From: <u>Herman Barahona</u>
To: <u>PER. climateactionplan</u>

Cc: <u>Sacejc</u>

Subject: Public comment / Recommendation

Date: Thursday, February 17, 2022 2:01:55 PM

Attachments: <u>IMG 6277.PNG</u>

IMG 6276.PNG IMG 6274.PNG IMG 6275.PNG

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear County Supervisors and responsible officials:

For decades, the Sacramento Executive Airport has allowed single engine airplanes to use **leaded** fuel in South Sacramento. South Sacramento has some of the worst air quality conditions in the county. Local hospital health needs assessments indicate that low-income families and predominantly people of color suffer from above-average respiratory illnesses in this area - A known health risk that has been exacerbated by the COVID19 pandemic.

As you may already know, the number of AQMD permits(approx 4,500) issued in the county are also highly concentrated in South Sacramento. In some cases, like the former Campbell Soup Factory site, it has been exempted from any environmental impact reports. This is an environmental justice zone that deserves your attention. I have attached the flight paths listed by the county airport department. These illustrations will give you a good idea of the decadeslong impact on communities, schools, and churches.

Consider duplicating the solution that **Santa Clara county** has done for its own executive airport(see link below).

https://grist.org/transportation/california-county-bans-toxic-aviation-fuel-at-its-airports/

It is time for Sacramento county county to stop the use of leaded fuel. The residents (families and children) of south Sacramento and surrounding communities deserve your leadership to make this system change a reality.

Please feel free to reach out to us and we will be happy to meet to explore solutions and next steps.

Respectfully,

Herman Barahona 916-900-1717 Sacramento Environmental Justice Coalition

Cc: SacEJC membership



From: clara

To: PER. climateactionplan

Subject: Waste Management and recycling requirement Date: Sunday, February 20, 2022 11:34:24 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

I am a senior individual living in a retired community (Destinations) in Sacramento County and have been advised that a green waste can will be provided for my use.

When I moved into this development, I opted out of having a green can because it was unnecessary. I have a garbage disposal, I recycle glass, aluminum and plastic.

I have a compost bin in my back yard and due to allowable space, I do not have room for another can. The HOA provides yard maintenance and they trim and collect all their waste and remove it. There are no trees in the development other than those maintained by the HOA, hence, again, no need for a green can.

It poses an undue burden on myself as well as others living in this community to lug another cart to curbside for pick up. We are all seniors, many with disabilities.

I would suggest a communal drop and pick-up site rather than a can for each household. Identifiable, biodegradable bags could be provided and dropped off at the communal location. I would be happy to do that if it could not be ground in the disposal.

A reconsideration would be greatly appreciated.

Clara Watters 7461 Chevelle Way Sacramento, CA 95829 From: <u>Herman Barahona</u>

To: <u>Sacejc</u>

Subject: Sacramento's EJ Zones

Date: Wednesday, February 23, 2022 8:42:56 AM

Attachments: 2.22.22EJ presentation.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

FYI - feel free to share.

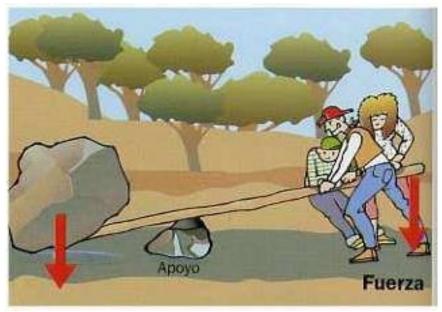
Presentations available upon request. Join/support our coalition!

Resilience and solidarity,

Herman Barahona 916-900-1717

Sacramento Environmental Justice Coalition

Environmental Justice 101



"There is nothing noble about being superior to some other man. The true nobility is in being superior to your previous self"

"No hay nada noble en ser superior a otro hombre. La verdadera nobleza es ser superior a quien eras ayer"

Hindu Proverb











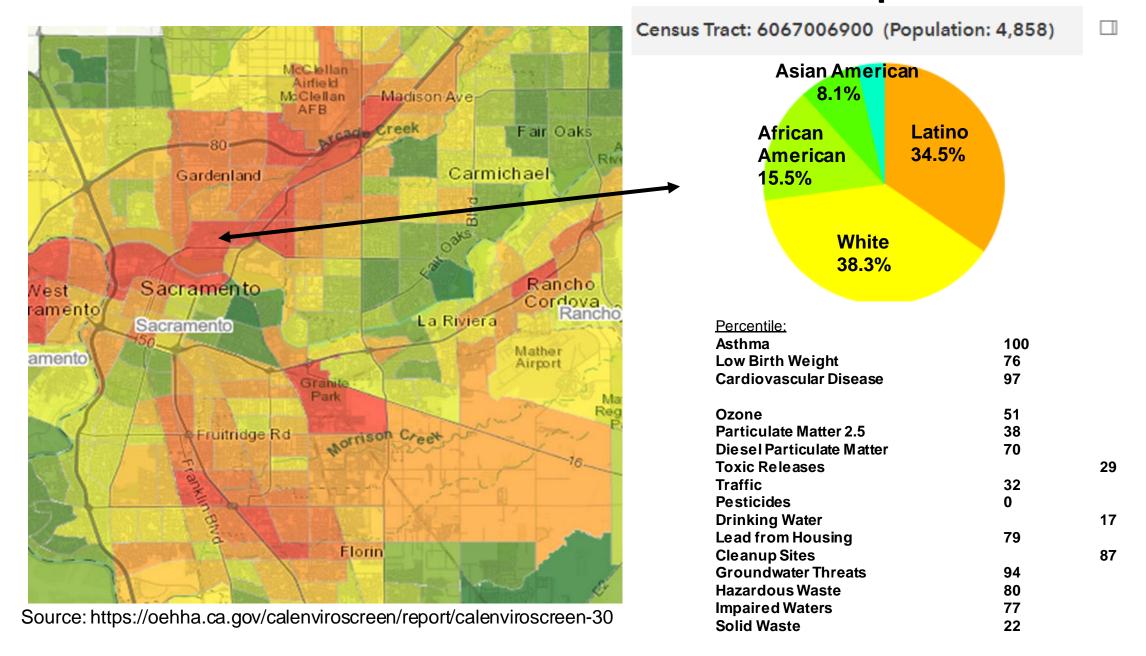




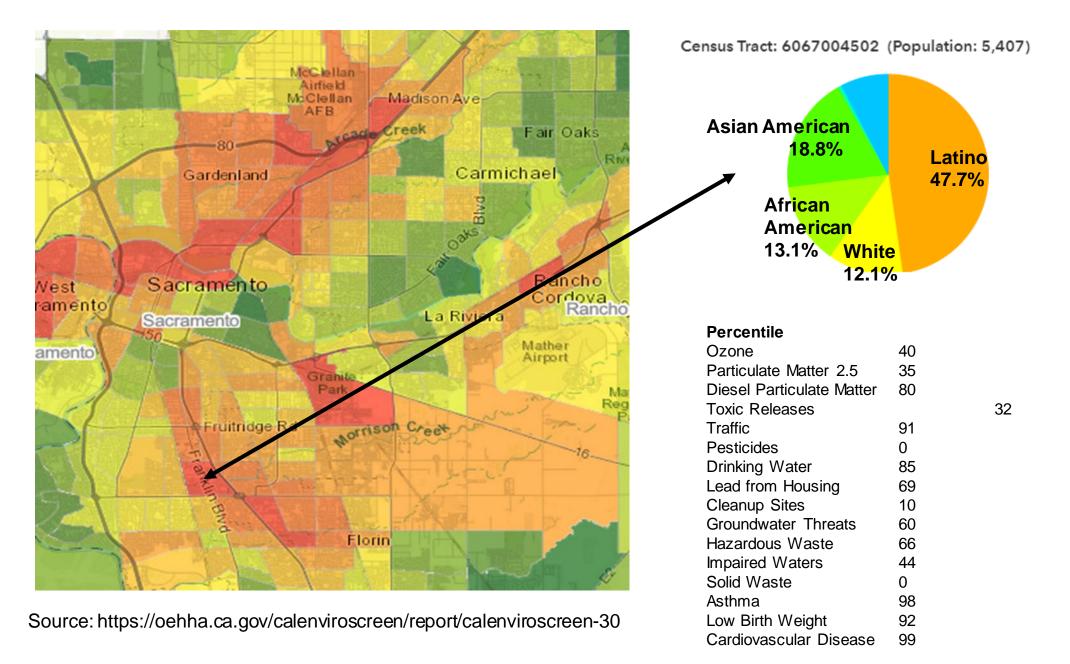




Chronic Health Conditions near St. Joseph

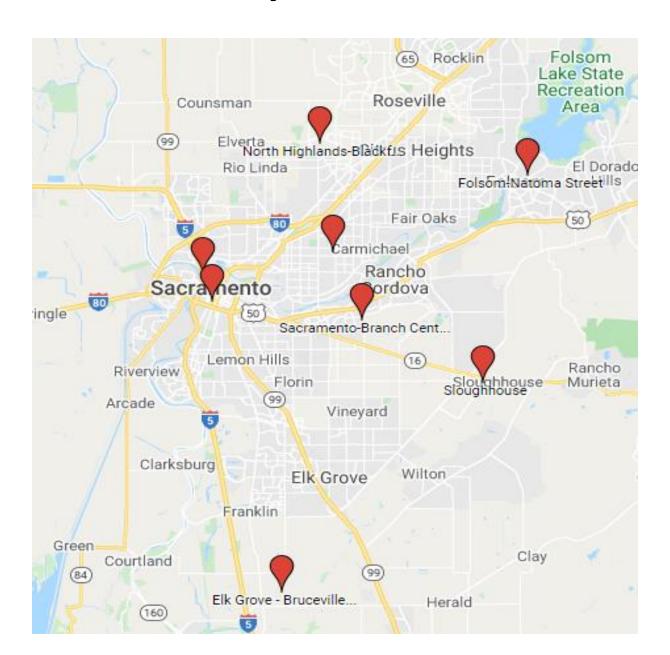


Chronic Health Conditions near St. Rose



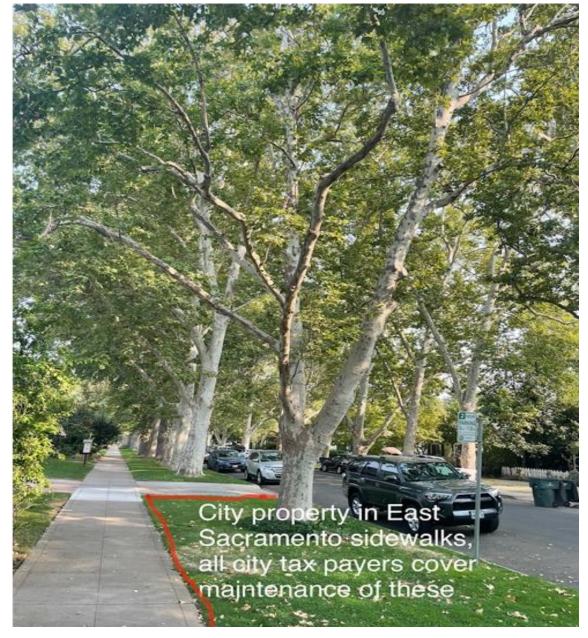
Federal Air Quality Monitors in Sacramento

- Federal Monitors
 Trigger Enforcement if there are violations of US EPA Law
- They gather specific data to help regulators reduce/mitigate pollution
- Why are there no Federal Air Quality Monitors in Sacramento?





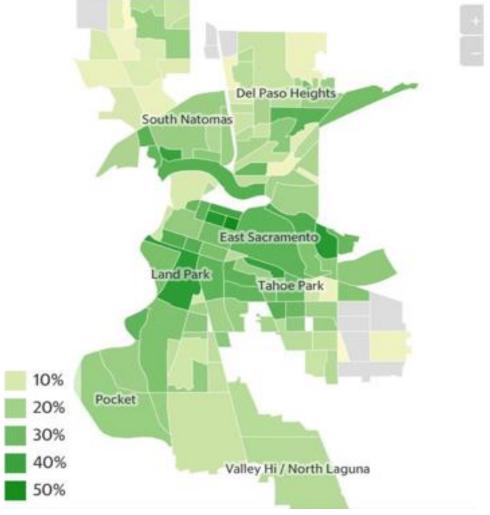
Source: Sacramento AQMD



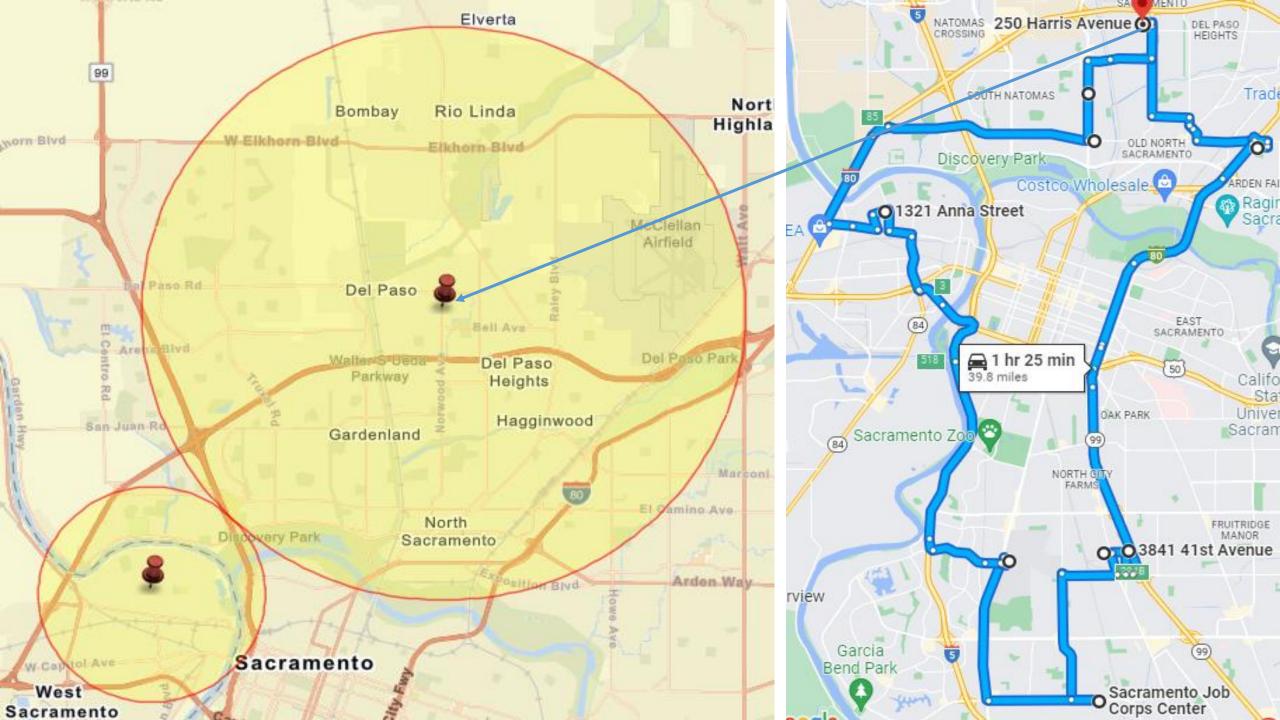
Source: SacEJC Research and City of Sacramento Planning Dept

NEIGHBORHOOD TREE CANOPY

Trees cover <u>nearly 20 percent</u> of the city of Sacramento. But the canopy in some neighborhoods is more than twice that amount, according to a city-wide assessment.



Source: https://www.sacbee.com/









EJScreen Report (Version 2.0)

3.5 miles Ring Centered at 38.638059,-121.460724

CALIFORNIA, EPA Region 9

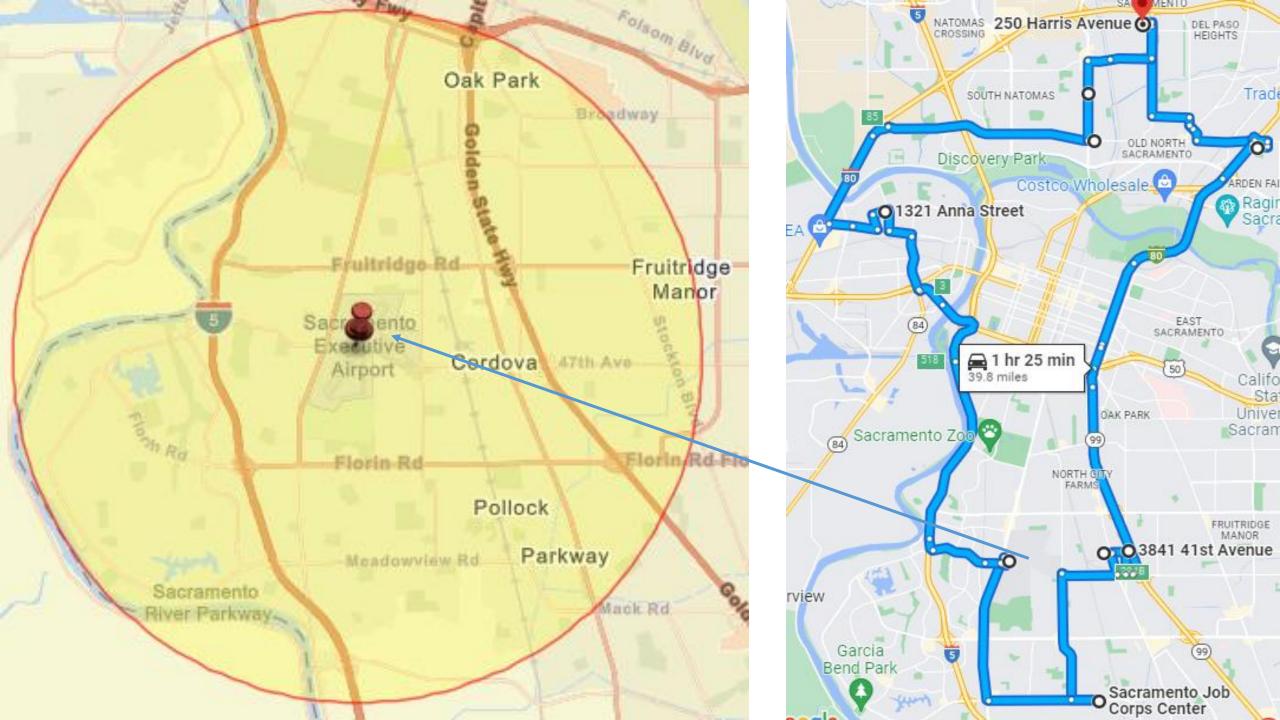
Approximate Population: 145,987

Input Area (sq. miles): 38.48

CRP

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA	
Environmental Justice Indexes				
EJ Index for Particulate Matter 2.5	73	77	91	
EJ Index for Ozone	70	72	88	
EJ Index for 2017 Diesel Particulate Matter*	66	68	83	
EJ Index for 2017 Air Toxics Cancer Risk*	76	78	88	
EJ Index for 2017 Air Toxics Respiratory HI*	78	80	90	
EJ Index for Traffic Proximity	82	83	92	
EJ Index for Lead Paint	72	76	86	
EJ Index for Superfund Proximity	77	81	90	
EJ Index for RMP Facility Proximity	82	84	92	
EJ Index for Hazardous Waste Proximity	65	71	90	
EJ Index for Underground Storage Tanks	74	77	84	
EJ Index for Wastewater Discharge	82	84	96	

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US







EJScreen Report (Version 2.0)

3.5 miles Ring Centered at 38.511639,-121.495056

CALIFORNIA, EPA Region 9

Approximate Population: 209,624

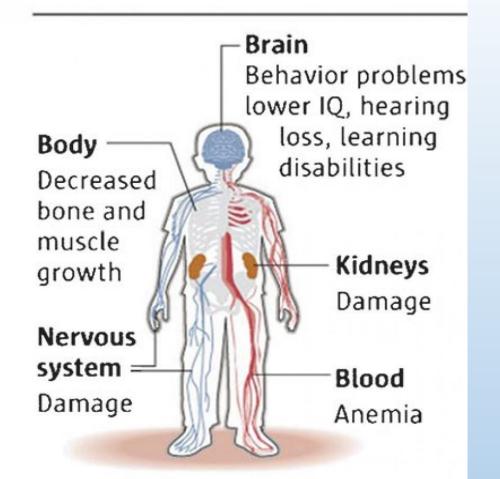
Input Area (sq. miles): 38.48

South Sacramento

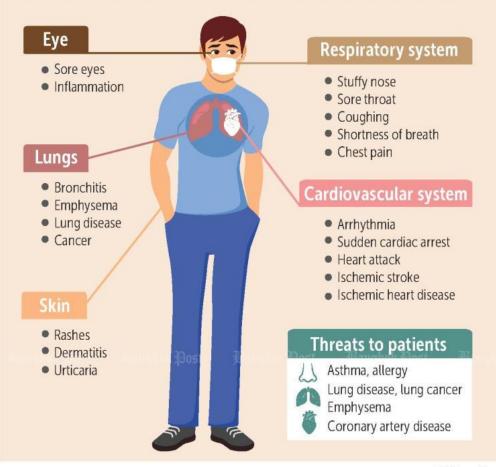
Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA	
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EJ Index for Ozone	67	69	86	
EJ Index for 2017 Diesel Particulate Matter*	67	69	84	
EJ Index for 2017 Air Toxics Cancer Risk*	73	76	87	
EJ Index for 2017 Air Toxics Respiratory HI*	75	77	89	
EJ Index for Traffic Proximity	84	85	93	
EJ Index for Lead Paint	70	75	85	
EJ Index for Superfund Proximity	76	79	89	
EJ Index for RMP Facility Proximity	82	85	93	
EJ Index for Hazardous Waste Proximity	62	67	88	
EJ Index for Underground Storage Tanks	77	79	86	
EJ Index for Wastewater Discharge	60	61	85	

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US

Lead Poisoning



HEALTH EFFECTS OF PM2.5



BKPgraphics



















Map of community / Mapa del barrio

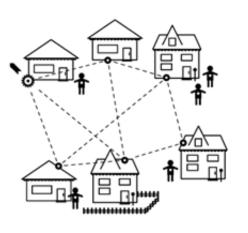












Neighbors and Associations Vecinos y asociaciones



Thank you!

"...We have to realize that a true ecological approach always becomes a social approach; it must integrate questions of justice in debates on the environment, so as to hear both the cry of the earth and the cry of the poor."

Pope Francis
 Laudato Si (Encyclical Letter on Care for Our Common Home)

Herman Barahona barahonaconsulting@gmail.com 510-559-0310

Sign our petition to ban lead-fuel:





















Taylor. Todd

From: PER. climateactionplan

Subject: Board of Supervisors Climate Action Plan (CAP)Comments

From: Megan Shumway < meganshumway 7881@gmail.com >

Sent: Tuesday, March 15, 2022 7:52 PM

To: Clerk of the Board Public Email < <u>BoardClerk@saccounty.net</u>> **Subject:** Board of Supervisors Climate Action Plan (CAP)Comments

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Comments on the County Climate Action Plan

First I must quote the Intergovernmental Panel on Climate Change (IPCC)/summary for Policymakers "5PM.B.2.1

Since AR5 there is increasing evidence that degradation and destruction of ecosystems by humans increases the vulnerability of people (high confidence) Unsustainable land-use and land cover change, unsustainable use of natural resources, deforestation, loss of biodiversity, pollution, and their interactions adversely affect the capacities of ecosystems, societies, communities, and individuals to adapt to climate change. (high confidence) Loss of ecosystems and their services has cascading and long-term impacts on people globally, especially for Indigenous Peoples and local communities who are directly dependent on ecosystems to meet basic needs. (high confidence)

"5PM.B.2.5

Key infrastructure systems including sanitation, water, health, transport, communications, and energy will be increasingly vulnerable if design standards do not account for climate conditions (high confidence)"..... "Future exposure to climate hazard is also increasing globally due to socio-economic development trends including migration, growing inequality, and urbanization (high confidence)"

Keep the IPPC's comments for policymakers in mind when you read my following recommendations. They are only a very small part of what we should do.

1. Regarding pages 14-16 Allowing more gas infrastructure units to be built until 2026 will only continue the emissions and increase them in the built environment with no assurance there will be a mechanism to convert them to all-electric any time soon. There is no reason to follow past patterns for Reach Codes

I strongly encourage the supervisors to exercise their policing powers under the Climate Emergency Declaration to change this policy to all Permits issued as of 2023 to have an all-electric infrastructure with rare exceptions.

There is nothing magical about buildings over 4 stories. They too can be all-electric. There is no need to follow what has been the past Reach Code model. The mechanisms already exist for this to happen and the cost will be less without having to run gas piping and meters. This will even be the case if a business is granted a gas exception on the ground floor. The rest of the building should be all-electric. Modern gas stoves and heaters do not function without an electric starter anyway. There is no excuse that holds up not to provide safer, cleaner electric infrastructure that will prevent a rise in Sacramentos emissions as the county population grows. This will also prevent many health conditions that plague our population and impact health care costs that everyone eventually pays. This change to all-electric buildings going forward is needed Now.

- 2. I applaud the many changes to further Zero Emission Vehicle infrastructure and improve RT, Biking, and walking. The one thing missing that would benefit Sacramento businesses is a permitting change for "Gas Stations" to "Fueling Stations" with one or more alternative fuel sources. At a minimum, rapid charging stations for travelers to Sacramento County should be a requirement. People come from all over the State of California for Hospital care, State Government functions, Entertainment events, and shopping. Transitioning to "Fueling Stations" will make Charging more ubiquitous and easier to locate. It will also prevent congestion at Super Charge sites. This is a move that should be considered if we are to move to an Electric vehicle (EV) future. This doesn't ban the sale of fossil fuels at these Fueling Stations. It only expands access to rapid charging which is especially important to out-of-the-area visitors who don't have time to use slower chargers. The option remains to provide Hydrogen as an alternate fuel. I recommend this permit change start as soon as possible or by 2023. Starting the transition now will leave Sacramento County better prepared to meet the infrastructure for the Governor's Electric Vehicle Sales plan in 2023. Californians purchase over 17 million new cars each year according to a quick google search. That will rapidly increase the number of EVs on the roads that need rapid charging in our future. Sacramento County should have a clear vision of our future by starting the permit changes now
- 3. There is a lot more we could do! I would like to see a grant for a business start-up that would convert combustion engines to electric vehicles. Most middle and lower-income people buy only used cars. They might consider buying a converted eclectic vehicle or even replace their own failing combustion engine with an electric motor and battery. This would greatly expand the EVs available to the working class and reduce the GHGs and air pollution that is fueling global warming.

EV car-share programs. expanded transit options. We need anything that will make a rapid change in our GHGs especially as the population grows. Otherwise, we will be fighting a losing battle.

Thank you for your attention to these areas of the Climate Action Plan.

Sincerely,

Megan Shumway BSN/PHN

--

Megan Shumway

From: <u>Barbara Ray</u>

To: PER. climateactionplan

Subject: Very little new vision , more of the same old ,same old.

Date: Wednesday, March 16, 2022 6:32:12 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Sent from Mail for Windows

From: <u>Stan Okumura</u>

To: PER. climateactionplan; Supervisor Serna

Cc: <u>capteam@350sacramento.org</u>

Subject: A Strong CAP

Date: Thursday, March 17, 2022 10:08:11 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Hello,

I'm a Sacramento County resident at 6014 11th Ave, Sacramento, CA 95820. It's very important to me for the beautification of Sacramento and for our climate impact that we have a strong plan in place to reduce urban sprawl, pollution, and car-dependent communities. If there were more bike paths and better public transportation, I would be a citizen utilizing these added features. Additionally, if there were stricter rules to reduce natural gas in the household, I would be happy to oblige them. I would really like to see my values of committed reductions of fossil fuels represented in the Climate Action Plan.

Thank you for your consideration and please hear my voice as a resident looking for a healthier, more connected Sacramento County.

--

Stanley Okumura stanokumura@gmail.com 530.417.1745 stanokumura.com

Taylor. Todd

From: PER. climateactionplan

Subject: Comments on the The County Climate Action Plan

From: Ann Amato <anngarden4@gmail.com>
Sent: Friday, March 18, 2022 12:01 AM

To: Supervisor Serna < Supervisor Serna@saccounty.net >; Rich Desmond < RichDesmond@saccounty.net >; Clerk of the

Board Public Email <BoardClerk@saccounty.net>; Smith. Todd <smithtodd@saccounty.net>; Taylor. Todd

<taylorto@saccounty.net>; lundgrenj@sacounty.gov

Subject: Comments on the The County Climate Action Plan

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Supervisors, County Planners and Our New County Sustainability Manager,

I am a Carmichael resident and a member of the Sacramento Climate Coalition.

I am the author of the following portions of our organization's larger document which covers our topics of concern regarding the County's Climate Action Plan (CAP). Each section contains suggestions for both the City and County of Sacramento. I include a brief personal comment at the end on issues which stand out for me.

Solar Power and Resilience

We recommend that the City and County:

- 1. Invest in and include household solar power with battery backup as part of the infrastructure to address climate change and an emergency preparedness plan.
- 2. Adopt ordinance to incentivize rooftop solar and provide for renters, as well as owners, to benefit from the lower bills.

Environmental Justice

We recommend that the City and County:

- 1. Invest in their lower income, more vulnerable economically neglected communities via affordable housing, electric and solar infrastructure, as well as resilience and food hubs.
- 2. Invest in affordable housing as it will assist in solving food insecurity.
- 3. Assist in helping families access current food programs like CalFresh, and implement a mobile application to connect food providers with the food insecure.
- 4. Raise the minimum wage.
- 5. Address air quality issues and disaster preparedness by investing in solar power in our more vulnerable communities

All these recommendations would increase community resiliency.

Note: Nourish California estimates that if every Sacramento household that currently qualifies actually signs up for Cal Fresh, it would inject another \$90.5 million into the local economy and benefit food retailers and farmer's markets.

In developing proposals for the use of American Rescue Plan (ARP) funds, building of more affordable housing is a key start. Along with affordable housing, proactively developing resiliency hubs, and better public transportation to outlying, more impacted areas, are a way for our local government to lower greenhouse gas production while supporting our underserved communities, and assisting with the food scarcity problem. Through these community hubs, the County can further increase resilience by offering job training and job opportunities for local residents to help run the hubs. According to the National Building Sciences "one

dollar spent on resilience for local governments and communities has a four-to-six-fold return on investment." (USDN - Urban Sustainability Directors Network)

Enforcement of SB-379 (requiring cities and counties to integrate climate adaptation and resilience strategies in the safety elements of the City's General Plan before or by January 2022) should help promote programs that foster resilience

Community Resilience

The City and the County need to increase overall resilience in the face of increasing weather extremes and climate related disasters that come with the warming climate.

We recommend that the City and County::

- 1. Support the creation and expansion of resilience hubs for ongoing challenges of the climate emergency and for dealing with natural disasters; at the hubs:
 - a. Provide farmers market space, food hubs and seed swaps, support for gardening and composting
 - b. Provide cooling and heating support for weather extremes using solar power;
 - c. Reduce the need to go long distances for basic necessities (this includes food banks);
- 1. Address public health issues of climate change.
- 2. Use solar power and provide ordinance support for SMUD solar programs and the rooftop solar industry.
- 3. Place a special focus on low income/vulnerable communities

Resilience Hubs

Hubs can offer coordination of resource distribution and services before, during and after a disaster. Food hubs can be colocated with these resilience hubs. If designed and run well, hubs can lower GHG emissions by operating their own microgrid. If upgraded to enable emergency assistance and equipped with solar power and battery backup, they can provide a backup power source to our utility energy grid during power outages. In addition to being a smart investment and focal points for neighborhood revitalization, these hubs can potentially lower the burden on local emergency response teams and become part of an emergency network, including addressing public health needs.

The Urban Sustainability Directors' Network (USDN) offers Resilience Hub Guidance via their website, usdn.org/resiliencehubs.html. Their PDF includes six phases of development from assessment, to site development, to the operating plans. USDN's approach is equity based with a focus on lower income communities with limited resources.. Its website addresses cost and funding information as well as resources for local funding through non-profits, foundations, local, state and federal governments as well as utility incentives. There is also information about a USDN Team available for consultation and assistance to a wide range of entities, including municipal or county governments.

Composting, Community Gardens and a Greener Community

We recommend that the City and County of Sacramento:

- 1. Keep our organic waste within our county and invest in programs that process Sacramento household and green waste to create compost for use in municipal and residential landscaping.
- 2. Promote and support an urban gardening program as a sustainable practice.
- 3. Collaborate with the SMUD's and the Tree Foundation's current free tree planting program to encourage and support the planting of urban trees.

These actions provide multiple ways to sequester carbon.

If lower income residents are to receive free trees, to make their neighborhoods cooler and more walkable, a plan must be developed for the City and County to maintain these trees as they age, due to the maintenance costs that are prohibitive for lower income residents

My brief comments on the County CAP Does it address the above issues?

While the County CAP includes many positive measures, it does not include: an overall inclusion of EJ in its measures, and affordable housing as a means to create more resilient communities with less food scarcity. There is no mention of establishing Resilience and Food Hubs. Another big gap in the CAP is the absence of implementing an active solar measure for residential, not just the County buildings. The General Plan does include this action as well as supporting the rights of residential solar owners. I am not clear whether this is why it is basically non-existent in the CAP. This is a glaring omission in a Climate Action Plan.

Ann Arbor, Michigan has a model Climate Action Plan that includes a municipal composting program, in addition to both Resilience Hubs and Community Solar, as well as a Landfill Solar Program that are well worth your attention. More detail about my recommendations can be found in the Sacramento Climate Coalition's "Climate Change Information. Input for Planning Purposes for the City and County of Sacramento" that you will receive, if you have not already.

Thank you for your time and attention to these issues. A thank you for all the work the County staff has done to redraft the CAP and for future further improvements that address our climate emergency.

Ann Amato, LCSW Carmichael, CA Sacramento Climate Coalition anngarden4@gmail.com (916) 320-6501 From: ROBERT ROSENBAUM

To: Supervisor Serna

Cc: Clerk of the Board Public Email; tateiship@agc-ca.org; jofil.borja@berkeley.edu; PER. climateactionplan

Subject: Comment on County CAP

Date: Saturday, March 19, 2022 10:18:39 AM

Attachments: <u>CAP comment.pdf</u>

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Please see attached PDF of letter outlining health impacts of climate change that have not been full addressed by county CAP. Please print out for inclusion in public comments on the county CAP.

Content of PDF appears below.

Robert Rosenbaum, Ph.D.

2617 51st Street, Sacramento, CA 95817 <u>brosenbaum1@mac.com</u> • 510-220-4834 • PSY 7293

March 18, 2022

To: The Honorable Phil Serna: SupervisorSerna@saccounty.net

Cc: Commissioner Justin Raithel

Commissioner Cara Martinson: c/o Boardclerk@saccounty.net

Commissioner Peter Tateishi: tateiship@agc-ca.org Commissioner Jofil Borja:jofil.borja@berkeley.edu

Sacramento County Office of Planning and Environmental Review ClimateActionPlan@saccounty.net

Re: Sacramento County's Climate Action Plan

Dear Supervisor Serna:

As one of your constituents, I am pleased that Sacramento County is reviewing its Climate Action Plan. However, as a health professional, I am concerned the CAP doesn't fully address the needs of my patients, friends, and family.

I've seen patients whose multiple sclerosis symptoms were exacerbated by extreme heat. I had one patient who contracted Valley Fever from simply driving through a dusty portion of Sacramento County with his windows down; he suffered permanent dementia as a result. Pediatric asthma is rising, and adults with pulmonary disorder are struggling. I forcing me to stay indoors during much of the past few summers due to wildfire

Incidents such as these, along with concern for the health of my adult daughters and their grandchildren, has led me to join Climate Health Now, a group of healthcare professionals dedicated to educating the public about the health and social equity issues posed by climate change. The health effects of climate change don't seem to be a major focus of the county's CAP, so I would like to make you aware of some areas the Center for Disease Control has identified.

- EXTREME HEAT: Most years, extreme heat causes more deaths than hurricanes, tornadoes, flood, wildfires. *The number of days each year the temperature will be above 100°F in Sacramento is projected to more than double from 15 in 2021 to 33 in the 2030s, with more than two weeks of temperatures above 104°.* During similar heat events in Russia (2010) and Europe (2003) and, 55,000 to 70,000 people died. During the 2006 California heat wave, there were over 16,000 additional emergency room visits.
- AIR QUALITY: Climate change leads to increases in particulate matter (wildfires), ozone, chemical pollutants, and
 higher pollen counts. These exacerbate cardiovascular disease and pulmonary illnesses. They raise cancer risks, and
 are also associated with more children being born with neurodevelopmental disorders.

- WATER-RELATED: As extremes of precipitation become more frequent, so do floods and droughts. Floods can
 lead to contamination of the water supply. Climate extremes can also lead to red tides and alga blooms that
 contaminate seafood and cause food poisoning. Crop and livestock losses can occur, leading to food insecurity.
 Furthermore, during droughts, dry soil dispersed by wind releases fungi that cause Valley Fever (as happened to my
 patient) and spread agricultural and industrial chemicals which can harm health
- VECTOR-BORNE DISEASE: Mosquitos and ticks spread, often carried by rodents. West Nile virus, Lyme disease,
 Rocky Mountain spotted fever, hantavirus and plague are likely to spread. In June 2021, a mosquito carrying West
 Nile Virus was found in Sacramento County for the first time.
- MENTAL HEALTH: As climate-related disasters become more frequent, so does post-traumatic stress disorder. Recent research funded by Blue Shield of California and the Global Fund for Mental Health finds young adults frequently reporting climate-related anxiety and depression. When I consult to California university counseling centers, I hear how students are increasingly reluctant to commit to having children or make long-term plans; many are thinking of leaving California because they anticipate the impact of climate change here. In the general population, suicide, violence against others, and drug use all increase with climate extremes.

The County CAP addresses these areas to some extent, but often fails to make sufficient concrete plans to deal with the health care impacts. For example:

Section 3.1.1 purports to address extreme heat, and acknowledges the need for cooling centers. However, it makes no
provision for funding such centers. It laudably states it will consult with disadvantaged communities regarding
cooling centers' location, but does not take into account the need for cooling centers for agricultural workers and
construction crews.

The CAP also discusses cool pavement technology and tree planting but has no specific goals for numbers of trees planted or miles of cool paving, nor any way of assessing whether the county is on track for achieving those goals.

 The CAP touches on the issue of vector-borne diseases in section Flood-10, where it describes coordinating with the Sacramento-Yolo Mosquito and Vector Control district and expanding public outreach and education. However, no specifics are given for how this will be done.

Mosquito abatement is mentioned but no program for incentivizing or providing window and door screens is proposed. There is also no consideration given to rodent control.

Climate change is already affecting the health of people in Sacramento County. Without action to halt and reverse GHGs, climate change is setting the stage for public health disaster which could even dwarf covid. This is not an exaggeration: a few weeks ago the United States' Assistant Secretary for Preparedness and Response issued an alert to health care executives and emergency planners asking them to prepare their healthcare systems for expected climate emergencies.

Climate change is already taking more and more of a personal toll. If you know anyone with a with a pre-existing medical conditions, they are likely to feel less well because of climate change. If you know anyone who is over the age of 65 or under the age of 12, they are especially susceptible to health impacts from climate change as are pregnant women, outdoor workers in farming, construction, gardening, not to mention athletes (and anyone) who likes to exercise outdoors.

Climate change also poses important social equity issues. People with limited resources to deal with the heat - those living alone, poor, homeless, or with mobility/transportation issues - are hit hardest.

Please take these issues into account when reviewing the proposed CAP. We need to have more specific plans, ones with clear goals whose progress can be monitored. In addition to providing for mitigation efforts, it's urgent to decrease GHG as rapidly as possible.

If we don't take concrete steps now your health, mine, and the health of the people we care about will all suffer.

Respectfully,
Robert Rosenbaum, Ph.D.

<u>brosenbaum1@mac.com</u> • 510-220-4834 2617 51st St, Sacramento CA 95817-1617

Robert Rosenbaum, Ph.D.

2617 51st Street, Sacramento, CA 95817 brosenbaum1@mac.com • 510-220-4834 • PSY 7293

March 18, 2022

To: The Honorable Phil Serna: SupervisorSerna@saccounty.net

Cc: Commissioner Justin Raithel

Commissioner Cara Martinson: c/o Boardclerk@saccounty.net Commissioner Peter Tateishi: tateiship@agc-ca.org

Commissioner Jofil Borja:jofil.borja@berkeley.edu

Sacramento County Office of Planning and Environmental Review

ClimateActionPlan@saccounty.net

Re: Sacramento County's Climate Action Plan

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I've seen patients whose multiple sclerosis symptoms were exacerbated by extreme heat. I had one patient who contracted Valley Fever from simply driving through a dusty portion of Sacramento County with his windows down; he suffered permanent dementia as a result. Pediatric asthma is rising, and adults with pulmonary disorder are struggling. I forcing me to stay indoors during much of the past few summers due to wildfire

Incidents such as these, along with concern for the health of my adult daughters and their grandchildren, has led me to join Climate Health Now, a group of healthcare professionals dedicated to educating the public about the health and social equity issues posed by climate change. The health effects of climate change don't seem to be a major focus of the county's CAP, so I would like to make you aware of some areas the Center for Disease Control has identified.



Most years, extreme heat causes more deaths than hurricanes, tornadoes, flood, wildfires. The number of days each year the temperature will be above 100°F in Sacramento is projected to more than double from 15 in 2021 to 33 in the 2030s, with more than two weeks of temperatures above 104°.

During similar heat events in Russia (2010) and Europe (2003) and, 55,000 to 70,000 people died. During the 2006 California heat wave, there were over 16,000 additional emergency room visits.



Climate change leads to increases in particulate matter (wildfires), ozone, chemical pollutants, and higher pollen counts. These exacerbate cardiovascular disease and pulmonary illnesses. They raise cancer risks, and are also associated with more children being born with neurodevelopmental disorders.



Water Related As extremes of precipitation become more frequent, so do floods and droughts. Floods can lead to contamination of the water supply. Climate extremes can also lead to red tides and alga blooms that contaminate seafood and cause food poisoning. Crop and livestock losses can occur, leading to food insecurity. Furthermore, during droughts, dry soil

dispersed by wind releases fungi that cause Valley Fever (as happened to my patient) and spread agricultural and industrial chemicals which can harm health



Mosquitos and ticks spread, often carried by rodents. West Nile virus, Lyme disease, Rocky Mountain spotted fever, hantavirus and plague are likely to spread. **In June 2021 the first mosquito carrying** West Nile Virus was found in Sacramento County.



As climate-related disasters become more frequent, so does post-traumatic stress disorder. Recent research funded by Blue Shield of California and the Global Fund for Mental Health finds young adults frequently reporting climate-related anxiety and depression. When I consult to California university counseling centers, I hear how students

are increasingly reluctant to commit to having children or make long-term plans; many are thinking of leaving California because they anticipate the impact of climate change here. In the general population, suicide, violence against others, and drug use all increase with climate extremes.

The County CAP addresses these areas to some extent, but often fails to make sufficient concrete plans to deal with the health care impacts. For example:

• Section 3.1.1 purports to address extreme heat, and acknowledges the need for cooling centers. However, it makes no provision for funding such centers. It laudably states it will consult with disadvantaged communities regarding cooling centers' location, but does not take into account the need for cooling centers for agricultural workers and construction crews.

The CAP also discusses cool pavement technology and tree planting but has no specific goals for numbers of trees planted or miles of cool paving, nor any way of assessing whether the county is on track for achieving those goals.

• The CAP touches on the issue of vector-borne diseases in section Flood-10, where it describes coordinating with the Sacramento-Yolo Mosquito and Vector Control district and expanding public outreach and education. However, no specifics are given for how this will be done.

Mosquito abatement is mentioned but no program for incentivizing or providing window and door screens is proposed. There is also no consideration given to rodent control.

Climate change is already affecting the health of people in Sacramento County. Without action to halt and reverse GHGs, climate change is setting the stage for public health disaster which could even dwarf covid. This is not an exaggeration: a few weeks ago the United States' Assistant Secretary for Preparedness and Response issued an alert to health care executives and emergency planners asking them to prepare their healthcare systems for expected climate emergencies.

Climate change is already taking more and more of a personal toll. If you know anyone with a with a pre-existing medical conditions, they are likely to feel less well because of

climate change. If you know anyone who is over the age of 65 or under the age of 12, they are especially susceptible to health impacts from climate change as are pregnant women, outdoor workers in farming, construction, gardening, not to mention athletes (and anyone) who likes to exercise outdoors.

Climate change also poses important social equity issues. People with limited resources to deal with the heat - those living alone, poor, homeless, or with mobility/transportation issues - are hit hardest.

Please take these issues into account when reviewing the proposed CAP. We need to have more specific plans, ones with clear goals whose progress can be monitored. In addition to providing for mitigation efforts, it's urgent to decrease GHG as rapidly as possible.

If we don't take concrete steps now your health, mine, and the health of the people we care about will all suffer.

Respectfully,

RIX M

Robert Rosenbaum, Ph.D.

From: goli sahba

To: Smith. Todd

Subject: Action: Input for revised County CAP review Date: Thursday, March 17, 2022 11:22:13 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Todd,

Thank you so much for your presentation at the Sacramento Climate Coalition last evening. Thank you, also, for the amazing effort you and your team have put into the revision of the CAP and incorporating much of the community's input including the emphasis placed on the 2030 carbon neutral goal set forth in the County's Emergency Declaration.

This letter also includes many comments/suggestions that I composed after reviewing the revised CAP in detail. I apologize for the length but hopefully you realize that it is from the sense of respect and appreciation for all of the work that you all have done that I felt compelled to review the majority of your document.

3-7-2021 CAP recommendations/comments(in Italics)

Original document language in blue:

I applaud the changes in the revised CAP which emphasize the need to use 2030 as the Carbon Neutrality goal to avoid catastrophic costs due to Climate Change. The potential costs of inaction include 100's of billions of lost dollars, the extinction of over one-million plants and animals and the premature deaths, loss of livelihoods and disruption of the communities of many people.

P. 5 1.4 "Greenhouse Gas Reduction Targets for 2030: ... Thus, the County's approach in this CAP is to 1) maintain momentum and get reductions started sooner rather than later, while providing flexibility for the CAP to be updated later to meet carbon neutrality objectives and 2) outline the steps the County will begin to undertake in order to achieve carbon neutrality by 2030, as described below. ... The Climate Emergency Resolution adopted by the County Board of Supervisors on December 16, 2020, establishes the County's goal to reduce GHG emissions and achieve carbon neutrality by 2030 and seeks to address the climate emergency through the eight actions described below.

Urgent and immediate mobilization of public and private resources to develop and implement a climate and sustainability plan that identifies and integrates current and future actions necessary to achieve an equitable, sustainable, and resilient economy and transition to a countywide carbon neutrality footprint by 2030; ...

I concur with steps 2-8 which emphasize the 2030 carbon neutral date and further describe needed actions based on community input, and the County's Climate Emergency Declaration's statement to establish a Climate emergency Mobilization Task Force. I appreciate the recognition of the need for and the efforts made to achieve these goals "...

through regional collaboration between Multiple partners." I also applaud the recent County/City and SMUD MOU on electrification and hope that this can be replicated in all of the other components of a comprehensive GHG reductions plan such as

- a. transportation,
- b. carbon sequestration
- c. energy conservation and & alternative energy use and generation
- d. composting/ waste and single use plastic elimination (zero waste)

I agree with action 4: "Evaluate the resources necessary to achieve carbon neutrality by 2030 and the emergency actions required to eliminate emissions by 2030." This is of critical importance to be done quickly, within 2022, with timelines so that necessary funds, grants, revenue streams can be earmarked and applied for to support the work. Please also see below in section re Appendix G re recommendation for creating a committee to consider forming a Public Bank of Sacramento.

Re Action step 6, we concur with the plan to "Support farmers... in necessary conservation and regenerative practices, ..."

And with Action 7 to educate "... County residents and staff on the urgent need to reduce GHG emissions ..." This should include measures that will also coordinate with CA state offices many of which wastefully light up the Sacramento sky at night. Additionally, we suggest a formal public service education bus/radio/media ad program to ensure success in reaching the City's Climate Emergency Declaration's 2030 as many folks are unaware of the impending perils of climate change and of the steps they can take to help in preventing the worst effects with such ideas as:

- a. SMUD's forward thinking campaign: "Clean Power City by 2030" b. "Drive Less Sacramento"- walk, bike or ride more
- c. Make public transportation irresistible: "Why Drive?" Further incentivize City, State and County workers to "park and ride" by adequately funding more rapid and efficient public transportation. Change the current 75% subsidy for city and state employees to FREE to really see increased ridership!
- d. "Make your next car an EV" and to borrow from the Sonoma collaborative, "EV access for All": Collaborate with SMUD and the County to install EV chargers and with GIG car companies.
- e. "Electrify for your Health" Gas appliances increase the risk of asthma in Kids by 40%!
- f. Develop and advertise an ordinance for Rideshare, car rental and cab companies to convert 10% of their vehicle fleets each year to reach all EV's by 2030.

(Shenzen, China, a city of 12 million achieved an all electric taxi fleet by 2020.)

- g. Kick the Single use Habit-" Plastic is Choking our Planet." City/County ordinances to ban styrofoam and encourage reusable takeout ware by customers and entrepreneurial companies.
- h. Encourage stepwise family/household actions to prepare for community's Carbon Zero by 2030 Goal:
 - 1. Conserve electricity and water-weatherize home (provide incentives to do this)
 - 2. Electrify your home as appliances breakdown starting with
 - 3. Electric heatpump
 - 4. electric water heaters
 - 5. commute to work by Telecommuting/RT/Bike/Carpool
 - 6. teach making and showcase low-cost solar-cookers, etc.

The above statements demonstrate that the County recognizes the need to act with a sense of urgency and purpose to reach carbon neutrality by 2030 <u>but</u> <u>needs to be appended with timelines for action quickly</u> if we are to reach our urgent goal!

P. 12- GHG-01 Under Target Indicator: Consider programs for peer-to-peer farmer assistance to help with implementing no-till, crop rotation, perennial crops, sylva-pasture methods, elimination of need for pesticides, and provide access and instruction on use of no till planting equipment. Also, provide and incentivize attendance of free carbon-farmer-led online and in person series of workshops on how to convert to the regenerative and no- till practices with available site visits.

GHG-02-(p.13) Urge and incentivize planting 50% Native trees such as Valley oaks, Blue and Interior Live Oak, etc. for at least half of the plantings as this would not only improve the chances of tree survival during persistent drought years but also most likely aid in decreased water use, and projected bird (indicator species) and insect species extinction. (Although the Sacramento Tree Foundations provides many native shade trees, many offered are not Native.) This may require a City/County ordinance since in many developments in Sacramento, one can observe nondiverse plantings of Bradford pear trees and others with distinct absence of Native trees leading to habitat loss and food desserts for birds and insects.

GHG-28: (p. 32)Reduce or Eliminate Emissions in Agricultural Equipment: <u>Time frame</u> should be ASAP, not ''midterm'' in sending "request to SMAQMD recommending an update to Rule 215 Agricultural Permit Requirements (last updated in 2010) to require any diesel-powered agricultural off-road equipment to be EPA-rated Tier 4 final models..."

and when available, emphasize the need between now and 2030 to switch to electric or non-fossil-fuel alternative fuels (when available) equipment when current ones require replacement.

p. 50 Measure Temp-08: Again, encourage and incentivize the use of at least 50% of parking lot trees to be Native trees that will particularly withstand prolonged drought and flooding such as Valley Oaks which will also minimize Native species' loss.

Provide community resilience and food sovereignty by incorporating a list of drought tolerant fruit trees(such as Pomegranate, Persian fruiting Mulberry, persimmons and others(https://balconygardenweb.com/best-drought-tolerant-fruit-trees-low-maintenance-fruits/) that can be planted along with shade trees especially in communities with need of trees to mitigate food deserts and reduce dependence on expensive and imported fruits.

p. 56 Measure Water -04: Amend the Sacramento... dedicated to low water, drought tolerant and at least ½ of the 80% to be native plants to minimize water need and native bird/insect species extinction.

Appendix G: GHG Reduction Measure Cost Analysis:

Qualitative evaluations of costs of the measures recommended in the CAP are listed but no attempt at obtaining potential quantitative analysis of the costs of the needed changes has been made. This can lead to not having a sense of the range of funds needed over the course of the 9 years to 2030 to reach our Carbon Zero goals.

Furthermore, with an estimate of the actual range of costs identified then there will be a need for analysis of the means to obtain the necessary funding through a combination of the following:

1. Initiate a committee to research and consider forming a <u>Public Bank of</u>

Sacramento as has been done by 25 other states and 18 California municipalities including San Francisco and Los Angeles. This could safely generate funds to defray many of the costs associated with building the green infrastructure, generating the sustainable jobs, and assisting with housing the unhoused- all of which are necessary to achieve carbon neutrality and community resiliency. In doing so, Sacramento funds would be divested from Wall Street banks with insecure schemes and the underwriting of future fossil fuel projects.

2. Recommend County, City and SMUD to collaborate with a **Committee on Climate Emergency Program Funding Mechanisms** to accelerate the implementation of climate mitigation and adaptation programs.

In closing, I applaud and appreciate the County's efforts and response to community input on the CAP and request further urgent work to provide much needed step-by step details and timelines for each of the areas of action mentioned in the CAP as a way of ensuring that the 2030 Carbon zero goal will be achieved.

--

Goli Sahba M.D., Member, Sacramento Climate Coalition and 350 Sacramento







March 18, 2022

To: Supervisor Don Nottoli

Chair, Sacramento County Board of Supervisors

827 7th Street, Room 225 Sacramento, CA 95814

From: North State Building Industry Association

Sacramento Regional Builders Exchange

Associated Builders and Contractors, Northern California Chapter

This letter offers comments from the above listed industry trade associations on the Sacramento County Climate Action Plan (CAP) February 2022 Draft. We appreciate the opportunity to provide comments on prior CAP drafts, and we would like to state that this letter adds to (and does not supplant) our prior comments on items not specifically listed here.

We appreciate the opportunity to work closely and collaboratively with the county and other stakeholders on this important issue. We continue to urge the county to look at adopting a wide range of mitigation measures as potential alternatives and to allow flexibility for applicants seeking to use the CAP.

The construction industry would ask that applicants be granted the flexibility to demonstrate compliance with the CAP through a combination of the alternatives described in the current or through yet-to-be-defined technologies or options that applicants may wish to present to the county as alternatives after adoption of the CAP in 2022.

As stated in our previous letters, we are pleased that the report recognizes SMUD's substantial work to meet the state's ambitious 2030 GHG reduction goals. The ASCENT report states that no additional mitigation measures are technically necessary to meet the county's proportionate share of the state's 2030 climate action goal because SMUD's already-adopted climate emergency resolution and incentives.

With that fact in mind, we would make the following additional observations on the specific mitigation measures, which are prioritized based on areas of greatest concern.

GHG 30 – Require New Housing Outside the UPA to be Carbon Neutral Immediately

We strongly object to this measure which would in effect be a growth moratorium on certain projects that may need to adjust the USB or UPA. This measure has <u>not</u> been fully analyzed in either a planning or financial context, and it is likely that it would drive housing production further away from the county, leading to longer drive times for new homeowners, thus undermining the intent of the CAP. There are also real policy conflicts with this proposal, as it may prevent new housing growth near the USB and UPA that is anticipated to fund the county's South Sacramento Habitat Conservation Plan, the county's affordable housing program and help the county acquire needed long term water rights. The decision about growth in certain regions of the county should be done in a general plan process, not in a climate action mitigation document. This measure may operate as a de facto moratorium on growth, and as such may be illegal under state law (SB 330). This measure should be removed and slated for discussion when the CAP is modified or adjusted in future years so that there is adequate time for appropriate analysis and planning to inform the Board of Supervisors of the implications.

GHG-07. Energy Efficiency in New Residential

This measure requires a phase out of natural gas by 2023 in buildings of less than 4 stories subject to feasibility and cost effectiveness analysis. We appreciate the fact that feasibility criteria has been added to this mitigation measure with considerations of supply chain availability of parts, price of component parts and recognition and consideration of projects where natural gas lines may already be constructed or approved in an architectural master plan or improvement plans. Our original suggestion was that the price increase be tied to a dollar amount (\$3,000) and not to the current percentage and we continue to believe this is more feasible for the housing market. We ask that the board continue to support staff efforts to work on a variety of feasibility alternatives in this area to perfect viable alternatives and recognize the substantial progress that has been made already.

GHG 11 - VMT

We appreciate that there is new economic feasibility criteria mentioned, and would ask that the language in the CAP regarding this "economic feasibility" state more specify that it is intended to not create costs that would significantly hinder or stop housing production. In addition, we also ask that this measure be "strongly encouraged" and/or that there be flexibility in how this goal is strived for/reached given the potentially astronomical costs involved for new homeowners.

GHG 15 – Pedestrian Networks

New development should be allowed to help offset their project's GHG by investing in new pedestrian networks in existing neighborhoods.

GHG 02 – Urban Forest

New development should be allowed to contribute to greening the urban environment as a mitigation measure before exhausting all on site mitigation options.

The building industries would like to work with Sacramento County on achieving its climate objects while also considering that it is one of just a few jurisdictions taking such aggressive action. An overarching consideration to the feasibility and costs associated with this ambitious Climate Action Plan is that the City of Sacramento, West Sacramento and the County of Sacramento are the only jurisdictions in our large region considering such rapid phase in of such measures and we are concerned with the potential affect on consumer behavior and regional GHG goals. There are at least a dozen other jurisdictions not making such requirements of the building industry that are within 10 miles of the county boarders. While we are open to using a variety of technologies and approaches to reduce GHG, we would be wise to recognize that onerous costs could simply drive homebuilders and homebuyers to neighboring jurisdictions.

The Board of Supervisors has rightly been deeply concerned about the ongoing housing crisis and we hope that the board will continue to recognize that reaching both climate and housing goals requires a unique balancing of policy priorities given the completive market of housing in the many surrounding jurisdictions.

Thank you for your consideration of our feedback. We look forward to continuing to provide input on the alternatives as they are developed in the coming months.

CC: Supervisor Rich Desmond
Supervisor Patrick Kennedy
Supervisor Phil Serna
Supervisor Sue Frost
Todd Smith, Sacramento County Planning

From: <u>Erin Teague</u>

To: PER. climateactionplan
Cc: Smith. Todd: Taylor. Todd
Subject: SAR CAP Comment Letter

 Date:
 Monday, March 21, 2022 6:29:51 PM

 Attachments:
 2022 0321 SAR CountyCAPLetter GHG-06.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Hi Todd and Todd,

I just submitted this letter for public comment, and I will be there for the presentation on Wednesday. Please let me know if you need any additional information.

Erin L. Teague

Government Affairs Director Sacramento Association of REALTORS® 2003 Howe Avenue, Sacramento, CA 95825

Cell: (916) 801-6056

Email: eteague@sacrealtor.org



March 21, 2022

Supervisor Don Nottoli Chair, Sacramento County Board of Supervisors 827 7th Street, Room 225 Sacramento, CA 95814

RE: Item #3 Sacramento County Climate Action Plan - Measure GHG-06 Energy Efficiency and Electrification of Existing Residential Buildings

On behalf of the Sacramento Association of REALTORS® (SAR) and our 8,000+ members, we appreciate the opportunity to provide additional comments on the Sacramento County Climate Action Plan (CAP) February 2022 Draft. We add these comments as an addition to our previous comments that are not included in this letter. We are grateful for the collaboration we have had with staff and other stakeholders on this topic, and we look forward to participating as this conversation continues to move forward.

While we have collaborated closely with staff on GHG-06 there are still a few points of concern that we have as it relates to the electrification of existing residential buildings. The most concerning portion of the language is, "Permits for additions or alterations that do not include HVAC and/or water heating appliances will be require to upgrade to an electrical panel or branch circuit to support these appliances in the future." How can we predict the electric need of a home in the future? This creates a costly home upgrade between \$2,000-\$4,000 that would not be related to the upgrade that the homeowner is doing at that time.

An example would be a homeowner that needs to pull a permit to install new windows. Windows that create energy efficiencies and are greenhouse gas (GHG) reducing home projects that we want to encourage homeowners to do. This project is not related to the current electrical needs of the house, but it would cause an additional trade to be involved that is not at all relate to the original project. Therefore, forcing an additional cost for a product that they will not reap the benefits until additional appliances are added. The worst-case scenario in this example is the homeowner does not install the new windows because of the new additional requirement to upgrade the panel, and we do not benefit from the GHG reduction that the windows would provide. Additionally, the technology in this space is constantly changing, how does it factor in for the homeowner if now they include solar and battery storage on their home? We must create ways for homeowners to incrementally make these GHG reducing changes to their homes at a rate they can afford and





provide logical steps towards projects that are connected. A requirement to upgrade and electrical panel that may not be used for years is wasteful on a project that does not require a home to upgrade the load.

In the new language, the portion that states, "Permits for additions or alterations that include HVAC and/or water heating appliances will be required to include electrically powered appliances." We recommend some clarity that it is only the new HVAC and/or water heating appliances that need to be electric. As written, it is not clear that it is only the new HVAC and/water heating appliances are the only upgrades that are required to be all electric.

We understand that this strategy is an important part of the process for home electrification, it is important that there be extensive communication, education and a streamlined approach for installation of these products. When a homeowner's water heater goes out and needs to be replaces it is often a project that can be complete in 24 hours. In order to install an electric heat pump, it is a process that can take 1-2 weeks in the best of circumstances. The new process now involves plumbing and electrical trades and can even mean new space requirements and placement in the home. For these reasons we encourage you to consider and education program along with incentives, so residents have time to plan for larger scale projects before appliances break down. We are always willing to engage as our members often work with their clients on long-term home projects and cost projections to help partner in the communication and education of the new regulations.

Please keep in mind that as we approach all requirements, we want to make sure we are not further creating barriers for homeowners that want to make greenhouse reducing upgrades and help provide options to incrementally make these upgrades for those that cannot afford to do it all at once.

We understand that there is an enormous amount of pressure for local jurisdictions to reduce GHG rates, but we should note that if Sacramento County is the only area in our region that implements these strict reach codes, you could be putting home values in the unincorporated county at an unfair market advantage than those that are outside the area. Instead, Sacramento County should be working with the State for action that phases out gas appliances throughout California. Without a statewide strategy, there will be confusion in the region about what rules apply to which areas, or even more concerning, lower marketability of properties in Sacramento County versus other areas in the region.

SAR understands the need to reduce greenhouse gas in our region at a reasonable investment rate for homeowners to protect their most valuable asset, their home. Since 2012, SAR has participated with SMUD and Rebuilding Together Sacramento (RTS), to create a very successful home insulation program for an average cost of \$250. RTS was able to help low-income homeowners insulate their



homes. That not only helped homeowners save on their energy bills but reduced greenhouse emissions. Programs like this can help homeowners understand the need for reasonable home upgrades that can help clean our air quality and save them money.

We hope to continue to be part of this critical conversation as a stakeholder in Sacramento County and look forward to collaborating closely with staff to help meet the county's climate goals. Please contact Erin Teague with any questions eteague@sacrealtor.org.

Thank you for your consideration,

Erin Teague

Government Affairs Director

En L. Teague

Sacramento Association of REALTORS®

cc: County Supervisor Frost

County Supervisor Desmond County Supervisor Kennedy

County Supervisor Serna

Todd Smith, Sacramento County Planning



Taylor. Todd

Subject: County's Proposed Climate Action Plan. Item #3 on the agenda

Importance: High

From: Faye Wilson Kennedy < fayek@springmail.com >

Sent: Monday, March 21, 2022 6:02 PM

To: Supervisor Serna <SupervisorSerna@saccounty.net>; Nottoli. Don <nottolid@saccounty.net>; Frost. Supervisor

<<u>SupervisorFrost@saccounty.net</u>>; Rich Desmond <<u>RichDesmond@saccounty.net</u>>; Kennedy. Supervisor <<u>SupervisorKennedy@saccounty.net</u>>; Clerk of the Board Public Email <<u>BoardClerk@saccounty.net</u>>
Cc: rsabalow@sacbee.com; Genoa Barrow <genoa.barrow@sacobserver.com>; Scott T. Anderson

<scotta@newsreview.com>

Subject: County's Proposed Climate Action Plan. Item #3 on the agenda

Importance: High

County's Proposed Climate Action Plan. Items # 2 and #3 on the agenda.

Dear Sacramento County Board of Supervisors:

RE: County's Proposed Climate Action Plan. Item #3 on the agenda.

The Sacramento Poor People's Campaign (Sac PPC) is writing to provide comments for the upcoming March 23 Sacramento County Board of Supervisors meeting.

The Sacramento Poor People's Campaign is committed to lifting up and deepening the leadership of those most affected by systemic racism, poverty, the war economy, ecological devastation and to building unity across lines of division.

Climate Emergency Mobilization Task Force:

We are writing to support the creation of the Climate Emergency Mobilization Task Force. Community involvement in the creation of a Climate Emergency Response Plan is crucial to promote wide support for the necessary changes we face in the coming years to reduce and eliminate our dependence on fossil fuels. This Task Force is an important step forward for the County and will help elevate climate leaders in the struggle to face the ongoing climate emergency.

The Climate Emergency Response Plan will be one of the first in California. And the Sacramento Poor People's Campaign is committed to advocating for the strongest climate emergency plan we can achieve.

The Task Force and The Plan must address the following five (5) major issues and concerns:

1. Collaboration

The City, County and SMUD need to work together to meet their carbon free 2030 goals. We believe
the City and County of Sacramento should formally collaborate with other agencies to ensure that the
2030 Carbon Free Goal of mutual climate emergency declarations are met. The County is to be

- commended for placing language throughout the document promoting collaboration with other agencies and entities.
- The County, City and SMUD need to act with a clear sense of urgency and purpose to reach carbon neutrality by 2030 to avoid catastrophic costs due to Climate Change. The disruption of the communities and cultures of millions of people; and costs include 100's of billions of lost dollars, the extinction of over one-million plants and animals and the premature deaths, and loss of livelihoods.

2. Environmental Justice Lower income/Vulnerable communities - Affordable Housing, Food Insecurity, and Economic Investment

- Invest in low income, more vulnerable communities via affordable housing, electric and solar infrastructure as well as resilience and food hubs. Invest in affordable housing (income-based housing) as it will assist in solving food insecurity.
- Assist in helping families access current food programs like Cal Fresh and raise the minimum wage
 to ensure a better quality of life to low-income and impacted community members. Address air
 quality issues and disaster preparedness by investing in solar power in our more vulnerable
 communities.

3. The Unhoused and Climate Change

- Invite the unhoused community stakeholders to a climate resiliency and disaster planning session to prepare for extreme weather events and coordinate services to improve results and manage resources effectively. Build long-term climate resilient and carbon zero housing with green services, i.e., transportation, medical, food assistance, and job training.
- Establish a communication system using social media to connect government and nonprofit service providers to the unhoused and vulnerable communities to supply information about upcoming weather events and available services.
- Create or expand resiliency hubs that may include safe campgrounds and permanent housing in all
 communities. Community churches, nonprofits, and citizens actively engaged in the process could
 work in concert with government officials to conduct a needs assessment, establish policies and
 procedures and a governance process.
- Establish or strengthen a carbon-free transportation system that ensures the unhoused and underserved community members can get to a resiliency hub or other appropriate location in emergencies to address basic needs such as housing, shopping, and medical services.

4. Community Resilience

- Support the creation and expansion of resilience hubs for ongoing challenges of climate emergency and for dealing with natural disasters, at the hubs:
- Provide farmers market space, food hubs, seed swaps, support for gardening and composting
- Provide cooling and heating support for weather extremes using solar power
- Reduce the need to go long distances for necessities.
 - o Address public health issues of climate change. Use solar power and provide ordinance support for SMUD solar programs and the rooftop solar industry.
 - Place a special focus on low income/vulnerable communities

5. Composting, Community Gardens, and a Greener Community

- Keep our organic waste within our county; and invest in programs that process Sacramento household and green waste to create compost for use in municipal as well as residential landscaping.
- Promote and support an urban gardening program as a sustainable practice
- Collaborate with the SMUD's and the Tree Foundation's current free tree planting program to encourage and support the planting of urban trees.

Finally, we strongly recommend the County utilize an "equity, climate, and health in all policies" approach. -- to think about the potential benefits and harms of all climate actions and decisions in terms of how they not only help the County to work towards zero carbon by 2030, but also in how they can promote and improve public health outcomes, advance social, economic, and racial equity, and built community resilience.

Thank you for your leadership to the "equity, climate, and health in all policies" approach Sacramento Poor People's Campaign (Sac PPC)

From: Sean K. Falvey

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Subject: Sacramento County Climate Action Plan (CAP)

Date: Tuesday, March 22, 2022 9:28:58 AM

Attachments: image001.png

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX) and Sacramento County resident, I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you

Sean Falvey MBA, DBIA, LEED AP

Project Executive

c: 916.531.0001 w: Sundt.com

a: 2850 Gateway Oaks Dr, Ste 450, Sacramento CA 95833



Sundt's 2022 Mike Gaines MDA/ALS Charity Golf Tournament is Friday, May 13th at Timber Creek Golf Course in Roseville. For more information on the event or to register, please <u>click here</u>.

From: Edward Primasing
To: Supervisor Serna

Subject: Action Plan Considerations

Date: Tuesday, March 22, 2022 9:16:22 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Supervisor Serna:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Sincere regards,

Edward J. Primasing

Director of Marketing & Business Development | PCCI Marketing Department 10600 White Rock Road | Rancho Cordova, CA 95670 PH: 916.631.6604 | FAX: 916.631.6690 | CELL: 916-534-0505



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From: <u>Daniel M. Steinberg</u>

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick; Supervisor Serna; Nottoli. Don;

Desmond. Rich; Frost. Sue; Kennedy. Patrick

Cc: <u>tmurphy@srbx.org</u>

Subject: CAP

Date: Tuesday, March 22, 2022 9:14:25 AM

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!

Daniel M. Steinberg

TRAINOR FAIRBROOK

980 Fulton Avenue, Sacramento, California 95825

P: 916.929.7000 F: 916.929.7111 dsteinberg@trainorfairbrook.com www.trainorfairbrook.com

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From: Craig Sweeney
To: Supervisor Serna
Subject: 2022 Climate Action Plan

Date: Tuesday, March 22, 2022 8:06:40 AM

Attachments: <u>image004.png</u>

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisor Serna:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!

Craig Sweeney

Vice President of Operations Service and Controls Division

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"Performance Through Planning"

From: <u>John Stump</u>

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Cc: tmurphy@srbx.org

Subject: 2022 Climate Action Plan- Request

Date: Tuesday, March 22, 2022 7:45:14 AM

Attachments: <u>image001.png</u>

image002.png

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!

Warmest Regards,

John Stump, President

Flint Builders I Roseville — San Jose — San Diego **I** 916.997.2819 Mobile **I** <u>www.flintbuilders.com</u> — <u>www.hummingbirdbuildings.com</u>



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From: <u>Josh Wertz</u>

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Subject: 2022 Climate Action Plan

Date: Tuesday, March 22, 2022 7:40:37 AM

Attachments: image001.png

Importance: High

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!

Josh Wertz

Vice President of Estimating & Chief Operating Officer

Western Engineering Contractors, Inc.

(916) 652-3990 x114 Fax (916) 652-3995

iwertz@westeng.com

www.westeng.com



Subject:

Sacramento County CAP--comments for March 23 Workshop

From: Rosie Yacoub < rayacoub@yahoo.com > Sent: Tuesday, March 22, 2022 12:04 PM

To: Kennedy. Supervisor < SupervisorKennedy@saccounty.net>

Cc: Supervisor Serna < Supervisor Supervisor SupervisorSerna@saccounty.net">Supervisor SupervisorSupervisorSerna@saccounty.net; Nottoli. Don < nottolid@saccounty.net; Clerk of the Board Public Email < BoardClerk@saccounty.net

Subject: Sacramento County CAP--comments for March 23 Workshop

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

I am writing as a volunteer for 350 Sacramento to comment on certain portions of the County Climate Action Plan (CAP)—specifically the building electrification measures. I am a resident of district 2, but am also addressing these items for 350 Sacramento's electrification team.

Measures GHG-04-06 are great steps forwards outlining a path forward for building electrification. Both new building and existing building stock measures are written, and the County is ambitiously proposing them on the same timeline. The concept for the new building electrification is very similar to that of the City of Sacramento, and the County should be able to lean on feasibility analyses used by the City of Sacramento (1).

To improve on all of the measures, the permissive use of the word "will", should be replaced with the mandatory word "shall". For example, where GHG 05 says The County will develop a reach code requiring new commercial and nonresidential buildings it should say "shall develop". This stronger language is used in other CAPs.

To improve on the requirements to replace appliances for existing buildings: GHG-04 and GHG-06, both natural gas and propane run appliances should be specified for replacement by electric appliances. Burning gas is burning gas.

On GHG-06, specifying and passing a compliance measure alongside the requirement for replacement of gas appliances with electric ones in residential buildings is key. Without a strong compliance measure for properly permitting the County should not anticipate reductions in excess of 10% compliance, which

CEC has determined is the rate of permit compliance in the State of CA for appliance replacement (2). This greatly reduces the efficacy of the requirement, and the County shouldn't count reductions they aren't going to get. A concept that requires the County to ensure that all improvements have been permitted when required, similar to the resale program in the City of Davis (3), is the only thing that will make this a meaningful measure. This needs to be specified in the CAP.

If these measures are to begin in the timeframe suggested by the CAP, they actually need to be brought before the Board soon. The new building electrification measures should be brought to the Board for a vote by June and the Supervisors should direct staff to prepare for this today. The existing building measures should be brought to the Board after identifying a way to get permit compliance for measure GHG-06, but of course before the end of the year, in order to be in place by 1/1/2023. The clock is ticking, let's get started!

Thanks for your attention, Rosie Yacoub

- 1. See <u>2019 Low Rise Reach Code Analysis SMUD Final</u> (<u>cityofsacramento.org</u>) and <u>2019 MidRise Reach Code Analysis</u> (<u>cityofsacramento.org</u>)
- 2. See <u>CEC Final 2021 Integrated Energy Policy Report Volume I Building Decarbonization</u>, Page 64
- 3. See Resale Program | City of Davis, CA

"Wherever I go I seem to be surrounded by fairytales. Business leaders, elected officials all across the political spectrum spending their time making up and telling bedtime stories that soothe us, that make us go back to sleep. These are 'feelgood' stories about how we are going to fix everything. How wonderful everything is going to be when we have 'solved' everything. But the problem we are facing is not that we lack the ability to dream, or to imagine a better world. The problem now is that we need to wake up." – Greta Thunberg

Taylor. Todd

Subject: Bradford White Corporation Comments to Sacramento County Revised Climate Action

Plan

Attachments: 2022-0322_County of Sacramento-CAP BWC Comments.pdf

Importance: High

From: Michael Corbett < MCorbett@bradfordwhite.com >

Sent: Tuesday, March 22, 2022 12:36 PM

To: PER. climateactionplan <climateactionplan@saccounty.net>

Cc: Clerk of the Board Public Email < <u>BoardClerk@saccounty.net</u>>; Supervisor Serna < <u>SupervisorSerna@saccounty.net</u>>; Kennedy. Supervisor < <u>SupervisorKennedy@saccounty.net</u>>; Rich Desmond < <u>RichDesmond@saccounty.net</u>>; Frost.

Supervisor <SupervisorFrost@saccounty.net>; Nottoli. Don <nottolid@saccounty.net>

Subject: Bradford White Corporation Comments to Sacramento County Revised Climate Action Plan

Importance: High

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Mr. Smith,

On behalf of Bradford White Corporation (BWC), we would like to thank you for the opportunity to comment on the County of Sacramento's Revised Final Climate Action Plan (CAP), specifically as it relates to proposed implementation dates and the feasibility of requiring new and existing buildings to adopt all electric water heating technology.

BWC is an American-owned, full-line manufacturer of residential, commercial, and industrial products for water heating, space heating, combination heating, and water storage products. In the State of California, a significant number of individuals, families, and job providers rely on our products for their hot water and space heating needs.

BWC has provided specific comments in the attached letter to community greenhouse gas reduction measures GHG-04, 05, 06, 07 as outlined in section 2.1 of the Revised Final Climate Action Plan.

If planning and environmental review staff or county supervisors would like to discuss further, please feel free to contact me at your convenience.

Best Regards,

Mike Corbett

Michael Corbett

State Gov't Affairs & Product Specialist 2700 Mercantile Drive, Suite 100 Rancho Cordova, CA 95742

Cell: 269-309-6596





March 22, 2022

Todd Smith, Principal Planner
Office of Planning and Environmental Review
827 7th Street
Sacramento, CA 95814

Dear Mr. Smith:

On behalf of Bradford White Corporation (BWC), we would like to thank you for the opportunity to comment on the County of Sacramento's Revised Final Climate Action Plan (CAP), specifically as it relates to proposed implementation dates and the feasibility of requiring new and existing buildings to adopt all-electric water heating technology.

BWC is an American-owned, full-line manufacturer of residential, commercial, and industrial products for water heating, space heating, combination heating, and water storage products. In the State of California, a significant number of individuals, families, and job providers rely on our products for their hot water and space heating needs.

BWC has provided specific comments to community greenhouse gas reduction measures GHG-04, 05, 06, 07 as outlined in section 2.1 of the Revised Final Climate Action Plan.

MEASURE GHG-04: INCREASE ENERGY EFFICIENCY AND ELECTRIFICATION OF EXISTING COMMERCIAL/NONRESIDENTIAL BUILDINGS AND FACILITIES

Measure GHG-04 sets target dates for the replacement of natural gas water heating in existing commercial and nonresidential facilities as follows:

- Building permit applications filed on or after January 1, 2023, for buildings that are three stories or less; and
- Building permit applications filed on or after January 1, 2026, for buildings that are four stories or more.











BWC strongly opposes the proposed deadlines for the following reasons:

- The recently adopted 2022 California Energy Code does not require existing commercial and nonresidential buildings to be updated to be all-electric. The code does not provide a suggested pathway for most commercial end uses to comply.
- Over 50 jurisdictions throughout the state have adopted reach codes, above and beyond the 2019 Energy Code, requiring only new construction to be built all-electric. There has not been adequate cost-effectiveness analysis completed on adopting all-electric replacements in existing commercial and nonresidential buildings. For a cost-effectiveness analysis to be completed, there needs to be a sizeable population of existing installations in which to evaluate. Installations of heat pump water heater (HPWH) technology outside of the residential building space is few and far between, and there is not enough data to thoroughly conduct a feasibility study. This is particularly true when considering the diversity of building types in existing commercial and nonresidential buildings.
- Statewide decarbonization programs do not offer incentives for commercial electric water heating equipment. Most recently, the California Public Utilities Commission (CPUC) released its proposed program guidelines for the Self Generation Incentive Program (SGIP), which explicitly recommends against offering incentives for electric HPWH technology for commercial and nonresidential applications. The CPUC staff cite and supporting public comments cite the primary reason is that nonresidential HPWH technology is not commercially available to support market transformation currently.
- A shift to require that existing commercial and nonresidential buildings be retrofitted to use all electric water heating technology will require significant time, money, and collaboration by manufacturers and plumbing trade associations to train the workforce to ensure quality installations. As proposed by the CAP, this is not an effort that can be done in a matter of months but will take years as technology becomes commercially available.
- When there is not enough commercially available HPWH technology, creating an ordinance for existing commercial and nonresidential buildings to require the use of electric HPWH technology will require the building authority to grant exceptions to use readily available natural gas equipment. While some building owners plan ahead to replace equipment, emergency replacements are unavoidable and will require the building owner to act quickly to restore hot water service. Without readily available equipment, infrastructure, and contractors trained in electric HPWH technology to support an emergency changeout, a building owner will have to install a natural gas water heater or boiler.

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• On June 1, 2021, the City of Sacramento adopted Resolution No. 2021-0166 establishing a framework for electrifying existing buildings. The framework outlines steps for engaging with residents, businesses, and other stakeholders to plan an equitable transition from gas in buildings. BWC recommends the County of Sacramento adopt Resolution No. 2021-0166 or a similar resolution to evaluate how and when existing building stock can electrify in lieu of the proposed permit dates outlined in the current measure.

BWC suggests Measure GHG-04 adopt provisions similar to those included in GHG-07 requiring the County to evaluate supply chain feasibility. We suggest the following language:

"Where a project applicant can reasonably demonstrate that all parts and equipment required to retrofit an existing mixed fuel building with electric equipment and appliances are not commercially available, are more costly than efficient commercially available gas options and cannot be acquired from a manufacturer within 120 days for planned replacements. Furthermore, if no equipment is available from local suppliers to replace broken equipment on an emergency basis, an exception shall be granted to use readily available gas equipment."

In addition to the proposed language above, we suggest including specific exceptions, such as those noted below. BWC participates in building code and ordinance discussions across California and the rest of the country. The following are common exceptions for commercial and nonresidential buildings that have been adopted for end uses that would have a very challenging time electrifying.

- Manufacturing or industrial facilities with process loads; or
- Healthcare facilities, emergency services, and "essential facilities," which are buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow, or earthquake; or
- Where it has been determined by the code official that building constraints make compliance technically infeasible; or
- Where the owner of such building can demonstrate to the code official that compliance would create an undue hardship.

MEASURE GHG-05: INCREASE ENERGY EFFICIENCY AND ELECTRIFICATION OF NEW COMMERCIAL/NONRESIDENTIAL BUILDINGS OR FACILITIES

Measure GHG-05 sets target dates for use of electric water heating technology in commercial and nonresidential new construction as follows:

• Building permit applications filed on or after January 1, 2023, for buildings that are three stories or less; and











• Building permit applications filed on or after January 1, 2026, for buildings that are four stories or more.

BWC opposes the proposed deadlines for the following reasons:

- The recently adopted 2022 California Energy Code, does not include an all-electric pathway for most end uses in commercial and nonresidential new construction. Furthermore, cost-effectiveness studies conducted on available electric water heating equipment, have not demonstrated technology to be cost-effective compared to gas.
- Statewide new construction decarbonization programs do not offer incentives for commercial and nonresidential electric water heating equipment. The primary reason is that nonresidential HPWH technology is not commercially available to support market transformation.

BWC suggests Measure GHG-05 adopt provisions similar to those included in GHG-07 requiring the County to evaluate supply chain feasibility. We suggest the following language:

"Where a project applicant can reasonably demonstrate that all-electric parts and equipment required to construct an all-electric building are not commercially available, are more costly than efficient commercially available gas options and cannot be acquired from a manufacturer within 120 days, an exemption shall be granted."

As mentioned in our comments to GHG-04, BWC also suggests that the same exceptions apply for new commercial and nonresidential buildings. There is not readily available technology to meet the unique hot water demands of these end uses and a trained labor force to install HPWH technology in the commercial and nonresidential space.

MEASURE GHG-06: INCREASE ENERGY EFFICIENCY AND ELECTRIFICATION OF EXISTING RESIDENTIAL BUILDINGS

Measure GHG-06 sets target dates for the replacement of natural gas water heating in existing residential facilities as follows:

- Building permit applications filed on or after January 1, 2023, for buildings that are three stories or less; and
- Building permit applications filed on or after January 1, 2026, for buildings that are four stories or more.

BWC strongly suggest that the County revisit the proposed measure implementation dates. While existing buildings represent the bulk of the opportunity to decarbonize the county as identified in











the CAP, much of the existing building stock is historical and/or not constructed to today's building standards. Therefore, it increases the complexity of retrofitting to all-electric water heating. It is imperative to include both local business owners and manufacturers in the conversation regarding electrifying existing buildings. Without a broader group of stakeholders involved in these conversations, we are concerned with the timing and strategy that would be proposed and how it would limit the success of measure GHG-06.

Over 90% of residential water heater replacements are done on an emergency basis where the water heater has failed and is not necessarily easily or cost effectively repaired. It is essential that ample products are available, and customers need to be able to have these products installed as timely as possible to satisfy their needs. This would be unlikely if manufacturers do not have the right product mix, and those products are not stocked by local distributors, forcing the consumer to wait. Without involving manufacturers and the local business community in the conversation, the County is leaving out critical stakeholders required to successfully support the transition to all-electric buildings. Setting arbitrary dates for adoption will not necessarily result in products being readily available.

BWC suggests Measure GHG-06 adopt provisions similar to those included in GHG-07 requiring the County to evaluate supply chain feasibility. We suggested the following language:

"Where a project applicant can reasonably demonstrate that all parts and equipment required to retrofit an existing mixed fuel residence with electric equipment and appliances are not commercially available, are more costly than efficient commercially available gas options and cannot be acquired from a manufacturer within 120 days for planned replacements. Furthermore, if no equipment is available from local suppliers to replace broken equipment on an emergency basis, an exception shall be granted to use gas equipment."

In addition, consistent with our comment on GHG-04, BWC recommends the County of Sacramento adopt Resolution No. 2021-0166 or a similar resolution to evaluate how and when existing building stock can electrify in lieu of the proposed permit dates outlined in the current measure. Resolution No. 2021-0166 establishes a framework for electrifying existing buildings. The framework outlines steps for engaging with residents, businesses, and other stakeholders to plan an equitable transition from gas in buildings.

MEASURE GHG-07: ELIMINATE FOSSIL FUEL CONSUMPTION IN NEW RESIDENTIAL BUILDINGS

Measure GHG-07 sets target dates for the replacement of natural gas water heating in new residential facilities as follows:

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- Building permit applications filed on or after January 1, 2023, for buildings that are three stories or less; and
- Building permit applications filed on or after January 1, 2026, for buildings that are four stories or more.

BWC generally does not have concerns with measure GHG-07 as it is currently written. The proposed measure is consistent with the adoption of the 2022 California Energy Code and has many well thought out provisions included that would allow for mixed fuel construction. We are encouraged by the measure's mention of supply chain feasibility and encourage the County to establish a working group consisting of manufacturers and local suppliers that meet regularly to evaluate local supply challenges and equipment availability.

In addition to specific comments provided for GHG Measures 04, 05, 06 and 07, BWC recommends establishing an "Infeasibility Waiver Process," and "Technical Panel" like the one below adopted by the City of Sacramento in their final building electrification ordinance. This panel should consist of community leaders, environmental justice representatives, labor unions, utility providers, equipment manufacturers, local business community, city staff, and elected officials. The panel should have the responsibility of determining market readiness for transitioning to all-electric buildings.

Infeasibility Waiver Process:

"To provide additional flexibility for new construction which codified exemptions cannot provide, the New Building Electrification Ordinance provides for an infeasibility waiver process that will allow the Building Official to waive all-electric requirements for the portions of the project where all-electric is demonstrated by the project applicant to be infeasible."

Infeasibility Waiver Guidance Document - Technical Panel

"As part of the preparation for implementing the New Building Electrification Ordinance, city staff are convening an advisory technical panel that will be tasked with vetting barriers where technologies are not yet market-ready for electrification and providing input on an Infeasibility Waiver Guidance Document that will be developed for electrifying new construction. The members of the technical panel have been selected, including 14 representatives of stakeholder groups as approved by City Council on June 1, 2021, and the Technical Panel will convene early next year. City Council will adopt the final Infeasibility Waiver Guidance Document in Fall 2022, prior to the Ordinance going into effect."

Lastly, we strongly urge the County Board of Supervisors to consider the financial burden of GHG-04, 05, 06, 07 and other measures that may be placed on their constituents. Even with the support of local incentives from Sacramento Municipal District and incentives from the state, the cost of

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equipment and necessary improvements to support converting mixed fuel buildings and homes to all-electric can cost business owners and homeowners thousands more compared to replacing like for like gas equipment.

Bradford White thanks the environmental planning staff and county supervisors for the opportunity to provide feedback on the County of Sacramento's CAP. Please let me know if you have any questions or would like any additional information.

Respectfully Submitted,

Bradford White Corporation

Eric Truskoski Senior Director of Government and Regulatory Affairs

Cc: B. Ahee; M. Corbett; R. Wolfer; Chair County Supervisor Nottoli, Vice Chair County Supervisor Desmond, County Supervisor Kennedy, County Supervisor Serna, County Supervisor Frost











From: Kim Oldehoeft

To: PER. climateactionplan

Cc: Supervisor Serna; Smith. Todd; Lundgren. John; Taylor. Todd

Subject: February 2022 CAP is NOT READY for approval Date: Tuesday, March 22, 2022 1:17:08 PM
Attachments: 20220322 CAP KDO comments.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Climate Action Plan Committee

Please see my attached comment letter regarding the Revised Final Draft Climate Action Plan dated February 2022. I send these with urgency.

It is time for Sacramento, as the State's Capitol, to truly lead California into the future.

Thank you,

Kim

Todd Smith, Principal Planner
John Lundgren, Senior Planner
Todd Taylor, Associate Planner
Office of Planning and Environmental Review
827 7th Street
Sacramento, California 95814

CC: Phil Serna Supervisor, District 1 700 H Street, Suite 2450 Sacramento, California 95814

RE: Public Comment on Revised Final Draft Sacramento County Climate Action Plan dated February 2022

Dear Mr. Smith, Mr. Lundgren, and Mr. Taylor:

I am a resident of Sacramento County, and I support acting to reduce emissions and curb the effects of climate change as soon as possible using the *best available science*. The February 2022 version of the Sacramento County Final Draft Climate Action Plan (CAP) is not ready for approval. As it is written, it lacks a clear commitment to take climate action and does not update the 2011 CEQA analysis. A new environmental review must be conducted to provide the CAP with much-needed direction from top scientists and up-to-date science. If passed today, the CAP would harm the people and the planet rather than help. A strong, committed, effective CAP provides leadership to the community by clearly requiring all future activities in the County to work toward carbon-zero, to develop a plan for climate change adaptation, and to actively sequester existing carbon in the atmosphere. The residents of this County are relying on YOU, our government, to protect them and put a strong plan in place to support them should disaster arise. The entire planet is relying on you to do the promised work in an effective way.

As a mother of a young child attending school in the Sacramento City Unified School District, I am especially passionate about local and global issues that will impact my child. As most parents, I want my child to thrive with enough resources and live without constant fear. I am teaching my child to live in sustainable ways that respect the earth and all the inhabitants, such as conserving water, repairing broken toys, utilizing used clothes and toys, etc. It isn't easy to live sustainably in the world right now (e.g. lack of sustainable resources), and it can be expensive sometimes (e.g. owning an electric car) especially when the public resources don't fully support this commitment. For example, the distance from home to community resources requires driving and there aren't charging stations outside of City centers from apartment dwellers or those who can't afford a home charger. If our culture truly valued the global environment, residents would find it easy to make choices and behave in ways that also valued the environment. The County CAP is a unique opportunity to create a better world and adapt to climate change.

As a biologist (and mother), I spend my bits of personal time and energy learning about climate disruption and solutions, growing and propagating native plants and a food garden, and providing support to friends and community members to understand and appreciate wild birds and ecology. I offer my professional experience freely to local organizations such as Sacramento Valley Conservancy, Sacramento Audubon

Society, Sacramento Tree Foundation, the Environmental Council of Sacramento, and 350 Sacramento. I participate in citizen science through the National Audubon Society (Climate Watch Surveys, eBird contributions, etc.), and I am a Certified Climate Steward through the University of California's Department of Agricultural and Natural Resources.

My greatest concerns about the current draft of the CAP are that the environmental review of 2011 has long expired, and the 2022 addendum is insufficient in reviewing all the changes that have occurred over the past decade. The CAP's proposed measures are based on that environmental review, and they are not written clearly enough. Because a CAP would permit future projects to go forward without additional greenhouse gas review, only a very strong, explicit, up-to-date, detailed, enforceable CAP must be passed. The current draft of the CAP is not in passable condition.

Redo the Environmental Review for 2022

Much has happened since the 2011 environmental conditions were reviewed, and the 2022 addendum does not adequately reflect these changes. Here are a few relevant changes since 2011:

- The warmest seven years have all been since 2015 including last year (2021), with 2016, 2019, and 2020 constituting the hottest three. ¹
- Atmospheric carbon dioxide has risen by at least 25ppm.²
- Sea level has increased from 54.4 to 101.3 mm above 0 mm of the 1990s³. That's a 1.8-inch increase since 2011 of the 4 total inches of sea level rise since the 1990s.
- o Renewable energy production has skyrocketed and has become more readily available.⁴
- o The cost of coal flatlined, and the cost of renewables has dropped.⁵
- o Paris Agreement⁶
- Conference of the Parties held ten summits (COP 17-26), most recently in 2021 (COP26).
- Advancement of scientific understanding of climate change, effective mitigation, and reliable solutions

The Environmental Review of 2011 and the 2022 Addendum do not adequately review and address the current world. A new environmental review must be conducted to provide the CAP with much-needed direction from top scientists and up-to-date science. Sacramento County is fortunate in that it includes the Capitol of the Great State of California. This means that the County houses many state government agencies, and therefore a new CAP must utilize the expertise of locally based state scientists and specialists. It is imperative to elicit involvement of as many of these experts as possible to ensure the best available science is being used. Additionally, it is time for Sacramento to truly lead California as the State's Capitol into the future.

¹ https://public.wmo.int/en/media/press-release/2021-one-of-seven-warmest-years-record-wmo-consolidated-data-shows

² https://scrippsco2.ucsd.edu/

³ https://sealevel.nasa.gov/understanding-sea-level/key-indicators/global-mean-sea-level

⁴ https://www.eia.gov/todayinenergy/detail.php?id=51698

⁵ https://www.nrel.gov/news/program/2018/costs-continue-to-decline-for-residential-and-commercial-photovoltaics-in-2018.html</sup>

⁶ https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

⁷ https://www.un.org/en/climatechange/cop26, https://www.nationalgrid.com/responsibility/environment/cop26

In addition to the list of developments above, the environmental conditions within Sacramento County have changed from various human activities such as construction, increased unhoused encampments in sensitive natural areas such as along the rivers, and other activities resulting in environmental degradation. A new environmental review is required to sufficiently create an effective strategy for the County to curb future greenhouse gas emissions and to mitigate for current and past emissions. Basing a climate action plan on environmental reports performed over a decade ago is setting the plan up for failure.

Clarify the Measures

Critical parts of the CAP are written with vague and unenforceable language. This communicates, whether intentionally or not, that the County is uncommitted to making the necessary changes to curb greenhouse gases and to do their part to reduce existing greenhouse gases. Specific, measurable, scientifically sound, up-to-date, well-thought-out justifications, measures, and alternatives are needed. More detail is required throughout the entire document to describe what will be accomplished, how it will be accomplished, when it will be accomplished, and how it will be funded.

With unclear measures, there is great opportunity for miscommunication which sets a low bar for effectiveness. I am reminded of a common miscommunication around our home. Person One says, "I'll clean this room later tonight" and then picks up the trash on the floor. However, Person Two thought "clean" also meant tidy the toys, put the dirty socks into the laundry, vacuum up the pet fur, and wipe up the spills and crumbs. When Person Two is shocked to see the room is still a mess to their standards, Person One is confused about why the other is upset because after all they did clean as they had promised. With vague, generalized communication, each party has a different expectation, and the outcome is upset and confusion for everyone. With explicit communication, the room is cleaned to an agreed upon condition and everyone has the same expectations. With the Climate Action Plan, the stakes are extremely high and will impact every living thing on the globe. Therefore, the CAP must include explicit details, plans, strategies, feasible alternatives, performance measures, etc.

Each measure must be clarified with answers to each of these questions, and more as appropriate:

- 1. What evidence-based science is supporting each measure? Detail the feasible alternatives.
- 2. How will the measure implementation be funded? How will monitoring the effectiveness be funded?
- 3. How will each measure be enforced? Will you have qualified independent monitors? How will this be funded?
- 4. Who enforces measure implementation? What are the consequences of a measure not being enforced? What source will fund enforcement?
- 5. How and when will you determine effectiveness of each measure? What is the timeline for achievement? Will there be independent scientists measuring results? Will the County monitor implementation? How will this be funded?
- 6. Explain in much more detail the programs and performance measures, economic analyses, timelines and compact development.
- 7. How will each measure reduce traffic?
- 8. How will each measures reduce sprawl and preserve existing green spaces? Will the County take action to increase the area of green spaces for sensitive species?

Iterative Process

The advancement of science or a change in conditions (e.g. natural disasters, population growth, etc.) present potential for certain measures to be rendered ineffective for achieving carbon-neutrality. The CAP must clearly describe feasible alternatives and provide strategies for such contingencies. A committee of independent qualified scientists and specialists of the Sacramento Region must perform an annual review of the CAP to ensure it is effective and append the document with updates, including new feasible measures as necessary.

Carbon Farming

I'd like to address one measure from the February 2022 CAP:

"MEASURE GHG-01: PROMOTE AND INCREASE CARBON FARMING Measure: The County will work with local farmers, ranchers, and land managers to promote and increase carbon sequestration on agricultural lands through the development of carbon farming plans. Implementation: Develop a program by 2024 that, through targeted outreach, provides carbon sequestration education and resources to relevant stakeholders (e.g., farmers, ranchers, and land managers). The program will focus on educating stakeholders about the co-benefits of implementing carbon sequestration practices and the variety of financial and technical resources that are available to assist farmers and ranchers in implementation. This program may be coordinated with industry groups and nonprofits. Implementing County Departments: SM and Agricultural Commissioner".

This measure isn't clear about how it will go about implementing carbon farming. The statements are vague and uncommitted. There is a wealth of existing knowledge, regional experts, and an existing network of carbon farming already in action. Instead of reinventing the wheel, the County must follow the footsteps of most of the other counties in California and join the California Association of Resource Conservation Districts (CARCD) network. (RCD = Resource Conservation District).

"RCDs around the state have begun creating and implementing Carbon Farm Plans in partnership with the Carbon Cycle Institute (CCI). Many RCDs are at the cutting edge in developing and implementing pilot projects and creating programs to incentivize and provide technical assistance for carbon farming and healthy soils projects. The California Department of Food and Agriculture, CCI, and the USDA Natural Resources Conservation Service are core partners in these efforts. The programs are designed to assist the agencies in meeting their missions and current priorities while supporting farmers and ranchers with field evaluations, irrigation techniques, and a host of other practices that reduce carbon emissions, help farmers and ranchers meet their bottom line, and provide stewardship for their land while supporting a sustainable and productive agricultural economy."9

Experts partnering within the California Association of Resource Conservation Districts include:

- Natural Resources Conservation Service:
- California Department of Conservation
- Sustainable Conservation

⁸ https://carcd.org/

⁹ https://carcd.org/our-work/project/carbon-farming/

- Conservation Strategy Group
- Solid Ground Consulting
- S.D. Bechtel, Jr. Foundation
- Resources Legacy Fund
- The Campbell Foundation
- Central Valley Community Foundation
- PG&E Corporation Foundation
- National Fish and Wildlife Foundation
- U.S. Forest Service
- U.S. Army Corps of Engineers
- U.S. Air Force
- California Department of Food and Agriculture
- California Department of Water Resources
- California Department of Fish and Wildlife
- California Department of Conservation
- The California Department of Forestry and Fire Protection
- Coastal Conservancy
- Sierra Nevada Conservancy
- Central Valley Joint Venture
- Wildlife Conservation Board
- American Farmland Trust
- Audubon California
- Best Best & Krieger
- California Climate & Agriculture Network
- California Council of Land Trusts
- California Farm Bureau Federation
- California Fire Safe Council
- California Invasive Plant Council
- Carbon Cycle Institute
- Community Alliance with Family Farmes
- Defenders of Wildlife
- Dixon Ridge Farms
- Environmental Defense Fund
- National Grazing Lands Coalition
- Northern California Water Association
- Regional Water Authority
- The Center for Land-Based Learning
- The Nature Conservancy
- University of California Agriculture and Natural Resources
- University of California Davis College of Agriculture and Environmental Sciences
- National Association of Conservation Districts
- California Special Districts Association
- California Association of Local Agency Formation Commissions

...to name a few. I do not believe for one minute that the County of Sacramento can develop a carbon farming plan that would be as good as something created by the partnership of the above experts as those supporting the California Association of Resource Conservation Districts. As the County of Sacramento is a public entity protecting the people residing within its jurisdiction, and in the case of a climate action plan it impacts all of humanity, the County must place itself on the cutting edge. In joining the California Association of Resource Conservation Districts, the County expedites effective carbon farming and would probably save a lot of money by tapping in to an existing, well-informed, multi-agency, multi-organization, effort. The County of Sacramento must join this state-wide effort and rely on top-notch scientific research and guidance.

Reiterating Previous Comments

The CAP must incorporate and elaborate on the following actions described in my comment previous letter written for the 2021 draft. Some of these topics are not even mentioned in the CAP, but they are critical components to develop an effective CAP. I briefly restate these topics below.

1. Short-Lived Climate Pollutants

The CAP failed to mention short-lived climate pollutants (SLCPs). The CAP must address a strategy to halt these small but mighty SLCPs. Even if the CAP is leaning on statewide regulations to control SLCPs, this must be clearly stated in the CAP so that it is clear, enforceable, and measurable. If it is not mentioned in the CAP, there is room for misunderstanding.

2. Consult Local Indigenous Tribes on the CAP

The CAP failed to describe consultation with local Indigenous Tribes. The CAP must consult with local Indigenous Tribes. Indigenous Traditional Ecological Knowledge is integral for adapting to climate change and greatly reducing emissions. To remedy this gross oversight, the CAP must collaborate closely with local Indigenous leaders and adjust the document to include priorities determined by the Indigenous. The least the County government can do is involve these communities in developing a reparative Climate Action Plan for the future.

3. Native Plant Restoration and Habitat Connectivity

The CAP failed to include any discussion about native plant protection. The CAP must address how the County will make use of native plants to build resilience and connectivity in the local ecosystem.

4. Green Job Creation

Green Job Creation was dismissed from the CAP and must be reinstated. If the County is serious about reducing emissions and sequestering existing emissions, it must weave into its fabric a strong local Green Economy. The CAP must decrease Sacramento County's contribution to climate change while simultaneously creating employment opportunities for people at all skill levels.

5. Trash Reduction

The CAP failed to discuss the impacts of trash on climate change. The CAP must address the issue of trash creation and improved clean-up and management.

6. Keep Food Local

The CAP failed to explicitly describe how the County will support farmers during extreme weather conditions. The CAP must outline details for how it will support local farmers to build resilient farms and sustain extreme weather events and conditions.

As the document is written, it would permit activity within the County to remain on the current trajectory toward worst-case-scenario greenhouse gas emissions and is on schedule to exceed emissions goals. As it stands, we have less than 10 years to make the change so the planet will be liveable for future generations of people and beloved pets, wild animals and plants, and life as we know it. I am counting on you to do the right thing to so that our County will do its part in its global contribution.

Last note, if you yourselves are feeling hopeless and possibly afraid about the impacts of climate change, I completely understand. I have certainly had periods of time where I am a deer in headlights and I go into denial. All of us who are thinking deeply and regularly about this topic certainly have these feelings from time to time. However, if your feelings are preventing you from creating an impactful CAP that protects the people and life of this County and this planet, I urge you to step aside and hire someone who believes that climate change can be addressed, that it is a process of adapting to the changes in climate, a process of overhauling the way we think about daily life, providing opportunities for our community to easily operate in a sustainable way, and taking responsibility for cleaning that which humans have uniquely dirtied.

Thank you for your consideration of these additional comments.

Kimberly Oldehoeft, MS Biology, UC Climate Steward Sacramento County Resident

Taylor. Todd

Subject:

March 23rd at 6:00 Meeting, Item #3 Climate Action Plan

From: Christian McGlade <christian.mcglade@gmail.com>

Sent: Tuesday, March 22, 2022 2:10 PM

To: Clerk of the Board Public Email < BoardClerk@saccounty.net > **Subject:** March 23rd at 6:00 Meeting, Item #3 Climate Action Plan

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Sacramento County Board of Supervisors,

My name is Christian McGlade and I am a realtor in Sacramento County. I am reaching out to express genuine concern for my clients as it relates to GHG-06, specifically the following phrase:

"Permits for additions or alterations that do not include HVAC and/or water heating appliances will be required to upgrade to an electrical panel or branch circuit to support these appliances in the future."

My biggest hesitation is that there are many projects my clients are looking to do around the home that require a permit and have nothing to do with electrical (ie: new doors, new windows, etc). Many of the clients I serve have very limited savings, especially after paying down payments, closing costs, appraisal gaps, etc. Therefore, requirements like this would make it that much more difficult for them to afford certain upgrades.

For example, if I had a client who were willing to replace windows to make them more energy-efficient to save money on heating and air in the long run, the additional several thousand that would be required for the electrical upgrade may very well prevent them from getting the new windows in the first place.

Moreover, this requirement may delay my client's choice to even purchase a home that could use some upgrades-- thereby delaying the opportunity to create generational wealth for their children.

I appreciate you taking the time to understand my concerns. I believe we all would like to do all we can to deal with climate issues and I believe the proposal is well-intentioned; however, this would just be unrealistic for many clients' wallets, especially the lower-income clients I serve who need to start building generational wealth as soon as possible. Please do not hesitate to contact me with any questions.

Best,



916.296.8387 • CHRISTIAN.MCGLADE@GMAIL.COM

1819 K STREET . SUITE 100 . SACRAMENTO, CA 95811

Christian McGlade

Better Homes & Gardens Real Estate
San Diego State University Fowler College of Business, B.S., 2018

C: 916.296.8387

1819 K Street #100, Sacramento, CA 95811

DRE# 02105096

Oh, by the way...I'm never too busy for any of your referrals.

I have not and will not verify or investigate the information supplied by third parties.

From: <u>Mike Paris</u>
To: <u>Supervisor Serna</u>

Subject: Proposed Climate Action Plan

Date: Tuesday, March 22, 2022 12:03:25 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors:

Regarding the 2022 Climate Action Plan, I am concerned that some of the measures may drive up the cost of housing in Sacramento. I am a builder here in Sacramento County and we respectfully urge you to please:

- Oppose Requirements for Immediate Carbon Neutral Housing (Measure GHG 30) This will stop housing and force homeowners to drive even further to Sacramento.
- Support feasibility criteria in meeting the conversion to all-electric appliances (Measure GHG 7)
- Oppose requirements for Tier 4 construction equipment as there is simply not enough equipment in the market to even meet current demand or to comply with this requirement in 2023. (Measure GHG 8)

Thank you!



MICHAEL E. PARIS
CEO | President
8880 Cal Center Drive, Suite 350
Sacramento, California 95826
916.497.0903 Direct
916.825.6180 Cell

From: Harder, J. Steve
To: Supervisor Serna
Subject: 2022 Climate Action Plan

Date: Tuesday, March 22, 2022 11:57:48 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!

Steve Harder, Gilbane Building Company

From:

To: Nottoli. Don; Rich Desmond; Frost. Supervisor; Kennedy. Supervisor; Supervisor Serna

Cc: PER. climateactionplan

Subject: Sacramento County Climate Action Plan Date: Tuesday, March 22, 2022 11:22:48 AM Attachments: CED letter to Supervisors 3 22 22.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear County Supervisors,

On March 21, 2022 U.N. Secretary General Antonio Guterres warned that the world is "sleepwalking to climate catastrophe" unless we limit Earth's warming to 1.5 degrees Celsius. Here in Sacramento county we are already dealing with extreme heat, drought, poor air quality from wildfires, and the potential for severe flooding. Climate change is already <u>impacting our physical and mental health</u> and <u>disproportionately</u> affecting people of color.

The seven hundred members of the Sacramento chapter of Physicians of Social Responsibility (PSR) urge you to follow up your December 2020 Climate **Emergency Declaration by clearly articulating the goal of and finding the ways** for Sacramento county to become carbon zero by 2030. We are very disappointed that the Climate Action Plan does not provide the roadmap to achieve this necessary goal. The plan needs to include precise metrics that can be carefully monitored to achieve the 2030 goal of becoming carbon zero. In short, there needs to be greater urgency and detail in how greenhouse gases will be reduced in all the areas outlined in the CAP.

This may be our last, best change to make the changes needed and is the reason that the health community has been calling for urgent action. The future of our children and our grandchildren depends on your taking such action now.

Respectfully,

Harry Wang, MD

President, Physicians for Social Responsibility/Sacramento

www.sacpsr.org

916 955-1199



Physicians for Social Responsibility 10 Dumfries Court Sacramento, California 95831 www.sacpsr.org • info@sacpsr.org 916 955-6333

March 22, 2022

To: The Honorable Don Nottoli, Chair: nottolid@saccounty.net

The Honorable Rich Desmond, Vice Chair: richdesmond@saccounty.net

The Honorable Sue Frost: <u>SupervisorFrost@saccounty.net</u>

The Honorable Patrick Kennedy: <u>SupervisorKennedy@saccounty.net</u>

The Honorable Phil Serna: SupervisorSerna@saccounty.net

Cc: Mr. Todd Smith, Principal Planner: ClimateActionPlan@saccounty.net

re: Sacramento County Climate Action Plan (CAP)

Dear County Supervisors,

On March 21, 2022 U.N. Secretary General Antonio Guterres warned that the world is "sleepwalking to climate catastrophe" unless we limit Earth's warming to 1.5 degrees Celsius. Here in Sacramento county we are already dealing with extreme heat, drought, poor air quality from wildfires, and the potential for severe flooding. Climate change is already <u>impacting our physical</u> and mental health and disproportionately affecting people of color.

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This may be our last, best change to make the changes needed and is the reason that the health community has been calling for urgent action. The future of our children and our grandchildren depends on your taking such action now.

Respectfully,

Harry Wang, MD

President, Physicians for Social Responsibility/Sacramento

From: Tom Ford

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Subject: Sacramento County Climate Action Plan

Date: Tuesday, March 22, 2022 11:14:02 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!



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From: <u>Jessica A. Robison</u>

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Cc: <u>Daniel M. Steinberg</u>
Subject: 2022 Climate Action Plan

Date: Tuesday, March 22, 2022 11:07:54 AM

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!

Jessica A. Robison

TRAINOR FAIRBROOK

980 Fulton Avenue, Sacramento, California 95825 P: 916.929.7000 F: 916.929.7111 jrobison@trainorfairbrook.com www.trainorfairbrook.com

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From: <u>Vince Bernacchi</u>

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Subject: Sacramento County Climate Action Plan

Date: Tuesday, March 22, 2022 10:50:31 AM

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!

Vince Bernacchi President, LEED® AP Schetter Electric P 916.446.2521 Ext. 3236 F 916.446.2621

www.schetter.com

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From: Russell Snyder
To: PER. climateactionplan

Subject: Climate Action Plan comment letter from the California Asphalt Pavement Association (CalAPA)

Date: Tuesday, March 22, 2022 2:18:33 PM

Attachments: 2022-0322 Sacramento County Climate Action Plan Comment Letter.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

To Whom It May Concern:

Attached please find our comment letter to the February 2022 Climate Action Plan for Sacramento County. Please confirm that you have received this letter, and feel free to contact me if you have any questions or need additional information.

Regards,

RUSSELL W. SNYDER, CAE, Executive Director
California Asphalt Pavement Association (CalAPA)
P.O. Box 981300, West Sacramento, CA 95798
1550 Harbor Blvd., Suite 211, West Sacramento, CA 95691
(916) 791-5044 – Office / (925) 548-5409 – Mobile
http://www.calapa.net



The California Asphalt Pavement Association

2022 OFFICERS

March 22, 2022

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Sacramento County
Planning and Environmental Review

Toni Carroll, Vice Chair Graniterock

E-Mail: ClimateActionPlan@saccounty.net

Scott Bottomley, Treasurer Sully-Miller / Blue Diamond Materials

Jeff Benedict, Secretary Valero Energy RE: Sacramento County Climate Action Plan Comment Letter

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MAIN OFFICE 1550 Harbor Blvd., Suite 211 West Sacramento, CA 95691 (916) 791-5044

> WEBSITE www.calapa.net

E-MAIL info@calapa.net

On behalf of the asphalt pavement industry in California, please accept our comments on the most recent version of the Sacramento County Communitywide Climate Action Plan. It is our intention to focus on Page 46 of the plan as it relates to "cool pavements" (MEASURE TEMP-07: USE OF COOL PAVEMENT TECHNOLOGY AND REDUCE THE EXTENT OF PAVED SURFACES).

First and foremost, you should be aware that the term "cool pavements" is largely a term of art that can be broadly defined to include many different pavement designs, technologies, materials and treatments to achieve a net reduction in the temperature of pavements that are deemed contributing Urban Heat Island in urbanized areas. Our industry has worked closely with various research entities studying this topic, including the University of California Pavement Research Center and the Lawrence Berkley Labs, as well as Arizona State University (ASU) and the National Center for Asphalt Technology at Auburn University. You should be aware that the science on this topic continues to evolve, and as noted by a recent study by ASU reflective pavements can have many unintended consequences for health and safety of people as well as for the environment. In just once recent example, the manufacture of "cool pavement" coatings were found to be more energy intensive than typical treatments and also tended to be more carbon intensive (Harvey/Levinson 2017).

For these and other reasons, we strongly recommend that the language in this section be changed from "require the use of cool pavement technology" to "evaluate cool pavement technology" and, in later references, change the wording to read "develop and incorporate cool pavement standards where practical and feasible."

We commend the County of Sacramento for its commitment to protecting the environment in the development of the Climate Action Plan, and that is a commitment shared by our industry. After all, our employees live and work in the county as well. We are happy to share additional studies and information on this topic upon request.

The California Asphalt Pavement Association, founded in 1953, is the oldest and largest construction trade association that focuses exclusively on the asphalt pavement industry in California. Our members include asphalt producers, refiners, paving contractors, testing labs, consultants, equipment manufacturers and many other related

companies that make up the industry. Please feel free to contact me at (916) 791-5044 if you have any questions.

Sincerely,

RUSSELL W. SNYDER, CAE

Executive Director

From: Betsy Reifsnider
To: PER. climateactionplan

Subject: CAP comments for March 23rd workshop Date: Tuesday, March 22, 2022 2:58:17 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear County Supervisors and Staff,

As a person of faith, I am discouraged that the County's Revised Final Climate Action Plan (CAP) is so tepid. Pope Francis called all people to an "ecological conversion," calling us to "protect the world and not prey on it." Much work needs to be done to strengthen this woefully inadequate CAP. Here are just two examples:

- <!--[endif]-->Because transportation is one of our region's biggest producers of greenhouse gas emissions, I urge the County to combat sprawl by focusing on infill development and funding our public transit system, not our highway system.
- <!--[endif]-->I live in Land Park where we are blessed with a healthy tree canopy. Please work to increase the tree canopy in underserved communities like West Arden Arcade and South Sacramento, communities which suffer the worst effects of air pollution and extreme heat events.

Tuesday's <u>Sacramento Bee</u> reported that 90-degree weather is arriving a month early and the UN General Secretary says the world is "sleepwalking to a climate catastrophe." Last year, you wisely declared a Countywide "Climate Emergency." Please reflect this state of emergency by strengthening the CAP as recommended by scores of environmental and environmental justice organizations and by neighborhood leaders.

Sincerely,

Betsy Reifsnider

1344 Vallejo Way Sacramento, CA 95818 (916) 442-6480 From: Alexandra Reagan
To: PER. climateactionplan

Subject: Recommendations to Strengthen the County's Proposed Communitywide Climate Action Plan

Date: Tuesday, March 22, 2022 3:29:07 PM

Attachments: 2022 03 March 21 Sac Co CAP Feb draft joint comment letter.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

To Chairperson Nottoli:

On behalf of the Environmental Council of Sacramento, the Sacramento Valley Chapter of the California Native Plant Society, the Sacramento Audubon Society, the Sierra Club Sacramento Group, and the Xerces Society, I am submitting by way of this email our recommendations to strengthen the County's Proposed Communitywide Climate Action Plan. Please see the attached letter.

Regards,

Alexandra Reagan (she/her)

Director of Operations
Environmental Council of Sacramento (ECOS)
P.O. Box 1526, Sacramento, CA, 95812

Cell: (916) 765-4977

Email: office@ecosacramento.net

www.ecosacramento.net



Post Office Box 1526 | Sacramento, CA 95812-1526

March 22, 2022

Sacramento County Board of Supervisors 700 H St, Sacramento, CA 95814

Subject: Recommendations to Strengthen the County's Proposed Communitywide Climate Action Plan

Dear Chairperson Nottoli,

The Environmental Council of Sacramento, the Sacramento Valley Chapter of the California Native Plant Society (Sac Valley CNPS), the Sacramento Audubon Society, the Sierra Club Sacramento Group, and the Xerces Society are submitting the following recommendations to strengthen the proposed Communitywide Climate Action Plan (Plan) dated February 2022. Your inclusion of these recommendations into the Plan will increase the County's preparedness to meet the challenges of our changing climate and its impact on the region's water resources and environment. We note that the County is already moving in important directions to conserve water, improve both wild and landscaped areas' ability to adapt to climate change, and implement measures to deal with coming droughts and flood events. The County's implementation of the following recommendations will extend and strengthen already identified Climate Action Plan (CAP) initiatives and result in a more effective Countywide CAP.

The following comments have been organized to track specific areas already identified in the Plan.

2.2 Government Operations Greenhouse Gas Reduction Measures

Measure Gov – Water – 01 (page 38) Develop Water Efficiency Policy This measure establishes a target of 20% water use efficiency improvement in new and existing county buildings when compared to 2015.

Recommendations:

This measure's goal of an improvement of 20% in the County's water use efficiency seems low given the large potential for improved landscape water efficiency within existing and new County buildings and properties. County staff should be asked to increase this goal, possibly even doubling it. We suggest a more aggressive goal be established.

Add a goal that all County properties have low water use landscaping and feature efficient irrigation methods and techniques by 2030.

Ensure that each publicly visited County facility include interpretive signage that conveys the water savings message to the public.

Measure Gov – Water – 02 (page 39) Conduct Turf Landscape Irrigation Audit

Recommendations:

Expand this measure to target the entirety of the County's landscaping. It should be restated as a County-wide Property Landscape Irrigation Audit and include the following actions:

The initial Audit should identify all essential and nonessential turf. For essential turf, focus on improving watering practices. For nonessential turf, a plan and timetable should be developed to phase it out by 2030. Nonessential turf should be replaced with low water, drought tolerant plants and/or permeable ground covering with an emphasis on local native plants and trees.

The second phase of the Audit should focus on non-turf landscaping and identify landscape areas that include water wasting plantings as well as water system efficiency improvements. The water wasting planting areas should be phased out and replaced by 2030 with low water use, drought tolerant plants with an emphasis on local native plants and trees.

All existing tree plantings should be evaluated for watering efficiency in each phase of the Audit.

All new County building landscaping and any landscape refurbishment should meet the proposed county landscape goal of 100% low water use landscaping (except for essential turf grass). The County should make use of local native plants and trees whenever practical.

Other CAP Water Actions to increase the use of gray and recycled water as well as rain gardens and other mechanisms to encourage storm water capture and infiltration should be incorporated into both existing and new County facilities.

The County should make use of low water use, native plants and trees in transportation corridor medians and curb areas, other transportation and pedestrian right of way landscaping, and parking landscaping. The County should coordinate with the State CNPS's Plants for Parkways program for information and technical assistance on appropriate native plant selection, landscape design and planting tips, and plant watering and maintenance tips for this region.

The County should work with the Sac Valley CNPS, Xerces Society, and the Sacramento Audubon Society to ensure County personnel are trained on how to select, plant, and care for low water use local native plants.

For purposes of this and all other recommendations regarding the use of low water use, drought tolerant plants and/or permeable ground covering with an emphasis on local native plants and trees, the County should rely upon the State CNPS's Calscape.org database of low water use local native plants, the Sac Valley CNPS Homegrown Habitat local native plant list, the Sac Tree

foundation's Shady 80 tree list, information from the Xerces Society and the Sacramento Audubon Society, and other sources approved by the County's planning agency.

Public awareness of these landscaping changes and the lists of available and appropriate landscape plants and techniques to ensure they thrive should be incorporated in the County's water efficiency outreach program.

Measure Gov – Water – 03 (page 39) Use Water Efficient Equipment This measure replaces old or inefficient irrigation systems and equipment with efficient equipment when funds are available from water agencies.

Recommendation:

Given the importance of the water efficiency actions called for in Measures 1 and 2, the County should budget for these items as well as seek grants and funding from water purveyors, the State of California, and the Federal Government.

3.1.2 Prepare for Increased Risk of Wildfire

Measure Fire – 02 (page 48) Coordinate with State and Local Agencies to Establish Ecological Recovery Programs to Return Native Plants to Burned Areas.

Recommendation:

The County should seek the assistance of the signatories of this letter in implementing this measure.

Measure Fire -03 (page 49) Update Tree Planting Guidelines to Select Wildfire Resistant Species

Recommendation:

The County should seek assistance from CalFire for information on fire resistant plants, as well as the signatories of the letter and the Sac Tree Foundation, in implementing this measure.

3.1.3 Prepare for Increased Drought

Measure Water -01 (page 50)

Recommendation:

This measure should include the Sacramento Water Forum as a partner agency in determining the Region's water resilience.

Measure Water -02 (page 51) Increase On-site Grey Water and Rainwater Reuse, Storm Water Reuse, and Recycled Water Systems

Recommendation:

Along with County efforts to voluntarily and otherwise encourage residents and businesses to increase use of on-site grey water and rainwater, storm water, and recycled water systems, the County's program should incorporate the successful elements of the City of Sacramento's rainwater catchment program.

Measure Water – 04 (page 52) Reduce Potable Water Use in Outdoor Landscaping

This Action includes changing the County landscape ordinance to require 80% of new landscaping be low water use, drought tolerant plantings for new residential and nonresidential buildings; improving rebate programs for removing turf; and increasing recycled water service for landscaping by 50%. The signatories commend the County for establishing sound, achievable results for new landscaping and water use for its purposes.

Recommendations:

Add to the new landscaping ordinance the requirement that nonessential turf can only be part of the 20% of landscaping that is not low water use and drought tolerant. In addition, the standard should include a preference for the use of low water use, drought tolerant, local native plants and trees, as referenced in our comments on Measure Gov - Water - 02 above.

Establish a Countywide goal and program to work with city governments to establish their own landscaping ordinances which mirror the proposed County landscaping ordinance. In addition, the County should work with cities to adopt the same landscaping protocols and programs recommended above for inclusion in Measures Gov – Water – 01 & 02.

Establish the following goals and program to work with city governments and local water purveyors to eliminate or replace a minimum of 50% of all existing nonessential turf throughout the County with low water use, drought tolerant plants and/or permeable ground cover with an emphasis on local native plants and trees by 2025. Establish a long-term goal to work with city governments and local water purveyors to convert 80% of all outdoor landscaping in the County to low water use, drought tolerant plants and/or permeable ground cover with an emphasis on local native plants and trees by 2030.

Measure Water -05 (page 53) Expand Upon Existing Water Conservation Education Outreach Programs for Residents and Businesses

Recommendation:

Publish on the County's web site water use (GPCD) statistics (available from the California Department of Water Resources) for customers of each water purveyor within the County, along with information about water use in other similar climates within the state, to enable area

residents to compare their water use to others in the region and across the state. Information about the County's water use should also be posted. This information will be useful in determining how successful the County's efforts are in reducing its own as well as regional water demand.

Measure Water – 06 (page 53) Collaborate with Federal, State and Local Agencies and Organizations to Identify Future Water Supplies...

Recommendations:

The County should participate with Sacramento Area Flood Control Agency (SAFCA), State Department of Water Resources, the Bureau of Reclamation, the Sacramento Water Forum (WF), Regional Water Authority (RWA), local water agencies and other interested parties in the development of excess storm water recharge projects including Flood-Managed Aquifer Recharge (Flood–MAR).

Identify priority recharge areas within the County, including Paleochannels, and move to zone such properties for that purpose.

Convene discussions with Groundwater Sustainability Agencies (GSA), RWA, SAFCA, WF, conservation landowners, agricultural interests, and others interested in developing and securing multi-benefit projects (including projects that restore native plants and habitats) that can be utilized for groundwater recharge in the three groundwater subbasins. The County should actively participate in the acquisition (purchase, conservation leases, or other means) of viable projects.

3.1.4 Prepare for Increased Flooding

Measure Flood – 01 (page 54) Evaluate and Improve Capacity of Stormwater Infrastructure for High-intensity Rainfall Events

Recommendation:

The County should assume responsibility for the maintenance of culverts currently maintained by property owners where residents experience local flooding.

Measure Flood – 03 (page 55) Identify New Locations for Multi-Benefit Flood Control...

Recommendation:

The County should convene SAFCA, flood control districts, GSAs, agricultural interests, and conservation landowners to discuss and identify priority projects and begin the CEQA process as appropriate. This Measure should be combined with the efforts called for in Measure Water -06.

Measure Flood – 05 (page 56) Invest in Pervious surfaces ...

Recommendation:

Include the requirement that all infill and redevelopment areas that experience local flooding mitigate for any increase in impermeable surfaces through on-site retention or other methods to attenuate flows.

Measure Flood – 08 (page 57) Work with SAFCA and Local Agencies...

The Flood-MAR concept as currently presented poses some regional issues that require discussion and resolution before substantial progress can be made.

Recommendations:

The County should actively join with SAFCA, RWA, WF, interested water purveyors, and the affected GSAs to identify the issues and their resolution so that an appropriate, protective excess storm water use program can be developed and moved forward.

Either as part of this measure or as part of a separate one, the County should become involved in determining when and how some of the excess storm water from future storm events that moves down the Sacramento River can be diverted either out into the bypass or other diversion points for recharge benefits for this region.

Measure Flood – 11 (page 59) Identify Concrete Channel Restoration Areas

Recommendation:

Include in this measure the expansion of creek corridors by moving levees and floodwalls to increase flood protection and restore native habitat in the expanded corridor.

Measure Flood – 12 (page 59) Replant Bare or Disturbed Areas

Recommendation:

The County should seek the assistance from the signatories of this letter when implementing this measure to incorporate native plants that will provide bird and wildlife habitat in replanted areas.

The Communitywide Climate Action Plan moves the County forward in its efforts to adapt to the region's changing climate in the areas we have commented on here. We believe our recommendations will strengthen the measures outlined in the Plan and are consistent with the direction the County is prepared to take. We urge you to include our recommendations when you

adopt the Plan and offer our support and technical expertise to aid the County and its staff in the implementation of the recommendations for which we have expertise.

Susan Herre,

President

Environmental Council of Sacramento

Drom Dem

Ted Rauh

Water Committee Chair

Environmental Council of Sacramento

William F. Branco

Barbara Leary

President

Sierra Club Sacramento Group

Angela Laws

Labora Leavy

William Bianco

President

Sacramento Audubon Society

Angela Laws

Endangered Species Conservation Biologist

The Xerces Society

Ellen Pimentel

President

Sac Valley California Native Plant Society

Taylor. Todd

Subject:

Support Item 2 Task Force, 3/23/22 & Sponsor a Public Dashboard with Big Picture Targets and regular updated measures

From: Inga Olson < olsoning@yahoo.com > Sent: Tuesday, March 22, 2022 3:43 PM

To: Rich Desmond < RichDesmond@saccounty.net >; Supervisor Serna < SupervisorSerna@saccounty.net >; Kennedy.

Patrick <KennedyP@saccounty.net>; Nottoli. Don <nottolid@saccounty.net>; Frost. Supervisor

<SupervisorFrost@saccounty.net>

Cc: Smith. Todd <smithtodd@saccounty.net>; Chris Brown <info@sacclimate.org>

Subject: Support Item 2 Task Force, 3/23/22 & Sponsor a Public Dashboard with Big Picture Targets and regular updated measures

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Supervisors Desmond, Serna, Kennedy, Nottoli, and Frost,

I ask you to support the Climate Emergency Task Force. This Task Force in combination with the County Climate Sustainability Manager and the County Staff give us the best shot at achieving a zero carbon future by 2030. In addition, I ask you to aggressively support the climate work by identifying funds, expediting timelines to achieve results quickly, and collaborating regionally and beyond to accelerate our cost-effectiveness.

The one additional item I would ask you to establish is a public workshop to address how you will set, monitor and regularly report on climate targets with measures via a user-friendly public dashboard. I am talking about identifying a few key big picture targets to achieve zero carbon emissions by 2030. From what I can tell, the CAP is not going to achieve this, but I hope the Task Force, Sustainability Manager and the Supervisors will rectify this. Regardless, throughout this journey, we need to see our target and know how close or how far we are from achieving it.

Sincerely,

Inga Olson 4729 Hazelwood Ave. Carmichael, CA 95608

Taylor. Todd

Subject:Sacramento County CAP Comments - SMAQMDAttachments:Sacramento County Feb 2022 Final CAP comments.pdf

From: Shelley Jiang <<u>SJiang@airquality.org</u>>
Sent: Tuesday, March 22, 2022 4:37 PM
To: Smith. Todd <<u>smithtodd@saccounty.net</u>>

Cc: Paul Philley < Philley@airquality.org; DuBose. Rachel (SacMetroAirQuality) < rdubose@airquality.org;

Subject: Sacramento County CAP Comments - SMAQMD

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Hello Todd,

I hope you're doing well. Please find the comments on Sacramento County's Final Draft Communitywide Climate Action Plan attached here. Thank you for the opportunity to provide feedback on this critical document.

Best wishes,

Shelley Jiang

Transportation & Climate Change
Sacramento Metropolitan Air Quality Management District

SACRAMENTO METROPOLITAN



March 22, 2022

Todd Smith, Principal Planner
Sacramento County Office of Planning and Environmental Review
727 7th Street, Room 225
Sacramento, CA 95814
smithtodd@saccounty.net

Subject: Revised Final Draft Sacramento County Climate Action Plan (February 2022)

Dear Mr. Todd Smith,

Sacramento County released the Final Draft Communitywide Climate Action Plan (draft CAP or CAP) for public review on February 17, 2022. The draft CAP represents the County's commitment to implement Mitigation Measures CC-1 and CC-2 of the 2030 General Plan, and to respond to the County's adoption of a Climate Emergency Resolution in December 2020. The draft CAP focuses on reducing greenhouse gas (GHG) emissions from communitywide activities and government operations through a suite of policies, programs, and aspirations. The draft CAP also contains a Climate Adaptation Strategy to address vulnerabilities to climate change impacts such as the effects of extreme heat and sea level rise.

General Comments

The Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) appreciates the County's efforts to listen to its residents and stakeholders in making significant strides forward in this version of the draft CAP. We welcome the additional stringency, ambition, and mandatory actions outlined in this update, and hope to continue our strong collaboration with the County in pursuit of its 2030 targets. We offer the following comments to help support the County's goals of achieving greenhouse gas (GHG) emissions reductions while supporting public health, equitable communities, and a sustained, resilient quality of life.

For each measure that changed from the September 2021 version, the County should provide a justification and a brief description or reference to the methodology, to help the reader understand the reason for the change.

Specific Comments

Modifications to baseline and forecasted GHG emissions

The County has made multiple revisions to its 2015 baseline emissions as well as its 2030 forecasted emissions. Total 2015 baseline emissions have declined by 147,000 metric tons (MT), which includes a decline of 107,000 MT in residential energy use emissions, a decline of 47,000 MT in commercial energy use emissions, and an increase of 24,000 MT in on-road vehicle emissions. It is not clear why these modifications have been made, and we would appreciate an explanation into any alterations of baseline data. What are the reasons behind modifications to historic residential and commercial energy use data, as well as on-road vehicle emissions?

Similarly, we would appreciate an explanation into modifications in forecasted, legislative-adjusted GHG emissions. Total 2030 emissions (with existing policies) have now increased by 107,000 MT. The rate of change between 2015 and 2030 for both residential and commercial energy use now reflects a slower pace of decline, while the forecasted emissions reductions in building energy as a result of existing strategies actually increase by 440% (291,105 MT of reductions, as opposed to 65,000 MT in the previous draft). Conversely, forecasted reductions from renewable energy due to the Renewable Portfolio Standard *decreased* by 36 percent in this draft, and from SMUD's Zero Carbon Plan, a decrease of 23%. These changes are considerable, and some are counter to expectations (e.g., utility companies generally increase ambitions for renewable energy procurement). An explanation for these changes would be helpful and appreciated.

Greenhouse Gas Reduction Targets for 2030 and Climate Emergency Resolution

We welcome the County's robust discussion of the Climate Emergency Resolution and the development of specific steps and actions to achieve the 2030 climate neutrality goal. The Sac Metro Air District looks forward to working with the County on ambitious, well-crafted strategies and actions to reach its climate neutrality goals. We offer the following comments for clarification:

- Table 3 (p.6): Under the current table layout, the values for 1) reductions from existing state/regional policies and 2) quantified CAP reductions are both placed in the column for "Forecast GHG Emissions by 2030 (MT CO2e)". This leads to potential for confusion. We suggest revising this table for greater clarity and logical flow.
- Additional tables/charts: It would be helpful to have an additional table illustrating the gap to reach 2030 carbon neutrality by sector for both Community and Government GHG emissions. This can help highlight the sectors with the greatest gaps and priority areas for action.
- Climate Emergency Response Plan (CERP): The development of the CERP allows for the County to evaluate and determine additional strategies for GHG reductions at a later date, as part of a process that may have lower visibility than the CAP adoption process. The County should confirm that the CERP will have similar legal status as the CAP, including as part of CEQA review for new development. We recommend that the CERP process include not only technical experts but also community-based organizations and community stakeholders. In addition, the CERP process should be open and transparent to the public, and be supported by political will. As part of the CERP process, the County should clarify the relationship between the CERP and the CAP, and how the CERP's recommendations may be included into future iterations of the CAP. We would also expect to see any recommendations from the CERP be adopted immediately, before the CAP update process commences.

Community Greenhouse Gas Reduction Measures

New developments that implement all feasible on-site GHG reductions will be allowed to fund the implementation of many of the CAP's GHG reduction measures. To facilitate this, we recommend that the County establish and approve a running list of potential projects and programs that meet CAP reduction measure standards. This is important as project proponents may not know of or be able to quickly identify potential projects to fund, and helps to ensure that funding is effectively deployed where the GHG mitigation benefits can be greatest. A longlist of projects will also help to save time and reduce friction during the planning and review process. As some GHG-reduction projects will inherently be more expensive than others, the County should consider pooling funding to ensure that high-cost, high-benefit projects can be implemented. Finally, we recommend establishing clear quantification methodologies, review criteria, and verification standards to ensure that projects can deliver the promised GHG reductions. Information on all funded reduction projects should be available to the public for transparency and accountability.

• **GHG-01 Carbon Farming:** Based on Appendix E.4.1 (p.565 / E-8), participation rates for each carbon farming practice have been revised down. However, significant outreach, education, and technical assistance will still be needed to reach the 10-30% participation rate projected here. We recommend the County to clarify if the quantification modeling accounts for initially low participation rates, with a gradual ramp-up over time. Mid-term targets, removed in this draft, should be added back in to provide progress tracking indicators.

GHG-02 Enhance and Protect Urban Forest:

- o The County should allocate funding to address barriers to improving the urban forest in communities with low tree canopy and under-served communities, such as the lack of public right-of-way for tree planters on existing roads and pavements. The County should commit to working with community members on identifying the best locations for tree planting.
- o The quantification methodology for this measure continues to rely on the number of trees planted per new dwelling unit as a proxy for the number of new trees. We consider this to be insufficient, as private developers, not the County, are responsible for tree planting in new development. Moreover, the number of new trees should not be tied to planned future development, particularly as we should prioritize environmental justice communities for new trees. Thus, the County may need to aim for a greater number of new trees than is typically associated with new development.
- We would also like to note comments from our previous letters that have not been addressed, including a requirement to track tree removals – it is key that the measure indicator is for *net* trees planted, not simply new trees, as it is highly likely that trees will be removed as part of the development process.
- GHG-04 Energy Efficiency and Electrification for Existing Commercial/Nonresidential: We applaud
 the addition of ordinances as an implementation mechanism for this measure, turning it from
 voluntary to mandatory.
 - Exemptions: We recommend that that the limited exemptions for manufacturing, industrial, and essential medical facilities should apply only to the appliance electrification requirement, not the Tier 1 energy efficiency compliance. Energy efficiency will benefit all building types. In addition, hospitals should only receive exemptions for water heater electrification, as their space heating needs will be comparable to other commercial buildings. We recommend the County to provide clear language on the limits of the exemptions.
 - O Quantification (Appendix E): The GHG quantification assumptions appear to remain the same, even though this measure has now been upgraded from voluntary participation through outreach to mandatory. A more accurate quantification methodology would be to estimate the square footage or number of commercial developments undergoing alterations or additions (based on building permits) each year, and estimate the electrification/EE savings accordingly. The current method may result in either an underor over-estimate, depending on whether the percentage of businesses undergoing alterations/additions by square footage is less or greater than 10 percent each year. It also appears that the quantification includes hospitals for electrification—we assume this is only after 2026.

GHG-05 Energy Efficiency and Electrification for New Commercial/Nonresidential:

O As noted previously, we commend the County for expanding new building electrification to commercial and non-residential projects. We recommend the County collaborate with

- the City on its cost-effectiveness and feasibility study to maximize efficiency, avoid duplication, and ensure consistency with neighboring jurisdictions.
- Quantification (Appendix E): The quantification methodology appears to not have been updated and accounts for only improvements in energy efficiency, not electrification. The County should update the quantification to account for electrification of new development, which will result in greater GHG reductions and reduce the gap to carbon neutrality.
- GHG-06 Energy Efficiency and Electrification for Existing Residential: We appreciate the County's inclusion of CalGreen Tier 2 energy efficiency upgrades as part of this measure, as well as the mandatory electrification requirement for water heater and HVAC replacements.
 - O We caution the County that compliance may be a difficulty: some water heater and HVAC replacements take place independently of the building permit process. In addition, some people may desire to replace a broken HVAC or water heater as soon as possible, and may be frustrated if additional electrical work to upgrade branch circuits or panels are needed. Anticipating and addressing these considerations in advance may facilitate compliance.
 - Outreach and education: To maximize efficiency, we recommend the County evaluate existing educational resources before developing their own materials and videos; for example, many local jurisdictions and utilities in California have collaborated to create Switch is On (www.switchison.org).
 - o **Training and education:** Building permit staff will need to be trained.
 - O Quantification (Appendix E): The quantification methodology appears to need updating to reflect the current measure. For example, it still includes reductions from electrifying cooktops, which are no longer part of the measure. In addition, GHG reductions from electrification are lower by 25,000 MT, but the source of the decrease is unclear.
- GHG-07: No Natural Gas in New Residential
 - O Supply chain feasibility: This exemption appears likely to be unnecessary; as SMUD staff have noted previously, delay in supply availability is usually not a concern as California is part of a national market. Moreover, Sacramento County going all-electric is unlikely to trigger a supply chain shortage, even with many development projects in progress, as each project will be on slightly different timelines.
 - o p.18: "In addition, new development projects that have incorporated all feasible on-site GHG mitigation may be permitted to contribute financially toward the electrification programs for existing buildings in Measures <u>GHG-05</u> and GHG-06 subject to quantification of the costs per MT CO2e." GHG-05 should likely be replaced with GHG-04, which focuses on existing commercial buildings.
 - O Quantification (Appendix E): Similar to GHG-06, GHG reductions from this measure have decreased in this draft; we suggest the County provide an explanation for the decrease.
- **GHG-08 Tier 4 Construction Equipment:** We would like to thank the County for addressing our comments in this measure.
- GHG-12 Update Transportation System Management Plan for Nonresidential Projects: The measure description should clearly identify the required elements of a transportation system management plan (TSMP) for non-residential projects. This will help support tracking, monitoring, and enforcement necessary to an effective TSMP. Additionally, the quantification details in Appendix E suggests that this measure is based on measure TRT-2 Commute Trip Reduction in the CAPCOA Quantifying Greenhouse Gas Mitigation Measures Handbook (CAPCOA Handbook); if this is so, the measure should be clearly specified. Note that TRT-2 is only applicable to projects in urban and suburban contexts; the County should exclude any rural commute VMT from the

- quantification. Please also note that a newer edition of the $\frac{\text{Handbook}}{\text{Handbook}}$ has been released in 2022, with updated quantification methodologies; TRT-2 is now $\frac{\text{T-6}}{\text{County}}$, and the County may wish to update their quantification accordingly.
- GHG-13 Revise Parking Standards for Non-Residential Development: We suggest the County remove minimal parking standards. In Appendix E, the quantification assumptions should clearly note the specific measure used from the CAPCOA Handbook, likely PDT-1, which is only applicable for urban and suburban projects.
- **GHG-19 EV Parking:** We applaud the County for moving to CalGreen Tier 2 for this measure. Supporting EV charging at multifamily developments is critical to expanding EV deployment to a wider population.
 - o Multifamily residential developments: According to the measure, 100% of spaces must now be EV Capable. We recommend the County to also establish a minimum percentage of parking spaces to be EV Ready. According to 2022 CalGreen Tier 2, multifamily developments and hotels and motels with 20 or more units must have a minimum of 40% parking spaces be EV Ready and 15% with electric vehicle supply equipment (EVSE) installed; developments with fewer than 20 units should have 40% of parking spaces be EV Ready. Thus, as the measure specifies that EV charging standards should exceed Tier 2, we recommend the County establish target percentages for EV Ready at a minimum of 40 percent, as well as target percentages for EVSE-installed spaces in multifamily developments.
- **GHG-23 Incentivize Infill Development:** We appreciate the County's inclusion of water and sewer infrastructure upgrades, EVSE, and mobility hubs as eligible expenses for the infill fee.
- **GHG-30 Require Carbon-Neutral New Growth:** We appreciate the County's addition of this measure.
- GHG-31 Explore Pathway for Carbon Capture and Sequestration: We recommend clarifying what types of carbon capture and sequestration projects are contemplated in this measure (e.g., landscape-based, geologic, etc.).

Government Operations Greenhouse Gas Reduction Measures

• GOV-FL-01 Expand Fleet Conversion Program: We applaud the increased level of ambition in this measure, as well as the addition of more detailed target indicators and timeline. In considering the cost effectiveness of this measure, the County should factor in the potential cost savings from pursuing sustainably fueled vehicles, as oil prices are likely to increase long-term while renewable and zero-carbon alternatives decrease in costs. Indeed, market trends may even accelerate the County's timeline.

GOV-BE-01 Green Buildings:

- o This measure calls for all new County buildings to exceed the 2019 California Energy Code by 10 percent. However, by the time the new CAP is adopted, the 2022 building code will be imminent. We suggest that this measure is written as a 10 percent improvement from the current adopted edition of the California Energy Code.
- o If the county follows its own adopted CAP measures, including GHG-05, then all new commercial buildings will be electric. Thus, all new County buildings will be electric as well. However, the quantification methodology for GOV-BE-01 (p575) assumes the use of natural gas. We recommend the County to update the measure and quantification methodology to reflect all-electric new County buildings.

Climate Adaptation Strategy

- TEMP-03: To support this measure, we recommend the County to pursue forthcoming State of California funding on community resilience centers, which will be administered through the Governor's Office of Planning and Research. We recommend the County to prepare for this funding opportunity by strengthening its relationships with community groups and community-based organizations in environmental justice communities. Additionally, as many people are reluctant to go to cooling centers, it is important to provide residents clear, informative guidance in multiple languages on heat safety tips and recognizing symptoms of heat illness/heat stroke.
- **TEMP-04:** We support the County requiring the use of cool roofs for new development. We encourage the County to use the latest cool roof standards, which have been updated in the forthcoming 2022 Building Energy Efficiency Standards, taking effect on January 1, 2023.
- TEMP-07: We appreciate the County's commitment to developing and incorporating cool pavement standards into the County's roadway design manual for use in public rights-of-way, as well as the County's development standards for private development projects, in both new construction and changes to existing on-site paved surface.
- WATER-02: We recommend the County develop an incentive program and guidance for commercial and residential properties to install greywater systems. We also recommend guidance and/or incentives for new development to incorporate integrated rainwater storage and greywater systems to reduce vulnerability to drought while also providing water for urban forestry and greenery, which can support local biodiversity and reduce the heat island effect
- WATER-04: The County should include the important caveat that while in general, landscaping areas should be low-water and drought tolerant, trees should still continue to be prioritized as part of landscape areas, and that trees should continue to be watered. Trees bring in significant environmental benefits.
- FLOOD-04: Evacuation planning should include the use of buses both to support residents who lack access to vehicles and also to reduce gridlock and jams, especially where capacity is bottlenecked by bridges.
- **FLOOD-06:** Critical facilities should also include affordable-housing and senior developments, whose residents may have less capacity to adapt and evacuate.

Implementation and Monitoring Strategy

- **Financing:** Financing is essential to implementation, and we recommend that the implementation of all CAP measures is appropriately funded in the annual budget, especially for near-term actions. Financing should also be included to support the development of the CERP.
- **Reporting:** The CAP portal (p66) should report on progress toward target indicators for each measure, as well as quantified GHG reductions, on an annual basis.
- Coordination with community groups and community-based organizations (p.67): Many of the CAP measures call for multilingual, culturally appropriate outreach to Sacramento County's diverse residents. It is important that the County not rely on volunteer time from community groups but develop mutually respectful, professional partnerships with them, with fair compensation for their time, expertise, and other work provided to help implement CAP measures. This is no different from paying a consultant to help with a climate action plan or general plan: community-based organizations bring knowledge, networks, expertise, experience, and capacity that local governments lack. We should not expect community-based organizations—already understaffed, underfunded, and over-tasked—to take on additional work for free, even when the tasks in question may be part of their mission.

Climate Action Plan Consistency Checklist

To aid user understanding of the checklist, we recommend including detailed directions, especially for the energy efficiency measures. The City of Sacramento's <u>Climate Action Plan</u> has a section with detailed directions that may serve as a template. A Frequently Asked Questions document may also be helpful and can be developed based on staff experience in creating the CAP.

Section B: General Plan Land Use Consistency, p.I-3 (p607):

- The first paragraph of Section B should make clear that being within the scope of emissions covered under the CAP (i.e., consistent with General Plan and zoning designations) does not relieve the applicant of filling out Section C (CAP Measures).
- For #1, within the 'If Yes' scenario, consideration of Question 4 should be included. (I.e., the response should read: If "Yes", Questions 2, 3 and 4 below are not applicable, the project shall proceed to Section C of the Checklist.")
- For #3, regarding the Urban Policy Area and/or Urban Service Boundary, we recommend indicating that this question is related to GHG-30.
- For #4, we recommend moving the CalEEMod methodology section that is currently in the 'If Yes' paragraph to its own paragraph, underneath the 'If No' paragraph, and labeling it "Recommended Methodology".

Section C: CAP Measures, p.I-4

- The introduction (I-4, p. 608) states that "All applicable Checklist questions must be answered 'Yes', and documentation provided that substantiates how compliance would be achieved. For measures for which a 'Yes' is indicated, the features must be demonstrated as part of the project's design and described." The introduction goes on to discuss what to do if a question is marked with a 'No.' Since a 'No' response is available as an option, the statement about requiring questions to be marked as a Yes should be corrected; we suggest revising to, "To be consistent with the CAP, all applicable Checklist questions must be answered 'Yes'".
- Energy Efficiency, p.I-5 (p. 609)
 - As with the All-Electric Residential Building Standard Section (p. 610-611), here we
 recommend a statement on the start date of requirements. For GHG-04 and GHG-06, the
 requirements will apply for building permit applications on or after January 1, 2023, for
 buildings that are three stories or less, and building permit applications filed on or after
 January 1, 2026, for buildings that are four stories or more.
 - This section should also include a question on electrical panel and branch circuit upgrades for residential alterations that don't involve appliance upgrades, consistent with measure GHG-06.
- EVSE, p.I-9:
 - This section should be renamed to Electric Vehicle Supply Equipment.
 - If the County establishes target percentages for EV Ready and EVSE-Installed parking spaces for multifamily projects to meet CalGreen Tier 2 requirements, as the measure is written, this checklist item should be updated accordingly.

We would like to thank Sacramento County for your continued hard work and dedication in preparing this climate action plan, for your willingness to listen to stakeholders, and for laying the groundwork for ambitious actions needed to achieve climate neutrality by 2030. We appreciate the efforts made to strengthen many of the measures in this CAP in response to public comments. We look forward to

working with the County to realize these actions and measures – the success of which is critical to our future as a livable, sustainable, climate-resilient community.

We appreciate your attention to these comments. If you have any questions, please contact Shelley Jiang at sjiang@airquality.org or (279) 207-1132.

Sincerely,

Paul Philley, AICP

Program Supervisor, CEQA and Land Use Section

Sac Metro Air District

Pal Thuly

From: <u>Kathryn Pettit</u>

To: PER. climateactionplan; Kennedy, Supervisor; Rich Desmond; Supervisor Serna; Nottoli, Don; Frost, Supervisor

Cc: <u>Josh Chatten-Brown; County Executive; Smith. Todd; Travis. Lisa</u>

Subject: Comments on Revised Final Draft Climate Action Plan and Revised Addendum

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Dear Supervisors Kennedy, Desmond, Serna, Nottoli, and Frost:

On behalf of 350 Sacramento, Sierra Club Sacramento Group of the Mother Lode Chapter, and the Environmental Council of Sacramento, we provide the attached comments on the County of Sacramento's Revised Final Draft Climate Action Plan and Revised Addendum.

Thank you for your consideration of these comments.

Sincerely, Katie Pettit

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March 22, 2022

Via e-email

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Re: Comments on the February 2022 Revised Final Draft Climate Action Plan and Addendum to the General Plan Environmental Impact Report

Dear Supervisors Kennedy, Desmond, Serna, Nottoli, and Frost:

The law firm of Chatten-Brown, Carstens & Minteer represents 350 Sacramento, Sierra Club Sacramento Group of the Mother Lode Chapter, and the Environmental Council of Sacramento ("Organizations") on matters relating to the County of Sacramento's environmental review of its Revised Final Draft Climate Action Plan ("Revised CAP" or "CAP") and Revised Addendum to its General Plan Environmental Impact Report ("EIR").

The Organizations have advocated for strengthened measures to ensure a legally adequate CAP since the release of the first administrative draft over a year ago. The Organizations appreciate the CAP's inclusion of certain improvements, namely, Measure GHG-30's requirement that new development in greenfield areas achieve carbon neutrality (including quantification from loss of carbon sequestration capacity) *if* the Board revises M-GHG-30 as detailed below. However, the CAP still suffers from several legal deficiencies that must be addressed. This letter outlines those deficiencies so the Board may better understand what California case and statutory law requires before it makes any decision to adopt and/or or modify the current draft of the CAP.

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¹ To be clear, the Organizations believe all development should occur within the UPA. In order to reduce VMT the County must focus on infill development. However, if the County approves any development outside the UPA, these projects should be subject to the terms of M-GHG-30 with the modifications set forth in this letter.

The United Nations Intergovernmental Panel on Climate Change released a damning report last month, detailing the dire consequences that will arise from failed leadership on addressing climate change.² California stepped up to be a leader in reducing the United States' greenhouse gas (GHG) emissions through mandating State GHG reductions to 1990 levels by 2020, 40% below 1990 levels by 2030, 80% below 1990 levels by 2050, and setting a target of carbon neutrality. The California Air Resources Board ("CARB"), charged with ensuring the State meets these goals, and the passage of Senate Bill 375, has underscored that this goal is unobtainable without local government action and changes in the land use and transportation sectors.³

The Organizations recognize that developing a CAP that meets the State's GHG reduction targets is a difficult task, and appreciate the improvements to the Revised CAP. However, this CAP still relies heavily on State, federal, and regional actions to claim it is meeting GHG reduction targets, and banks on unenforceable, dubious measures. This has the deleterious effect of allowing projects to bypass GHG analysis and mitigation and ultimately increase County GHG emissions, if the Board allows the CAP to be used to streamline GHG mitigation of future development. Further, the County has been approving sprawl projects in the greenfield that only serve to increase GHG emissions, rather than focusing on infill development. Despite transportation being one of the largest contributors to County emissions, the CAP does little to reduce vehicle emissions.

The Organizations' previous comments on the CAP have not been adequately addressed. The CAP fails to ensure promised GHG reductions for the reasons detailed below, and bypasses required environmental review through its improper reliance on an addendum. Because the CAP creates new environmental impacts and does not meet the requirements of CEQA Guidelines Section 15183.5, it cannot be used to streamline GHG analysis in subsequent projects. The County must also refrain from authorizing further General Plan Amendments ("GPAs"), as well as projects that are outside of or require extensions of the Urban Policy Area ("UPA") or Urban Services Boundary ("USB"), until it can demonstrate it complied with the Climate Change mitigation measures CC-1 and CC-2 for the 2011 General Plan Update ("GPU") buildout.

There has been an undue delay in the County complying with the promises it made in 2011, including to prepare a second-phase CAP within one year of adopting the General Plan Update (General Plan Mitigation Measure CC-2). The County Board of Supervisors should direct staff to begin implementing many of the CAP's measures now; nothing prevents the County from beginning to reduce its emissions starting today.

 $^{^2 \}underline{\text{https://apnews.com/article/climatescienceeuropeunitednationsweather 8d5e277660f7125f}} \\ fdab 7a833d9856a3.$

³ https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.

However, the current CAP fails to ensure promised reductions and cannot be used to streamline further development as a qualified CAP.

I. The CAP Should Establish and Demonstrate It Will Achieve a Carbon Neutrality Target Now.

The CAP should set the County's Carbon Neutrality goal as set forth in the Board of Supervisors' Climate Emergency Resolution. (**Exhibit A**.)⁴ Approval of this CAP as a Qualified CAP GHG Streamlining Plan precludes any further GHG mitigation from projects deemed "consistent" with the CAP. The CAP greatly falls short of meeting carbon neutrality, only effectuates a small amount of GHG reductions, and relies heavily on other governments and agencies to do the heavy lifting. (Revised CAP February 2022 Tracked-Changes Version ("CAP Redlines"),⁵ p. 7.)

The County's Climate Emergency Resolution called for urgent change. The Revised CAP claims that while it "does not meet the carbon neutrality goal through quantified measures, it does provide the flexibility for the plan to change over time to take additional steps that will meet the goals of the Climate Emergency Resolution." (CAP Redlines, p. 7.) The Organizations support the development of a Climate Emergency Response Plan ("CERP"). However, this does not need to be tied to CAP adoption. The Board should call for the completion of the CERP, separate from the CAP, as an early-action item that can be started immediately. Further, the CAP ultimately does not commit to achieving carbon neutrality and only promises to "evaluate the feasibility" of actions to close the emissions gap. (*Ibid.*)

Before the CAP can be used as a streamlining plan, the Board should require a firm commitment that the CAP will have a target of carbon neutrality and demonstrate it will achieve that target. The Organizations emphasize that the County can begin implementing some of the measures today. However, the approval of the CAP as a streamlining device shields projects deemed "consistent" from any GHG analysis or mitigation, in contravention of meeting the State and County's carbon neutrality target.

 $^{^4}$ <u>https://www.saccounty.gov/news/latest-news/Pages/Board-Approves-Declaration-of-Climate-Emergency.aspx.</u>

⁵ Cites are to the Revised CAP, tracked-changes version on the County's website: https://planning.saccounty.net/PlansandProjectsInProgress/Documents/Climate%20Action%20Plan/Revised%20Final%20Draft%20CAP_February%202022_Track-Change.pdf.

II. The County's Current Growth Plans and CAP Will Increase GHG Emissions That Were Not Accounted for in the CAP Inventory in Violation of CEQA.

To qualify as a GHG streamlining plan, a qualified CAP must **adequately quantify projected GHG emissions**, "[e]stablish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;" "[s]pecify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;" and establish a monitoring mechanism and require an amendment if the plan is not achieving specified levels. (Section 15183.5 subds. (b)(1)(A), (B), (D), (E), emphasis added.)

The Revised CAP and Addendum's quantification and conclusions lack substantial evidence because the County failed to account for GHGs from pending and approved projects outside of the UPA/USB in its inventory and forecast. Therefore, the claimed achievement of the CAP's targets is inaccurate, absent proof that these projects will be carbon-neutral (and therefore wouldn't affect the baseline).

The CAP inventory was based on the Sacramento Area Council of Governments (SACOG) 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), which was based on General Plan land use projections. Ascent's 2015 Greenhouse Gas Emissions Inventory and Forecasts Memo ("2015 Memo"), dated November 15, 2016, formed the basis for the CAP's inventory and forecast. (Exhibit B, p. 1.) The 2015 Memo detailed the CAP's reliance on SACOG MTP/SCS projections (Ex. B, 11, 24.), which did not include several approved and pending projects outside of the UPA/USB. This means their emissions are not accounted for in the CAP. Further, the 2015 Memo also stated that "Data provided did not include VMT associated with any of the SACOG-designated Sphere of Influence (SOI) areas within Sacramento County." (Ex. B, p. 11.) The 2015 Memo further admits that decreases in the VMT sector since the

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⁶ EIR Addendum, pp. 2-3 ["... the results from the 2015 baseline year inventory were forecast to 2030 . . . Growth projections were based on the [SACOG] 2016 [MTP/SCS]."] Of further concern with the CAP inventory, forecasts, and target, the County relied on a 2015 baseline year that allowed it to claim achievement of its "target" from Day 1, up until around 2029. (CAP Redlines, p. 7, Figure 2 Summary of Community Forecast Emissions, Emissions Reductions and Remaining Emissions Gap [demonstrating the inventory emissions as below the target with or without CAP implementation until the final two years of implementation].) The Revised CAP also anticipates large reductions from legislative actions—30% from the projected Business As Usual ("BAU") forecast. (CAP Redlines, p. E-4.)

2005 inventory could be attributed to omission of VMT from areas located with SOI areas in the region. (*Ibid.*) Omission of these emissions from the 2015 inventory and forecasted business as usual emissions result in an artificially low number of "needed" reductions. In reality, the CAP must account for and reduce the emissions from these projects to meet its target.

The 2016 MTP/SCS Appendix E-3: Land Use Forecast Background Documentation specifically listed the following projects as "Approved or Pending Greenfield Plans not included in adopted 2035 MTP/SCS" for the Unincorporated Sacramento County: Cordova Hills Specific Plan, Jackson Township Specific Plan, Newbridge Specific Plan, and the Northwest Special Planning Area. (**Exhibit C**, p. 13, 142.) Further, SACOG anticipated much fewer housing units to be built by 2035 in the adopted MTP/SCS than units that are planned/proposed in eight Specific Plans and projects in Unincorporated Sacramento County, including West Jackson Specific Plan. (*Ibid.*) The adopted 2016 MTP/SCS did not change these assumptions.⁷

An EIR is needed to assess the extent that in-process and approved projects and plans were left out of the CAP inventory and forecast, as Ascent's 2015 Memo and the CAP Addendum fail to analyze and disclose what GHG emissions from these projects were omitted, and the impacts of that omission—especially if the CAP will be used as a qualified CAP.⁸

Yet, the County has allowed greenfield sprawl development beyond the UPA through project-specific amendments that extend it. The GHG impacts of these extensions and facilitation of leapfrog growth was not studied in the General Plan EIR.

⁷ In determining projected growth, the 2016 MTP/SCS included a "Scenario 2" that assumed the same total projected amounts of population, jobs, and housing units for 2036 as the then-current plan projected for 2035. (Ex. C, p. 4.) The 2016 MTP/SCS reported a Draft Preferred Scenario that featured "correspondingly slightly less growth in greenfield areas as the 2012 MTP/SCS." (2016 MTP/SCS, p. 13, 21 [graph showing 1% *less* projected households in the 2016 MTP/SCS compared to the 2012 MTP/SCS]; 2016 MTP/SCS Appendix G-1, p. 103 [displaying Cordova Hills, Jackson Township,

Newbridge, and Northwest Special Planning Area as "Areas Not Identified for Growth in the MTP/SCS by 2036" in the Draft Preferred Scenario.] The Draft Preferred Scenario was adopted. (2016 MTP/SCS, p. 13.)

⁸ Further, the CAP "Consistency Checklist" only finds consistency where Projects are consistent with existing General Plan land use and zoning designations, do not require a General Plan Amendment, and do not require an amendment to the UPA or USB, absent demonstrating carbon neutrality. (CAP Redlines, p. I-3.)

 $^{^9\,\}underline{\text{https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/New-Growth-Areas-and-Master-Plans.aspx.}$

The County has to-date entitled the NewBridge project; and has approved for planning the following four large projects beyond the UPA: Jackson Township, Jackson West, Grand Park, and Upper West Side. Grand Park and Upper West Side are also beyond the USB. These four proposed projects total over 55,000 new dwelling units and require project-specific General Plan Amendments to extend the UPA/USB.

The CAP itself provides a list of "several approved and pending master plans [] in locations that contribute to increased VMT and associated GHG emissions" under Measure GHG-23, which places a fee on ten projects. (CAP Redlines, p. 27 [removing placement of a fee on "Cordova Hills" and "Easton Special Planning Area/Land Use Master Plans" after receiving a letter from Cordova Hills' Counsel (CAP Redlines, p. 175)].)

It does not appear that all the nine, already-approved, high GHG projects and plans are incorporated into the CAP inventory and BAU forecast. If these emissions were in fact incorporated, please identify the location in the CAP or Addendum that demonstrates this. Further, please clarify what, if any, pending projects and plans outside of the UPA/USB, or in SOI areas, were considered in the GHG inventory and BAU forecast. The 2015 Memo merely states that it did not include emission projections from SOI areas. Before it can be used to streamline development, the CAP must conduct a supplemental EIR that details which pending and approved Projects were not included in the inventory and forecast, or it must demonstrate that these omitted projects will achieve carbon neutrality.

Any projects and plans that were not included in the CAP inventory and forecast must achieve carbon neutrality. (*Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 541 ["The CAP's GHG emission forecasts are based on land use allowed under the GPU only and assume that in-process and future GPAs will mitigate GHG emissions to zero above CAP projections under M-GHG-1."])

While the CAP requires a dwelling unit fee on seven of these projects (under M-GHG-23), this measure does not actually ensure infill development or remedy the exclusion of these emissions from the inventory and forecast. Any omitted approved and pending plans allowing growth beyond that forecasted under the 2016 MTP/SCS, which was based on General Plan land use designations and specifically left out units beyond the UPA/USB, *must* demonstrate carbon neutrality. The CAP's failure to incorporate GHG emissions from the approved plans that extend development beyond the General Plan land use designations mean that its GHG inventory, forecast, and purported achievement of its targets lack substantial evidence. (*Golden Door Properties, supra,* 50 Cal.App.5th at 482–483, 490-491, 541 [finding the County abused its discretion in approving the CAP because the CAP's projected additional GHG emissions from projects requiring a general plan amendment was not supported by substantial evidence.])

The Revised CAP's new measure M-GHG-30 to "Require Carbon Neutral New Growth" (CAP Redlines, p. 33) does not remedy this CEQA violation, as it leaves out important analysis to demonstrate and actually ensure that projects outside of the UPA/USB are carbon neutral. The Organizations are greatly encouraged by the inclusion of the carbon neutrality requirement, and support its inclusion in the CAP. However, as written, M-GHG-30 may increase GHG emissions by facilitating greenfield sprawl projects, through allowing them to claim consistency with the CAP and rely on streamlined GHG review despite M-GHG-30's lack of any substantive information on GHG quantification and protocols. (CAP Redlines, p. 33 ["A plan consistency check at this stage would include a County-adopted CAP that contains a measure requiring carbon neutrality in new development outside of the UPA established in the General Plan"].)¹⁰ Any GHG quantification to ensure "carbon neutrality" must take place in a Projectspecific EIR that is available to the public for review of the quantification methodology and appropriateness of Project on-site and off-site mitigation measures. Any attempt to bypass CEQA review on this issue and place sole discretion in the County, without any established protocols or performance measures, improperly defers mitigation in violation of CEQA. (Golden Door Properties, LLC v. County of San Diego, supra, 50 Cal. App.5th at 520.)

The Organizations provide further information on the inadequacy of M-GHG-30 in Section IV. The deficiencies of M-GHG-30 (CAP Redlines, p. 33), and the carbon offset program that the CAP references (CAP Redlines, p. 41) will increase emissions absent adequate safeguards. The lack of safeguards fails to ensure carbon neutrality for projects beyond the UPA/USB and/or requiring a GPA, preventing a finding of substantial evidence that the CAP was based on an accurate inventory and BAU forecast, and will reach its targets. (*Golden Door Properties, supra,* 50 Cal.App.5th at 506-16, 525.)

Further, the Revised CAP and Addendum fail to include a cumulative impacts analysis of the pending and approved projects and plans outside of the UPA and USB that CEQA requires. (*Golden Door Properties, supra,* 50 Cal.App.5th 467, 526-533 [finding CEQA violation where County CAP Supplemental Environmental Impact Report failed to consider cumulative impacts of pending General Plan Amendments.]) Here, the CAP did not even conduct an EIR (and evidence of cumulative impacts indicates it should), and its Addendum failed to analyze and mitigate the impacts of the pending, approved, and foreseeable future Projects and Plans relying on CAP measures to increase greenfield sprawl.

¹⁰ This also calls into the question the CAP's "consistency checklist," and future findings of consistency with the CAP.

The CAP also fails to provide substantial evidence or explanation for expected GHG reductions projected to be achieved from State, federal, and regional efforts. The programs provide the vast majority of the CAP's claimed GHG reductions. While we recognize that the CAP has reduced its reliance on SMUD's aspirational and unenforceable goal of being carbon free by 2030, the CAP still does not explain how the GHG reductions will be enforced. SMUD has not mandated that it meet its neutrality goal, and its own staff has acknowledged the uncertainties.

Instead of incorporating mitigation measures to account for this uncertainty, the CAP instead vaguely references offset measures. The CAP does not provide any information on what these offsets will entail. The Organizations support the Revised CAP's removal of the previous reference to offsets throughout the State. However, the CAP still allows for offsets throughout the Central Valley region, outside of the County's jurisdiction and enforcement capabilities. The CAP should explicitly state that only local offsets within the County's jurisdiction may be utilized and should provide information on the protocols and processes for when and how offsets may be used, and how the program will be funded and administered. This will also ensure the realization of cobenefits in the County.

Additionally, M-GHG-30's vague allowance of "investment in initiatives with validated GHG reduction benefits" to claim carbon neutrality, without any performance standards, raises major concerns. It is unclear whether the reference to these "initiatives" is the same as the carbon offset program, or if project proponents will be allowed to purchase out-of-county offsets. The County must not allow the purchase of carbon offsets from voluntary registries, as even CARB-approved registries fail to ensure actual GHG reductions.

Finally, over-reliance on offsets at the expense of specific plans that detail, and mandate emission reductions increases uncertainty about whether emission targets will be met.¹¹ Therefore, offsets should be a measure of last resort, and policies to prevent sprawl should be pursued before turning to offsets.

 $\frac{https://www.cdn.law.stanford.edu/wpcontent/uploads/2015/03/Managing-Uncertainty-in-Carbon-Offsets-SLS-Working-Paper.pdf.}{}$

¹¹ Barbara Haya, et al. Environmental & Natural Resources Law and Policy Program, Stanford Law School. Managing Uncertainty in Carbon Offsets: Insights from California's Standardized Approach. August 2019,

III. The CAP's Allowance for Undefined Offsets May Only Serve to Increase GHG Emissions.

The CAP's discussion of carbon offsets is grossly inadequate and extremely problematic. The CAP vaguely references an entire carbon offset program and the potential for future development projects to mitigate through this program, yet does not provide any information on specific protocols, GHG quantification, or performance standards to ensure that carbon offsets are real, verifiable, additional, and quantifiable. (*Golden Door Properties, supra*, 50 Cal.App.5th at 482, 508-516, 520.)

It is also unclear what is meant by the CAP's statement: "New development projects that have incorporated all feasible on-site GHG mitigation may be permitted to fund energy efficiency and electrification retrofits of existing buildings subject to quantification of the costs per MT CO2e through their individual application processes." (CAP Redlines, p. 41.) Is this related to the reference to "investments in initiatives with validated GHG reduction benefits" under M-GHG-30? (CAP Redlines, p. 33.) As discussed in Section IV, vague, generalized "mitigation" allowed under M-GHG-30 is not required to be "additional" under M-GHG-30, and is likely not additional if a project is "mitigating" its new emissions by implementing mitigation measures that are already required under the CAP to mitigate emissions from development under the 2011 GPU.

The CAP merely requires, "Any offset program approved by the County must include carbon offsets that are real, quantifiable, verified, additional, and permanent within the timeframe of the program or project." (CAP Redlines, p. 41.) Parroting these requirements, without provision of adequate protocols, safeguards, or performance measures, violates CEQA. (*Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 507 [finding violation of CEQA despite a mitigation measure's incorporation of these requirements without actual protocols].)

The carbon offset program also mentioned it could allow for Projects outside of the County's control. (CAP Redlines, p. 41.) The Organizations applaud the Revised CAP for removing an allowance of offsets anywhere in the State, and for prioritizing Sacramento County's Environmental Justice communities and in-county offsets first. However, more information must be provided on how the County will enforce the offset program—the offset program and M-GHG-30 both vaguely reference potential reliance on third parties. Further, specific criteria for geographical priorities are required to avoid improper delegation and deferral of mitigation. (*Golden Door Properties*, 50 Cal.App.5th at 518.)

Any carbon offset program must go through separate environmental review that includes adequate protocols and performance standards that ensure any offsets are legitimate and meet CEQA's requirements. "[T]he novelty of greenhouse gas mitigation

measures is one of the most important reasons 'that mitigation measures timely be set forth, that environmental information be complete and relevant, and that environmental decisions be made in an accountable arena." (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 96.)

IV. The CAP Still Relies on Unenforceable, Unsubstantiated, and Vague Measures.

To qualify as a GHG streamlining plan, a CAP must "[s]pecify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level" and establish a monitoring mechanism and require an amendment if the plan is not achieving specified levels. (Section 15183.5 subds. (b)(1) (D), (E).)

Yet, the CAP still relies on vague measures that lack performance standards, relies on voluntary actions, defers formulation of plans, fails to identify costs and funding sources, proposes partnerships with uncertain effects, and does not commit to specific schedules and interim performance metrics. In particular, the CAP still fails to include "economic analysis and detailed programs and performance measures, including timelines" as promised in the General Plan 2011 EIR and Policy LU-115 Implementation Measure H.

The Organizations have provided extensive detailed comments on how to strengthen each of the GHG reduction measures. The Organizations appreciate the instances where those suggestions were incorporated but reiterate the improvements that are needed to provide substantial evidence of the claimed GHG reductions.

The County's failure to incorporate enforceable measures, lack of achieved reductions in the transportation sector, and approval of greenfield sprawl projects echo the County of San Diego's actions that the Court of Appeal found violated CEQA in Sierra Club v. County of San Diego (2014) 231 Cal.App.4th 1152. The Court specifically noted, "The County cannot rely on unfunded programs to support the required GHG emissions reductions." (Id. at 1169.) Further, as is the case here, "[t]he record shows that transit-related measures are either unfunded, that the County is not making meaningful implementation efforts, and in some instances that the County is acting contrary to mitigation measures incorporated into the general plan update PEIR." (Ibid.)

As detailed in *Sierra Club*, the County's approval of major greenfield sprawl projects that were unaccounted for in the CAP inventory and forecast, insufficient measures that reduce vehicle emissions, and failure to identify funding violate CEQA. (231 Cal.App.4th 1169.) Of concern in particular is Measure GHG-11, which allows

projects to avoid the County's Transportation Analysis Guidelines requirement to achieve a 15 percent reduction in daily VMT where "infeasible" through participation in a VMT mitigation program that has yet to be analyzed or established. (CAP Redlines, p. 20 [vaguely noting that "[d]etailed feasibility criteria will be developed and will include appropriate economic considerations"].)¹²

Further, GHG-11 vaguely allows for "funding allocated toward VMT improvement projects or equivalent GHG emission reduction projects," without any specification or objective criteria, despite its expansion beyond VMT-related GHG reductions. Additionally, Senate Bills 375 and 743 specifically call for VMT reductions, as referenced in the 2011 Phase 1 CAP Strategy and Framework Document. This calls into question whether the claimed reductions from this measure are actually additional.

Many of the CAP's other measures, including its transportation measures, also rely on unfunded programs and unenforceable promises to "work with" another agency to establish a program in violation of CEQA. (See *Sierra Club v. County of San Diego*, *supra*, Cal.App.4th at 1169 ["For example, two of the four transportation measures, T1 (increase transit use) and T2 (increase walking & biking), rely on at least one unfunded program. In addition, measures T1 and T2, as well as T3 (increase ridesharing), also rely on 'coordination' with SANDAG (San Diego Association of Governments) and/or other entities"].) The CAP does not identify any source of funding for this future VMT Mitigation Bank, despite the costs for research of GHG quantification and administrative costs that will be involved.

Measure GHG-01 accounts for a large swath of GHG reductions. Organizations had previously commented on the prior draft CAPs' unrealistic projected GHG reductions from this measure that completely relies on voluntary actions and fails to identify a funding source or detailed program. The Revised CAP instead reduced

¹² For example, M-GHG-14 vaguely states the County will "support and work with" other agencies to implement policies in the Circulation Element, states the County "*could*" implement this measure through various actions, which includes "seeking funding." (CAP Redlines, p. 22.) As another example, the CAP Measure M-GHG-10 states, "[t]he County will implement the Sacramento Area Plug-In Electric Vehicle Collaborative's Electric Vehicle Readiness and Infrastructure Plan to increase the electric vehicle (EV) network capacity through infrastructure, fleet changes, funding mechanisms, utility coordination, and education. The County will support updates to [Plan] as more information is available and in response to emerging trends, which may result in changes to the target indicator." (CAP Redlines, p. 19.) Not only does this introduce uncertainty in the CAP's targets, it also fails to identify how the CAP will financially provide the EV chargers.

expected participation rates, acreage targets, and expected reductions, rather than improve the measure itself. (CAP Redlines, p. 12; Appx E-8.)

While the Revised CAP reduced M-GHG-01's expected GHG reductions, there is still no explanation of the rationale behind the factors and multipliers that were used to calculate the measure's expected GHG reductions (for example, the estimated participation rates, acres, etc.) (CAP Redlines, p. E-8.) The CAP must include this rationale for transparency purposes and to substantiate the revised figures. Further, the Revised CAP should have improved the measure itself with financial incentives, not simply cut expected participation rates and targets. The County should also include easements to assure permanence of agricultural uses and projects' GHG reductions. No monitoring is proposed to ensure permanence or verifiability of the expected GHG reductions.

M-GHG-30 is also inadequate because it lacks the performance standards and objective criteria that are required under CEQA, as discussed earlier. In particular, M-GHG-30 vaguely allows a showing of carbon neutrality through "advanced project designs that incorporate energy efficiency, renewable energy generation, clean transportation, carbon sequestration, and/or investments in initiatives with validated GHG reduction benefits." Under this construction, a Project could show carbon neutrality entirely through "investments in initiatives with validated GHG reduction benefits." M-GHG-30 must be revised to require demonstration of carbon neutrality through an EIR process, or the CAP must be updated with an EIR, to formulate performance standards and protocols, including for GHG quantification and financial cost for each carbon metric ton. Further, M-GHG-30 will allow review and verification by the County "or a qualified third party." (CAP Redlines, p. 33.) The County must review and verify Project quantification and proposed mitigation.

The Revised CAP still includes language that undermines the effectiveness and claimed reductions under Measures GHG-5 and 7. The Organizations strongly support the inclusion of these measures and proposed ordinances, and the Board should direct staff to begin these items as soon as possible. However, as written these measures are of uncertain efficacy because they are explicitly subject to future feasibility and cost-effectiveness analysis – in other words they have not yet been determined to be feasible. The critical details of the measures, their claimed GHG reductions, and whether they will be adopted at all, are dubious and insufficient under CEQA.

Measure GHG-06 of the Revised CAP also fails to ensure GHG reductions. This measure states the County will "adopt a ... requirement" that replacement space and hot water heat appliances shall be electric, without specifying what form the "requirement" will take. Further, GHG-06 relies on permits, but absent an enforcement mechanism such as point-of home-sale checks, compliance is doubtful.

The Organizations reiterate their other previous un-remedied objections, including to M-GHG-11, 21, 22, and 23, that were raised in previous comment letters for lack of enforceable standards, lack of substantial evidence of effectiveness, and facilitation of sprawl.

Finally, the CAP includes measures to increase carbon farming and maintain the County's lands with high carbon sequestration. Yet, the County's approval of sprawl greenfield projects that are encroaching on the lands *necessary* to carry out these measures directly undermines these measures from achieving their stated purpose. Preservation of the County's agricultural and forest lands are essential to these measures.

The Organizations wish to reiterate: there are some good measures in the CAP that the Board should direct Staff to implement as soon as possible. These include required carbon neutrality for projects outside the UPA, building electrification requirements, and carbon sequestration projects. However, the Revised CAP's measures still fail to include performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions reductions to qualify as a streamlining document that immunizes all "consistent" projects from GHG mitigation.

V. The CAP Improperly Relies on an Addendum.

The CAP improperly relies on an addendum rather than a Supplemental EIR. CEQA requires analysis of a project's impacts, and supplemental environmental review where a project will create new impacts that were not previously analyzed. Where "there is substantial evidence in the record that the later project may arguably have a significant adverse effect on the environment, which was not examined in the prior program EIR, doubts must be resolved in favor of environmental review and the agency must prepare a new tiered EIR, notwithstanding the existence of contrary evidence." (*Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1319.)

The County's 2011 General Plan Update EIR deferred mitigation and analysis of the GHG impacts from its development buildout until the formation of a Climate Action Plan via mitigation measures CC-1 and CC-2. Yet, the County is now attempting to adopt the CAP through an EIR Addendum.

An addendum is only appropriate where there are minor changes or unchanged conditions. The GPU EIR was certified over ten years ago. Since then, new information, regulations, and mandates surrounding climate change have emerged. In particular, Senate Bill 32 increased the State reduction targets, a change that Ascent itself has

indicated warrants supplemental environmental review.¹³ Senate Bill 375 changed the analysis of transportation impacts and introduced new guidelines for VMT impacts. The County adopted Transportation Analysis Guidelines to comply with SB 375. These changes in law, regional plans, and policies affect the CAP's analysis of its environmental impacts, especially on climate change, requiring the use of an SEIR.

Further, the CAP itself will result in new impacts that were not adequately addressed in the EIR. Namely, its use as a GHG streamlining document. This is especially important given the County's approval of four greenfield sprawl projects whose impacts where not analyzed in the General Plan EIR. County must prepare an EIR that also analyzes the cumulative impacts of approval of those projects (CEQA Guidelines 21094(e)(4).). The creation of a carbon offset program will create impacts. The CAP also specifically notes that the creation of a carbon sequestration program (under M-GHG-31) will "include research on any potential safety and environmental impact concerns associated with various technology solutions." (CAP Redlines, p. 33.) A local carbon offset program and carbon sequestration can provide positive impacts if pursued correctly, and the Board can direct Staff to begin research into both today. However, the CAP as it stands cannot be used as a streamlining document, especially due to the inadequate environmental review.

CEQA runs in favor of requiring a tiered EIR. There is little detail in the GPU about the CAP, and the GPU did not analyze the CAP's use to streamline future projects' GHG analysis. The CAP Addendum repeatedly claims that the General Plan adequately reviewed all environmental impacts and provides conclusory statements that the CAP does not present any "peculiar" impacts not already analyzed in the General Plan EIR. Yet, neither the General Plan EIR nor the CAP Addendum analyze the impacts of utilizing the CAP as a streamlining document, including the impacts should the CAP (or other relied-upon assumed legislative reductions) fail to achieve the promised reductions. The Mitigation Measures in the CAP must be incorporated into a Supplemental EIR, including mitigation of cumulative impacts from projects requiring an adjustment to the UPA or USB.

This is analogous to the County of San Diego's improper use of an addendum in *Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1172. The Court held, "[w]ith respect to the CAP as a plan-level document itself, the County failed to proceed in the manner required by law by failing to incorporate mitigation measures into the CAP as required by Public Resources Code section 21081.6. . . the PEIR never considered the use of the CAP and the Thresholds as a plan-level program. Thus, the environmental impacts of its use needed to be considered in an EIR." (*Ibid.*, emphasis added.)

¹³ 350 Sacramento October 8, 2021 Letter, pg. 8.

Further, as in *Sierra Club*, the details of the Revised CAP "were not available during the program-level analysis of the General Plan." (*Ibid.* at 1174.) In particular, the Court highlighted that the County's general plan update PEIR did not provide detailed GHG-reduction targets and deadlines; comprehensive and enforceable GHG emissions-reduction measures; and implementation, monitoring, and reporting of progress toward the targets defined in the CAP. (*Ibid.*) In essence, the impacts of this CAP, especially from its use as a GHG streamlining plan, have not been addressed.

The improper use of an addendum is not merely a procedural issue. The addendum allows the County to avoid CEQA's requirement that it adequately responds to public comments on the CAP and Addendum. An addendum avoids CEQA's substantive mandate that all feasible mitigation and alternatives be implemented. The CAP Addenda presents four "Strategies" in an attempt to mimic an alternatives discussion, yet the County avoids any duty to select a feasible, less damaging alternative. This includes a required Smart Growth Alternative. In *Golden Door*, the Court found that a county's CAP SEIR was deficient for its failure to include a Smart Growth Alternative. (*Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 546 ["Although the CAP recognizes that on-road transportation is the largest source of GHG emissions in the County (45 percent of the GHG inventory), no alternative addresses VMT or transportation-related GHG emissions. Plaintiffs contend that the County violated CEQA by failing to consider smart-growth alternatives aimed at reducing VMT. As explained post, we agree."].) The County must prepare an EIR that includes a Smart Growth Alternative.

Ultimately, the Addendum circumvents CEQA's procedural safeguards and does not ensure that the CAP's implementation actions and targets are enforceable and legally binding.

VI. The CAP Addendum Fails to Disclose the CAP's Inconsistency with the Sustainable Communities Strategy, Senate Bill 375, and Other Governing Documents.

SACOG adopted its 2020 MTP/SCS in November 2019. The SCS calls upon jurisdictions in the Sacramento region to lower GHG emissions "by accelerating infill development, reducing vehicle trips, and electrifying remaining trips." The SCS acknowledges projected emission reductions from new vehicle technology, yet explicitly states, "[I]t will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32."

Further, CARB set a 19% VMT reduction target for SACOG by 2035. SACOG adopted its "Green Means Go" Program, which prioritizes infill development as a

"critical foundation." SACOG's current MTP/SCS sets a goal of having 1/3 of all homes and ½ of all jobs in a transit priority area. The SCS assumes the region will attract new homes to infill areas.

Yet, the majority of County approved Projects are greenfield projects beyond the urban growth boundaries. Further, the CAP fails to incorporate any measures that actually promote infill development. Rather, the one GHG measure that focuses on infill, M-GHG-11, relies on sprawl for vague funding towards infill. The CAP should have incorporated the infill "Strategy 1" option.

The CAP does little to reduce on-road vehicle and transportation emissions, as demonstrated in its own forecasts that include CAP implementation. The few measures that do address transportation emissions are voluntary, vague, and unenforceable. Based on the foregoing reasons, the Addendum's finding that the CAP is consistent with the MTP/SCS lacks substantial evidence. (*Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 533.)

The CAP is also inconsistent with County's Phase 1 CAP Strategy and Framework Document, which was the policy "foundation for the CAP components which follow," and which emphasizes the need to reduce VMT via "[s]hifting development patterns to an emphasis on compact development." (See 350 Sacramento Comment Letter, Oct. 8 2021, pp. 15-16.)

VII. The County Must Incorporate All Feasible Mitigation Measures and Should Select the Infill Alternative.

Public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant effects of such projects. (Public Resources Code Section 21002.) Yet, the Revised CAP fails to incorporate feasible mitigation measures and alternatives.

Appendix F of the Revised CAP includes a number of feasible alternative measures, some of which the County dismisses based on its assertion that the Phase I Strategy and Framework document does not identify modified land uses as a strategy to address VMT:

Strategy options described in this section entail changes to the underlying assumptions used to prepare the CAP, such as modified land uses or setting targets for GHG reduction that were not identified as part of the Phase 1 Strategy and Framework document...

(CAP Redlines, p. F-1.)

In fact, the 2011 Phase I Strategy and Framework Document cited by the County expressly states that the County's "direct authority over land use," can be used to address VMT and associated GHG emissions. ¹⁴ This means that several of the strategies in Appendix F, as well as many others, are feasible, viable options.

The CAP cannot be used as a streamlining document due to its deficiencies that are detailed throughout this letter. However, action is needed now. The Board should direct staff to begin implementing the CAP's measures with incorporation of the revisions suggested in this letter and the Organizations' previous letters, along with the measures listed in Strategy Option 1: Infill Development. As detailed in 350 Sacramento's previous letter, dated October 8, 2021, the County's projected housing needs through 2040 is 37,230 units, which can be met through the current estimated infill capacity of 33,000 units. This letter provides further analysis of the measures and alternatives that should be included.

Finally, as discussed in Section 1, the CAP should establish and demonstrate it will achieve a carbon neutrality target. The Board should also implement the Revised CAP's suggested requirement that any development outside the UPA/USB achieve carbon neutrality, but with the added safeguards discussed earlier that ensure carbon neutrality.

VIII. Conclusion

We appreciate the County's work on the Revised CAP. However, the Revised CAP as proposed cannot be used as a streamlining device without adequate environmental review, enforceable and adequate GHG reduction measures, resolution of the CAP inventory and forecast inaccuracies, incorporation of feasible alternatives and mitigation measures, and removal of vague references to carbon offsets without adequate protocols.

We ask the Board to direct staff to begin implementing these programs, with the necessary improvements detailed above, as soon as possible. This especially includes carbon neutrality, electrification, and carbon sequestration. We need action now, and work on the electrification measures, in particular, should begin immediately given the January 2023 effective date. However, as written, this CAP will only serve to increase

¹⁴https://planning.saccounty.net/PlansandProjectsInProgress/Documents/Climate% 20Acti on% 20Plan/CAP% 20Strategy% 20and% 20Framework% 20Document.PDF, p. 14.

^{[&}quot;Sacramento County recognizes that local governments are on the front line . . . Land use patterns have a direct impact on transportation needs and options, which, in turn, affect energy consumed and GHG emissions associated with transportation.]

emissions if approved as a GHG streamlining device, in direct contravention of the Board of Supervisors' Climate Emergency Resolution.

Thank you for your consideration of these comments.

Sincerely,

Kathryn Pettit Josh Chatten-Brown

cc:

County Executive Ann Edwards (*CountyExecutive@SacCounty.net*)
Principal Planner Todd Smith (*smithtodd@saccounty.net*)
County Counsel Lisa Travis (*travisl@saccounty.net*)

Exhibit A

RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, DECLARING A CLIMATE EMERGENCY

WHEREAS, Sacramento County is at risk of experiencing the devastating effects of extreme heat and weather events caused by rising atmospheric greenhouse gasses, resulting in climate change, including rising temperatures and more extreme heat waves, drier landscapes and more intense droughts, increased frequency and magnitude of wildfires and associated air pollution, health impacts, utility and transportation services interruptions, economic disruption, property loss, dislocation, housing shortages, food insecurity, gaps in education due to school closures, impacts on agricultural production; increased risk of floods, and increased demand on public sector resources and emergency response capacity; and

WHEREAS, The need for immediate climate action is exemplified in the risks already impacting the region's public health and safety, life-sustaining ecosystems and the region's economy; and

WHEREAS, due to Sacramento County's climate, the confluence of the Sacramento River and the American River, a long growing season, and soil types, agriculture has traditionally been, and continues to be, an important economic driver for Sacramento County, now threatened by prolonged drought, flooding, severe storms, wildfires, and growing salinization of the Sacramento – San Joaquine Delta waterways; and,

WHEREAS, indigenous communities, low-income communities, communities of color, the young, the disabled, and the elderly suffer the gravest consequences from climate change; and,

WHEREAS, the scope and scale of action necessary to stabilize the climate will require unprecedented levels of public awareness, engagement, and deliberation to develop and implement effective, just, and equitable policies to address the climate crisis; and,

WHEREAS, on November 9, 2011, Sacramento County approved the Phase 1 Climate Action Plan Strategy and Framework document (Phase 1 CAP), which is the first phase of developing a community-level Climate Action Plan; and,

Resolution Of The Board Of Supervisors Of The County Of Sacramento, State Of California, Declaring A Climate Emergency Page 2

WHEREAS, on September 11, 2012, Sacramento County approved the Phase 2A Climate Action Plan for Government Operations (Phase 2A CAP); and,

WHEREAS, preparation and adoption of the Phase 2B Communitywide Climate Action Plan is a high priority for Sacramento County and shall provide meaningful and equitable climate action, enhance resiliency and provide a transparent and public pathway for future plan performance and adaptive management; and,

WHEREAS, the County's goal is to eliminate greenhouse gas emissions to the greatest extent possible, to remove or sequester greenhouse gases to mitigate any remnant GHG emissions, and ultimately to sequester more GHG than emitted, thereby decreasing atmospheric GHG concentrations to ultimately achieve carbon neutrality by 2030; and,

WHEREAS, the Office of Emergency Services' Heat and Climate
Emergency Response Plan for the Emergency Operations Center, the
Department of Water Resources' current update of the Local Hazard Mitigation
Plan, implementation of the adopted Environmental Justice Element, and
preparation of the Communitywide Climate Action Plan and Vulnerability
Assessment are linked in addressing climate change and adaptation in
Sacramento County; and,

WHEREAS, ongoing coordination and integration among multiple County planning efforts is necessary to achieve carbon neutrality.

WHEREAS, The Sacramento County Board of Supervisors is committed to restoring a safe and stable climate that is essential to the health and prosperity of Sacramento County residents and businesses; and,

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of the County of Sacramento does hereby declare climate change an emergency requiring urgent and immediate mobilization of public and private resources to develop and implement a climate and sustainability plan that identifies and integrates current and future actions necessary to achieve an equitable, sustainable, and resilient economy and transition to a countywide carbon neutrality footprint by 2030; and,

Resolution Of The Board Of Supervisors Of The County Of Sacramento, State Of California, Declaring A Climate Emergency Page 3

BE IT FURTHER RESOLVED, the County of Sacramento commits to build on existing climate action commitments and taking significant steps to sustain and accelerate short term communitywide carbon elimination, and all efforts and actions necessary to eliminate emissions by 2030, recognizing that such a goal will only be achieved through regional collaboration between multiple partners; and,

BE IT FURTHER RESOLVED, the Communitywide Climate Action Plan shall explain the County's approach to reduce greenhouse gas emissions in order to achieve carbon neutrality by 2030, building on recommendations and analysis from community partners, and suggested mitigation measures from climate experts, urban and regional planners, community members, and economists. Development and implementation of the plan shall be guided by science, data, best practices, and equity concerns; and

BE IT FURTHER RESOLVED, County staff shall evaluate the resources necessary to achieve carbon neutrality by 2030, and the emergency actions required to eliminate emissions by 2030. Where existing funding or resources do not support the level of action required, County staff shall identify gaps and provide recommendations to the County Executive and Board of Supervisors.

BE IT FURTHER RESOLVED, the County of Sacramento will establish, within 60 days, a permanent Climate Emergency Mobilization Task Force composed of climate experts including but not limited to representatives of the scientific community and academia to oversee the development and implementation of a climate emergency response plan utilized by all departments within the County of Sacramento, and each department shall assign a point person to provide regular updates to the Task Force and the Board of Supervisors concerning departmental progress in reducing emissions.

BE IT FURTHER RESOLVED, it is vital that farmers operating within the County of Sacramento be supported during the climate emergency, including support in necessary conservation and regenerative practices that will reduce emissions and improve resilience to extreme weather events.

Resolution Of The Board Of Supervisors Of The County Of Sacramento, State Of California, Declaring A Climate Emergency Page 4

BE IT FURTHER RESOLVED, the County of Sacramento affirms the community's need to understand, participate and support all actions and initiatives the County adopts in response to the climate emergency. The County therefore commits to support outreach, information and education for County residents and staff on the urgent need to reduce GHG emissions, and the policies and strategies necessary to advance sustainability and resilience. Implementation of the County's climate efforts shall include the engagement of community-based and grassroots organizations and inclusive economic development partners, with a focus on low-income and disadvantaged communities, youth, communities of color, and environmental justice.

BE IT FURTHER RESOLVED, the County shall continue to support and enhance local climate mitigation and adaptation efforts, and the work of local agencies and partners, including the Sacramento Municipal Utility District (SMUD), the Sacramento Metropolitan Air Quality Management District (AQMD), the Sacramento Area Council of Governments (SACOG), and other regional agencies and associations as well as the region's environmental and social justice member organizations.

On a motion by Supervisor	, seconded by
Supervisor	_, the foregoing Resolution was passed
and adopted by the Board of Supervisors	s of the County of Sacramento this 16th
day of December, 2020, by the following	vote, to wit:

AYES:	Supervisors,	
NOES:	Supervisors,	
ABSENT:	Supervisors,	
ABSTAIN:	Supervisors,	
	Supervisors, REFORM ACT (§ 18702.5.))	
		Chair of the Board of Supervisors of Sacramento County, California
ATTEST: _		
C	erk, Board of Supervisors	

Resolution Of The Board Of Supervisors Of The County Of Sacramento, State

Of California, Declaring A Climate Emergency

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Exhibit B

Memo



455 Capitol Mall, Suite 300 Sacramento, CA 95814 916.444-7301

Date: November 15, 2016

To: Todd Taylor and John Lundgren (Sacramento County)

From: Honey Walters, Erik de Kok, and Dimitri Antoniou (Ascent Environmental, Inc.)

Subject: Sacramento County Climate Action Plan: Communitywide Greenhouse Gas Reduction &

Climate Change Adaptation (Communitywide CAP)

Task 1 Technical Memorandum: 2015 Greenhouse Gas Emissions Inventory and Forecasts

INTRODUCTION

In 2009, Sacramento County (County) and the Sacramento Municipal Utility District (SMUD) completed a greenhouse gas (GHG) emissions inventory for the incorporated and unincorporated areas of the County, using 2005 as the emissions baseline year (Sacramento County 2009). The 2005 inventory included both emissions generated by the community and internal operations. In 2011, the County adopted a Climate Action Plan (CAP) Strategy and Framework Document (Phase 1 CAP), and in 2012 the County adopted a County Government Operations CAP document (Phase 2A CAP). In 2011, new data and methods were applied to some sectors in the 2005 inventory to update the 2005 emissions estimates. References to the original 2005 inventory data presented in this memo are based on the inventory results as presented in the 2011 Phase 1 and 2012 Phase 2A CAP documents.

Sacramento County is currently updating the 2005 inventory for baseline year 2015, as part of the current effort to prepare a comprehensive Communitywide CAP (Phase 2B) that will quantify and substantiate GHG reductions for both community sources in the unincorporated area and the County's internal operations. This initial phase in the preparation of the new Communitywide CAP includes: (1) updating the unincorporated County's community and internal operations GHG emissions inventory to 2015, and (2) preparing new GHG emissions forecasts for 2020, 2030, and 2050. This technical memorandum provides the results of the 2015 GHG emissions inventory update and future year emissions forecasts, including associated methods, assumptions, emission factors, and data sources.

The updated GHG emissions inventory and forecasts will provide a foundation for the forthcoming phases of work on the Communitywide CAP including the development of GHG emissions reduction targets, GHG emissions reduction measures, and an action plan to help the County achieve identified targets.

ORGANIZATION OF THIS MEMORANDUM

This memorandum consists of three main parts:

▲ Section 1: Summary of Inventory Results presents an overview of the updated 2015 GHG community and internal operations emissions inventory for each sector, including any new sectors not previously included in the 2005 inventory. Key components include:

Page 2

- A summary of annual emissions by sector; and
- A general comparison to previous inventories.
- Section 2: Data, Methods, and Assumptions summarizes data, methods, and assumptions used in the 2015 inventory and provides a brief explanation regarding differences between the 2015 inventory and 2005 inventory on a sector-by-sector basis.
- Section 3: Emissions Forecasts summarizes the forecasted GHG emissions under a "business-as-usual" (BAU) scenario for future years 2020, 2030, and 2050.

SUMMARY OF INVENTORY RESULTS 1

1.1 2015 COMMUNITY INVENTORY RESULTS

Based on the modeling conducted, the unincorporated area of the County generated approximately 4,853,647 metric tons of carbon dioxide equivalent (MTCO₂e) in 2015. Major emissions sectors included residential and commercial/industrial building energy use, on-road vehicles, solid waste, off-road vehicles and equipment, agriculture, and high global warming potential gases. Table 1 and Figure 1 present the County's 2015 GHG emissions inventory by sector. A description of each emissions sector, including key sources of emissions, is provided in further detail in Section 2.2.1.

Table 1 **2015 Unincorporated Sacramento County Community Greenhouse Gas Inventory**

Sectors	2015 (MTCO₂e/year)	Percent of Total
Residential Energy	1,193,311	25%
Commercial/Industrial Energy	890,603	18%
Building Total	2,083,914	43%
On-Road Vehicles	1,671,596	34%
Off-Road Vehicles	196,769	5%
Transportation Total	1,868,365	39%
Solid Waste	352,909	7%
Agriculture	254,899	5%
High-GWP Gases	251,085	5%
Wastewater	27,253	<1%
Water-Related	15,222	<1%
Total	4,853,647	100%

Notes: Totals may not add due to rounding. MTCO2e = metric tons of carbon dioxide equivalent; GWP = Global Warming Potential

Source: Data compiled by Ascent Environmental in 2016.



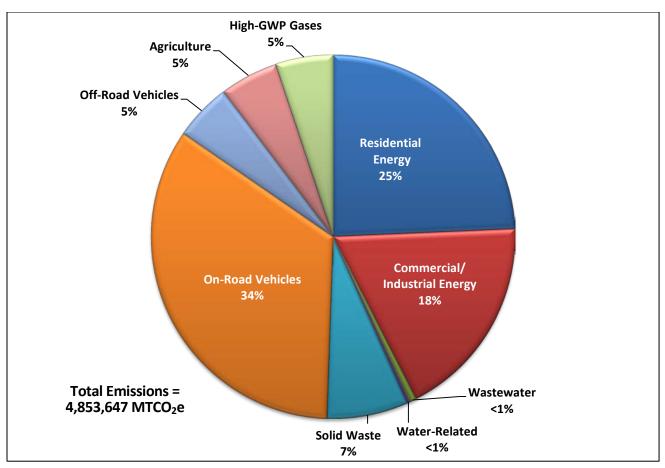


Figure 1 2015 Unincorporated Sacramento County Community Greenhouse Gas Inventory

Table 2 shows the 2005 community inventory for the unincorporated County alongside the updated 2015 results. In general, the organization of the updated 2015 community inventory is consistent with the 2005 inventory. Primary differences in the 2015 inventory were that energy use from the commercial and industrial sectors are now combined, and aircraft emissions at Sacramento International Airport (SMF) were excluded, as aircraft operations and emissions are not controlled or influenced by the County (See discussion in Section 2.2.2 regarding airport emissions for further details). For purposes of comparing the two inventories, emissions totals in Table 2 combine the industrial and commercial sectors from the 2005 inventory and do not include the aircraft emissions in the reported totals. Based on the modeling conducted, a 1.4 percent increase in emissions from the 2005 inventory was reported. Some sectors showed increases in emissions, while others showed decreases in emissions. Specific examples and further comparison between the two inventories is included in Section 2.2.1 on a per-sector basis. In general, differences in emissions between the two inventories can be explained by:

- ▲ the use of different Global Warming Potential (GWP) values between inventories (see Section 2.1 below for explanation of GWP values);
- adjustments in calculation methodologies (e.g., equations and emission factors);
- differences in data sources between the two inventories; and
- ▲ changes in actual activity levels within the County since 2005 (e.g., population increase, number of buildings, building energy use and vehicle travel).



Table 2 Comparison of Unincorporated Sacramento County Community Greenhouse Gas Inventories (2005 and 2015)

Sectors	2005 Inventory (MTCO ₂ e/year)	2015 GHG Inventory (MTCO ₂ e/year)	Difference (MTCO₂e/year)	Percent change from 2005
Residential Energy	1,033,142	1,193,311	+160,169	+16%
Commercial and Industrial Energy ¹	772,129	890,603	+118,474	+15%
On-Road Vehicles	2,066,970	1,671,596	-395,374	-19%
Off-Road Vehicles	236,466	196,769	-39,697	-17%
Solid Waste	201,350	352,909	+151,559	+75%
Water-Related	5,885	15,222	+9,337	+159%
Wastewater	70,662	27,253	-43,409	-61%
Agriculture	197,132	254,710	+57,578	+29%
High-GWP Gases	203,528	251,085	+47,554	+23%
Sacramento International Airport ²	200,404	NA	NA	NA
Total ³	4,787,264	4,853,647	+66,383	+1.4%

Notes: Totals may not add due to rounding; MTCO₂e = metric tons of carbon dioxide equivalent; GWP = Global Warming Potential; NA = Not applicable

Source: Sacramento County, 2011; 2015 inventory prepared by Ascent Environmental in 2016.

1.2 2015 INTERNAL OPERATIONS INVENTORY RESULTS

Based on the modeling conducted, the County's internal operations generated approximately 123,397 MTCO₂e in 2015. Major emissions sectors included employee commute, buildings and facilities, vehicle fleet, and airport operations (e.g., ground support equipment and fleet only). Table 3 and Figure 2 present the County's 2015 GHG internal operations emissions inventory by sector. A description of each emissions sector, including key sources of emissions, is provided in further detail in Section 2.2.1.

Table 3 2015 Unincorporated Sacramento County Internal Operations Greenhouse Gas Inventory

Sectors	2015¹ (MTCO2e/year)	Percent of Total (%)
Employee Commute	38,290	31%
Vehicle Fleet (on and off-road vehicles)	29,591	24%
Buildings and Facilities	28,247	23%
Airports (buildings and facilities)	18,310	15%
Water-Related	4,665	4%
Streetlights and Traffic Signals	3,729	3%
Wastewater	565	<1%
Total	123,397	100%

Notes: Totals may not add due to rounding.

 $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Source: Data compiled by Ascent Environmental in 2016.



^{1.} The 2005 Inventory separated Industrial and Commercial sectors, and thus they are combined here for comparison to the 2015 inventory, which did not separate industrial from commercial.

^{2.} Aircraft emissions were not included in the 2015 Inventory, but they were included in the 2005 inventory and are included for reference purposes only.

^{3.} Totals do not include aircraft emissions reported in the 2005 inventory.

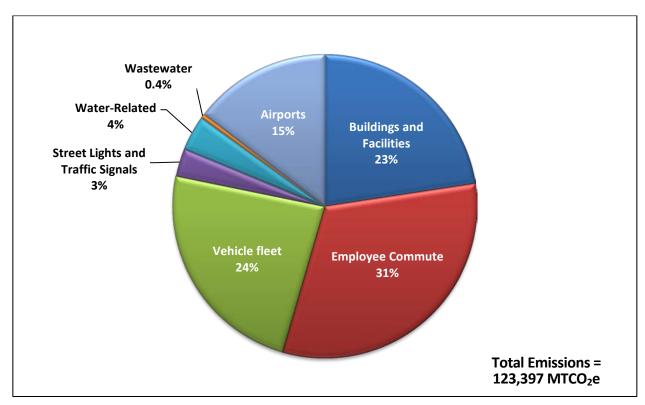


Figure 2 2015 Unincorporated Sacramento County Internal Operations Greenhouse Gas Inventory

Table 4 shows the 2005 inventory for the internal operations of the County alongside the updated 2015 internal operations inventory. In general, the organization of the updated 2015 community inventory is consistent with the 2005 inventory. One primary difference is that the 2015 update includes emissions associated with wastewater treatment and conveyance associated with County operations. All other sectors are the same as the 2005 inventory. Similar to the 2005 inventory, emissions associated with County airports were estimated separately. This sector includes emissions associated with airport buildings, facilities, and water-use. Airport fleet and employee commute emissions were not included in the airports sector, similar to the 2005 inventory, but are included in other applicable sectors.

For purposes of comparing the two inventories, emissions totals in Table 4 are summarized with and without the additional wastewater sector. Based on the modeling conducted, and considering emissions from the additional sector, an eight percent decrease in emissions from the 2005 baseline was reported. Some sectors showed increases in emissions, while others showed decreases in emissions. Specific examples and further comparison between the two inventories is included in Section 2.2.2 on a per-sector basis. In general, differences in emissions between the two inventories can be explained by;

- the use of different GWP values between inventories (see Section 2.1 below for explanation of GWP values),
- adjustments in calculation methodologies (e.g., equations and emission factors),
- ▲ differences in data sources between the two inventories, and



Table 4 Comparison of Unincorporated Sacramento County Internal Operations Greenhouse Gas Inventories (2005 and 2015)

Sectors	2005 Inventory Baseline (MTCO ₂ e/year)	2015 GHG Inventory (MTCO ₂ e/year)	Difference (MTCO ₂ e/year)	% change from 2005
Buildings and Facilities	35,870	28,247	-7,623	-21%
Employee Commute ¹	31,970	38,290	+6,320	+20%
Vehicle Fleet (on and off-road vehicles, County and airports) ²	37,720	29,591	-8,129	-22%
Streetlights and Traffic Signals	8,810	3,729	-5,081	-58%
Water-Related	5,580	4,665	-915	-16%
Wastewater	NA	565	NA	NA
Airports (buildings, ground support)	14,980	18,310	+3,330	+22%
Total (excluding Wastewater)	134,930	122,832	-12,098	-9.8%
Total (including Wastewater)	134,930	123,397	-11,533	-9.3%

Notes: Totals may not add due to rounding. MTCO2e = metric tons of carbon dioxide equivalent; NA = Not applicable

Source: Sacramento County, 2012; 2015 inventory prepared by Ascent Environmental in 2016.

2 DATA, METHODS, AND ASSUMPTIONS

2.1 OVERALL ASSUMPTIONS AND DATA

2.1.1 Utility Emission Factors

Emissions of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) per megawatt hour (MWh) or therm of natural gas vary greatly by location and from year to year depending on numerous factors. Best available utility-specific factors for GHG emissions were obtained and used throughout the inventory to estimate GHG emissions from electricity and natural gas consumption. Sources for electricity and natural gas emission factors are shown below.

- Electricity: Utility electricity emission factors for CO₂ were provided by SMUD and Pacific Gas & Electricity (PG&E) directly (SMUD 2016a, PG&E 2016). Electricity emission factors for CH₄ and N₂O were obtained from the U.S. Environmental Protection Agency's (EPA's) Emissions & Generation Resource Integrated Database (eGRID) 2012 GHG Annual Output Emission Rates (EPA 2015).
- ▲ Natural Gas: Utility natural gas emission factors for CO₂ were provided by PG&E directly. Emission factors for CH₄ and N₂O were obtained from the Climate Registry Emission Factors (2014). Specific factors used in the inventory calculations are shown below in Table 5.



^{1.} Similar to the 2005 inventory, the 2015 employee commute sector includes airport employees

^{2.} Similar to the 2005 inventory, the 2015 vehicle fleet sector includes airport fleet vehicles

Table 5 Unincorporated Sacramento County GHG Inventory Building Energy Emission Factors			
Emission Factor	Unit	Source	
SMUD- Electricity			
561.08	lb CO ₂ /MWh	SMUD, personal communication with Martha Helek	
31,120	lb CH ₄ /MWh	EPA eGrid 2012 (updated 2015)	
5,670	lb N ₂ O/MWh	EPA eGrid 2012 (updated 2015)	
PG&E- Electricity			
429	lb CO ₂ /MWh	PG&E-provided energy data	
31,120	lb CH ₄ /MWh	EPA eGrid 2012 (updated 2015)	
5,670	lb N ₂ O/MWh	EPA eGrid 2012 (updated 2015)	
PG&E- Natural Gas			
11.7	lb CO ₂ /therm	PG&E-provided energy data	
0.11	lb CH ₄ /therm	2014 Climate Registry Emission Factors. Table 12.9.	
0.002	Ib N ₂ O/therm	2014 Climate Registry Emission Factors, Table 12.9.	

Notes: CH₄ = methane; CO₂ = carbon dioxide; eGrid = Emissions & Generation Resource Integrated Database; GHG = greenhouse gas; GWh = gigawatt-hours; kg = kilograms; lb = pounds; MMBTU = million British thermal units; MT = metric tons; MWh = megawatt-hours; N₂O = nitrous oxide; PG&E = Pacific Gas and Electric; SMUD = Sacramento Municipal Utility District.

Source: Compiled by Ascent Environmental 2016.

2.1.2 Global Warming Potentials

GHG emissions other than CO_2 generally have a stronger insulating effect (e.g., ability to warm the earth's atmosphere or greenhouse effect) than CO_2 . This effect is measured in terms of a pollutant's GWP. CO_2 has a GWP factor of one while all other GHGs have GWP's measured in multiples of one. The California Air Resources Board (ARB) currently uses GWP factors published in the Fourth Assessment Report (FAR) from the Intergovernmental Panel on Climate Change (IPCC), where CH_4 and N_2O have GWP's of 25 and 298, respectively (IPCC 2007). This means that CH_4 and CO_2 0 would be 25 and 298 times stronger than CO_2 0, respectively, in their potential to insulate solar radiation within the atmosphere.

This inventory uses the same FAR GWP values. The 2005 inventory conducted for baseline year 2005 used GWPs from IPCC's Second Assessment Report, of 21 for CH_4 and 310 for N_2O . CH_4 emissions are typically higher from natural gas use than electricity and therefore, higher GWP values for CH_4 would result in higher emissions from natural gas use. Changes in GWP values used would also have a direct effect on emissions in the High-GWP Gases sector.

2.1.3 Population and Employment

Population data were available for the unincorporated County for 2013 (Sacramento County 2016a). Population, employment, and housing growth projection data were provided by County staff directly but sourced from the Sacramento Area Council of Governments (SACOG). Growth projections were used to obtain 2015 population data and to forecast future year emissions (See Section 3 for further details regarding growth factors used). The 2015 population for the unincorporated County that was used in this inventory is 576,007. Population data were used to estimate wastewater process and high-GWP emissions



for the community inventory. The total number of County employees was used for various sectors in the internal operations inventory to scale the emissions from the community inventory and to calculate employee commute emissions. County employee data were provided directly from County staff for 2015.

2.2 SECTOR-SPECIFIC ASSUMPTIONS AND METHODS

The 2015 inventory update includes several changes to the data sources and emission factors used in the 2005 inventory, along with changes in methods in some sectors. These differences were necessary in cases where the original data sources used in the 2005 inventory were no longer available or have been updated. New methods that provide more accurate emissions estimates are available for sectors such as the on-road vehicles and solid waste sectors. The general approach for both inventories is consistent with guidance from the Local Governments for Sustainability (ICLEI). Specifically, methods and assumptions were consistent with the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (Community Protocol), Version 1.0 (ICLEI 2012) and the Local Government Operations Protocol (LGOP) for the Quantification and Reporting of Greenhouse Gas Emission Inventories, Version 1.1 (ICLEI 2010).

The following summarizes data sources and methods used in estimating the unincorporated County's 2015 GHG emissions inventory. Further explanation of sector-specific methods is provided below.

- Building Energy: This sector was included in both the community and the internal operations inventory. Annual (2015) electricity and natural gas usage data for the unincorporated areas were obtained from PG&E's Green Communities report for Sacramento County. Annual (2015) electricity data for SMUD customers within the unincorporated County were obtained directly from SMUD (2016b). Account data for both SMUD and PG&E only included usage data for service accounts located within the unincorporated County boundaries.
- Transportation (On-Road and Off-Road Vehicles): This sector was included in both the community and the internal operations inventory. For the on-road vehicle sector, annual vehicle miles traveled (VMT) by speed bin (e.g., zero to five miles per hour) were obtained from SACOG for the unincorporated area, using the Senate Bill (SB) 375 Regional Technical Advisory Committee's (RTAC's) origin-destination method (established through SB 375). Vehicle emission factors were available from ARB's 2014 EMissions FACtor (EMFAC) model. Off-road vehicle emissions were estimated from ARB's OFFROAD 2007 model and scaled by population, jobs, or location of activity in the unincorporated area.
- Solid Waste: This sector was only included in the community inventory. Emissions associated with waste generated by residents and businesses in the incorporated County were estimated using disposal and landfill data provided by Sacramento County for Kiefer Landfill and disposal data available from the California Department of Resources Recycling and Recovery (CalRecycle) for other landfills receiving waste from the unincorporated County. Landfill gas (LFG) information was available from EPA.
- Agriculture: This sector was only included in the community inventory. Agricultural emissions were based on livestock and crop data from the County's 2015 Crop Report; pesticide use data from the California Department of Pesticide Regulation (DPR) (DPR 2014); fertilizer use from the California Department of Food and Agriculture (CDFA), ARB's GHG inventory, and University of California Davis Agricultural studies; diesel irrigation pump information from ARB; and open burning permit data from the Sacramento Metropolitan Air Quality Management District (SMAQMD).
- High-GWP Gases: This sector was only included in the community inventory. Estimates of high-GWP gases were available at the State level and were scaled from the Statewide GHG inventory to the unincorporated area by population.



- Wastewater: This sector was included in both the community and the internal operations inventory. Domestic wastewater emissions were calculated using population-based equations from the Community Protocol (ICLEI 2012). Emissions associated with wastewater conveyance/pumping were estimated based on wastewater pumping energy use data provided by Sacramento Area Sewer District (SASD) and Sacramento Regional County Sanitation District (Regional San) as well as total wastewater treatment volumes also provided by Regional San. Emissions were scaled to the unincorporated County population (community inventory) and employees (internal operations inventory).
- Water-Related: This sector was included in both the community and the internal operations inventory. Water-related emissions were estimated by using a region-specific energy intensity factor in combination with water consumption volumes compiled from the numerous water purveyors within Sacramento County. Water consumption volumes were estimated for the unincorporated County based on water purveyor service boundaries. Total water consumption volumes for individual water purveyors were apportioned based on the percent of service area located within unincorporated County. The energy intensity factor was also applied to County water use volumes that were available for owned buildings/facilities (internal operations inventory). Energy use was also available from Sacramento County Water Agency (SCWA) for water-related facilities. SMUD utility emission factors were used to estimate GHG emissions.
- ▲ Airports: This sector was only included in the internal operations inventory. Energy consumption data were provided by Sacramento County airports department. Data included building energy use, ground support equipment and airport vehicle fleet fuel usage. Note that airport fleets and employee commute emissions were included with total County fleet and employee commute sectors. Emissions associated with aircraft operations were not included because they are outside of the County's jurisdictional control.
- Streetlights/Traffic Signals: This sector was only included in the internal operations inventory. Electricity use was provided directly from Sacramento County for all streetlights and traffic signals.

2.2.1 Community Inventory

BUILDING ENERGY SECTOR

Based on GHG emissions modeling conducted, residential and non-residential building energy use in 2015 resulted in approximately 2,083,914 MTCO₂e. This sector comprised approximately 43 percent of the unincorporated County's emissions, resulting in the largest emissions sector in the inventory. These emissions were a result of electricity and natural gas energy use in buildings and other facilities, such as outdoor lighting, pumps, or other equipment. The building energy sector consumed approximately 5.5 million MWh of electricity and 100 million therms of natural gas. Water-related and wastewater conveyance energy was removed from this sector and are reported separately. SMUD is the primary electricity provider with PG&E supplying some electricity and all natural gas in the County.

Electricity accounted for approximately 67 percent of emissions from the building energy sector with 57 percent of total emissions coming from the residential sector. Table 6 presents building-energy use and associated emissions by fuel and source. Table 5, above, includes emission factors used to quantify emissions from electricity and natural gas use, which were also used to quantify emissions in other sectors, as discussed in applicable sectors below.



	Table 6	Building Energy Use and GHG Emissions by S	Source
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Source	Quantity	GHG Emissions	Percent
Electricity	MWh/year	MTCO ₂ e/year	Sector/Energy Type
Residential	2,804,198	716,128	51%
Commercial	388,871	98,884	7%
Industrial	2,267,601	579,646	42%
Electricity Total	5,460,669	1,394,658	100%
Natural Gas	Therms/year	MTCO ₂ e/year	Sector/Energy Type
Residential	69,610,572	477,183	69%
Commercial	30,412,628	208,479	30%
Industrial ²	524,202	3,593	1%
Natural Gas Total	100,547,402	689,256	100%
Energy Combined		MTCO ₂ e/year	Sector/Energy Type
Residential	NA	1,193,311	57%
Commercial	NA	307,363	15%
Industrial	NA	583,240	28%
Total	NA	2,083,914	100%

Notes: Totals in columns may not add due to rounding. PG&E provided electricity and natural gas use for 2015 for unincorporated Sacramento County. SMUD provided electricity use for 2015 for unincorporated Sacramento County.

MWh = megawatt-hours; MT = metric tons; NA = not applicable; CO₂ = carbon dioxide; CO₂e = carbon dioxide equivalent; GHG=greenhouse gas.

Source: Data provided by Ascent Environmental in 2016 based on modeling using data provided by PG&E and SMUD.

In the 2005 inventory, emissions were quantified using ICLEI's Clean Air and Climate Protection (CACP) software. Default, statewide emission factors were replaced with emission factors from the California Climate Action Registry. Emissions were scaled by population data for the unincorporated County in 2005. The updated inventory used specific utility emission factors and energy use was provided directly from the utilities, as discussed above. The 2015 update combines commercial and industrial sectors into one. Emissions from wood-burning were not calculated separately for this inventory, as they were before. Increases in emissions in the building energy sector are likely due to increased population, economic growth, and higher GWP values used in the 2015 inventory update.

TRANSPORTATION SECTOR

On-Road Vehicles

Based on modeling conducted, on-road vehicle usage in the unincorporated County resulted in 1,671,596 MTCO₂e in 2015, or 34 percent of the County's inventory. On-road vehicle emissions are primarily the result of exhaust from the combustion of gasoline and diesel fuels. To a smaller degree, emissions from on-road vehicles also result from upstream electricity generation for electric vehicles. Due to lack of available data, emissions from the combustion of natural gas and other non-electric alternative fuels in on-road vehicles were not included in the community inventory, and are assumed to have minimal contribution to total emissions.



SACOG is the regional Metropolitan Planning Organization responsible for developing a regional transportation plan (MTP) for Sacramento, Yolo, Yuba, Sutter, El Dorado, and Placer Counties. As discussed above, under Section 2.2, the California Sustainable Communities and Climate Protection Act of 2008 (SB 375) requires metropolitan planning organizations (MPOs) to develop a Sustainable Communities Strategy (SCS) as part of the MTP. SACOG provided vehicle travel information for the unincorporated County based on their regional travel demand model and consistent with planning years considered in their 2016 MTP/SCS. SACOG typically updates their regional growth and travel forecasts on a four-year cycle and therefore VMT data were available for SACOG MTP/SCS Plan years 2012, 2020, and 2036. Daily VMT data were interpolated between the available years based on a straight trend-line from 2012 to 2036. Consistent with ARB methodology for the quantification of GHG reduction measures, daily VMT was multiplied by 347 days per year to estimate annual VMT to account for lower VMT during weekends, holidays, and summer periods. Data provided did not include VMT associated with any of the SACOG-designated Sphere of Influence (SOI) areas within Sacramento County.

Total annual VMT in the unincorporated County were approximately 3,514,165,943 in 2015. This VMT estimate is associated with trips that begin or end in the unincorporated County. These vehicle trips included 100 percent of vehicle trips that both originate from and end in the unincorporated area (i.e., fully internal trips), 50 percent of trips that either end in or depart from the unincorporated area (i.e., internal-external or external-internal trips), and zero percent of vehicle trips that are simply passing through the area (i.e., external-external, or "pass-through", trips). This passenger vehicle trip accounting method is consistent with the RTAC method established through Senate Bill 375 and ARB recommendations.

SACOG provided VMT data by speed bin (e.g., zero to five miles per hour, five to ten miles per hour), which allowed for the use of detailed emission factors calculated for the same categories from EMFAC 2014. Although EMFAC provides CO₂ and CH₄ emissions data, direct N₂O emission factors were not available. Instead, N₂O emissions were calculated using ARB inventory methods that assume N₂O emissions are equal to 4.16 percent of NO_X emissions for gasoline vehicles and 0.3316 g N₂O per gallon fuel for diesel vehicles (ARB 2014a). Emissions from electricity use in electric vehicles were quantified based on total County electric vehicle VMT, as estimated by vehicle fuel type from EMFAC 2014, and scaled to the unincorporated County population. SMUD utility intensity factors, as described above, were applied to estimate emissions.

Methods described above are consistent with methods that were reported in the 2005 inventory for the unincorporated County. It is not known whether or not VMT data used in the 2005 inventory included the SOI areas or not. Decreases in this sector can likely be explained by increased vehicle efficiency over time and (potentially) previous data including VMT from areas located with SOI areas in the region.

Off-Road Vehicles

Based on modeling conducted, off-road vehicles operating in the unincorporated County emitted approximately 2196,769 MTCO₂e in 2015, four percent of the County's 2015 inventory. These emissions were the result of fuel combustion in off-road vehicles and equipment used in construction, industry, and recreation and were available from ARB's OFFROAD 2007 model. Unfortunately, the OFFROAD 2007 model only provides emissions detail at the State, air basin, or county level. Sacramento County emissions data from OFFROAD 2007 were apportioned to the unincorporated area using custom scaling factors depending on the off-road fleet type. For example, due to the likely correlation between commercial activity and employment, the unincorporated portion of emissions from light commercial equipment in the County is assumed to be proportional to the number of jobs in the unincorporated County as compared to the County as a whole. Note that, although reported by the OFFROAD model, emissions from agricultural equipment are included separately in the agriculture sector and are excluded from the off-road vehicles sector. The estimated annual emissions and scaling factors used are presented in Table 7 below by fleet type.



Although ARB has released newer category-specific models designed to replace OFFROAD 2007, these newer models estimate statewide emissions without county-level detail and focus primarily on criteria pollutant emissions. ARB recommends using OFFROAD 2007 where desired information is unavailable from the newer off-road models (ARB 2015a). Notwithstanding ARB recommendations, OFFROAD 2007 model tends to overestimate emissions because it was developed prior to the 2009-2010 recession and, thus, presumes a higher growth rate in equipment population than what may have actually transpired in 2015 (ARB 2010). Additionally, the model does not include recent regulatory changes such as idling limits and newer engine tier requirements (ARB 2014b).

Table 7	2015 Unincorporated Sacramento County	y Community Off-Road Emissions by Fleet Type
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Off-Road Fleet Type	MTCO ₂ e/year	Scaling Method
Airport Ground Support	4,633	population
Pleasure Craft	28,826	population
Construction and Mining Equipment	96,063	jobs
Transport Refrigeration Units	16,233	jobs
Industrial Equipment	10,627	jobs
Light Commercial Equipment	11,242	jobs
Lawn and Garden Equipment	12,145	population
Recreational Equipment	7,039	population
Oil Drilling	9,781	jobs
Entertainment Equipment	177	jobs
Railyard Operations	2	jobs
Total	196,769	

Notes: Totals may not add due to rounding. MTCO₂e = = metric tons of carbon dioxide equivalent.

Source: Data provided by Ascent Environmental in 2016, based on modeling from OFFROAD 2007

Methods described above are consistent with methods that were reported in the 2005 inventory for the unincorporated County. However, in the 2015 inventory, some off-road sectors were scaled by jobs, whereas all sectors in the 2005 inventory were scaled by population. Further, for the 2015 inventory, farm-related off-road equipment emissions were included in the agriculture sector. Thus, if agriculture-related off-road equipment were added to this sector, reported increases would be higher and would show a 10 percent increase. Increases (if agriculture-related equipment were added) in this sector can be explained by population and economic growth. However, the rate of increase in emissions is not expected to be proportional to the increase in population/jobs, as off-road vehicle fuel efficiency and emissions have been improving over the years due to State regulations.

SOLID WASTE EMISSIONS

Based on modeling conducted, the solid waste sector was responsible for approximately 352,909 MTCO₂e, or seven percent of the County's 2015 GHG inventory. The ICLEI Community Protocol recommends that community GHG inventories include both "waste-in-place" emissions (i.e., methane emissions associated with existing waste already deposited since the first operational year of the landfill) and emissions associated with annual waste generated by the community in the inventory year. Waste-in-place emissions accounted for 212,239 MTCO₂e, or 60 percent of the emissions from the solid waste sector and community-generated waste in 2015 accounted for 140,650 MTCO₂e, or 40 percent of the solid waste sector. Table 8



summarizes emissions from the solid waste sector. Additional details regarding calculation methods and assumptions are discussed below.

Table 8	2015 Unincorporated Sacramento Cour	ity Community Solid Waste Emissions by S	ource

Source	MTCO ₂ e
Fugitive CH ₄ emissions	212,239
Stationary Combustion (excluding biogenic CO ₂ from onsite waste-to-energy)	20
Total Waste-in-Place Emissions	212,259
Solid Waste generated by Unincorporated Sacramento County in 2015	140,650
Total	352,909

Notes: Totals may not add due to rounding; CO₂= carbon dioxide; CH₄= methane

Source: Waste-in-place emissions were obtained from Kiefer Landfill Mandatory Reporting to EPA for 2014 (EPA 2016). Community-generated waste emissions were estimated based on waste tonnage data provided by Sacramento County for Kiefer Landfill (2016b) and CalRecycle (2016) for all other landfills for waste generated in 2015.

Waste-in-Place

LFG is a mix of gases, primarily composed of CH₄, generated from decomposing organic waste and waste chemical reactions and evaporation in landfills (i.e., fugitive emissions). If a landfill has an impermeable membrane that covers a portion or all of the landfill (i.e., cover-and-capture), it can harvest the LFG and prevent CH₄ emissions from being released into the atmosphere. Once captured, a landfill can either convert the CH₄ to CO₂ through flaring or use it as a fuel for other energy-related applications.

Waste-in-place emissions were included for the Sacramento County Landfill (Kiefer) as this is the only active, public disposal facility within the unincorporated County boundaries. Consistent with ICLEI Community Protocol, if a community has a landfill subject to the EPA's Mandatory Reporting Rule (MRR), GHG emissions should be reported in the same manner they are reported to EPA, The Kiefer landfill is subject to the MRR, thus GHG emissions were summarized based on 2014 reporting data available through EPA's GHG Reporting Program (EPA 2016). In addition to fugitive CH4 waste-in-place emissions, Kiefer landfill operates an onsite waste-to-energy facility, which uses LFG to generate electricity that is supplied back to the grid for community consumption. GHG emissions are emitted from the stationary internal combustion engine used to generate this electricity, and included in the inventory. Any CO₂ emissions from flaring are not reported to EPA and thus were not counted toward the County's inventory because IPCC and EPA considers any CO₂ emissions from flaring to be of biogenic origin and thus do not result in a net increase of CO₂ into the atmosphere (IPCC 2006a).

Note that waste-in-place CH_4 emissions occur from LFG generated at solid waste facilities and are calculated based on the accumulated waste disposed at the facility since the year that it began accepting waste. In comparison, emissions associated with community-generated waste are calculated based on the total waste generated by the community in the inventory year (i.e., 2015) at all landfills that waste is sent to. The methodology used to estimate emissions for the inventory year accounts for future emissions based on the waste disposed in 2015.

Community-Generated Waste in 2015

CH₄ emissions from decay of waste generated annually by residences and businesses in the unincorporated County accounted for 140,650 MTCO₂e, or 40 percent of emissions from the solid waste sector. A total of 416,740 tons of waste was reported for unincorporated Sacramento County in 2015 (CalRecycle 2016).



For emissions related to annual solid-waste generation from the community in the unincorporated County, CH₄ emissions are also generated from organic decomposition. The release of CH₄ from community-generated waste depends on the LFG management systems of the landfills at which the waste are disposed.

Community emissions associated with solid waste generation were estimated using ICLEI Community Protocol Equation SW.4.1 which calculates community-generated waste sent to landfills based on total tonnage disposed. Total waste disposed in 2015 by the unincorporated County, whether an LFG collection/control technology was in place or not, and waste characterization factors were used to estimate emissions.

Total solid waste generation by amount, type, and disposal landfill was available from CalRecycle. Information regarding the use of an LFG capture system was available for some landfills from EPA's GHG emissions database and EPA's Landfill Methane Outreach Program (LMOP). For landfills not included in this database, a review of available facility documentation and aerial imagery were used to determine if an LFG capture system was in place. Based on the review conducted, all facilities included an LFG capture system and therefore the default LFG collection efficiency, as recommended by the ICLEI Community Protocol, of 0.75 was used. Default waste characterization emission factors were used. Input disposal tonnage, by facility, is shown in Table 9 below.

Table 9 2015 Unincorporated Sacramento County Community Disposal Tonnage by Facility

Source	MTCO ₂ e
Landfills Receiving Waste from Sacramento County in 2015	Total Tonnage Deposited in 2015
Altamont Landfill & Resource Recovery	618
Anderson Landfill	5
Azusa Land Reclamation	50
Foothill Sanitary Landfill	35
Forward Landfill, Incorporated	70,527
Keller Canyon Landfill & Recycling Center	12
L and D Landfill	41,647
North County Landfill & Recycling Center	3,925
Potrero Hills Landfill	473
Recology Hay Road	239
Recology Ostrom Road	9
Sacramento County Kiefer Landfill	286,946
Western Regional Landfill	368
Yolo County Landfill	11,889
Total Waste Disposed (tons)	416,740

Notes: Totals may not add due to rounding; Data provided by Keith Goodrich, Sacramento County on June 1st, 2016(b) for Kiefer Landfill.

 $Source: Cal Recycle\ 2016,\ compiled\ by\ Ascent\ Environmental,\ 2016.$

In the 2005 inventory, emissions from this sector were quantified using the CACP software (wastegeneration) and ARB's first order of decay (FOD) model (waste-in-place) for reporting year 2005. Waste-in-place emissions were not updated in the 2011 Phase 1 CAP and therefore a large increase is shown in this



inventory as a result of additional solid waste disposal at Kiefer Landfill from 2005 through 2014. These sectors are not completely comparable between inventories due to different methods used and the addition of waste at Kiefer Landfill from 2005 until 2014, which would increase CH₄ emissions.

AGRICULTURE

Based on modeling conducted, emissions from the agriculture sector accounted for approximately 254,899 MTCO₂e from agricultural activity such as farm equipment operations, direct emissions from livestock, and fertilizer use, or five percent of the 2015 County inventory. Fuel combustion in farm equipment and CH₄ emissions from livestock made up 25 percent and 20 percent of total emissions from the sector, respectively. Other emissions estimated for this sector were from fertilizer use, lime application, burning of agricultural residue, and diesel-powered agricultural pumps. These emissions are summarized in Table 10 below.

GHG emissions associated with farming equipment were obtained from ARB's OFFROAD2007 model. ARB has a more recent off-road equipment model, the 2011 off-road inventory model, but it is limited to construction, industrial, and oil drilling equipment types and does not include agricultural equipment. In cases where the new model does not cover a desired category, ARB recommends using OFFROAD2007 for estimating emissions. Farming equipment emissions are assumed to occur entirely within the unincorporated County.

Table 10 2015 Unincorporated Sacramento County Community Agriculture Emissions by Source

Source	MTCO₂e/year
Farm Equipment	64,817
Enteric Fermentation from Livestock	50,402
Manure Management from Livestock	73,815
Fertilizer Use	34,402
Agricultural Irrigation Pumps	55,95
Residue Burning	1,314
Urea Fertilization	541
Lime Application	2.4
Pesticide Application	24,012
Total	254,899

Notes: Totals may not add due to rounding. $MTCO_2e = metric tons$ of carbon dioxide equivalent.

 $Source: Data\ compiled\ by\ Ascent\ Environmental,\ 2016.$

With respect to livestock emissions, CH₄ and nitrous oxide emissions are released through enteric fermentation (a type of digestion process) and exposure of manure produced by these animals. The 2015 Sacramento County Crop Report provided estimates of total weight of cattle, lamb, and slaughter sheep in the County. Average weight per head of livestock were calculated by comparing historical County livestock population estimates from the California Agricultural Statistical Review and total livestock weights reported in the County crop reports in the same year. This was used to calculate livestock population needed for emissions estimates. All livestock-generated GHG emissions were estimated using population-based emission factors and quantification methods identical to those by ARB in the State inventory.



Emissions from fertilizer use vary by crop type and acreage. The acreage of crops cultivated in the County was based on the 2015 Sacramento County Crop and Livestock Report (Sacramento County 2016c). The amount of fertilizer application for each crop type grown in the County was based on sample cost reports for each crop that are published by the University of California Cooperative Extension (UCCE). UCCE has special fertilizer reports available for wine grapes grown in the Sacramento region. Information about the mass amounts of urea and lime was provided in the Fertilizing Materials Tonnage Report for January to June of 2013. Emission factors and quantification methods for GHG emissions associated with urea and lime fertilizer application were obtained from IPCC (IPCC 2006b). These emission factors and quantification methods were also used by ARB in its development of the State GHG inventory and subsequent updates (ARB 2015a).

The GHG emission factor and quantification method for agricultural irrigation pumps and number of pumps were obtained from ARB reports on diesel irrigation pumps (ARB 2003, 2006). The latest reports provided total diesel pumps in SMAQMD's jurisdiction in 2006, but did not break down the inventory by county. However, pumps at both the county-level and air district-level were included in an older report. Assuming the ratio of pumps in the air district remained the same as in 2003, approximately 101 pumps were estimated to operate in Sacramento County in 2006. The County's pump inventory in 2015 was assumed unchanged from 2006. (ARB 2006: Table D-2).

Residue burning refers to the burning of croplands after they are harvested to clear the land of residual vegetation. The GHG emissions from residue burning in Sacramento County were based on Bay Area Air Quality Management District (BAAQMD) emissions inventory methods for open burning (emissions per ton of material burned), and 2015 open burning permit data submitted to the air district (ton or cubic yard of material burned) (BAAQMD 2014, SMAQMD 2015). SMAQMD provided the permit information in response to a public records request. However, the air district had not yet quantified emissions from open burning for the 2015 calendar year. The permit data provided total acres (e.g. orchard pruning) burned by material category. Thus, it was necessary to calculate emissions separately. In Sacramento County, over 864 acres, or 32 percent, of material openly burned in Sacramento County consisted of fruit and nut tree prunings. SMAQMD open burn permits also included burning of debris associated with flood control, forest management, and fire-fuel management-related burns. Although these are not necessarily agricultural-related emissions, they were included in the residue burning sub-sector to facilitate a more complete inventory.

A common pesticide that is also categorized as a GHG is methyl bromide. Based on the published factors from IPCC's Fifth Assessment Report, methyl bromide is assumed to have a GWP factor of 2. However, according to the California Pesticide Information Portal, no methyl bromide was used in the County in 2014. 2015 information was not available, but no changes in methyl bromide use are expected.

In the 2005 inventory, all agriculture emissions were calculated using the CACP software. Similar data sources were used previously as were in the 2015 update inventory. The 2005 inventory did not include farm-related off-road equipment in the agriculture sector. Considering that the 2015 update inventory did include farm-related off-road equipment, agriculture emissions associated with enteric fermentation of cattle and swine, manure management from dairy cows, enteric fermentation and manure management from dairy cows, and N_2O emission from fertilizer have gone slightly down since the 2005 inventory. This is likely due to conversion of agriculture land over the past years and overall reductions in agriculture productivity due to the drought and other factors. Specifically, the 2015 Sacramento County Crops and Livestock Report showed an overall six percent decrease in total crop production and 10 percent decrease in cattle production from 2014 (Sacramento County 2016).



HIGH-GWP GASES

High-GWP gases accounted for 251,085 MTCO₂e, or approximately five percent of total emissions in 2015. This sector includes emissions from various high-GWP gases including hydrofluorocarbons (HFCs), perfluoroethers (PFEs), and perfluorocarbons (PFCs). HFCs and CFCs are generally emitted into the atmosphere through offgassing, leakage, or direct emissions of refrigerants, solvents, aerosols, foams, and fire protection suppression chemicals. Other high-GWP gases are used in specific industrial applications like semiconductor manufacturing or make up less than one percent of the overall State's emissions inventory (ARB 2015b).

Estimates of high-GWP gases were calculated based on ARB's 2014 State GHG inventory. 2014 State per-capita emission factors were calculated from the most recent California 2014 inventory. These emission factors were then scaled to 2015 assuming that per capita emissions would increase by five percent between 2014 and 2015, consistent with increases between the 2013 and 2014 inventory data. The final 2015 emission factors were applied to the known population of the unincorporated County to obtain County-level emissions. Emissions from High GWP gasses are summarized below in Table 11 by emissions source and application.

In the 2005 inventory, statewide high GWP GHG emissions trends were mapped from 1990 to 2004 and the resulting trend line (showing an average annual rate of growth of approximately 10 percent) was used to estimate emissions in 2005. This approach is similar to what was done for the 2015 inventory. However, the ARB inventory was used rather than the estimate from the California Energy Commission, as was done in the 2005 inventory. Increases in emissions are explained by population increases from 2005.

Table 11	2015 Unincorporated Sacramento County Community High	h GWP Gases by Application
Table 11	2015 Unincorporated Sacramento County Community High	A GWP Gases by Abbii

Emissions Source and Application	Unincorporated Sacramento County Emissions (MTCO₂e/yr)	
Commercial	117,677	
Aerosols	2413	
Fire Protection	471	
Foams	2,385	
Refrigeration and Air Conditioning	112,407	
Industrial	38,671	
Aerosols	410	
Fire Protection	118	
Foams	11,715	
Refrigeration and Air Conditioning	24,864	
Solvents	1,564	
Residential	42,419	
Aerosols	9,287	
Foams	4,263	
Refrigeration and Air Conditioning	28,869	
Transportation	52,317	
Aerosols	2,645	
Refrigeration and Air Conditioning	49,673	
Grand Total	251,085	

Note: Totals may not add due to rounding. MT = metric tons, CO₂e = carbon dioxide equivalents; GWP=global warming potential Source: Source: ARB 2015b, IPCC 2007: Table 2.14, IPCC 2013; data compiled by Ascent Environmental in 2016.



WASTEWATER EMISSIONS

Based on modeling conducted, wastewater generation in 2015 resulted in emissions of approximately 27,253 MTCO₂e, less than one percent of total emissions, primarily from fugitive CH₄. Wastewater emissions were estimated in two components: (1) pumping-related energy for wastewater conveyance from the source to the treatment facility, and (2) wastewater treatment process emissions. Each is discussed separately below.

Wastewater Conveyance

SASD and Regional San are the primary agencies responsible for sewer conveyance and wastewater treatment within the unincorporated County. Service areas for SASD and Regional San also include the cities of Citrus Heights, Rancho Cordova, Elk Grove, Folsom, Sacramento, and West Sacramento in Yolo County.

Within Regional San's service area, wastewater is collected from customers' homes and businesses via sewer collection pipes operated by SASD, City of Sacramento Department of Utilities, City of Folsom Sewer District, or City of West Sacramento Public Works. Wastewater is then conveyed and pumped through a network of lower lateral and main pipes owned and operated by SASD. Finally, SASD pipes are connected to larger interceptor pipelines owned and operated by Regional San, which convey the wastewater to the Sacramento Regional Wastewater Treatment Plant (WWTP) near Elk Grove.

Emissions associated with wastewater conveyance are directly related to the energy required to convey the wastewater and the volume of water conveyed/pumped. To estimate GHG emissions, a regional wastewater conveyance energy intensity factor was calculated from total pumping energy data within SASD and Regional service area and total wastewater treated in 2015. SASD pumping data were provided directly by SASD. Regional San pumping energy and treatment effluent volumes were provided directly by Regional San (pers. Comm. Steve Nebozuk, Regional San. 2016). Because pumping energy was specific to SASD and Regional San (excluding local sewer districts within SASD and Regional San's service area), but wastewater effluent data represented the entire SASD and Regional San service area (e.g., unincorporated County and cities), the effluent volumes were adjusted down by 25 percent to exclude the portion of wastewater generated by incorporated cities (pers. Comm. Salam Khan, SASD. 2016). Effluent volume was apportioned to the unincorporated County population and the calculated energy intensity factor was applied to obtain total wastewater conveyance-related energy. GHG emissions were estimated using the same emissions factors described for the building sector. Similar to methods used in the 2005 inventory, wastewater-related energy use data were subtracted from the building sector based on applicable North American Industry Classification System (NAICS) codes to avoid double-counting.

According to the ICLEI Community Protocol, wastewater discharge and treatment energy intensities associated with septic tanks and other on-site systems are assumed negligible. Hauling emissions associated with maintenance of septic tanks are captured in the on-road vehicle sector and not included in this sector.

Wastewater Treatment Process Emissions

Wastewater generated by the unincorporated County is treated at the Regional San WWTP. Treatment process emissions at the WWTP include electricity consumption for treatment, process N_2O , wastewater effluent containing N_2O , and emissions from biogas combustion. Wastewater treatment process emissions for Regional San were calculated in accordance with LGOP, Version 1.1. Specifically the following equations/methods were used to capture all emission types that occur at the treatment plant.

▲ Annual electricity consumption for the Regional San WWTP adjusted for the unincorporated County population and SMUD utility intensity factors described in the building sector.



- Equation 10.10 from LGOP for process N₂O emissions from effluent discharge.
- Equation 10.3.2.2 from the LGOP for process N₂O emissions from wastewater treatment without nitrification/denitrification.
- ▲ Equation 10.2 from the LGOP for direct emissions from combustion of digester gas.

It was assumed that the entire unincorporated County population is served by the Regional San WWTP. As such, process wastewater emissions may be slightly over estimated as some portion of the unincorporated County use onsite septic tanks for wastewater treatment. Emissions from wastewater treatment are summarized below in Table 12.

Table 12 2015 Unincorporated Sacramento County Community Wastewater Emissions

Wastewater Emission Type	MTCO ₂ e/year
Wastewater Conveyance	2,088
Wastewater Treatment	25,166
Total Wastewater Emissions	27,253

Notes: Totals may not add due to rounding. MT = metric tons; CO₂e = carbon dioxide equivalent.

Source: Modeled by Ascent Environmental in 2016.

In the 2005 inventory, emissions from this sector were quantified using statewide, per-capita emissions estimated by ARB for 2004 and were scaled to the unincorporated County population. As described above, the 2015 inventory update uses process-specific data and equations to estimate wastewater process emissions and uses region-specific energy intensity factors and effluent volumes to estimate emissions associated with wastewater conveyance. The decrease in emissions in this sector is likely due to the more refined and region-specific methodology used in this inventory. It is important to note that SRCSD also recycles water for use in irrigation and landscaping. However, the use of recycled water would translate to reductions in potable water consumption. Wastewater-related emissions are associated with the actual quantities of water conveyed and treated and therefore accurately reflect energy and water use in 2015.

WATER-RELATED EMISSIONS

Based on modeling conducted, water-related emissions accounted for 15,222 MTCO₂e in 2015, less than one percent of the County's 2015 GHG inventory. GHG emissions associated with water consumption occur from the indirect use of energy associated with water treatment and pumping energy required to distribute water to the point of use (e.g., residence, business). Water-related emissions were estimated by using an energy intensity factor (i.e., the total amount of energy required to produce a unit of water for a particular use), and applied to total water consumption for Sacramento County in 2015. GHG emissions were estimated by applying SMUD utility intensity factors, as described for the building sector. The methods used are explained in more detail below.

Energy Intensity Factor

An energy intensity factor, with regard to water-related emissions, is defined by the amount of energy (electricity, natural gas and oil) required to produce a unit of water for a particular use. Electricity is the primary source of energy used for water treatment and conveyance in the Sacramento region (SMUD 2014). Other energy sources may include diesel pumps for onsite water wells and back-up generators at treatment plants. It is likely that the vast majority of diesel pumping occurs on agricultural land or other unincorporated lands with private onsite pumps. GHG emissions from agricultural-related pumps were accounted for in the



agriculture sector, discussed below in this section. Other diesel pumps that may occur were considered negligible. With regard to natural gas use for water treatment and conveyance, total industrial/commercial land uses (the land uses likely to include water-related energy use) accounted for 10 percent of the total community energy, and it is likely that most (if not all) of this is associated with building energy use. Thus, for purposes of this analysis, energy intensity is based on electricity use only, and is expressed as kilowatt-hours per million gallons (kWh/MG).

In 2013, SMUD and the Regional Water Authority published the Assembly Bill (AB) 32 Water Energy Assessment and Savings Demonstration Project (SMUD 2014). This was a comprehensive study completed for the purpose of identifying opportunities to reduce GHG emissions through water system and energy facility improvements. Part of the study included an assessment of existing water supplies, water conveyance volumes, and energy use by individual water suppliers within Sacramento County. The study estimated energy intensity factors based on available energy consumption and water volume conveyed for all water suppliers that participated in the study, as well as a regional average intensity factor (i.e., 1,062 kWh/MG).

A review of all water purveyors in Sacramento County was conducted and compared to the water purveyors included in the SMUD study discussed above. Some of the water purveyors included in the calculation for the regional intensity factor discussed above do not provide water to the unincorporated County. Thus, a weighted specific energy intensity factor was calculated based on the energy intensities for the water purveyors that do provide water to the unincorporated County, weighted by the percent of total water provided by each purveyor (methods used to obtain total water volumes are discussed below). This resulted in a specific intensity factor of 1,215 kWh/MG for the unincorporated County.

Water Consumption

To estimate water-related emissions, total water consumption volumes were estimated and applied to the energy intensity factor discussed above. Based on a review of available Sacramento County Geographic Information System (GIS) data, the SMUD study, and the California Department of Water Resources (DWR), there are 25 individual water purveyors in Sacramento County, some of which entirely serve unincorporated areas and others that serve both incorporated cities and the unincorporated County (e.g., City of Folsom, San Juan Water District). As such, water consumption data were not readily available from any one source.

Water consumption volumes were compiled for all water purveyors identified within the unincorporated County. Water consumption volumes were available for many of the 25 water purveyors. However, no water volume data were available for some smaller purveyors. These included Clay Water District, Galt Irrigation District, Natomas Central Municipal Water Company, and Omochumne-Hartnell Water District. Based on a review of aerial imagery and GIS layers for these districts, it was determined that these districts serve primarily agriculture land uses. In addition, per California Water Code 10617, an "urban water supplier" is defined as a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually," and would be required to prepare an Urban Water Management Plan to DWR. Thus, because no water consumption data were available through DWR, it is likely that these water purveyors represent small portion of total water consumption in the County and were therefore determined to not contribute substantially to the overall water consumption and energy demand in the unincorporated County.

Water volumes were compiled for all other 21 purveyors within Sacramento County from available online sources such as the SMUD study and DWR. Total water use from each purveyor was apportioned to the unincorporated County based on the percentage of each purveyor's service area acreage within the unincorporated County. Water service boundaries for all water purveyors were available from the County's online GIS database.



Total estimated water consumption for unincorporated County was multiplied by the calculated energy intensity factor and GHG emissions were estimated based on SMUD utility factors, as described in the building sector. Similar to methods used in the 2005 inventory, water-related energy use data were subtracted from the building sector based on applicable NAICS codes (i.e., water pumping, irrigation, and treatment for agriculture, commercial, and industrial land uses) to avoid double-counting. Results are shown below in Table 13.

Table 13 2015 Unincorporated Sacramento County Community Water-Related Emissions Summary

Water Suppliers	Quantity		
Total Water Delivered	49,009 MG/year		
Total Energy Consumption	5,947 MWh/year		
Total Water-Related GHG Emissions	15,222 MTCO₂e/Year		

Notes: Totals may not add due to rounding. MG= million gallons; MWh = megawatt-hours; MT = metric tons; CO₂e = carbon dioxide equivalent; GHG=greenhouse gas. Source: Data compiled by Ascent Environmental in 2016.

In the 2005 inventory, emissions from this sector were quantified based on energy use provided by SCWA only. As discussed above, the 2015 inventory update uses regional-specific energy intensity factors and water consumption volumes to estimate emissions associated with water treatment and conveyance for the entire unincorporated County, which explains the large increase over the 2005 inventory.

2.2.2 Municipal Operations Inventory

EMPLOYEE COMMUTE

Employee commute accounted for 38,290 MTCO₂e, or approximately 31 percent of total emissions in 2015. This sector estimated GHG emissions associated with fuel use and VMT traveled for Sacramento County employees commuting to and from work. Employee work and home zip code information was available for all County employees in 2015. Annual VMT for all employee work commute trips was calculated based on mileage from the center of each work zip code to the associated home zip code. Similar to methods used in the 2005 inventory, total annual VMT was adjusted based on County average vacation time and a 9/80 work week, where employees complete 80 hours of work in a 9-day period and have the 10th day off, which eliminates one roundtrip commute every two weeks. Further, emissions were reduced based on available results of a County employee commute survey conducted in 2010 for the 2005 inventory, which indicated that approximately 14 percent of travel by County employees consisted of carpooling, public transit, bicycle, or walking. Emissions were estimated using emission factors derived from EMFAC 2014, as discussed in Section 2.2.1.

The primary difference between emissions reported in this sector is that the 2011 Phase 1 CAP updated the 2005 inventory based on an employee commute survey that was conducted in 2010. Emissions were back-casted to 2005 to update the baseline inventory. Based on available data in this survey, total annual employee VMT in the 2005 inventory was lower than what was estimated for the 2015 inventory; that is, total employee annual VMT was estimated at approximately 73 million as compared to 108 million in the 2015 inventory update. In addition, the employee commute survey estimated that the County had 11,000 employees in December 2005, as compared to 11,933 in December 2015.



VEHICLE FLEET

County-owned vehicle fleet emissions accounted for 29,591 MTCO₂e, or approximately 24 percent of total emissions in 2015. Vehicle fleet fuel consumption data for 2015 (e.g., mileage, fuel consumption) was provided for all County-owned vehicles. This sector includes emissions estimated from on-road and off-road vehicles owned and operated by the County. Airport fleet emissions were also included in this sector. Emissions were estimated using emission factors derived from EMFAC 2014 (on-road vehicles) and published emissions factors from the Climate Registry (2014) for off-road vehicles.

Similar data and methods were used for this sector in the 2005 inventory. Decreases in emissions for this sector are likely due to County staff deliberately purchasing more fuel-efficient and lower-emission vehicles as part of the regular fleet replacement to reduce fleet-related GHG emissions.

BUILDINGS AND FACILITIES

County buildings and facilities accounted for 28,247 MTCO₂e, or approximately 23 percent of total emissions in 2015. This sector includes energy (e.g., electricity and natural gas) use for all County buildings and facilities, excluding airport buildings/facilities which are included as part of the airports sector (see below). Energy use data were provided for 2015 by individual County departments (e.g., General Services, Transportation, Parks and Recreation). Buildings include County-owned and leased buildings. Infrastructure and facilities include energy use at park/golf buildings, park/golf lighting and irrigation controllers, and other facilities such as movable access gates and communications towers. GHG emissions were estimated using the same methods and emission factors as described in Section 2.2.1.

Data and methods used for this sector are similar to those used in the 2005 inventory. Decreases in emissions for this sector are likely due to deliberate actions on the part of County staff to reduce energy usage by retrofitting many County facilities to be more energy efficient, construction of new buildings to LEED standards, increase in the use of on-site renewable energy systems such as installing solar panels on buildings/facilities, as well as utility energy intensity factors improving, likely due to SMUD's increased renewable energy portfolio.

AIRPORTS

Emissions from County airports accounted for 18,310 MTCO₂e, or approximately 15 percent of total emissions in 2015. The GHG emissions associated with airport facilities are broken out separately from other County facilities. The reported emissions are associated with energy used for the County's ground operations (i.e., airfield and landside maintenance equipment, roadways, parking) and buildings. Aircraft emissions and airline-owned ground support equipment are excluded because the County does not have control over those operations. Airline ground support equipment is included in the community inventory off-road sector, as discussed above in Section 2. Also, the airport fleets and airports employee commute data were not broken out for this inventory; those emissions are included in emissions shown for the vehicle fleet and commute categories. This sector includes emissions associated with building energy and ground operations at Sacramento International (SMF), Mather, and Sacramento Executive Airports.

Increased emissions in this sector are likely due to the recent airport expansion of Terminal B at SMF, which was opened in 2011 and is approximately three times larger than the terminal it replaced.

¹ Aircraft are owned and operated by private airline companies and are not considered to be part of the Sacramento County's Airport System's internal operations. Regulatory authority for GHG emissions associated with aircraft operations rests with the Federal Aviation Administration and EPA.



WATER CONSUMPTION

Water-related activities in the County's internal operations resulted in 4,665 MTCO₂e, or approximately four percent of total GHG emissions in 2015. Similar to the 2005 inventory, water-related emissions were estimated based on energy used to operate water delivery facilities under the jurisdiction of SCWA. In addition, water consumption volumes were available for County-owned buildings and facilities. The calculated water energy intensity factor, described in Section 2.2.1, was applied to water consumption data, to obtain water-related energy use, and summed with available energy data from SCWA. As such, this inventory provides additional detail and a slightly more complete picture with regard to water-related GHG emissions, as compared to the 2005 inventory. GHG emissions were estimated using SMUD utility emission factors.

Methods used in this inventory were similar to methods previously used. However, additional water consumption volumes were available for County-owned buildings. Despite additional water-consumption data, emissions reported were lower in comparison to the 2005 inventory. Decreases in emissions are likely due to deliberate actions on the part of County staff to reduce water use by replacing existing fixtures with water conserving fixtures, reducing landscape watering, and training employees, as well as by utility energy intensity factors improving as a result of increased renewable energy sources and reductions in community water usage due to recent drought conditions and mandatory reductions that were in place throughout California in 2015.

STREET LIGHTS/SIGNALS

County streetlights and traffic signals accounted for 3,729 MTCO₂e, or approximately three percent of total emissions in 2015. This sector includes emissions associated with electricity consumption to power County-owned traffic signals and street lights. In addition, energy consumption associated with Smart Meter Communication devices installed on County streetlights and illuminated street name signs are also captured in this sector. GHG emissions were estimated using SMUD utility emission factors.

Data and methods used for this sector are similar to those used in the 2005 inventory. Decreases in emissions for this sector are likely due to deliberate actions on the part of County staff to reduce energy usage by replacing existing street and parking lot light fixtures with LED lights, as well as by utility energy intensity factors improving as a result of SMUD's increased renewable energy sources.

WASTEWATER

Wastewater emissions associated with County-owned buildings and facilities were not included in the 2005 inventory. Although the County has no direct control over wastewater-related emissions, the generation and treatment of wastewater by activities in County-owned buildings and eventual treatment of those emissions can be accounted for as a subset of community wastewater emissions. Additionally, water conservation measures could result in emissions reductions from this sector.

Wastewater treatment and conveyance emissions associated with County buildings and facilities accounted for 565 MTCO₂e, less than one percent of total emissions in 2015. Emissions from wastewater conveyance and treatment were estimated separately for this inventory. Similar to the community inventory, emissions for this sector were based on total population served by the Regional San WWTP and total effluent volume treated. To estimate emissions associated with wastewater treatment at Regional San, total County employment data were used. Methods are identical to what was described in Section 2.2.1. To estimate emissions associated with wastewater conveyance, the community effluent data, as described in Section 2.2.1, was scaled to the total number of employees of Sacramento County (i.e., 11,933) and applied to the



wastewater conveyance energy intensity factor that was calculated for the community inventory, as discussed in Section 2.2.1. GHG emissions were estimated using SMUD utility emission factors.

SECTORS NOT INCLUDED IN THE INVENTORY

Emissions associated with solid waste generation attributable to County owned and operated buildings are not included in the baseline emissions inventory shown above due to unavailability of data. Emissions associated with operation of the County-owned Kiefer Landfill are also not included in the inventory due to the community nature of the solid waste sector and uncertainty regarding the allocation of responsibility between the County and other jurisdictions that contribute refuse to the landfill. All solid waste emissions, including emissions associated with waste generation by County residents in the unincorporated area, is discussed in the Community inventory in Section 2.2.1 above.

3 GHG EMISSIONS FORECASTS TO 2020, 2030, AND 2050

BAU emissions forecasts provide the County with an assessment of how the County's emissions would change over time without further action from federal, State, or local regulation.. Forecasts for the community inventory and internal operations inventory were done separately. This section discusses methods used for each. BAU forecasts described in this section for 2020, 2030, and 2050 are generally based on the State's GHG reduction target years established in key State legislation and policies, including AB 32 (Pavley, Statutes of 2006), SB 32 (De Leon, Statutes of 2016), and Executive Orders B-30-15 and S-3-05. The Statewide GHG reduction targets are as follows:

- 1990 levels by 2020 (AB 32);
- ▲ 40 percent below 1990 levels by 2030 (SB 32 and EO B-30-15); and,
- 80 percent below 1990 levels by 2050 (E0 B-30-15 and S-3-05)

For the community inventory, estimated BAU emissions forecasts were based on predicted growth in existing demographic forecasts, including population, jobs, and household growth between 2012 and 2036 for the unincorporated Sacramento County, as provided by SACOG. Population and dwelling units are expected to increase annually by one percent, while employment is expected to increase annually by 1.9 percent. These growth factors were used to forecast BAU emissions for 2020, 2030 and 2050 for most sectors in the inventory. SACOG also provided annual VMT growth projections for the years 2012 through 2036. Based on this data, annual VMT is projected to increase one percent annually. VMT projections were used to scale emissions from the on-road vehicle sector. The same annual growth rates were applied to years beyond 2036. In addition, the community inventory includes emissions from agriculture activities in the County, which were scaled based on anticipated changes in future agriculture land, as evaluated in the Sacramento County General Plan Final Environmental Impact Report (FEIR) which estimated that approximately 412 acres of agriculture land would be lost every year, or 0.1 percent of total agriculture land (Sacramento County 2010). BAU forecasts for the internal operations inventory were based on projected employment increases for the County, as discussed above.

Table 14 shows baseline emissions in 2015 and BAU emissions forecasts for 2020, 2030, and 2050.



Table 14 Unincorporated Sacramento County Emissions Inventory and BAU Forecasts (MTCO2e/year)

Sector	2015	2020	2030	2050
2015 Community Inventory				
Residential Energy	1,193,311	1,254,182	1,385,397	1,690,448
Commercial/Industrial Energy	890,603	978,487	1,181,128	1,720,999
On-Road Vehicles	1,671,596	1,765,579	1,969,694	2,451,443
Off-Road Vehicles	196,769	214,146	253,855	357,866
Solid Waste	352,909	372,751	4,15,844	517,551
Agriculture	254,899	253,627	251,102	246,128
High-GWP Gases	251,085	265,202	295,861	368,223
Wastewater	27,253	28,785	32,113	39,967
Water-Related	15,222	16,078	17,937	22,323
Total	4,853,647	5,148,836	5.802,930	7,414,948
2015 Internal Operations Inventory			•	
Employee Commute	38,290	42,068	50,781	73,991
Vehicle Fleet	29,591	32,511	39,244	57,182
Buildings and Facilities	28,247	31,034	37,461	54,584
Airports (buildings and facilities)	18,310	20,117	24,283	35,382
Water-Related	4,665	5,125	6,187	9,015
Streetlights and Traffic Signals	3,729	4,097	4,945	7,206
Wastewater	565	621	749	1,092
Total	123,397	135,574	163,651	238,452

Notes: Total may not add due to rounding. BAU = Business as usual, CO₂e = carbon dioxide equivalents, NA = Not Available, GWP = Global Warming Potential, MT = metric tons

Source: Ascent Environmental, 2016

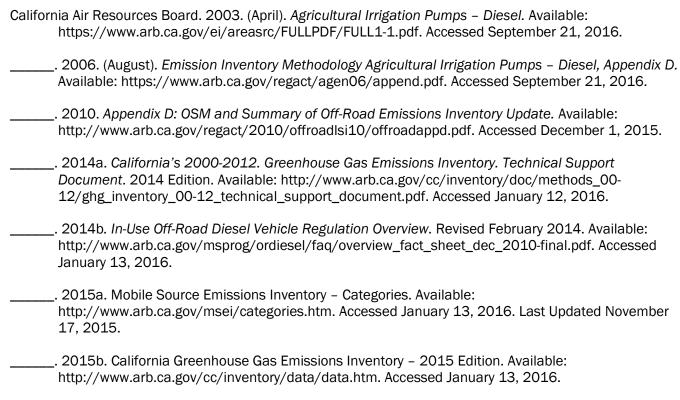


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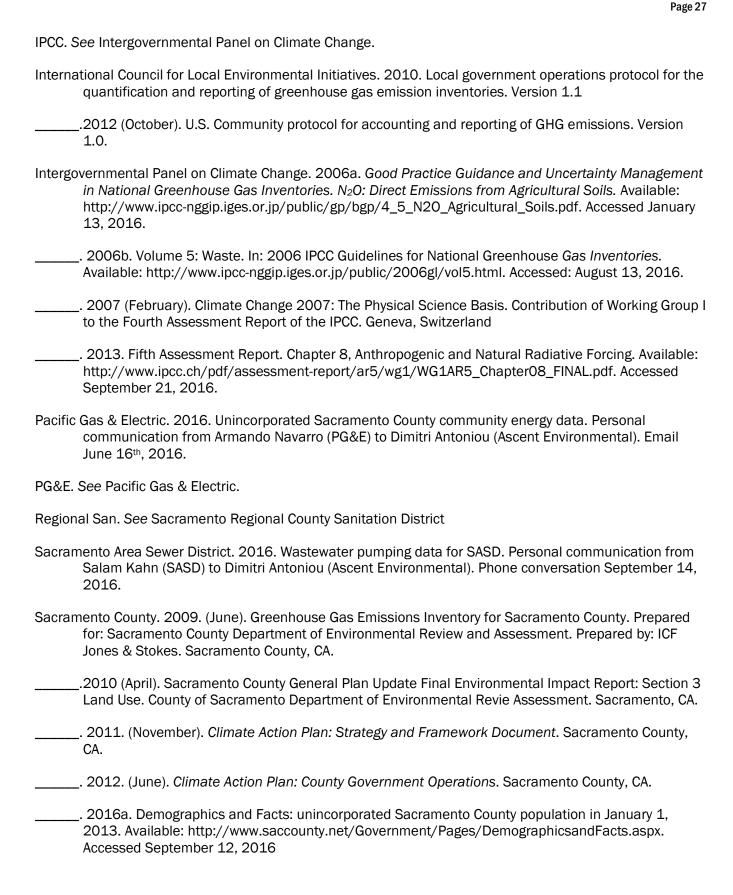
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Exhibit C

Appendix E-3: Land Use Forecast Background Documentation

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SACOG 2012 Base Year Update Methodology Summary and Conditions of Use February 26, 2015

SACOG has created a year 2012 spatial dataset of estimated land use, employment, and housing conditions for use in the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) Update. This dataset will be the base year from which the MTP/SCS land use scenarios will be created.

The 2012 existing conditions dataset consists of three components: 1) an existing housing unit estimate, 2) an existing employment estimate, and 3) existing land use. This memo briefly describes the process SACOG used to create these three pieces of data.

Existing Housing Unit Estimate

SACOG began its housing estimate with 2010 Census data and then added to it housing permit data collected from each jurisdiction from January 1, 2010 through December 31, 2011 in order to develop a January 1, 2012 housing unit estimate at Census blocklevel. The block estimates were then aggregated to jurisdiction level totals and compared to the California Department of Finance (DOF) jurisdictional housing unit estimates for January 1, 2012. Aerial photography, assessor data, and any land use information provided by individual jurisdictions were then used to reconcile our estimates to DOF estimates in effort to minimize discrepancies. Because they are both estimates, there is still some variation at the jurisdiction level between SACOG's housing estimate and DOF's housing estimate.

Existing Employment Estimate

To estimate employment in the region, SACOG purchased point level employment data from InfoUSA in March 2012. This dataset is one of the more comprehensive and detailed employment datasets available. It does however contain many duplicate records and excludes almost all government and other public employment. Every effort was made to remove the duplicate information and add in any missing data that could be identified, including large employers and public sector employment. These supplemental data were added from a variety of sources including state and local government data, windshield surveys, etc. The data were then aggregated to Census block group (split at jurisdiction boundaries where necessary) to get a total jobs estimate for 2012. Because there are not many agencies that track total employment, particularly at the small area, there are few other data sources by which we can compare the SACOG employment estimates. The State Employment Development Department (EDD), for example, tracks county-level employment estimates only, and excludes public sector employment from its estimates.

Existing Land Use

To create the 2012 existing land use estimate, SACOG started with its 2008 existing land use dataset and modified it with a number of more recent data sources, including local government inventories (where available), assessor data and aerial photography. In combination with the housing permit and employment data sets referenced above, these data sources were used to update SACOG's spatial estimate of existing land uses. Once existing land use data were updated to the year 2012, housing and employment yields from those land uses were estimated in GIS controlled to the Census block group estimates for housing and employment described above.

Conditions of Use

The SACOG 2012 Small-Area Estimates are estimates of housing units and employment for small areas within the region. Because the estimates are generated using GIS, each developed parcel is assigned a PLACE TYPE (or land use) and a housing and/or employment estimate, but it is not our intention that

these data be used at a parcel-level. We calibrate the parcel file to match control totals of housing units and jobs by Census block and Census block group (repsectively). This means that on any given parcel, the estimate may not match the exact use at that parcel; however, if a number of parcels are added up to a larger area (e.g. census block group or greater), the estimates should closely match the mix of uses on the ground in 2012. Although these data are controlled and validated to a larger geography, we provide parcel-level estimates to allow users the flexibility to aggregate to different geographies (e.g. jurisdiction, community plan area, traffic analysis zone, etc.) based on their needs.

Note that for employment estimates, the discrepancy between the parcel-level estimate and the actual use of the parcel will vary more, in general, than the estimates of dwelling units. This is due to several factors. First, employment at a given parcel varies by season, changes in the economy, factors related to specific industries, and individual factors related to specific employers. For example, the total number of jobs at a multi-tenant office building on a single parcel will most likely change year to year based on natural turnover of tenants and economic and other factors. Housing units, once built, generally remain in place from year to year.

One reason SACOG uses a computed estimate of land use, rather than using a parcel-level inventory of actual uses, is because parcel-level inventories of dwelling units and jobs are not available for most of the region. Additionally, the purpose of the 2012 Small-Area Estimates dataset is for creating projections and future land use scenarios and because projections are not set at the parcel-level, this methodology allows for an "apples to apples" comparison between the base year and future year estimates.

The geography of this data is a "split" parcel file. We started with parcels, but we split some of them based on their size and location (into halves, quarters, etc). This was done to allow us greater flexibility when modeling our land use forecast.



Transportation Committee

Item #13-10-**7B**Information

October 24, 2013

Growth Projections and Land Use Forecasting Process

Issue: What is the relationship of the regional growth projections to the land use forecasting process in the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) update?

Recommendation: None. This item is for information and discussion.

Discussion: In the early stakeholder outreach meeting in October, staff presented to stakeholders the proposal that the Board committees heard in September: to assume in the next MTP/SCS the same total projected amounts of population, jobs, and housing units for 2036 (or 2037 or 2038, to be determined through further refinement) as the current plan projects for 2035. Among the stakeholders in attendance at the outreach meeting, there was widespread agreement with this draft approach. This approach to the regional growth forecast does not dictate the *allocation* of regional growth throughout the region. To kick off that process, staff is meeting with the planning and public works staff of each SACOG member jurisdiction to gather information to inform the land use forecasting process for the MTP/SCS update. This is the process by which the regional growth is allocated to jurisdictions and planning areas within jurisdictions. By the end of October, staff will have met with 15 of the 28 jurisdictions; the remaining meetings will occur in November.

Attached is some additional information to underscore the point that if the Board does decide to carry the growth projections into the next plan, there is opportunity later in the update process to address the allocation and pace of growth during the planning period.

Approved by:

Mike McKeever Chief Executive Officer

MM:KL:gg Attachments

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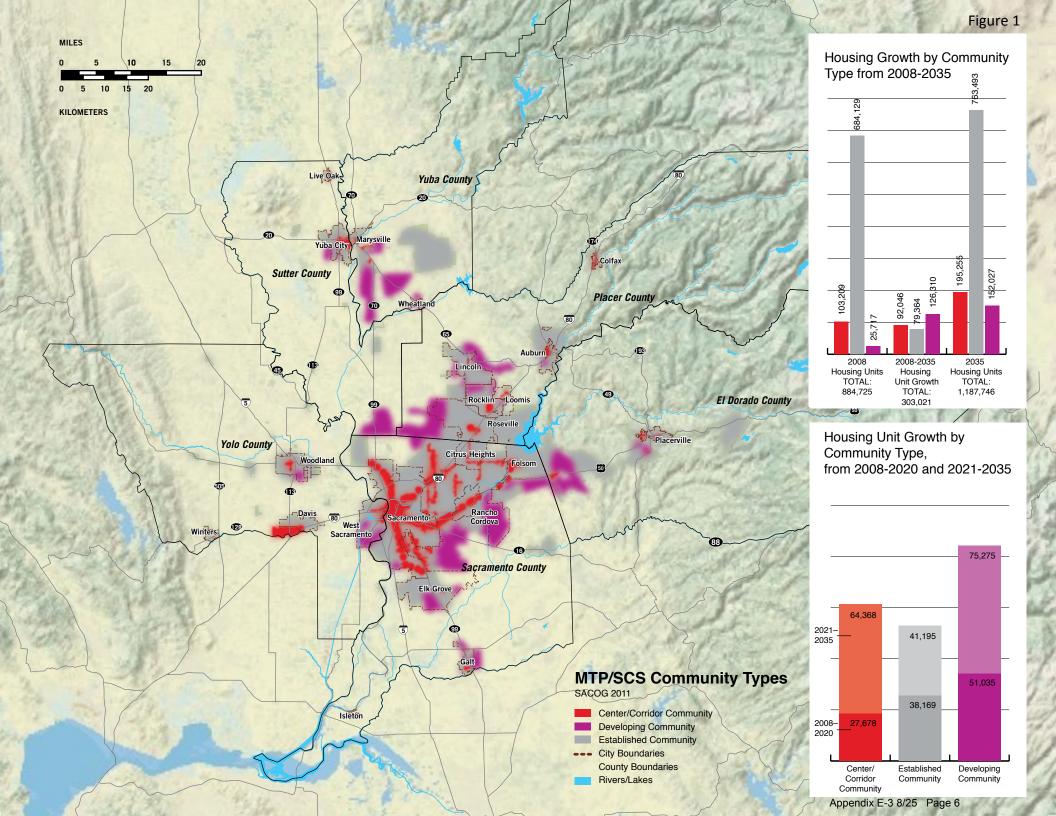
MTP/SCS REGIONAL GROWTH PROJECTIONS AND LAND USE FORECASTING PROCESS

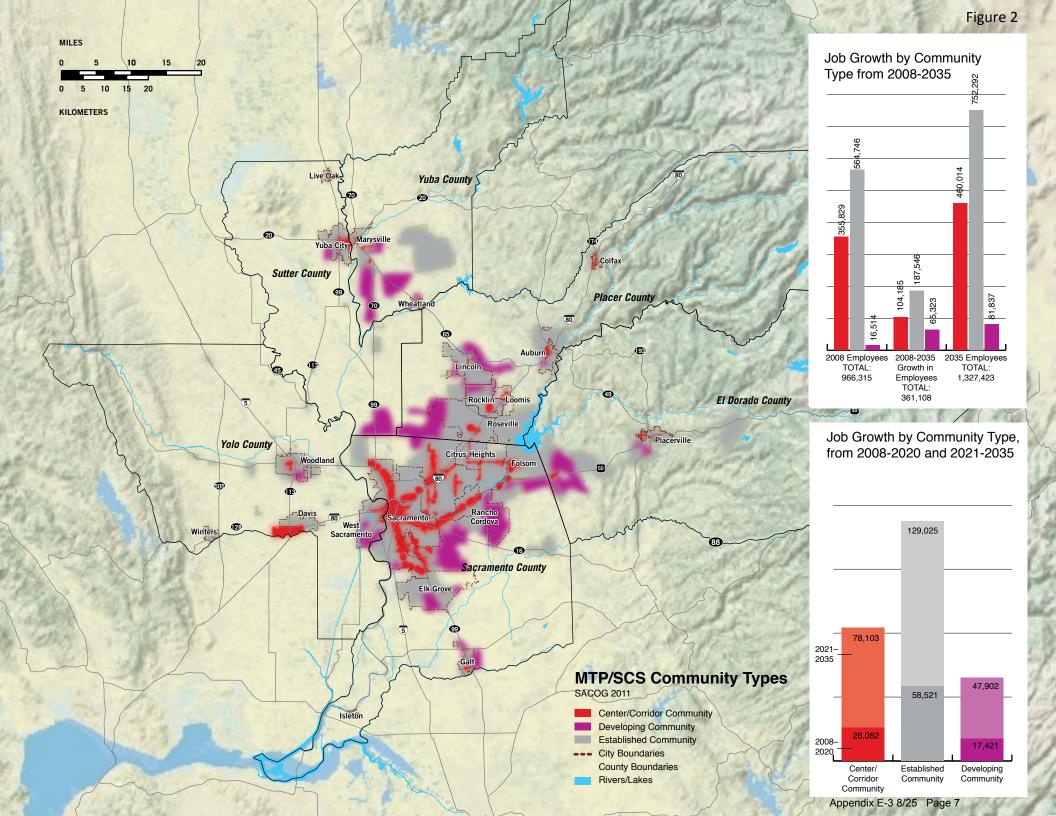
In September, the Board considered a staff proposal to use the regional growth projections of the current MTP/SCS in the next MTP/SCS. A question from that discussion was: how, if at all, would this affect the ability to reconsider the allocation of growth in the region and the growth rate during the planning period, particularly in the early years as the region recovers from recession? If the Board decides to carry the regional growth projections forward into the next MTP/SCS update, there will still be the ability and requirement to revisit both of these topics.

Regarding the allocation of growth in the region; there is ample capacity within the current MTP/SCS land use forecast to allow SACOG to revisit how housing and jobs are allocated across jurisdictions and community types. The current MTP/SCS land use forecast accommodates 303,000 new homes and 361,000 new jobs to the year 2035. Figures 1 and 2 are maps illustrating the four community types in the MTP/SCS: Center and Corridor Communities, Established Communities, Developing Communities and Rural Residential Communities. Over 98 percent of regional housing (Figure 1) and jobs (Figure 2) growth is distributed among three of these community types – Centers and Corridors, Established, and Developing Communities. Within the community type areas represented on the maps is a development capacity based on adopted or proposed local land use plans. This capacity is approximately 513,000 new housing units and 1,077,000 new jobs. In other words, there is capacity within these community areas to accommodate projected regional growth plus an additional increment of growth. The land use forecast was created in this way because we consider this a realistic depiction of how development will actually occur. This also demonstrates a measure of market flexibility in the land use forecast.

Regarding the pace of regional growth over the planning period; it will be important to consider the timing of new growth in the context of what has happened since the adoption of the current MTP/SCS. The current MTP/SCS predicts that 39 percent of the new housing and 28 percent of the new jobs projected to come to the region by 2035 will arrive by 2020, shown in the bottom tables in Figures 1 and 2. The bottom tables in these figures show how the distribution of this growth in the early years (2008-2020) was weighted heavily toward filling in fully entitled projects in Established Communities (the grey bar in these tables) and construction of fully entitled projects in Developing Communities (the purple bar in these tables). Given the past five years of economic recovery, it will be important to re-examine the rate of growth during the planning period, particularly to 2020, which is a greenhouse gas milestone year under SB 375.

In December, the Board will be asked to take action on the staff proposal to use the regional growth projections of the current MTP/SCS in the next MTP/SCS. The local plans reflected in the MTP/SCS map have ample capacity to accommodate these growth projections. In addition, there are areas outside of the MTP/SCS map either approved or proposed for growth that would also need to be considered in the land use forecasting process. The next two years of the plan update will include a process to re-examine both the allocation of growth throughout the region and the pace of growth during interim years of the plan.







Transportation Committee

Item #14-2-4B

February 3, 2014

Inventory of Adopted and Proposed Land Use Plans (initial focus on new greenfield plans)

Issue: What is the status of the land use forecast update for the 2016 MTP/SCS and what is the process moving forward?

Recommendation: This item will be presented at all three Board committees for information and discussion.

Discussion: Under the land use forecast topic of the MTP/SCS update framework is a research task to inventory adopted and proposed land use plans in the region. This is one of the first technical steps of every MTP/SCS update cycle to help determine if and how to adjust the MTP/SCS land use forecast. In addition, the Board recently expressed interest in understanding the planned development capacity in the region compared to the long-term market demand for housing and employment.

Description of the map and greenfield plan inventory:

The map and accompanying table in Attachment A is a first assessment of planned development capacity, focused on adopted and proposed land use plans in greenfield areas, or areas with no current urban development. This mapped information was gathered through a combination of staff research and interviews with member agency planning and public works staffs.

The map and tables identify projects that are in the current MTP/SCS as Developing Communities or are candidates for inclusion in the updated plan as Developing Communities. The map overlays approved and proposed greenfield development projects with the adopted MTP/SCS community types and Blueprint growth footprint. The accompanying Table A-1 lists, by jurisdiction, each of the mapped plans along with the total amount of planned housing (capacity) and the amount of housing expected to be constructed by 2035 (demand) in the adopted MTP/SCS. The sum of the greenfield plans not currently in the MTP/SCS represents an estimated 117,615 housing units of additional capacity beyond the 525,000 units of capacity in the plan (the plan estimates market demand for 303,000 new housing units by 2035) (see Table A-2). It is important to note that this regional capacity will increase further once the inventory for the Established, Center and Corridor, and Rural Residential communities is completed and the "unknown" capacities of the listed greenfield plans become "known." In particular, the Rural Residential Communities capacity will increase significantly as there are tens of thousands of units of housing capacity in adopted general plans in those areas. It is also important to note that the map and table only represents a partial analysis: employment capacity estimates for community types are still under development. While the current MTP/SCS shows that all community types have additional capacity beyond the 2035 horizon year, Developing Communities have the highest additional housing of all of the community types (Table A-2).

The fundamental issue in this map is not that the sum of these plans is inconsistent with the Blueprint footprint; in fact, nearly all of these projects are generally consistent with the Blueprint at least in terms of their development footprint. The issue highlighted by the map is that there is a 50-60 year potential development supply of housing for 20 years of demand in the MTP/SCS. In other words, given the large supply of development, the challenge in the MTP/SCS update will be the phasing of the first 20 years of demand in order to plan the appropriate transportation investments.

Next steps for an updated land use forecast:

There are several new growth area plans on this map that are not part of the current MTP/SCS, a few of them entitled and several in the entitlement process. As part of our normal review of land use plans in the MTP/SCS update, it is possible we will identify some areas that we now conclude are not likely to develop during the planning period, or that their growth rate could be significantly slower.

In addition to consideration of local land use plan, the land use forecasting process of the MTP/SCS also relies on analysis of state and federal regulatory and private market influences on development. State and federal policies and regulations include, most notably (but not limited to): those relating to development in floodplains and other natural hazard areas (e.g., fire), federal Clean Water Act and Endangered Species Act permit requirements, Transportation Control Measures in air quality plans under the Federal Clean Air Act, and state housing requirements. Practical considerations affecting the cost and timing of providing infrastructure (e.g., water, sewer, transportation) are also analyzed, and this cycle, the availability of water will be a particularly important factor. Private market considerations are analyzed, such as people's interest in different types of housing and developers'/builders' ability to deliver that housing at prices people can afford, as are future demographic trends (i.e., percentage of households with children, older heads of households, etc.). Staff aims to bring to this analysis the PECAS land economics and transportation model to test the affects of different market conditions on the regional growth pattern. Staff will bring information from all of the above research to Board committees, member agencies and stakeholders as it is assembled. Ultimately, all of this information will need to be analyzed in terms of how it affects plan performance. As is highlighted in the Plan Performance chapter of the MTP/SCS, the distribution of development across the four community types and across housing types is critical to the plan's ability to lower VMT and congestion and meet SB 375 greenhouse gas targets.

Staff has also started thinking through how to analyze this information while maintaining an implementation focus to the plan update. Attachment B describes a proposed approach, which is also summarized as follows:

Approach to Creating and Analyzing MTP/SCS Scenarios:

- 1. Three scenarios for plan horizon year 2036 will be based on the current plan plus two updated/refined scenarios from the last plan cycle. The updated scenarios will account for new information on local land use plans, changes in federal and state regulations and policies, and market forces. (Spring and Summer 2014)
- 2. Concurrent with Step 1, analyze different timing to construction of transportation and land use components of current MTP/SCS. (Spring through Fall 2014)
- 3. Refresh revenue assumptions of the current plan using the same basic revenue framework in the plan. Use the phasing analysis initiated in Step 2 to test the flexibility of those revenue assumptions and identify implications of different timing of transportation investments. (Spring through Fall 2014)
- 4. Based on input from public workshops, stakeholders (including our cross-sectoral working group), members and partner staff and the Board over the next several months create a framework for a draft preferred scenario that includes assumptions for the plan horizon year of 2036 and a timing sequence for building the transportation network and estimating when development projects will be constructed. (Fall 2014, draft preferred scenario creation in 2015)

Staff will seek Board input on this analytical process at all February Board committees, have meetings with stakeholders in February, and then ask the Board to take action on this in March.

Approved by:

Mike McKeever Chief Executive Officer

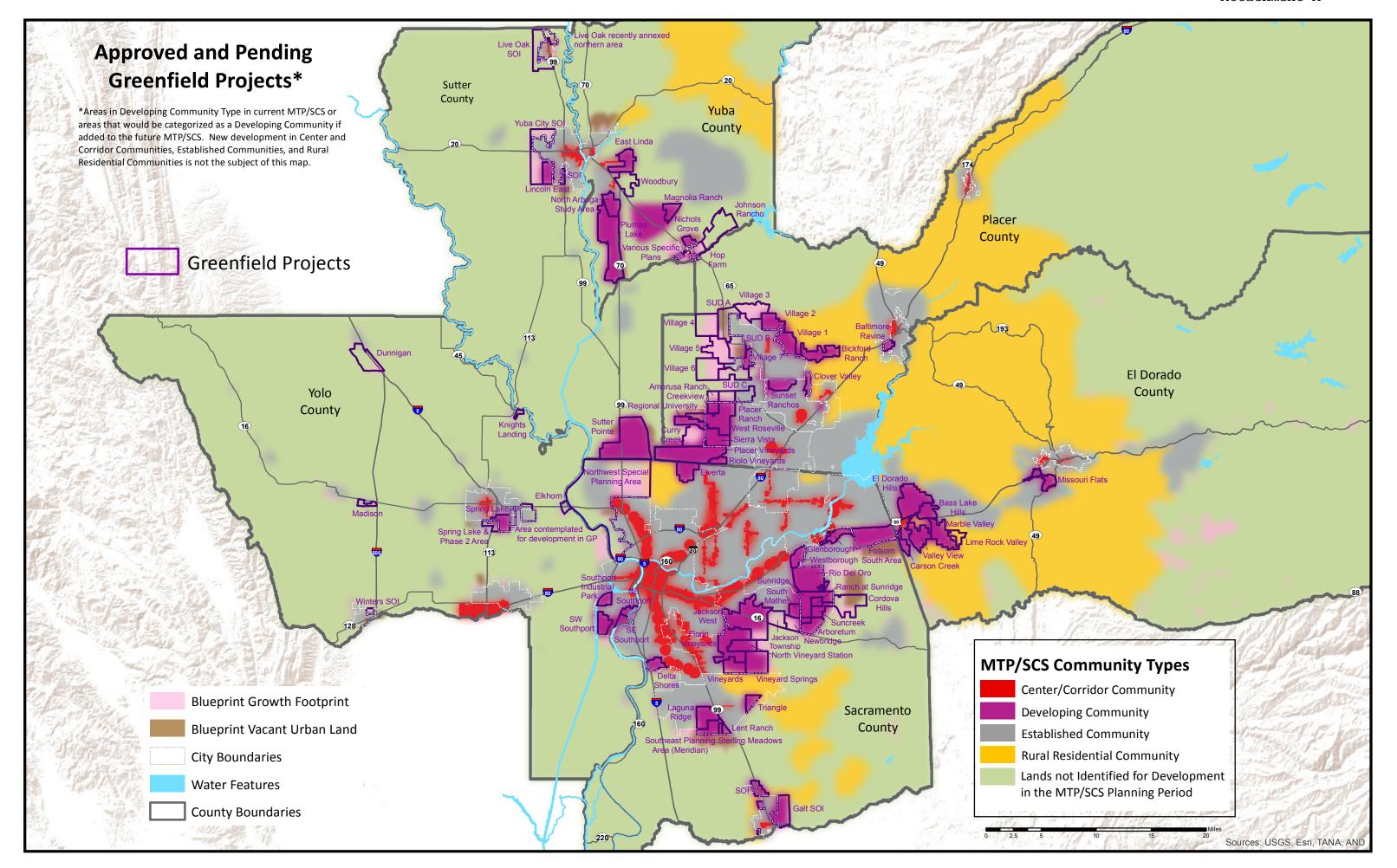
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Attachments

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Approved or Pending Greenfield Plans included in adopted 2035 MTP/SCS as Developing Community El Dorado County Placerville	Total Housing Units Planned/P roposed in Project	Housing Units Estimated to be Built by 2035 in Adopted MTP/SCS	Approved or Pending Greenfield Plans not included in adopted 2035 MTP/SCS El Dorado County Placerville	Total Housing Units Planned/Propos ed in Project
riaceiville			riacei ville	
Unincorporated El Dorado County			Unincorporated El Dorado County	
Bass Lake Hills Specific Plan	1,458	1,392	Lime Rock Valley Specific Plan	800
Carson Creek Specific Plan	1,700	1,162		
El Dorado Hills Specific Plan	6,162	4,996		
Missouri Flats (Diamond Springs-El Dorado)	844	498		
Valley View Specific Plan	2,840	1,350		
Village of Marble Valley Specific Plan	3,236	647		
Placer County			Placer County	
Auburn			Auburn	
Baltimore Ravine Specific Plan	725	725		
Colfax			Colfax	
Lincoln			Lincoln	
Village 1 Specific Plan	5,639	2,034	Village 3 ¹	4,841
Village 7 Specific Plan	3,285	3,296	Village 4 ¹	5,421
Village 2 ¹	3,784	2,037	Village 5	5,779
			Village 6 ¹	5,083
			SUD C ¹	0
			SUD A ¹	1,899
			SUD B ¹	429
Rocklin			Rocklin	
Sunset Ranchos Specific Plan	4,339	4,339		

	Total			
	Housing	Housing Units		
	Units	Estimated to be		Total Housing
	Planned/P	Built by 2035 in		Units
Approved or Pending Greenfield Plans included in	roposed in	Adopted	Approved or Pending Greenfield Plans not	Planned/Propos
adopted 2035 MTP/SCS as Developing Community	Project	MTP/SCS	included in adopted 2035 MTP/SCS	ed in Project
Clover Valley Specific Plan	558	564		
Roseville			Roseville	
West Roseville Specific Plan (includes amendments in progress)	9,900		Amoruso Ranch Specific Plan	3,011
Creekview Specific Plan	2,011	579		
Sierra Vista Specific Plan	8,769	6,106		
Unincorporated Placer County			Unincorporated Placer County	
Bickford Ranch Specific Plan	1,890	1,435	Squaw Village Specific Plan	750
Placer Vineyards Specific Plan	14,132	8,037	Curry Creek ²	unknown
Regional University Specific Plan	4,387	2,781	Placer Ranch ¹ (Placer County/Roseville)	6,740
Riolo Vineyards Specific Plan	933	934		
Sacramento County			Sacramento County	
Citrus Heights			Citrus Heights	
Elk Grove			Elk Grove	
Laguna Ridge Specific Plan	7,826	7,590		
Lent Ranch Specific Plan	280	280		
Triangle Specific Plan	701	403		
Sterling Meadows Specific Plan	1,184	950		
Southeast Planning Area/Meridian Specific Plan	4,790	4,102		
Folsom			Folsom	
South Folsom Plan Area Specific Plan	10,210	6,688		
Galt			Galt	
Galt SOI ¹	7,577	1,091		

Total			
Housing	Housing Units		
Units	Estimated to be		Total Housing
Planned/P	Built by 2035 in		Units
roposed in	Adopted	Approved or Pending Greenfield Plans not	Planned/Propos
Project	MTP/SCS	included in adopted 2035 MTP/SCS	ed in Project
		Isleton	
		Village on the Delta Specific Plan	300
		Rancho Cordova	
8.763	7,571		
	*		
4,893	1,834		
4,742	571		
6,078	756		
		Sacramento	
5,092	5,077		
		Unincorporated Sacramento County	
4,950	1,507	Cordova Hills Specific Plan	9,010
6,063	3,292	Jackson Township Specific Plan	6,143
5,942	3,740	Newbridge Specific Plan	3,075
6,610	5,251	Northwest Special Planning Area	22,000-25,000
9,919	2,552		
3,239	3,262		
15,658	5,150		
2,504	1,039		
		Sutter County	
		Live Oak	
		Live Oak northern annexation ¹	2,700
		Live Oak SOI ¹	10,900
	Housing Units Planned/P roposed in Project 8,763 11,601 2,713 4,893 4,742 6,078 5,092 4,950 6,063 5,942 6,610 9,919 3,239 15,658	Housing Units Estimated to be Built by 2035 in Adopted MTP/SCS	Housing Units Planned/P Proposed in Adopted MTP/SCS Isleton Willage on the Delta Specific Plan

	Total			
	Housing	Housing Units		
	Units	Estimated to be		Total Housing
	Planned/P	Built by 2035 in		Units
Approved or Pending Greenfield Plans included in	roposed in	_	Approved or Pending Greenfield Plans not	Planned/Propos
adopted 2035 MTP/SCS as Developing Community	Project	MTP/SCS	included in adopted 2035 MTP/SCS	ed in Project
Yuba City			Yuba City	
Lincoln East Specific Plan	4,865	1,024		
Yuba City SOI ¹	8,300	725		
Unincorporated Sutter County			Unincorporated Sutter County	
Sutter Pointe Specific Plan	17,500	3,489		
Yolo County			Yolo County	
Davis			Davis	
West Sacramento			West Sacramento	
Southport Industrial	1,383	482		
SW Southport specific plans	6,501	2,849		
SE Southport specific plans	3,433	836		
NE Southport-Liberty Specific Plan only	1,900	249		
Winters			Winters	
			Winters SOI area ²	unknown
Woodland			Woodland	
Spring Lake Specific Plan	4,037	4,049	Spring Lake Phase 2 ²	unknown
			Woodland potential GP growth areas ²	unknown
Unincorporated Yolo County			Unincorporated Yolo County	
			Dunnigan Specific Plan	9,230
			Elkhorn Specific Plan	0
			Madison Specific Plan	630-1,335
			Knights Landing Specific Plan	393-800

Approved or Pending Greenfield Plans included in adopted 2035 MTP/SCS as Developing Community Yuba County	Total Housing Units Planned/P roposed in Project	•		Total Housing Units Planned/Propos ed in Project
Marysville			Marysville	
ividi ysvine			ividi yovine	
Wheatland			Wheatland	
Wheatland various specific plans in city	1,325	612	Johnson Rancho/Hop Farms Specific Plan	14,369
Nichols Grove Specific Plan	1,609	436		
Unincorporated Yuba County			Unincorporated Yuba County	
East Linda Specific Plan	6,014	4,614	Woodbury ²	unknown
North Arboga Study Area	2,500	1,311		
Plumas Lake Specific Plan	18,130	6,548		
Magnolia Ranch Specific Plan ³	3,302	0		
Region			Region	
Total	288,726	152,026	Total	117,615

¹Housing unit total shown here are an estimate from General Plan and/or jurisdiction staff, not from a development proposal.

²Housing unit estimate not available.

³Specific Plan project area is in a Developing Community in the MTP/SCS; however, this specific plan was not assumed in the MTP/SCS.

	Estimated New	Estimated New	Difference between Estimated
	Housing Unit	Housing Units Built	Housing Capacity and Estimated
	Capacity in	in the MTP/SCS by	Housing Units Built by 2035 in
Community Type/Plan Area	Region ^{1,2}	2035 ¹	the MTP/SCS ^{1,2}
MTP/SCS Center and Corridor Communities	135,636	92,046	43,590
MTP/SCS Established Communities	124,050	79,364	44,686
MTP/SCS Rural Residential Communities	5,694	5,301	393
MTP/SCS Developing Communities	263,009	126,310	136,699
Total for all MTP/SCS Community Types	528,389	303,021	225,368
Approved or pending greenfield projects not included in the MTP/SCS	117,615	0	117,615
Total Inventory (plans included and not included in the MTP/SCS)	646,004	303,021	342,983

¹Estimate of new units, does not include housing units that exist as of 2008. In 2008 approximately 25,717 housing units existed in areas shown in Developing Communities. Those existing units were subtracted from the total 152,026 housing units estimated to be built by 2035 in the MTP/SCS (shown on the previous table).

²The housing unit capacity estimates in Center and Corridor Communities, Established Communities, and Rural Residential Communities is currently being updated. The numbers shown here are from the current MTP/SCS, where in particular, in Rural Residential Communities, the housing capacity was limited to areas that have growth in the MTP/SCS. There are ten's of thousands of units of housing capacity in the adopted general plans in these Rural Residential Communities.

MTP/SCS Framework: Approach to Creating/Analyzing Scenarios

Consistent with the Board's direction to focus this MTP/SCS update on implementation issues staff is raising a trial balloon on how to create and analyze scenarios. We will get Board input at the three February committees and have meetings with stakeholders in February and then ask the Board to take action on this in March.

1. Three scenarios for plan horizon year 2036 will be based on the current plan plus two updated/refined scenarios from last plan cycle.

Discussion: Scenarios should bracket a reasonable range of possible futures, taking into account all major market and policy/regulatory influences. All scenarios are designed to represent reasonable possibilities of what might occur (i.e. not idealized futures driven solely by 1 or 2 considerations to the exclusion of others). The three scenarios analyzed last time met this real world test, and varied principally by how much housing and transportation choice they created. The S\scenario (#3) with the most use of a range of transportation modes had the most amounts of new development in Centers and Corridors and Established Communities and attached housing. On the other end, the scenario (#1) with the least use of transportation modes other than the automobile had the most amounts of new development in Developing Communities and Rural Communities and large lot single family housing. The final plan adopted by the Board was most like the scenario in the middle (#2), but it included elements of both Scenarios #1 and #3 based on input from our members, the public and stakeholders and technical analysis. (See attached Table to compare the adopted MTP/SCS with the three scenarios analyzed during that plan's development process.)

For the 2016 MTP/SCS update staff suggests that the existing MTP/SCS be one of the scenarios, with the other 2 scenarios being similar to the first and third Scenarios from the last plan cycle, refreshed and updated to reflect relevant actions and trends that have occurred in the interim. For example, the updated Scenario 1 would have similar amounts of new growth in each of the 4 community types as Scenario 1 from the last plan cycle, but the specific properties forecasted to be developed within each community type would differ at least to some extent based on local government land use approvals since the last plan, market trends, and the intentions and capability of the property owners/developers. Similarly this updated Scenario 1 would have similar amounts of housing growth in the lower density and higher density housing types as Scenario 1 from the last cycle, though they may be located to some extent in different places. A preliminary look at the data leads staff to believe that this approach likely creates sufficient flexibility to ensure that the Plan and EIR documents this cycle analyze a reasonable range of alternatives that might be likely to occur.

While this step will be important, we are trying to keep the level of effort contained so that it is possible to maximize the effort available for Step 2.

2. Analyze different timing to construction of transportation and land use components of current MTP/SCS.

Discussion: Key components of the Board's December 2013 action focusing this plan cycle on implementation issues were to explore the full potential for a "fix-it-first" investment strategy, and to

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analyze whether there are reasons to alter the timing that land use and transportation projects in the current plan should be constructed. In other words, even if the end state in 2035 (now 2036) was the same, does it make a difference how (in what order) the region builds the projects that lead to that end condition? Staff has done some very preliminary thinking on this topic and believes that in some areas differences in timing might have a substantial impact on the life cycle costs and benefits of the plan. To illustrate the point at the extremes, there may be significant differences in variables such as total new lane miles, vehicle miles traveled, air pollution and water use from first building the growth forecast in the plan for Rural Communities and Developing Communities versus first building the growth forecast for Centers and Corridors and Established Communities. SACOG has never focused on this type of information when constructing the plan (except to ensure compliance with federal clear air act and SB 375 standards) and staff believes it could really help the Board and stakeholders focus on new policy issues that might improve life cycle plan performance (i.e. even if the end state in 2036 remained substantially the same as the current plan).

3. Analyze different levels and types of transportation revenue

Discussion: Every plan cycle SACOG must refresh its revenue assumptions, consistent with federal requirements that our plan contain "reasonably reliable" revenues. Mainly this involves scrutinizing existing, long-term revenue streams like federal, state and local transportation taxes and local development fees, but within reasonable limits it can also involve new future revenue streams that we forecast to be available in the plan. Staff suggests that this revenue analysis first be focused on the currently adopted MTP/SCS (i.e. will we have the same, more or less revenues to build the projects included in the plan?). Then, if the scenario and timing analyses conducted under #1 and #2 above indicate there may be a need for new revenue (which seems likely), that we analyze the merits and viability of a focused list of new revenue sources. For example, the following new revenue sources are potential candidates for consideration: state cap and trade revenue, new local transportation sales taxes, statewide vehicle registration fee.

4. Prepare draft plan scenario

Discussion: Based on input from public workshops, stakeholders (including our cross-sectoral working group), member and partner staff and Board members over the next several months staff will create by the end of 2014 a framework for a draft preferred scenario for Board consideration that includes both the end state condition in 2036, and a timing sequence for building the transportation network and estimating when development projects will be constructed.

Table	Table B-1. Description of 2012 MTP/SCS Scenarios 1, 2 and 3 (for the planning period 2008-2035)						
	Land Use Inputs	Scenario #1	Scenario #2	Scenario #3	Adopted MTP/SCS		
1	Share of growth in Center & Corridor Communities (percent of new homes)	19%	28%	36%	30%		
2	Share of growth in Established Communities (percent of new homes)	30%	28%	27%	26%		
3	Share of growth in Developing Communities (percent of new homes)	46%	41%	35%	42%		
4	Share of growth in Rural Residential Communities (percent of new homes)	5%	3%	2%	1%		
5	Share of growth in large-lot single-family homes (percent)	39%	33%	25%	28%		
6	Share of growth in small-lot, single-family homes (percent)	30%	25%	23%	28%		
7	Share of growth in attached homes (percent)	31%	42%	52%	43%		
	Transportation Inputs	Scenario #1	Scenario #2	Scenario #3	Adopted MTP/SCS		
8	New or expanded roads (lane miles, percent increase from 2008)	32%	31%	26%	29%		
9	Transit service (Vehicle Service Hours, percent increases from 2008)	54%	88%	127%	98%		
10	Funding for transit (\$ in billions)	\$10.7	\$11.7	\$13.7	\$11.3		
11	Funding for road, bike and pedestrian maintenance (\$ in billions)	\$10.9	\$11	\$11	\$11.3		
12	Funding for new road capacity (\$ in billions)	\$8.7	\$8	\$6.7	\$7.4		
13	Funding for bike and pedestrian street and trail improvements (\$ in billions)	\$2.8	\$2.9	\$3.0	\$3.0		
14	Additional miles of bicycle paths, lanes and routes (Class 1, 2 and 3 = 1,700 in 2008)	800	1,100	1,300	1,100		
15	Funding for Programs (\$ in billions)	\$1.5	\$1.6	\$1.7	\$2.2		

	Table B-1 (continued) Description of 2012 MTP/SCS Scenarios 1, 2 and 3 (for the planning period 2008-2035)						
2 0 0 0	Performance Outcomes	Scenario #1	Scenario #2	Scenario #3	Adopted MTP/SCS		
16	Square miles of farmland converted to development (4,166 square miles of farmland in 2008)	93	70	50	57		
17	Square miles of vernal pools affected by development	9	8	7	7		
18	Share of new homes near high-frequency transit (percent of new homes)	22%	28%	35%	38%		
19	Share of new jobs near high-frequency transit (percent of new jobs)	26%	35%	44%	39%		
20	Transit costs recovered by ticket sales (percent)	38%	41%	51%	38%		
21	Total homes in environmental justice areas near high-frequency transit (percent of homes, 30% in 2008)	43%	45%	47%	55%		
22	Share of trips by transit, bike or walk (percent increase per capita from 2008)	12%	22%	31%	33%		
23	Vehicle miles traveled (VMT) (percent change per capital from 2008)	-6%	-8%	-9%	-6.9%		
24	Vehicle miles traveled in heavy congestion (percent of total VMT)	5%	6%	7%	6%		
25	Travel time spent in car per capita (percent change from 2008)	-3%	-4%	-4%	-4%		
26	Weekday passenger vehicle CO ₂ emissions (percent change per capita from 2005)	-14%	-16%	-17%	-16%		



Transportation Committee

Item #14-4-6B Information

March 26, 2014

Inventory of Adopted and Proposed Land Use Plans (Follow-up on Employment, Infill, and Rural Residential)

Issue: This is the second part of the housing and employment inventory that will inform the update of the land use forecast for the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

Recommendation: This item will be presented at all three Board committees for information and discussion.

Discussion: Under the land use forecast topic of the MTP/SCS update framework is a research task to inventory adopted and proposed land use plans in the region. This is one of the first technical steps of every MTP/SCS update cycle to help determine if and how to adjust the MTP/SCS land use forecast. In addition, the Board expressed interest in understanding the planned development supply in the region compared to the long-term market demand for housing and employment. This information is the second part of the land use inventory staff presented to the Committee in February; the first part was focused on the amount of housing planned for adopted or proposed greenfield areas.

Description of the inventory:

The tables in Attachment A are a first assessment of the current housing and employment supply in adopted and proposed land use plans. This information was gathered through a combination of staff research and interviews with member agency planning and public works staffs and is a refresh of the build-out information that is included in the current MTP/SCS.

The tables show housing and employment estimates by community type for build-out of these areas. As shown in Attachment A Table 1, there is a regional supply of 692,939 new homes and 1,300,415 new jobs in local plans (from 2008). The demand in the current MTP/SCS, and in the 2016 MTP/SCS update, is about 303,000 new homes and 361,000 new jobs (from 2008).

Infill areas (Center and Corridor and Established Communities) are planned for 259,582 new homes and 762,636 new jobs at build-out. Rural Residential Communities are planned for 45,697 new homes and 46,133 new jobs at build-out. Greenfield areas (Developing Communities and areas that are candidates for inclusion in the updated plan as Developing Communities) are planned for 387,660 new homes and 491,645 new jobs at build-out. Table 2 shows the housing and employment supply in all community types by jurisdiction.

This total housing and employment build-out estimate for the region is higher than the build-out estimate in the current MTP/SCS because the data have been refreshed to account for changes to local land use plans. Some of this has to do with recategorized community types (e.g., an area may have been recategorized from a Center/Corridor to an Established Community); some has to do with increases or decreases in the build-out estimates of local plans; and some is attributed to the new or proposed development projects. Change in the infill areas is typical and relatively small compared to the magnitude of change in the greenfield development potential that was presented in February.

The issue highlighted by this information is the same one presented in February: that there is a much larger planned supply of housing (50-60 year potential development supply) and employment (80-90 year potential development supply) than the 20 years of housing and employment demand in the MTP/SCS. In other words, given the large supply of development, the challenge in the MTP/SCS update will be the phasing of the first 20 years of demand in order to plan the appropriate transportation investments.

Next steps for an updated land use forecast:

Under the scenario framework that the Board adopted in March 2014, staff will use this inventory of adopted and proposed plans in conjunction with market and regulatory research and analysis to inform a more detailed scenario methodology that will be brought to the committees next month.

Approved by:

Mike McKeever Chief Executive Officer

MM:KL:gg Attachments

Key Staff: Matt Carpenter, Director of Transportation Services, (916) 340-6276

Kacey Lizon, MTP/SCS Manager, (916) 340-6265

Jennifer Hargrove, MTP/SCS Coordinator (916) 340-6216

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Attachment A - Table 1

	Estimated New	Estimated New	Estimated New	Estimated New
	Housing Units Built	Employees in the	Housing Unit	Employee Capacity
	in the MTP/SCS by	MTP/SCS by 2035 ¹	Capacity in Region	in Region ¹
Community Type/Plan Area	2035 ¹	·	Region ¹	
MTP/SCS Center and Corridor Communities	92,046	104,185	129,791	279,262
MTP/SCS Established Communities	79,364	187,546	129,791	483,374
MTP/SCS Rural Residential Communities	5,301	4,054	45,697	46,133
MTP/SCS Developing Communities	126,310	65,323	261,095	306,481
Total for all MTP/SCS Community Types	303,021	361,108	566,374	1,115,251
Approved or pending greenfield projects not included in the MTP/SCS	0	0	126,565	185,164
Total Inventory (plans included and not included in the MTP/SCS)	303,021	361,108	692,939	1,300,415

¹Estimate of new housing or employees; does not include housing or employees that exist as of 2008. The 2016 MTP/SCS will be using a base year of 2012 and therefore these numbers will change to reflect housing and employment changes that have happened between 2008 and 2012.

Attachment A - Table 2						
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**		
Placerville Center and Corridor Communities	177	4,246	316	4,939		
Established Communities	5,221	7,165	5,667	7,096		
Jurisdiction Total	5,398	11,412	5,983	12,034		
Junistiction Total	3,330	,	2,222			
El Dorado County						
Center and Corridor Communities (listed below)						
El Dorado Hills Town Center	15	3,509	16	3,867		
Diamond Springs Rd	66	483	105	612		
Established Communities (listed below)						
Stan Stino	6	0	1,041	221		
Dixon Ranch	2	0	605	0		
Central El Dorado Hills	437	0	1,000	633		
Remaining Established	33,456	34,389	46,296	46,500		
Developing Communities (listed below) Bass Lake Hills	1,392	118	1,458	109		
Carson Creek	1,162	47	1,700	3,879		
El Dorado Hills	4,996	2,047	6,162	3,368		
Marble Valley	647	0	3,236	1,988		
Missouri Flats	498	3,436	844	6,497		
Valley View	1,351	132	2,840	156		
Rural Residential Communities	23,712	5,686	28,096	13,761		
Placerville Sphere of Influence Area ¹	1,467	1,136	1,526	1,933		
Lime Rock Valley ¹	6	14	800	59		
Jurisdiction Total	69,216	50,998	95,726	83,582		
Auburn						
Center and Corridor Communities (Amtrak station and Hwy 49)	796	2,943	855	3,811		
Established Communities	6,215	6,883	7,820	9,114		
Developing Communities (listed below)						
Baltimore Ravine	719	63	725	226		
Jurisdiction Total	7,730	9,888	9,400	13,151		
Colfax						
Center and Corridor Communities (I-80 Corridor Study area)	225	1,285	265	2,382		
Established Communities	770	360	1,073	899		
Jurisdiction Total	995	1,646	1,338	3,281		
Lincoln						
Center and Corridor Communities (portion of Downtown Urban Design Plan)	116	1,208	115	1,372		
Developing Communities (listed below)		,		,-		
Portion of Hwy 65 in SOI	0	5,456	0	11,013		
Village 1	2,035	586	5,639	676		
Village 2	2,037	235	3,784	351		
Village 7	3,264	395	3,285	396		
Established Communities	21,559	11,607	21,483	25,142		
Village 3 ¹	0	0	4,841	unknown		
Village 4 ¹	0	0	5,421	unknown		
Village 5 ¹	0	0	5,779	994		
Village 6 ¹	0	0	5,083	unknown		
SUD A ¹	0	0	1,899	unknown		
		_	-			
SUD B ¹	0	0	429	10,409		

Attachment A - Table 2						
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**		
SUD C ¹	0	0	0	123		
Remainder SOI ¹	0	0	0	unknown		
Jurisdiction Total	29,010	19,486	57,758	50,475		
Loomis				ı		
Center and Corridor Communities (Town Center Master Plan)	598	1,163	1,317	1,227		
Established Communities	1,878	3,237	1,921	4,077		
Rural Residential Communities	857	783	1,275	832		
Jurisdiction Total	3,333	5,183	4,513	6,136		
Rocklin						
Center and Corridor Communities (Rocklin Downtown Plan/amtrak station)	1,882	1,585	2,714	2,895		
Established Communities	21,533	18,857	21,360	39,828		
Developing Communities (listed below)	, -	,	0	0		
Clover Valley	551	97	558	128		
Highway 65 Corridor	0	4,116	0	13,263		
I-80 Commercial	0	937	0	3,442		
Sunset Ranchos	4,318	847	4,339	2,020		
Jurisdiction Total	28,284	26,439	28,971	61,575		
Roseville Center and Corridor Communities (listed below) Dowtown Master Plan and remaining Amtrak station Douglas West Sunrise	1,970 421 495	3,784 1,903 3,410	2,784 370 349	18,477 1,915 3,411		
Developing Communities (listed below)						
Creekview	579	380	2,011	418		
Sierra Vista	6,106	4,797	8,769	9,003		
West Roseville	8,831	2,688	10,478	3,251		
Established Communities	46,499	80,585	47,170	91,265		
Amoruso Ranch ¹	0	0	3,011	1,463		
Placer Ranch ¹	0	0	6,740	20,155		
Jurisdiction Total	64,901	97,547	81,682	149,358		
Plana Caustin						
Placer County Established Communities	10,234	22,208	12 200	65,493		
Auburn Sphere of Influence Area	8,260	14,773	13,389 10,342	19,710		
Colfax Sphere of Influence Area	597	367	1,111	404		
Developing Communities (listed below)	337	307	1,111	404		
Bickford Ranch	1,435	73	1,890	312		
Placer Vineyards	8,037	3,007	14,132	9,037		
Regional University	2,781	349	4,387	1,868		
Riolo Vineyards	934	150	933	166		
Rural Residential Communities	26,143	8,593	50,371	27,254		
Curry Creek ¹	0	0	unknown	unknown		
Squaw Village	0	0	750	unknown		
Jurisdiction Total	58,420	49,521	97,307	124,244		
Citrus Heights				1		
Center and Corridor Communities (listed below) Sunrise	1 01 5	7,217	1 015	7 217		
Sunnse	1,815	1,211	1,815	7,217		

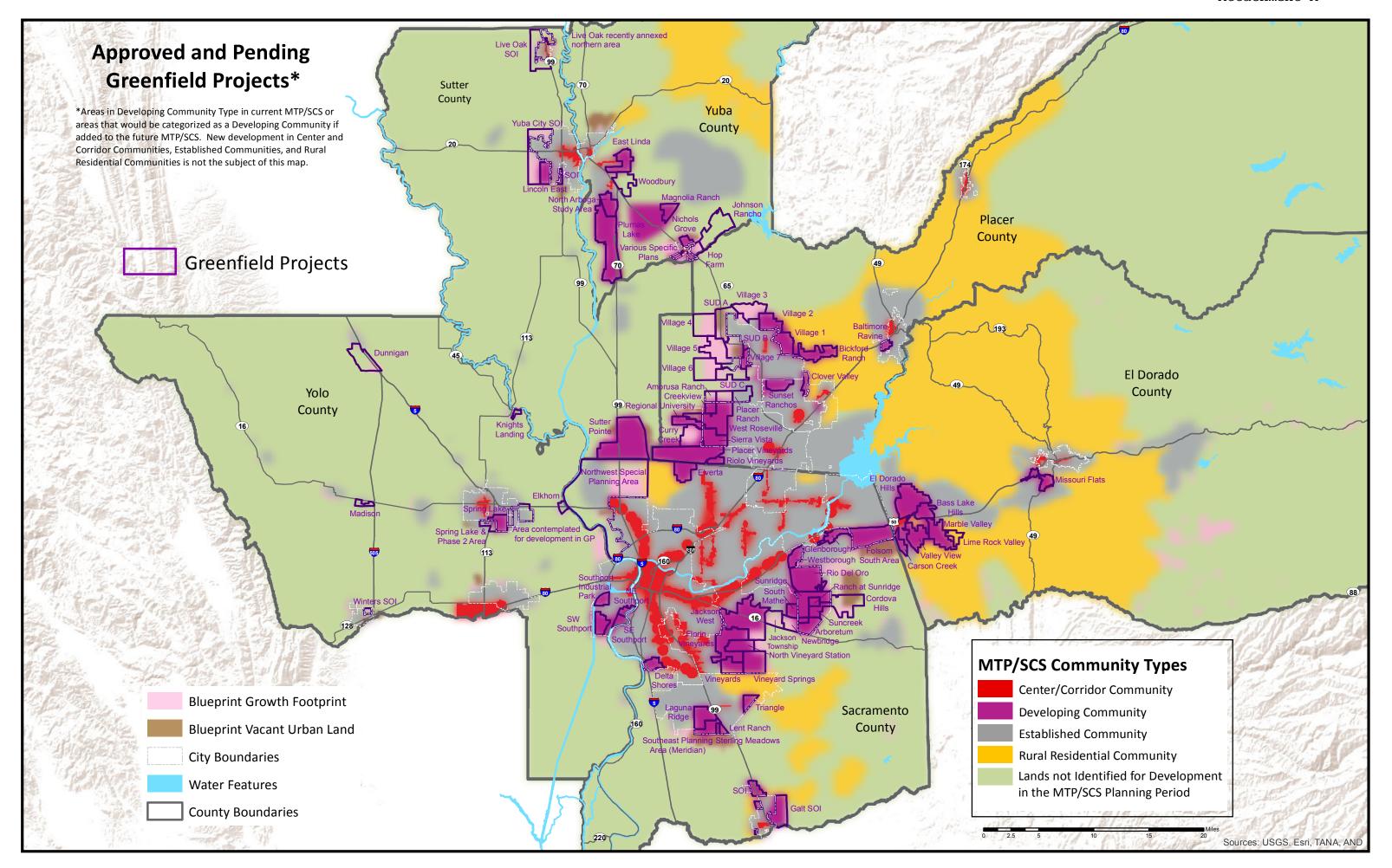
Riverside-Auburn Blvd (The Boulevord Plan) 1,070 3,113 2,025 4,926 1,045	Attachme	nt A - Table 2			
Sarabished Communities 37,012 13,440 37,012 13,457 13,467 13,	Jurisdiction/Community Type	Housing Units Built in the Current MTP/SCS	Employees in the Current MTP/SCS	Total Housing Units at Build	Total Employees at
Section Sect	Riverside-Auburn Blvd (The Boulevard Plan)	1,070	3,113	2,025	4,926
Ele Grove Center and Corridor Communities (Old Town Plan area) 69 9.39 69 1.039	Established Communities	37,012	13,440	37,012	13,457
Center and Corridor Communities (Old Town Plan area) 69 339 69 1,039 55,188	Jurisdiction Total	39,897	23,770	40,852	25,601
Stablished Communities 46,860 34,055 47,296 35,518 Nural Residential Communities 5,756 1,586 5,876 1,485 Nural Residential Communities 1,485 Nural Residential Residenti	Elk Grove				
Sural Residential Communities 5,756 1,586 5,876 1,485	Center and Corridor Communities (Old Town Plan area)	69	939	69	1,039
Developing Communities (listed below)	Established Communities	46,860	34,055	47,296	35,518
Laguna Ridge	Rural Residential Communities	5,756	1,586	5,876	1,485
Laguna Ridge	Developing Communities (listed below)				
Lent Ranch 280 3.222 280 4,400		7,590	4,281	7,826	4,291
Southeast Planning Area 4,102 3,493 4,790 5,101			•	·	
Sterling Meadows 950 0			· ·		
Triangle Special Plan 403 43 701 342 Jurisdiction Total 66,010 47,619 68,022 52,176 Folsom					
Section Sect			-		
Conter and Corridor Communities 2,186 10,833 2,196 12,659					
Center and Corridor Communities 2,186 10,833 2,196 12,659 Established Communities (listed below)	Jurisulction rotal	00,010	47,015	00,022	32,170
Established Communities (listed below)	Folsom				
Developing Communities (listed below) Folsom South Area 6,688 1,291 10,210 13,619 Jurisdiction Total 36,104 48,120 41,654 67,606 Galt	Center and Corridor Communities	2,186	10,833	2,196	12,659
Folsom South Area 6,688 1,291 10,210 13,619	Established Communities	27,230	35,996	29,248	41,328
Durisdiction Total 36,104 48,120 41,654 67,606	Developing Communities (listed below)				
Center and Corridor Communities (Downtown and Lincoln Corridor)	Folsom South Area	6,688	1,291	10,210	13,619
Center and Corridor Communities (Downtown and Lincoln Corridor) 481 2,804 501 3,299 Established Communities (listed below) 9,322 4,960 9,331 9,233 Developing Communities (listed below) 1,091 0 2,000 140 Remaining SOI 0 385 5,577 24,040 Jurisdiction Total 10,894 8,149 17,409 36,712 Island 443 159 510 171 Villages on the Delta ¹ 0 0 300 0 Jurisdiction Total 443 159 810 171 Willages on the Delta ¹ 0 0 300 0 Jurisdiction Total 443 159 810 171 Ranch Ocrdova Center and Corridor Communities 10,956 20,469 8,228 40,763 Established Communities (listed below) 4,8182 53,670 18,213 66,798 Developing Communities (listed below)	Jurisdiction Total	36,104	48,120	41,654	67,606
Center and Corridor Communities (Downtown and Lincoln Corridor) 481 2,804 501 3,299 Established Communities (listed below) 9,322 4,960 9,331 9,233 Developing Communities (listed below) 1,091 0 2,000 140 Remaining SOI 0 385 5,577 24,040 Jurisdiction Total 10,894 8,149 17,409 36,712 Island 443 159 510 171 Villages on the Delta ¹ 0 0 300 0 Jurisdiction Total 443 159 810 171 Willages on the Delta ¹ 0 0 300 0 Jurisdiction Total 443 159 810 171 Ranch Ocrdova Center and Corridor Communities 10,956 20,469 8,228 40,763 Established Communities (listed below) 4,8182 53,670 18,213 66,798 Developing Communities (listed below)	Colt				
Established Communities 9,322 4,960 9,331 9,233		401	2.004	F01	2 200
Developing Communities (listed below) Eastview 1,091 0 2,000 140			· ·		
Eastview 1,091 0 2,000 140		9,322	4,960	9,331	9,233
Remaining SOI 10,894 8,149 17,409 36,712 10,894 8,149 17,409 36,712 10,894 8,149 17,409 36,712 10,894 8,149 17,409 36,712 17,409 36,712 17,409 36,712 17,409 36,712 17,409 36,712 17,409 36,712 17,409 36,712 17,409 36,712 17,409		1 001	0	2.000	140
10,894 8,149 17,409 36,712 15 12 15 13 1			-	·	
Isleton					
Established Communities 443 159 510 171 Villages on the Delta¹ 0 0 300 0 Jurisdiction Total 443 159 810 171 Rancho Cordova Center and Corridor Communities 10,956 20,469 8,228 40,763 Established Communities (listed below) 18,182 53,670 18,213 66,798 Developing Communities (listed below) Arboretum 571 96 8,763 3,488 Ranch at Sunridge 2,296 355 2,713 358 Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525	Jurisdiction Total	10,894	8,149	17,409	36,/12
Villages on the Delta ¹ 0 0 300 0 Jurisdiction Total 443 159 810 171 Rancho Cordova Enter and Corridor Communities Center and Corridor Communities 10,956 20,469 8,228 40,763 Established Communities 18,182 53,670 18,213 66,798 Developing Communities (listed below) 571 96 8,763 3,488 Ranch at Sunridge 2,296 355 2,713 358 Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525	Isleton				
Marie Mari		443	159	510	171
Marie Mari		0	0	300	0
Center and Corridor Communities 10,956 20,469 8,228 40,763 Established Communities 18,182 53,670 18,213 66,798 Developing Communities (listed below) 571 96 8,763 3,488 Arboretum 571 96 8,763 3,488 Ranch at Sunridge 2,296 355 2,713 358 Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) Blue Line Seg 1 (American River to Swanston) 4,205 11,745 6,054 14,525		· ·	-		
Center and Corridor Communities 10,956 20,469 8,228 40,763 Established Communities 18,182 53,670 18,213 66,798 Developing Communities (listed below) 571 96 8,763 3,488 Arboretum 571 96 8,763 3,488 Ranch at Sunridge 2,296 355 2,713 358 Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) Blue Line Seg 1 (American River to Swanston) 4,205 11,745 6,054 14,525	Rancho Cordova				
Established Communities 18,182 53,670 18,213 66,798 Developing Communities (listed below) 571 96 8,763 3,488 Ranch at Sunridge 2,296 355 2,713 358 Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) Blue Line Seg 1 (American River to Swanston) 4,205 11,745 6,054 14,525		10.956	20.469	8.228	40.763
Developing Communities (listed below) Arboretum 571 96 8,763 3,488 Ranch at Sunridge 2,296 355 2,713 358 Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) Blue Line Seg 1 (American River to Swanston) 4,205 11,745 6,054 14,525					
Arboretum 571 96 8,763 3,488 Ranch at Sunridge 2,296 355 2,713 358 Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525		10,102	33,070	10,213	50,756
Ranch at Sunridge 2,296 355 2,713 358 Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525		571	96	g 762	3 188
Rio Del Oro 8,057 4,325 11,601 12,558 Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525				·	
Suncreek 1,834 185 4,893 1,404 Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525					
Sunridge 7,571 2,170 8,763 3,563 Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525					
Westborough 756 201 6,078 5,444 Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525				·	
Jurisdiction Total 50,223 81,471 69,252 134,377 Sacramento Center and Corridor Communities (listed below) 4,205 11,745 6,054 14,525				·	
Sacramento Center and Corridor Communities (listed below) Blue Line Seg 1 (American River to Swanston) 4,205 11,745 6,054 14,525					
Center and Corridor Communities (listed below) Blue Line Seg 1 (American River to Swanston) 4,205 11,745 6,054 14,525	Jurisdiction Total	50,223	81,4/1	69,252	134,377
Blue Line Seg 1 (American River to Swanston) 4,205 11,745 6,054 14,525	Sacramento			 	
	Center and Corridor Communities (listed below)				
	Blue Line Seg 1 (American River to Swanston)	4,205	11,745	6,054	14,525
	Blue Line Seg 2 (Marconi)	1,890	1,341	1,890	1,354

Attachmen	nt A - Table 2			
	Estimate of Total	Estimate of Total	Estimate of	Estimate of
Jurisdiction/Community Type	Housing Units Built in	Employees in the	Total Housing	Total
Jurisdiction/Community Type	the Current MTP/SCS	Current MTP/SCS	Units at Build	Employees at
	by 2035*	by 2035*	Out**	Build Out**
Blue Line Seg 3 (Roseville Rd/Watt)	27	990	45	2,234
DNA Seg 1 (South Natomas)	6,444	3,608	6,444	3,608
DNA Seg 2 (North Natomas Marketplace)	2,952	8,204	6,195	14,909
DNA Seg 3 (Commerce Pkwy)	5,011	3,447	5,011	3,447
DNA Seg 4 (Greenbriar)	3,314	344	3,448	782
Downtown Sacramento (East of 16th St)	15,276	30,817	16,193	40,109
Downtown Sacramento (West of 16th St)	25,979	105,094	31,401	124,653
Franklin Blvd 1	2,268	3,021	2,268	3,024
Gold Line Seg 1 (39th to 59th)	3,848	8,936	3,907	9,281
Gold Line Seg 2 (65th to Power Inn)	7,641	12,783	7,893	14,045
Gold Line Seg 3 (College Greens and part of watt)	1,375	2,820	2,328	4,765
South Line Seg 1 (Broadway to 47th)	6,124	8,229	6,224	9,907
South Line Seg 2 (Florin)	2,519	3,681	2,519	3,681
South Line Seg 3 (Meadowview to CRC) Stockton Blvd 1 (14th Ave to Florin Rd)	10,246 3,182	2,655 2,922	10,269	2,661 2,922
Developing Communities (listed below)	3,182	2,922	3,182	2,922
Delta Shores	5,077	2,123	5,092	6,678
Established Communities	153,329	150,315	155,253	194,392
Panhandle ¹	0	0	1,375	22
Camino Norte ¹	0	1,140	0	1,140
Jurisdiction Total	260,707	364,215	276,991	458,139
Sacramento County				T
Center and Corridor Communities (listed below)				
Auburn Blvd/Madison Ave (Auburn North)	1,196	9,886	1,299	11,935
Blue Line Seg 3 (Roseville Rd/Watt)	981	4,126	3,036	4,208
Fair Oaks Blvd 1 (West- Howe to Fulton)	2,472	6,711	2,501	6,890
Fair Oaks Blvd 2 (Central- El Camino to Winding)	3,909	7,981	5,209	10,292
Fair Oaks Blvd 3 (East- Fair Oaks Village Area)	1,168	2,801	1,209	3,000
Florin Rd Franklin Blvd 2	2,343	8,575	6,933	12,487
Fulton Ave (Fair Oaks to Marconi)	3,258 764	5,059 8,651	3,793	5,677 8,881
Gold Line Seg 4 (Watt to Butterfield)	9,381	15,531	1,041 12,701	16,962
Gold Line Seg 4 (Watt to Butter) lead	2,613	8,352	4,202	19,411
Gold Line Seg 6 (Folsom Blvd in Folsom)	0	1,214	0	1,214
Greenback Ln 2 (Sunrise to Main)	2,269	4,625	2,333	4,640
Stockton Blvd 1 (14th Ave to Florin Rd)	1,079	401	1,107	387
Stockton Blvd 2 (Florin Rd to Mack Rd)	4,453	4,884	5,825	5,627
Watt Ave 1 (Central- Auburn Blvd to Arden Wy)	2,924	13,303	3,169	13,419
Watt Ave 2 (N. Watt & W of Watt- Madison to Antelope)	8,360	12,186	8,415	12,231
Developing Communities (listed below)	,	, -	, -	
Elverta	1,507	344	4,950	404
Florin Vineyard	2,552	1,528	9,919	6,243
Glenborough at Easton	3,262	1,795	3,239	1,796
West Jackson	5,150	4,167	15,658	32,839
North Vineyard Station	3,292	379	6,063	563
Mather South	1,039	239	3,529	5,073
Vineyard Springs	3,740	1,394	5,942	764
Vineyard	5,251	1,671	6,610	1,546
Established Communities	182,709	124,251	187,767	195,762
Rural Residential	14,072	11,582	19,015	16,252

Attachme	nt A - Table 2			
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**
Cordova Hills ¹	0	0	9,010	13,556
Jackson Township ¹	0	0	6,143	8,044
Newbridge ¹	0	0	3,075	2,556
Northwest Special Planning Area ¹	0	0	25,000	70,608
Jurisdiction Total	269,744	261,636	368,693	493,266
Live Oak	1			
Center and Corridor Communities (downtown)	85	878	336	1,972
Established Communities	3,721	1,029	4,337	2,446
Recent annexation areas north and south ¹	20	40	2,700	7,593
Sphere of Influence Area ¹	324	144	10,900	2,304
Jurisdiction Total	4,149	2,091	18,273	14,316
Yuba City				
Center and Corridor Communities (Central City and Hwy 20 corridor) Established Communities Developing Communities (listed below)	1,912 27,450	10,036 24,002	2,076 28,051	10,036 29,205
Lincoln East (SOI)	1,024	287	4,865	1,570
South SOI/Hwy 99 Corridor	725	470	725	1,826
Remainder SOI ¹	0	0	7,575	3,493
Jurisdiction Total	31,111	34,795	43,292	46,130
Junisaletion Total	02/222	3 1,7 3 3	13,232	10,200
Sutter County				
Established Communities Developing Communities (listed below)	7,580	4,386	13,650	13,774
Sutter Pointe	3,489	3,287	17,500	55,045
Employment Centers ¹	0	0	0	14,225
Jurisdiction Total	11,069	7,673	31,150	83,045
Davis				
Center and Corridor Communities (listed below)	419	2 409	424	1 407
Core Area Plan Davis Amtrak station	1,696	3,498 2,890	424 1,794	1,497 3,253
Nishi	600	414	602	1,497
Established Communities	26,550	13,637	27,292	14,253
Jurisdiction Total	29,265	20,440	30,112	20,500
West Sacramento	1			
Center and Corridor Communities (listed below)				45
Bridge District	4,127	7,543	4,567	13,715
Pioneer Bluff Washington	· ·	3,392	5,757	28,939
Washington remaining center and corridor area	3,076 3,969	3,550 3,195	2,588 7,342	5,693 21,289
Established Communities	18,633	31,418	21,707	38,436
Developing Communities (listed below)	10,000	31,710	21,707	55,450
NE Village of Southport (Liberty area only)	249	2	1,900	4
SE Village of Southport	836	23	3,433	120
Southport Industrial Park	482	4,203	1,383	4,968
SW Village of Southport	2,849	271	6,501	1,063
Jurisdiction Total	35,616	53,597	55,178	114,228

Attachmer	Attachment A - Table 2			
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*		Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**
Winters				
Center and Corridor Communities (Downtown Master Plan)	3	176	50	197
Established Communities	3,063	2,940	4,254	4,940
Sphere of Influence Area ¹	0	0	unknown	unknown
Jurisdiction Total	3,066	3,116	4,304	5,137
Woodland				
Center and Corridor Communities (Downtown and East St Corridor)	1,522	3,470	1,527	4,763
Developing Communities (listed below)	1,322	3,170	1,327	1,703
Spring Lake	4,049	1,527	4,037	1,242
Established Communities	18,946	28,371	18,710	43,106
Potential GP Growth Area ¹	0	0	unknown	unknown
Northern SOI area ¹	0	0	unknown	unknown
Spring Lake Phase 2 ¹	0	0	unknown	unknown
Jurisdiction Total	24,517	33,368	24,274	49,111
	,-		,	-,
Yolo County				
Center and Corridor Communities (UC Davis)	2,646	20,702	2,646	29,134
Established Communities	7,641	9,797	9,189	13,541
Dunnigan ¹	0	0	9,230	10,656
Elkhorn ¹	0	0	0	9,553
Madison ¹	0	0	1,335	250
Knights Landing ¹	0	0	800	100
Jurisdiction Total	10,287	30,499	23,200	63,234
	-	-	-	-
Marysville				
Center and Corridor Communities (Downtown Economic Development Strategi	386	2,913	435	3,344
Established Communities	5,334	6,387	5,356	6,197
Jurisdiction Total	5,720	9,300	5,791	9,541
Wheatland	400		443	
Center and Corridor Communities (downtown area) Established Communities	109	55	113	55
Developing Communities (listed below)	1,319	901	1,667	761
Various specific plans in city limits	612	465	1,325	1,296
Nichols Grove (SOI)	436	243	1,609	243
Hop Farm/Johnson Rancho (SOI) ¹	0	0	14,369	7,861
Jurisdiction Total	2,476	1,664	19,083	10,215
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Yuba County				
Center and Corridor Communities (listed below)				
North Beale Corridor Reinvestmant Plan	209	1,182	209	1,182
Olivehurst Ave	287	299	450	548
Established Communities	9,854	4,560	13,147	6,058
Established Communities (Beale AFB)	185	6,444	126	6,428
Developing Communities (listed below)			6.01.	
East Linda	4,614	1,274	6,014	4,426
North Arboga Study Area Plumas Lakes	1,311 6,548	137 3,296	2,500	2,564 16,176
Piurias Lakes	0,346	3,290	18,130	16,176

Attachmen	Attachment A - Table 2					
	Estimate of Total	Estimate of Total	Estimate of	Estimate of		
Jurisdiction/Community Type	Housing Units Built in	Employees in the	Total Housing	Total		
furisalction/community Type	the Current MTP/SCS	Current MTP/SCS	Units at Build	Employees at		
	by 2035*	by 2035*	Out**	Build Out**		
Highway 65 Employment Center	36	2,709	36	23,730		
Magnolia Ranch ¹	0	0	3,302	2,501		
Rural Residential Communities	6,421	5,036	12,734	15,775		
Woodbury ¹	0	0	unknown	unknown		
Jurisdiction Total	29,464	24,937	56,648	79,389		
*This information is from the current 2012 MTP/SCS, it has not yet been updated or refreshed for the 2016 MTP/SCS Update						
**This information is an estimate of build out based on current local la current 2012 MTP/SCS.	nd use plans and is an u	update to the build	out estimates fr	om the		
¹ Area not designated for new development in the current 2012 MTP/S0	ns .					



REVISED

Attachment A - Table 1

Revised April 2, 2014

	Estimated New	Estimated New	Estimated New	Estimated New
	Housing Units Built	Employees in the	Housing Unit	Employee Capacity
	in the MTP/SCS by	MTP/SCS by 2035 ¹	Capacity in Region	in Region ¹
Community Type/Plan Area	2035 ¹		Region ¹	
MTP/SCS Center and Corridor Communities	92,046	104,185	129,791	281,365
MTP/SCS Established Communities	79,364	187,546	129,791	483,374
MTP/SCS Rural Residential Communities	5,301	4,054	45,697	46,133
MTP/SCS Developing Communities	126,310	65,323	261,095	306,481
Total for all MTP/SCS Community Types	303,021	361,108	566,374	1,117,354
Approved or pending greenfield projects not included in the MTP/SCS	0	0	126,565	185,164
Total Inventory (plans included and not included in the MTP/SCS)	303,021	361,108	692,939	1,302,518

¹Estimate of new housing or employees; does not include housing or employees that exist as of 2008. The 2016 MTP/SCS will be using a base year of 2012 and therefore these numbers will change to reflect housing and employment changes that have happened between 2008 and 2012.

	nt A - Table 2 pril 2, 2014			
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**
Placerville				
Center and Corridor Communities	177	4,246	316	4,939
Established Communities	5,221	7,165	5,667	7,096
Jurisdiction Total	5,398	11,412	5,983	12,034
El Dorado County				
Center and Corridor Communities (listed below)				
El Dorado Hills Town Center	15	3,509	16	3,867
Diamond Springs Rd	66	483	105	612
Established Communities (listed below)				
Stan Stino	6	0	1,041	221
Dixon Ranch	2	0	605	0
Central El Dorado Hills	437	0	1,000	633
Remaining Established	33,456	34,389	46,296	46,500
Developing Communities (listed below)	4 202	440	4.450	100
Bass Lake Hills	1,392	118	1,458	109
Carson Creek	1,162	47	1,700	3,879
El Dorado Hills	4,996	2,047	6,162	3,368
Marble Valley	647	0	3,236	1,988
Missouri Flats	498	3,436	844	6,497
Valley View	1,351	132	2,840	156
Rural Residential Communities	23,712	5,686	28,096	13,761
Placerville Sphere of Influence Area ¹	1,467	1,136	1,526	1,933
Lime Rock Valley ¹	6	14	800	59
Jurisdiction Total	69,216	50,998	95,726	83,582
Auburn				
Center and Corridor Communities (Amtrak station and Hwy 49)	796	2,943	855	3,811
Established Communities	6,215	6,883	7,820	9,114
Developing Communities (listed below)				
Baltimore Ravine	719	63	725	226
Jurisdiction Total	7,730	9,888	9,400	13,151
Colfax		_		
Center and Corridor Communities (I-80 Corridor Study area)	225	1,285	265	2,382
Established Communities	770	360	1,073	899
Jurisdiction Total	995	1,646	1,338	3,281
Lincoln				
Center and Corridor Communities (portion of Downtown Urban Design Plan)	116	1,208	115	1,372
Developing Communities (listed below)		_,		_,
Portion of Hwy 65 in SOI	0	5,456	0	11,013
Village 1	2,035	586	5,639	676
Village 2	2,037	235	3,784	351
Village 7	3,264	395	3,784	396
Established Communities	21,559	11,607	21,483	25,142
Village 3 ¹	0	0	4,841	unknown
Village 4 ¹	0	0	5,421	unknown

Attachment A - Table 2 Revised April 2, 2014				
neviseu A			- · · · ·	- · · ·
	Estimate of Total	Estimate of Total	Estimate of	Estimate of
Jurisdiction/Community Type	Housing Units Built in the Current MTP/SCS	Employees in the Current MTP/SCS	Total Housing	Total
	by 2035*	by 2035*	Units at Build Out**	Employees at Build Out**
	DY 2035 .	by 2035 ·	Out	Build Out
Village 5 ¹	0	0	5,779	994
Village 6 ¹	0	0	5,083	unknown
SUD A ¹	0	0	1,899	unknown
SUD B ¹	0	0	429	10,409
SUD C ¹	0	0	0	123
Remainder SOI ¹	0	0	0	unknown
Jurisdiction Total	29,010	19,486	57,758	50,475
Loomis				
Center and Corridor Communities (Town Center Master Plan)	598	1,163	1,317	1,227
Established Communities	1,878	3,237	1,921	4,077
Rural Residential Communities Jurisdiction Total	857	783 5,183	1,275	832
Jurisdiction Total	3,333	5,183	4,513	6,136
Rocklin				
Center and Corridor Communities (Rocklin Downtown Plan/amtrak station)	1,882	1,585	2,714	2,895
Established Communities	21,533	18,857	21,360	39,828
Developing Communities (listed below)			0	0
Clover Valley	551	97	558	128
Highway 65 Corridor	0	4,116	0	13,263
I-80 Commercial	0	937	0	3,442
Sunset Ranchos	4,318	847	4,339	2,020
Jurisdiction Total	28,284	26,439	28,971	61,575
Roseville				
Center and Corridor Communities (listed below)				
Dowtown Master Plan and remaining Amtrak station	1,970	3,784	2,784	18,477
Douglas West	421	1,903	370	1,915
Sunrise	495	3,410	349	3,411
Developing Communities (listed below)				
Creekview	579	380	2,011	418
Sierra Vista	6,106	4,797	8,769	9,003
West Roseville	8,831	2,688	10,478	3,251
Established Communities Amoruso Ranch ¹	46,499	80,585	47,170	91,265
Jurisdiction Total	0 64,901	0 97,547	3,011 74,942	1,463 129,203
Julisuiction Total	04,301	37,347	74,542	129,203
Placer County				
Established Communities	10,234	22,208	13,389	65,493
Auburn Sphere of Influence Area	8,260	14,773	10,342	19,710
Colfax Sphere of Influence Area	597	367	1,111	404
Developing Communities (listed below)				
Bickford Ranch	1,435	73	1,890	312
Placer Vineyards	8,037	3,007	14,132	9,037
Regional University	2,781	349	4,387	1,868
Riolo Vineyards Rural Residential Communities	934	150	933	166 27.254
	26,143	8,593	50,371	27,254
Placer Ranch ¹	0	0	6,740	20,155
Curry Creek ¹	0	0	unknown	unknown

Attachment A - Table 2 Revised April 2, 2014				
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**
Squaw Village	0	0	750	unknown
Jurisdiction Total	58,420	49,521	104,047	144,399
Citrus Heights Center and Corridor Communities (listed below) Sunrise	1,815	7,217	1,815	7,217
Riverside-Auburn Blvd (The Boulevard Plan)	1,070	3,113	2,025	4,926
Established Communities	37,012	13,440	37,012	13,457
Jurisdiction Total	39,897	23,770	40,852	25,601
Elk Grove Center and Corridor Communities (Old Town Plan area)	69	939	69	1,039
Established Communities	46,860	34,055	47,296	35,518
Rural Residential Communities	5,756	1,586	5,876	1,485
Developing Communities (listed below)	3,730	1,300	3,670	1,400
Laguna Ridge Lent Ranch	7,590 280	4,281 3,222	7,826 280	4,291 4,400
Southeast Planning Area	4,102	3,493	4,790	5,101
Sterling Meadows	950	0	1,184	0
Triangle Special Plan	403	43	701	342
Jurisdiction Total	66,010	47,619	68,022	52,176
Folsom				
Center and Corridor Communities	2,186	10,833	2,196	12,659
Established Communities	27,230	35,996	29,248	41,328
Developing Communities (listed below)				
Folsom South Area Jurisdiction Total	6,688 36,104	1,291 48,120	10,210 41,654	13,619 67,606
Galt				
Center and Corridor Communities (Downtown and Lincoln Corridor)	481	2,804	501	3,299
Established Communities	9,322	4,960	9,331	9,233
Developing Communities (listed below) Eastview	1,091	0	2,000	140
Remaining SOI	0	385	5,577	24,040
Jurisdiction Total	10,894	8,149	17,409	36,712
Isleton				
Established Communities	443	159	510	171
Villages on the Delta ¹	0	0	300	0
Jurisdiction Total	443	159	810	171
Rancho Cordova				
Center and Corridor Communities	10,956	20,469	8,228	40,763
Established Communities Developing Communities (listed below)	18,182	53,670	18,213	66,798
Arboretum	571	96	8,763	3,488
Ranch at Sunridge	2,296	355	2,713	358
Rio Del Oro	8,057	4,325	11,601	12,558
Suncreek	1,834	185	4,893	1,404

	nt A - Table 2 April 2, 2014			
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**
Sunridge	7,571	2,170	8,763	3,563
Westborough	756	201	6,078	5,444
Jurisdiction Total	50,223	81,471	69,252	134,377
Sacramento				
Center and Corridor Communities (listed below)				
Blue Line Seg 1 (American River to Swanston)	4,205	11,745	6,054	14,525
Blue Line Seg 2 (Marconi)	1,890	1,341	1,890	1,354
Blue Line Seg 3 (Roseville Rd/Watt)	27	990	45	2,234
DNA Seg 1 (South Natomas)	6,444	3,608	6,444	3,608
DNA Seg 2 (North Natomas Marketplace)	2,952	8,204	6,195	14,909
DNA Seg 3 (Commerce Pkwy)	5,011	3,447	5,011	3,447
DNA Seg 4 (Greenbriar)	3,314	344	3,448	782
Downtown Sacramento (East of 16th St)	15,276	30,817	16,193	40,109
Downtown Sacramento (West of 16th St)	25,979	105,094	31,401	124,653
Franklin Blvd 1	2,268	3,021	2,268	3,024
Gold Line Seg 1 (39th to 59th)	3,848	8,936	3,907	9,281
Gold Line Seg 2 (65th to Power Inn)	7,641	12,783	7,893	14,045
Gold Line Seg 3 (College Greens and part of watt)	1,375	2,820	2,328	4,765
South Line Seg 1 (Broadway to 47th)	6,124	8,229	6,224	9,907
South Line Seg 2 (Florin)	2,519	3,681	2,519	3,681
South Line Seg 3 (Meadowview to CRC)	10,246	2,655	10,269	2,661
Stockton Blvd 1 (14th Ave to Florin Rd)	3,182	2,922	3,182	2,922
Developing Communities (listed below)	3,101	_,===	3,131	_,=_
Delta Shores	5,077	2,123	5,092	6,678
Established Communities	153,329	150,315	155,253	194,392
Panhandle ¹	0	0	1,375	22
Camino Norte ¹	0	1,140	0	1,140
Jurisdiction Total	260,707	364,215	276,991	458,139
Sacramento County				ı
Center and Corridor Communities (listed below)				
Auburn Blvd/Madison Ave (Auburn North)	1,196	9,886	1,299	11,935
Blue Line Seg 3 (Roseville Rd/Watt)	981	4,126	3,036	4,208
Fair Oaks Blvd 1 (West- Howe to Fulton)	2,472	6,711	2,501	6,890
Fair Oaks Blvd 2 (Central- El Camino to Winding)	3,909	7,981	5,209	10,292
Fair Oaks Blvd 3 (East- Fair Oaks Village Area)	1,168	2,801	1,209	3,000
Florin Rd	2,343	8,575	6,933	12,487
Franklin Blvd 2	3,258	5,059	3,793	5,677
Fulton Ave (Fair Oaks to Marconi)	764	8,651	1,041	8,881
Gold Line Seg 4 (Watt to Butterfield)	9,381	15,531	12,701	16,962
Gold Line Seg 5 (Hazel/Easton)	2,613	8,352	4,202	19,411
Gold Line Seg 6 (Folsom Blvd in Folsom)	0	1,214	0	1,214
Greenback Ln 2 (Sunrise to Main)	2,269	4,625	2,333	4,640
Stockton Blvd 1 (14th Ave to Florin Rd)	1,079	401	1,107	387
Stockton Blvd 2 (Florin Rd to Mack Rd)	4,453	4,884	5,825	5,627
Watt Ave 1 (Central- Auburn Blvd to Arden Wy)	2,924	13,303	3,169	13,419
Watt Ave 2 (N. Watt & W of Watt- Madison to Antelope)	8,360	12,186	8,415	12,231
Developing Communities (listed below)				
Elverta	1,507	344	4,950	404

	nt A - Table 2 April 2, 2014			
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**
Florin Vineyard	2,552	1,528	9,919	6,243
Glenborough at Easton	3,262	1,795	3,239	1,796
West Jackson	5,150	4,167	15,658	32,839
North Vineyard Station	3,292	379	6,063	563
Mather South Vineyard Springs	1,039 3,740	239 1,394	3,529 5,942	5,073 764
Vineyard	5,251	1,671	6,610	1,546
Established Communities	182,709	124,251	187,767	195,762
Rural Residential	14,072	11,582	19,015	16,252
Cordova Hills ¹	0	0	9,010	13,556
Jackson Township ¹	0	0	6,143	8,044
Newbridge ¹	0	0	3,075	2,556
Northwest Special Planning Area ¹	0	0	25,000	70,608
Jurisdiction Total	269,744	261,636	368,693	493,266
		, , , , , ,		
Live Oak				
Center and Corridor Communities (downtown)	85	878	336	1,972
Established Communities	3,721	1,029	4,337	2,446
Recent annexation areas north and south ¹	20	40	2,700	7,593
Sphere of Influence Area ¹	324	144	10,900	2,304
Jurisdiction Total	4,149	2,091	18,273	14,316
Yuba City	1 2 2 2	10.005		10.006
Center and Corridor Communities (Central City and Hwy 20 corridor) Established Communities	1,912	10,036	2,076	10,036
Developing Communities (listed below)	27,450	24,002	28,051	29,205
Lincoln East (SOI)	1,024	287	4,865	1,570
South SOI/Hwy 99 Corridor	725	470	725	1,826
Remainder SOI ¹	0	0	7,575	3,493
Jurisdiction Total	31,111	34,795	43,292	46,130
Sutter County				
Established Communities	7,580	4,386	13,650	13,774
Developing Communities (listed below)				
Sutter Pointe	3,489	3,287	17,500	55,045
Employment Centers ¹	0	0	0	14,225
Jurisdiction Total	11,069	7,673	31,150	83,045
Davis				
Center and Corridor Communities (listed below)				
Core Area Plan	419	3,498	424	3,600
Davis Amtrak station	1,696	2,890	1,794	3,253
Nishi	600	414	602	1,497
Established Communities	26,550 29,265	13,637 20,440	27,292 30,112	14,253 22,603
Jurisdiction Total	23,203	20,440	30,112	22,603
West Sacramento				
Center and Corridor Communities (listed below)				
Bridge District	4,127	7,543	4,567	13,715

	nt A - Table 2			
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**
Pioneer Bluff	1,395	3,392	5,757	28,939
Washington	3,076	3,550	2,588	5,693
remaining center and corridor area	3,969	3,195	7,342	21,289
Established Communities	18,633	31,418	21,707	38,436
Developing Communities (listed below)				
NE Village of Southport (Liberty area only)	249	2	1,900	4
SE Village of Southport	836	23	3,433	120
Southport Industrial Park	482	4,203	1,383	4,968
SW Village of Southport	2,849	271	6,501	1,063
Jurisdiction Total	35,616	53,597	55,178	114,228
Winters				
Center and Corridor Communities (Downtown Master Plan)	3	176	50	197
Established Communities	3,063	2,940	4,254	4,940
Sphere of Influence Area ¹	0	0	unknown	unknown
Jurisdiction Total	3,066	3,116	4,304	5,137
Woodland				
Center and Corridor Communities (Downtown and East St Corridor)	1,522	3,470	1,527	4,763
Developing Communities (listed below)				
Spring Lake	4,049	1,527	4,037	1,242
Established Communities	18,946	28,371	18,710	43,106
Potential GP Growth Area ¹	0	0	unknown	unknown
Northern SOI area ¹	0	0	unknown	unknown
Spring Lake Phase 2 ¹	0	0	unknown	unknown
Jurisdiction Total	24,517	33,368	24,274	49,111
Yolo County				
Center and Corridor Communities (UC Davis)	2,646	20,702	2,646	29,134
Established Communities	7,641	9,797	9,189	13,541
Dunnigan ¹	0	0	9,230	10,656
Elkhorn ¹	0	0	0	9,553
Madison ¹	0	0	1,335	250
Knights Landing ¹	0	0	800	100
Jurisdiction Total	10,287	30,499	23,200	63,234
Junistiction Total	10,207	30,433	23,200	03,234
Marysville				
Center and Corridor Communities (Downtown Economic Development Strategie	386	2,913	435	3,344
Established Communities	5,334	6,387	5,356	6,197
Jurisdiction Total	5,720	9,300	5,791	9,541
Wheatland				
Center and Corridor Communities (downtown area)	109	55	113	55
Established Communities	1,319	901	1,667	761
Developing Communities (listed below)				
Various specific plans in city limits	612	465	1,325	1,296
Nichols Grove (SOI)	436	243	1,609	243
Hop Farm/Johnson Rancho (SOI) ¹	0	0	14,369	7,861
Jurisdiction Total	2,476	1,664	19,083	10,215

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Revised A	April 2, 2014		ı	T
Jurisdiction/Community Type	Estimate of Total Housing Units Built in the Current MTP/SCS by 2035*	Estimate of Total Employees in the Current MTP/SCS by 2035*	Estimate of Total Housing Units at Build Out**	Estimate of Total Employees at Build Out**
Yuba County				
Center and Corridor Communities (listed below)				
North Beale Corridor Reinvestmant Plan	209	1,182	209	1,182
Olivehurst Ave	287	299	450	548
Established Communities	9,854	4,560	13,147	6,058
Established Communities (Beale AFB)	185	6,444	126	6,428
Developing Communities (listed below)				
East Linda	4,614	1,274	6,014	4,426
North Arboga Study Area	1,311	137	2,500	2,564
Plumas Lakes	6,548	3,296	18,130	16,176
Highway 65 Employment Center	36	2,709	36	23,730
Magnolia Ranch ¹	0	0	3,302	2,501
Rural Residential Communities	6,421	5,036	12,734	15,775
Woodbury ¹	0	0	unknown	unknown
Jurisdiction Total	29,464	24,937	56,648	79,389
*This information is from the current 2012 MTP/SCS, it has not yet bee **This information is an estimate of build out based on current and profrom the current 2012 MTP/SCS.				ut estimates
¹ Area not designated for new development in the current 2012 MTP/S	CS.			



Item #14-5-**8A** Information

May 8, 2014

2016 MTP/SCS Update: Methodology for Regional Scenarios

Issue: What is the method for developing regional land use and transportation scenarios and what factors are considered in the development of the land use component of the scenarios?

Recommendation: This item will be presented to all three Board committees for information and discussion.

Discussion: In March, the Board adopted a framework for creating and analyzing scenarios (Attachment A) that describes four steps toward development of a draft preferred scenario for the 2016 MTP/SCS. The first step is to create three regional land use and transportation scenarios for the plan horizon year of 2036. In reviewing and adopting this scenario framework, the Board requested more information on the method for creating the regional scenarios, and in particular, more information on the land use component of the scenarios.

Process for Scenario Review

Scenario information is vetted through planning and public works staff at each SACOG member jurisdiction. Last November, local staff provided input on the proposed scope, cost, and timing of transportation investments for consideration in the plan update. The first vetting of land use information occurred in summer 2013, with local staff review of the 2012 existing conditions land uses. The next period of review occurred in winter 2013 with local staff review of the modeled inventory of adopted and proposed local land use plans. Both transportation and land use assumptions for a set of regional scenarios will be vetted through local staffs in July before final model runs and analyses are conducted to prepare for October public workshops. When the Board directs the development of a draft preferred scenario at the end of 2014, SACOG staff will develop a preliminary draft preferred scenario for vetting again through local planning and public works staff, with reasonable opportunity for local elected bodies to provide input on the assumptions in early 2015 if desired.

General Method for Developing Scenarios

The regional land use and transportation scenarios will be built up from scenarios used for the current plan and the information gathered from local government planning and public works staff over the last several months, which started with informational interviews with each government's staff on recent planning activity and project submittals in response to SACOG's call for projects. Because all three scenarios must meet some reasonableness test for CEQA and federal regional transportation planning requirements, they are also subject to "guardrails," or a framework, of land use and transportation constraints. For example:

- All three scenarios will have the same amount of housing, employment and population growth and transportation budget.
- All three scenarios will have a land use pattern paired with a transportation budget and network.
- The land use component of the scenarios will represent a realistic range of possible future development patterns through the year 2036 based on adopted and proposed local plans and policies, market performance information, and regulatory and resource constraints.
- The scenarios will follow the land use and transportation descriptions of the scenarios developed for the current plan:
 - O Scenario 1: The land use pattern has the highest amount of growth in Developing Communities, the least amount of growth in Transit Priority Areas and infill areas, and the highest amount of growth in lower density housing of the three scenarios. In terms of transportation investments, Scenario 1 has the highest investment in new and expanded roads of the three scenarios and the lowest amount of funding for transit and non-motorized transportation.

- o Scenario 2: This is the 2012 MTP/SCS. It is in the middle of Scenarios 1 and 3 on all land use and transportation indicators.
- O Scenario 3: The land use pattern has the highest amount of growth in Centers and Corridors and Established Communities, the most amount of growth in Transit Priority Areas and infill areas, and the highest amount of growth in higher density housing of the three scenarios. In terms of transportation investments, Scenario 3 has the highest investment in transit and non-motorized transportation of the three scenarios and the lowest amount of funding for new and expanded roads.

The land use scenario is developed and then the transportation network is tailored to the land use pattern. For the transportation component of the scenarios, the starting point for Scenarios 1 and 3 will be Scenarios 1 and 3 from the 2012 MTP/SCS, updated to account for newer proposed projects and changes to existing projects. Scenario 2 is the 2012 MTP/SCS. The attached framework for transportation scenario development (Attachment B, updated from the 2012 MTP/SCS) will guide the update of Scenarios 1 and 3.

Methodology for Land Use Allocation

SACOG's process for creating a land use allocation, whether for alternatives scenarios or a preferred scenario, considers a number of policy, regulatory and market factors that can affect the location or rate of development, starting first and foremost with each adopted and proposed land use plan identified and inventoried in consultation with local agency planning staff. The inventory of land use plans forms the basis for allocating housing and employment growth spatially within a jurisdiction. The decision on how much and what kind of housing and employment to allocate is based on an analysis of the other policy, regulatory and market factors. These data are particularly important in assessing development readiness of specific plans and master plans, which, unless they are under construction, inevitably have some amount of local, state or regional entitlement plus infrastructure improvement required in order to begin construction. The following is a sample list of factors considered in the estimation of growth within subareas of a jurisdiction: status of local, state and federal entitlement applications, as applicable; past housing permit activity in the vicinity of the project; major infrastructure requirements; developer readiness to pursue entitlement and construction; proximity to job centers and services; and housing product mix. These and additional factors are described in detail in Attachment C. Not all of these factors are easily quantifiable; SACOG considers factors about each project area in relative terms. In other words, for any given development factor (e.g., major infrastructure requirements), all projects are evaluated relative to each other. The effect of this evaluation is a filtering of projects that are more likely and less likely to build during the course of the plan update, followed by how much growth can be expected.

The process and resulting preliminary draft growth estimate consider each jurisdiction individually. However, the MTP/SCS growth projections are created for the region, so each jurisdiction must also be considered as a share of the regional economy. To do this, the preliminary jurisdiction growth estimate is analyzed and adjusted to achieve the regional projections for housing and employment growth by considering: the jurisdiction's share of regional housing and employment today compared to historical share, what it will be in the future, and what the basis is for the changes; how quickly or slowly the jurisdiction has grown in the past relative to the regional average growth rate and relative to other jurisdictions in the same market area and/or of similar size; how adopted and proposed plans might change the jurisdiction's growth rate from past trends; the amount of growth assumed in the market area; and the jobs/housing ratio today compared to the jobs/housing ratio for the estimated growth.

Summary of Research on Factors Influencing Development

Staff is updating research from the 2012 plan on a variety of development factors in order to have the most up-to-date information for the 2016 plan. Since this research directly informs the land use scenario process, which will begin this month, staff is providing a brief summary on the findings of the research to date and how each factor is likely to affect the regional land use scenarios.

Inventory of Adopted and Proposed Local Land Use Plans: This is the basis for all MTP/SCS scenario development, whether alternatives for CEQA analysis or the draft preferred scenario for the plan. The current inventory shows that there is significantly more residential and employment capacity planned than projected demand.

Floodplains and Levee Improvements: Local governments within floodplains are working toward compliance with state and federal floodplain regulations. The main urban growth areas in the region that are affected by floodplain remapping or levee de-certification include: Woodland, Wheatland, Yuba City, and the Natomas Basin portions of Sacramento, Sacramento County, and Sutter County. The timing of funding and construction of levee improvements is one factor that may influence the timing of construction of land development projects in these jurisdictions. For the purposes of scenario development, floodplain and levee improvement schedules are assumed to affect timing of development.

Habitat Conservation Plans/Natural Communities Conservation Plans Development: With the exception of the Natomas Basin Habitat Conservation Plan, the HCPs and NCCPs in the region continue to be under development. Given the complexity of issues and number and variety of participating parties, there continues to be uncertainty around the completion of each plan. At the same time, almost all development projects located within the HCPs/NCCPs subject to Clean Water Act and Endangered Species Act permitting requirements are pursuing independent permits. The timing of permit issuance is expected to affect the timing of construction of development projects. According to the federal and state resource agencies, the timing of individual permitting versus permitting under a future HCP/NCCP could affect the viability of some projects, because without an approved HCP, the currently identified lands available for mitigation of these projects is not sufficient to mitigate the needs of all of these projects. For the purposes of scenario development, federal and state permit status are assumed to affect timing of development.

Water Supply: Staff is still researching this topic but information gathered so far -- based on discussions with local government planners, the Placer County Water Agency and Regional Water Authority -- indicates that long term (20-year) water supply in and of itself is not likely to be a limiter of growth. Rather, the factors that would have the greatest effect on the timing of development projects are the timing of financing and construction of new treatment, storage and conveyance facilities needed for new development areas, and consideration of the amount of development that could be built before significant investments in water infrastructure are needed. Staff is still gathering information on the timing aspects of water infrastructure (i.e., which projects have sufficient water supply and infrastructure available such that a large percentage of a project could be constructed in the next four years).

Housing Market Trends: A housing market trends white paper was written to support the 2012 MTP/SCS. Research is underway to update the literature review for that paper. A review of literature to date on local and national housing market and demographic trends, as well as consultation with the development industry, points to a continuation of the trends identified in the 2012 paper. The biggest issue arising out of this research is housing affordability: what kind of housing can the private sector afford to build that households can afford to buy or rent. For the purposes of scenario development, this affects the type and location of new housing.

Approved by:

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MM:KL:gg Attachments

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MTP/SCS Framework: Approach to Creating and Analyzing Scenarios

Consistent with the Board's direction to focus this MTP/SCS update on implementation issues, the following approach will be used to create and analyze scenarios to inform the 2016 MTP/SCS update. The scenarios developed in this process will be used to illustrate trade-offs and effects of different development patterns and transportation investments compared to the adopted MTP/SCS. In keeping with the implementation themes of the plan update, the scenarios will be used in the following ways: to inform discussions of the Board, stakeholders, member and partner agencies, and public workshop participants on policy issues of the plan update; as alternatives for the environmental impact report; as the basis for making necessary refinements to Scenario 2 (the adopted MTP/SCS).

- 1. Three scenarios for plan horizon year 2036 will be based on the current plan plus two updated/refined scenarios from last plan cycle.
 - Discussion: Scenarios should bracket a reasonable range of possible futures, taking into account all major market and policy/regulatory influences. All scenarios are designed to represent reasonable possibilities of what might occur (i.e. not idealized futures driven solely by 1 or 2 considerations to the exclusion of others). The three scenarios analyzed last time met this real world test, and varied principally by how much housing and transportation choice they created. The S\scenario (#3) with the most use of a range of transportation modes had the most amounts of new development in Centers and Corridors and Established Communities and attached housing. On the other end, the scenario (#1) with the least use of transportation modes other than the automobile had the most amounts of new development in Developing Communities and Rural Communities and large lot single family housing. The final plan adopted by the Board was most like the scenario in the middle (#2), but it included elements of both Scenarios #1 and #3 based on input from our members, the public and stakeholders and technical analysis. (See attached Table to compare the adopted MTP/SCS with the three scenarios analyzed during that plan's development process.)

For the 2016 MTP/SCS update staff suggests that the existing MTP/SCS be one of the scenarios, with the other 2 scenarios being similar to the first and third Scenarios from the last plan cycle, refreshed and updated to reflect relevant actions and trends that have occurred in the interim. For example, the updated Scenario 1 would have similar amounts of new growth in each of the 4 community types as Scenario 1 from the last plan cycle, but the specific properties forecasted to be developed within each community type would differ at least to some extent based on local government land use approvals since the last plan, market trends, and the intentions and capability of the property owners/developers. Similarly this updated Scenario 1 would have similar amounts of housing growth in the lower density and higher density housing types as Scenario 1 from the last cycle, though they may be located to some extent in different places. A preliminary look at the data leads staff to believe that this approach likely creates sufficient flexibility to ensure that the Plan and EIR documents this cycle analyze a reasonable range of alternatives that might be likely to occur.

While this step will be important, we are trying to keep the level of effort contained so that it is possible to maximize the effort available for Step 2.

- 2. Analyze different timing to construction of transportation and land use components of current MTP/SCS. Discussion: Key components of the Board's December 2013 action focusing this plan cycle on implementation issues were to explore the full potential for a "fix-it-first" investment strategy, and to analyze whether there are reasons to alter the timing that land use and transportation projects in the current plan should be constructed. In other words, even if the end state in 2035 (now 2036) was the same, does it make a difference how (in what order) the region builds the projects that lead to that end condition? Staff has done some very preliminary thinking on this topic and believes that in some areas differences in timing might have a substantial impact on the life cycle costs and benefits of the plan. To illustrate the point at the extremes, there may be significant differences in variables such as total new lane miles, vehicle miles traveled, air pollution and water use from first building the growth forecast in the plan for Rural Communities and Developing Communities versus first building the growth forecast for Centers and Corridors and Established Communities. SACOG has never focused on this type of information when constructing the plan (except to ensure compliance with federal clean air act and SB 375 standards) and staff believes it could really help the Board and stakeholders focus on new policy issues that might improve life cycle plan performance (i.e. even if the end state in 2036 remained substantially the same as the current plan).
- 3. Analyze different levels and types of transportation revenue
 Discussion: Every plan cycle SACOG must refresh its revenue assumptions, consistent with federal
 requirements that our plan contain "reasonably reliable" revenues. Mainly this involves scrutinizing
 existing, long-term revenue streams like federal, state and local transportation taxes and local
 development fees, but within reasonable limits it can also involve new future revenue streams that we
 forecast to be available in the plan. Staff suggests that this revenue analysis first be focused on the
 currently adopted MTP/SCS (i.e. will we have the same, more or less revenues to build the projects
 included in the plan?). Then, if the scenario and timing analyses conducted under #1 and #2 above
 indicate there may be a need for new revenue (which seems likely), that we analyze the merits and
 viability of a focused list of new revenue sources. For example, the following new revenue sources are
 potential candidates for consideration: state cap and trade revenue, new local transportation sales
 taxes, statewide vehicle registration fee.
- 4. Prepare draft plan scenario

Discussion: Based on input from public workshops, stakeholders (including our cross-sectoral working group), member and partner staff and Board members over the next several months staff will create by the end of 2014 a framework for a draft preferred scenario for Board consideration that includes both the end state condition in 2036, and a timing sequence for building the transportation network and estimating when development projects will be constructed.

	Land Use Inputs	Scenario #1	Scenario #2	Scenario #3
			(Adopted MTP/SCS)	
	Share of growth in Center & Corridor			
1	Communities	19%	30%	36%
	(percent of new homes)			
_	Share of growth in Established Communities	200/	260/	270/
2	(percent of new homes)	30%	26%	27%
3	Share of growth in Developing Communities	46%	42%	35%
3	(percent of new homes)	40%	4276	33/6
	Share of growth in Rural Residential			
4	Communities	5%	1%	2%
	(percent of new homes)			
5	Share of growth in large-lot single-family homes (percent)	39%	28%	25%
6	Share of growth in small-lot, single-family homes	30%	200/	220/
6	(percent)	30%	28%	23%
_	Share of growth in attached homes	240/	420/	F 20/
7	(percent)	31%	43%	52%
			Scenario #2	
	Transportation Inputs	Scenario #1	(Adopted MTP/SCS)	Scenario #3
8	New or expanded roads	220/	2007	2004
	(lane miles, percent increase from 2008)	32%	29%	26%
9	Transit service	54%	98%	127%
	(Vehicle Service Hours, percent increases from			

	2008)			
10	Funding for transit (\$\\$ in billions)	\$10.7	\$11.3	\$13.7
11	Funding for road, bike and pedestrian maintenance (\$ in billions)	\$10.9	\$11.3	\$11
12	Funding for new road capacity (\$ in billions)	\$8.7	\$7.4	\$6.7
13	Funding for bike and pedestrian street and trail improvements (\$ in billions)	\$2.8	\$3.0	\$3.0
14	Additional miles of bicycle paths, lanes and routes (Class 1, 2 and 3 = 1,700 in 2008)	800	1,100	1,300
15	Funding for Programs (\$ in billions)	\$1.5	\$2.2	\$1.7

			Scenario #2	
	Performance Outcomes	Scenario #1	(Adopted MTP/SCS)	Scenario #3
16	Square miles of farmland converted to development (4,166 square miles of farmland in 2008)	93	57	50
17	Square miles of vernal pools affected by development	9	7	7
18	Share of new homes near high-frequency transit (percent of new homes)	22%	38%	35%
19	Share of new jobs near high-frequency transit (percent of new jobs)	26%	39%	44%
20	Transit costs recovered by ticket sales (percent)	38%	38%	51%
21	Total homes in environmental justice areas near high-frequency transit (percent of homes, 30% in 2008)	43%	55%	47%
22	Share of trips by transit, bike or walk (percent increase per capita from 2008)	12%	33%	31%
23	Vehicle miles traveled (VMT) (percent change per capital from 2008)	-6%	-6.9%	-9%
24	Vehicle miles traveled in heavy congestion (percent of total VMT)	5%	6%	7%
25	Travel time spent in car per capita (percent change from 2008)	-3%	-4%	-4%
26	Weekday passenger vehicle CO ₂ emissions (percent change per capita from 2005)	-14%	-16%	-17%

TRANSPORTATION FRAMEWORK FOR ALTERNATIVE SCENARIOS FOR THE MTP/SCS UPDATE

At the March 2014 Board meeting, a general approach was adopted for creating scenarios for the 2016 MTP/SCS update. The approach relies on updating Scenarios 1 and 3 from the 2012 MTP/SCS analysis, and treating the current MTP/SCS as Scenario 2. Practically speaking, the update of the transportation components of Scenarios 1 and 3 will focus on changes to transportation projects since the 2012 MTP/SCS was adopted: adding in newly proposed projects, and updating descriptions/costs of projects that have changed. Additionally, all scenarios must "fit" into the budget, which may require delaying some projects.

This document provides more background and detail on the transportation options that made up the scenarios for the 2012 MTP/SCS, and that will be used to update Scenarios 1 and 3 for use in the 2016 MTP/SCS. The options in this document were originally described for the Board in June 2010 and adopted by the SACOG Board as part of the 2012 MTP/SCS scenario development.

Transportation Options

Table 1 lists the transportation options that were used to define the three 2012 MTP/SCS scenarios. More detailed definitions of each option are provided in the following pages.

Local Streets Bridges and Scenario Name Land Use Ped/Bike Transit Freeways Sample Compact Shuttles Bike Lanes ITS Projects/ Development Commuter bus Auxiliary Lanes Sidewalks/Paths Measures Mixed Use Fixed route bus HOV Lanes ITS Development in BRT Interchanges Complete Streets Transit Priority Street car Bridges Street widening Areas LRT New Mixed Flow

Table 1. Transportation Project Options for MTP/SCS Scenarios

Revised excerpt of memorandum to SACOG Board, June 2010.

Data and Information Used in Developing Transportation Scenarios

A few key guiding principles for combining transportation options and land use scenarios were used to form the three scenarios for the 2012 MTP/SCS analysis:

- Varying the amount of direct corridor improvements, transit investment, and road rehabilitation funding levels to support rural mobility
 - o Scenario 1 provides opportunities to increase capacity on select rural corridor segments with growing urban traffic near the urban/rural edge.
 - Scenarios 2 and 3 have higher levels of inter-community transit investments and road rehabilitation funding to support investments in closing shoulder gaps and intersection improvements that make corridors safer and support farm-to-market travel.

- Varying the amount and type of growth within transit corridors, to support higher (or lower) levels of transit service.
 - o Scenario 1 provides opportunities for expanded coverage of transit services, relative to Scenario 2 and 3.
 - o Scenario 3 provides more opportunities for higher frequency/higher capacity transit, relative to Scenarios 1 and 2.
- Varying the mix of complete streets projects among the scenarios.
 - o Scenario 1 has a relatively greater share of complete streets projects in new growth areas.
 - O Scenario 3 has a relatively greater share of complete streets "remodeling" projects in the currently urbanized areas.
- Varying the amount of demand management and Intelligent Transportation Systems (ITS) among the scenarios.
 - o Scenario 3 relies more on demand and system management options (e.g., ITS) than Scenarios 1 and 2.
- Varying the balance of transportation options targeted to alleviating existing or future bottleneck locations.
 - Scenario 1 has a relatively greater share of projects intended to alleviate future bottlenecks, compared to Scenarios 2 and 3.
 - o Scenario 3 has a relatively greater share of projects intended to alleviate existing bottleneck locations in the currently urbanized areas, relative to Scenarios 1 and 2.

Outlined below are data, standards and thresholds which were used to develop Scenarios 1, 2 and 3, based on the guiding principles.

Transit-Oriented Development. It has long been understood that the land use and demographic characteristics in a corridor affect its potential for supporting transit, and the type of transit which may be appropriate for the corridor. The following factors have been shown to influence the transit ridership and productivity of different types of transit service in transit corridors: density of development, with higher density supporting higher frequency and capacity transit services; the mix of uses, with better mix of uses allowing transit to be used for non-work and non-peak period trips; the income demographics of residents, with lower income residents more likely to utilize transit service; the prevalence of paid parking, with higher levels of paid parking generating more transit ridership; and block size and street pattern, with smaller block sizes and finer street networks supporting higher levels of walk access to/from transit. Table 2 summarizes metrics to evaluate transit-supportive land uses.

Table 2. Land Use / Transit Service Integration Guidelines

Factor	Metric	Thresholds	
		< 4 du / res acre: >60 minute service	
	Dwelling units per	< 5,000 people/sq mi	
D ''	residential acre		
Density		4-15 du / res acre: 15 to 60 minute service	
		5,000 – 15,000 people/sq mi	
	Population / square		
	mile	>15 du / res acre: 15-or-less minute service	
		>15,000 people/sq mi	
	Mix index	Greater than average mix supports midday,	
Mix of Use	With index	evening service	
Income	Median household	Lower than average income supports more	
Demographics	income	frequent service, midday and evening service	
Street Pattern /	Intersection	Smaller block size supports walk access	
Block Size	density	Smaller block size supports walk access	
	Total employment	>50,000 jobs + >20 jobs / empl acre + paid	
	at center	parking = high capacity bus or rail	
Serves	Employment	parking – night capacity bus of ran	
Major density at center		250,000 jobs or 20 jobs / ampl core =	
Jobs	Paid parking	<50,000 jobs or <20 jobs / empl acre = conventional express bus	
Center	at center	Conventional express ous	

Complete Streets Opportunities. There is no cookie cutter for complete streets projects, but there are some common elements. Complete streets projects are intended to serve multiple modes and users, so complete streets opportunities exist where there is a likelihood of multiple types of users. Table 7 lists six user groups to be considered in a complete street project (passenger vehicles, transit vehicles, transit passengers, pedestrians, bicyclists, trucks or commercial vehicles). In some areas, streets may serve high volumes of all six user groups (e.g., arterial streets in urban core areas). In other areas, two or three of these user groups may be served—for example, in a commercial district of a smaller town, overall traffic volumes may be lower, and transit users (both transit vehicles and passengers) may be few in number, but streets may serve significant volumes of automobiles, delivery trucks, pedestrians, and bicyclists. Some rural roadways may serve automobiles, farm vehicles, and also cater to recreational bicyclists. Opportunity areas for complete streets consider adjacent land uses (mix of uses, density, etc.), presence of transit, likelihood of high volumes of pedestrians and bicyclists, and overall traffic volumes. Many of the same metrics shown in Table 2 also apply to identify opportunities for higher-intensity complete streets projects, since transit-oriented development generates higher levels of pedestrian use, and higher numbers of transit passengers and vehicles.

<u>Bottleneck Locations</u>. For purposes of the MTP/SCS scenarios, these areas are characterized by congestion which persists for three hours or longer during peak periods of demand. Indications of congestion are: on freeways, average speeds 35 miles per hour or below and stop-and-go driving; on surface streets, average speeds 20 miles per hour or below average over longer stretches of roadway, and long queues at intersections with waits through one or more signal

cycles. Traffic counts showing volumes within 5 percent of normal hourly capacity for three successive hours during peak demand periods are evidence of bottlenecks. Table 3 summarizes the thresholds.

Table 3. Roadway Bottleneck Indicators

Variable	Metric	Threshold
Traffic Volume	Daily Traffic Per Lane	>15,000 for freeways
		>6,000 for surface streets
		Hourly volumes per lane > 95% of
Duration of congestion	Peak spreading	capacity for 3 successive hours
Delay	Travel Speed	<35mph for freeways
		<20 mph for arterial streets

Definitions of Transportation Options

Below are more detailed definitions of transportation options that may be updated in the transportation scenarios. For projects in the current MTP/SCS that are carried over to the transportation scenarios for the 2016 plan update, these options will be used to tally investment levels by different types of projects. Planning-level descriptions of any new projects added to the transportation scenarios will be based on these definitions.

<u>Transit Service Types</u>. Six service types focused on local or intra-regional service may be updated in varying degrees: shuttles, commuter buses, conventional fixed route buses, bus rapid transit, street cars, and LRT. Table 4 provides service characteristics of these types. Two primarily inter-regional service types are included in the scenarios as well: conventional intercity rail and high-speed rail.

<u>Bike Lanes, and Pedestrian Paths</u>. The conventional definition of bike lane types in the Caltrans design manual are used: Class I, II, and III lanes.

<u>Intelligent Transportation Systems (ITS)</u>. ITS includes options for efficient management of arterial roadways, freeways, and connections between them. For local streets, these options conform to the ITS America definition of "Arterial Management", with emphasis on the surveillance, traffic control, and information dissemination functions. The existing agency transportation management centers and STARNET provide the basis for expanded implementation (see Table 5).

<u>Demand Management</u>. Includes policies, programs, information, services, and tools that increase overall system efficiency by encouraging a shift from single-occupant vehicles to non-single-occupant modes or a shift of auto trips out of peak periods. see Table 6).

<u>Complete Streets</u>. A complete street is a street designed with features and amenities (not merely accommodations) for as many users of the street as can reasonably be expected, based on the surrounding land uses, transit system, and other factors. There is no single design for a complete

street. A complete street in a rural area, for example, will look much different from a complete street in a denser, urban area. Information from the National Coalition for Complete Streets is used to identify complete streets strategies that work in different contexts. The key elements of complete streets are listed in Table 7.

<u>Conventional Street Widening</u>. A conventional street widening is the addition of a lane to a surface street connecting between two or more intersections, along with improvement of other facilities along the street such as addition of Class 2 bike lanes, sidewalk improvements, ramps at crosswalks, etc. Conventional street widenings are implemented to address congestion on roadway segments where bicycle, pedestrian, or transit volumes may not be high enough to justify higher level, multi-modal amenities typically associated with a complete street improvement.

<u>Freeway Auxiliary Lane</u>. Lanes that connect from an on-ramp lane at one interchange to the next downstream off-ramp are defined as freeway auxiliary lanes. Lanes of this sort can greatly improve operations in congested freeway segments, allowing greater distance for vehicles exiting or entering the freeway main line lanes to merge. This extra distance is especially useful for trucks and larger vehicles entering or exiting the freeway.

<u>High Occupancy Vehicle Lanes</u>. HOV lanes are the most common sort of managed lanes. For purposes of MTP/SCS scenarios, HOV lanes are conventional HOV lanes as they are currently implemented in the region, i.e., operating 6:00 to 10:00 AM and 3:00 to 7:00 PM, limited to two-plus carpools and transit vehicles, with no barrier separations.

<u>Freeway Interchanges</u>. Freeway interchanges are points where access is provided between local surface streets and freeway or restricted access facilities. Interchanges can be simple (e.g., a standard "L-9" or "split-diamond" configuration), or very complex (e.g., the recent improvements to the I-80 / Douglas Boulevard interchange in Roseville). Other physical or operational features can be included with interchanges (e.g., ramp meters, HOV bypass lanes, or direct-to-HOV-lane-ramps). New interchange projects are often accompanied by auxiliary lane developments (e.g., auxiliary lanes added from the last upstream interchange or to the next downstream interchange). Where present, these additional features are called out separately.

<u>River Crossings</u>. Although many structured spans of roadway or rail exist in the region, for purposes of the MTP/SCS, bridges refer to structured spans that cross major rivers in the region (American, Sacramento, Feather, Bear, Yuba rivers, or the Yolo Causeway), and accommodate high volumes of travelers. Roadway or other structured spans that cross minor rivers or creeks, or are constructed as part of a freeway interchange project, are included with the roadway or interchange project, and are not tallied or described separately as "river crossing" projects. Table 8 provides a listing of river crossings that were in place in 2008 (the base year for the current MTP/SCS). Future spans that accommodate similarly high volumes of travelers may be included in scenario updates.

<u>Freeway Mixed Flow Lanes</u>. Any new, unrestricted lane that continues through at least one interchange (i.e., the lane does not meet the definition of a "freeway auxiliary lane" above), or that connects to an existing mixed flow lane, and effectively extends the existing lane, is

described and tallied as a new mixed flow lane addition.

Other Projects. The listing of project options defined above covers the vast majority of projects included in the current MTP/SCS. However, other project options are present in the current plan in significant numbers, and are likely to be included in the update of MTP/SCS scenarios:

- Freeway Operations Improvements—Projects that add new lanes, extend existing lanes, or make other improvements that are not freeway auxiliary lanes or mixed flow lanes, will be grouped together as operations improvements. Examples: an extension of an existing off-ramp further upstream, but not connecting with the next upstream off-ramp; adding an on-ramp lane, but not connecting the lane through to the next downstream off-ramp.
- Intersection Operational Improvements—A project that adds auxiliary lanes to a surface street intersection in order to accommodate expected queues of vehicles at peak demand times is an example of a common intersection improvement, which does not meet the definition of a street widening or a complete street.
- Safety Projects—A project for which the primary purpose is amelioration of an existing safety problem, and which does not meet the definition of a street widening, freeway auxiliary lane project, or freeway mixed flow lane project, is defined as a safety project.

<u>Bottleneck Locations</u>. Bottleneck locations are segments of the roadway system that are heavily congested for long periods of time during normal weekdays. Indications of bottleneck conditions are: slow speeds or stop-and-go conditions for long periods within commute hours; long queues at intersections, with waits through one or more signal cycles. Additionally, bottlenecks must serve high volumes of travelers, relative to their facility type.

Table 4. Transit Service Types

	Table 4. Transit Service Types						
Service Type	Vehicle Type	Operating ROW or Guideway	Operating Speeds	Station/Stop Characteristics	Station/Stop Spacing	Service Frequency	Capacity
Shuttle	Vans, small buses	Surface streets	With traffic, plus stops (ranges 10-25 mph)	Potential route deviation; some urban bus stops	Varies	Varieslikely 30+ minute headways	10-15 passengers per vehicle
Commuter Bus	Commuter Bus	Freeways, state highways, surface streets	Line haul on HOV lanes (55+ mph); varies with traffic on freeway and surface streets	Park-and-ride lots and home end; urban bus stops at work end	Wide spacing + long line hauls	Peak periods only	40-45 passengers per vehicle
Conventional Fixed Route Bus	Urban bus	Surface streets	With traffic, plus stops (ranges 10-25 mph)	Curbside urban bus stops	1/4 to 1/2 mile	Varies 10+minutes; potential day-long coverage, with late Evening service	35-45 passengers per vehicle
BRT	Varies: Urban bus to articulated buses or "trains on rubber tires"	Varies: Surface streets to busways	Varies: with traffic + operational improvements (15-30mph average)	Varies: urban bus stops, some loading platforms	1/4 to 1/2 mile for "low" BRT; 1/2+ for "high" BRT	Varies- 10+minutes; potential day-long service, with late evening service	Varies: 35-45 for "low" BRT; 60-90 for articulated vehicles
Streetcar	Smaller train cars	Rail-in-street, some exclusive rail	With traffic, plus stops (ranges 10-25 mph)	Varies: some curbside or median stops, some stations	1/4 to 1/2 mile	Varies 10+minutes; potential day-long coverage, with late evening service	Varies by length of trainlikely smaller than LRT
Light Rail	Light rail vehicles	Exclusive rail, some rail-in- street	On exclusive guideway up to 60mph; averages 20-40mph with stops	Major transfers to local bus; park-and- ride lots at some stations	1/2 to 1 mile	Varies 10+minutes; likely day-long coverage, with late evening service	125 - 600 passengers per train length
Intercity Rail	California car	Shared with freight rail, or exclusive heavy rail	Up to 70mph; averages 50mph with stops	Major intermodal transfer points to local service; park- and-ride lots at most stations	10-20 miles	Varies High weekend demands	Varies by length of train
High Speed Rail	TBA	ТВА	ТВА	ТВА	ТВА	ТВА	Varies by length of train

Table 5. ITS Options

Arterial or Freeway ITS Option	Candidate Locations
Arterial Management	Major arterial roadways
Ramp Metering	On ramps in congested freeway segments
Variable Message Signs	High volume decision points
Active Traffic Management	Freeways, major non-freeway locations (e.g. river crossings)
Incident Management	High volume locations; high accident locations
Integrated Corridor Management	Combined freeway / LRT / major parallel arterial corridors
Traveler Information	Areawide, with targeted traveler markets

Table 6. Demand Management Options

Demand Management Option	Examples	Candidate Locations
Transportation Management Agencies	TMA's currently operating in region	Large employment centers
Work-Based Incentives	Transit fare subsidies; non- motorized travel subsidies; carpool subsidies	TMA's, large individual employers
Work-at-Home and Alternative Work Week	9/80 or 4/10 schedules; video conferencing	Regionwide
Vanpool Support	SANDAG vanpool program	TMA's, large individual employers
Car-Sharing Programs	Zipcar	Large employment centers
Accountability / Program Evaluation		Regionwide

Table 7. Complete Streets and Corridor Elements

User Groups	Design features	Operational features
Light Passenger Vehicles (Cars and light duty trucks)	 Appropriately sized travel lanes in urban areas & shoulders on rural corridors with heavy traffic Physical barriers (e.g., medians) 	 Traffic signal coordination Real-time monitoring of conditions
Transit Vehicles	 Appropriately sized travel lanes Efficient access to/from stations and stops and travel lanes 	Queue jumpsSignal priority
Pedestrians	 Appropriately sized sidewalks or separate/parallel paths, free from obstructions Well-placed crosswalks Spatial/physical separation from vehicle travel lanes Bulbs, curb extensions, etc. 	
Bicyclists	Bike lanes or pathsLockup/storage facilities	■ Bike detectors
Transit Passengers	 Shelters/street furniture at stations/stops Efficient, convenient access to/from stations/stops and vehicles 	 Real-time transit information at stations/stops
Commercial Vehicles	 Accommodation for deliveries, etc. on commercial streets Geometric intersection design improvements and turn-outs to support farm vehicles on roadways serving agriculture areas 	

Table 8. Major River Crossings in the SACOG region in 2008

Description	Lanes	Weekday Volume
American River		
Rainbow Bridge	2	38,027
Lake Natoma Crossing	4	32,986
Hazel Avenue Bridge	4	48,260
Sunrise Boulevard Bridge	6	89,281
Watt Avenue Bridge	6	93,083
Howe Avenue Bridge	4	68,056
H Street Bridge	4	43,096
Capital City Freeway	6	172,373
State Route 160	6	55,000
Interstate 5	10	204,000
American River Subtotal	52	844,162
Sacramento River		
Interstate 5 between Sacramento and Yolo Co.	4	52,926
Interstate 80 between Sacramento and Yolo Co.	6	90,252
I Street Bridge/ Railyards	2	12,600
Tower Bridge	4	16,821
US 50 Pioneer Bridge	8	189,000
Sacramento River Subtotal	24	361,599
Yuba River		
State Route 70 S. of Marysville	6	63,806
Feather River		
5th Street Bridge between Marysville and Yuba City	2	31,427
10th Street Bridge between Marysville and Yuba City	4	45,258
State Route 99 N. of SR70/99 "Y"	4	15,882
Feather River Subtotal	10	92,567
Bear River		
State Route 70 over Bear River	2	19,486
State Route 65 E. of Bear River	4	20,516
Bear River Subtotal	6	40,002
Other		
Interstate 80 Yolo Causeway	6	150,000
All Crossings	104	1,552,136

Source: SACOG, updated in 2014

Methodology for MTP/SCS Jurisdiction-Level Land Use Allocation Last updated: May 5, 2014

Purpose: The purpose of this document is to provide specific information about how jurisdiction-level growth allocations are developed for MTP/SCS land use scenarios.

1. Creating Jurisdiction Growth Estimates

SACOG's process for creating a land use allocation begins with creating housing and employment growth estimates by jurisdiction. The following is a description of how SACOG creates housing unit and employee scenario allocations for a jurisdiction in the MTP/SCS.

a. What do base line and historic residential and employment growth trends indicate about a jurisdiction's potential long-term growth?

First, SACOG assembles all of the numerical data considerations available and relevant to each jurisdiction. This data is not intended to be definitive; it is the best available useful information that is considered as part of the analytical process that leads to the jurisdictional growth estimates. This includes jurisdiction-level summaries of:

• Baseline data

- o Total number of housing units and employees today (2012);
- o Jobs/Housing ratio today (2012);
- o Percent of regional growth share for housing units and employees today (2012).

Historic reference data

- o Annual, five-year average and ten-year average historic residential building permits;
- o Percent of regional five-year and ten-year residential permits;
- O An extrapolation of the five-year and ten-year building permit averages to estimate 2012-2036 housing unit growth if those past trends defined the future;
- O Historic county-level employment estimates from State of California Employment Development Department;
- o Employment estimates from past SACOG MTP and MTP/SCS base years (2004 and 2008);
- Percent of regional employment estimates from past SACOG MTP and MTP/SCS base years (2004 and 2008);

Capacity data

- o General Plan and specific plan capacity for housing units and employees;
- O How close existing housing units and employees are to reaching the capacity estimate (how close the jurisdiction is to build-out today);
- o Mix of planned employment uses; mix of planned residential uses.

• MTP/SCS data

- o Housing units and employees assumed in the last MTP/SCS;
- o Regional share of growth of housing units and employees in the last MTP/SCS;
- o Job/Housing ratio in the last MTP/SCS;
- O A projection of housing unit and employee growth based on percentage share of growth from the current MTP/SCS applied to the new regional growth forecast.

While local land use plans have a strong influence on the estimated growth pattern, it is more accurate to state that they are the start, not the end, of the process. There are many reasons for this, but essentially the sum of all local policies and regulations never yields a growth pattern exactly consistent with the projected amount of employment and housing growth for the entire region. For example, the current sum of adopted and proposed local plans can accommodate 50 to 60 years of residential and 80 to 90 years of employment growth compared to the 20-year growth rate of the 2016 MTP/SCS update. Additionally, the time horizons of general plans seldom exactly match the time horizon for an MTP/SCS. All of these plans and regulations are also likely to change many times throughout the planning horizon of the MTP/SCS. So assuming that they are, in effect, frozen for two or more decades on the date the MTP/SCS is adopted is not likely to be accurate. For this reason, other policy, regulatory and market information is gathered and analyzed.

b. What other policy, regulatory and market factors might influence the location, shape, and pace of growth within a jurisdiction?

Next, for each jurisdiction SACOG gathers and considers a number of other policy, regulatory and market factors that can affect the location or rate of development, not all of which are easily quantifiable in a spreadsheet. In addition to local land use plans, other data are gathered and used to assess development readiness of specific plans and master plans, which, unless they are under construction, inevitably have some amount of local, state or regional entitlement plus infrastructure improvement required in order to begin construction.

This information comes largely from local government planning staff at each SACOG member agency, but can also come from other sources. For additional policy and regulatory factors, SACOG consults with other governmental agencies such as flood control agencies, local agency formation commissions, federal and state natural resources agencies, and water agencies. SACOG also reaches out to the development industry through the MTP/SCS cross-sectoral sounding

board—and in this 2016 update has regular meetings with the North State Building Industry Association—to solicit input on the market and regulatory factors influencing development. Again, data gathered through these interactions are not intended to be conclusive by themselves; they are part of the information gathered and considered in the process of creating jurisdictional growth estimates. SACOG considers factors about each project in relative terms. In other words, for any given development factor (e.g., major infrastructure requirements), all projects are evaluated relative to each other. The information considered includes:

- The number and development capacity of greenfield (Developing Communities) and/or infill opportunities (Center and Corridor and Established Communities) in and around the jurisdiction.
 - o For specific plans:
 - Is the plan approved; and what levels of approval does it have?
 - Has construction started on the site?
 - Does the project require annexation through a local agency formation commission (LAFCo)?
 - Are there natural resource issues to consider and does the project require federal and/or state permit(s)?
 - Are there development agreements to consider?
 - Is there pending litigation on the project?
 - Does the plan help or hinder the region's ability to attain air quality conformance under the federal Clean Air Act?
 - Was the plan part of the last MTP/SCS and is there updated information about the plan that should be considered?
 - What type of infrastructure needs to be built to support the development (wastewater treatment plant, water conveyance, highway interchange, etc.)?
 - Are there other specific plans in the area and if so what is their entitlement status?
 - How competitive is the project's location in the regional market/how close is it to job centers and services?
 - How close is the project to existing urban development and/or how far is it from urban development in the future?

- How does the project's mix of housing products compare to projected housing product demand?
- How does the project's mix of employment land uses compare to projected growth in employment sectors?
- How active is the developer(s) in pursuing entitlements?
- General Plan land use policies that may influence the timing, shape and location of development:
 - o When was the plan adopted?
 - o Is the plan currently being updated?
 - o What are the land uses, densities, and intensities allowed?
 - o Are there policies about mixed-use and/or redevelopment?
 - o Are there policies about jobs-housing balance?
 - o Are there policies about infrastructure provision?
 - o Are there agricultural preservation policies?
- Major job centers in or near the jurisdiction (existing or proposed)
- Strength of the current residential market in the jurisdiction's market area
- Strength of the commercial, office and industrial markets in the jurisdiction's market area
- Major infrastructure or natural resource constraints to building (such as water/sewer capacity, flooding, habitat issues, etc.)
- The level of transit service today and planned in the last MTP/SCS
- c. Combining base line and historic data with policy, regulatory and market factors to create a preliminary jurisdiction growth estimate.

The jurisdiction-level base line and historic data are used to estimate a jurisdiction's overall housing and employment growth. The policy, regulatory and market factors are evaluated to assess which subareas and projects within a jurisdiction are more likely and less likely to build during the course of the plan update, and how much of their capacity might be absorbed. Using all of the data and information above, SACOG creates a preliminary draft allocation of housing and employment growth for each jurisdiction.

d. Adjusting the preliminary jurisdiction growth estimates to achieve the regional projections for housing and employment growth.

The process described in steps 1a through 1c and resulting preliminary draft growth estimate consider each jurisdiction individually. However, the MTP/SCS growth projections are created for the region, so each jurisdiction must also be considered as a share of the regional economy. The MTP/SCS land use forecast is bounded by SACOG's regional growth forecast. For the 2016 MTP/SCS, this equates to 287,000 new homes and 479,000 new jobs between 2012 and 2036. These regional housing and employment growth projections are further divided into projections by housing type and employment sector. Therefore, the preliminary jurisdiction growth estimate is analyzed and adjusted to achieve the regional projections for housing and employment growth, by considering the following:

- The jurisdiction's share of regional housing and employment today compared to what it will be in the future, and the basis for the changes;
- How quickly or slowly the jurisdiction has grown in the past relative to the regional average growth rate and relative to other jurisdictions in the same market area and/or of a similar size;
- How adopted and proposed plans might change the jurisdiction's growth rate from past trends;
- The amount of growth assumed in the larger sub-regional market area;
- The jobs/housing ratio today compared to the jobs/housing ratio for the estimated growth.

Creating jurisdictional growth estimates that match the region's growth forecast is an iterative process involving the above steps 1a through 1d. Once preliminary housing and employment growth "targets" are set for all jurisdictions, they are then modeled in a GIS.

2. Modeling the Preliminary Draft Growth Estimates

The primary reasons for modeling the preliminary allocation are to 1) be able to account spatially for the estimated growth, which makes it possible to make further refinements if needed and, 2) to provide the ability to vet all preliminary assumptions with local jurisdictions in an easily understandable format.

Land use scenario software tools are used for developing and comparing land use scenarios; by themselves, they are not projections or forecasting tools. SACOG formerly used I-PLACE³S and is currently transitioning to an open source software called UrbanFootprint. In either case, the software tool is used to spatially allocate development to jurisdictions by subareas (which are defined by local planning areas) to reach the jurisdictional estimates developed according to the land use allocation process described above. If the resulting modeled land use allocation does not match the jurisdiction target of housing and employment growth, both sets of numbers are then analyzed to

determine whether one, or both, should be adjusted. The allocation process is thus an iterative process to achieve a land use scenario that reflects the regional growth forecast.

Once the scenario is modeled, it can be visually displayed in a number of ways and can also be tallied and summarized by different geographies. For the 2012 MTP/SCS land use forecast and accompanying scenarios, SACOG primarily summarized and displayed the dataset using the MTP/SCS Community Types.

3. Vetting Draft Land Use Scenarios

Regional land use scenarios and the draft preferred scenario are vetted through planning staff at each SACOG member jurisdiction. To support local staff's review, SACOG provides jurisdiction-level tabular summaries showing housing and employment estimates for 2012, 2036, and build out capacity at the Community Type level, as well as a corresponding Community Type map. If other summaries, maps, or individual data files are requested, SACOG also provides these. After receiving comments and feedback from the jurisdictions, SACOG uses the new information provided as well as all the data and considerations outlined earlier in this document, to determine if proposed refinements should be made to a scenario. A change in one jurisdiction can affect growth assumptions elsewhere in the region, so when refinements are proposed, all jurisdictions are reanalyzed to determine whether or not the refinements should be made and where other refinements may be required in order to maintain the regional housing and employee growth totals. The revised information is again circulated to local jurisdiction planning staff for review.

Throughout the 2016 MTP/SCS process, SACOG will conduct four review periods directed to local planning staff at various stages of the plan update, with many additional opportunities for review and comment through the regularly scheduled Planners Committee and Regional Planning Partnership meetings and individual meetings or phone calls as requested by jurisdiction staff. The various review periods are summarized below. The first vetting of information occurred in summer 2013, with local staff review of the 2012 existing conditions land uses. The next period of review occurred in winter 2014 with local staff review of the modeled inventory of adopted and proposed local land use plans. The regional scenarios will be vetted through local staffs in July 2014 before travel model runs and analyses are conducted to prepare for October public workshops. After the Board directs the development of a draft preferred scenario at the end of 2014, SACOG staff will develop a preliminary draft preferred scenario for vetting again through local planning and public works staff, with reasonable opportunity for local elected bodies to provide input on the assumptions in early 2015, if they so choose. These review periods are anticipated to occur in February and April of 2015.

4. Creating Interim Year Land Use Forecasts

For the 2012 MTP/SCS, one interim year (2020) was developed using the above-described growth allocation process. The starting point of the 2020 MTP/SCS land use forecast was the 2035 MTP/SCS land use forecast, including all of the assumptions that SACOG developed in coordination with local agency planning staff and the SACOG Board endorsed for use in the 2012 plan update. For the 2016 plan update, interim year forecasts will be developed for the years 2020 and 2035 to satisfy SB 375 requirements, and likely another interim year of 2025 or 2027, in order to support the Board in its exploration of investment timing and strategies.

Most jurisdictions do not grow at a constant rate over time, so each jurisdiction's unique planning and development circumstance must be considered to determine whether its growth is likely to happen faster or slower (e.g., more of its growth between 2012 and 2020 or more of it between 2020 and 2036). The iterative process described earlier in this memo will be used to create jurisdiction level growth estimates for each of the interim periods of the plan. In addition, the process for creating an interim year growth forecast is defined by the longer term 2036 growth rate; in other words, an interim year growth forecast for a jurisdiction, and the region as a whole, must be consistent with the location and rate of growth defined in the horizon year (2036) forecast.



Transportation Committee

Item #14-10-6B

September 25, 2014

2016 MTP/SCS Update: Land Use Forecast Methodology

Issue: How is the land use forecast methodology applied in the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) Update?

Recommendation: None. This item will be presented to all three Board committees for information and discussion.

Discussion: A major component of the MTP/SCS is a forecasted land use pattern based on a regional projection of population, employment and housing growth. This is not only a statutory requirement for the plan, but also an important step in developing the revenue-constrained transportation plan. In order to allocate the transportation budget effectively, it is important to know where housing and employment growth is most likely to occur during the planning period.

In support of the SACOG Board's policy discussions on the update of the plan, and in response to its requests for more transparency in the land use forecast of the MTP/SCS, staff brought a series of land use-related items to the Board committees through the spring and summer. An inventory was discussed of all adopted and proposed local land use plans that comprise the universe of potential development opportunities during the planning period, 2012-2036. Briefings were provided on factors that influence the timing, location, or shape of development: the status of federal entitlements and habitat conversation planning efforts, levee and flood plain mapping status, water infrastructure, airport land use compatibility constraints, and trends in demographics and housing demand.

This item is a follow-up on the question of how all of these and other factors may be applied in an update of the land use forecast of the MTP/SCS. Attachment A describes the factors and range of conditions staff has observed around the region in updating the inventory of local plans. This table was presented to the cross-stakeholder sounding board, Regional Planning Partnership, and Planners Committee for information and discussion. Staff asked for input on the usefulness and clarity of the table and received generally positive and appreciative feedback on it.

SACOG considers these factors about each potential growth area in relative terms; that is, for any given development factor, all projects and growth areas, whether infill or greenfield, are evaluated relative to each other. The regulatory, policy and market factors noted in Attachment A will be used to identify what adjustments might be made to the land use forecast to reflect the continuation of demographic and economic trends at play four years ago while addressing the passage of time and available new information.

Staff seeks committee members' questions and comments on Attachment A. This is being brought to the committees for information in advance of a Preferred Scenario Framework, which will include recommendations on how the land use forecast of the current MTP/SCS should be updated.

Approved by:

Mike McKeever Chief Executive Officer

MM:KT:gg Attachment

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DISCUSSION DRAFT

Attachment A: Factors Considered in Updating the MTP/SCS Land Use Forecast

	Regulatory/Policy and Market Factors	Description of projects assumed to have the highest likelihood to build within 20 years	Middle range of conditions	Description of projects assumed to have the lowest likelihood to build within 20 years
REGULATORY	Local Entitlements	Specific Plan approved, Annexation complete (if required), Tentative Map(s) in process	Range of conditions includes: projects that are approved but still need annexation; projects approved but no tentative maps submitted; projects approved but have unsettled lawsuit; projects currently in process; projects in pre-application	No current entitlement activity; identified by general plan or SOI as future growth area
	State/Federal Entitlements	Approved	Range of conditions includes: projects that are not yet approved but in process; projects participating in an HCP or NCCP; projects with no significant resource issues	Significant, unresolved resource issues
λ	Air Quality	In SCS with lower VMT than average for Developing Communities	Range of conditions includes: projects that are in the SCS with average VMT; projects in the SCS with higher than average VMT; projects not in the SCS with lower than average VMT; projects not in the SCS with average VMT	Not in SCS with above average VMT for Developing Communites
POLICY	Regional Plans and Policies	Consistent with 2012 MTP/SCS and Blueprint	Range of conditions includes: projects in MTP/SCS and partially consistent with Blueprint; projects in MTP/SCS and not consistent with Blueprint; projects consistent with Blueprint and not MTP/SCS; projects partially consistent with Blueprint and not in MTP/SCS	Not consistent with 2012 MTP/SCS or Blueprint
MARKET	Proximity to Job Centers	Close proximity to a regional jobs center	Range of conditions includes: projects partially within 4 miles of a regional job center; projects within 4 miles of a secondary job center; partially within 4 miles of a secondary job center	Significant distance from any job center(s)
	Housing Mix	Mix of housing types including mostly small-lot and attached	Range of conditions includes: projects that have a mix of housing types including small-lot and attached housing at varying amounts; projects that are primarily large-lot residential because they are in more rural areas	All large-lot single-family where higher densities could be supported (i.e more urban or suburban locations)
	Market Area Saturation	Historically high market demand and limited number of approved or pending projects in market area	Range of conditions includes: projects in areas with high market demand and high number of approved or pending projects in market area; projects in areas with average market demand and a high number of approved or pending projects in market area; projects in area with lower market demand and a high number of approved or pending projects in market area, but have a unique factor that could significantly change the market demand for the area	Historically low market demand and a high number of approved or pending projects in market area
	Adjacency	Adjacent to existing urban development or has significant borders with a city boundary or areas designated for future urban development	Range of conditions includes: projects that are adjacent to existing development at varying rates	Less than 10% adjacent with existing urban development, a city boundary or areas designated for future urban development
	Developer Activity	Very active, single ownership or experienced ownership partnerships, multiple completed projects in region	Range of conditions includes: very active to active, single or multiple ownerships with no development history; single or mulitple ownerships with varying levels of activity and some projects completed in the region; single or mulitple ownerships with varying levels of activity and no history of completed projects in or outside the region	Not active, single or multiple ownership, no completed projects in the region
	Transportation Infrastructure	No major or regional infrastructure needed or infrastructure is fully funded	Range of conditions includes: projects that have some infrastructure, but need more; projects that can build some before significant infrastructure investment is needed; projects that need significant infrastructure and have funding	Significant infrastructure needed and not funded or not yet defined
	Other Infrastructure (sewer, water, flood control, etc)	No major or regional infrastructure needed of infrastructure is fully funded	Range of conditions includes: projects that have some infrastructure, but need more; projects that can build some before significant infrastructure investment is needed; projects that need significant infrastructure and have funding	Significant infrastructure needed and not funded or not yet defined

Trends in the Housing Market: An Update on Changing Demographics and Consumer Preferences

Sacramento Area Council of Governments

August 28, 2014

Note: This paper is an update to a version that was released in February 2011. The purpose of this paper is to examine factors affecting the housing market as SACOG prepares the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) Update.

Introduction

The U.S. housing market in the coming decades will differ significantly from recent decades. The new housing stock that is produced will need to change, too. Evolving demographics and preferences held by specific demographic groups, or generational cohorts, are driving the change. On the housing demand side, the aging of the large baby boomer generation, the preferences of the even larger Generation Y cohort (those born between 1981 and 1999¹) as well as continued immigration will have a major impact on demand. On the supply side, the type and location of new housing construction over the past few decades may not match anticipated future demand according to many researchers. This poses both constraints and opportunities for future development, redevelopment and reuse in the Sacramento region. This updated paper reviews new information and further explores national housing market trends that have emerged since the original paper was published in 2011. As SACOG updates the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy, it will consider what these national trends may mean to the SACOG region.

Housing Choices of Generational Cohorts and Immigrants

Baby boomers and Generation Y will drive much of the change

While numerous demographic factors have been shifting over time, the change in the distribution of age cohorts is probably the most profound. Waves of Americans in different age categories, each having their own identity, lifestyles and preferences for housing types, are increasingly impacting how the U.S. grows.

A lot of attention has been paid to the baby boomer generation, those born between 1946 and 1964. This large group of Americans currently totals 77 million or 25 percent of the U.S.

SACOG 2014 White Paper Trends in the Housing Market: Changing Demographics and Consumer Preferences Page 1

¹ Demographers use different year ranges to define Gen Y, Gen X, baby boomer and others. This paper uses 1981 to 1999 for Gen Y because this range falls in the middle of the different timeframes, and data are more readily available for these years.

population.² As they age, their changing housing demands and choices will create changes in housing markets.

Following them is Generation X (Gen X), often referred to as the baby bust generation, because of the significant drop-off in births. This generation, born between 1965 and 1980, currently total 66 million people or 21 percent of the U.S..² Over time, this generation's smaller size may bring a drop-off in overall housing demand.

The next wave of Americans is called Generation Y (Gen Y), millenials, or echo boomers for primarily being the offspring of the baby boomers. This generation, born between 1981 and 1999, is the largest cohort. They currently number 85 million or 28 percent of the U.S. population and will have a profound impact on the U.S. housing market for decades ahead.²

In addition to the baby boom and millennial generations, a third group that cuts across generations will also have a large impact on housing demand: immigrants and their offspring. National immigration policy, however, will ultimately determine the growth of this group.

Each of these groups and their near and long-term housing demands are examined below.

Baby boomers' housing trends and choices

Starting in 2011, the oldest baby boomers (boomers) turned 65, with a huge wave of retirees expected over the next two decades. Because this generation is so large, the impact on the built environment has been, and will continue to be, equally large. Immediately after World War II, a huge increase in the national birth rate resulted in enormous demand for consumer goods. As boomers became adults, their demands for housing, cars, college educations and other goods and services continued to grow. By middle age, as they were raising children, they increasingly demanded single-family homes and associated roadway expansions to get them to their jobs.

Now, according to researcher Richard Florida, nationally 10,000 boomers will turn 65 every day from 2011 through 2029. This quantity of older adults is unprecedented. According to the U.S. Census Bureau, 10.4 million boomers are between the ages of 55 and 64, a 43 percent increase over the past decade (compared to overall population growth of nine percent). As a result, certain housing trends have emerged:

Community Preferences

Of the many studies of baby boomer housing preferences, there are different findings about the percentage of older adults who say they would like to stay in their family home if possible versus

² According to the 2010 U.S. Census, the national proportions of baby boomers, Generation X and Generation Y cohorts are very similar in the SACOG region, at 24 percent, 21 percent and 29 percent of the region's population, respectively.

moving to a new home. Regardless of the total number of seniors who eventually move, research indicates that a high percentage of those who are moving are interested in alternative housing products, such as smaller homes or amenity-rich communities. In real estate expert RCLCO's national survey of boomer preferences for amenities, 83% ranked walking, 67% nearby shopping, and 51% bicycling as top priorities. Employment proximity is also becoming increasingly important, as the number of workers 75 or older has risen by 77 percent in the past two decades according to AARP's Public Policy Institute. A scientific poll of people age 45 and older by AARP in 2010 found that that having the following amenities close by were also particularly important to older adults: bus stop (50%), grocery store (47%), park (42%) and pharmacy/drug store (42%).

RCLCO has found that as leading-edge baby boomers begin to demand senior-oriented housing, forward-looking developers are responding creatively to their lifestyles and preferences. Two notable trends are towards development of intergenerational housing projects and age-restricted housing projects that are closely integrated into an intergenerational neighborhood. As general trends in development focus on infill building, walkability, and creating lively and active neighborhoods, RCLCO notes that,

[I]ntegrating seniors into the larger community provides housing for community-minded seniors; stability for transient communities; arts and wellness programs for a town; and intergenerational relationships for children, families, and aging seniors. In fact, better integrating seniors housing into the fabric of the community, and creating innovative and architecturally interesting projects, helps reduce any stigma of seniors housing and encourages earlier consideration of this lifestyle alternative.

Housing Preferences and Downsizing

While many older adults would like to stay where they are, many also appear ready to downsize and/or seek more service-rich environments, whether in their own community or elsewhere. A *New York Times* feature entitled "Baby Boomers' Second Act" evidenced an interest among some boomers in downsizing, noting that boomers are opting towards condos and smaller, lower maintenance homes in order to have more time to pursue their own interests.

A Baby Boomer Survey by Del Webb, the leading builder of retirement communities, found that 55 percent of boomers plan to move to a new home at some point in the future, and nearly 28 percent plan to downsize on their next home purchase. The findings from the Del Webb survey are consistent with the findings from a housing preferences survey conducted 10 years earlier in the Sacramento region by Robert Charles Lessor Company (now RCLCO). That housing preference survey found that almost two-thirds of boomer respondents wanted their next home to be either a single family home with a small yard, an attached townhouse or a condomium unit.

SACOG 2014 White Paper Trends in the Housing Market: Changing Demographics and Consumer Preferences Page 3 For the boomers who do choose to move, many are not purchasing homes. According to the Harvard University Joint Center for Housing Studies in 2013, between 2002-2012 the number of renter householders aged 55-64 grew by 80 percent, disproportionate to the 50 percent growth rate for the total age cohort.

However, depending on when and how much home prices rise in the Sacramento region, boomers who may want to downsize may be unable or unwilling to sell their homes if their homes are worth less than what they still owe in mortgage debt; values have fallen below what they are willing to sell them for as part of retirement planning; and/or the cost of a new home would absorb most or all of their current home equity.

Another disincentive for seniors to sell may include the property tax situation in California. In general, California's Proposition 13 requires that when a home is sold it is reassessed to market value for property tax purposes. Voter-approved Proposition 60 in 1986 provided an age-related exception, allowing anyone over 55 to maintain their property tax base assessment if they move within the same county. Proposition 90, approved by voters in 1988, then allowed counties to decide whether to accept property tax rates of those over 55 moving in from another county. As of September 2013, El Dorado County was the only county in the SACOG region to participate in this local option; thus, only intracounty moves or intercounty moves by older adults to El Dorado County receive the property tax benefit.

Assisted Living

An important subset of housing demand among older adults is for assisted living options. According to a 2012 AARP report, the population age 85 and over – the most likely to need long-term care – will increase by 78% by 2032 and 270 percent by 2050, much faster than the U.S. average. According to AARP, between 2004/05 and 2010, nursing homes and beds in California decreased but assisted living options increased significantly to begin meeting that demand, as shown in the following table:

California	2004/2005	2007	2010	Change
# of nursing facilities	1,325	1,283	1,257	-5%
# of nursing facility beds	125,354	123,228	122,233	-2%
# of assisted living & residential care facilities	6,543	7,471	7,471	14%
# of assisted living and residential care units	154,830	161,586	211,402	37%

Source: AARP, Across the States: Profiles of Long-Term Care and Independent Living, California, 2006, 2009, 2012

A United States of Aging survey of 3,000 people age 60 and over found that while 77 percent said they intend to continue living in their current homes for the rest of their lives, the following were options they would consider if they found they were unable to care for themselves: 48 percent said they would move to an assisted living community; 40 percent would seek help from

community programs; 36 percent would move in with a family member or friend; 32 percent would hire a paid caregiver; and 20 percent said they would live in a nursing home.

According to the California HealthCare Foundation, with changes in consumer preferences, the nursing home industry has been undergoing a culture shift to models that provide a more neighborhood or smaller home-like atmosphere for elders requiring greater levels of care. However, these models require physical changes that may conflict with current state/local regulations and building codes.

Generation Y housing trends and choices

Delayed Household Formation

The recent recession disproportionately affected the millennial generation and their housing choices. Increasingly, young adults have been living at home with their parents and waiting to rent or purchase their own homes. According to the Pew Research Center, a record total of 21.6 million or 36 percent of the nation's millenials were living in their parents' home in 2012, up from 18.5 million of their same aged counterparts in 2007, prior to the recession. This is the highest share of young adults living at home in the last 40 years.

This move to live at home has been driven by numerous factors, including declining employment rates, rising college enrollment and subsequent college debt, as well as delayed and declining marriage rates. Generation Y, currently aged 15 to 33 years old, is 85 million strong and growing due to immigration; however, according to a 2012 poll by the American Planning Association (APA), millenials have a poverty rate two times higher than Gen Xers and baby boomers. Unemployment was especially high in the Sacramento area. Compared to the national rate of 14 percent, almost 20 percent of millenials in the Sacramento region were unemployed in 2012. Gen Xers and Baby Boomers were better off when they were the same age: Sacramento region Gen Xers faced an eight percent unemployment rate in 1990, and for young adult boomers, the unemployment rate was about nine percent in 1970 (Reese, 2014).

The Federal Reserve Bank tracks consumer debt, including student loans. Their data show that outstanding student loans increased nationally from \$836 billion in 2009 to \$1.2 trillion in 2013.

In 2010, while the overall homeownership rate in California was 56 percent, only 28 percent of those aged 25-34 owned homes, down from 31 percent in 2000 and 35 percent in 1990 (Myers 2013).

However, as the economy and job growth recovers, Gen Ys are expected to respond by forming more of their own households, according to the Harvard Joint Center for Housing Studies. This will create a bigger demand for multifamily housing in particular, as discussed below.

Housing and Location Preferences

Polling research by real estate consulting firm Robert Charles Lessor and Company (RCLCO) between the years 2007 and 2013 indicates that Gen Y is split roughly equally between wanting to live in urban environments, suburban communities or small communities/rural areas. Their most recent polling (2013) indicates that Gen Y respondents wanting to live in urban environments rose to 39 percent from 31 percent in 2011, while those wanting to live in suburban communities dipped from 42 percent to 29 percent. When asked in 2013 where they want to work, 63 percent said either downtown or an older suburb. Thirty-seven percent said they wanted to work in an outlying or rural area. The Urban Land Institute's America in 2013 survey found that 40 percent of millenials prefer medium- or big-city living.

Polling research by RCLCO identified that certain housing trends are important to Gen Y: design, sustainability, tech savvy, low maintenance, and flexible storage space were all found to be more important characteristics than dwelling size. RCLCO concludes that many younger renters want to live in urban areas and are willing to live in smaller units and trade features and in-home amenities for location. Additionally, the APA found that millennials possess a growing interest in communities with "sharing economy" amenities, such as tools, homes, bicycles, rides, automobiles, etc. Nearly three-quarters of millenials find the sharing economy to be "somewhat to extremely important" (APA, 2014).

RCLCO indicates that the most vital or important part of a community for millenials is "walkability" and proximity to amenities.. ULI's 2013 survey found that 62 percent of millenials prefer neighborhoods that are close to a mix of shops, restaurants and offices. In 2014, the APA found that 81 percent of millenials – and 77 percent of boomers – feel that affordable and convenient transportation alternatives play a role in deciding where to live. A 2014 study by the Rockefeller Foundation and Transportation for America reinforced this finding, with two-thirds of millenials saying that access to high quality public transportation is one of the top three criteria they consider when deciding where to live.

The effects of immigration

As mentioned earlier, U.S. immigration policy will be the major driver of the future size of this group. The Census Bureau's middle series national population projection from 2012 assumes an annual national addition of 850,000 residents from net foreign immigration from 2015 through 2020, which is about one-third of total growth. Even if all immigration ceased, past inflows and higher fertility rates ensure that immigrant households will increasingly drive growth in housing demand because immigrant households have continued to grow at a faster pace than native-born households.

As documented in a 2013 report by Dowell Myers and Michael Pitkin for the Research Institute for Housing America and Mortgage Bankers Association, between 2000 and 2010, immigrants

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accounted for 82 percent of the growth in homeownership in California, and are anticipated to continue to be a vital part of market demand. The following table projects homeownership growth of native born and foreign born households in California between 2010 and 2020.

CA Homeowners	Total in 2010	Projected Total, 2020	Projected Increase	
Native Born	4,064,000	4,525,000	11.3%	
Foreign Born	935,000	1,277,000	36.6%	
Hispanic				
Native Born	270,000	436,000	61.5%	
Foreign Born	455,000	660,000	45.1%	
Non-Hispanic				
Native Born	3,794,000	4,089,000	7.8%	
Foreign Born	480,000	617,000	28.5%	

Source: Immigrant Contributions to Housing Demand, 2013

As shown, the highest growth rate for homeownership is expected among native-born Hispanics. Significant growth is also projected for foreign-born households, whether Hispanic or non-Hispanic. Foreign-born households are also expected to comprise over one third of rental growth in California.

In 2010 projections used for developing the 2012 MTP/SCS, the Center for Continuing Study of the California Economy projected the greatest household growth among Asian and Hispanic households, but noted that these households have tended to have lower household formation rates, due to more intergenerational households, as described below.

While immigrants have historically had a higher likelihood of living in attached housing products and in urban areas, this trend has been changing. As city centers seem to be more desirable for baby boomers and those in Generation Y, and the urban cores have gentrified and pushed housing prices up, immigrants, members of both generational cohorts, are increasingly moving to first-ring suburbs. As immigrants move further toward outer-ring suburbs, higher percentages of them than in the past are increasingly looking for larger units with three or more bedrooms and child-friendly configurations according to researchers John Pitkin and Dowell Myers. That said, immigrants, like their native-born counterparts, are a diverse group and as such will seek a variety of housing product types and sizes in both urban and non-urban areas.

Other Factors in Household Demand

Changes in the rental market – strong demand for multifamily housing

The traditional prime renter age in the U.S. is between 20 and 34, which almost matches the Gen Y age group. By 2015, the U.S. will have substantially more 20 to 34 year olds than 35 to 49 year olds, according to the Harvard Joint Center for Housing Studies. Corresponding to this trend, the number of households headed by persons under 35—the prime rental group—will grow faster than the overall population.

According to the Federal Reserve Bank of Kansas City, the national outlook through the end of the decade is especially positive for multi-family construction, reflecting pent-up demand for housing. The slowdown in housing production during the Great Recession affected housing products at different rates. The gap between household growth and multi-family housing production was twice as large as the gap for single-family production. The Federal Reserve concludes that multifamily housing supply was already less than demand before the housing crisis; this scarcity of supply compounded by increasing demand for the product presents a strong outlook for multifamily construction in the future.

Over the next 30 years, the Census Bureau predicts that the total U.S. population will increase by 68 million over the next 30 years, or approximately 2.3 million people annually. This will boost overall demand for various housing types, help in the absorption of any excess housing inventory, and propel greater demand for apartments. Due to the demographic shifts described above, and the corresponding shifts in housing preferences due to the aging of the baby boomers and the entry of Gen Y into the housing market, researchers such as Dowell Myers and Arthur Nelson conclude that there will be a greater demand for higher density housing with more amenities in urban areas than in the past.

Changing rates of marriage and births

Americans, especially those in Generation Y, are taking longer to settle down, if they settle down at all. The median age of first marriage is increasing. In 1970, the median age for a man was 23 and 21 for a woman. In 2011, the median age at first marriage was 29 for men and about 27 for women. According to the Council on Contemporary Families, a Chicago-based research firm, for the first time in more than a century, more than half of those aged 25 to 34 have never been married.

Birthrates have also declined, and women are delaying having children. Per the Council, in 2010, one in four births was to a woman over 30. One in 12 births was to a mother age 35 or over, compared with 1 in 100 in 1970. As prolonged "emerging adulthood" means putting off getting married and having children, this likely increases the potential pool of renters.

Multi-generational household growth

According to the Pew Research Center, in 1980, 28 million Americans (12 percent) lived in a family with at least two adult generations (i.e., a grandparent and at least one other generation). By 2012, the percentages of the population living in multigenerational households included:

- 24 percent of adults ages 25-34, up from 11 percent in 1980;
- 23 percent of adults ages 85 and older;
- About one-in-four Hispanics and blacks.
- 27 percent of Asian Americans;
- 14 percent of non-Hispanic whites.

Changes in household size and composition

There is a persistent perception that the typical household is a married couple with children, but that has not been true for some time. According to the US Census Bureau in 2012, in 1970, the share of US households that were married couples with children 18 and under was 40 percent; in 2012 it dropped to 20 percent. The average U.S. household size has declined from 3.1 persons in 1970 to 2.6 persons; 61 percent of all households have only one or two persons living in them.

Another change is that parents are continuing to live in large homes long after their children have left. According to an August 2014 Sacramento Bee article entitled *Too much room: Growing number of Sacramento "empty nesters" living in big houses*,

Roughly 530,000 of the region's residents, usually married couples, live in two-person households, according to the latest census figures. More than one in five, or 117,000, of those residents live in homes with four or more bedrooms. The proportion of two-person households living in large homes has doubled since 1990.... The aging of baby boomers has left a growing number of "empty nesters" in homes large enough to accommodate children.

Single-person households have also been on the rise. According to the Pew Center, in 1900, just 1.1% of Americans lived in such a household, compared with 10.3% in 2008. In terms of age cohorts, 4.6 percent of those 18-24 lived alone in 2008, down from 5.7 percent in 1980. For those 65 and older, in 1900 only 5.9 percent lived alone, compared with 28.8 percent in 1990 and 27.4 percent in 2008.

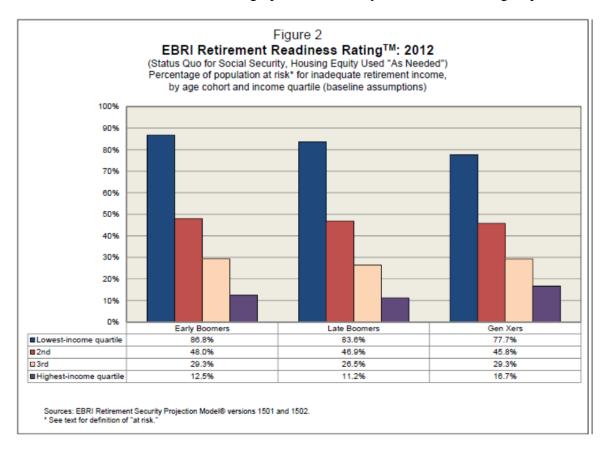
Researcher Dowell Myers notes that the rapid rise in one-person households will likely continue for the next several decades. A study by Y. Zeng, et al (2006), concluded that single-person households may grow to 34 percent of all households by 2030, and up to 37 percent by 2050.

According the Myers, Zeng's study is the most thorough demographic analysis to date using macro-simulation modeling with a variety of demographic factors.

Changes in Retirement Outlook

As the boomer generation approaches retirement, a portion may be in worse financial shape than previous generations. The Employee Benefit Research Institute (EBRI) utilizes a Retirement Security Projection Model[®] to simulate lifepaths of those born between 1948 and 1974 to assess whether they are likely to have adequate retirement income to support retirement living expenses and health care costs. According to EBRI's 2012 simulation, 44 percent of those in this age group are at risk of lacking sufficient retirement income, with the aggregate deficit estimated at \$4.3 billion nationally. Figure 2 below illustrates EBRI's findings for Early Baby Boomers (born 1948-54), Late Baby Boomers (1955-1964) and Gen Xers (1965-74).

Additionally, since 2000, typical expenses for older adults have risen by 88 percent while the Social Security COLA has increased average benefits by only 24 percent. Even putting aside uncertainties concerning the future solvency of the Social Security program, these financial pressures will affect some boomers' ability to afford retirement expenses—including housing costs. More affordable senior housing options will likely be needed for this group.



Prediction for New Housing Growth

The national trends described above likely apply for the most part to what is happening here in the Sacramento region: the demographic changes and consumer preferences described above all point to the housing market of the past no longer meeting the challenges of the market ahead. How do all three indicators and trends tie in together and what do they tell us? Two influential researchers, Arthur Nelson and Dowell Myers, have offered their interpretations.

New housing only serves one to two percent of all households

Demographer Dowell Myers holds that new construction does not respond to average growth in demand. Rather, he argues, that only one to two percent of all households each year lives in newly constructed units, and it is this small minority that is served by developers of new housing. Myers suggests that this segment is not representative of the population as a whole and is drawn disproportionately from population groups that are growing faster than the supply that they prefer. He concludes by stating that demographic change has the potential to drive major shifts in development patterns if the growing demographic categories in one generation (e.g., Gen Y) have very different preferences in product types than those of a prior one, (e.g., baby boomers). The Sacramento region's faster than average growth puts it slightly above the 1 to 2 percent rate, but does not change the implications for the region.

Housing preferences of Generation Y may not match available stock

In another article along similar lines, Myers and SungHo Ryu argue that the future population and age structure will lead to differences between age and home buying and selling. The aging, retirement and lifestyle patterns of the 77 million baby boomers will likely shape U.S. housing markets and trends for decades ahead. They conclude that there will be an oversupply of homes offered for sale by aging baby boomers – many of which may not be the housing type that young buyers want. Although many seniors will age in place, other older adult households will move. The researchers raise the idea that where decline once occurred as housing demand moved from the central city to the suburbs, the decline may now be reversed as the suburbs will see surpluses of large-lot single-family housing.

New direction for California

Planning researcher Arthur C. Nelson, writes extensively about the aforementioned trends and how they will affect future land use. His seminal work for the Urban Land Institute's publication "The New California Dream: How Demographic and Economic Trends May Shape the Housing Market" elaborates on many of the above-mentioned demographic and housing market themes. Nelson's work cites different data and resources and is based primarily attitudinal research, but identifies similar trends: there are demographic and market shifts that will change the nature of how we develop land use and housing in California.

Nelson's conclusions are that California will need to re-align its public policy and regulations to better reflect the needs and consumer preferences of baby boomers, Generations X and Y, immigrants and others who prefer urban environments that offer neighborhood walkability and transit access. He writes that the state's demographic composition tends to favor more central locations – including centrally positioned suburban locations- for their access to transit and services. His primary research shows that more than half of the Gen Y cohort have expressed interest in mixed-use development with transit options. The combined impact of energy costs and automobile ownership costs is likely to influence changing market patterns, probably in favor of more compact land uses over the long term.

In addition, his analysis shows that demand for new rental housing will be roughly equal to the demand for new owner-occupied housing if the 2010 homeownership rate holds steady (it has declined since 2010). For the regions covered by the state's four biggest Metropolitan Planning Organizations (SCAG in Southern California, ABAG/MTC in the Bay Area, SANDAG in San Diego and SACOG in the Sacramento area), he calculates that new rental housing demand will represent about 75 percent of total new housing demand. In his market preference research, he shows that between 2010 and 2035, the demand for townhouse and small-lot homes will more than double, while demand for multifamily units will increase by as much as 50 percent in some areas. On the other hand, the demand for conventional homes (e.g., large lots) will fall by more than a third, and, more importantly, the current excess supply of housing for conventional homes may keep the market from meeting future demand for small-lot or attached products.

Some of Nelson's overarching conclusions are that preferences related to location and type of development or community should be key considerations in planning for the future. He concludes that adding to the current inventory of large-lot homes contributes to the excess of existing supply and could lead to the further erosion of housing values in overbuilt markets. However, he notes exceptions to this, including where large-lot homes are part of a mixed-use planned community. He also concludes that all new residential development could be absorbed in areas that support and are supported by transit. These areas are within a 10-minute walk of a transit station and often have a well-established network of pedestrian pathways and infrastructure, including sheltered waiting areas, street furniture, low scale lighting, shade, bike racks, and retail service uses tailored towards pedestrian traffic. Finally, it's important to note that Nelson's conclusions are based on his analysis of the areas covered by the four largest MPO's (including SACOG) but that he notes that more research is necessary to fully explore the relationship between market trends, regulatory barriers, and infrastructure needs.

Conclusions

The above-described preference, demographic and other housing-related trends will continue to help inform the 2016 MTP/SCS update. However, trends are largely continuing from those

SACOG 2014 White Paper Trends in the Housing Market: Changing Demographics and Consumer Preferences Page 12 described in SACOG's 2011 white paper, and therefore do not indicate a need for major changes from the current plan in terms of the region's housing mix or growth pattern.

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Transportation Committee

Item #14-6-6B Information

May 29, 2014

Habitat Conservation Plans/Natural Communities Conservation Plans Development

Issue: What is the status of the current Habitat Conservation Plans/Natural Communities Conservation Plans and how do they relate to the Metropolitan Transportation Plan/Sustainable Communities Strategy?

Recommendation: None, this item is for information and discussion.

Discussion: The Blueprint and the SCS growth patterns both rely on significant amounts of infill growth but also growth in new master planned communities largely at the existing urban edges of the region. Many of those master planned communities, especially in southwest Placer County and southwest Sacramento County, are on land that has significant natural resource issues regulated by the federal Clean Water Act, Endangered Species Act, or both. Resource agencies, developers and environmentalists alike mostly agree that the preferred way to serve the twin goals of resource protection and urban development is at a large scale rather than on a project by project basis.

The most commonly used term for large-scale plans to protect resources as well as enable development is a Habitat Conservation Plan (HCP), which is a planning and regulatory document associated with the Endangered Species Act (ESA) and administered by the US Fish and Wildlife Service (USWFS). Many of the prospective developments in the Sacramento region, however, also must address impacts on waters of the United States through the Clean Water Act (CWA), a statute administered largely by the U.S. Army Corps of Engineers (USACE) in coordination with the U.S. Environmental Protection Agency (EPA). The goal for most of the resource planning efforts in our region is to address the requirements of the ESA and the CWA. It is also the goal of the HCPs in the region to address state endangered species requirements via either California Department of Fish and Wildlife's (CDFW) Natural Community Conservation Plan (NCCP) or via a programmatic permit with the CDFW. Additionally, all HCPs will be seeking programmatic State 401 Water Quality Certification which is administered by the Regional Water Quality Control Boards. (These various efforts are further defined in the appendix to this document.)

The SACOG region is home to one implemented HCP—the Natomas Habitat Conservation Plan—and has four additional Plans underway—the Placer County Conservation Plan (PCCP), the South Sacramento Habitat Conservation Plan (SSHCP), the Yolo Natural Heritage Program, and The Yuba-Sutter HCP.

The unique challenge in our region is the scale of the resources (larger than nearly anywhere else in the U.S.) and the fact that no national examples exist of similarly scaled plans that cover both ESA and CWA impacts. The complexities explain, in part, why the current projects have taken so long to get to this point and all have significant milestones still to achieve before they are completed and implementation can begin.

Stacey McKinley, consultant to SACOG, has been specifically engaged with the Placer County Conservation Plan both via SACOG and via engagement directly with Placer County. McKinley also worked on behalf of Sacramento County for a period of roughly two years on the SSHCP.

In the pursuit of hoping to better inform the MTP/SCS process, McKinley, along with SACOG staff, interviewed the following Federal Resource Agency and Plan Partner staff/consultants to better understand the current status of HCP/NCCP efforts in the SACOG Region.

- USEPA. Paul Jones
- USACE, Michael Jewell and Kate Dadey
- South Sacramento HCP: Bill Ziebron and Richard Radmacher

- Placer County Conservation Plan : Loren Clark
- Yolo Natural Heritage Program: Petrea Marchand
- Yuba/Sutter Conservation Plan: Danelle Stylos and Joyce Hunting
- The Natomas Basin Conservancy: Danelle Stylos

Meetings with HCP/NCCP Managers:

Managers were afforded time to give a general overview and were then asked a set of questions (below). Attachment A is a summary of that feedback followed by a "notes" section. At the time of this writing, follow-up with Plan Managers/staff/consultants remains underway, and any edits to the attached will be shared and discussed in the Committee setting.

Of particular interest to SACOG staff was the issue of timing of these efforts. It should be noted that the timelines in the attached summary reflect feedback from the Plan Managers themselves.

In general, all Plans must still answer the following key questions:

- What is the cost of implementation and what are the corresponding benefits?
- How much additional project-level review will be required once these Plans are implemented?

Lack of certainty on those key points, amongst others, is noteworthy, and its impact is evidenced by the individual pursuit of CWA 404/401 and USFWS/CFWS permits by project proponents who are also coordinating with the HCP/NCCP efforts. Questions asked to all:

- Explain your preserve design. Is it hard lined?
- Will impacts beyond those in your plan positively or negatively impact your preserve design?
- Are all transportation impacts covered in your plan?
- Will your plan call for advanced or phased mitigation?
- Explain (if applicable) how you are using growth projections to influence your permit term, other factors?
- Do you have any SCS/TPA's within your Plan area?
- Are you considering water availability/climate change in your Plan?
- How current is your data? Is it open source? How complete is your species occurance data?
- How frequently will you need to update your data to meet assurances with agencies?
- Is there anything we might do which might harm of help your Plan?
- Estimated year of completion?
- What is your relationship with neighboring/other HCP's?
- What Ag centric issues are you dealing with?
- Any exploration of mitigation to support ag practices?
- Will your Plan have a 404 component?
- What regulatory challenges are you facing?
- What fiscal challenges are you facing?
- Do you have any critical habitat within your Plan area?

Approved by:

Mike McKeever Chief Executive Officer

MM:SM:gg

^{*}Several attempts have been made to meet with USFWS and CDFWS and will continue to pursue meetings with these two resource agencies.

PLAN:	South Sacramento HCP	Placer County HCP/NCCP	Yolo Natural Heritage HCP/NCCP	Yuba Sutter HCP/ NCCP	Natomas HCP/NCCP
Start Date	2000	-2000 Implementation of Placer Legacy -2008 Initiate Preparation of HCP/NCCP	2002	2001	
Essential Milestones <u>Met</u> :					
Admin Draft (may be more than one)	Х	х	х		Х
Draft HCP/NCCP/EIR/EIS					
 Final HCP/NCCP/EIR/EIS Aquatic Resources Program Agreed to 					
 Implementation of HCP/NCCP 					
 Permits issued 					
Plan Managers Estimated Calendar of Milestones	-Late summer 2014 for release of the Draft HCP and accompanying Aquatic Resources Program Currently working on locking down 2-3 important components of the Plan to be able to complete EIS/EIR -General timeline of Final HCP/EIR/EISin 2015 with Implementation and permit issuance to follow	-Plan document late spring 2014 -EIR/EIS 2016/2017.hence	-Expectation of 2 nd Admin Draft Feb, 2015 -Expectation of DEIS/DEIR and Public Review Draft June 27, 2016 -Expectation of Final Draft Nov. 15, 2016 -Expectation of permit issuance April, 2017	-First Admin Draft by end of 2015/Early 2006	Adopted in 1997 and revised in 2003

PLAN:	South Sacramento HCP	Placer County HCP/NCCP	Yolo Natural Heritage HCP/NCCP	Yuba Sutter HCP/ NCCP	Natomas HCP/NCCP
Seeking ESA/2081	х	х	х	Х	х
Seeking 404CWA/401	х	х	х	Minimal effects coverage sought	No
NCCP	no	х	х	Х	No
Requested Term of Permits	50 year	50 years	50 years	50 years	35 years
Planning Area	374,000 acres initially but recently decreased by the City of Elk Grove's requested action to be removed from the Plan. The Plan covers the City of Rancho Cordova and the City of Galt, the Southeast Connector project and a portion of unincorporated Sacramento County.	201,000 acres	All of Yolo County (653,817 acres) with coverage for all of the Cities within the County and the unincorporated County. Of the 650,000 acres, there is an expectation of roughly 18,000 acres of impacts, but it should be noted that that number may slightly vary pending new effects analysis to be released as part of the February 2015, Admin Draft.	All of Sutter County (with the exception of the Sutter Buttes and the area covered by the Natomas HCP) as well as a portion of Yuba County	53,341 acres interior of the Natomas Basin located in Northern Sacramento County and Southern Sutter County
Unique features	-Interactions with Bay Delta Conservation Plan -5 key development projects of which most are in pursuit of individual permits while in parallel in support and pursuit of the HCP -Need for HCP or something similar to address the Biological Opinion for the Freeport Water Facility	-Use of growth projections -Importance of potential jurisdiction of rice -Good cross-jurisdictional relationship with Sutter County	-Very limited development in relation to overall Plan area -Overlap with Bay Delta Conservation Plan	-The Plan area is 100% dependent upon groundwater.	

PLAN:	South Sacramento HCP	Placer County HCP/NCCP	Yolo Natural Heritage HCP/NCCP	Yuba Sutter HCP/ NCCP	Natomas HCP/NCCP
Current Key Issues	- Five major projects located within the proposed HCP boundary. Due to outstanding issues with the HCP each project has decided to also simultaneously pursue Individual Permits and Section 7 consultation with the Federal agencies. -Treatment of onsite avoidance of impacts to waters.	-Pricing issues – costs to end users -Coordination with mitigation banks -Integration and assurances of 404 Clean Water Act coverage for all projects -Negotiations with Resource Agencies re: "right land in the right places"	-Row crop and orchard conversion -Cost share demand and funding source assurance on the part of USFWS -Lack of appreciation on Wildlife Agency part re: the habitat value of full suite of Ag cover types -Ability to successfully negotiate full or partial credit for lands which have been conserved with permanent easements of which the County has approximately 70,000 acres within the area proposed for preservation of HCP/NCCP impacts. -Approval by State Fish and Wildlife for an innovative easement template (approved 5.27.14 by USFWS) which recognizes cultivated lands.	-Levy improvements and the associated proposed buffers which may significantly erode agricultural lands -Ag conversion and neighboring flood management activities of potential concern.	Escalation in costs 1997 - \$2240.00 (per acre)3 2014- \$32,259 (per acre)3 \$21,009 (per acre)3 with land dedication

Glossary of acronyms used:

USACE: U.S. Army Corps of Engineers

USEPA: U.E. Environmental Protection Agency

USFWS: U.S. Fish and Wildlife Service

CDFW: California Department of Fish and Wildlife

HCP: Habitat Conservation Plan

NCCP: Natural Communities Conservation Plan

Notes:

-The HCP and NCCP efforts which are in pursuit of 404 Clean Water Act and 401 Water Quality Certification are doing so in a regulatory and policy environment which has not been tested at a scale relevant to the needs of the SSHCP and the PCCP. The only example of 404/401 integration nationally has been done subsequent to the adoption of the East Contra Costa Habitat Conservation Plan. It should be noted, however, that the acreage threshold for the 404 permit for the ECCHCP is limited to the loss of waters of the U.S., including wetlands, resulting from a single and complete project, would be proposed to not exceed a total of 1.5 acres. In addition, a project could not

permanently affect more than 300 linear feet of perennial, intermittent or third or higher order ephemeral streams, unless this linear limit is waived in writing by the Corps. Proposed projects that do not meet the eligibility requirements of the RGP would require

authorization by a standard permit, letter of permission or Nationwide permit. the translation of that being a permit which will have utility for actions such as culverts, boat docks, etc. The 401 Water Quality Certification for the ECCHCP has not yet been secured. As Plans in our region are maturing toward further investment in environmental documents, etc., time is of the essence for the Corps in particular to make assurances to the Plan partners that the 404 Clean Water Act integration will be designed to cover all projects which can demonstrate consistency with the HCP and will not be limited to an acreage threshold. If a threshold similar to that offered to the ECCHCP is to be the outcome for the HCP's in our region, arguably most or all of the projects considered in our Plans would be forced to pursue Individual Permits.

-In regard to timing of a "typical" HCP process, and specifically aligned with where our Regional Plans generally are at in their own processes, the best and most recent example may be the East Contra Costa HCP which issued its draft HCP/NCCP in 2004 with the HCP implemented in 2008. Subsequent to the implementation of the draft HCP, the Plan Partners pursued 404 and 401 certifications. In February of 2011, the Corps issued a public notice for their proposed engagement (as outlined above), and presently the Plan remains in pursuit of a 401/State Water Quality Certification.

-While some plans called out financing as a timely issue all will face the need to produce cost/benefit analysis in rather short order (relative to the staff's projected timelines) as conservation predominantly occurs via development and if the benefits to development (certainty, streamlining, etc.) are not made clear and binding at this point in the market, the most-likely funders of the Plans may not see utility in permitting through them.





Habitat Conservation Plans

Section 10 of the Endangered Species Act

What is a Habitat Conservation Plan and Incidental Take Permit?

An incidental take permit is required when non-Federal activities will result in "take" of threatened or endangered wildlife. A habitat conservation plan (HCP) must accompany an application for an incidental take permit. The purpose of the habitat conservation planning process associated with the permit is to ensure there is adequate minimizing and mitigating of the effects of the authorized incidental take. The purpose of the incidental take permit is to authorize the incidental take of a listed species, not to authorize the activities that result in take.

What is take?

"Take" is defined in the Endangered Species Act (ESA) as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species. Harm may include significant habitat modification where it actually kills or injures a listed species through impairment of essential behavior (e.g., nesting or reproduction).

How many HCPs have been developed and what size areas do they cover?

Both the number of HCPs and the size and complexity of the areas they cover have increased. More than 430 HCPs have been approved, with many more in the planning stage. Most of the earlier HCPs approved were for planning areas of less than 1,000 acres; now 10 exceed 500,000 acres, with several larger than 1,000,000 acres. In some cases, there are more than one incidental take permit associated with a HCP. For example, the Central Coastal Orange County HCP was developed as an overall plan under which each individual participating entity received a separate incidental take permit. This suggests that HCPs are evolving from a process adopted primarily to address single projects to broad-based, landscape-level planning, utilized to achieve long-term biological and regulatory goals.



The Wisconsin Statewide HCP was developed for the conservation of the endangered Karner blue butterfly. Photo by Joel Trick.

Who needs an incidental take permit?

Anyone who believes that their otherwise-lawful activities will result in the "incidental take" of a listed wildlife species needs a permit. The U.S. Fish and Wildlife Service (FWS) can help you determine whether your proposed project or action is likely to result in "take" and whether a HCP is an option to consider. FWS personnel can also provide technical assistance to help you design your project so as to avoid take. For example, the project could be designed with seasonal restrictions on construction to minimize disturbance during nesting.

What is the benefit of an incidental take permit and Habitat Conservation Plan to a private landowner?

The permit allows a landowner to legally proceed with an activity that would otherwise result in the illegal take of a listed species. The FWS also developed a regulation to address the problem of maintaining regulatory assurances and

providing certainty to landowners through the HCP process, called the "No Surprises" regulation.

What are No Surprises assurances?

No Surprises assurances are provided by the government through the section 10(a)(1)(B) process to non-Federal landowners. Essentially, private landowners are assured that if "unforeseen circumstances" arise, the FWS will not require the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level otherwise agreed to in the HCP without the consent of the permittee. The government will honor these assurances as long as a permittee is implementing the terms and conditions of the HCP permit, and other associated documents in good faith. In effect, this regulation states that the government will honor its commitment as long as the HCP permittees honor theirs.

Are incidental take permits needed for listed plants?

There are no Federal prohibitions under the ESA for the take of listed plants on non-Federal lands, unless taking of those plants is in violation of State law. However, before the FWS issues a permit, the effects of the permit on listed plants must be analyzed because section 7 of the ESA requires that issuance of a HCP permit must not jeopardize any listed species, including plants.

What is the process for getting an incidental take permit?

The applicant is in charge of deciding whether to pursue an incidental take permit. While FWS personnel provide detailed guidance and technical assistance throughout the process, the development of a HCP is driven by the applicant. The applicant is responsible for submitting a completed permit application. The necessary components of a completed permit application form, a HCP, an Implementation Agreement (if required), and, if appropriate, a draft National Environmental Policy Act (NEPA) analysis.

While processing the permit application, the FWS will prepare the incidental take permit, write a biological opinion under section 7 of the ESA, and finalize the NEPA analysis documents. Consequently, incidental take permits have a number of associated documents besides the HCP.

How long will it take to process our application?

The length of time to complete the permitting process depends on the complexity of issues involved (e.g., the number of species) and the completeness of the documents submitted by the applicant. The FWS will work to complete all steps, such as the public comment process, as expeditiously as possible. The most variable factor in permit processing requirements is the level of analysis required for the proposed HCP under NEPA, in other words, whether an Environmental Impact Statement (EIS), Environmental Assessment (EA), or a categorical exclusion is required. Other factors such as public controversy can also affect permit processing times.

"Low Effect" HCPs are those involving minor effects on federally listed, proposed, or candidate species and their habitats covered under the HCP and minor effects on other environmental values or resources. These HCPs do not require a NEPA

document, and the target permit processing time is 3 months.

HCPs that do not fall into the "Low Effect" category require either an EA or an EIS, depending on their complexity. For those requiring an EA as part of the permit application, the target permit processing time is 4 to 6 months. For those requiring an EIS, the target permit processing time may be up to 12 months.

How do we know if we have listed species on our project site?

Check with the appropriate State fish and wildlife agency, the nearest FWS field office, or the National Oceanic and Atmospheric Administration (NOAA) – Fisheries (for anadromous fish). You can arrange for a biologist from one of these agencies to visit your property to determine whether a listed species may be on your project site.

What needs to be in a HCP?

The contents of a HCP are defined in section 10 of the ESA and its implementing regulations. They include:

- an assessment of impacts likely to result from the proposed taking of one or more federally listed species.
- measures the permit applicant will undertake to monitor, minimize, and mitigate for such impacts; the funding that will be made available to implement such measures; and the procedures to deal with unforeseen or extraordinary circumstances.
- alternative actions to the taking that the applicant analyzed, and the reasons why the applicant did not adopt such alternatives.
- additional measures that the FWS may require as necessary or appropriate.

What kind of actions are considered mitigation?

Mitigation measures are actions that reduce or address potential adverse effects of a proposed activity on species covered by a HCP. They should address specific needs of the species involved and be manageable and enforceable. Mitigation measures may take many forms, such as preservation (via acquisition or conservation easement) of existing habitat; enhancement or restoration of degraded or a former habitat; creation of new habitats; establishment of buffer areas around existing habitats; modifications of land use practices, and restrictions on access.

What is the legal commitment of a HCP?

The elements of a HCP are made binding through the incidental take permit. While incidental take permits contain an expiration date, the mitigation identified in the HCP

can be in perpetuity in certain cases. Violation of the terms of an incidental take permit would result in illegal take under section 9 of the ESA. If the violation is deemed technical or inadvertent in nature, the FWS may send the permittee a notice of noncompliance by certified mail or may recommend alternative actions to the permittee so that they may regain compliance with the terms of the permit.

Who approves a HCP?

The FWS Regional Director decides whether to issue a HCP permit based on findings that:

- the taking will be incidental to an otherwise lawful activity;
- the impacts will be minimized, and mitigated to the maximum extent practicable;
- adequate funding will be provided;
- the taking will not appreciably reduce the likelihood of the survival and recovery of the species; and
- any other necessary measures are met.

If the HCP addresses all of these requirements and those of other applicable laws, the permit is issued.

What other laws besides the Endangered Species Act are involved?

In issuing an incidental take permit, the FWS must comply with the NEPA and all other statutory and regulatory requirements, including any State or local environmental/planning laws. HCPs may be categorically excluded from NEPA or may require either an EA or, rarely, an EIS.

Who is responsible for NEPA compliance during the HCP process?

The FWS is responsible for ensuring NEPA compliance during the HCP process. However, if the Service does not have sufficient staff resources to prepare the appropriate NEPA analysis in a timely fashion, an applicant may, within certain limitations, prepare draft Environmental Assessment analyses. This can benefit the applicant and the government by expediting the application process and issuance of the permit. When this is done, the FWS will provide the preparer with appropriate guidance concerning document preparation; and review the document within 30 days and take responsibility ultimately for its scope, adequacy, and content.

Does the public get to comment on our HCP? How do public comments affect our HCP?

The ESA requires a 30-day period for public comment on the application for an incidental take permit. However, we have recognized the concerns of the public regarding inadequate time for the public comment period, and have extended the minimum comment period to 60 days. Additionally, NEPA requires public comment on certain NEPA documents, and the FWS runs these two comment periods concurrently. Therefore, public comments must be considered in the permit decision.

What kind of monitoring is required for a HCP and who performs it?

The ESA or any party we designate as responsible (e.g., State wildlife agency, local government) in the HCP will monitor the project for compliance with the terms of the incidental take permit or HCP. If another party is responsible for monitoring compliance with the permit, the FWS will require periodic reporting from such party in order to maintain overall oversight responsibility for the implementation of the HCP's terms and conditions. For regional and other large-scale or long-term HCPs, monitoring programs must provide longterm assurances that the HCP will be implemented correctly, that actions will be monitored, and that such actions will work as expected. This should include periodic accountings of take, surveys to determine species status in project areas or mitigation habitats, and progress reports on fulfillment of mitigation requirements (e.g., habitat acres acquired). Monitoring plans for HCPs should establish target milestones, to the extent practicable, or reporting requirements throughout the life of the HCP and should address actions to be taken in case of unforeseen or extraordinary circumstances.

The FWS must monitor the applicant's implementation of the HCP and the permit terms and conditions. In addition to compliance monitoring, the biological conditions associated with the HCP should be monitored to determine if the species needs are being met. This includes determining if the biological goals that are expected as part of the HCP mitigation and minimization strategy are being met. The effectiveness monitoring will help the FWS determine if the conservation strategy is functioning as intended and the anticipated benefits to the species are being realized.

Are efforts made to accommodate the needs of HCP participants who are not professionally involved in the issues?

Because development of a HCP is done by the applicant, it is considered a private action and, therefore, not subject to public participation or review until the FWS receives an official application. The FWS is committed to working with HCP applicants and providing technical assistance as required throughout the HCP development process to accommodate their needs. The FWS believes that HCPs under development are restricted by privacy regulations unless waived by the applicant. However, the FWS does encourage the applicant to involve all appropriate parties. This is especially true for complex and controversial projects, and applicants for most large-scale, regional HCP efforts choose to provide extensive opportunities for public involvement during the planning process. The issuance of a permit is, however, a Federal action that is subject to public review and comment. There is time for public review during the period when the FWS reviews the information and decides to grant or deny a permit based on the completed HCP A 30day public comment period is required for all completed HCP applications. During this period, any member of the public may review and comment on the HCP and the accompanying NEPA document (if applicable). Additionally, the FWS solicits public involvement and review, as well as requests for additional information during the scoping process for an EIS.

Are the views of independent scientists used or sought, before and during development of a HCP?

The views of independent scientists are important in the development of mitigation and minimization measures in nearly all HCPs. In many cases, these individuals are contacted by the applicant and are directly involved in discussions on the adequacy of possible mitigation and minimization measures. In other cases, the views of independent scientists are incorporated indirectly through their participation in other documents, such as listing documents, recovery plans, and conservation agreements, that are referenced by applicants as they develop their HCP.

How does the FWS ensure that species are adequately covered in HCPs?

The FWS has strengthened the HCP process by incorporating adaptive management into the plans when there are species covered for which additional scientific information may be useful during the implementation of the HCP. These

provisions allow FWS and NOAA–Fisheries to work with the landowner to reach mutual agreement upon changes in the mitigation strategies within the HCP area, if new information about the species indicates this is needed. Any changes in strategy that may occur are discussed up front with the landowner during the development of the HCP. In this manner, the permittees are fully aware of any future uncertainty in the management strategies, and have concurred with the adaptive approaches outlined in the HCP.

What will the FWS do in the event of unforeseen circumstances that may jeopardize the species?

The FWS will use its authority to manage any unforeseen circumstances that may arise to ensure that species are not jeopardized as a result of approved HCPs. The FWS will work with all other Federal and State agencies to help ensure the continued survival and recovery of the species in the wild.

How can I obtain information on numbers and types of HCPs?

Our national HCP database displaying basic statistics on HCPs is available online from our Habitat Conservation Planning page at http://www.fws.gov/endangered/hcp/. The contact information regarding an individual HCP that is available for public comment is listed in the notice of availability for that HCP, published in the Federal Register by the appropriate Regional office. Regional office contact information can be found at http://www.fivs.gov.

U.S. Fish & Wildlife Service Endangered Species Program 4401 N. Fairfax Drive, Room 420 Arlington, VA 22203 703/358-2106 http://www.fws.gov/endangered/hcp/ December 2005 Appendix:

What is an HCP?

Via the introduction to the Endangered Species Act of 1973 (Act), Congress said that the purposes of the Act are "...to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such ... species..." Habitat Conservation Plans (HCPs) under section 10(a)(1)(B) of the Act provide for partnerships with non-Federal parties to conserve the ecosystems upon which listed species depend, ultimately contributing to their recovery.

HCPs are planning documents required as part of an application for an incidental take permit. They describe the anticipated effects of the proposed taking; how those impacts will be minimized, or mitigated; and how the HCP is to be funded. HCPs can apply to both listed and nonlisted species, including those that are candidates or have been proposed for listing. Conserving species before they are in danger of extinction or are likely to become so can also provide early benefits and prevent the need for listing. (Additional information on HCP's attached).

What is an NCCP?

Three of the four Plans underway are NCCP's (SSHCP is the exception). CDFW's **Natural Community Conservation Planning (NCCP)** program is an unprecedented effort by the State of California, and numerous private and public partners, that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. An NCCP identifies and provides for the regional or areawide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. The primary objective of the NCCP program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous activities that compose the development of a conservation plan. CDFW and the U.S. Fish and Wildlife Service provide the necessary support, direction, and guidance to NCCP participants

What is the 404 Clean Water Act?

<u>Section 404 of the Clean Water Act (CWA)</u> establishes a program to regulate the discharge of <u>dredged</u> or <u>fill</u> material into <u>waters of the United States</u>, including <u>wetlands</u>. Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404

requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is <u>exempt from Section 404 regulation</u> (e.g. certain farming and forestry activities).

What is the State 401 Water Quality Certification?

This program regulates discharges of fill and dredged material under <u>Clean Water Act Section 401</u> and the <u>Porter-Cologne Water Quality Control Act</u>.

This program protects all waters in its regulatory scope, but has special responsibility for wetlands, riparian areas, and headwaters because these waterbodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. We are involved with protection of special-status species and regulation of hydromodification impacts. The Program encourages basin-level analysis and protection, because some functions of wetlands, riparian areas, and headwater streams - including pollutant removal, flood water retention, and habitat connectivity - are expressed at the basin or landscape level.

Most projects are regulated by the Regional Water Quality Control Boards (Regional Boards). The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports and coordinates the Program statewide.



Transportation Committee

Item #14-6-**6C**Information

May 29, 2014

Floodplains and Levee Improvements Update

Issue: What are the regulatory constraints regarding future land development in levee-protected areas in the six-county region?

Recommendation: This is for information only.

Discussion: SACOG staff is reviewing regulatory constraints that may impact future development within the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) update. This item addresses the status of flood protection and local governments' abilities to meet federal and state requirements before development may occur. The Federal Emergency Management Agency (FEMA) requires that urban areas must have flood protection levels to withstand a 100-year flood level. California's SB 5 requires 200-year flood protection for urban areas and 100-year flood protection for rural areas.

SACOG contacted each local jurisdiction subject to these FEMA and SB 5 requirements and asked if and when they estimate their jurisdictions would be able to meet the requirements. Every jurisdiction has a plan in place or is part of a regional plan to identify where their levees need improvements. Some have secured funding to construct the improvements and others are in construction or have completed construction. Currently, Congress is reviewing the Water Resources Development Act (WRDA). If enacted, WRDA would provide funding for the completion of levee improvements in the Natomas Basis, and would ultimately remove the current de facto building moratorium in that basin for Sutter County, Yolo County and Sacramento County, City of Sacramento. In terms of impact to the 2016 MTP/SCS update, the timing for funding and construction of levee improvements is one of the factors that would influence the timing of development within floodplain areas in the short to mid term.

Approved by:

Mike McKeever Chief Executive Officer

MM:GC:ts
Attachment

Key Staff: Sharon Sprowls, Senior Program Specialist

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Gregory Chew, Senior Planner (916) 340-6227

Sacramento Region Floodplain Status Report

(May 27, 2014)

BACKGROUND

Since the 2008 MTP/SCS, SACOG has included a floodplain status report for the land use plan that underpins each MTP/SCS. This is an update to the most recent report, which was developed in 2010 for the 2012 MTP/SCS.

Since the 2010 update, the most significant development is the adoption of the Central Valley Flood Protection Plan (CVFPP) by the Central Valley Flood Protection Board (CVFP Board). The CVFPP fulfills the requirements of the Central Valley Flood Protection Act of 2008 (Senate Bill 5, 2007). The California Water Code also requires updates to the CVFPP every five years beginning in 2017.

In addition, Senate Bill 5 and subsequent legislation (Senate Bill 1278, 2012) require cities and counties in the Sacramento-San Joaquin Valley to have a 200-year level of flood protection for urban areas and a 100-year level of protection in rural areas. These laws also require the California Department of Water Resources (DWR) to produce floodplain maps, which cities and counties must use in making their findings. Flood protection plans and general plans must be consistent with the CVFPP, and flood protection improvement milestones must be met in order for development to occur. Those milestones include: a general plan amendment by July 2015 to include data and analysis contained in the CVFPP; locations of flood hazards; goals, policies and objectives for the protection of lives and property that will reduce the risk of flood damage; and feasible implementation measures. Within 12 months after the amendment of its general plan, each city and county is to amend its zoning ordinance.

Some local governments do not feel adequately prepared to comply with these laws because preliminary mapping from DWR, which serves as the basis for each city and county to make findings about their ability to meet the requisite flood protection levels, is incomplete. Pending legislation, AB 2108 (Eggman) would allow cities and counties to issue permits in areas that do not meet the required 200-year level of flood protection as long as the new structure or remodel does not increase occupancy by more than 50 percent. AB 2108 would also allow cities and counties that are making adequate progress in pre-construction planning and designing of flood system improvements to continue issuing development agreements, permits, and tentative maps if the city or county has demonstrated to the satisfaction of the CVFP Board that it is on its way to constructing improvements that will meet the 200-year level of flood protection for the areas where the new construction would occur.

From a funding standpoint, there is some uncertainty about the timing and frequency of additional reauthorizations of the federal Water Resources Development Act (WRDA). Since the 2012 MTP/SCS was adopted, Congress instituted a moratorium on earmarks, which essentially forestalled the passage of a

WRDA reauthorization, the federal funding mechanism for levees and other flood protection projects. Both houses of Congress have passed a WRDA reauthorization that is pending as of this writing. If enacted, reauthorization would provide \$689 million for the Sutter Basin and \$1 billion for Natomas levee projects and studies. Regular reauthorizations of WRDA would help continue to ensure that the region meets its flood protection requirements. At the state level, there is some funding available from prior bond measures, but regions must put together investment plans in order to access those funds. Investment plans are currently under development.

The passage of H.R. 3370 (Homeowners Flood Insurance Affordability Act of 2014) protects property owners from skyrocketing flood insurance rate increases. H.R. 3370 provides a four-year reprieve to dramatic increases in insurance rates for property owners. It also reinstates a grandfathering process for existing property owners who are mapped into risk areas, which helps cap how much insurance premiums can increase in a year.

Looking ahead to the period between now and the 2036 horizon year of the 2016 MTP/SCS, several factors may impact floodplains. First, recalculation of flood events (i.e., the likelihood of a flood occurring in any given year) may change, and FEMA may remap floodplain areas. This may help or harm jurisdictions, depending on the local conditions. Second, National Flood Insurance Program changes may increase the costs of development indirectly. Federal law enacted in 2012 required a phase-out of subsidized flood insurance, but the President enacted legislation to delay implementation in early 2014. Third, changes in hydrology will impact floodplain management, as many flood management systems, such as Folsom Dam, are also operated for water supply.

As discussed below, many jurisdictions continue to plan and construct levees and other improvements to meet state and federal requirements. In many cases, jurisdictions believe that their floodplain management efforts and improvement schedules will result in very little or no effect on growth forecasts and development in the floodplain as envisioned by the 2016 MTP/SCS, notwithstanding recent declines in the building industry. Some jurisdictions are more challenged to meet federal and state requirements due to levee conditions, hydrology, or funding shortfalls. Specific status reports, written with the help of local jurisdictions, are provided below.

SACRAMENTO COUNTY

Levee Status

The Sacramento Area Flood Control Agency (SAFCA) is managing the levee construction and certification project in the Natomas Basin for Sacramento County, the City of Sacramento, and Sutter County. The Natomas Basin levees are undergoing a major upgrade and are currently halfway complete.

The levees along both the Sacramento River and the American River were de-certified by FEMA in 2013. Re-certification of the American River levees will depend on programs associated with the Folsom Dam

Joint Federal Project and various levee improvements. The Folsom Dam Joint Federal Project (JFP) is currently under construction and completion is estimated for 2020. The Folsom Dam JFP will allow more efficient operation of the dam and allow the operators to manage larger flood events downstream so that levees downstream are not overwhelmed.

State and Federal Compliance Status

The Natomas area continues to be at risk of 100-year flooding and does not meet the 200-year flood protection requirements of California's DWR.

MTP/SCS 2036 Implementation

Development in the Natomas Basin depends on passage of WRDA, subsequent appropriations for levee improvements, and completion of the associated levee improvements. Once adequate progress is demonstrated, FEMA may change the flood designation from Zone "AE" to the less restrictive Zone "A99" designation. The current "AE" designation has caused a de facto building moratorium in Natomas given the restriction that structures must be elevated or flood-proof to a base elevation of 33 feet.

City of Sacramento

Levee Status

The City of Sacramento's levees along the Natomas Basin are under improvement and are about halfway completed. Federal funding for completing the levee work and compliance with FEMA's 100-year flood requirements and DWR, is dependent on enactment of a WRDA reauthorization, subsequent appropriations for levee improvements, and completion of the associated levee improvements. Once adequate progress is demonstrated, FEMA may change the area's flood zone designation.

In 2012 and 2013, the USACE levee certification expired along the Sacramento River, American River and North Streams. In order to re-certify, improvements to the levees are expected to take between 5-7 years, including those to the Natomas Basin described above.

The Folsom Dam Joint Federal Project (JFP) is currently under construction and completion is estimated for 2020. The Folsom Dam JFP will allow more efficient operation of the dam and allow the operators to manager larger flood events downstream so that levees downstream are not overwhelmed.

Because of many flood control projects in the South Sacramento Streams Groups (Morrison Creek area), over 3,000 structures were removed from the A99 zone as of May 12, 2014. This means that flood insurance will no longer be required and will be available at a lower rate. A widening and detention basis project along Florin Creek will be constructed in 2015, which will remove an additional 500 structures from the A99 zone.

State and Federal Compliance Status

Once these levee improvements are made, the City should be able to demonstrate compliance with state and federal requirements. The remainder of the City of Sacramento is designated Zone "X", meaning there are no building restrictions except for some floodplains created by Magpie Creek/Dry Creek (designated Zone "AE"), Arcade Creek (designated Zone "AE" and "AH"), and Florin Creek, designated Zone "AH".

SB 5/SB 1278 require the city to have 200-year level of protection by July 2016 in order to allow development. However, having a plan in place to reach the 200-year level of protection by July 2016 will delay the 200-year level requirement until 2025 if the city can show annual progress. The city is in the process of developing a plan.

MTP/SCS 2036 Implementation

Almost all of the Delta Shores project area is located in Zone "X", which means that the area is protected by levees. The portions of the project currently located in Zone "AE" will likely be redesignated to Zone "X" once the development's infrastructure has been planned.

City of Isleton

Levee Status

The city has levees along Georgina Slough and along the Sacramento River that will need to be improved to meet 100-year FEMA flood level requirements for participation in the National Flood Insurance Program. The ground elevation of Isleton ranges from approximately 0 feet, or sea level, up to 4 feet above sea level. The FEMA base elevation is 9 feet. New development in the city is required to be built at base level elevations. However, the city is not subject to SB 5 requirements because it has fewer than 10,000 residents.

State and Federal Compliance Status

As part of the Delta area, the city is included in the Central Valley Flood Protection Plan (CVFPP). The CVFPP is a comprehensive framework for systemwide flood management and flood risk reduction in the Sacramento and San Joaquin River Basins. The adoption of the CVFPP provides conceptual guidance to reduce the risk of flooding for about one million people and \$70 billion in infrastructure, homes and businesses, with a goal of providing 200-year protection to urban areas, and reducing flood risks to small communities and rural agricultural lands.

The city, as part of the CVFPP, continues to participate in the improvement of its levees. However, there is no clear schedule that indicates when the CVFPP will be implemented that will meet the requirements placed on the city.

MTP/SCS 2036 Implementation

Any new development in the city must be built at base level elevations, which would effectively require new residential units to have a second floor main entrance. Some housing units were built this way in the prior decade, but there is no clear indication additional units will be built this way in the future.

SUTTER COUNTY

The levees in Sutter County have not been certified as providing a 100-year level of protection due to underseepage issues along the Sacramento River, Feather River Sutter Bypass, Natomas Cross Canal, East Main Drain, Bear River and Yankee Slough. Levees along the west bank of the Feather River have been studied extensively, as has the south bank of the Natomas Cross Canal.

The Feather River Levee Improvement Project managed by the Sutter Butte Flood Control Agency is constructing 44 miles of levee improvements from Thermalito Bay to the Sutter Bypass along the Feather River. The improvements are scheduled to be completed in 2015. These levee improvements are being paid for by a combination of a voter-approved special assessment through a Proposition 218 process and resources from DWR and the USACE.

All of the lands within the city limits of Yuba City and within the city of Live Oak and its Sphere of Influence are protected by these improvements. The only urban area not covered is a portion of Yuba City's Sphere of Influence, discussed in the Yuba City section below.

The areas south of Yuba City in the Yuba City/Live Oak Basin, and most of the area within the Nicolaus Sub-basin fall into Special Flood Hazard Area Zone A (including zones AO and AH). In addition, lands within the Meridian and Robbins Basins are likely to be remapped by FEMA from Zone X currently to Zone A. Sutter County is required to enforce minimum National Flood Insurance Program (NFIP) standards, such as mandating that the first floor of new or substantially improved buildings be at or above base flood elevations.

The Natomas Basin Area within Sutter County is also located in Zone AE, and new buildings must be at or above base flood elevations. As discussed in the City of Sacramento section below, substantial improvements have been made and, if the Water Resources Development Act is passed at the federal level and funding for the remaining improvements are secured, it is expected that this designation will be removed with remapping and development will continue once again.

State and Federal Compliance Status

For the existing county urbanized areas surrounding the cities of Live Oak and Yuba County, FEMA requirements have been met and SB 5 200-year requirements are very likely to have been met with the improvements along the west bank of the Feather River. The county's portion of the Natomas Basin will likely meet FEMA and SB 5 requirements upon the approval of WRDA.

The non-urbanized areas in the Meridian Basin, Robbins Basin, Nicolaus Basin and south half of the Yuba City/Live Oak Basins will not be compliant with FEMA or SB 5 requirements. Until significant levee improvements are made to the Sutter Bypass, which have neither been analyzed nor engineered, these areas will continue to remain in some version of Zone A.

MTP/SCS 2036 Implementation

Sutter Pointe Specific Plan in the Natomas Basin is the only long-term residential urban development planned in the unincorporated county. The other affected projects are likely to be agricultural-related developments such as farm product processing units and silos and will have to be built at base flood elevations that are likely infeasible in many parts of the county.

City of Live Oak

Levee Status

Only a small portion of the city's downtown is within a flood zone. Live Oak is part of a group of jurisdictions for the Feather River Levee Improvement Project, managed by the Sutter Butte Flood Control Agency, which is constructing 44 miles of levee improvements from Thermalito Bay to the Sutter Bypass along the Feather River. The improvements are scheduled to be completed in 2015.

Because plans for the improvements are in place and funding has been secured, FEMA's map designation officially changed effective May 13, 2014 and now all lands within the city will be outside of a flood zone.

Federal and State Compliance

The improvements along the Feather River that are being constructed have met FEMA's requirements, and is expected to meet the State's 200-year level requirements as well.

MTP/SCS 2036 Implementation

FEMA and State flood protection requirements are not an obstacle to any future development within the city.

The City of Yuba City

Levee Status

DWR shows most of the city's lands within a floodplain and if FEMA were to remap the city, it would likely have lands within floodplains. However, like the city of Live Oak, Yuba City is part of the Feather River Levee Improvement Project managed by the Sutter Butte Flood Control Agency. This project is constructing 44 miles of levee improvements from Thermalito Bay to the Sutter Bypass along the west bank of the Feather River.

State and Federal Compliance Status

The city is expected to meet FEMA requirements for 100-year flood protection and SB 5 compliance for 200-year requirements, due to the completion of the Feather River West Levee Improvement Project. The one exception is the southwest portion of the city's Sphere of Influence near Bogue Road and Township Road. The city will re-examine how to address this area after the Feather River Levee Improvements project is completed.

MTP/SCS 2036 Implementation

With the exception of the southwest portion of the city's Sphere of Influence (SOI), the lands within the city's boundaries and SOI will have no flood impediments to development.

YOLO COUNTY

Unincorporated areas of Knights Landing, Clarksburg and Yolo

Levee status

Over the last decade, FEMA has made changes to re-define regional flood hazard areas. The Cache Creek levees were de-certified in 2002, placing portions of the City of Woodland in the 100-year floodplain. Similarly, the levees protecting the unincorporated towns of Knights Landing, Yolo and Clarksburg were de-certified in 2010, and all three towns were remapped into the 100-year floodplain. Yolo County is requesting that the Clarksburg community receive a changed classification to FEMA Zone "D", which is for unstudied areas where flood hazards are possible but undetermined. Communities with Zone "D" designation are free from mandatory flood insurance purchase requirements.

The Lower Sacramento and Delta North Regional Flood Management Plan is identifying regional flood management solutions. Part of this work includes researching alternatives for providing 100-year flood protection for Knights Landing and the town of Yolo. Alternatives include strengthening existing levees in place or a smaller ring levee system. The management plan has also spurred coordination between local agencies regarding the Yolo Bypass and Fremont Weir Wildlife Area. There is consensus for the development of a Yolo Bypass/Cache Slough Integrated Water Management Plan, but funding has not yet been secured.

State and Federal Compliance Status

As mentioned above, the unincorporated towns of Knights Landing, Yolo and Clarksburg are subject to FEMA's 100-year flood level requirements but are not subject to California's SB 5 requirements because they are communities under 10,000 residents. To meet the FEMA requirements, these communities are participating in the Lower Sacramento and Delta North Regional Flood Management Plan, which is the regional plan to address flood management solutions for the area that includes these Yolo County communities.

Knights Landing needs a funding solution to finish repairs for the Mid-Valley Area Levee Reconstruction Project. The project has an estimated total cost of \$7 million (85% federal/15% local split), but the benefit-cost ratio is being recalculated. The levees around Clarksburg last failed in 1918, but the system is incomplete. There are not secured funds identified for these improvements. Levee improvements needed to protect the community of Yolo have also not been secured. The management plan does not have funding for full implementation, and Yolo County is seeking ways to fund the improvements needed for its communities.

MTP/SCS 2036 Implementation

The three unincorporated communities within the 100-year floodplain have very limited projected growth potential. Floodplain regulations will likely affect agricultural operations and facilities more than residential development.

City of Woodland

Levee status

The Cache Creek levees were designed to provide the City of Woodland with a 10-year level of protection, but don't generally overtop until a 25-year or greater event occurs. There are currently no improvements in place to upgrade the levees above a 10-30 year level.

The Cache Creek Settling Basin and Yolo Bypass levees were de-certified by FEMA in 2009. This makes Interstate 5 on the south bank of Cache Creek vulnerable. It is estimated that the interstate would be shut down for one to three months east of Woodland and twenty hours north of Woodland if a 25-year or larger flood hits the area. The City, DWR, and USACE are exploring infrastructure and legislative solutions to interstate flooding issues.

State and Federal Compliance Status

The 100-year floodplain covers almost a third of the city of Woodland. Flood depths from a 100-year event are generally expected to be between 2-3 feet, but may reach up to 12 feet in some areas. The City is currently subject to FEMA's Zone "AE" designation and will be until the levees meet new 100-year level of protection criteria.

A unique issue for Woodland is that all of the levees that affect the city's flood problem are outside the city's jurisdiction. The city can only work with agencies with actual jurisdiction towards a solution. How this will affect the mandates required by state law remains to be determined.

MTP/SCS 2036 Implementation

None of the City's planned new residential areas within city limits and the Sphere of Influence are within the 100-year floodplain. However, the City is planning for infill projects and new industrial development areas in the floodplain. For industrial development areas, elevated docking stations provide flood

protection and comply with FEMA's Zone "AE" designation, which requires new development to be built at base flood elevation.

City of West Sacramento

Levee Status

West Sacramento has FEMA 100-year certification and an aggressive levee improvement program. The city has completed levee evaluations using current levee design guidelines and has identified deficiencies based on federal standards. The city's levee improvement program is designed ultimately to provide a 200-year level of protection. A six-mile improvement project along the Sacramento River will begin construction in 2016 and be finished by 2017. The project currently has EIR certification and is 90 percent complete with the design. The city estimates that the total cost to construct all needed levee improvements is between \$500 million and \$600 million.

State and Federal Compliance Status

Currently, the city projects meeting the 200-year level of protection by 2020. If FEMA were to remap this area it is anticipated that it would designate multiple flood zones within the city due to the complexities of the city's geography and hydrology. However, there are no signs that FEMA will remap the area in the near future. West Sacramento is leading a regional and even national effort to revise FEMA's flood zone designation criteria to more accurately reflect current conditions. Proposed regulatory changes to flood zone designations may help the city qualify for AR and/or A99 zones and further levee improvements.

MTP/SCS 2036 Implementation

Almost all of the land within current city limits is designated as Zone "X", which allows development to occur because of its levee protection. However, greenfield development in the Southport area could face flood-related regulatory obstacles if the area is remapped. Although the city maintains an aggressive levee improvement program and responsible land use policies, current federal regulatory conditions could delay growth allocations in the MTP/SCS update. Given current FEMA policies, final maps with an AE designation for the city could create a de facto building moratorium. With the evaluation of the levees for a 200-year event, and assuming that an improvement plan is completed by 2020 and continued progress is made on proposed regulatory changes to federal flood zone designations, the city believes that flood concerns could have variable but limited effect on the MTP/SCS allocations.

City of Winters

Levee Status

The FEMA FIRM shows the majority of the northeast area of town is within the 100-year flood plain, with a portion within the city limits and within its Sphere of Influence. This area is within the Moody

Slough sub-basin, and drainage facilities identified in the Moody Slough Sub-Basin Drainage would be implemented for the area to develop. The drainage facilities include a series of proposed canals, and levees, pipes, open channels, and detention ponds.

State and Federal Compliance Status

The city is not subject to State SB 5 requirements because it does not meet the definition of an urban area that exceeds 10,000 residents.

The portion of the city within the FEMA floodplain would be subject to FEMA 100-year floodplain. The city has proposed a series of canals, levees and other facilities to address this.

MTP/SCS 2036 Implementation

A portion of land affected by 100-year flood levels is within the city limits and within the urban limit line. At this time, the city nor the property owners have plans to annex additional land into the city limits in the foreseeable future and therefore it should not be assumed as part of the city's growth within the MTP/SCS.

YUBA COUNTY

Plumas Lakes, Linda, Olivehurst and Magnolia

Levee Status

The South Yuba County Basin (Reclamation District 784) consists of 29 miles of levees along the Yuba River, Feather River, Bear River, and the Western Pacific Interceptor Canal. The last four miles of levee construction along the Yuba River were completed in 2012.

In 2010, the U.S. Army Corp of Engineers conducted a feasibility study that looked specifically at the Yuba River's Goldfields area. The study found that these embankments—which had been realigned to prevent clogging and sediment deposits from mining practices during the 1900s—had eroded and would be breached by a 200-year storm.

The Three Rivers Levee Improvement Authority (TRLIA) and local mining companies are working to find a solution to the 200-year storm potential breach. They are currently considering four projects, three within the Goldfields and one that would expand the levee system south of the mining area. Levee improvements for the 200-year storm level are estimated to cost around \$50 million. This funding has not yet been secured.

As a result, TRLIA is moving forward with an interim fix that is estimated to cost between \$500,000 and \$1 million. This interim project will help Yuba County retain its 100-year accreditation. To date, the Goldfields Interim Fix Study has achieved CEQA compliance. Construction is set to begin in 2015.

State and Federal Compliance Status

South Yuba County has received FEMA 100-year Accreditation. Excluding the Goldfields area, RD 784 is essentially in compliance with the state's 200-year protection requirement. TRLIA will be making some additional 200-year improvements to the Western Pacific Interceptor Canal West Levee in 2015 due to DWR's Urban Levee Program results.

MTP/SCS 2036 Implementation

Given RD 784's levee accreditation by FEMA, flood issues are not an impediment to development in this area. Development applications in portions of Plumas Lakes are currently proceeding without building elevation or flood insurance requirements.

The Goldfields area east of Marysville does not have any proposed urban development. Flooding in this area will have the largest impact on development for agricultural uses, including processing facilities such as silos and dryers.

The City is not planning for any major new residential development projects. All of its growth will come from infill and potential annexation.

City of Marysville

Levee Status:

The current Flood Insurance Rate Map (FIRM) for the City reflects 100-year protection under a Provisionally Accredited Levee (PAL) Agreement. That Agreement expired in June 2010, but the FIRM has not been updated. As a result, they are not currently certified as having 100-year protection. Additionally, the DWR and the U.S. Army Corps of Engineers (USACE) have identified deficient areas in the levee system along the Feather and Yuba Rivers. The USACE has recently completed the first phase of a four-stage program to address these deficiencies and is in design on the other three stages.

Levees within the City's southern Sphere of Influence are within the jurisdiction of Reclamation District 784 and are certified as providing 200-year protection. The northern Sphere of Influence was deleted by recent LAFCO action.

State and Federal Compliance Status

The City is expected to meet the 2015 requirement for creating a floodplain management plan. When the USACE completes the final phase of the Marysville Ring Levee project, the city will have approximately a 285-year level of protection. Unless the City is remapped into a floodplain by FEMA, there are no state or federal requirements that impede infill development.

MTP/SCS 2036 Implementation

The City is not planning for any major new residential development projects within its city limits. All of its growth will come from infill and potential annexation.

City of Wheatland

Levee Status

The levee along the north side of Bear River achieved certification by FEMA in 2011 for a 100-year storm event. Development interests funded the necessary levee improvements, and an assessment district was approved by land owners to provide for long-term levee maintenance. These levee improvements have changed FEMA's floodplain mapping and much of the area north of the improved levee has been revised from "Zone A" designations to "Zone X".

Levees along Dry Creek are not FEMA-certified and require evaluation and a plan for improvement. The evaluation, design and construction of the improvements needed to achieve FEMA certification is estimated to range between \$7-\$16 million.

FEMA and SB 5 Status

The Bear River levees are considered to be compliant with FEMA. Further study of the Dry Creek levees is needed to assess whether Wheatland will be complaint with SB 5. Reclamation District 2103 received almost a half million dollars and a commitment from the state for geotechnical work along this creek to conduct an evaluation of the levee and determine the scope of necessary improvements.

MTP/SCS 2036 Implementation

Given the levee improvements along the Bear River and re-designation of the southern floodplain, development may occur in the southern portion of Wheatland. This includes the Heritage Oaks Estates, Roddan Ranch and Jones Ranch development projects. The latter two are mostly protected by the Bear River levees, but some fill is needed along the southerly edges of these developments to raise the ground above the 100-year flood elevation. Development in the north is moving more slowly due to needed levee improvements along Dry Creek. The Johnson Rancho Specific Plan is located mostly outside the floodplain, but some areas are within the Dry Creek floodplain that will need improvements before development would be allowed in those areas.



Transportation Committee

Item #14-6-6D Information

May 29, 2014

Research of Factors Influencing Development Pattern (Water)

Issue: How is staff researching the influence of water on future development patterns in the context of the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) update?

Recommendation: None. This item is for information only.

Discussion: Water supply is among the many regulatory, policy, and market factors that can influence the timing and shape of future development. In the last year, the Board directed staff to look at how water supply in future years may affect the development pattern projected in the MTP/SCS. This staff report provides the status of that research.

Staff has reached out to the Regional Water Authority, Placer County Water Agency, and local government planning staffs to assess the types of water supply factors that should be considered in different parts of the region. Based on these discussions, research efforts are focused on understanding the amount of development that can occur in new growth areas before new large infrastructure investments are needed and on the timing of financing and constructing new treatment, storage and conveyance facilities for new development areas. Much of staff's research on water supply comes from specific plans or environmental impact reports for new growth areas, general plans, and urban water management plans (UWMPs). The UWMPs are prepared by urban water suppliers to project demand in their service area and identify strategies for water source reliability. Combined, these planning documents suggest that the long-term (20-year) water supply is not likely to be a limiter of growth in the region, though they do not provide a clear answer about the timing or phasing of development. Staff will continue to meet with water experts, local government staff and water agencies to best determine how the timing of investments in water infrastructure fit within the context of the MTP/SCS update.

Approved by:

Mike McKeever Chief Executive Officer

MM:KL:ts

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Transportation Committee

Revised Item #14-6-2E

June 4, 2014

Airport Constraints Analysis

Issue: What are the regulatory constraints regarding future land development surrounding airports in the six-county region?

Recommendation: This is for information only.

Discussion: SACOG staff is reviewing regulatory constraints that may impact future development within the 2016 MTP/SCS Update. In December 2013, the Board requested that staff analyze how much land is affected by airport regulatory constraints. This item addresses what impact airport-related operations have on development potential of lands outside of airport properties for all public use and public-serving airports in the six-county region. There are 20-22 airports that fall under the definition of public use or public-serving airports in the region.

The State's Aeronautic Act, codified under Public Utilities Section 21001 et seq., requires that SACOG, in its role as Airport Land Use Commission for Sacramento, Sutter, Yolo and Yuba Counties, and Placer County Transportation Planning Commission for Placer County, and El Dorado County Transportation Commission for El Dorado County, develop plans for each airport that address land use compatibility. The State provides guidelines based on the type of airport, operational factors, and the types of land use that are compatible, conditionally compatible and incompatible depending on the location of the site to the airport. The compatibility plans must consider noise contours of the aircraft, safety zone restrictions and height.

In the attachment, SACOG's analysis of these factors in existing compatibility plans for these airports shows how many acres of land fall with the 65-70 CNEL noise contours (Community Noise Equivalent Level), which is often used as the noise-related demarcation between allowable and not allowable residential development,. The 60-65 CNEL noise contour is used for the newer compatibility plans for Sacramento International Airport, Yuba County Airport and Beale Air Force Base. As such, SACOG identified ten development planeight communities areas that are affected by these contours as shown in the attached map. In most or all cases, the developers are very aware of airport related restrictions and work with the local ALUCs to design their communities accordingly. Safety and height-related compatibility are also evaluated on a more case-by-case basis and are not part of this analysis.

Approved by:

Mike McKeever Chief Executive Officer

MM:GC:ts
Attachments

Key Staff: Kacey Lizon, Acting Planning Manager, (916) 340-6265

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Acres of Land Constrained by Airport Noise Contours (by Jurisdiction, by Airport)

Jurisdiction and Applicable Airport ¹	Acres of Land within Noise Contours:					
	60-65 CNEL	65-70 CNEL	70-75 CNEL	75-80 CNEL	75-80 CNEL	TOTAL
El Dorado County	45	9			-	54
Placerville						
Placerville Airport	1	-	-	-	-	1
Unincorporated El Dorado County						
Placerville Airport	44	9	-	-	-	53
Placer County	212	76			-	288
Lincoln					-	
Lincoln Regional Airport	115	76	-	-	-	191
Unincorporated Placer County					-	
Lincoln Regional Airport	97	-	-	-	-	97
Sacramento County	4,404	3,860	821	137	-	9,222
Rancho Cordova					-	
Mather Airport	-	313	124	17	-	454
City of Sacramento	159	291	-	-	-	450
Sacramento Executive Airport	-	-	-	-	-	-
McClellan Air Force Base	-	286	-	-	-	286
Rio Linda Airport	-	5	-	-	-	5
Sacramento International Airport	159	-	-	-	-	159
Unincorporated Sacramento County	4,245	3,256	697	120	-	8,318
Franklin Field	-	43	-	-	-	43
Mather Airport	-	1,037	298	17	-	1,353
McClellan Air Force Base	-	483	64	1	-	549
Rio Linda Airport	-	4	-	-	-	4
Sacramento International Airport	4,245	1,688	335	102	-	6,370
Sutter County	1,489	347	1	-	-	1,837
Unincorporated Sutter County						
Sacramento International Airport	1,489	347	1	-	-	1,837
Yolo County	1,686	154	-	-	-	1,840
Unincorporated Yolo County						
Sacramento International Airport	1,686	154	-	-	-	1,840
Yuba County	2,734	695	168	8	-	3,605
Unincorporated Yuba County						
Beale Air Force Base	2,721	693	168	8	-	3,590
Yuba County Airport	14	2	-	-	-	16
REGION TOTAL (Sum of All Affected Acres in All Jurisdictions)	10,571	5,140	990	145	-	16,847

¹Auburn Municipal Airport, Blue Canyon Airport, Borges-Clarksburg Airport, Brownsville Airport, Cameron Park Airport, Elk Grove Airport, Georgetown Airport, Rancho Murieta Airport, South Lake Tahoe Airport, Sunset Skyranch Airport, Sutter County Airport, Watts-Woodland Airport, and Yolo County Aiport are not included in this analysis because their noise contours do not extend, or minimally extend, beyond airport boundaries.

60 to 65 CNEL or 65-70 CNEL: Residential Uses Restricted or prohibited: Single family, multifamily, group homes, and mobile homes

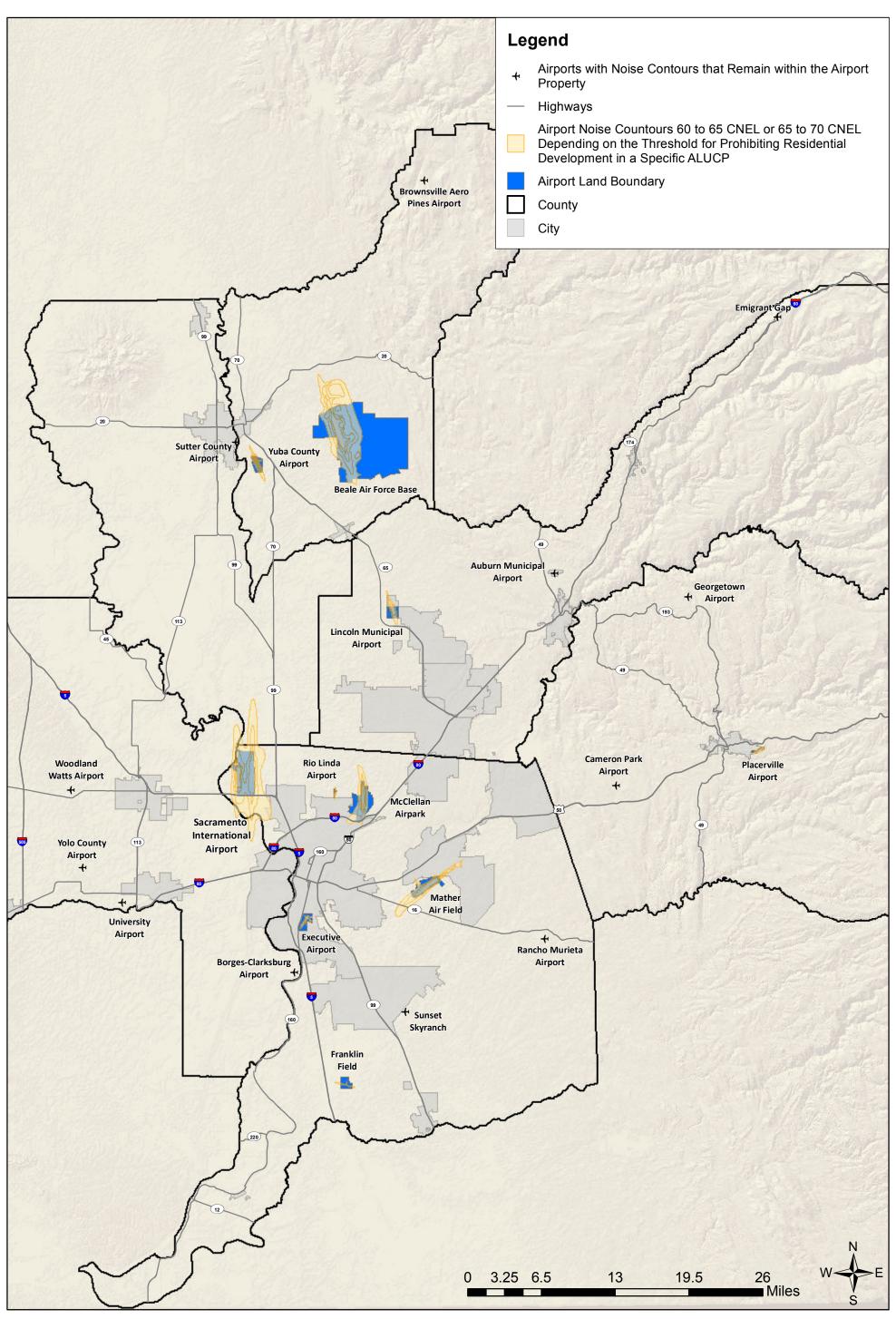
70-75 CNEL: 70 CNEL uses plus schools, universities, libraries, child care, nursing facilities, and art galleries restricted

75-80 CNEL: 70-75 CNEL uses plus retail trade of lumber, building materials and nurseries; hospitals; parks; riding stables; theme parks; amusement parks; theaters; auditoriums; sports center; and livestock/poultry restricted

80-85 CNEL: 70-80 CNEL uses plus passenger transportation, retail trade, business/professional services, shopping districts, public/quasi public, and all parks and recreation (except open space) restricted

Source: California Department of Transportation Division of Aeronautics, California Airport Land Use Planning Handbook, October 2011; El Dorado County Transportation Commission, Placerville Airport Land Use Compatibility Plan, June 2012; Placer County Transportation Planning Agency, Lincoln Regional Airport Land Use Compatibility Plan, February 2014; SACOG, Beale Air Force Base Land Use Compatibility Plan, March 2011; SACOG, Franklin Field Comprehensive Land Use Plan, December 1992; SACOG, Mather Airport Comprehensive Land Use Plan, 1997; SACOG, McClellan Air Force Base Comprehensive Land Use Plan, December 1992; SACOG, Sacramento Executive Airport Comprehensive Land Use Plan, May 1999; SACOG, Sacramento International Airport Land Use Compatibility Plan, December 2013; SACOG, Yuba County Airport Land Use Compatibility Plan, March 2011.

Sacramento Region Airports



Source: California Department of Transportation Division of Aeronautics, California Airport Land Use Planning Handbook, October 2011; El Dorado County Transportation Commission, Placerville Airport Land Use Compatibility Plan, June 2012; Placer County Transportation Planning Agency, Lincoln Regional Airport Land Use Compatibility Plan, February 2014; SACOG, Beale Air Force Base Land Use Compatibility Plan, March 2011; SACOG, Franklin Field Comprehensive Land Use Plan, December 1992; SACOG, Mather Airport Comprehensive Land Use Plan, 1997; SACOG, McClellan Air Force Base Comprehensive Land Use Plan, December 1992; SACOG, Rio Linda Airport Comprehensive Land Use Plan, December 1992; SACOG, Sacramento Executive Airport Comprehensive Land Use Plan, May 1999; SACOG, Sacramento International Airport Land Use Compatibility Plan, December 2013; SACOG, Yuba County Airport Land Use Compatibility Plan, March 2011.

Jurisdiction Review of the Land Use Forecast

Collaboration between SACOG and local agencies began in late 2013. This effort included work on the land use assumptions, the call for transportation projects, and development of regional-scale land use and transportation scenarios. The following partner and member agency collaboration has occurred to date:

- The first vetting of the plan update assumptions occurred in Summer 2013, with local staff review of the 2012 existing conditions land uses.
- In Fall 2013, local staff provided input on the proposed scope, cost, and timing of transportation investments for consideration in the plan update.
- The next period of land use review occurred in Winter 2013 with local staff review of the modeled inventory of adopted and proposed local land use plans.
- In 2014, staff hosted two open workshops for Board members and stakeholders on the travel demand model that is used in the MTP/SCS. The meetings were a way to share the data inputs and assumptions, model development and maintenance program, comparison to other models, local and regional applications, and state and federal oversight of the model.
- In July 2014, both transportation and land use assumptions of the regional scenarios were vetted through local staffs in preparation for the October public workshops and information to the SACOG Board.
- For each of the aforementioned milestones, staff has also been coordinating with partner
 agency staff at the El Dorado County Transportation Commission (EDCTC) and Placer County
 Transportation Planning Agency (PCTPA). The objective has been to align planning assumptions
 as each of these agencies concurrently update their long-range transportation plans.
- In Winter 2015, the Discussion Draft Preferred Scenario, which consists of a land use forecast and transportation project list, was vetted through local agencies for a six-week period to allow for adequate local review.
- In February 2015, during the six-week vetting of the Discussion Draft Preferred Scenario, SACOG
 held six elected official information meetings (one in each county in the region) to present the
 Discussion Draft and solicit questions and comments on it.

Additionally, most of the research and discussion items presented to the SACOG Board throughout the year have also been shared with the SACOG staff advisory committees, including the Regional Planning Partnership, the Transit Coordinating Committee, the Bicycle and Pedestrian Advisory Committee and the Planners Committee.

Regional Growth Pattern

As part of the MTP/SCS, SACOG develops a growth forecast, estimating new population, employment, and housing for the region, and a land use forecast, which is the distribution of this growth around the region. The purpose of this document is to describe the general use, density and intensity of the land use forecast for each jurisdiction.

Growth rates and patterns within an area are influenced by various local, regional, and national forces that reflect ongoing social, economic, and technological changes. Ultimately, the amount and location of population growth and economic development that occurs within a specific area is regulated by city and county governments through zoning, land use plans and policies, and decisions regarding development applications. Local government and other regional, state, and federal agencies also make decisions regarding the provision of infrastructure (e.g., transportation facilities, water facilities, sewage facilities) and protection of natural resources that may influence growth rates and the location of future development.

At any point in time, the 28 jurisdictions in the Sacramento Region are at various stages of updating or augmenting their local land use plans. Since the adoption of the Blueprint Vision by the SACOG Board of Directors in December 2004, a number of jurisdictions in the region have been voluntarily implementing the Blueprint smart growth principles into their planning processes. The general plan and specific plan development activities occurring in the region by the local jurisdictions are reflected in the 2036 land use forecast that accompany the population, housing and employment forecasts for the MTP/SCS 2036. These plans fall within one of four categories:

- General plans adopted since adoption of the Blueprint Vision in 2004 (with dates for those recently adopted in the last eight years): City of Citrus Heights (2011), El Dorado County, City of Galt (2009), City of Lincoln (2008), City of Live Oak (2009), Placer County (2013), City of Rancho Cordova, City of Rocklin (2012), City of Roseville (2010), City of Sacramento (2015), Sutter County (2010), City of Wheatland, Yolo County, the City of Yuba City, and Yuba County (2011). Undergoing general plan updates (as of 2015): City of Folsom, , City of West Sacramento, and the City of Woodland. El Dorado County is also undergoing a Land Use Policy Programmatic Update and the Sacramento County General Plan has been amended to include changes up to 2012.
- Developing or recently adopted area-specific land use plans (since 2012): City of Davis, El Dorado County, City of Lincoln, City of Colfax, City of Elk Grove, City of Roseville, Placer County, City of Placerville, City of Rancho Cordova, City of Roseville, City of Sacramento, Sacramento County, City of Wheatland, Yolo County, and Yuba County.
- Not currently updating general plans or community-level land use plans: City of Auburn, City of Isleton, Town of Loomis, City of Marysville, and City of Winters.

In developing the MTP/SCS 2036 land use forecast, SACOG worked with each of the local jurisdictions to develop a growth forecast and accompanying land use allocation that reflects each of their Blueprint implementation efforts. At the same time, the MTP/SCS 2036 land use assumptions must reflect the growth pattern that is most likely to occur, based on the best information available (93 C.F.R. § 93.122). The resulting growth patterns are a combination of local policies, many of

which reflect or are influenced by Blueprint principles, and market forces leavened by issues such as flooding and habitat conservation.

Definitions for Frequently Utilized Terms

The following terms are used throughout this document to describe the characteristics of the land uses identified in the MTP/SCS.

General Plan- California law requires each jurisdiction in the state to develop and adopt a general plan, a long-term plan for the physical development of the city or county. It must contain seven mandated elements, including: Land Use, Open Space, Conservation, Housing, Noise, Circulation, and Safety.

Specific Plan- Sometimes referred to as a master plan, community plan, or planned unit development, this is a tool many cities and counties use to implement the general plan in new growth areas. It effectively establishes a link between implementing the policies of the general plan and the development proposal of a specific area.

Sphere of Influence (SOI)- A sphere of influence refers to a plan for the probable ultimate physical boundary and service area of a city, as determined by the Local Agency Formation Commission (LAFCo). LAFCos are state-mandated, quasi-judicial countywide commissions whose function is to oversee boundary changes of cities and special districts, the formation of new agencies, including the incorporation of new cities or districts, and the consolidation of special districts and cities.

Density- Housing units divided by net residential acres (land on which housing is built, exclusive of public rights-of-ways, parks, schools and public areas). All densities discussed in this section of the MTP/SCS refer to net density.

Rural Residential- Single-family housing that is typically one to two stories, built at a density less than or equal to one unit per acre.

Very Low Density Residential- Single-family housing that is typically one to two stories, built at a density between two and four units per acre.

Low Density Residential- Single-family housing that is typically one to two stories, built at a density between four and eight units per acre.

Medium Density Residential- Single-family or multi-family (attached) housing that is typically built at a density between 9 and 12 units per acre. Typical building heights are one to two stories.

Medium-High Density Residential- Single-family or multi-family (attached) housing that is typically built at a density between 13 and 25 units per acre. Typical building heights are one to three stories.

High Density Residential- Multi-family (attached) housing that is typically built at a density greater than 25 units per acre. Typical building heights are between two and six stories, with taller buildings in the more urban areas.

Commercial- Commercial uses include retail and combined retail and office uses ranging from neighborhood scale to regional scale, generally one to two stories. Up to three stories is allowed when mixed with residential in a vertical mixed-use format. Floor Area Ratios (FAR) generally range from 0.2 to 0.6; however, FAR can be up to 2.0 in mixed use buildings.

Office- Office uses include a range of office buildings from single, small office uses (e.g., generally not including office parks or complexes) that range from one to three stories to multi-story towers (20 or more stories). The minimum FAR is generally 0.8.

Industrial- Industrial uses range from light industrial-office to heavy industrial. This includes business park complexes, warehouses, manufacturing and processing facilities, and other industrial uses generally ranging from one to two stories. FAR are typically 0.3 or less.

Public- Public uses include schools, hospitals, fire stations, airports, military facilities, libraries, community centers, zoos, public pools, etc. FAR are generally about 0.2 to 0.3; however, because of the wide range of public uses, this range can be much larger. For example, universities and hospitals will often have FAR greater than 1.0 and airports, by contrast, are usually very low, at less than 0.05.

Rural Residential Community- This refers to one of the Community Types identified in the MTP/SCS (see Chapter 3- Land Use Forecast for a full description and map of the Community Types). Residential development forecasted in these areas in the MTP/SCS does not exceed the maximum density of one unit per acre, as defined by general plans. Employment development is generally based on 80 percent of the allowed intensity of the land use designations in adopted general plans.

Center and Corridor Community- This refers to one of the Community Types identified in the MTP/SCS (see Chapter 3- Land Use Forecast for a full description and map of the Community Types). Unless otherwise noted, development forecasted in these areas in the MTP/SCS is generally based on 80 percent of the allowed density or intensity of the land use designations in adopted general plans.

Established Community- This refers to one of the Community Types identified in the MTP/SCS (see Chapter 3- Land Use Forecast for a full description and map of the Community Types). Unless otherwise noted, development forecasted in these areas in the MTP/SCS is generally based on 80 percent of the allowed density or intensity of the land use designations in adopted general plans.

Developing Community- This refers to one of the Community Types identified in the MTP/SCS (see Chapter 3- Land Use Forecast for a full description and map of the Community Types). These areas were modeled according to the density and intensity assumed in the adopted and proposed specific plans, master plans, and special plans discussed throughout this document.

O V E R V I E W O F DRAFT PREFERRED S C E N A R I O L A N D U S E F O R E C A S T

The land use forecast was developed within the same basic policy framework as the transportation system. The Board has directed that the emphasis of this particular four-year plan update shall be on improving implementation of an existing high performing plan and examining a short list of policy issues, such as the timing of transportation investments and whether more funds should be spent on transportation maintenance

needs.¹ Nevertheless, during each update cycle SACOG updates its empirical data and future-predicting analytical tools, and this new knowledge informs changes to the existing plan. The changes included in this draft land use forecast can accurately be described as refinements to the current plan.

The most important elements of the land use forecast include the Board's decisions to:

- Use the same regional economic growth forecast through 2036 (the end of year of this plan) as the forecast through 2035 in the current plan; and
- Strive for similar shares of future growth in the four Community Types (Centers and Corridors, Established, Developing and Rural Residential Communities) and in housing types (attached, small-lot single-family and large-lot single-family) as in the current plan. The third major land use issue is jobs-housing balance within commuting sheds of the region's largest employment centers. These three key land use components all relate strongly to the challenges the region faces in meeting federal and state clean air targets. To meet the air quality standards, increases from current conditions are essential in the shares of future growth in infill areas, medium and higher density housing products, and jobs-housing balance around the region's employment centers. The Board's decisions on how to focus transportation investments can help to support the needed land use changes. Highlighted below are some of the refinements from the current plan included in this draft land use forecast, first at the regional scale. Keep in mind that all of these changes are of a relatively small scale and within the context of the policy framework of not altering the current plan unless there is clearly an information-based reason to do so.

REGIONAL-SCALEREFINEMENTS

The dominant overarching consideration, by far, has been that the economy has been recovering more slowly than expected, with the housing market in particular being stalled at about a 3,000-unit-per-year production level. This is well below the current Plan's forecasted annual rate through 2035 of over 11,000 units per year, and even further below the peak of the market in 2005, when over 17,000 new units were built.

¹ SACOG, *Policy Framework for MTP/SCS Update Process*, December 12, 2013. http://www.sacog.org/calendar/2013/12/board/pdf/12B-Framework.pdf.

² SACOG, *Framework for Draft Preferred Scenario*, December 18, 2014. http://www.sacog.org/calendar/2014/12/board/pdf/10-MTP%20Framework.pdf

While there are some changes to market conditions in both the infill and greenfield areas, the big-picture story is that the economics of significantly increasing housing construction of any type and in virtually any location remain very challenged.

Infill and Greenfield Development

Consumer preference and demographic studies, as well as market performance around the state and nation, continue to indicate that it will take more growth in infill areas and in attached and small-lot single-family products to satisfy the future demand that will come from the millennial generation and the fast-growing senior population. The main differences in 2015 compared to 2011, when the current plan was written, are summarized below.

For infill development, there are somewhat improved regulatory and financial conditions. Two more changes to CEQA have been signed into law (SB226 and SB743), both designed to reduce barriers to infill development. Although neither has been fully implemented, both show promise of making a difference. In the fall of 2014, Governor Brown signed Infrastructure Financing District legislation to restore a portion of the tax increment financing capacity lost when redevelopment authority was eliminated, although it is not yet clear whether this new law will yield big change or small change. A state law also was passed directing a very substantial portion of Cap and Trade funding to infill areas for transportation, housing and other greenhouse gas-reducing development projects. Local governments continue to revise their codes to ease the barriers to infill, such as the City of Sacramento's major changes to its zoning code and parking regulations, both of which quickly helped to increase infill development. While it would be very unwise to understate the continued hurdles to large-scale infill, the situation for this sector is decidedly better than four years ago.

For greenfield development, on balance conditions are about the same as four years ago. There has not been a large master planned community that has broken ground in this region in approximately the last decade. Recent good news from the federal government regarding levee work and flood designation issues in the North Natomas Basin means that construction of new homes is likely to re-start in that area, enabling the build-out of the current North Natomas Community Plan (approximately 3,000 new homes). While that supply of available lots will not last long, this is an important step in the right direction. One of the new trends in the last four years is an uptick in construction in approved projects that lend themselves to being built in small pieces or phases.

³ SACOG, *Floodplains and Levee Improvements Update,* June 5, 2014.

All of the natural resource conservation planning efforts throughout the region have made progress in the last four years, but all are at the minimum a few years from being completed to the point that construction using those plans can begin.⁴ While there is hope for eventual success of all of these initiatives, big challenges remain. It is difficult to confidently project a firm completion/implementation date for any of them, especially because all of them except Yolo County have made it a priority to address the impacts regulated by all three relevant federal agencies (Army Corps of Engineers, U.S. Fish and Wildlife Service and Environmental Protection Agency). While this comprehensive coverage is essential in order to truly achieve the clarity and certainty both development and environmental interests are seeking, it is a feat that has never been accomplished in prior plans. An HCP is a U.S. Fish and Wildlife Service instrument to help implement the U.S. Endangered Species Act, but the Army Corps of Engineers and Environmental Protection Agency have responsibilities under the U.S. Clean Water Act that must be addressed as well. All three federal agencies believe that in Placer and Sacramento Counties, absent an HCP with this type of expanded coverage, there is a substantial chance that limited available resource lands for protection and mitigation will make it impossible for all of the developments being planned in those areas to occur.

Some of them suggest that even with such an HCP, it may not be possible to provide for all of the planned development. Regardless of how many projects are ultimately covered, the specific costs and regulatory streamlining that the HCPs will provide for any development project are not yet clear. On balance, the input SACOG received from the three federal agencies is that the Placer County Conservation Plan at this moment appears to be on a somewhat faster track to completion than the South Sacramento Habitat Conservation Plan. The large majority of new greenfield growth projected for the region is affected by these two plans. Nearly all developments affected by these plans are also pursuing individual federal permits, as an insurance policy in case the HCP efforts stall or are terminated. But the mitigation requirements for individual permits are typically higher than for projects covered by an adopted HCP and, due to labor shortages, the U.S. Fish and Wildlife Service is currently focusing its staff time on the HCPs rather than processing individual permits.

A final big trend in the greenfield sector this plan cycle is the very large oversupply of housing and employment capacity in Developing Communities that are already entitled or very far along in the entitlement process.⁵ There are sites for about three new homes being planned for every one home of market demand through 2036 and sites for seven new employees for every projected new employee that the economy is likely to produce. Some have argued that this oversupply is good and necessary because, for a variety of reasons, not all of the projects will be built, and the market needs some flexibility to operate efficiently. Both the current plan and this draft land use forecast, in fact, provide slightly more than twice the capacity for growth within included Developing Communities as the projected amount to be actually built by 2035 or 2036, providing for a very substantial amount of extra capacity and market flexibility.

⁴ SACOG, Habitat Conservation Plans/Natural Communities Conservation Plans Development, June 5, 2014.

⁵ SACOG, *Inventory of Adopted and Proposed Land Use Plans,* April 3, 2014.

Southwest Placer County, especially in and around the city of Roseville, is projected to be a particularly strong performer in the Developing Community sector, and is projected in the draft land use forecast to see somewhat higher amounts of growth than in the current plan.

Housing Product Types

Development conditions have been so unusual over the last few years that it is very difficult, and maybe dangerous, to interpret any empirical evidence as setting a trendline in one direction or another for anything. With that important qualifier, here are a few observations:

- 1. Traditional single-family homes continue to have a fairly high market share in a very depressed homebuilding market.
- 2. Small-lot and attached homes are being built, but mainly in the areas of the region with the highest property values in infill areas.
- 3. There has been a significant rise in demand for, and construction of, rental multifamily projects. The evidence indicates that construction is not nearly as great as the current market demand, with rising rents and very low vacancy rates being the clearest proof of this. The depth of the long-term market demand for rental products is a matter of debate throughout the country, but there seems little doubt that it will be greater than we have seen in this region in the past. There may be uncertainty about how long millenials' current overwhelming pattern of renting instead of buying will last, and whether the future will bring better or worse conditions for home mortgages, but it seems very clear that to meet market demand, this region is going to have to be able to build a significantly greater amount of rental housing than it has in the past.⁶

The abundance of development capacity in the entitled and planned Developing Communities creates a special challenge for predicting the "most likely" development pattern to be built by 2036. We have found virtually no disagreement with the regional growth forecast that SACOG is using for this plan update. But few, if any, of the development teams or local government staff we interviewed are conducting market studies that estimate what portion of the regional or subregional market an individual development is likely to realize in the next few decades. As people review the details of this draft land use forecast, we strongly encourage you to keep in mind this basic dynamic of the large difference between projected regional market demand for housing and jobs and the sum of housing and employment capacity in these Developing Community plans.

⁶ SACOG, *Trends in Demographics and Housing Demand,* August 28, 2014.

Employment Sectors

As the regional economy recovers from the recession, much of the employment growth will refill existing vacant buildings and sites where there is and will continue to be significant capacity to absorb new employment. In the near term the recovery among the commercial markets (industrial, office and retail) is varied, with some sectors seeing less vacancy than others. Heavy industrial and light industrial sites are doing very well and light industrial is doing the best in terms of low vacancy rates and high demand. Industry experts expect these spaces to continue to do well in the region. On the other hand, research and development flex sites have high vacancy rates given the large amounts of vacant suburban office space that is available and competing with these sites. The office sector in general has a high vacancy rate, meaning that in the near term there will likely be very little new construction until these vacancy rates significantly decrease. The size of offices demanded by business is also changing.

Except for large employers (e.g., the health care industry), few office users need or want 100,000 square feet or larger buildings. Most of the office demand is for 50,000 to 100,000 square feet. As employers try to attract millennial workers, there is evidence that some are moving from suburban to urban locations where many of these workers prefer to live and work. In the retail sector, businesses are continuing to locate in existing vacant retail buildings built in the last several years. Some new retail buildings are being constructed but it is questionable how much more of the traditional retail format is needed.

Although there is a large supply of existing and planned employment capacity in the region, predicting the most likely development pattern is somewhat less challenging than predicting the residential development pattern because employment tends to agglomerate in existing employment centers, and employment projects tend to build in much smaller increments than the large master planned residential communities. The largest of these centers are Downtown Sacramento, Rancho Cordova and Roseville and the latter two are faster growing. Several secondary (smaller) job centers and aspiring job centers are located throughout the region. The majority of the job growth projected occurs in all three of these employment centers, and among them the growth rate varies depending on how strong the current and historic job market has been in each center. Some aspiring centers, located in historically housing-rich areas of the region, are forecast to see some uptick in their job growth compared to the current plan, although the changes are modest compared to the vision in their plans. Future plans may forecast greater amounts of employment growth in these aspiring centers if market performance warrants.

DRAFT PLAN SCENARIO PERFORMANCE ON REGULATED AIR EMISSIONS

SACOG is required to meet Federal Clean Air Act standards as a condition of receiving transportation funding from the Federal Government and must also meet performance targets for

reducing greenhouse gas emissions from cars and light duty trucks set by the California Air Resources Board, if feasible. Current computer modeling indicates that, like the adopted plan, this Draft Preferred Scenario just meets the state's greenhouse gas emission targets for the Sacramento region in 2035.

The modeling to establish Federal Clean Air Act compliance is much more complex and will not be completed until later in the spring. Total regional air emissions of all types correlate very closely with basic building blocks of the land use pattern, including the percentage of total growth projected in the "infill" areas (Centers/Corridors and Established Communities) compared to the sum of growth in Developing Communities and Rural Residential areas; the amount of housing growth in the sum of small-lot single-family and attached products versus large-lot single-family; and the balance of jobs and homes around the major employment centers in the region.

⁷ Sacramento Metropolitan Air Quality Management District, *Regional Air Quality Planning Update*, August 28, 2014. http://www.sacog.org/calendar/2014/08/transportation28/pdf/AQ%20Presentation%20HANDOUT.pdf

SUMMARY BY JURISDICTION

EL DORADO COUNTY

Placerville

Land development in the City of Placerville is significantly limited by topography, as the city is located in a narrow valley surrounded by steep hills. In the past several years, new development has occurred on individual infill sites, resulting in a slow growth rate for the city. As the county seat and a major stop along the tourist routes into the Sierra Nevada foothills and mountains, Placerville has also maintained a relatively strong jobs base in the county. Today the city is more than almost 80 percent built out and is primarily characterized as an Established Community in the MTP/SCS. The MTP/SCS also designates a Center and Corridor Community along Placerville Drive and Highway 50 within the city limits. This is consistent with the Placerville Drive Multi-Modal Corridor Mobility Study and the Placerville Drive Development and Implementation Plan, which include land use and transportation concepts for the area

Growth projections through 2036 reflect continued infill of the city's vacant and underutilized parcels. Approximately 927 new housing units and 2,208 new jobs are projected by 2036 in Established Communities and Center and Corridor Communities, building out about 82 percent of the remaining capacity. New housing units range from low to medium-high density and new jobs are primarily commercial in the Center and Corridor Community, with new commercial, office, industrial and public uses in Established Communities. The city's strong jobs/housing ratio of 2.1 currently is expected to stay the same by 2036. Moderate growth in both jobs and housing will occur through the time period, with 2020 growth that is on par with the regional average for housing growth and lower than the regional average for employment growth. The build out estimate for the city provides an additional 488 new employees and 196 new homes post 2036.

Trends that will be tracked through the regional monitoring program that could influence future land use forecasts in Placerville include future implementation of the Multi-Modal Corridor Mobility Study, the Placerville Drive Development and Implementation Plan, and higher density rezoning required as part of the Housing Element Update.

El Dorado (Unincorporated County)

Residential development is concentrated in the western half of the county and historically has been rural in nature. Commercial development is generally located along Highway 50 and State Routes 49 and 193. In the last decade, robust suburban residential and employment growth has occurred at the county's western edge, in the communities of El Dorado Hills and Cameron Park. Due to the fact that these areas have a significant amount of existing homes and employment areas, Cameron Park, the portion of El Dorado Hills that is west of El Dorado Hills Boulevard, the areas immediately adjacent to Placerville, and the Diamond Springs area are designated as Established Communities in the MTP/SCS. Today, these areas are primarily made up of low density housing and supporting commercial and public uses, as well as light industrial uses. The remaining portion of El Dorado Hills, along with the adopted specific plans of Carson Creek, Bass Lake Hills, Valley View, Missouri Flats, and Marble Valley make up the Developing Communities in El Dorado. The El Dorado Hills Business Park south of Highway 50 and just east of the El Dorado-Sacramento

County border has begun generating some job growth outside of the traditional jobs center in the city of Placerville. This area is one of two Center and Corridor Communities in the county. The other is located in the Diamond Springs area, along Pleasant Valley Road, between Missouri Flat Road and Highway 49. The county general plan designates "agricultural districts" with the purpose to conserve, protect, and maintain agriculture use in areas throughout the eastern portion of the county. Within these districts, there are stronger policies related to non-agricultural development, including providing a 10 acre buffer between agricultural-related and non-agricultural uses. These areas, along with the eastern half of the county, which is primarily forest and publicly-owned lands, are designated as lands not identified for development in the MTP/SCS planning period, meaning no non-agricultural related development is projected within these areas. The remaining county areas are considered Rural Residential Communities in the MTP/SCS, consistent with the county general plan. Although the general plan includes substantial theoretical opportunities for rural residential construction in these areas, market forces, county policies to protect and promote agricultural uses, and wildfire risk issues are expected to significantly limit the amount of actual rural residential development.

The MTP/SCS forecasts 10,984 new housing units and 18,706 new employees in the unincorporated portion of El Dorado County by 2036. Although the Center and Corridor Communities are expected to experience growth almost to capacity, the majority of growth by 2036, 5,691 housing units and 15,168 employees, is located within Established Communities. New housing growth ranges from very low density to medium-high density, the majority of which is continued build out of existing plans. New employment is a mix of neighborhood-supportive commercial and public uses, as well as filling in and expanding existing industrial/office parks along Latrobe Rd., and in various locations along Highway 50.

Developing Communities in the MTP/SCS make up 3,827 of the new housing units and 1,335 new jobs. The portion of El Dorado Hills that is a Developing Community has approximately 3,558 homes and 1,435 jobs today. The MTP/SCS forecast includes an additional 1,002 new homes and 600 new jobs in this area by 2036; however, planned capacity for this area includes an additional 1,333 employees and 1,602 housing units. The growth in this area is primarily very low density residential, averaging two units per acre with smaller-scale neighborhood-supporting commercial and new public uses. Bass Lake Hills, immediately adjacent to El Dorado Hills is planned almost entirely for residential uses, has 798 new housing units and 66 new employees by 2036. Similar to El Dorado Hills, this area is primarily very low density residential, averaging two units per acre, and neighborhood-supporting public uses. Planned capacity for this area includes an additional 505 units of capacity. The Valley View specific plan area, located just south of Highway 50 from El Dorado Hills has a planned capacity for 2,839 housing units and 156 employees. Housing has recently started building in this area, resulting in the construction of approximately 746 homes and 134 employees as of 2012. The MTP/SCS forecast assumes construction of another 885 homes and 27 new jobs by 2036. Similar to its surroundings, this area has an average density of three housing units per acre and commercial and public employment uses. Carson Creek is a Developing Community located just south of Highway 50 on the Sacramento-El Dorado border which began construction during the past decade. This area is projected to add 702 new housing units in the MTP/SCS planning period, averaging about six units per acre. Planned capacity for this area includes an additional 538 housing units at build out. New commercial, office, industrial, and public uses have the potential to generate 3,716 new employees at build out. Of this employment growth, 63 new employees are forecast in the MTP/SCS during the 2036 planning period. Missouri Flats, a Developing Community just outside of Placerville, has plans to more than double the current 3,129

employees, reaching a potential 6,497 employees at capacity. This area is unique because it is currently more like an Established Community; however, the county has adopted design guidelines for the area to encourage revitalization and improve the quality and character of the area. For this reason it is included as a Developing Community. The MTP/SCS assumes only a small amount of housing and more substantial employment growth in this area, with 580 new employees and 44 new housing units by 2036. Revitalization of an existing community often happens slower than new growth due to its location within the region. It is likely that this area will take time beyond the current planning period to realize its full capacity. The final Developing Community is Marble Valley, which is expected to provide the full capacity of 398 new homes at an average density of one dwelling unit per five acres. El Dorado County is currently processing an application for the proposed Village of Marble Valley Specific Plan, which includes capacity for 3,236 housing units and almost 2,000 jobs. If adopted, this Village of Marble Valley Specific Plan would supersede the currently approved Marble Valley Specific Plan, but would not change the MTP/SCS forecast.

Rural Residential Communities in El Dorado County are expected to experience lower amounts of growth, approximately 1,202 new housing units and 284 new jobs by 2036. The MTP/SCS forecast assumes relatively small amounts of new rural residential homes and small-scale community-supportive commercial and public uses to be constructed in the region by 2036. This is in part due to changing demographics which suggest a higher percent of the population will choose to live on smaller lots or in attached homes near existing jobs, services, and with more transportation choices.

Unincorporated El Dorado County as a whole is forecasted to grow in pace with the regional average. This means it will experience slower growth rates between now and 2020 as the region comes out of the current recession. Regionally, 33 percent of the 2036 employment growth is forecasted to occur by 2020 and 17 percent of the housing growth forecasted by 2036. El Dorado County is projected to build 32 percent of its 2036 employment and 18 percent of the housing by 2020. The jobs/housing ratio in 2036 is forecasted to improve slightly to 0.7, from 0.6 today.

Trends that will be tracked through the regional monitoring program that could influence future land use forecasts in El Dorado County include the rate of increased job growth in the foothills, the degree to which the County's priority of protecting and growing its agricultural activities succeeds, and the pace of rural residential construction. Implementation of the Land Use Policy Programmatic Update to the General Plan, for which the Final Environmental Impact Report (EIR) is estimated for release in summer 2015, will also influence future land use forecasts in El Dorado County. Additionally, the county faces development constraints from surrounding oak woodlands and from Measure Y.

PLACER COUNTY

Auburn

Auburn has generally experienced a slow pace of growth over the past 20 years. Development opportunities within the city are limited to a single greenfield site south of Interstate 80, and scattered infill and redevelopment parcels. Though it covers a large area, Auburn's sphere of influence (SOI) similarly has few large development parcels outside of the redevelopment potential along the Highway 49 corridor (north of the city limits). Given the nature of existing development in the Auburn area, large capacity-adding annexations are not projected to occur. For this reason,

most of the city and the SOI are designated as Established Communities in the MTP/SCS. The half-mile radius around the existing Amtrak station is identified as a Center and Corridor Community. The greenfield site south of Interstate 80 which has an adopted Specific Plan known as Baltimore Ravine, is characterized as a Developing Community in the MTP/SCS. Auburn has historically maintained a strong balance of jobs to housing, due in part to its role as the county seat, a shopping and service destination for the surrounding rural areas, and as a stop along heavily-traveled tourist routes to the Sierra Nevada foothills and mountains.

Auburn's Established Communities are primarily built out today in terms of new residential and employment capacity. These areas have capacity to add approximately 1,721 new housing units; however, this is all through individual infill opportunities at maximum allowed densities and would take significant time to achieve. Given the historic nature of residential growth in Auburn, the MTP/SCS forecast is for 280 new homes in Established Communities by 2036. Similarly these areas have capacity for about 3,658 new employees, but the MTP/SCS forecast is for 1,433 new employees by 2036. About 640 new employees and 267 new housing units are expected to be added to the Center and Corridor Community around the train station in the MTP/SCS planning period. Growth within the Established and Center and Corridor Communities ranges from rural to medium-high density residential uses and includes community-supporting commercial, industrial, and office employment uses. The remaining growth in the MTP/SCS, 718 new housing units and 226 new employees, is in the Developing Community of Baltimore Ravine. This plan is approved and expected to total 725 housing units with an average density of 10 units per acre and supporting commercial and public uses, generating potentially 226 employees at build out.

The jobs/housing ratio is expected to remain jobs-heavy, increasing slightly from 1.3 to 1.4 in 2036. A greater share of the housing growth will occur in the later years of the planning period, as it is expected that the housing units in Baltimore Ravine will likely not begin construction right away. Similar to many Developing Communities around the region, it is expected to start building after 2020. The employment forecast in the MTP/SCS for Auburn is similar to the majority of the region in that it will take time for the job market to recover and so slower job growth is expected in the early years.

Among the factors that will be tracked through the regional monitoring program is the possible interplay between growth on the county's valley floor and growth rates in Auburn. If the expected success of the on-going effort to adopt a habitat conservation plan in this area stalls or fails it is possible that growth pressures may shift up into the foothills and change the projected pace of growth in Auburn. Another factor that could increase Auburn growth rates would be the provision of additional commuter rail service to the city.

Colfax

Colfax is a relatively small city that has experienced historically slow growth. Though the city is not built out, much of the current development has been there for a long time and the city does not have any large new growth areas. For this reason, most of the city is considered an Established Community in the MTP/SCS. The city is currently working on a Highway Corridor Revitalization Plan for the area along Interstate 80 to encourage economic development of the area. Most recently, the city identified the planning area boundary and targeted opportunity sites for redevelopment. This portion of the city is designated as a Center and Corridor Community in the MTP/SCS.

Through 2036, Colfax is anticipated to grow slowly, adding 683 new jobs and 105 new housing units. New development is likely to be small-scale and a significant amount of it concentrated in and around the Interstate 80 and Highway 174 corridors. New residential uses range from very low density to high density within the highway corridor and new employment uses include commercial, office, industrial, and public development. The increase in anticipated employment development within the corridor is likely to shift the balanced jobs/housing ratio in the city from 0.9 today to a jobs-heavy ratio of 1.5 by 2036.

Issues that will be tracked through the regional monitoring program include whether there are any unexpected market dynamics that increase growth rates substantially. Additionally, we will track the development and implementation of the Highway Corridor Revitalization Plan for the area along Interstate 80, which has resurfaced as a priority now that the city's wastewater treatment issues have been resolved.

Lincoln

The City of Lincoln has been one of the fastest growing cities in the Sacramento region for much of the last decade, nearly doubling its population during the past 10 years. The majority of growth has been residential development within the city limits, though commercial development accelerated during the three to four years preceding the Great Recession. As a result of this growth, the residential capacity within the city limits is over 80 percent built out today. For this reason, the entire city limits, with the exception of the downtown area, is identified as an Established Community in the MTP/SCS. The downtown area, because of its location along Lincoln Boulevard and its history as being the town center, is distinguished as a Center and Corridor Community in the MTP/SCS. The Lincoln Boulevard and East Joiner Parkway are also part of the Center and Corridor Community. The city's 2050 General Plan accommodates a major expansion of the population and city limits. The Plan was developed at approximately the same time as the Blueprint and the two documents are essentially consistent with each other. The general plan organizes new growth into "villages." There are seven villages and three special use districts, each containing a mixture of land uses and densities designed to implement smart growth principles and to recognize the environmental and physical constraints of each village area. Large commercial and industrial uses are planned for the areas along the Highway 65 Bypass. All seven villages are within the city's SOI. Village 1 and Village 7 have adopted specific plans. Specific plans for Village 5/Special Use District B and Special Use District B-Northeast Quadrant are currently in process. Throughout the expansion areas of the city (east and west), a minimum of 40 percent of the gross land area will be dedicated open space and parklands. As a participant in the Placer County Conservation Plan, Lincoln is working with Placer County and federal and state resource agencies over those lands that will be preserved and developed within its future city limits. It is most likely that Village 1, Village Village 5/Special Use District B and Special Use District B-Northeast Quadrant, and Village 7 will begin construction within the current MTP/SCS planning period and they are, therefore, designated as Developing Communities. A portion of the current SOI, outside of the Villages, along Highway 65 is designated by the general plan for employment uses, including a medical center and light industrial uses. This area is also identified as a Developing Community in the MTP/SCS.

The MTP/SCS forecasts 10,841 new housing units and 10,927 new employees in Lincoln by 2036. About 3,583 of the new housing units are in the Center and Corridor Community and Established Communities. This growth ranges from very low density to high density and comes close to building out the residential capacity of the current city limits (1,154 units of capacity

remaining). Employment growth in Established Communities accounts for 2,999 of the new employees, which includes commercial, office, industrial, and public land uses. Within the Established Communities there still exists additional land capacity for another 12,210 employees. Employment growth in the Center and Corridor Community accounts for 3,648 of new employees of the same uses, plus mixed use, with additional capacity for 2,600 employees at build out.

The Developing Community that is located along Highway 65 and Industrial Avenue, includes 3,199 new employees by 2036 in the MTP/SCS forecast. This area is designated by the general plan for employment only and, therefore, no housing growth is assumed for this area in the MTP/SCS. This area has capacity beyond the MTP/SCS forecast for an additional 5,545 new jobs. Village 7 is the first of the Villages assumed to begin construction. As a result, the MTP/SCS forecasts this specific plan area will likely build out its 3,285 housing units and 397 employees by 2036, with remaining capacity for 100 employees. This village includes an average residential density of 10 units per acre with neighborhood-serving commercial and public uses. Villages 1 and Village 5/Special Use District B and Special Use District B-Northeast Quadrant make up the remaining growth for the city. Village 1 has a capacity of 5,640 housing units and 677 employees. The MTP/SCS forecasts 2,007 new housing units and 500 employees by 2036. The average residential density is six units per acre and the plan includes neighborhood-serving commercial and public uses. The Developing Community of Village 5/Special Use District B and Special Use District B-Northeast Quadrant include a total of 1,999 new units and 285 new employees in the MTP/SCS. However, this village area is planned for a capacity of 8,318 housing units and 11,402 employees. Similar to the other villages, the Developing Community of Village 5 and Special Use District B includes neighborhoodserving commercial and public uses plus some office uses, and has an average residential density of five units per acre.

While Lincoln experienced rapid growth before the onset of the Great Recession, the effects of the recession coupled with high foreclosure rates contributed to a slower housing growth rate more recently. Changing demographics within the city are likely to continue this trend, resulting in housing growth that is generally on par with the regional average. Slightly above the regional average of 17 percent, the MTP/SCS forecast assumes 20 percent of the 2036 housing growth will occur by 2020. Much of this growth by 2020 is expected to occur in the existing city limits, in Established Communities, with the build out of currently developing subdivisions. Lincoln is also projected to experience increased job growth into the future, as it merges with the growing southwest Placer job center along the Highway 65 corridor. By 2020, the MTP/SCS forecasts approximately 27 percent of the 2036 jobs will be realized, compared to the regional average of 33 percent. This growth forecast works to improve the city's jobs/housing ratio from 0.5 today to 0.7 by 2036.

There are several key variables to monitor carefully that may influence the timing and nature of growth in Lincoln in future MTP/SCS updates. First, the Lincoln Bypass, completed in 2012, has already reduced traffic and increased business in the downtown area. Additionally, we will be watching the rate of residential permitting activity post-recession. Also important is the timing of completion of the Placer County Conservation Plan, which currently appears to be on a positive trajectory headed towards resolution. However, challenging issues remain, including some involving lands within the Lincoln SOI. Any one of these three variables could alter market conditions enough to warrant changes in future MTP/SCS's.

Loomis

The Town of Loomis is a small, rural community that has experienced very little growth in the past 10 years despite its location in the fast-growing southwestern region of Placer County. Loomis' general plan aims to maintain the town's rural character overall, while the Town Center Master Plan supports some infill and redevelopment in the downtown area. Because of this, the Town Center area is designated as a Center and Corridor Community in the MTP/SCS, while the housing and industrial employment areas bordering it are characterized as an Established Community and the remaining portions of the city are identified as a Rural Residential Community.

Loomis' projected MTP/SCS growth of 1,629 new employees and 779 new housing units by 2036 is expected to happen slowly over the planning period and primarily within the Center and Corridor Community and Established Community. This growth is consistent with the uses included in the general plan and current project applications, ranging from rural residential to mixed use development with neighborhood-supporting commercial, office, and industrial employment. With no plans for expansion, the town's residential growth is limited to development of the remaining vacant rural residential lands, and minimal development in its downtown. Employment growth will be concentrated along the Interstate 80 corridor and in the downtown. Residential growth will be slow, with the town only likely to see 8 percent of its 2036 housing growth by 2020.

The regional monitoring program will include tracking infill development such as envisioned in the town's core area by the Downtown Master Plan currently in progress, and the potential impact any additional commuter train service in Placer County might have on growth rates and patterns in and around Loomis.

Rocklin

The City of Rocklin is surrounded by the cities of Lincoln, Roseville, and the Town of Loomis. The city experienced significant residential growth prior to the Great Recession and, as a result, today the city is about 70 percent built out in its housing capacity. The city's recently adopted general plan (2012) assumes build out of city residential uses by 2035 using the general plan's midrange growth projections. The general plan allows for higher densities and mixed use in the downtown area, which provides significant capacity for residential and employment growth in that area. The downtown area is located within the half-mile radius of the existing Amtrak station and is designated as a Center and Corridor Community in the MTP/SCS. There are also four new growth areas within the city: two residential-focused and two employment-focused. These areas are identified as Developing Communities in the MTP/SCS, while the remainder of the city is considered an Established Community.

Over the last few years, the city has experienced an increase in applications for more infill-focused residential development on vacant commercial or other non-residential land. This trend, combined with the recently adopted housing element that identified rezoning of some non-residential land to residential land, has resulted in an increase in housing capacity in the city beyond what the current general plan estimates. Based on these trends and the information gathered to date, SACOG estimates build out of the city could reach approximately 31,789 housing units and 52,287 employees. Similar to the general plan update projections, the MTP/SCS forecast for Rocklin is that most of the city's residential capacity will be built out by 2036. The city's employment centers are expected to grow significantly by 2036, but will not likely reach capacity for some time beyond the MTP/SCS planning period. By 2036, the MTP/SCS forecast for the city includes 6,989 new

housing units and 10,554 new jobs. Just over half of this housing growth will occur in existing subdivisions and infill in the Established and Center and Corridor Communities. In Established Communities, new residential growth ranges from rural residential to high density land uses and new employment growth includes primarily commercial, research and development/tech and public uses. The MTP/SCS forecasts this area will grow by 3,272 new housing units and 3,089 employees. The Center and Corridor Community is expected to grow by 320 housing units and 334 employees. This residential growth is expected to be higher density residential and commercial employment that will be added through small-scale infill and redevelopment and, therefore, is expected to be absorbed slowly over the MTP/SCS planning period.

The remaining growth is in the four Developing Communities. Sunset Ranchos is an adopted specific plan area that is currently under construction. At build out the plan will include a total of approximately 4,358 housing units and 1,436 jobs. The MTP/SCS forecasts that Sunset Ranchos will be nearly built out by 2036, with only capacity for 191 employees remaining. With an average residential density of eight units per acre, this area is primarily low and medium density uses, including some neighborhood-supporting commercial and public uses. Directly west of Sunset Ranchos along Highway 65 is the city's newest planned employment center. Though building activity in this area has only occurred recently, this area could accommodate up to 10,041 employees at build out and is primarily made up of commercial, office, and research and development/tech uses. The MTP/SCS projects that this area will reach about 40 percent of its employment capacity by 2036. Additionally, the Highway 65 Corridor area is expected to build out its capacity for 370 new medium to high density residential units. The second employment-focused Developing Community in Rocklin is along Interstate 80. At build out, this area could potentially add 2,936 new employees to the city. Since 2012, this area has experienced significant commercial construction and continues to grow. The MTP/SCS projects that this area will add 2,471 new employees from 2012 to 2036. Additionally, this Developing Community is expected to add 195 medium to high density residential units by 2036 out of a capacity for 300. The fourth and final Developing Community in Rocklin is the Clover Valley Specific Plan area. Clover Valley is planned for 561 low density units, averaging four units per acre and includes some small-scale commercial and public uses. The MTP/SCS projects that roughly the first phase of this development, about 25 percent of the planned housing units, will be built by 2036.

In addition to having historically high growth rates, Rocklin, along with the rest of southwest Placer County, is an area in the region demonstrating strong post-recession residential and employment growth. As a result, Rocklin's job and housing growth is expected to outpace the regional average. The MTP/SCS forecasts 40 percent of Rocklin's 2036 employment growth by 2020, compared to the regional average of 33 percent of the 2036 employment growth by 2020. Similarly, the MTP/SCS forecasts 37 percent of the 2036 housing growth forecast by 2020 will occur in Rocklin, compared to the regional average of only 18 percent of the 2036 housing growth by 2020.

The regional monitoring program will include continued tracking of market trends around the type and location of housing development as the region continues to come out of the recession and many of the planned developments in the southwest Placer area begin to build.

Roseville

Roseville sits at the heart of the southwest Placer employment center. For more than a decade, the city has experienced significant housing growth. However housing growth has been outpaced by

employment growth in the city. Employment uses have been concentrated in the areas around Interstate 80 and Highway 65. While residential uses surround these areas, the majority of the city's housing is located west of the Interstate 80 and Highway 65 corridors. The city recently annexed the lands in the western portion of the city, including the specific plan areas of Sierra Vista and Creekview. These two areas along with the currently building West Roseville Specific Plan area and the in-process Amoruso Ranch Specific Plan area are characterized in the MTP/SCS as Developing Communities. Roseville also has three areas identified as Center and Corridor Communities. The first includes the half-mile radius around the existing Amtrak station, including the Downtown Specific Plan and Riverside Gateway areas. The second two are centered on the Sunrise Boulevard and Douglas Boulevard intersection, and correspond with two of the city's primary future target infill and revitalization areas. The balance of city is largely built out today and is therefore designated as an Established Community in the MTP/SCS.

With 33,624 new jobs and 18,896 new housing units, job growth is expected to outpace housing growth through 2036 in Roseville. About 23,000 employees or 68 percent of the job growth is forecasted to occur in Established Communities by in-filling of existing employment areas, including regional retail centers, office parks/light industrial complexes, and industrial parks. These Established Communities have additional land capacity for an additional 9,163 new employees at build out. Residential growth capacity in these Established Communities is much lower and would occur primarily through infill development. The MTP/SCS forecasts 2,989 new housing units in these areas by 2036, building out remaining residential capacity. Redevelopment and infill, both mixed use and residential, in the Center and Corridor Communities are forecasted to be slow and steady throughout the planning period. These Center and Corridor Communities are forecast for 1,100 new housing units and 4,061 new employees within the MTP/SCS planning period. Build out potential in these areas is significant, at 7,112 additional employees and 469 additional housing units. With other large established employment centers in the city, it is unlikely that these areas will reach their employment capacity for some time, well beyond the current MTP/SCS planning period. Both Established and Center and Corridor Communities include residential development at a range of densities from low to high and a variety of employment uses including commercial, office, industrial, public, and mixed-use.

The majority of the new housing growth is projected to take place in Developing Communities. Unlike Established Communities, which experience high employment growth relative to housing growth, Developing Communities experience high housing growth relative to employment growth. This is due to two factors: (1) most of the residential growth in Developing Communities is not expected to fully build out by the horizon year of the MTP/SCS and, therefore, a critical mass of housing is not present to support planned employment growth; and (2) most Developing Communities are located around existing regional jobs centers in southwest Placer County, southeastern Sacramento County, and urbanized Yolo County and are intended to provide nearby housing for those jobs centers.

The West Roseville area is assumed to come close to building out its planned 10,478 housing units, adding 6,502 housing units to the roughly 2,926 that exist today, at an average of seven units per acre by 2036. This area also has plans for new commercial, office, and public uses which could result in 2,768 new employees at build out. The MTP/SCS forecasts 2,500 of these new employees by 2036. Sierra Vista is also projected to experience substantial growth by 2036. The MTP/SCS forecast for Sierra Vista includes 6,098 new housing units and 3,500 new jobs by 2036. The plan's build out capacity includes 8,679 homes and 9,003 jobs. Housing growth in this area will range from

low to high density, with an average density of 10 units per acre. Employment uses include commercial and neighborhood-supporting public uses. Another Developing Community, Creekview, is forecasted to build about 60 percent of its 2,011 housing unit capacity by 2036. This area is mostly medium density residential, with an average density of 11 units per acre. It includes some neighborhood-supportive commercial and public uses, building out the capacity for 418 new employees in the MTP/SCS. The final Developing Community, Amoruso Ranch, is projected to add 1,001 new homes and 145 new jobs by 2036. Housing growth in Amoruso Ranch will occur at an average of seven units per acre and employment growth will generally include neighborhood-supporting commercial uses.

Job growth in Roseville is somewhat slower in the early years of the plan compared to historic trends, but is expected to keep pace with residential development. With approximately 10,091 new employees and 5,257 new housing units by 2020, the city is forecasted to get 30 percent of its 2036 job growth and 28 percent of its 2036 housing growth by 2020. Almost 80 percent of this job growth is expected to occur within existing job centers in Established Communities. Most of the housing growth in the early years, which outpaces regional housing growth by 2020, is expected to occur mostly within Established Communities and West Roseville.

There are several on-going planning initiatives which may influence the growth projected for Roseville in future amendments to the MTP/SCS, including the pace and location of new housing and employment growth as the region continues to recover from the recession. Additionally, there are two universities currently proposed in southwest Placer County. It will be important to monitor the progress of these proposals and surrounding developments as this is an important factor that could influence the timing and pace of development in southwest Placer County, including Roseville. Although the city is not participating in the Placer County Conservation Plan, the timing of PCCP adoption will be an important issue tracked through regional monitoring that might also influence Placer County growth patterns in future MTP/SCS updates.

Placer (Unincorporated County)

Historically, development in unincorporated Placer County has been concentrated in rural communities, the majority of which are clustered along the Interstate 80 corridor. The MTP/SCS describes these areas as Rural Residential Communities. Clusters of more concentrated housing and employment are located near the more urban areas of the county. The areas immediately surrounding the cities of Auburn and Colfax, as well as Granite Bay, and the Sunset Industrial area are all examples of this. These areas are characterized as Established Communities in the MTP/SCS. In the past several years, however, Placer County has adopted an updated General Plan to incorporate amendments through 2013 and approved a number of new specific plans, which will allow significant new residential and employment growth in the county. Because these are new development areas, they are characterized as Developing Communities in the MTP/SCS. These Developing Communities include the specific plans for Placer Vineyards, Regional University, Riolo Vineyards, Bickford Ranch, Placer Ranch, and Squaw Village. The county's long-term vision for growth includes an additional new growth area, Curry Creek, located just north of Baseline Road and the Placer Vineyards plan area. This area has been identified for future growth in the general plan and, while the county's work plan includes development of a community plan for this area, this project is not currently moving forward. Therefore, Curry Creek and the remaining portions of the

unincorporated county outside of the Established and Developing Communities described above, are not identified for development in the current MTP/SCS planning period.

Because of the amount of development planned in the southwest portion of the county, Placer County, in partnership with South Placer Regional Transportation Authority, Placer County Water Agency, the City of Lincoln, CA Department of Fish and Wildlife, U.S. Fish and Wildlife Service, National Marine Fisheries Service, the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, and the California Regional Water Quality Control Board are developing the Placer County Conservation Plan (PCCP). The proposed PCCP is a Habitat Conservation Plan (HCP) under the Federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. When adopted, the plan would allow local entities to issue state and federal permits, streamlining a currently very lengthy process.

Placer Vineyards is the largest Developing Community in Placer County, located on the Sacramento-Placer county line. At build out this plan will accommodate land for about 9,037 employees and 14,132 housing units. Employment uses are mostly neighborhood serving and include commercial, office, industrial, and public uses. Residential uses range from low density to high density, including mixed use, with an average density of seven units per acre. Regional University, located adjacent to the Roseville city limits, is planned for 4,387 new housing units and about 1,875 new jobs at build out. This plan includes land for a new university campus, which is where the majority of the jobs are expected to come from, along with some neighborhood-serving retail and commercial uses. Because the plan includes a major university campus and it is adjacent to a more urban part of the county, Roseville, the residential densities planned for this area will average 13 units per acre, not including the on-campus housing. Placer Ranch is located at the Roseville city boundary just north of West Roseville and east of Amoruso Ranch. At build out this plan will accommodate 5,376 homes and 20,155 jobs. Similar to Regional University, most of the projected employment growth will come from the new university campus, along with some additional commercial mixed use, industrial, and public uses. The residential densities planned for this area will average eight units per acre. These plans represent a shift in the traditional type of development Placer County has done historically.

Riolo Vineyards is a Developing Community located between Placer Vineyards and the existing rural community located around PFE Road and Walerga Road. This plan, at build out will include 938 housing units, at an average density of four units per acre and about 166 jobs, mostly neighborhood service commercial and public uses. The Developing Community, Bickford Ranch, is located in a primarily rural residential area, east of Lincoln. This plan has capacity for 1,890 homes, averaging three units per acre, and about 312 employees that are mostly neighborhood-supporting commercial and public uses. The Developing Community, Squaw Village, is located west of River Road in the Sierra Nevada Mountains near Lake Tahoe. At build out, this plan includes 850 housing units at a density of 22 units per acre and 574 commercial employees.

Capacity in Established Communities and Developing Communities is estimated at 34,946 new homes and 85,276 new jobs. Established Communities, if built out, would add 53,512 new jobs, most of which are in the Sunset Industrial Community Plan area and Auburn Sphere of Influence area. Established Communities, also if built out, would add 7,621 new housing units. Rural Residential Communities have a large amount of capacity and if built out could add 23,605 new rural residential homes and 19,668 new jobs. The remaining capacity comes from Developing Communities, as described above.

In total, the MTP/SCS forecast for unincorporated Placer County includes 15,668 new housing units and 21,412 new jobs by 2036. Of this, the majority of new jobs, or 16,550, are within Established Communities, primarily located in the Sunset Industrial Community Plan area and the area around Auburn. These jobs are primarily industrial and light industrial, but include a variety of other uses including office, retail, and public uses. Established Communities also account for 1,604 of the new housing units, which range from rural residential to medium-high density. Rural Residential Communities in Placer County are expected to experience low amounts of growth, approximately 2,499 new housing units and 804 new jobs by 2036. The MTP/SCS forecast assumes relatively small amounts of new rural residential homes and neighborhood-supporting commercial and public uses to be constructed in the region by 2036, as compared to the build out capacity. This is in part due to historical building rates combined with changing demographics, which suggest a higher percent of the population will choose to live on smaller lots or in attached homes near existing jobs, services, and with more transportation choices. In Placer County, this is also in part due to potential wildfire risks in these areas.

The majority of the new homes (74 percent) are located within the southwest Placer Developing Communities by 2036. Placer Vineyards, the largest of the plans is projected to construct 4,524 new housing units and 1,499 new employees in the MTP/SCS by 2036. By 2036, the MTP/SCS projects that Placer Ranch will include 2,900 new housing units and 2,003 employees. Regional University includes 1,448 new housing units and 381 new jobs. The MTP/SCS forecast for both Placer Ranch and Regional University includes some portion of university development by 2036. The MTP/SCS forecast includes 922 new housing units and 84 new employees in Riolo Vineyards, building out residential capacity and building close to employment capacity for the area. By 2036, the MTP/SCS projects growth of 1,427 new homes and 92 employees in Bickford Ranch. Squaw Village, the smallest of the plans, is projected to construct 345 new housing units in the MTP/SCS by 2036.

The MTP/SCS forecast assumes 12 percent of the 2036 housing growth and 27 percent of the 2036 job growth will likely occur by 2020. In the early years, housing and job growth are slower than the regional average of 17 percent and 33 percent respectively, primarily because so much of the new housing growth is in Developing Communities that have not yet begun building. Most of the growth in Developing Communities is expected to happen in the latter half of the planning period.

The timing of PCCP adoption will be the dominant issue tracked through regional monitoring that might influence Placer County growth patterns in future MTP/SCS updates.

SACRAMENTO COUNTY

Citrus Heights

Citrus Heights has limited growth opportunities in the near term as the city is nearly built out, with 70 percent of its employment growth capacity and 86 percent of its housing growth capacity built today. For this reason, much of the city is characterized as Established Community in the MTP/SCS. The city has one large remaining infill opportunity in the Established Community area and that is the golf course located near Greenback Lane and Sunrise Boulevard. The city has also identified two corridors in the city for targeted redevelopment and revitalization. These areas, the Auburn Boulevard corridor and the Greenback Lane corridor, make up the Center and Corridor Communities in the MTP/SCS within the city. The city will use the approved Auburn Boulevard

Specific Plan and the completed Sunrise Market Visioning Project to encourage redevelopment and infill in these Center and Corridor Communities.

The MTP/SCS forecast for Citrus Heights is 2,581 new housing units and 5,871 new employees by 2036. Of this, 60 percent of the new jobs and 40 percent of the new housing units are expected to occur in Center and Corridor Communities, with the remaining 40 percent of new jobs and 60 percent of now housing units in Established Communities, including development of the golf course property noted above. Generally, new growth in the city includes a range of residential development from very low to medium-high density, mixed use development, and commercial, office, and public uses. Most development is expected to occur in the latter half of the planning period, since market forces are still weak in the near-term to support significant infill growth in Citrus Heights. About 30 percent of the city's 2036 employment growth is expected to occur by 2020 and nine percent of the city's housing growth is expected to occur during the same period. This growth rate is close to the regional average of 33 percent of 2036 job growth by 2020, but is lower than the regional average of 17 percent of 2036 housing growth by 2020. The smaller scale infill nature of the residential growth contributes to a slower growth rate in the city in the near term. Because employment in the city is projected to grow slightly faster than residential development, the city's jobs/housing balance will improve slightly from 0.5 today to 0.6 in 2036.

Regional monitoring will focus on whether the recent increase in planning applications in the city continues and whether planned projects within the corridor areas continue to progress which could influence the pace of growth in Citrus Heights in the future.

Elk Grove

Over the last decade Elk Grove has experienced significant residential growth. While much of this development is newer, particularly west of Highway 99, it has happened so rapidly that the city is almost 76 percent built out in terms of residential uses and 43 percent built out in employment uses. For this reason, much of the city is considered an Established Community in the MTP/SCS, with the exception of the rural residential areas, historic Elk Grove, and the newest and not yet built planning areas. The northeast corner of Elk Grove has historically consisted of rural residential uses and is intended for continued rural residential use in the city's general plan. As a result, this area is characterized as a Rural Residential Community in the MTP/SCS. Old Town Elk Grove is identified as a Center and Corridor Community in the MTP/SCS, consistent with the city's revitalization effort in its Old Town Elk Grove Special Planning Area. The latest specific plan in the city to start building in recent years is Laguna Ridge. Laguna Ridge is designated as a Developing Community in the MTP/SCS and has built out 20 percent of its housing capacity and 30 percent of its employment capacity as of 2012. A second Developing Community, as designated in the MTP/SCS, is known as the Triangle Special Planning Area. Similar to Laguna Ridge, this plan area has also started building and is just under 40 percent built out today. Three other new growth areas in the city, all located within the southern portion of the city adjacent to Laguna Ridge, represent the next increment of new growth for the city. These Developing Communities in the MTP/SCS include the adopted Lent Ranch Marketplace Special Planning Area, the adopted Southeast Policy Area Community Plan, and the Sterling Meadows policy area. In 2010, Elk Grove completed a market study to identify economic development opportunities and land use needs for the city. The study supports the city's strong desire to add more jobs in order to help balance the currently housing-concentrated character of the city. Employment growth has been a strong focus for Elk

Grove, which completed an evaluation of their progress in implementing the recommendations of the market study in 2014.

By 2036, the MTP/SCS forecast for Elk Grove adds 13,909 new housing units and 19,863 new employees to the city. Approximately 18 percent of these housing units and 41 percent of the employees are building out the city's Established Communities and Rural Residential Communities in a range of residential densities from very low to medium-high and employment uses including commercial, office, industrial, and public development. The majority of the new growth, approximately 82 percent of the housing growth and 57 percent of the employment growth, will occur in the city's Developing Communities. The Laguna Ridge Specific Plan is approved to build 7,826 housing units; however, based on development activity, the city has estimated the plan will likely build out at a number lower than the approved 7,826 units. The MTP/SCS forecast is for a total of 7,586 housing units built by 2036 in this area, with an average density of eight units per acre. This area is also planned for employment uses including retail, office, and a civic center and medical facility that, together, will generate 4,400 employees in total by 2036. The Lent Ranch Special Planning Area is primarily a plan for new commercial and office employment uses that could accommodate 4,400 employees and 280 new multi-family units at build out. The MTP/SCS forecast for this Developing Community is for 3,222 new employees and to build out the 280 unit multifamily housing capacity at an average density of 24 units per acre. The Southeast Planning Area plan includes capacity for 4,790 homes at an average of nine units per acre and 24,720 commercial, office, industrial, and neighborhood-supporting public jobs. The MTP/SCS forecasts 4,023 new homes and 5,000 new jobs in this area by 2036. Sterling Meadows, a Developing Community situated in between Southeast Planning Area and Lent Ranch, is a residential-only community planned for 980 new units at a density of eight units per acre. The MTP/SCS forecast assumes most of this, 950 units, will develop by 2036. The remaining 119 new housing units in the MTP/SCS forecast for Elk Grove come from the Triangle area. This Developing Community at build out includes 701 housing units averaging one unit per acre and includes capacity for 343 neighborhood-supporting jobs.

While much of the recent development in Elk Grove has been residential in nature, the city is projected to capture a greater share of the region's employment over the MTP/SCS planning period. About five percent of the regional employment growth is forecasted in Elk Grove. This is supported by the city's effort to attract more jobs and by the fact that it has begun to see some of this employment growth in the recent arrivals and expansions of a number of medical facilities and state jobs. The MTP/SCS forecast provides a jobs/housing ratio of 1.4 for the growth in the city. This will help improve the city's jobs/housing balance from 0.6 today to 0.8 in 2036. It will, however, take time for the city to establish this employment growth. Because much of the employment growth is expected to occur in Developing Communities, it is expected to occur during the latter half of the planning period. Conversely, residential growth is expected to grow faster in the early years of the plan as compared to the rest of the region, as housing development continues in Established and Developing Communities that are already building today. Approximately 32 percent of the city's 2036 employment growth is forecast to occur by 2020 and approximately 31 percent of the city's 2036 housing growth is forecasted by 2020. Much of this housing is the continued build out of Laguna Ridge, which is under construction today.

Key issues that may influence the trajectory of growth in Elk Grove that will be tracked through the regional monitoring program include, the pace of success of the city's substantial initiatives to promote jobs growth, whether the city starts to experience any of the types of redevelopment activity in existing areas that are part of the typical evolution of urban areas, and the outcome of the current sphere of influence amendment application. Any or all of these factors could lead to a changed land use forecast for the city in future MTP/SCS update cycles.

Folsom

Folsom's rapid growth in the last several years has been a balance of employment and housing. The city is home to several major employers and, along with the rest of the region, experienced robust residential growth in the decade prior to the recession. Today, about 65 percent of the city's housing capacity and 64 percent of the employment capacity is built out. Therefore, much of the existing city north of Highway 50 is characterized as an Established Community in the MTP/SCS. The city's historic downtown and three light rail station areas (within a half mile boundary of each) are identified as Center and Corridor Communities in the MTP/SCS. In 2011, the city completed its Historic Sutter Street Revitalization Project, which included streetscape and building façade improvements and a new public plaza. This area also includes future plans for mixed use commercial and residential projects. The city adopted a specific plan for the area just south of Highway 50 in 2011, and annexed the area, in 2012. This Folsom Plan Area is designated as a Developing Community in the MTP/SCS. The specific plan includes a mix of housing and employment that, at build out, would include 10,210 new housing units and 13,619 new employees. Employment uses include commercial, office, light industrial, and public. The average residential density for this plan is nine units per acre.

Capacity within the city is estimated at 14,352 new housing units and 20,118 new jobs. Established Communities, if built out, would add 3,756 new jobs and 3,279 new housing units. Build out capacity in Center and Corridor Communities would add 863 new housing units and 2,743 new employees. The remaining capacity comes from the Folsom Plan Area Developing Community as described above.

In total, the MTP/SCS forecast for Folsom includes 12,625 new housing units and 13,693 new jobs by 2036. Of this, 3,756 new jobs are in Established Communities. The majority of the new jobs are commercial, office, light industrial and public uses filling in the existing employment centers along Highway 50 and East Bidwell Street. Established Communities also add 3,278 new housing units. These are primarily filling in the newer subdivisions in the eastern portion of the city. New development in Center and Corridor Communities includes 2,743 new jobs and 681 new housing units. Almost all of the available new housing and employment capacity in both Established and Center and Corridor Communities are included in the MTP/SCS because much of it is either under construction or proposed today. The majority of the new jobs in Center and Corridor Communities come from larger commercial, office, and industrial infill opportunities around some of the light rail stations. A smaller number of employees in these areas are from new public uses and mixed-use developments. The Folsom Plan Area south of Highway 50 includes 8,665 new housing units and 7,194 new employees in the MTP/SCS forecast. Because Folsom is a growing community and is nearly built out today in residential capacity, this Developing Community is where much of the future housing growth is projected to occur. The MTP/SCS forecast also includes 7,194 new employees in this Developing Community by 2036. The city as a whole includes a regional job center, good transit access, and as a result the city is expected to grow faster than the regional average of 17 percent of new 2036 housing growth occurring by 2020 and 33 percent of 2036 new jobs by 2020. The MTP/SCS forecast assumes 19 percent of the 2036 housing growth will occur by 2020 and approximately 46 percent of the 2036 jobs will occur by 2020.

Issues that will be tracked through the regional monitoring program include the type, location, timing and pace of development south of Highway 50 and the update of the city's general plan. The city is conducting a comprehensive update of the 1988 general plan for the first time, and will focus on Folsom as an urbanizing city that faces the challenge of balancing growth between infill development and a new plan area.

Galt

The City of Galt is centered on Highway 99 at the southern edge of Sacramento County. In the past decade, the city has experienced moderate housing and employment growth. Today about 79 percent of the city's residential capacity is built out. For this reason, most of the area within the existing city limits is characterized as an Established Community in the MTP/SCS. Established Communities have the capacity to add 1,993 new housing units, primarily through build out of existing subdivisions and some infill, and 6,425 new jobs. The majority of potential new jobs are industrial uses in the existing industrial complexes located north of Elm Avenue and new commercial uses along Highway 99. The city's historic downtown and the adjacent Lincoln Way and C Street corridors are identified as Center and Corridor Communities in the MTP/SCS, as is part of the Twin Cities Road area. These Center and Corridor Communities have the capacity to add about 140 new housing units and 2,000 new jobs. With the exception of the small rural residential community just north of the Twin Cities Road, most of the city's Sphere of Influence (SOI) is characterized as a Developing Community in the MTP/SCS. Though there is no specific plan for the SOI area, the general plan designated land uses include residential growth that would average five units per acre that could result in a total of 7,577 housing units and 24,180 employees at build out. Much of the new employment concentrated along Highway 99 is a targeted effort by the city to provide economic development opportunities in the city that will help improve the city's currently low jobs/housing ratio. There is currently discussion of a proposed American Indian casino in the area.

In total, the MTP/SCS forecast for Galt includes 2,883 new housing units and 3,607 new jobs by 2036. Of this, 1,858 new housing units and 2,155 new employees are in Established Communities; 135 new housing units and 1,009 new employees are in Center and Corridor Communities. Both Established and Center and Corridor Communities are expected to build most of their residential capacity by 2036. Finally, the MTP/SCS forecast includes 890 new housing units and 443 new employees are in the SOI Developing Community. The MTP/SCS forecast assumes 28 percent of 2036 employment growth and only 3 percent of 2036 housing growth will occur by 2020. All of the 2020 growth is projected to occur in the current city limits within the Established and Center and Corridor Communities, where the housing market is still recovering and doesn't support significant residential infill growth in the near-term in this area.

Like many other jurisdictions throughout the region and in Sacramento County especially, future growth patterns in Galt could be influenced by the timing of implementation of the South Sacramento HCP, which includes Galt. Additionally it will be important for the regional monitoring program to track the pace of residential activity and the progress of the casino proposal. Future transit connections both north to Elk Grove and Sacramento and south to Lodi and Stockton could also influence growth patterns in Galt.

Isleton

The city of Isleton is located in the southernmost portion of Sacramento County in the Sacramento River Delta. Capacity in Isleton is estimated at 810 housing units and 192 jobs. With almost 50 percent of its housing capacity and about 75 percent of its employment capacity built out today, the city is characterized as an Established Community in the MTP/SCS. The one exception is the Villages on the Delta project located in the eastern portion of the city at 6th street and H Street, which is identified as a Developing Community in the MTP/SCS and will include 300 housing units at build out.

In total, the MTP/SCS forecast for the city includes 59 new low to medium density housing units and 16 new neighborhood-supporting commercial and public jobs by 2036. Of this growth, 28 new housing units are projected for Villages on the Delta.

Isleton growth patterns are strongly influenced by its location in the Delta, and the progress of implementing new state legislation affecting all aspects of the future of the Delta will be tracked for its potential influence on Isleton and other portions of the region.

Rancho Cordova

Rancho Cordova has emerged as a regional job center over the past twenty years, with a high jobs/housing ratio. During that time, housing development did not keep up with employment growth. The city's general plan, adopted in 2006, places heavy emphasis on improving jobs/housing balance. In support of this goal, several adopted and proposed specific plans include the goal of providing housing for existing and future workers in Rancho Cordova. These adopted and proposed specific plans are characterized as Developing Communities in the MTP/SCS and include the following plan areas: Sunridge, Ranch at Sunridge, Suncreek, Arboretum, Rio Del Oro, and Westborough. Additionally, the city has four light rail stops within the city limits that, along with the entire Folsom Blvd corridor, are part of the city's adopted Folsom Boulevard Specific Plan. The Folsom Boulevard Specific Plan supports high density and mixed use development and redevelopment along the corridor, which is identified as a Center and Corridor Community in the MTP/SCS. The remaining land within the city is characterized as an Established Community in the MTP/SCS.

At build out, the city has the capacity for a total of 134,459 jobs and 62,840 housing units. Established Communities have the capacity to add 34,582 new jobs and 1,659 new housing units. These new commercial, office, and industrial jobs are primarily located in existing office park and industrial complexes. New housing capacity in the Established Community comes from building out newer subdivisions and more traditional infill. The Folsom Boulevard Specific Plan, due to its higher densities and office and commercial mixed use land designations, has the potential to add 24,566 new jobs and 2,240 new housing units. This housing capacity estimate is lower than the city's original planned build out estimate for the corridor, which was recently reduced to adjust for current market and economic factors. The remaining 31 percent of the new employment capacity and 90 percent of the new housing capacity is in the Developing Communities.

Sunridge is the only Developing Community in the city that has started building. At build out this area will include 8,763 housing units and 3,563 jobs, including new commercial and public uses and a range of new housing types, averaging eight units per acre. In the middle of the Sunridge Specific Plan area is another Developing Community, the Ranch at Sunridge. Though this plan is

not yet adopted, it proposes to add 1,610 new homes and about 358 new jobs. This plan includes mostly residential uses, averaging seven units per acre, with some supporting commercial and public uses. Directly south of Sunridge and the Ranch at Sunridge is Suncreek. This recently adopted specific plan has capacity for 4,893 homes and 1,408 jobs. Similar to its surroundings, this plan is mostly residential, with an average density of eight units per acre, and includes some neighborhoodserving commercial and public employment uses as well. South of Suncreek, reaching the southernmost portion of the city is the proposed Arboretum development. This proposed plan, with an average density of 11 units per acre and supporting commercial and public uses, could add 4,742 new housing units and 3,488 new jobs. Heading back north, just above Douglas Road, is the proposed Rio Del Oro Specific Plan. This is the largest Developing Community in the city. Located adjacent to the eastern edge of the city's existing industrial complex areas, this plan is proposed to expand those employment uses and add significant housing. In total, this proposed plan would add 12,558 new jobs and 12,189 new housing units. The western portion of the plan includes all types of employment uses, primarily office and light industrial. New housing growth also includes a wide range of housing types, which have an average density of six units per acre. Directly north is Westborough. An initial proposed plan for this Developing Community includes 4,200 homes and 5,447 jobs. This plan would include primarily commercial and public uses and would average eight units per acre.

The MTP/SCS forecast for the city includes a total of 32,567 new jobs and 19,814 new housing units by 2036. Rancho Cordova is expected to increase its share of both the region's housing and employment by 2036, also slightly improving its high jobs/housing ratio from 1.9 today to 1.8 in 2036. The majority of new housing growth, 16,143 units, is in Developing Communities. However, these areas account for significantly less of the city's MTP/SCS employment forecast. Only about 14 percent of new jobs, or 4,707 jobs, in the city will be in Developing Communities. Because many of the plans in these areas are housing-focused, it is likely that the housing units will begin building before the employment uses. Additionally, the city has existing employment centers that will capture much of the estimated employment growth. Established Communities make up 68 percent of new employment growth, or 22,044 employees, and 7 percent of new housing growth, or 1,484 units. The Center and Corridor Community includes the remaining 5,816 new jobs and 2,188 new housing units within the city's MTP/SCS forecast by 2036. Infill and redevelopment along the Folsom Boulevard corridor is largely expected during the latter portion of the planning period. In this Center and Corridor Community, only 14 percent of the housing growth and 29 percent of the employment growth expected by 2036 is assumed to occur by 2020. Similarly, the Developing Communities also have the majority of growth happening during the latter half of the planning period. Because many of these plans are not yet approved, but are currently in process, it is likely that not all of them will begin to build by 2020 and some will have just begun construction at that time. Because of slower growth anticipated in the early years of the plan in these two community types, the city as a whole is expected to grow slightly slower than the regional average during the first eight years of the plan.

Issues to track through the regional monitoring program include the final resolution of the South Sacramento HCP the timing and pace of development in the greenfield areas, and the slower-to-recover infill and redevelopment market in the Folsom Boulevard area. All of these are factors that could ultimately affect growth patterns in the city.

Sacramento

The City of Sacramento is centrally-located within Sacramento County and is the largest city in the SACOG region, with 29 percent of the region's jobs and 21 percent of the region's housing units currently. The city recently completed an update to its general plan, as required every five years by city policy, which was adopted in March 2015 and extends the document's planning horizon to 2035. Like the 2009 plan, the 2015 plan aims to accommodate substantial population growth, largely through infill, reuse, and redevelopment strategies. The general plan identifies opportunity areas throughout the city for significant changes in land use and increased densities. New housing and jobs will be distributed among activity centers of various sizes (neighborhood, sub-regional, and regional), transportation corridors, and new growth areas. The activity centers identified in the city's general plan generally correspond with the MTP/SCS community types. In the past decade, the majority of the city's employment and residential growth occurred in the North Natomas community and, as a result, residential uses in this area are largely built today. For this reason, North Natomas is included along with the communities of South Natomas, North Sacramento, Land Park, Pocket, South Sacramento, and Fruitridge/Broadway as having most of their land area in Established Communities in the MTP/SCS. The city has two new growth areas within the current city limits. These areas include the approved Greenbriar Specific Plan and the Delta Shores Specific Plan. Delta Shores is identified in the MTP/SCS as a Developing Community. However, because of the planned light rail extension, the Greenbriar Specific Plan is considered a Center and Corridor Community in the MTP/SCS. The city's general plan also identifies two other new growth areas outside the current city limits. One, known as the Camino Norte, is located adjacent to the southwest corner of North Natomas and the other is located adjacent to the northeast corner of North Natomas, called the Panhandle area. These two areas are not identified for growth in the current MTP/SCS planning period, primarily due to their unincorporated status, infrastructure need, and potential flood and habitat issues. While most jurisdictions in the region are described as having Established Communities and Developing Communities as their primary community types and growth areas, the City of Sacramento is unique in that Center and Corridor Communities cover much of the city and are the locations where most new growth is concentrated. Consistent with the city's infill-focused general plan, over the past several years the downtown area and surrounding neighborhoods have also seen significant revitalization in the form of infill and redevelopment, much of it in mixed use format. South and east of downtown, infill development has also occurred, albeit on a smaller scale. The entire central city area, along with areas covered by a half-mile buffer around existing and proposed light rail stations, generally make up the designated Center and Corridor Communities in Sacramento. For discussion purposes these Center and Corridor Communities are grouped into the following six subareas: (1) the central city, covering the area from Broadway to the American River and from the Sacramento River to Alhambra Boulevard., (2) the existing south-line light rail stations, (3) the proposed south-line light rail extension stations, (4) the Folsom-line light rail stations, (5), the northeast line light rail stations, and (6) the proposed north airport-line light rail stations.

The central city Center and Corridor Community is the urban center of the region, encompassing downtown Sacramento and including the State Capitol. This area includes many of the identified city opportunity areas, including the central business district, R street, Broadway, and the 12th, 16th, 19th, and 21st Street corridors. As noted above, these areas have seen an influx of high density residential and mixed use projects in recent years, and many of these types of projects are currently in progress, including redevelopment of the former mall for the Entertainment and Sports Center. This area also includes the city's largest redevelopment opportunity, the Railyards project,

where a specific plan has been approved and Phase Two of development to renovate the historic depot is currently in progress. Located directly north of the Railyards is the River District area which is also planned for significant growth and revitalization that began with the completion of the new Greyhound Bus terminal and construction of Township 9 and continues with the Twin Rivers Housing Project. Unlike anywhere else in the region, the central city has capacity for and plans to build new office, residential and mixed use buildings that are likely to exceed three and four stories. In the downtown area, it is possible that new mixed use and high density housing projects could range from four to 25 stories. Most new office buildings are also likely to build in that same range; however, there is no height limit on new office buildings in the downtown area. Collectively, this Center and Corridor Community has the potential capacity to add 74,769 new jobs and 27,640 new homes. This would more than double the amount of existing housing units in the central city today.

The existing south-line light rail stations span from Broadway to Meadowview and include portions of Florin Road just outside the half-mile station area. The proposed south-line extension will expand from the existing line at Meadowview down to Consumnes River College. The Folsom-line includes station areas from 4th Street to College Greens within the city limits. The northeast-line includes stations from the American River to Watt Avenue in the city limits. The proposed airport-line will include a number of stations beginning near West El Camino Avenue and extending to Greenbriar in the city limits. Similar to the central city Center and Corridor Community, these communities overlap with a number of the city's opportunity areas. The city also has a number of approved plans for various areas within these Center and Corridor Communities, including: Curtis Park Railyards, Florin Road Corridor Plan, 65th Street Transit Village, Northeast Line Area Plan, and Swanston Transit Village. The city's general plan and infill programs further support development in these areas. Together, these Center and Corridor Communities have the potential to add about 34,812 new employees and 29,650 new jobs.

In total, the MTP/SCS forecast includes 72,269 new housing units and 103,218 new employees by 2036 in the City of Sacramento. Approximately 64,520 new employees and 44,063 new housing units are in Center and Corridor Communities, much of it in the central city area. Adding significant new housing to the central city area will provide a better jobs/housing ratio and will help in reducing regional VMT. About 35 percent of the city's MTP/SCS employment growth and 32 percent of the housing growth is in Established Communities. Much of this housing growth is the continued build out of North Natomas. However, it does include some infill in other existing communities, as well as development of some larger proposed housing projects. Most of the employment growth is either neighborhood-serving commercial, office, and public uses, hospital and college expansions, as well as new industrial/office uses that are mostly concentrated in the existing industrial center in the northeast and southeast portions of the city. The Delta Shores Developing Community plans for 5,115 housing units at an average density of 16 units per acre. The plan has a significant amount of land planned for commercial development that could provide up to 6,660 new employees at build out. The MTP/SCS assumes 5,077 new housing units and 2,223 new jobs in this Developing Community by 2036.

Sacramento is anticipated to maintain a large share of the population, housing, and employment in the SACOG region through 2036. In the early years of the plan, the MTP/SCS forecast assumes the city experiences new employment growth that is somewhat higher than the regional average of 33 percent of new 2036 jobs occurring by 2020 and housing growth that is somewhat slower than the regional average of 17 percent of new 2036 homes occurring by 2020. This is primarily due to the time needed to recover from the recent recession and see some significant new job growth in the region. Most of new growth during the first half of the MTP/SCS planning period will occur

through development within the city's Center and Corridor Communities. The MTP/SCS does forecast an increase in new housing construction in the North Natomas area prior to 2020 as flood related building restrictions were lifted in June 2015.

There are many issues to track through the regional monitoring program that may influence growth rates in the city of Sacramento. Implementation of the general plan and comprehensive zoning update, which streamline the process for infill development; the ability of the region and the commitment of the city to build major infrastructure projects (three new bridges, a streetcar system, extend light rail to the airport); the success of the city in achieving the downtown housing goal; and ultimately the amount of market demand for the urban housing projects envisioned by the general plan all could influence future growth patterns in the city.

Sacramento (Unincorporated County)

Unincorporated Sacramento County is the most urbanized of the unincorporated counties in the Sacramento region, with 24 percent of the region's existing housing and 20 percent of the region's existing employment. The majority of its population resides in the Urban Policy Area (UPA), which lies within the Urban Services Boundary (USB) or the ultimate boundary for urbanization in the unincorporated county. Sacramento County completed a general plan update in 2011 that facilitates infill and revitalization in targeted commercial corridors within the existing UPA and employs a smart growth management framework in considering proposed UPA expansions. Under the county's general plan, the UPA may be expanded if proposed development projects are consistent with a new growth management framework, which is built upon the relationship between land use and transportation to achieve goals and requirements relative to air quality, transportation, land use, infrastructure, and GHG emissions.

Today, most of the communities within the UPA are identified in the MTP/SCS as Established Communities. Most of these are residential in character (e.g., Arden Arcade, Carmichael, Cordova, Fair Oaks, North Highlands, Orangevale, Rancho Murieta, and South Sacramento) and are projected to receive relatively small amounts of future growth consistent with existing plans that aim to retain the character of the neighborhoods. Others are important and growing employment centers (e.g., Sacramento International Airport, Metro Air Park, Aerojet, McClellan, and Mather). Together, these Established Communities contain 78 percent of existing housing and 53 percent of existing jobs in the unincorporated county today.

Running between and through these communities are miles of major roadways bordered primarily by commercial land uses. The county's general plan update identifies 13 commercial corridors for varying levels of additional commercial and residential development through reinvestment and redevelopment. Given the county's planning efforts underway to allow for additional growth in these corridors, they are identified in the MTP/SCS as Center and Corridor Communities. The corridors include Auburn Boulevard, Fair Oaks Boulevard in Arden Arcade, Fair Oaks Boulevard in Carmichael, Fair Oaks Boulevard in Fair Oaks, Greenback Lane in Orangevale, Watt Avenue and Fulton Avenue in Arden Arcade, North Watt Avenue and West of Watt in North Highlands, Florin Road and Stockton Boulevard in South Sacramento, and the unincorporated portions of Folsom Boulevard, where the four light rails stations offer significant opportunity for transit-oriented and mixed use development. The county has either completed or initiated planning processes for all of these corridors, with the goal of promoting economic revitalization within the corridors themselves, as well as for the surrounding communities and for the county as a whole.

Outside of the USB, land uses are primarily agricultural or agricultural-residential. The latter land use is clustered in the communities of Orangevale in the north county, and Alta Mesa, Clay, Franklin, Herald, Sloughhouse, and Wilton in the south county. These communities are identified in the MTP/SCS as Rural Residential Communities. The county's draft general plan contains policies to preserve these historic communities without encouraging excessive growth due to the high cost of providing services to these remote locations.

Outside of Established Communities and Center and Corridor Communities, new growth areas in unincorporated Sacramento County are mostly south of Highway 50 and west of Interstate 80. Most of these areas are identified in the MTP/SCS as Developing Communities. These Developing Communities include the following adopted plans: Elverta Specific Plan in northern Sacramento County, the Glenborough at Easton Specific Plan in eastern Sacramento County, the Florin Vineyards Specific Plan, North Vineyard Station Specific Plan, Vineyard Springs Comprehensive Plan, and Vineyards Community Plan in central Sacramento County. The MTP/SCS also identifies two of the county's currently in process specific plans as Developing Communities. The proposed Mather South Specific plan and the West Jackson Specific Plan are located adjacent to the Rancho Cordova and Sacramento city limits, respectively.

The county's long-term vision includes additional new development along Jackson Highway/State Route 16. In this area, the Cordova Hills Master Plan was recently approved and the area amended into the UPA. Outside the current UPA, but within the current USB, the county is currently processing two applications for the proposed Newbridge and Jackson Township master planned communities. Outside of the current UPA and USB, in the northwestern portion of the county, the county is also currently processing an application for a project identified as the Northwest Master Plan. These areas outside the UPA and the remaining areas of the unincorporated county not described as Established, Developing, or Rural Residential Communities are not identified for development within the current MTP/SCS planning period.

In addition to the general plan update, the county is in the midst of preparing the South Sacramento Habitat Conservation Plan (SSHCP). The SSHCP will consolidate environmental efforts to protect and enhance wetlands (primarily vernal pools) and upland habitats to provide ecologically viable conservation areas. It will also minimize regulatory hurdles and streamline the permitting process for development projects. Sacramento County is partnering with the incorporated cities of Rancho Cordova, and Galt, as well as the Sacramento Regional County Sanitation District, Sacramento County Connector JPA, and Sacramento County Water Agency, to further advance the regional planning goals of the SSHCP. The Study Area excludes the City of Sacramento, the City of Folsom, the City of Elk Grove, the Sacramento-San Joaquin Delta, and the communities of Rancho Murieta and Wilton. At this time, it is not clear when this process is likely to conclude, though the county and other parties have placed a high priority on successfully completing it as soon as possible.

By 2036, the MTP/SCS forecasts that unincorporated Sacramento County will continue to be the most urbanized county in the region. The MTP/SCS forecasts 48,381 new housing units and 79,312 new employees by 2036 in areas of the unincorporated County that have potential build out capacity for 107,938 new housing units and 226,974 new employees. Within the existing urban core, most new growth will occur through limited infill and redevelopment in Center and Corridor Communities, including 37 percent of housing growth and 48 percent of employment growth. By 2036, the MTP/SCS forecasts 18,747 new housing units and 37,931 new employees within Center and Corridor Communities out of a potential build out capacity of 36,967 new housing units and

70,160 new employees. This new growth will take the form of commercial, office, and industrial employment uses and new housing growth will be predominantly medium-high to high density and/or mixed-use. Of this new development, only 10 percent of the housing growth, and 34 percent of the employment growth, is expected to occur by 2020. The majority of this new development is expected to occur after 2020.

The vast majority, 85 percent, of the housing growth in Centers and Corridors is projected for three general areas: light rail stops, the area west of the northern Watt Avenue surrounding the McClellan employment center, and transportation corridors (Stockton, Franklin, Florin) in southern Sacramento County. The remaining 15 percent of the forecasted housing (2,878 units) is in relatively small amounts along seven other corridor segments throughout the county. In the county's Established Communities, the MTP/SCS forecasts 11,065 new housing units and 34,410 new employees by 2036 out of a total build out capacity of 17,506 new housing units and 108,182 new employees. Residential growth in Established Communities is expected to occur mostly through small-scale infill of existing low density residential lots, in line with the county's existing zoning and general plan. Employment growth in Established Communities is expected to occur through a combination of new construction and intensification of commercial, industrial, and public uses in existing employment areas, including the recent expansion of Sacramento International Airport, Metro Air Park, and McClellan Park.

In the Developing Communities of the unincorporated county, the MTP/SCS forecasts 17,981 new housing units and 4,994 new employees by 2036 out of a total build out capacity of 48,823 new housing units and 43,575 new employees. Elverta, the only Developing Community in the north, is forecast to add 1,432 new housing units and 312 new employees by 2036 out of a total planned capacity of 5,922 new housing units and 357 new employees. This community is planned for an average residential density of five units per acre with neighborhood-supporting commercial and public uses. The other Developing Communities identified in the MTP/SCS are all located south of Highway 50. Of these, four are located south of State Route 16 in the Vineyard Community. North Vineyard Station, which recently began construction, is projected to receive 3,052 new housing units and 285 new employees by 2036, out of a planned capacity of 6,062 housing units and 563 employees. Growth in this Developing Community is predominantly residential, at an average density of seven units per acre, supported by neighborhood commercial and public uses. The Vineyard Springs Comprehensive Plan began building in the early 2000's and is projected to receive 1,420 new dwelling units and 395 new employees by 2036, out of a total planned capacity of 5,943 housing units and 764 employees. The average residential density is four units per acre and the plan includes neighborhood-serving commercial and public uses. The Florin Vineyard Community Plan, which has not yet begun construction, fills in the "gap" between a number of specific plans in the Vineyard area. This area, planned for a capacity of 9,917 housing units and 6,243 employees, is expected to grow by 2,018 housing units and 209 employees during the MTP/SCS planning period. Uses in the Florin Vineyard Community Plan range from residential development at an average density of six units per acre to neighborhood serving-commercial and public uses to office and industrial uses. The remaining area covered by the Vineyard Community plan began construction in the early 2000's and is projected to receive 762 new housing units and 390 new employees by 2036, building out employment capacity in the area and with 1,257 housing units of residential capacity remaining. Just north of the Vineyard Developing Communities, the proposed West Jackson Specific Plan area is identified as a Developing Community because of its adjacency to urban infrastructure on the west and north, the absence of sensitive natural resources and other natural constraints, and efforts by the landowner to begin converting the site, indicate that

the area will see some amount of urban development by 2036. The MTP/SCS forecasts 4,996 new housing units and 1,859 new employees for West Jackson, out of a potential total capacity of 15,658 housing units and 32,839 employees. General uses in this Developing Community include residential uses at an average density of seven units per acre, various commercial, office, and industrial uses, and community-supporting public uses. East along the Jackson Corridor, the Mather South Specific Plan, located north of Jackson Highway and west of Sunrise Boulevard, is a proposed amendment to an adopted reuse plan for the former Mather Air Force Base. The county-initiated Mather South plan contemplates a mixed use community that would accommodate a total capacity of 3,529 housing units and 5,027 employees. Of this, the MTP/SCS forecasts construction of 1,030 new housing units and 217 new employees by 2036. The plan is focused on attracting a university or other large employer and thus includes mixed use commercial uses in addition to supporting public uses. Residential densities average 10 units per acre. Northeast of Mather South, the MTP/SCS also forecasts growth within the Glenborough at Easton Specific Plan. This Developing Community is a reuse of the eastern portion of the Aerojet campus along Highway 50, east of the city of Rancho Cordova and southwest of the city of Folsom. The portion of the project known as Easton covers the half-mile area around the Hazel light rail station and is therefore identified in the MTP/SCS as part of the county's Center and Corridor Communities. The Glenborough Specific Plan was adopted by the county as a mixed use residential community planned for a total of 3,239 housing units and 1,796 employees (excluding the Easton transit-oriented development). Due to its prime location along Highway 50 and Folsom Boulevard, its proximity to several light rail stations, and its location between major employment centers in Rancho Cordova and Folsom (and Aerojet itself), Glenborough is forecasted in the MTP/SCS to build 3,271 new housing units and 1,327 new jobs – virtually all of its capacity - by 2036. Residential densities of this Developing Community average eight units per acre and employment land uses include commercial, office, and neighborhoodsupporting public uses.

Rural Residential Communities in unincorporated Sacramento County are expected to experience low amounts of growth, approximately 588 new housing units and 1,977 new jobs by 2036. The MTP/SCS forecast assumes relatively small amounts of new rural residential homes to be constructed in the region by 2036. This is in part due to the current recession combined with changing demographics, which suggest a higher percent of the population will want and need to live on smaller lots or in attached homes near existing jobs, services, and with more transportation choices.

Sacramento County's general plan includes provisions that require projects in new developing communities outside of the UPA to meet criteria that are generally consistent with the principles of the Blueprint and this MTP/SCS. These criteria provide the county and the region additional flexibility as the MTP/SCS is updated and amended, since they help ensure that new growth included in the MTP/SCS performs well in terms of vehicle miles traveled, greenhouse gas and other air emissions, transit ridership, and bicycle and pedestrian trips. SACOG's regional monitoring program will pay particular attention to many outstanding growth issues in Sacramento County, including proposed revisions to the current UPA and USB; progress in preparing the SSHCP; completion of levee improvements; the rate at which development occurs in Centers and Corridors, Established Communities, and the many Developing Communities; the economic factors that will influence the rate of growth in these different community types; and how those growth rates may affect the economic condition of surrounding neighborhoods.

SUTTER COUNTY

Live Oak

Development in Live Oak is primarily suburban and rural-style housing with small-scale employment and commercial uses along Highway 99. The city's general plan aims to maintain the small-town character of Live Oak, promote a balance of jobs, housing and services, and revitalize the existing downtown area. Most of the developed areas of the city are characterized as an Established Community in the MTP/SCS, with the exception of the Highway 99 corridor which is designated as a Center and Corridor Community. Within these two communities, the city has an estimated capacity for an additional 3,574 new employees and 2,125 new housing units. Additionally, the general plan includes a significant amount of new housing and employment capacity in the city's Sphere of Influence (SOI). In 2011, the city annexed a few larger land areas north and south of the previous city limits. These recent annexation areas and the remaining SOI are not identified for development within the current MTP/SCS planning period.

In total, the MTP/SCS forecast for Live Oak includes 1,063 new employees and 1,222 new housing units. Just over half of this new employment growth is in Center and Corridor Communities. This Center and Corridor growth of 37 new housing units and 560 new employees consists of primarily low and medium density housing and commercial and office uses. The remaining housing and employment growth comes from Established Communities. Most of this is in the form of new neighborhood-supporting retail, commercial, and office uses as well as new public uses. The majority of the housing growth, 97 percent, is in Established Communities and is largely a result of building out many of the newer existing subdivisions. While Live Oak is expected to grow at a rate similar to the regional average by 2020, employment growth overall by 2036 is projected to improve the city's jobs/housing ratio from 0.3 to 0.5.

Issues to track through the regional monitoring program include whether regional market pressures for more housing in Live Oak return as the economy continues to grow and whether the planned improvements to the levee system are constructed, as expected, by the end of 2015.

Yuba City

As the county seat, Yuba City functions as the trading and service center for the surrounding agricultural area and maintains a balanced jobs/housing ratio. Today the city is about 56 percent built out in its employment capacity and 69 percent built out in its housing capacity. As such, most of the city is designated as an Established Community in the MTP/SCS. The exception is the city's downtown area and the commercial area centered on Highway 20 and Highway 99, which is characterized as a Center and Corridor Community in the MTP/SCS. Most of the additional capacity in the existing city limits is within the Established Community areas, where 12,743 new jobs and 5,184 new housing units could be accommodated. The majority of this employment capacity is in commercial and industrial uses, while the housing growth is largely building out newer low and medium density existing subdivisions. Just outside the city limits, along the east side of Highway 99, some established low density residential development exists. This area is considered an Established Community in the MTP/SCS forecast for Yuba City as the area is supported by city services even though it has not been annexed into the city. The Center and Corridor Community area has capacity for an additional 393 new homes and 2,814 new jobs to be added to the city at build out. These jobs are also mainly commercial, office, and industrial uses and the housing is mostly

medium-high density. Directly adjacent on the west side of Highway 99, just outside of the city limits, new housing and employment uses are planned. This area is identified as a Developing Community in the MTP/SCS. Employment uses will include commercial, office, and industrial uses while the residential uses planned are low and medium density, averaging eight units per acre. At build out the Highway 99 corridor area could include a total of 1,826 jobs and 723 housing units. The city's general plan acknowledges and plans for future growth to occur primarily through village-style development in its sphere of influence (SOI). As part of general plan implementation, the city developed a new specific plan for the portion of the SOI located near the southwest corner of the existing city limits. This adopted specific plan, Lincoln East, is the second Developing Community in Yuba City included in the MTP/SCS. This plan is for a new mixed use community which would include a total of 4,868 housing units averaging eight units per acre and new neighborhood serving commercial and public facilities for a total of 1,570 employees. The remaining SOI area has an additional housing and employment capacity; however, these areas are not identified for development within this MTP/SCS planning period.

Moderate, balanced growth is anticipated for Yuba City through 2036. The city is expected to maintain its share of the regional housing and employment and its well-balanced jobs/housing ratio through 2036. The MTP/SCS forecast for Yuba City includes 10,984 new jobs and 6,409 new housing units. The majority of this growth, about 69 percent of employment and 81 percent of housing, is within Established Communities. As noted above, this employment growth is primarily commercial and industrial uses and the residential growth which consists primarily of building out newer low and medium density existing subdivisions. The Center and Corridor Community includes 2,768 new jobs and 226 new housing units within the MTP/SCS planning period. Most of this growth is planned for infill development; however, a small percentage of redevelopment is assumed in this area by 2036. The remaining growth comes from Developing Communities in the Sphere of Influence (SOI). The area around Highway 99 includes 194 new units and 397 new jobs in the MTP/SCS. Lincoln East includes 791 new housing units and 222 new jobs by 2036. Primarily due to market, infrastructure, and potential flood constraints, these Developing Communities are not likely to begin building until the later years of the plan post 2020. The MTP/SCS forecast includes only six percent of its 2036 housing growth and 30 percent of its 2036 employment growth by 2020. This housing growth rate in the early portion of the plan is lower than the regional average of 17 percent of new 2036 housing units by 2020, primarily due to market factors and infrastructure constraints for new residential development. Similarly, the 28 percent employment growth by 2020 is somewhat slower than the regional average in part due to high vacancy rates in commercial and industrial uses regionally.

Issues to track through the regional monitoring program include progress on planned levee improvements, the first phase of which is expected to be complete by 2016, and whether the return of a strong regional economy leads to more market pressures for housing growth in the city. This dynamic may also be affected by planned development in southern Sutter County.

Sutter (Unincorporated County)

Development activity in unincorporated Sutter County has historically been focused within the spheres of influence of Live Oak and Yuba City and, to a lesser extent, in a number of smaller rural towns throughout the unincorporated area. These towns, Sutter, Meridian, Robbins, Tudor, Nicolas, East Nicolas, and Rio Oso make up the Established Communities in unincorporated Sutter County. The county has one large new growth area, located on the Sacramento-Sutter County line

along Highway 99, with an adopted specific plan. The Sutter Pointe Specific Plan area is designated as a Developing Community in the MTP/SCS. The county's general plan, adopted in 2011, directs most new growth to this area and aims to preserve much of the county in agricultural uses. The county general plan does identify two new commercial/industrial employment areas in the county, one north of Yuba City and one south. These areas, and the remaining areas within the unincorporated county, are not identified for development in the MTP/SCS. However, agricultural-related housing and employment is likely to occur in these areas and is supported by the MTP/SCS environmental sustainability policies.

The Sutter Pointe Developing Community represents almost all of the employment and housing capacity in the county. At build out, this plan includes 17,500 housing units and 55,045 employees. The majority of these employment uses are industrial, though the plan does also include commercial and public uses. The average residential density planned is eight units per acre. While the MTP/SCS forecast includes 94 percent of the county's new employment and 89 percent of new housing to occur within this Developing Community by 2036, that growth represents only a small portion of the build out capacity in the specific plan. The MTP/SCS forecast includes 2,232 new employees and 3,398 new housing units in unincorporated Sutter County by 2036. Of this, 2,108 employees and 3,010 housing units are in Sutter Pointe. The remaining 124 jobs and 389 housing units in the MTP/SCS forecast are located in Established Communities, where continued low density development and neighborhood-serving commercial and public uses are planned. Development in Sutter Pointe is most likely to occur during the latter portion of the planning period. Because the Sutter Pointe Specific Plan area is not likely to begin building until sometime after 2020, and because the MTP/SCS does not forecast new agricultural employment, the MTP/SCS forecast includes only 1 percent of 2036 employment growth and 2 percent of 2036 housing growth by 2020.

The regional monitoring program will track the extent to which infrastructure cost challenges are resolved for Sutter Pointe, as well as the timing of construction of other developments in the north part of the region that might compete with Sutter Pointe for market share. These issues could affect the pace of growth in Sutter Pointe, either increasing or decreasing it compared to projections in this MTP/SCS plan cycle.

YOLO COUNTY

Davis

The City of Davis is largely built out, as per the city's general plan adopted in 2001. Most of the city is characterized as an Established Community in the MTP/SCS, with the exception of the area within a half-mile of the existing Amtrak station, which is characterized as a Center and Corridor Community. The downtown area is also included in this Center and Corridor Community, for which the city has a Core Area Strategy and Specific Plan that promote economic development. Similarly, the Center and Corridor Community includes a portion of the city's SOI, the 44 acre Nishi property, which is envisioned by the City as a potential mixed use development with high density housing and light-industrial and office uses. However, as this site is designated with an agricultural land use in the current general plan, it does require voter approval to change the land use designation, which is currently proposed as part of the annexation application in progress. Measure R requires voter approval for proposed changes to agricultural land use designations.

In total, the city has capacity to add 7,227 new jobs and 3,137 new housing units at build out. In addition to the Nishi site noted above, the city has a Sphere of Influence (SOI) that includes areas to the north and south of the existing city limits. To the north, the SOI includes two areas along Highway 113, one area between County Road 101A and County Road 102, one area northeast of County Roads 105/30 (which consists of the Yolo County landfill and the City of Davis sewage treatment plan), and a fourth area just south of County Road 30B on the Mace curve. These areas consist of residential development in unincorporated Yolo County (Royal Oak, Willowbank, and El Macero). The city is currently processing two applications for employment centers in the SOI area. To the south, the SOI includes three areas south of Interstate 80 and the UC Davis campus area. With the exception of the UC Davis campus, the MTP/SCS does not identify development within these SOI areas by 2036.

By 2036, the MTP/SCS forecast for Davis includes 4,911 new employees and 2,888 new housing units. The majority of this growth, 58 percent of the employment and 65 percent of the housing, is in Established Communities. Employment growth consists of commercial, office, and industrial uses primarily located along Highway 80. New housing growth, ranging from low to high density, is a result of small-scale infill throughout the city and one remaining large infill opportunity in the city at the Cannery site located along East Covell Boulevard and F Street. The remaining 2,067 new employees and 1,016 new housing units in the MTP/SCS forecast for Davis are within the Center and Corridor Community, which includes expansion of existing commercial and office uses and redevelopment as well as some new high density residential and employment development.

Davis will generally maintain its jobs/housing ratio, which improves slightly from today. However, these figures do not include the dynamic of planned growth at the adjacent UC Davis campus because that growth is in unincorporated Yolo County and is therefore part of the MTP/SCS forecast for the unincorporated County, not Davis. By 2020, 36 percent of 2036 employment growth and 19 percent of 2036 housing growth is forecast to occur. This is higher than the regional average based on a strong housing market, the recent construction occurring in the Cannery, and redevelopment opportunities available in the Center and Corridor Communities.

Issues to track through the regional monitoring program include the success of the city in developing its remaining infill sites, the progress of planning for development at the Nishi property, and the success of the University in pursuing ambitious expansion plans and how that might affect the housing market in the area.

West Sacramento

West Sacramento's heavy employment base has shifted toward a more balanced mix of employment and housing in the past decade as residential development has continued to pick up pace in recent years. With the exception of the riverfront area, much of the northern half of the city is developed. This portion of the city is characterized as an Established Community in the MTP/SCS. The city's recent development focus has been mixed use higher density projects along the riverfront, including the recently adopted Bridge District plan, the proposed Stone Lock District, and revitalization of the Washington Specific Plan area. These areas are characterized as Center and Corridor Communities in the MTP/SCS. The city has also made a concerted effort to begin redevelopment and revitalization of the historic West Capitol Avenue corridor. With recent streetscape improvements, construction of a transit hub and new civic center, and adopted design guidelines, this area is also identified as a Center and Corridor Community in the MTP/SCS.

The city's Southport community began development in 2001, but only a small portion of the development potential in this area exists today. The majority of the built area in Southport is considered part of the Established Community in the MTP/SCS. However, the remaining undeveloped areas of Southport, described as villages by the city are included in the MTP/SCS as either Developing Communities or areas not identified for growth by 2036. A portion of the Northeast Village, which is directly adjacent to existing development and the Southport Industrial Park are characterized as Developing Communities in the MTP/SCS. The portion of the Northeast Village that is a Developing Community includes capacity for 1,900 homes, with an average density of six units per acre, and neighborhood supporting employment uses. The Southport Industrial Park area has slowly begun developing commercial and industrial uses, which at build out could include 5,010 jobs and 1,383 higher density housing units. The two remaining villages known as the Southeast Village and a portion of the Southwest Village are not identified for development by 2036 in the MTP/SCS. While development is planned for these areas eventually, the City has made a conscious effort to promote infill and redevelopment in the near-term. The city's long term vision for development also includes the areas directly north and south of the existing city limits; however, these areas are also not identified for development in the current MTP/SCS planning period.

The MTP/SCS forecast for West Sacramento includes 29,500 new employees and 16,054 new housing units by 2036. The majority of this development, 46 percent of the employment and 71 percent of the housing units, is in infill and redevelopment opportunities within the Center and Corridor Communities. Due to its location directly across the Sacramento River from downtown Sacramento, and the type of development planned, this area of West Sacramento will become part of the urban core of the region in the future. This results in a 1 percent increase in the city's share of the regional housing and employment by 2036. Significant infrastructure exists or is currently under construction for this area. Together these Center and Corridor areas, all planned for a mix of high density housing and new commercial, office, industrial, and public uses, have the capacity to add 64,391 new jobs and 18,761 new housing units to the city at build out.

Established Communities include 12,164 new employees and 4,014 new housing units. Many of these new employees are in existing commercial and industrial centers and most of the new housing is filling in existing subdivisions with some small amounts of infill. The remaining growth is in the Developing Communities. The MTP/SCS forecast for the Northwest Village Developing Community includes 513 new housing units and 89 new jobs. The Southport Industrial Park is expected to grow by 3,754 employees and 200 housing units by 2036. Though this employment growth is only 13 percent of the city's total employment growth forecasted by 2036, it is building out the employment capacity estimated for the area.

The city, as a whole, is expected to grow faster than the regional average for employment by 2020 and grow slower than the regional average for housing by 2020. Although the City has made significant infrastructure investments in many of the Center and Corridor Communities, there is still some planning and infrastructure needs in others. This combined with the slower pace of smaller infill and redevelopment projects in the older Center and Corridor Communities of West Capital and Washington contribute to the slower housing growth rate in the near term.

Issues to track through the regional monitoring program include: the pace at which the city continues to build out the riverfront area; the timing and impact of the planned streetcar; and the timing and substance of the general plan update Any of these factors could affect the land use forecast for West Sacramento in the next MTP/SCS.

Winters

Winters is a small city surrounded by agricultural uses. The city has deep historic roots as a community and is therefore is primarily characterized as an Established Community in the MTP/SCS. This includes the city's gateway, which has undergone recent planning efforts. The Established Community has the potential capacity to add 3,163 new jobs and 1,921 new housing units at build out. The city's Downtown Plan is a form-based code approach to guiding infill and redevelopment opportunities in the historic downtown area, which is designated as a Center and Corridor Community in the MTP/SCS. Because growth in this area is likely to happen primarily through redevelopment, it is difficult to estimate the capacity for new housing and jobs. Even with several redevelopment opportunities the net gain of housing units and employees could be small. The estimated capacity for this area could add 55 new jobs and 16 new housing units. The city also has a sphere of influence that is north of the existing city limits. Due to current economic conditions and the remaining capacity within the city today, this area is not identified for development in the MTP/SCS.

The MTP/SCS forecast includes 1,198 new employees and 970 new housing units in Winters by 2036. All of this housing is planned for Established Communities, likely in the northern portion of the city where the newer residential growth has been concentrating. New residential growth is primarily low density, but ranges from very low density to high density uses. A small amount of employment development is assumed in the Center and Corridor Community, adding 29 new employees. The remaining employment growth is in Established Communities, including mainly commercial and industrial uses at the gateway and along East Grant and Grant Avenue. The MTP/SCS forecast assumes that Winters is likely to see most of this growth during the latter half of the planning period, likely with housing growing significantly slower than the regional average, but employment growing on pace with the regional average.

Issues to track the regional monitoring program include whether the city's successful downtown revitalization at some point will result in a significantly higher growth rate for the city. Winters' position on the edge of the region and proximity to the Bay Area creates the potential for unique growth dynamics in this city.

Woodland

Due to its role as the county seat, and its location along Interstate 5, Woodland has maintained a balanced jobs/housing ratio. With about 71 percent of its housing capacity built today, most of the city is characterized as an Established Community in the MTP/SCS. Most of the new housing construction is within the Spring Lake Master Plan area, which is characterized as a Developing Community in the MTP/SCS. Woodland also has two areas designated as Center and Corridor Communities in the MTP/SCS. Woodland's adopted East Street Specific Plan and downtown redevelopment plan are intended to guide and encourage revitalization and development in the older parts of the city, which make up these Center and Corridor Communities. The city is currently updating its general plan and is considering planning for new growth areas just outside the city limits. However, with the exception of the Spring Lake Master Plan area (which extends just outside the current city limits), these areas are not identified for development by 2036 in the MTP/SCS.

By 2036, the MTP/SCS forecast includes 11,680 new jobs and 4,127 new housing units in Woodland. Established Communities include 10,474 of the new jobs and 668 of the new housing units. Because residential land in the Established areas of the city are largely built out today, most of

this housing growth is in scattered infill throughout the city, building out the remaining 668 units of potential capacity. The city's Established Communities also include several existing job centers where industrial and commercial uses are concentrated. These areas have the potential to add 25,221 new jobs at build out. The MTP/SCS assumes almost 42 percent of this capacity is likely to be built by 2036, which is a significant amount of employment that accounts for 90 percent of the city's total employment growth in the MTP/SCS. Center and Corridor Communities also build out a significant amount of their capacity for new housing in the MTP/SCS. The MTP/SCS forecast includes 623 new housing units in this area, with capacity estimated at 824 new housing units. These Center and Corridor Communities also add 533 new jobs by 2036 with a potential build out of 1,892 jobs. Development in these areas in the MTP/SCS consists of primarily residential and commercial mixed use with medium to high density housing. Consistent with the city's plans and recent trends, the MTP/SCS includes some redevelopment in this area, which may contribute to the net employment gain being less than the housing growth for the area. Most of the new residential growth is in Spring Lake, which is currently building today and is estimated to include 2,836 new housing units and 672 new employees by 2036. At build out, this Developing Community has capacity for 7,954 housing units and 1,242 employees. It includes new neighborhood-serving commercial and public uses and a variety of new housing, with an average density of eight units per acre. Woodland is expected to grow on pace with the regional average in the early years of the MTP/SCS, with 18 percent of its 2036 housing growth and 30 percent of its 2036 employment growth forecast by 2020. This is largely due to the expected continuation of commercial and industrial growth along Interstate 5 and the residential building in Spring Lake.

Issues to track through the regional monitoring program include the potential impacts of commercial development on Interstate 5 on planned development rates in the downtown. Woodland is also currently in the process of updating its general plan, which could include changes to land uses and the location of growth in and around the city. Any of these factors could affect the land use forecast in the next MTP/SCS.

Yolo (Unincorporated County)

Yolo County is the western edge of the Sacramento region, and an important part of the Interstate 80 corridor linking Sacramento to the Bay Area. The county has remained largely an agricultural resource area with most growth occurring in its incorporated cities and unincorporated towns. This commitment to agriculture and preserving the county's rural character has been reinforced by the county's general plan adopted in 2009. The general plan directs all residential growth to designated areas within cities and growth boundaries of existing unincorporated communities (with the exception of farm dwellings). Development pressures on prime farmland between Davis and Woodland have led these two cities and the county to enter into an agreement to preserve the land for agricultural use. This is further supported by the urban growth boundaries in both cities. Growth in unincorporated Yolo County is directed to the existing unincorporated towns of Capay, Clarksburg, Dunnigan, Esparto, Knights Landing, Madison, Monument Hills, Yolo, and Zamora. These communities are characterized as Established Communities in the MTP/SCS. The towns of Dunnigan, Esparto, Knights Landing, and Madison have the majority of the new housing potential. Specifically, Dunnigan has a proposed specific plan that includes capacity for up to 9,230 new housing units at build out. This proposed specific plan is not yet adopted and is currently on hold by the county, and is therefore not identified for development in the current MTP/SCS planning period. The remaining agricultural and natural resource areas of the county are also not identified for development in the MTP/SCS. However, agricultural-related housing and

employment is likely to occur in these areas and is supported by the MTP/SCS environmental sustainability policies. UC Davis is located in the county, just south of Davis, and is characterized as a Center and Corridor Community in the MTP/SCS.

The MTP/SCS forecast for unincorporated Yolo County includes 5,509 new jobs and 3,178 new housing units. Of this growth, 2,513 new jobs and 2,666 new housing units are at the UC Davis campus, building out past the current Long Range Development Plan (LRDP) for the University. The remaining 2,996 new jobs and 512 new homes are in Established Communities, building out 52 percent of the remaining employment growth capacity and 45 percent of the remaining housing growth capacity. These new housing units are largely low and medium density; however, a range of densities from very low to high density are planned. New jobs come primarily from new commercial, industrial, and public uses. The MTP/SCS does not forecast new agricultural employment or farm dwellings, both of which are likely to continue to grow in Yolo County. By 2020, the MTP forecast includes 51 percent of the unincorporated county's 2036 employment growth and 56 percent of the 2036 housing growth to occur. Employment and housing growth is expected to happen faster than the regional averages of 33 percent and 17 percent, respectively, by 2020 due to growth on the University campus.

Issues to track through the regional monitoring program include UC Davis's growth plans, including the LRDP update, and how the county and the city of Davis may respond. The University is emerging as an even more major player in the region's economic development future.

YUBA COUNTY

Marysville

The City of Marysville has historically maintained a compact footprint due in large part to significant flood constraints. Today, Marysville is substantially built out within its existing city limits, with limited opportunities for growth through infill and redevelopment. Marysville adopted a Downtown Strategic Plan in 2004 to facilitate this type of development. More recently, post-recession, the City has initiated a Bounce Back Vision and Implementation Plan, a strategic plan for economic development in this area. This area of the city is characterized as a Center and Corridor Community, while the remaining city is considered an Established Community.

The MTP/SCS 2036 growth forecast for Marysville projects that the city builds out almost all of its housing and employment capacity. By 2036, the MTP/SCS forecast includes 1,118 new employees and 365 new housing units. Beyond this, general plan capacity could add an additional 77 housing units. The majority of this growth, 69 percent of the new employment and 73 percent of the new housing, is expected to occur in Established Communities through infill development including low to high density residential, mixed use, and commercial and office employment. The remaining growth, 26 percent of jobs and 8 percent of housing, is expected to occur in the Center and Corridor Community area through infill and small amounts of redevelopment. The city is expected to grow significantly slower than the regional average during the first half of the planning period. This is primarily due to flood constraints and the general job market weakness in the region currently.

Issues that will be tracked through the regional monitoring program that may influence future land use projections for Marysville include the success of the city's infill and commercial

redevelopment efforts, as well as the amount of growth that occurs in unincorporated Yuba County immediately to the city's south. Planned infrastructure upgrades,; construction of major transportation projects such as the improved bridge access to Yuba City, and construction of the Goldfields Parkway bypass around the City, may also influence future growth in the city.

Wheatland

Wheatland is a small city along Highway 65 that in the early 2000s experienced accelerated housing growth as workers in Placer County moved north along the Highway 65 corridor to find housing. The northern and eastern portion of the city, where most of the newer residential activity has happened in the last decade, is considered an Established Community in the MTP/SCS. The city's existing downtown area is characterized as a Center and Corridor Community. The easternmost and southernmost portions of the city that cover the approved Jones Ranch and Heritage Oaks are characterized as a Developing Community in the MTP/SCS. The remaining city limits is made of the recently annexed large area covering the Johnson Rancho/Hop Farm project area. This area and the city's remaining Sphere of Influence (SOI), including the approved Nichols Grove project area, are not identified for development within the MTP/SCS planning period.

The MTP/SCS forecast for Wheatland includes 1,026 new employees and 1,087 new housing units by 2036. Of this growth, 532 employees and 346 housing units are within Established Communities, primarily building out existing newer subdivisions and new neighborhood-serving commercial and public uses. Just over half of the employment growth is also within these areas. At build out, these Established Communities have the potential to add an additional 101 housing units. Most of the new housing growth (68 percent) in the city is in Developing Communities. Jones Ranch and Heritage Oaks, the approved Developing Community in the existing city limits, accounts for 493 new employees and 739 new housing units. These employees are primarily from commercial and public uses and the housing growth is expected to continue the trend for low density units, averaging about six units per acre. Building out capacity of this area could add an additional 802 employees and 572 housing units beyond the MTP/SCS forecast. About 25 percent of the city's 2036 employment growth and 17 percent of the city's 2036 housing growth is anticipated by 2020. This is because much of the employment growth is new neighborhood-serving commercial and public uses and much of the housing growth is expected to occur within the Developing Community, which is likely to develop during the latter portion of the planning period.

Issues to track through the regional monitoring program include the potential effect of flood protection issues in the city's northwest quadrant and the extent to which residential pressures from the Placer County employment center to the south return as the economy continues to recover.

Yuba (Unincorporated County)

While historically a rural agricultural county, unincorporated Yuba County approved several specific plans in the 1990s that have been developing during the last 10 years. The county also adopted its general plan in 2011. The general plan categorizes housing development in the county into two main categories: Valley Neighborhood and Rural Community. Rural Communities include the communities of Hallwood, Browns Valley, Loma Rica, Oregon House, Dobbins, Rackerby, Brownsville, Challenge, Log Cabin, Camptonville, Strawberry Valley, Smartsville, and Camp Far West. General plan policies support the continued rural character of these communities and, therefore, they are characterized in the MTP/SCS as Rural Residential Communities. The Valley

Neighborhood areas include the existing communities of Linda and Olivehurst, as well as the newer growth areas of Plumas Lake, East Linda, and the North Arboga Study Area. Linda and Olivehurst are characterized as Established Communities in the MTP/SCS. Beale Air Force Base, the only active military base in the region and the largest employer in the Yuba-Sutter sub-region, is also designated as an Established Community in the MTP/SCS. The majority of housing development in recent years has occurred within three newer growth areas in the unincorporated county. These growth areas, Plumas Lake, North Arboga and East Linda, are designated Developing Communities in the MTP/SCS. The county's general plan also establishes a Valley Growth Boundary as a focus for economic development, demonstrating the county's commitment to providing more job opportunities for residents who would otherwise likely be commuting to Placer or Sacramento for work. As such, the general plan identifies a new employment center along Highway 65, which is also identified as a Developing Community in the MTP/SCS. The general plan identifies mixed use corridors along North Beale Road and Olivehurst Avenue as areas where the county envisions infrastructure improvements to encourage development and redevelopment. Such land uses would include commercial, public, and medium to high density housing, including mixed use. These areas are identified as Center and Corridor Communities in the MTP/SCS. The remaining areas in the county are identified as planning reserve or natural resources in the general plan and are not identified for development in the MTP/SCS planning period.

In total, for all community types taken together, the county has capacity for 23,672 new housing units and 53,170 new employees. Developing Communities represent the largest amount of housing and employment capacity in the unincorporated county. Around 77 percent of that housing and 68 percent of that employment capacity is within Developing Communities. Plumas Lake, the Developing Community located along Highway 70, started building in 2004 and has the capacity for 18,130 homes and 16,176 jobs at build out. This community includes a mix of housing and employment uses with housing densities averaging five units per acre and employment uses including commercial, office, light industrial, and public. Adjacent to the northern border of Plumas Lake is the North Arboga plan area which is also currently under construction. This plan has capacity to add an additional 1,357 new housing units and 2,387 new jobs at build out. It includes commercial, industrial, and public uses and an average residential density of four units per acre. East Linda, located adjacent to the existing town of Linda, also began developing around the same time as Plumas Lakes and North Arboga. This area, at build out, could add commercial, industrial and public uses generating a total of 4,426 employees and 6,009 housing units, averaging six units per acre, to what exists today. The Highway 65 Employment Area has capacity for 23,730 employees at build out, including a wide variety of employment uses, including regional commercial, light and heavy industrial, agricultural processing, office, and public uses. The federal government also approved an American Indian tribe's plan to build a casino in this area. Predominately an employment-only Developing Community, the MTP/SCS does not forecast residential development in this area. However, the general plan does allow for up to 4,000 new housing units in this area, if such uses contribute to, or construct infrastructure needed to serve the primary employmentgenerating uses; the county is currently processing an application in this area for the Magnolia Ranch Specific Plan, which includes about 3,300 homes and 3,400 jobs. Established Communities have capacity to add 3,560 new housing units and 2,854 employees at build out. The potential build out employment capacity for Beale AFB is currently unknown. Having recently opened a new training facility and currently constructing more office facilities, the MTP/SCS assumes Beale AFB could add 2,000 employees and 109 new homes at build out. Center and Corridor Communities have a build out potential that could add 313 new homes and 993 new jobs.

The total MTP/SCS forecast for unincorporated Yuba County includes 6,220 new housing units and 9,948 new jobs by 2036. The majority of this new growth is expected to occur in Developing Communities with 2,280 new housing units and 2,361 new employees in Plumas Lake, 2,231 new housing units and 1,489 new employees in East Linda, 269 new housing units and 374 new employees in North Arboga, and 2,513 new employees in the new Highway 65 Employment Center. The remaining 32 percent of employee growth and 23 percent of housing growth in the MTP/SCS is within Established Communities, Center and Corridor Communities, and Rural Residential Communities. Established Communities include 2,435 new employees and 1,291 new housing units. The majority of these new jobs are likely to be located at Beale AFB, while the remaining commercial and industrial uses are located within the Linda and Olivehurst area, primarily along Highway 65. The MTP/SCS assumes some mixed use development, including a very small number of redevelopment sites in Center and Corridor Communities. This development adds 756 new employees and 92 new housing units by 2036. Rural Residential Communities in unincorporated Yuba County are expected to experience low amounts of growth, with only approximately 57 new housing units and 20 new jobs by 2036. The MTP/SCS forecast assumes relatively small amounts of new rural residential homes to be constructed in the region by 2036. This is in part due to the recent recession combined with changing demographics, which suggest a higher percent of the population will choose to live on smaller lots or in attached homes near existing jobs and services with more transportation choices. This is also supportive of the county's Valley Growth Boundary, which aims to guide the majority of the county's long term growth into the Center and Corridor, Established, and Developing communities.

By 2036, the county's share of regional employment growth increases from today and their share of the regional housing market remain constant. The county's share of regional employment is expected to increase from 1.4 percent today, to about 2.2 percent in 2036, increasing the jobs/housing ratio from 0.4 to 0.7. However, because much of this employment growth is dependent on development of the Highway 65 Employment Area, which has infrastructure challenges to address, most of this employment is expected to occur later in the planning period.

The regional monitoring program will track the level to which the county succeeds in its desire to have jobs rather than housing lead its future growth. The success of establishing the Highway 65 area as an employment center, together with the future of Beale, will be the primary drivers of future employment growth and are top local priorities.

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Fxisting	Conditions	2016 M	TP/SCS	2016	MTP/SCS	Build Out	Estimate
Draft Preferred Scenario - April 16, 2015		Year 2012	Total in Ye		Total in Year 2036		Total at B	
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Placerville								
Center and Corridor Communites	2,976	172	3,311	182	4,243	235	4,939	316
Established Communitites	6,362	4,357	6,574	4,514	7,304	5,221	7,096	5,336
Jurisdiction Total	9,338	4,529	9,884	4,696	11,546	5,456	12,034	5,652
El Dorado County Unincorporated								
Center and Corridor Communities	2,081	104	2,985	353	3,999	368	4,479	370
Established Communities	17,469	29,458	21,881	30,361	32,638	35,149	49,287	50,525
Rural Residential Communities	9,356	24,940	9,430	25,187	9,640	26,142	13,931	28,827
Developing Communities (listed below)								
Bass Lake Hills	59	155	76	166	125	953	109	1,458
Carson Creek	163	460	180	578	226	1,162	3,879	1,700
El Dorado Hills	1,435	3,558	1,910	3,801	2,035	4,560	3,368	6,162
Marble Valley ¹	0	1	0	17	0	398	0	398
Missouri Flats	3,129	408	3,212	419	3,709	452	6,497	853
Valley View	134	746	134	895	161	1,630	156	2,839
Jurisdiction Total	33,826	59,829	39,808	61,777	52,532	70,813	81,705	93,132
EL DORADO COUNTY TOTAL	43,164	64,358	49,692	66,473	64,079	76,269	93,739	98,784

¹ The Build Out Estimate shown reflects adopted planning documents. However, the county is processing an application for this area that could result in a change to these estimates.

2016 Metropolitan Transportation Plan/Sustainable								
Communities Strategy Update	Existing	Conditions	2016 MT	P/SCS	2016	MTP/SCS	Build Out	Estimate
Draft Preferred Scenario - April 16, 2015	Total in	Year 2012	Total in Ye	ar 2020	Total in	Year 2036	Total at B	uild Out
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Auburn								
Center and Corridor Communities	2,304	482	2,507	483	2,944	749	3,811	856
Established Communities	5,456	5,631	5,903	5,785	6,889	5,910	9,114	7,352
Developing Communities (listed below)								
Baltimore Ravine	1	12	1	12	227	729	226	725
Jurisdiction Total	7,761	6,124	8,410	6,279	10,060	7,389	13,151	8,932
Colfax								
Center and Corridor Communities	522	205	693	215	1,128	258	2,380	263
Established Communities	293	706	314	715	370	758	899	1,073
Jurisdiction Total	815	911	1,007	929	1,498	1,016	3,279	1,336
Lincoln								
Center and Corridor Communities	2,598	292	3,604	516	6,246	1,042	8,846	1,117
Established Communities	3,470	17,739	4,388	18,921	6,469	20,572	17,679	21,651
Developing Communities (listed below)								
Hwy 65 area	2,263	0	3,263	0	5,463	0	11,007	0
Village 1	13	34	13	203	513	2,041	677	5,640
Village 5/SUD B	76	148	76	148	361	2,147	11,402	8,318
Village 7	0	33	0	585	296	3,286	397	3,285
Jurisdiction Total	8,420	18,246	11,343	20,373	19,347	29,087	50,008	40,011
Loomis								
Center and Corridor Communities	200	148	255	148	801	552	1,288	688
Established Communities	2,336	1,473	2,454	1,495	3,253	1,752	4,039	1,947
Rural Residential Communities	747	848	747	885	856	944	784	1,319
Jurisdiction Total	3,282	2,469	3,455	2,529	4,911	3,248	6,112	3,954

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 M	TP/SCS	2016	MTP/SCS	Build Out	Estimate
Draft Preferred Scenario - April 16, 2015	Total in	Year 2012	Total in Ye	ear 2020	Total in	Year 2036	Total at B	Build Out
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Rocklin								
Center and Corridor Communities	984	1,000	1,036	1,078	1,318	1,319	1,987	1,960
Established Communities	16,226	19,609	17,369	21,059	19,315	22,881	35,759	24,235
Developing Communities (listed below)								
Clover Valley	0	2	0	2	0	142	128	561
Highway 65 Corridor	429	0	1,893	146	4,004	370	10,041	370
I-80 Commercial	85	4	1,487	198	2,555	199	2,936	304
Sunset Ranchos	160	1,665	354	2,379	1,245	4,358	1,436	4,358
Jurisdiction Total	17,884	22,280	22,138	24,862	28,438	29,269	52,287	31,789
Roseville								
Center and Corridor Communities	5,034	2,124	6,323	2,175	9,094	3,224	16,206	3,693
Established Communities	59,122	44,177	67,193	46,129	82,123	47,166	91,285	47,168
Developing Communities (listed below)								
Creekview	3	2	3	102	421	1,207	418	2,011
Sierra Vista	0	18	0	469	3,500	6,116	9,003	8,679
West Roseville	483	2,926	1,214	5,629	2,983	9,428	3,251	10,478
Amoruso Ranch	0	0	0	0	145	1,001	1,463	3,011
Jurisdiction Total	64,642	49,247	74,733	54,504	98,266	68,143	121,627	75,040

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 M	ΓP/SCS	2016	2016 MTP/SCS		Estimate
Draft Preferred Scenario - April 16, 2015	Total in	Year 2012	Total in Year 2020 Total in Year 2036		Total at Build Out			
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Placer County Unincorporated								
Established Communities	18,228	16,143	23,729	16,772	34,778	17,746	71,738	23,764
Rural Residential Communities	7,527	26,922	7,740	27,884	8,330	29,421	27,195	50,527
Developing Communities (listed below)								
Bickford Ranch	108	6	108	247	200	1,433	312	1,890
Placer Vineyards	0	213	0	213	1,499	4,737	9,037	14,132
Regional University	0	0	0	0	381	1,448	1,875	4,387
Riolo Vineyards	66	17	66	71	150	939	166	932
Placer Ranch	0	0	0	0	2,003	2,900	20,155	5,376
Squaw Village	180	6	180	64	180	351	574	850
Jurisdiction Total	26,108	43,307	31,823	45,251	47,520	58,975	131,052	101,858
PLACER COUNTY TOTAL	128,912	142,583	152,910	154,726	210,040	197,127	377,516	262,920

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 M	TP/SCS	2016 I	MTP/SCS	Build Out	Estimate
Draft Preferred Scenario - April 16, 2015	Total in	Year 2012	Total in Ye	ear 2020	Total in	Year 2036	Total at B	Build Out
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Citrus Heights								
Center and Corridor Communities	6,824	1,713	7,872	1,755	10,354	2,757	12,147	4,094
Established Communities	11,115	33,764	11,815	33,955	13,456	35,302	13,456	36,991
Jurisdiction Total	17,939	35,477	19,686	35,709	23,810	38,059	25,603	41,085
Elk Grove								
Center and Corridor Communities	541	53	647	53	947	53	1,043	71
Established Communities	27,286	45,476	29,659	45,948	35,421	47,268	35,518	47,296
Rural Residential Communities	1,712	3,982	1,712	4,106	1,777	4,683	1,800	5,876
Developing Communities (listed below)								
Laguna Ridge	1,336	1,541	2,221	4,910	4,371	7,586	4,400	7,826
Lent Ranch	0	1	2,439	30	3,222	280	4,400	280
Southeast Planning Area	4	38	565	295	5,004	4,061	24,720	4,790
Sterling Meadows	0	0	0	90	0	950	0	980
Triangle Special Plan	123	282	123	301	123	401	343	701
Jurisdiction Total	31,001	51,372	37,365	55,733	50,865	65,282	72,225	67,820
Folsom								
Center and Corridor Communities	7,109	1,330	9,323	1,440	9,852	2,011	9,852	2,192
Established Communities	28,739	24,895	32,242	25,980	32,495	28,174	32,495	28,174
Developing Communities (listed below)								
Folsom South Area	0	0	621	1,182	7,194	8,665	13,619	10,210
Jurisdiction Total	35,848	26,225	42,186	28,602	49,541	38,850	55,966	40,576
Galt								
Center and Corridor Communities	1,299	470	1,598	477	2,308	605	3,299	610
Established Communities	2,805	7,338	3,509	7,431	4,960	9,195	9,230	9,331
Developing Communities (listed below)								
SOI	460	199	460	200	904	1,090	24,180	7,212
Jurisdiction Total	4,565	8,007	5,567	8,108	8,172	10,890	36,709	17,153

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 MT	P/SCS	2016 (MTP/SCS	Build Out	Estimate
Draft Preferred Scenario - April 16, 2015	Total in	Year 2012	Total in Ye	ar 2020	Total in	Year 2036	Total at B	uild Out
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Isleton								
Established Communities	123	388	125	394	139	419	171	510
Developing Communities (listed below)								
Villages on the Delta	21	12	21	12	21	40	21	300
Jurisdiction Total	144	400	146	406	160	459	192	810
Rancho Cordova								
Center and Corridor Communities	16,192	5,988	17,895	6,286	22,008	8,176	40,758	8,228
Established Communities	32,296	16,556	38,694	16,998	54,340	18,039	66,878	18,215
Developing Communities (listed below)								
Arboretum	0	0	0	0	115	1,525	3,488	4,742
Ranch at Sunridge	0	0	0	0	98	711	358	1,610
Rio Del Oro	0	0	0	827	2,090	5,119	12,558	12,189
Suncreek	0	21	0	21	226	3,391	1,408	4,893
Sunridge	114	3,054	718	4,504	2,170	7,707	3,563	8,763
Westborough	32		32	0	155	765	5,447	4,200
Jurisdiction Total	48,634	25,619	57,340	28,637	81,201	45,433	134,459	62,840
Sacramento								
Center and Corridor Communities	146,107	59,363	174,298	65,965	210,627	103,426	255,689	116,653
Established Communities	111,260		121,959	135,386	147,734	155,515	194,590	156,139
Developing Communities (listed below)	111,200	132,330	121,333	133,300	<u> </u>	133,313	154,550	150,155
Delta Shores	0	0	795	460	2,223	5,077	6,660	5,115
Jurisdiction Total	257,367	191,749	297,053	201,811	360,585	264,018	456,939	277,908

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 M	ΓP/SCS	2016	2016 MTP/SCS Total in Year 2036		Estimate
Draft Preferred Scenario - April 16, 2015	Total in	<i>Year 2012</i>	Total in Ye	ear 2020	Total in			Build Out
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Sacramento County Unincorporated								
Center and Corridor Communities	67,142	26,472	80,069	28,363	105,073	45,219	137,302	63,439
Established Communities	94,239	171,653	102,880	173,758	128,649	182,718	202,421	189,159
Rural Residential	10,480	13,726	11,056	13,867	12,458	14,314	15,537	18,369
Developing Communities (listed below)								
Elverta	47	78	47	325	358	1,510	404	6,000
Florin Vineyard	1,319	557	1,389	894	1,528	2,575	6,243	9,917
Glenborough at Easton	453	0	453	560	1,780	3,271	1,796	3,239
West Jackson	2,169	145	2,169	145	4,028	5,141	32,839	15,658
North Vineyard Station	93	363	158	1,261	379	3,415	563	6,062
Mather South	48	0	48	0	265	1,030	5,075	3,529
Vineyard Springs	369	2,400	611	2,634	764	3,820	764	5,943
Vineyard	1,156	4,591	1,240	4,714	1,546	5,353	1,546	6,610
Jurisdiction Total	177,516	219,986	200,119	226,522	256,828	268,366	404,490	327,924
SACRAMENTO COUNTY TOTAL	573,014	558,836	659,462	585,527	831,161	731,357	1,186,582	836,116

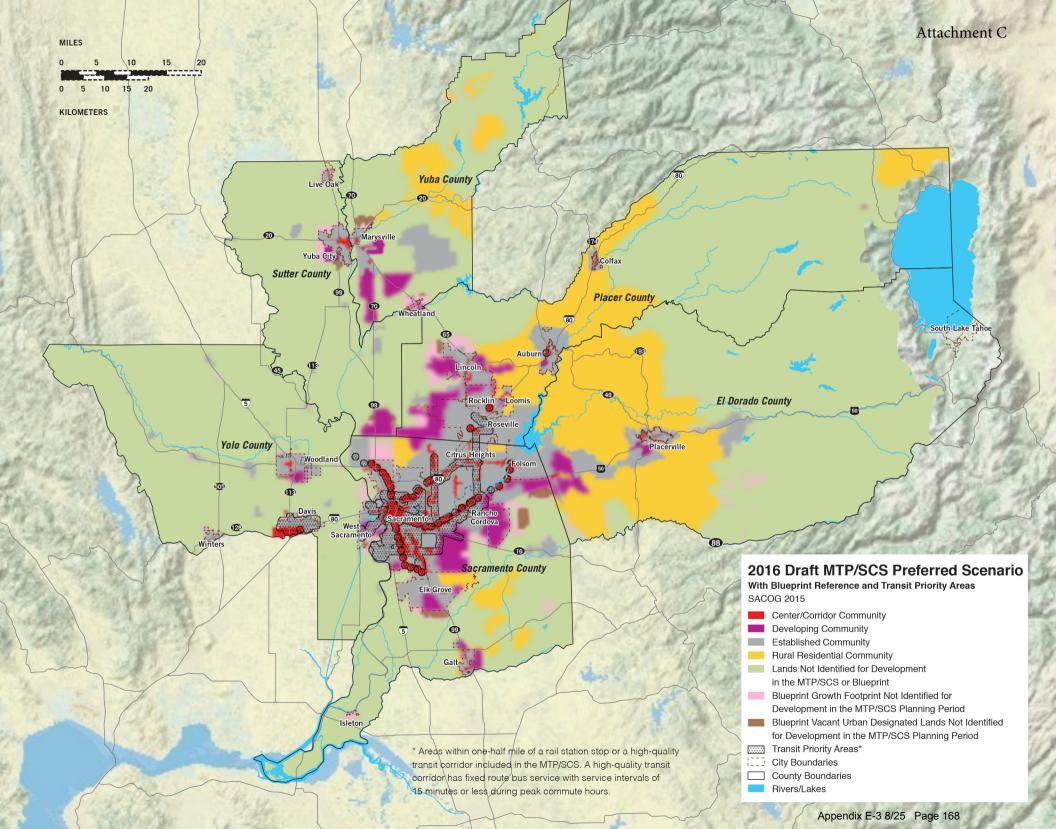
2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 M	ΓP/SCS	2016	MTP/SCS	Build Out	Estimate
Draft Preferred Scenario - April 16, 2015	Total in	Year 2012	Total in Ye	ear 2020	Total in	Total in Year 2036		Build Out
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Live Oak								
Center and Corridor Communities	296	53	461	53	856	91	1,972	336
Established Communities	548	2,498	695	2,704	1,051	3,682	2,446	4,339
Jurisdiction Total	844	2,551	1,155	2,757	1,907	3,773	4,418	4,676
Yuba City								
Center and Corridor Communities	7,222	1,683	8,073	1,691	9,990	1,908	10,036	2,076
Established Communities	16,467	22,864	18,677	23,212	24,065	28,062	29,210	28,048
Developing Communities (listed below)								
Lincoln East (SOI)	116	183	116	183	338	975	1,570	4,868
South SOI/Hwy 99 Corridor	15	36	15	36	412	230	1,826	723
Jurisdiction Total	23,820	24,766	26,881	25,122	34,804	31,175	42,642	35,715
Sutter County Unincorporated								
Established Communities	3,974	6,456	3,990	6,521	4,098	6,845	13,787	7,374
Developing Communities (listed below)								
Sutter Pointe	887	18	887	18	2,995	3,027	55,045	17,500
Jurisdiction Total	4,861	6,474	4,877	6,539	7,093	9,872	68,832	24,874
SUTTER COUNTY TOTAL	29,525	33,790	32,913	34,418	43,804	44,820	115,892	65,264

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 MTP/SCS 2016 MTP/SCS			MTP/SCS	Build Out Estimate		
Draft Preferred Scenario - April 16, 2015	Total in	Year 2012	Total in Ye	ear 2020	Total in	Year 2036	2036 Total at Bu		
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	
Davis									
Center and Corridor Communities	4,531	1,829	5,344	1,862	6,598	2,845	8,404	3,045	
Established Communities	10,899	24,611	11,844	25,130	13,743	26,483	14,253	26,533	
Jurisdiction Total	15,430	26,440	17,188	26,992	20,341	29,329	22,657	29,578	
West Sacramento									
Center and Corridor Communities	5,244	1,983	8,113	3,221	18,737	13,310	69,636	20,744	
Established Communities	19,355	16,650	28,358	17,553	31,518	20,663	38,436	20,639	
Developing Communities (listed below)									
NE Village of Southport (Liberty only)	6	18	6	18	95	532	4	1,900	
Southport Industrial Park	1,255	228	2,716	228	5,010	428	5,010	1,383	
Jurisdiction Total	25,860	18,879	39,193	21,020	55,360	34,933	113,086	44,667	
Winters									
Center and Corridor Communities	147	39	155	39	176	40	203	56	
Established Communities	1,774	2,333	2,135	2,425	2,942	3,303	4,937	4,254	
Jurisdiction Total	1,921	2,372	2,290	2,465	3,119	3,343	5,140	4,310	

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 MTP/SCS 2016 MTP/SCS		MTP/SCS	Build Out Estimate		
Draft Preferred Scenario - April 16, 2015	Total in Year 2012		Total in Ye	ear 2020	Total in	Year 2036	Total at B	uild Out
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs			Housing Units
Woodland								
Center and Corridor Communities	2,852	726	3,012	753	3,385	1,349	4,744	1,550
Established Communities	17,923	18,111	20,977	18,301	28,397	18,779	43,144	18,779
Developing Communities (listed below)								
Spring Lake Master Plan	572	1,217	826	1,741	1,244	4,053	1,242	7,954
Jurisdiction Total	21,347	20,054	24,815	20,796	33,027	24,181	49,130	28,283
Yolo County Unincorporated								
Center and Corridor Communities (UC Davis)	21,700	717	23,644	2,410	24,213	3,383	29,134	2,648
Established Communities	6,684	7,090	7,560	7,178	9,680	7,602	12,500	8,220
Jurisdiction Total	28,384	7,807	31,204	9,587	33,893	10,985	41,634	10,868
YOLO COUNTY TOTAL	92,943	75,553	114,690	80,859	145,739	102,771	231,647	117,705

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing	Conditions	2016 M	TP/SCS	2016	MTP/SCS	Build Out	Estimate
Draft Preferred Scenario - April 16, 2015	Total in	Year 2012	Total in Year 2020		Total in Year 2036		Total at Build Out	
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units
Marysville								
Center and Corridor Communities	2,950	325	3,043	332	3,297	422	3,344	435
Established Communities	5,523	5,025	5,723	5,047	6,294	5,293	6,197	5,356
Jurisdiction Total	8,473	5,349	8,766	5,379	9,591	5,714	9,541	5,791
Wheatland								
Center and Corridor Communities	63	102	63	102	64	105	55	113
Established Communities	368	1,220	523	1,233	901	1,566	761	1,667
Developing Communities (listed below)								
Jones Ranch and Heritage Oaks	-	15	122	184	493	754	1,295	1,326
Jurisdiction Total	431	1,337	708	1,519	1,458	2,425	2,110	3,106
Yuba County Unincorporated								
Center and Corridor Communities	735	346	952	346	1,491	438	1,728	659
Established Communities	3,204	6,962	3,961	7,058	4,640	8,143	6,058	10,522
Established Communities-Beale AFB	3,551	509	4,079	509	4,550	618	5,551	618
Developing Communities (listed below)								
East Linda	76	2,213	510	2,624	1,565	4,444	4,426	6,009
North Arboga Study Area	177	1,147	192	1,262	551	1,416	2,564	2,504
Plumas Lake	195	2,613	894	2,918	2,556	4,894	16,176	18,130
Highway 65 Employment Center	206	36	206	36	2,719	36	23,730	-
Rural Residential Communities	3,360	7,819	3,360	7,841	3,380	7,875	5,094	12,884
Jurisdiction Total	11,503	21,644	14,154	22,593	21,451	27,864	65,328	51,325
YUBA COUNTY TOTAL	20,408	28,331	23,629	29,491	32,500	36,003	76,979	60,221

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy Update	Existing Conditions		Existing Conditions		2016 M	2016 MTP/SCS		2016 MTP/SCS		Estimate
Draft Preferred Scenario - April 16, 2015	Total in Year 2012		Total in Ye	ear 2020	Total in	Year 2036	Total at B	Build Out		
Jurisdiction/Community Type	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units	Jobs	Housing Units		
Region Total	887,965	903,451	1,033,297	951,495	1,327,323	1,188,347	2,082,355	1,441,011		
Center and Corridor Communities	307,652	107,718	365,274	120,297	459,750	193,885	633,282	236,212		
Established Communities	527,095	686,075	599,208	702,471	742,211	764,825	1,018,936	805,215		
Developing Communities	20,037	31,422	34,770	48,958	88,922	146,258	365,796	281,782		
Rural Residential Communities	33,181	78,237	34,045	79,770	36,441	83,380	64,341	117,802		



Taylor. Todd

Subject: March 23 Agenda Item 3 - Climate Action Plan **Attachments:** Item 3 - SMUD County CAP 03 23 22.pdf

From: Steve Johns < Steve.Johns@smud.org>
Sent: Tuesday, March 22, 2022 5:44 PM

To: Clerk of the Board Public Email < BoardClerk@saccounty.net >

Cc: Smith. Todd <<u>smithtodd@saccounty.net</u>>; Lundgren. John <<u>lundgrenj@saccounty.gov</u>>; Leroy Tripette

<Leroy.Tripette@smud.org>; Defanti. David <defantid@saccounty.gov>

Subject: March 23 Agenda Item 3 - Climate Action Plan

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Good Evening Madam Clerk,

Attached please find comments to the Board for Item 3 – Climate Action Plan on the March 23 Board agenda.

Thanks,

Steve

Steve Johns

Regional & Local Government Affairs Manager and 59th Street Reuse Project Lead c.916-769-0428 | steve.johns@smud.org

SMUD | Powering forward. Together. 6201 S Street MS B404, Sacramento, CA 95817



March 22, 2022

Sacramento County Board of Supervisors 700 H Street, Suite 2450 Sacramento, CA 95814

RE: March 23, 2022 Board of Supervisors Agenda Item 3
Workshop on the Communitywide Climate Action Plan

Dear Chair Nottoli and Supervisors,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Sacramento County Draft Community Climate Action Plan (CAP). SMUD is the primary electricity provider for Sacramento County (County) and our vision is to be the trusted partner with our customers and community, providing innovative solutions to ensure energy affordability and reliability, improve the environment, reduce our region's carbon footprint, and enhance the vitality of our community. Last year, SMUD's Board of Directors approved our 2030 Zero Carbon Plan (ZCP). Our ZCP identifies specific actions needed to get our power supply to zero carbon by 2030, but we cannot do this alone. Sacramento County is a critical partner to ensuring our plan's success and many of our initiatives overlap.

The County's most recent draft CAP recognizes SMUD's previous comments with modifications to policies and implementation measures. Prior to the release of the most recent draft CAP, in response to comments and requests, SMUD staff engaged County staff and their consultants to review and discuss the identified emission reduction values for energy in the document. After thorough review and several discussions, SMUD staff has concluded that the reductions reflected in the draft Plan are reasonable and are in line with SMUD's 2030 ZCP emissions reduction goals for our energy supply. Here are some details of our consideration:

- The emission reduction data we reviewed had been updated in response to comments to the County that SMUD had identified confidence in our ZCP achieving 90% carbon free emission using existing clean technologies. While SMUD identifies the last 10% reduction as coming from new technologies or advancements to current ones that are not yet cost effective, we firmly believe that new technologies will evolve and allow us to meet our 2030 zero carbon emissions goal, while maintaining reliability and affordable rates for our customers.
- We reviewed the County's baseline values and the methodology used to calculate the emissions reductions, including allocation of reductions due to various

mandates as well as SMUD's ZCP. The County's methodology takes 2015 energy usage and SMUD's emissions factor, which was obtained from SMUD staff, to calculate the 2015 baseline emissions. This is a valid and solid starting point.

- The County's methodology then uses population growth (residential) and employment growth (commercial/industrial) to escalate electrical load growth to 2030 levels. These 2030 loads are then multiplied by the 2015 emissions factors to establish a "business-as-usual" 2030 emissions baseline. This sets a 2030 baseline assuming no new reduction efforts are put into place.
- The emissions reduction for energy are then calculated based on a reduction relative to the "business-as-usual" baseline and not as a reduction relative to the emissions that occurred in 2015. We believe this is a valid comparison, and while SMUD's ZCP reductions were expressed relative to our baseline year emissions, this made sense for SMUD because we expect to get to zero emissions in 2030, regardless of what that total reduction might be relative to a baseline. We recognized expected load growth which increases our need for additional zero carbon resources in our ZCP.
- To calculate the emissions reductions relative to Title 24 regulations, the 2015 loads are adjusted based on existing and expected building standards to 2030 and multiplied by the baseline emissions factor. This value is then subtracted from the "business-as-usual" baseline to identify the reduction due to the Title 24 regulations.
- To calculate the emissions reductions for Title 24 plus the RPS regulations (60% in 2030), the baseline emissions factor was adjusted to account for the increase in renewables from the baseline year to 2030 (60% RPS) and then multiplied by the load calculated in the previous step. The difference between this value and that from the previous yields the emissions reduction attributed the RPS regulations.
- Finally, to calculate emission due to Title 24, the RPS, and SMUD's ZCP, a similar calculation was performed, but instead of adjusting the emissions factor to 60% RPS, it was adjusted to 90%. Taking the difference from this calculation and the previous one yields the amount of emissions reduction associated with SMUD's ZCP, assuming we only achieve what was identified using existing clean technologies. The reduction from SMUD's ZCP will be greater when we achieve our 2030 goal of zero carbon emissions.

The focus of our 2030 ZCP is on reducing emissions to zero, irrespective of whether those reductions were achieved due to regulatory requirements or additional actions and

therefore didn't include a breakdown similar to the one in the County's draft Plan. However, after reviewing the County's methodology, we believe it is a sound and reasonable approach to allocate the total emissions reduction to various efforts and mandates.

SMUD looks forward to coordinated implementation and collective achievement on electrification, local carbon free electricity development, and on other initiatives we share as common.

Sincerely,

Steve Johns

Smon

Manager, Regional and Local Government Affairs

cc: Todd Smith, Principal Planner

From: <u>Tom Alkire</u>

To: <u>PER. climateactionplan</u>

Subject: Sac County Climate Action Plan - Comments

Date: Tuesday, March 22, 2022 8:24:53 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

I am a 20+ year resident of Sacramento County who works in the plumbing and heating industry since 1996 so I consider myself an informed opinion on this topic. Please accept the following comments regarding the February 2022 update to the Sacramento County Climate Action Plan (CAP), specifically sections GHG-04, 05, 06 and 07.

Regulating electrification of existing homes and businesses effective 2023 is way too aggressive and needs to be pushed out. Suggesting minimum of 3 years and likely needing 5 years. My primary concerns are owner/occupant safety, followed closely by owner/occupant comfort and lastly, owner/occupant financial capability to react at the time of need. As the regulation reads now this looks very much like a Ready, Shoot, Aim scenario which rarely ends well.

Statistics show 80%+ appliance changeouts are unplanned events. When you drill down to HVAC and Water Heating equipment that % is closer to 90%. The fast tracked 2023 timeline for existing homes and business is unrealistic and statistically in direct conflict with the majority of your residents behavioral patterns. We the people, deserve to have proper amount of time to plan, budget and schedule for these conversions so the majority of them aren't emergencies.

The appliances we are talking about are arguably the most expensive items in our homes and/or businesses. These environmentally friendly appliances typically have longer delivery times (especially of late), some will require multiple trades people to do the work which takes more time, some if not many will need electrical service upgrades prior to the product installation. HVAC and Hot Water equipment are considered critical appliances and potential serious health and safety issues are possible when/if they are not available.

Financial incentives (rebates) to install environmentally friendly equipment help speed up the transition from outdated technology to new. SMUD rebate programs have been effective at driving more "green" equipment into homes and businesses in recent years. When regulation forces behavior, incentives tend to disappear effectively transferring the cost of technology upgrades solely to the home and business owners, in turn driving costs up for everyone. Not sure that can be described as progress.

Climate Change is something everyone should be concerned about. But, that concern should not be placed ahead of the health, safety and financial capability of the stakeholders today. It's the "many" that don't have the ability to react to the emergency when it arrives and it's typically the "few" who created the timeline that makes it an emergency. Give the "many" the needed time to prepare for the regulations and the result will always be better.

Example Scenario:

• Imagine a Senior Care Center with 60 residents currently running on 2 commercial gas water heaters working as 1 system. March 2023 comes along and the gas system reaches its end of life and stops working. The owner/s of the business bear the responsibility for their residents. Converting a building from gas to electric is not a quick process. Electric units do not recover like gas so 2 water heaters could likely need to become 4 or 5. The electrical load required to power those new water heaters exceeds the buildings capacity. There is no hot water, potentially for days if not weeks in reality. Unacceptable under any circumstance. This scenario could play out in multi-family apartments, schools, office buildings, etc. You must allow time for Sacramento County stakeholders to prepare.

Thank You!

Tom

From: Ruth Mc Donald

To: PER. climateactionplan

Subject: CAP

Date: Tuesday, March 22, 2022 8:45:45 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Our county must do better. The climate catastrophe is here and our CAP needs to be stronger, include more specific actions and timelines, and reflect the climate emergency that we know is real.

Thank you for reconsidering, we must all act as if the lives of our loved ones and future generations are at stake.

Sincerely,

Ruth J McDonald MD

From: Karen Jacques

To: <u>Phil Serna</u>; <u>PER. climateactionplan</u>

Subject: Climate Action Plan

Date: Tuesday, March 22, 2022 9:20:16 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Supervisor Serna and Climate Action Plan Staff

As you are well aware, the world is facing a climate crisis that is literally growing worse by the day. The IPCC's most recent report has made it very clear that we are fast running out of time to keep temperatures from rising more than 1.5 centigrade and that the consequences will be dire if we fail to do so. The County acknowledged the urgency of the climate crisis when it declared a Climate Emergency and committed to doing what is necessary to address that emergency by 2030. What is needed now is a strong, enforceable Climate Action Plan (CAP). Unfortunately, the most recent draft of the CAP still does not meet that goal. I volunteer with 350 Sacramento and I am among the concerned county residents who signed 350 Sacramento's petition calling for a much stronger CAP than the one currently before you. I agree that staff needs to be instructed to strengthen it and that they need to do so immediately. The longer we wait for a strong CAP to go into effect, the harder it will be to meet or come anywhere close to meeting strong climate goals by 2030.

While the 350 Petition does a good job of addressing the problems with the CAP as currently written, I want to call out a couple of issues that are of particular importance to me.

Key to the success of the CAP is the need for every goal in it to be mandatory, clearly defined and enforceable, with a timeline for achieving it and with subgoals along the way. For example the building electrification goals (GHG 04 to 06) are excellent, but there is no method for enforcing them and no plan for measuring progress in reaching them. Without enforcement and measurement, they sound nice, but they are meaningless.

Despite multiple comments at prior hearings, the CAP still fails to address sprawl. The SACOG region of which Sacramento is a part must reduce its vehicle miles traveled by 19 percent by 2035, but that won't be possible as long as developers are allowed to continue to build sprawl developments and people lack meaningful alternatives to their personal cars. The only way to give people meaningful alternatives to their cars is to build a strong public transit system, but successful public transit requires density, not sprawl. Sacramento County desperately needs strong incentives for developers to build dense, infill developments and strong disincentives for them to build sprawl. It also need an urban limit line that it adheres to. Transportation is the Sacramento region's biggest source of green house gases and this issue has got to be meaningfully addressed in the CAP.

Thank-you for this opportunity to comment. I look forward to staff returning quickly to the Board of Supervisors with what I hope will be a CAP that addresses all the remaining concerns that concerned members of the public have.

Sincerely,

Karen Jacques, District 1

From: Anthony DeRiggi

To: Rich Desmond; Supervisor Serna; Kennedy, Supervisor; Frost, Supervisor; Nottoli, Don; PER, climateactionplan

Cc: <u>Clerk of the Board Public Email</u>

Subject: Comments on Sacramento County CAP (word doc attached)

Date: Tuesday, March 22, 2022 9:33:03 PM

Attachments: my CAP comments.docx

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

March 22, 2022

To: The Honorable Don Nottoli, Chair: nottolid@saccounty.net

The Honorable Rich Desmond, Vice Chair: richdesmond@saccounty.net

The Honorable Sue Frost: SupervisorFrost@saccounty.net

The Honorable Patrick Kennedy: SupervisorKennedy@saccounty.net

The Honorable Phil Serna: SupervisorSerna@saccounty.net

Mr. Todd Smith, Principal Planner: ClimateActionPlan@saccounty.net

CC: BoardClerk@saccounty.net

Dear Sacramento County Supervisors,

Regarding the County Climate Action Plan, I will limit my comments to one GHG measure that also has significant air quality and health effects:

Measure GHG-09, regarding fossil-fuel powered landscaping equipment is weak and inadequate. It has no funding source for the trade-in program, and the target indicator is inadequate to significantly reduce the GHG emissions from the large number of leaf blowers, lawn mowers, and weed trimmers in the County. Also it does not mention landscaping of County property, so a new measure needs to be included in the Government Operations GHG Reduction Measures*.

Brief background:

The California Air Resources Board (CARB) reports that the small off-road engines used mainly for landscaping work now produce more smog-forming emissions than those from all the cars (approximately 30 million vehicles) operating in California. The most egregious polluter in this category is the gasoline-powered leaf blower. Using a gas leaf-blower for one hour produces the same amount of emissions as driving a typical passenger car 1100 miles. These powerful machines typically produce air-speeds of over 200 miles per hour and increase airborne particulates including pollen, mold, asbestos, animal feces, herbicides and pesticides. They also cause significant noise pollution, which can cause hearing loss, increased blood pressure, and heart disease.

The **environmental justice** aspect of this measure is significant, as the majority of gardening and landscaping employees are from disadvantaged communities. Their work requires them to carry a 30 pound gas engine on their back, which exposes them to high levels of emissions, including particulates, carbon monoxide, benzene, and other VOC's. They are also exposed to levels of noise from the engines, which often exceed 85 dB, which according to NIOSH, can cause permanent hearing loss from 8 hrs of exposure, and also harmful cardiovascular effects. CARB recently banned the sale of new gas-powered leaf blowers in the State of California starting in 2024, and will phase out the sale of all other gas powered landscaping equipment by 2028. Over 25 California cities have already completely banned the use of gas-powered leaf blowers, including Oakland, Santa Monica, South Pasadena, Claremont, Sonoma, Berkeley and Hermosa Beach.

Requested changes to the measure:

Measure: The County will phase out the use of gas-powered leaf blowers and other landscaping equipment, and will fund an incentive program to trade in fossil fuel landscaping equipment for electric versions.

Implementation: The County will work with local landscaping equipment retail businesses to create at least 10 convenient trade-in locations for gas powered landscaping equipment, including at least 2 in each supervisor district. Obtain County budget and SMAQD funding by 2024 for a robust incentive trade-in program for county residents. County will consider an ordinance to ban the use of gas-powered leaf blowers by 2026.

Target Indicators: 1. Track the number of trade-in vouchers issued for electric landscaping equipment, **with goal of 5000 pieces** of landscaping equipment replaced with electric by 2026. Monitor that there are at least 2 trade-in locations always available in each district.

*Proposed additional Government Operations measure:

Government Operations GHG reduction measure BE-5 (or whatever number is appropriate)

Measure: The County will convert fossil-fuel landscaping equipment used on County property to electric if electric versions are available.

Implementation: The County will replace all its gas-powered leaf blowers with electric versions by 2024, and will no longer purchase any new gas-powered landscaping equipment if electric versions are available.

Target Indicator: 100% of County property contractors and landscaping crews to use electric leaf-blowers by 2025. 100% of all other landscape equipment converted to electric by 2028

Sincerely,

Anthony DeRiggi, MD 932 46th st Sacramento CA 95819

Member of the Sacramento Environmental Commission, and Sacramento Medical Society Public and Environmental Health Committee

March 22, 2022

To: The Honorable Don Nottoli, Chair: nottolid@saccounty.net

The Honorable Rich Desmond, Vice Chair: richdesmond@saccounty.net

The Honorable Sue Frost: SupervisorFrost@saccounty.net

The Honorable Patrick Kennedy: SupervisorKennedy@saccounty.net

The Honorable Phil Serna: SupervisorSerna@saccounty.net

Mr. Todd Smith, Principal Planner: ClimateActionPlan@saccounty.net

CC: BoardClerk@saccounty.net

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Sincerely, Anthony DeRiggi, MD 932 46th st Sacramento CA 95819

Member of the Sacramento Environmental Commission, and Sacramento Medical Society Public and Environmental Health Committee

From: <u>Laurie Rivlin Heller</u>

To: <u>Clerk of the Board Public Email; PER. climateactionplan</u>

Cc: Kennedy, Supervisor; Rich Desmond; Frost, Supervisor; Supervisor Serna; Nottoli, Don

Subject: Comments On The Communitywide Climate Action Plan - 3/23/2022 Agenda Item #3 -- PLNP2016-00063

Date: Tuesday, March 22, 2022 9:33:33 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Board of Supervisors,

It always disappointed me and my colleagues at the California Natural Resources Agency, when Sacramento County and the City of Sacramento rarely applied for funding from any of our grant programs. And when they did apply, often they were not competitive.

The programs I refer to are administered by Caltrans (Environmental Enhancement and Mitigation Program), the Strategic Growth Council (Urban Greening), the Natural Resources Agency (River Parkways) and the California Cultural and Historical Endowment (Museum Grant Program), among others. These programs award grants to local governments ranging from \$250,000 to over \$1 million, for capital projects that mitigate and adapt to climate change.

If you click on the links I've provided, you'll see the kinds of projects that do get funded. I personally visited many of them. These cities, counties, water districts, public works and parks departments, universities etc. are successful for a number of reasons. I'll mention just a few of their best practices.

- 1) They develop projects hand-in-hand with local nonprofits, land trusts, environmental groups and neighborhood associations. These agencies can demonstrate extensive, long-term community support which stems from *their* long-term commitment to the communities in which the projects are based.
- 2) They have done their homework. Proposals are based on actual assessments which have identified the community's need, and are a puzzle piece in the long-term march toward sustainability. They are detailed, with timelines, budgets and matching funds already secured from partner agencies.
- 3) They have read SB 375 and take sustainable communities seriously. The projects reduce GHGs and focus on vulnerable neighborhoods. The projects get drivers out of cars, get cars off the road, give roads a diet. They improve neighborhoods that flood or suffer from heat, they reduce air pollution with trees and open spaces so people are happier and healthier. They expand public and active transportation to existing communities, where needed. They recycle historic buildings and make them available to local residents rather than paving a new parking lot.

Here are three examples:

- The Council for Watershed Health (LA County) received \$294,395 to retrofit an alley, alleviate flooding by converting an alleyway to pedestrian-friendly greenspace including walking path and bioswales to capture/infiltrate urban runoff and stormwater. The project will provide a safe pathway to nearby schools and catalyze other green street retrofits in the neighborhood. The project partners include Tree People; UC Riverside; US Bureau of Reclamation; California Department of Water Resources; Metropolitan Water District Southern California; City and County of Los Angeles; and Water Replenishment District of Southern California.
- · City and County of San Francisco received \$848,059 to eliminate two lanes of traffic through an existing park, to be replaced with native plants, bioswales for onsite water retention/infiltration, and to create safe pedestrian/bicycle paths to schools and commercial centers. The project removes 10,000 sf impervious asphalt and replaces it with permeable surfaces. Partners include San Francisco Municipal Transportation

Authority; San Francisco Bicycle Coalition and WalkSF.

LA Bureau of Sanitation was awarded \$500,000 to expand the urban forest by planting 1,600 trees and other vegetation in a disadvantaged and park-poor community. New trees will be planted along a former rail line, redesigned by Metro Transit as a new multi-purpose path. The project will transform an urban landscape into a green corridor with native species, will sequester carbon, increase biodiversity, reduce temperatures, infiltrate stormwater, and encourage public transportation.

I show you this because much of the dream that is this Climate Action Plan intends to seek grant funds for implementation. But the groundwork has not been laid. The assessments have not been done. The partnerships are not in place. The community support is yet-to-be. There is no track record of commitment to climate-vulnerable communities. There is no vision for a new, clean-energy Sacramento, nor implementation steps to get there.

Yet, the CAP specifically states the County will seek funding from

- SACOG's "Green Means Go" which pays for infrastructure upgrades in infill areas;
- EPA's Safe Drinking Water which reduces exposure to lead in drinking water in underserved communities;
- · Urban Greening grants which fund green infrastructure with priority to projects benefiting disadvantaged communities;
- Water Board's Funding Program to address drought and contamination in water systems serving low-income households.
- DWR's Integrated Regional Water Management grants for planning and implementation with disadvantaged communities.

This CAP is a plan to plan. Plus it's so full of caveats, it's clear the County intends to continue business as usual.

So much for climate change.

Laurie Heller

Taylor. Todd

Subject: Agenda Item #3 County Board of Supervisors meeting, March 23 Climate Action Plan

Workshop

Attachments: March 18 2022 Master Comments 2022 for County and City of Sacramento.docx.pdf

From: Chris Brown < info@sacclimate.org > Sent: Wednesday, March 23, 2022 10:24 AM

To: Clerk of the Board Public Email <BoardClerk@saccounty.net>; Serna. Phil <SernaP@saccounty.net>; Frost. Supervisor

<SupervisorFrost@saccounty.net>; Nottoli. Don <nottolid@saccounty.net>; Kennedy. Patrick

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Subject: Agenda Item #3 County Board of Supervisors meeting, March 23 Climate Action Plan Workshop

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.



Dear County Supervisors,

We acknowledge that the Draft CAP has included references to the emergency situation we face, and has a number of provisions that directly address the need to move faster. We applaud the staff for listening to the public and including these provisions. We are pleased that a goal of carbon neutrality by 2030 is acknowledge, but the targets in the Draft Final CAP do not achieve that goal, Tis may have to do with meeting the California Air Resources Board standards for a CAP, and if that is the reason it emphasizes the importance of the Climate Emergency Response Plan which the County decided to create in its December 2020 Climate Emergency Declaration.

Even if that is the anticipated approach we feel the Climate Action Plan document can be strengthened still. Here are a number of topics which are mentioned in the CAP, but we believe more specific language would strengthen in important measurable and monitorable ways. We have attached a more detailed document. We recognize that some of the below may be better addressed in

the soon to be developed Climate Emergency Response Plan, but we also advocate for their mention in the CAP. We have attached a longer document which elaborates on our recommendations which are summarized below:

First, **Transportation** which is the sector that produces the largest amount of GHG emissions in the County has several elements we support including reducing VMT, improving EV charging infrastructure and steps to increase the safety and availability of walking and biking, rolling infrastructure. What it lacks are clear measures to reduce and eliminate gasoline and diesel filling stations, including such interim steps as requiring EV charging stations at all fossil fuel filling stations

The CAP includes a recommendation to adopt an Electrification ordinance with an unnecessary delay in implementation. More than 50 jurisdictions across the state have already successfully adopted such ordinances and this can be done in 2022. Also needed is a plan to upgrade all permit regulations to accommodate the increasing needs for 21st century homes and buildings that have all electric appliances and may have solar plus batteries that need space in electric panels.

Environmental justice is another topic in which there is mention and some good ideas, but not nearly enough to meet the increasing impacts of climate change over the upcoming years. There is a recognition that we must Invest in lower income, more vulnerable communities via affordable housing, electric and solar infrastructure to improve resilience, but we found not mention of the following critical measures:

Resilience hubs to address needs for food, shared resources, cooling and heating centers, and other neighborhood services.

The need to raise the minimum wage.

The need for mobile applications to connect food providers with the food insecure.

No mention of the role increased distributed use of solar on rooftops can help address air quality issues and disaster preparedness by investing in solar power in our more vulnerable communities.

The need to address the problems facing the growing number of Unhoused in our community are also a climate issue. While ths impacts on the undhoused are mentioned in the CAP, there is a lack of specificity as to measures that will help reduce the risk to them and improve community resilience. Measures we recommend be included:

Establish a communication system using social media to connect government and nonprofit service providers to the unhoused and vulnerable communities to supply information about upcoming weather events and available services.

Create or expand resiliency hubs that may include safe campgrounds and permanent shelters in under-served communities. Community churches, nonprofits, and citizens actively engaged in the process could work in concert with government officials to conduct a needs assessment, establish policies and procedures and a governance process.

Establish or strengthen a carbon-free transportation system that ensures the unhoused and underserved community members can get to a resiliency hub or other appropriate location in emergencies to address basic needs such as housing, shopping, and medical services.

Build long-term climate resilient and carbon zero housing with green services, i.e. transportation, medical, food assistance, and job training.

Invite the unhoused community stakeholders to a climate resiliency and disaster planning session to prepare for extreme weather events and coordinate services to improve results and manage resources effectively.

To improve Community Resilience we recommend the following elements be clearly spelled out: Support the creation and expansion of Resilience Hubs for ongoing challenges of climate emergency and for dealing with natural disasters. Provide space at the hubs for farmers market food hubs and seed swaps, support for gardening and composting. Provide cooling and heating support for weather extremes using solar power;. This will reduce the need to go long distances for basic necessities. Repurposing publicly owned buildings and working with public/private partnerships and local NGOs is the most likely way to create such hubs that will be distributed across the broader community.

Composting, Community Gardens and a Greener Community We acknowledge the planned work to plant more trees which will increase shade and improve carbon sequestions, and hat composting will reduce methane production. We believe that the compost generated in the County should be destined for use here, both to reduce the impacts of transportation and to help repair and restore local soils that the traditional landscape approach sinc eWWii has strippe of so much carbon in the soils.

The Costs of Climate Inaction. If we do not act with speed we will pay much more for the repairs and restoration needs with increasing climate catastrophes. The CAP and all climate programs need to rethink funding mechanisms and avoid becoming completely dependent on grants to proceed. The County, City and SMUD need to **act with a clear sense of urgency and**

purpose to reach carbon neutrality by 2030 to avoid catastrophic costs due to Climate Change. The costs include 100's of billions of lost dollars, the extinction of over one-million plants and animals and the premature deaths, loss of livelihoods and disruption of the communities and cultures of millions of people. A first step is to form a **Public Bank** of Sacramento as has been done by 25 other states and 18 California municipalities including San Francisco and Los Angeles. This could safely generate funds to defray many of the costs associated with building the green infrastructure, generating the sustainable jobs, and assisting with housing the unhoused- all of which are necessary to achieve carbon neutrality and community resiliency. In doing so, Sacramento funds would be divested from Wall Street banks with insecure schemes and the underwriting of future fossil fuel projects. Recommend local jurisdictions research and introduce climate program funding mechanisms, such as those implemented in Albany CA, Portland, OR and Boulder, CO, to accelerate the implementation of climate mitigation and adaptation programs.

Collaboration The City, County and SMUD need to work together to meet their common carbon free by 2030 goals. We applaud the creation of the MOU covering electrification programs and will work with the three organizations and we believe and will support the City and County of Sacramento should formally collaborate with other agencies to ensure that the 2030 Carbon Free Goal of their mutual climate emergency declarations are met.

We recognize that the document does address the need to protect **Public Health** and recommend that this be a central motivating factor in how programs are designed and prioritized. Thi model provides for both the preventative measures to avoid the worst of what could happen by focusing on removing risks quickly, like the dependence on cars and internal combustions engines, while also providing for a focus on ameliorating the impacts on people who are already suffering from heat exposure, asthma, and other air quality problems to mention just a couple.

Again, please find a document attached which further elaborates on these points, We look forward to continued engagement with the County and the broader community as we face the increasing impacts of global warming.

Chris Brown
Sacramento Climate Coalition Coordinator

Climate Change Information

Final

Input for Planning Purposes for the City and County of Sacramento

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Executive Summary

Climate Change Information, Input for Planning Purposes for Sacramento City and County of Sacramento was prepared by the Sacramento Climate Coalition to describe, highlight, and outline the many climate change actions, challenges, and opportunities that Sacramento County needs to confront, manage, and implement over the next eight years to bring down net greenhouse gas (GHG) emissions to zero in our region.

We are in a **climate emergency** and our actions must reflect this. This means that we will most definitely be working outside our comfort zone. Our climate crisis is a current existential threat to our survival. **Doing nothing is not an option.** Doing more of the same is not an option. The time is now for forward thinking, allowing for organic natural solutions that already exist to reverse the devastation we have created and put us back on the path to sustainable life. As weather patterns are shifting, we are experiencing more and more extreme weather events. Soon, as sea levels are rising, water will become more scarce resulting in our food supply also being threatened.

This report addresses direct actions that must be taken or expanded to lower GHG emissions (e.g., electrification) and combat extreme conditions mentioned above; the report also addresses the greater financial, human, and species extinction costs of not accelerating our planning and implementation to address climate change. These direct and essential actions we must rapidly implement range from using existing technology to developing strong carbon sequestration actions that will address the areas where technology currently does not exist.

Transportation is the largest GHG sector in Sacramento County. This paper addresses key transportation actions and strategies. Sacramento County's 2021 Draft Climate Action Plan covers many of the issues discussed. Both the City and County need to address these and other recommendations *by 2030*. This paper recommends a focus of getting people out of their vehicles and onto public transportation, biking, walking, and rolling while supporting electric vehicles. These actions are critical to lowering local GHG emissions.

Decarbonization through **electrification** is many things. Primarily one thinks of electrifying buildings using green energy and not being powered with fossil fuels like natural gas heating, wood-burning stoves, or gas hot water heater and cookstoves. It is also building efficiency in order to consume less energy. Homes, office buildings, and other businesses that rely on power for equipment all need to be electrified and made more efficient on an accelerated schedule. The longer we wait to electrify, the more it will cost to retrofit existing infrastructure with green power alternatives and the longer it will take to reach net-zero GHG emissions in our region. Fossil fuels have little to no purpose in our future if we are to keep our carbon emissions down to the point that the planet can heal itself from the impacts from humans. Both the City and

County of Sacramento must set a powerful example both within their own infrastructure and through ordinances to establish accelerated schedules to convert our entire region to green energy.

Climate change challenges affect our region's **resiliency.** We are experiencing extreme heat, extreme rain events, extreme wildfires, and unhealthy air pollution levels that have a huge effect on our most vulnerable communities in our region that lead to public health issues that must be addressed immediately. To remain sustainable, the City and County have an opportunity to not just manage rapid climate change dilemmas but to be proactive by developing resilience actions and regenerative practices.

Environmental Justice Lower income, more vulnerable neighborhoods, frequently communities of color, suffer from underinvestment and a lack of support for necessary improvements. Supporting our underserved communities helps our whole region address inequities as well as helps to prepare these neighborhoods for climate change challenges and events.

Resilience hub development provides an opportunity to address current everyday issues in our communities, (especially our lower income communities) such as food insecurity, as well as access to health care, and can provide a way to prepare for climate change effects and climate disasters. The same resiliency measures must be applied to our power system in order to reduce power outages especially during floods, extreme wind events, and vandalism. The use of solar power and other green energy options offer tools to help improve our resiliency in our communities. Relillience hubs combined with green energy options must be a priority. Resilience and food hubs, better, affordable transportation for low-income areas, and more investment in affordable housing, are all solutions that can address the food scarcity issue and our vulnerability due to the climate events we are facing.

Addressing the needs from climate change weather events that cause people to be left unsheltered must also be addressed at all government levels locally and abroad. Close to home, the Paradise fire highlighted **disaster resilience** problems for surrounding communities while Paradise residents face health, trauma, and safety impacts from the fire's impact to their homes and livelihood. Sacramento City and County must prepare plans and take actions to protect our citizens from extreme climate change events. **Disaster resilience** means supporting local networks that address the social problems the unsheltered suffer from, that then, in turn, incur major costs to local governments: mental and medical illness, substance abuse, lack of basic services (restrooms/showers), and hunger, in addition to the healthcare and law enforcement costs. In the long term, the government will save money with a disaster resilience planning and implementation program. Acting now is essential!

Local governments should quickly implement programs to educate the public on **composting**, reducing food waste, developing more residential and community gardens, teaching

healthy cooking, and promoting tool lending services. These programs all support food hub development and will help provide healthy fruits and vegetables for people that often rely on processed and less healthy food options. These actions also reduce methane gas releases from landfills and allow for gardens that will sequester carbon from the atmosphere. This relatively low investment of resources will produce large GHG reduction benefits and will involve the community in implementing these actions to protect our planet.

Finally, local government agencies, including Sacramento City and County, the Sacramento Municipal Utility District and Sac Regional Transit, must educate the public on the need to reduce GHGs and how the public must contribute to the solutions needed to get to net zero GHG by 2030. This **public component needs to be made a very high priority**. Educating the public on benefits they (and our region) will receive from home electrification, and actions they can take, including using public transportation to commute to work instead of driving a fossil-fuel powered vehicle, taking resilience actions, and considering rooftop solar energy, will make them better informed on decisions we all need to make in the next few years. The promotion of green jobs must also be a part of this discussion.

<u>Local government collaboration</u> on GHG issues will not only provide a clear, single, and united voice to the public, but it will also improve local government's efficiency, reduce government costs, and open the door to gaining public support for needed actions that will make Sacramento County among the national leaders in getting net GHGs to zero by 2030.

Transportation

Transportation is the largest GHG sector in Sacramento County. This paper outlines five key transportation actions and strategies. Sacramento County's 2021 Draft Climate Action Plan covers many of the issues discussed. Both the City and County need to address these and **other recommendations by 2030.** This paper recommends a focus of getting people out of vehicles and onto public transportation, biking, walking, and rolling while supporting electric vehicles. These actions are critical to lowering local GHG emissions.

We recommend that the City and County::

- 1. Improve public transportation and get people out of vehicles as they commute to work, run errands, worship, and shop for groceries and clothing. While there are many other reasons to drive a car, local government should focus first on the most frequent uses of vehicles that represent the majority of vehicle miles traveled (VMT). Adopt and implement policies in transportation and land use decisions that consider ways to reduce VMTs when new projects and modifications to existing projects are evaluated.
- Explore and develop best practices for charging stations and other supporting
 infrastructure (e.g., running power to electric panels) necessary to support Electric
 Vehicles. (EVs). Focus on locating places where people can fully charge EVs
 especially for households that rent or lease their primary residence. Other EV
 recommendations are below.
- Fund projects that promote walking, biking, and rolling that include the following elements: separated bikeways, secure bicycle parking, adequate lighting, cooler bus stops during hot summer months, wider sidewalks, traffic calming, safety rules for new modes of transpiration (e.g., electric bikes), and other speed reduction measures.
- 4. **Ban Permits for "Gas" only stations**. Permit only multiple sources fueling stations with the space for parking spots while charging.
- 5. All transportation projects must consider **environmental justice and equity** in all phases of work prioritization and funding from project planning to project completion to assuring proper maintenance and operations.

The largest sector of Greenhouse Gas Emissions in Sacramento County is transportation. On-road and off-road vehicles account for 1,671,598 and 196,769 Metric Tons, respectively, of CO2 per year (MTCO2/year) or 38.5% of the total GHG community emissions (4,853,647 MTCO2/year measured in 2015). Government Operations vehicle fleets make up 29,951 of the 123,397 MTCO2/year or 24% of the total Government Operations GHG emissions. "[1] Sacramento County CAP, September 2021, Table 1)

The community, businesses, and government agencies need to collectively focus on reducing GHG emission in our region and treat it as a top priority. Addressed here are three key recommendations for both households and business (including state, federal and local agencies):

Improving Public Transportation

The County's September 2021 CAP does an excellent job in addressing needed actions in our region, and we ask that the City also adopt this CAP. Both the County and City need to address these actions by 2030, because time is of the essence!

Sacramento residents, especially in suburbs, drive their cars to accomplish nearly all of their tasks during a week. This is often considered necessary due to dropping off and picking up children from school, inflexible work schedules that force driving to work, work shifts that do not correspond to transit route times, long commutes outside of the Sacramento region, and other valid reasons to "need" to drive. City residents have numerous bus and Light Rail routes to choose from, and biking is comparatively easy to get to downtown offices due to shorter distances and more bike trails. Walking is also an option for people living in the downtown area. As a result, the real focus is to bring people downtown that live more than 5 to 10 miles from work.

While CAP actions are included in this document (noted by **), the Sacramento Climate Coalition has also included other actions and recommendations along with proposed time frames to complete these actions. Timeframes are noted at the end of each suggestion. Year 1 begins January 1, 2022. Year 8 ends on December 31, 2029.

Improved Transportation Access to Neighborhoods via Sac RT and other services

- a. Provide bBetter access to schools, libraries, shopping centers, parks, places of worship, bus stops and Light Rail stations. (Years 1-3)
- b. Provide better ADA access to busses and light rail and paratransit (Years 1-3)**
- c. Ensure safe access to light rail stations, bus stops, schools, parks, activity centers, and shopping malls (Years 1-3)**
- d. Find safe ways for children to ride their bikes to school including better street security programs. (Years 4-6)
- e. Have security cameras at bike racks and isolated bus stops. (years 6-8)
- f. Prioritize work to address EJ issues in all planning, especially in selecting project locations. Although, this should happen naturally. (years 1-3)

Cars, Trucks, Planes, and Equipment

- a. Reduce cars per household by one. While challenges exist for families working outside the home, taking children to school, running errands, etc., families could run a one-month trial to see if they are able to "take care of business" by only using one less vehicle. (Years 1-4)
- b. Expand EV charging stations. This is not only good for our air quality, but it will also be good for restaurants and shopping centers as people moving through Sacramento will stop, charge their vehicle, shop, and eat. People will not buy EVs if they fear they will not be able to recharge their cars. The same applies to non GHG emitting fuels. See issues regarding cobalt at the end of this paper. (Years 1-3)**
- c. Provide more hydrogen, biofuel, and other non-carbon fueling stations if the technology and cost competitiveness of these fuel types develop. These fuels will be able to support cars, trucks and equipment. (Years 1-4)
- e. Reduce car idle time, especially on our freeways without the need to widen highways. This can be accomplished by increasing the use of public transportation, carpooling and biking. (Years 1-6)**
- f. Study expanding school bus services in all areas with a goal of reducing lines of cars dropping off and picking up their children at school. This should lead to use of electric buses if this is a feasible alternative. (Years 6-8)
- g. Get churches, synagogues, mosques and other places of service to set up carpooling to and from services. Not only will this improve air quality, it will likely also bring together the community and improve attendance at services. (Years 3-6)
- h. Reducing fuel GHGs in Sacramento will be difficult without help from State and Federal air quality ordinances and laws.** Sacramento is a hub to get to South Lake Tahoe, Tthe Bay Area, Reno, and moving north or south through California. Unless everyone moves forward with cleaner fuels, our efforts will be diminished by the fumes from high gas usage vehicles passing through Sacramento. California and our federal government need to advance development of clean fuels for large trucks.

 The City and County need to lobby our legislature to influence bill development and passage. Per the EPA's website, "On August 5, 2021, EPA announced plans to reduce greenhouse gas (GHG) emissions and other harmful air pollutants from heavy-duty trucks through a series of rulemakings over the next three years. The first rulemaking, to be finalized in 2022, will apply to heavy-duty vehicles starting in model year 2027." (Years 1-5)
- I. Airplanes need to look for cleaner fuels, also, and federal and private industry R&D needs to accelerate. Carbon taxes on flights should become a part of everyone's ticket price and the tax will be used to both develop better aviation fuels and provide transportation subsidies for low-income residents of Sacramento County, including but not limited to improving access to public transportation. (Years 5-8)

Walk, Bike, and Roll and Transportation Improvements

- a. Create more safe walking, scooter, and bike routes. (Years 1-4)**
- b. Require more bike racks for parking bikes for all businesses and Light Rail stations. (Years 1-3)**
- g. Provide for bikes to rent for a few hours to a day, and place bikes at Light Rail Stations. (Years 5-8)**
- h. Use light green paint to delineate bike lanes in busy areas in both the city and county for uniformity and bike safety. (Years 1-8)
- Improved usage and safety classes for persons using electric bikes, skateboards, and Segway scooters that can reach speeds of over 30 mph. Many riders go way too fast! (Years 1-3)
- j. Improve street lighting in disadvantaged areas and especially at busy intersections.** Survey dangerous crosswalks for better pedestrian lighting using crash data. Provide adequate lighting at all bus stops that operate in the evening. (Years 1-3)
- k. Add lighting, drinking fountains, public restrooms, benches, and other amenities across the county to encourage walking and cycling. (Years 3-6)**
- I. Beautify and expand existing carpool parking sites and offer incentives for employees to carpool to work. Add benches and trees. (Years 3-6)**
- m. When possible, develop safer bike lanes and sidewalks that are separated from the streets. (Years 1-8)**

Other Considerations

Maintenance

Maintenance for the infrastructure needs to be considered in the planning, design, construction, and operation of our transit system. Scheduling regular maintenance may appear expensive but will actually save money in the long run.

Volunteer Support

Voluntary bike trail clean-up operations and operations similar to "adopt a bike trail" operations for transit systems can help keep the system clean. Community clean-up events will attract riders who support keeping our transportation system running strong. Service credits for high school students should also be considered.

Low Income/Homeless Services**

Sacramento needs to develop plans that allow low income and unhoused people to utilize public transportation to help them improve their quality of life. Our community needs to consider the use of special vehicles that can take homeless persons to appointments with the DMV (for IDs),

mental and medical health services, AA and NA meetings, and other places that can help homeless people get out of the cycle of living on the street. These types of services need to be extended to large encampments and areas identified by the Sacramento County Sheriff's Homeless Outreach Team (HOT) and the City Police Department.

Electric Vehicles

We recommend that the City and County:

- 1. Explore and develop infrastructure for Electric Vehicle options as a primary and secondary vehicle.
- 2. Large apartment complexes need rapid charging stations. Lower level charging stations are more appropriate to smaller apartment or condo complexes with garages or assigned parking. Federal funding should be secured for environmental Justice communities and low income housing to install charging stations while the permitting process should require charging stations as appropriate.
- 3. Secure funding for start up grants for local EV conversion businesses, an EJ issue/ Middle and low income people usually buy used cars.
- 4. Rapid charging stations for long distance travelers. Placement at area Hospitals, as well as shopping and large event venues.
- 5. Stop issuing permits for gas stations (only providing fossil fuels). Start issuing permits for fueling stations that provide multiple fuels fossil fuels as well as rapid electric charging or hydrogen.

According to the California Air Resources Board, "The transportation sector, including all passenger cars and light trucks, heavy-duty trucks, off-road vehicles, and the fuels needed to power them, is responsible for more than half of California's greenhouse gas emissions. It is also responsible for the majority of smog-causing pollutants and is a significant source of toxic air contaminants that directly impact community health. These emissions pose a direct threat to the environment, the economy, and public health.

By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's Executive Order establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers, and therefore does not require Californians to give up the existing cars and trucks they already own."

The government needs to lead by example: and we advocate for the County and City of Sacramento to electrify their fleets by 2030 as laid out in the Climate Emergency Declaration. For example, the County is working with SMUD to install fast (DC) chargers and a level 2 charger in Citrus Heights. The County needs to do more of this type of collaboration.

According to a Google search, well over 17 million <u>new cars</u> are purchased every year in California. Over the coming years, the marketing of electric vehicles in California will increase

and with rising gas prices and the governor's resolution, there will be an increase in EVs on California roads. Most of California's major highways intersect through Sacramento. The County can help meet the carbon emission goals by preparing the infrastructure to support emissions-free vehicles. Having opportunities for rapid charging in Sacramento could bring business to Sacramento County.**

The most beneficial use of federal funds would be to support businesses that convert combustion engines to electric vehicles by providing start-up grants. This would address middle income, working class and low-income people who buy used cars. If they like their car, they might consider converting their vehicle to electric or buying a used vehicle that has been converted to electric. This would be preferable to buying a used car with a combustion engine there by lengthening the life of a polluting car. This would greatly accelerate the number of clean energy vehicles on Sacramento's roads, further reducing greenhouse gas levels and making economic commitments to low- income Sacramento communities, who are often the ones hurt the most by our poor air quality.

Environmental justice can also be addressed by providing grants to low-income homeowners to install home charging stations, grants for electricians to provide free or low cost installations of charging stations for people of low income, and giving the owners of apartments, especially low-income apartments, incentives to install charging stations, in order to provide for a rapid and just transition to clean energy vehicles.

Decarbonization through Electrification & Efficiency

We recommend that the City and County::

- Adopt an electrification ordinance for all construction going forward. There should be only very rare exceptions when a business can not accomplish their task any other way. New construction will be required to have energy efficiency with insulation and energy efficient windows and doors.
- Upgrade all permit regulations to accommodate the increasing needs for twenty first century homes and buildings that have all electric appliances and may have solar plus batteries that need space in electric panels.
- Adopt an electrification ordinance for a home or business and its appliances when remodeling requires a permit.
- Create an education program for developers and customers on electrification and building efficiency.
- Set up interconnected microgrids in Sacramento County through collaboration with Sacramento City, County, and SMUD in order to increase our grid's efficiency and resiliency. Our utility's efficiency improves when energy is not waisted and can be redirected where it is needed adding to the community's resilience. Sacramento will be better able to deal with climate change and to prevent disasters, such as loss of power during killer heat waves.

The State of California and Sacramento County have evaluated their carbon emissions and at least 1/3 of emissions are from the built environment. SMUD encourages their customers to choose electrification of their homes. The population of the County is expected to grow, as it is in the rest of the world, and the demand for energy will grow almost to the limits of our ability to provide energy. The solution is decarbonization through electrification and efficiency. All three are essential, efficiency uses less energy and electrification prepares for the use of clean energy provided by rooftop solar, batteries or utility provided clean energy sources.

Decarbonization is many things. Primarily one thinks of a building not emitting carbon by not burning fossil fuels like natural gas heating ,wood burning stoves, or gas hot water heater and cook stoves, but it is also building efficiency in order to need less energy for heating of the air and water, and cooling.

Decarbonization happens when we:

- create efficiency in our buildings energy use;
- install energy efficient appliances like LED light bulbs, convection stoves and other energy efficient home appliances, heat pump water heaters and furnaces;

- insulate our building and utilize passive solar warming and ventilation/ fans for cooling; and
- when our utilities become more efficient through development of microgrids¹ Electrification of homes and businesses is the path to utilizing green energy, whether that be Rooftop Solar Plus batteries or clean energy provided by a utility. Fossil fuels should have little purpose in our future if we are to keep our carbon emissions down to the point that the planet can heal itself from the impacts of overconsumption and exploitation of the natural world. Appliance efficiency uses less energy to accomplish its task. New buildings should be taking advantage of advances in home and building efficiency with walls and ceiling insulation, high E glass, and buildings oriented to gain solar rays by the angle of the winter sun and shaded from

For the already built infrastructure, a significant part of decarbonization is the electrification of buildings and efficient electric appliances in order to stop burning fossil fuels and be ready for clean energy sources. This energy could be rooftop solar or clean energy from a utility. If a building is electrified, its natural gas connection can be shut down.

the angle of the summer sun.

There needs to be continued education, permit regulation, and commitment for funding assistance for homeowners and building owners if the built infrastructure is to be decarbonized. People are resistant to change and fearful of an increased electric bill. The consumer may not make the right choice without education on the cost savings and health benefits of electrification. In addition, many residents do not have the financial resources to make that change, and so programs to assist with no-cost financing and direct installation will be needed.

The longer the County and City wait to electrify building codes, the more it will cost to retrofit buildings or housing units with methane/natural gas, or propane hookups. Building more gas infrastructure compounds the problem. Sacramento City's ordinance is not reducing gas units in buildings over three stories; many more units with gas infrastructure are still going to be built, thereby continuing to add to the buildings needing decarbonization. There is no reason to allow this other than pressure from developers who are not educated or do not yet accept the benefits of electrification. There are no logistical problems in building all-electric. If you want high-end appliances, they are available including electric grills, and pizza ovens. The New Building Institute has multiple examples here in California of successful zero carbon buildings that include schools, warehouses, and multi-building business parks.² We need to be building energy-efficient and clean energy utilization buildings and homes, if we are to reduce our energy use per building and have the reserves we need for growth as the population expands. We do not need to expand Sacramento's carbon footprint.

https://newbuildings.org/news/new-building-electrification-technology-roadmap-shows-pathways-to-achieve-zero-carbon/

¹ More Than a Fair-Weather Energy Source: Solar + Microgrids Offer Resilience.

As stated below in the <u>Costs section</u>, the costs of inaction are higher than the costs of rapid action. Sacramento County's budget process may not allow direct purchase of all electric equipment for every building in the County, but the County does have tools at its disposal to direct a rapid retrofit of existing buildings, as well as prohibiting any new gas hookups. Ordinances can be passed that require electrification upgrades on all remodeling permits above a set square footage to be determined. Also, landlords can be required, when replacing appliances, to install electric appliances. This will help address equity issues. All-electric homes are safer and healthier. "Transitioning buildings from natural gas to clean electricity, such as through heating and cooling systems, water heaters, and cooking equipment, will be key to reaching California's emissions reductions goals. The City of Berkeley has taken a lead on this issue by banning natural gas hookups in new low-rise construction. Recently the ban survived a challenge in federal court, although opponents are planning to appeal the decision." - Berkeley Law Center for Law, Energy, and the Environment.

Communities of color and the poor are more likely to have health issues related to gas extraction/production and vehicle emissions, as well as gas appliances in their apartments and homes. (See CalEnviroScreen) Any opportunity to reduce carbon will lead to better air quality and lessen the environmental impacts of climate change that impact the homeless, the poor, and communities of color first. That said, the City and County need to do what can be done to ensure equity and environmental justice for all in Sacramento.

Here are some recommendations from the New Building Institute:

- For decarbonized residential construction
- For decarbonized commercial construction,

Information on the development of micro grids that would increase community resilience: Microgrid Business Models Analyzed in UC San Diego Study

Solar Power and Resilience

We recommend that the City and County::

- 1. Invest in and include household solar power with battery backup as part of the infrastructure to address climate change and an emergency preparedness plan.
- 2. Adopt ordinance to incentivize rooftop solar and provide for renters, as well as owners to benefit from the lower bills.

"A resilient power system, according to the US Dept of Energy and the National Academy of Sciences, "must be capable of lessening the likelihood of long duration electrical outages occurring over large service areas, limiting the scope and impact of outages when they do occur

and rapidly restoring power after an outage." The US Department of Energy's website offers two scenarios of the advantages of integrated solar power as part of that resilient power infrastructure. A flood forces a local utility substation to shut down, "within seconds, residential photovoltaic panel systems with battery storage automatically detect the loss of grid power and switch to 'islanded' mode to keep the power on." "Solar battery backup at a local fire station enables the utility company to keep its communication equipment on so it can coordinate rescue operations."

"Solar energy systems have the potential to make homes, commercial buildings and entire communities resilient. By adding the critical infrastructure in a community (hospitals, fire stations, shelters) and equipping those buildings with solar and energy storage systems, the community can respond better to, and recover faster from, electrical services loss." (energy.gov) Solar with battery backup can be used to avoid the increase in pollution during blackouts, caused by conventional back up generators. Businesses and homes with solar systems which still rely on the power grid can "also make (the grid) more resilient by reducing the amount of energy that homes pull from utilities and make transmission lines less likely to spark."4

The potential for solar to contribute to the resilience capacity and provide the health benefits of lowering GHS for vulnerable populations is significant. Policymakers should consider households' existing solar or lack thereof, when formulating strategies and plans for disaster preparedness, including early warning systems, communication during recovery and provision of health care and ensuring safety especially for these more vulnerable neighborhoods.⁵

³ Energy.gov, "Solar and Resilience Basics"

⁵ ODI.org/media/docs 11955 pdf (Overseas Development Institute) "How Solar Households Contribute to Resilience"

Environmental Justice

We recommend that the City and County:

- 1. Invest in their lower income, more vulnerable economically neglected communities via affordable housing, electric and solar infrastructure, as well as resilience and food hubs.
- 2. Invest in affordable housing as it will assist in solving food insecurity.
- 3. Assist in helping families access current food programs like CalFresh, and implement a mobile application to connect food providers with the food insecure.
- 4. Raise the minimum wage.
- 5. Address air quality issues and disaster preparedness by investing in solar power in our more vulnerable communities.

Lower income, more vulnerable neighborhoods, frequently communities of color, suffer from underinvestment and a lack of support for necessary improvements. Supporting our underserved communities helps our whole region address inequities as well as helps to prepare these neighborhoods for climate change challenges and events.

The lack of affordable housing in Sacramento is an enormous resilience issue. If residents are spending 40-50 to 60% of their income on housing, food insecurity often follows. The Covid pandemic has only exacerbated these social problems.

Providing low-income housing with electric and solar infrastructure, as well as resilience and food hubs, can lower the financial hardships that occur every day, as well as during community disruptions.

One in eight Sacramento residents struggles with food insecurity according to a study done by Feed America in 2019. "Under-resourced and low-income neighborhoods like North Highlands, South Sacramento, West Arden Arcade and North Vineyard have significantly higher rates of food insecurity compared to the rest of the County." (See Sacramento Bee 3-part article by Alexandra Yoon-Hendricks and Benjy Egel, 7/22/21, "The Face of Hunger") Again, food insecurity is tied to the high cost of housing. Food banks are seeing families who are housed, and even have two incomes coming up short on their food budget. Many residents make too much money to receive federal food assistance, yet need the help of food banks to get by. In addition, many residents who qualify for assistance are not signed up. "Before Covid, the local food bank was feeding 150,000 people per month. Now they serve 300,000 people monthly (Sacramento Bee article). These struggles are tied to a lack of economic opportunity, especially when the current minimum wage does not allow people to live reasonably. Catherine Brinkley, a UC Davis food systems professor points to the lack of infrastructure in these same neighborhoods: "We are talking about land-use planning that has historically done things like redlining, cordoning people off because of their skin color, and

starving them of transit, and libraries, and museums, and parks and recreational facilities." (Sac Bee Food Scarcity article-Yoon-Henricks and Egel.)

Economic investment in our low income, under-sourced neighborhoods is key to solving food scarcity, along with poverty in the long run. Our current food insecurity problems necessitate action in these neighborhoods now. Food hubs can be established in specific neighborhoods with neighborhood partners. Recent reporting by CapRadio (10/8/21 -Janelle Salanga) revealed that "food insecurity in Sacramento is higher than the US average". Ms. Salaga goes on to say that problems with available translators and transportation issues complicate access to food sources. Many residents do not have cars and must meet the two-hour windows and particular days that offer food distribution using an inadequate bus system. Having a food hub in their neighborhood would facilitate access for residents.

We recommend local governments develop a mobile software application in 2022 that connects restaurants, caterers and food banks, and community food hubs and food insecure residents. This kind of program can help distribute viable leftover food now from restaurants, caterers and food banks to localized food hubs where it can be distributed to the residents in that neighborhood that need assistance.

The first food hubs should also be housed within resilience hubs and provide neighborhood locations for continued food distribution and address food waste and composting, along with promotion and education about practical climate actions, healthy cooking, and tool lending services. These services offer residents the opportunity to become partners in addressing climate change through learning to recycle their food waste, grow their own food, and adding plants and trees to their landscape.

The City/County should promote Cal Fresh as it is undersubscribed. Nourish California estimates that if every Sacramento household that currently qualifies actually signs up, it would inject another \$90.5 million into the local economy and benefit food retailers and farmer's markets.

Raising the minimum wage supports resilience as well. Residents need to be able to live on their income and not be forced to work two to three jobs to afford feeding their families. Our City and County should support raising the minimum wage which is vital for residents to live reasonably.

Public Health Issues

Communities of color and the poor are more likely to have health issues related to gas extraction/production, vehicle emissions, and gas appliances in their apartments and homes. This is in addition to a lack of tree canopy and greenery. Any opportunity to reduce carbon will

lead to better air quality and lessen the environmental impacts of climate change that impact the homeless, the poor, and communities of color first. Reducing carbon can be accomplished through actions such as electric infrastructure and retrofitting, solar infrastructure, providing more tree cover, and establishing community gardens. See Sections: Solar Power & Resilience, Community Resilience and Community Gardens and a Greener Community.

The potential for solar to contribute to the resilience capacity and provide the health benefits of lowering GHS for vulnerable populations is significant. Policymakers should consider households' existing solar or lack thereof, when formulating strategies and plans for disaster preparedness, including early warning systems, communication during recovery and provision of health care and ensuring safety especially for these more vulnerable neighborhoods.⁶

⁶ ODI.org/media/docs 11955 pdf (Overseas Development Institute) "How Solar Households Contribute to Resilience"

Investment in Resilience for our Most Impacted Communities

We recommend that the City and County:

- 1. Investment by the City and County of Sacramento in their poorer neighborhoods will automatically address climate issues as well as the historical economic neglect of these areas.
- 2. Supporting our underserved communities helps our whole region address inequities as well as helps to prepare these neighborhoods for climate change challenges and events.

Underinvestment in communities of color, and a lack of support for change, are major problems that are not being sufficiently addressed in our community. Investment is too often focused on the downtown area, around the Arena and is often driven by the local developers. The languishing neighborhoods that are suffering the most are left behind. Investment in our vulnerable communities benefits all County residents.

In developing proposals for the use of American Rescue Plan (ARP) funds, building of more affordable housing is a key start. Sacramento County should also include community resilience hubs and food hubs or a combination thereof, as a smart investment given our current climate crisis. These hubs, along with affordable housing, and better public transportation to outlying, more impacted areas, are a way for our local government to lower greenhouse gas production while supporting our underserved communities, and assisting with the food scarcity problem. Through these community hubs, the County can also increase community resilience by offering job training and job opportunities for local residents to help run the hubs. According to the National Building Sciences "one dollar spent on resilience for local governments and communities has a four-to-six-fold return on investment."

With the implementation of a strong resilience plan, that is based in an equitable framework, Sacramento can be more prepared for what is to come with climate change and address current deficits in our poorer communities at the same time. Enforcement of SB-379 (requiring cities and counties to integrate climate adaptation and resilience strategies in the safety elements of the City's General Plan before or by January 2022) will help promote programs that foster resilience. Resilience and food hubs, better, affordable transportation for low-income areas, and more investment in affordable housing, are all solutions that can address the food scarcity issue and our vulnerability due to the climate events we are facing.

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⁷ USDN

The Unhoused and Climate Change

We recommend the City and County:

- **1.** Invite the unhoused community stakeholders to a climate resiliency and disaster planning session to prepare for extreme weather events and coordinate services to improve results and manage resources effectively.
- **2.** Establish a communication system using social media to connect government and nonprofit service providers to the unhoused and vulnerable communities to supply information about upcoming weather events and available services.
- **3.** Create or expand resiliency hubs that may include safe campgrounds and permanent shelters in under-served communities. Community churches, nonprofits, and citizens actively engaged in the process could work in concert with government officials to conduct a needs assessment, establish policies and procedures and a governance process.
- **4.** Establish or strengthen a carbon-free transportation system that ensures the unhoused and underserved community members can get to a resiliency hub or other appropriate location in emergencies to address basic needs such as housing, shopping, and medical services.
- **5.** Build long-term climate resilient and carbon zero housing with green services, i.e. transportation, medical, food assistance, and job training.

The Problem

Climate change and poverty are driving thousands north to the US border with hopes of a better life and it is reported that millions more will be coming. However, there are already US climate refugees. Thousands displaced in Paradise, California's deadliest fire, have not returned to their communities. Affordability, trauma, water safety, and insurance availability are some of the factors that impact refugees' decisions about where to locate.⁸

Currently unsheltered Sacramentans and other vulnerable populations, such as seniors, people with disabilities, the poor, and people of color are more likely to experience harmful health impacts or even die in extreme weather events. According to Faye Wilson Kennedy of the Poor People's Campaign in Sacramento, six homeless Sacramentans died of exposure in 2020.

⁸ The Guardian, September 9, 2020, Trauma, fear, homelessness: life after California's deadliest fire shows the future climate crisis, Dani Anguiano

The New Yorker reported that 96 people died this summer of heat-related causes during an extreme three-day event in Portland, Oregon--a location with nearly an identical metropolitan area population as Sacramento. Portland's city health officer warned at the start of the extreme heat event that people could literally bake in homes or shelters that were not air-conditioned.⁹

The Paradise disaster also impacted nearby communities. The Guardian reported that Chico grew by 10,000 people--this was 15-20 years of population growth overnight according to the city manager. At the same time, Chico was unable to increase some services, such as fire and policing. Cities at lower risk from sea level rise or wildfires should prepare for the possibility of large groups of people seeking refuge.

What are some possible ideas to address these problems?

If people were left homeless due to a flood we would get them housing, but the unhoused are not treated similarly. We must move to a holistic approach rather than taking incremental measures that address only the most extreme elements of the problem.¹⁰

Humanity and dignity must be the common denominator in all decisions impacting the unhoused whether the focus is on climate or general plans.

The County's new Climate Mobilization Task Force and any comparable city group should have a seat representing the unhoused population. At a minimum, a proactive approach will allow more flexibility, more consensus-building among stakeholders, and a more cost-effective solution than is possible with a reactive approach.

A systems approach is also necessary to ensure control and coordination. Stephen Roberts of the Homeless Assistance Resource Team (HART)of Orangevale/Fair Oaks talks about the lack of service coordination partly due to how spread-out service providers are in Sacramento County. Also, the unhoused move frequently, often because they are not welcome in any one place for long. He emphasizes the importance of coordination and flexibility to effectively provide the many types of necessary services.

It is not unusual for an unsheltered person to resist spending the night in a communal setting due to fears about loss of belongings, disease or harassment. Or, conversely, feeling like they are bound by too many rules. In a CapRadio article about being on the street through the historic storms in Sacramento this October, a couple said they want a home, not a temporary living situation, and they both have incomes. However, they cannot afford the homes that are available.¹¹

⁹ The New Yorker, October 18, 2021, Seventy-Two Hours Under the Heat Dome, James Ross Gardener ¹⁰ The Big Issue, November 1, 2021, Director of Policy and External Affairs at Crisis in "Climate change means ending homelessness is even more important. Here's why," Liam Geraghty

¹¹ CapRadio, October 26, 2021, Homeless Sacramentans explain how they survived the weekend's historic storm, Kris Hooks, Janelle Salanga

The same CapRadio article discussed city and county services provided in anticipation of the October storm and why they fell short. Four overnight respite centers were announced but only 48 hours before the storm hit. The city hall shelter was filled to near capacity but the other three centers were nearly empty. Some unhoused residents in the same article said they did not know about the seriousness of the storms, they did not hear shelters were opened, or they didn't have transportation. Sacramento County's Department of Human Assistance issued a press release that motel vouchers would be issued to the unhoused, but there was no clarification about how to get them. Some of the unhoused had their tents partially or totally submerged and several had to be rescued when the water abruptly overwhelmed their campsite.

Long-term planning is essential with participation among all stakeholders—the unhoused clients or those living in vulnerable situations, the homeless advocates and care provider individuals and nonprofits, government organizations, and supportive businesses and residents as well as those upset about the impacts of people living on the street to their businesses and to land values. Building social housing or affordable housing that is not climate resilient will contribute to global warming and it may not be livable depending upon the extreme weather situation that occurs, like the extreme heat that hit the US and Canada in summer 2021. The covid pandemic has demonstrated the importance of individual rooms vs communal rooms in social housing.

Establishing resiliency hubs in areas where people will use them and have easy access to them could provide a real solution for extreme weather events. Hubs can not only supply cooling, heating or air purification, but also can provide local jobs to support these activities and neighborhood residents. Medical supplies or N95 masks may be stored. In disasters, this can be a local coordination center to check on vulnerable residents and get medical help to people who need it. Bedding, cots and other supplies can be stored for use when people need to stay at the center overnight. The center can have a reliable computer, phone or radio system to ensure communication between the neighborhood and emergency services. Developing mobile services to warn of impending extreme events and to transport unhoused persons to shelters is also needed..

Community Resilience

The City and the County need to increase overall resilience in the face of increasing weather extremes and climate related disasters that come with the warming climate.

We recommend that the City and County:

- 1. Support the creation and expansion of resilience hubs for ongoing challenges of climate emergency and for dealing with natural disasters; at the hubs:
 - a. Provide hubs in community facilities with farmers market space, food hubs and seed swaps, support for gardening and composting; communication centers, power for medical devices and cell phones, and coordination of resource distribution and services
 - b. Provide cooling and heating support for weather extremes using solar power;
 - c. Reduce the need to go long distances for basic necessities;
- 2. Address public health issues of climate change, and
- 3. Use solar power and provide ordinance support for SMUD solar programs and the rooftop solar industry. Equip the resilience hubs with solar power and battery backup systems.
- 4. Place a special focus on low income/vulnerable communities.

According to the Urban Sustainability Directors' Network, climate resilience is "the ability to anticipate, accommodate and positively adapt to or thrive amidst changing climate conditions or hazard events and to enhance quality of life, reliable systems, economic vitality and conservation of resources for present and future generations."

Resilience Hubs

Our city, to remain sustainable, must not just react to the dilemma of rapid climate change, but be proactive by developing regenerative practices that support community resilience. The development of resilience hubs is a way to address current everyday issues in our communities such as food insecurity, and access to health care, and at the same time can provide a way to prepare for the effects of climate change and climate disasters.

These hubs can be housed in already existing facilities: churches, public facilities or community organizations. Hubs can offer support to local residents, operate as cooling centers in the summer, and a refuge in the winter with a communication center operating as a power hub for medical devices, computer and internet services, as well as cell phones in times of emergency.

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¹² Urban Sustainability Directors' Network (usdn.org/resiliencehubs.html p.6.

Hubs can offer coordination of resource distribution and services before, during and after a disaster. Food hubs can be colocated with these resilience hubs. If designed and run well, hubs can lower GHG emissions by operating their own microgrid. If upgraded to enable emergency assistance and equipped with solar power and battery backup, they can provide a backup power source to our utility energy grid during power outages. A smart investment, these hubs can potentially lower the burden on local emergency response teams and become part of an emergency network, including addressing public health needs.

One nearby example in neighboring Yolo County, is a partnership including private and public entities. The pilot Yolo County Energy Resilience Hub partnership is seeking American Rescue Plan (ARP) funding. This hub would add microgrid energy technology to a community facility such as a health clinic, to be utilized in the event of a mandatory power shut down and aimed at serving their most vulnerable communities during severe weather events. In addition to the medical services, the hub will provide cell phone and computer/internet services. During normal times, it can operate as a cultural/community/Youth Center that offers the same internet access as well as health services if that kind of facility is available. (Draft: Capay Valley Health & Community Center)

The Urban Sustainability Directors' Network (USDN) offers Resilience Hub Guidance via their website, usdn.org/resiliencehubs.html. Their PDF includes six phases of development from assessment, to site development, to the operating plans. USDN's approach is equity based with a focus on lower income communities with limited resources. Its website addresses cost and funding information as well as resources for local funding through non-profits, foundations, local, state and federal governments as well as utility incentives. There is also information about a USDN Team available for consultation and assistance to a wide range of entities, including municipal or county governments.

Resilience in view of a disaster

Being disaster resilient means being linked with local networks, i.e. emergency services and community organizations. Effective networks can share expertise and knowledge and build better local emergency plans. Those plans enable collaboration and coordination in responding to disasters and emergencies, as well as linking the unhoused to these networks.

"Policymakers should consider the potential for households' existing solar when formulating strategies and plans for disaster preparedness, including early warning systems, communication during recovery and provision of health care and ensuring safety and the potential for solar to contribute to the resilience capacity of vulnerable populations." (ODI.org/media/docs 11955 pdf (Overseas Development Institute) "How Solar Households Contribute to Resilience")

Composting, Community Gardens and a Greener Community

We recommend that the City and County::

- Keep our organic waste within our county. and invest in programs that process Sacramento household and green waste to create compost for use in municipal and residential landscaping.
- 2. Promote and support an urban gardening program as a sustainable practice.
- 3. Collaborate with the SMUD's and the Tree Foundation's current free tree planting program to encourage and support the planting of urban trees.

Food waste ending up in our garbage, and then ending up in the landfill, produces methane gas which is more immediately damaging to the environment than CO2. With the advent of SB1383 which mandates Californians to dispose of their organic household waste in their green cans as of January 1st, 2022, this methane production problem will begin to be addressed. The City and the County of Sacramento should follow the example of the city of Ann Arbor. They will address the other half of this problem of methane production. Ann Arbor not only collects, but also composts household organic waste at their municipal facility, and they offer the compost free to the public as well as use it for their municipal landscaping. The City of Sacramento and the County need to keep our organic waste within City and County boundaries, versus transport it outside of our area. Keeping composting localized enables the practice of using that compost for CO2 sequestration in the Sacramento area where it is needed.

An urban garden program is another sustainable practice that should be promoted and supported by our local governments. Gardens can be established in empty lots, or green spaces and in residential backyards in our region. They can contribute to the promotion of more local food, and more food independence for residents while increasing vegetation and tree planting, which sequesters more carbon. All these actions promote cohesion of neighbors and neighborhoods. Yolo Climate Emergency Coalition and Yolo Farm to Fork are combining their ARP proposals for a joint partnership focused on nine to twelve school gardens in Yolo County. The focus is to improve nutrition of children in Title 1 schools and their families by sustaining edible school gardens, along with other assistance around food and food preparation in the schools. The goal of this proposal is to advance food security, food sustainability and food sovereignty.

The need to establish more tree cover will have to involve many players. Utilities' power and gas lines, access to water, and zoning issues are some of the issues. Maps of prospective areas for planting need to be developed and problem solvers engaged in determining where to plant now, and in the future in the areas where the access issues are resolved. Creating green zones with

¹³ The A2 Zero Carbon Neutrality Plan I The Ann Arbor Climate Partnership (a2cp.org)

native, xeriscape plants can be a second-best substitute for some difficult areas to at least provide some dampening of the effects of heat.

Carbon Sequestration

We recommend that the City and County::

- 1. Include a Natural Sequestration program as part of the carbon free by 2030 plan.
- 2. Conduct <u>Carbon Farming</u> workshops available to all farmers and residents.
- 3. Immediately incorporate Urban Forests into the existing landscape.

If we are to attain our necessary goal of carbon free by 2030, an active, accelerated natural carbon sequestration program must be included as part of the working plan.

Natural carbon sequestration is an organic cycle that has been happening on this planet for billions of years. The process by which nature maintains a balance of carbon dioxide and oxygen in our atmosphere suitable for sustaining all life on, in, and including the planet itself.

Our soil can save us by way of sequestration.

"A mere 2% increase in the carbon content of the planet's soils could offset 100% of all greenhouse gas emissions going into the atmosphere".

-Dr. Rattan Lal, Professor of Soil Science, Ohio State University

Long accepted industrialized crop farming practices have over time led to depletion and degradation of our soil including pollution of our local waterways by way of tilling and pesticide and fertilizer use. Continuing these practices can lead to desertification, the turning of viable lands of rich soil into dirt. Per a Tufts University study, California has an aridity coefficient of 78% caused by overgrazing, use of pesticides, urbanization, forest fires, drought and "water stress." This study also labels significant areas within and around Sacramento County as 'highly' and 'most' vulnerable to desertification. ¹⁴ California recently passed legislation focused on saving its aquifers. It is now time to discontinue "business as usual".

Regenerative agriculture or farming is "a system of farming principles and practices that increase biodiversity, enrich soils, improves water cycles and enhances ecosystems." (arcadiafarmco.com). Combined practices of no till, regenerative farming and regenerative ranching not only pull CO2 from the air, they build soil health, stimulate plant and root growth, reduce evaporation, reduce soil compaction increasing soil's water-holding capacity, which reduces water runoff and pollution of nearby water systems.

"For every 1 ton of carbon stored in the soil, more than 3 tons of carbon dioxide will have been removed from the air. Healthy soil not only supports vigorous plant growth but also creates more

¹⁴ "The Golden State Crisis" 7/6/21, Mitesha Shree Shakya -subtitle: "Identifying the Most Vulnerable Areas to Desertification in the State of California"

nutritious fruits and vegetables, minimizes plant diseases and bug blight, and holds up to 30% more water".¹⁵

Carbon farming involves implementing regenerative practices that are known to improve the rate at which CO2 is removed from the atmosphere and converted to plant material and/or soil organic matter" (arcadiafarmco.com). Carbon farming needs to be part of the sequestration planning and not considered an "offset" or as an "afterthought" to be utilized should we not make our GHG reduction goal.

Creating mini urban forests within our various cities and suburbs will not only benefit citizens by sequestering carbon, but will also help filter stormwater, reduce runoff, provide animal habitat, and provide much needed shade for our communities. The trees must be native to our region in accordance with the natural ecosystem that exists.

¹⁵ Sierra Club, Loma Prieta Chapter, Soils Committee

The Costs of Climate Inaction (Or why we need to reach Carbon Neutrality by 2030 NOT 2045)

We recommend that the City and County::

- The County, City and SMUD need to act with a clear sense of urgency and purpose
 to reach carbon neutrality by 2030 to avoid catastrophic costs due to climate
 change. The costs include 100's of billions of lost dollars, the extinction of over
 one-million plants and animals and the premature deaths, loss of livelihoods and
 disruption of the communities and cultures of millions of people.
- 2. Initiate a committee to research and consider forming a Public Bank of Sacramento as has been done by 25 other states and 18 California municipalities including Cities and Counties of San Francisco and Los Angeles jointly (https://publicbankinginstitute.org/local-groups-by-state/). This could safely generate funds to defray many of the costs associated with building the green infrastructure, generating the sustainable jobs, and assisting with housing the houseless- all of which are necessary to achieve carbon neutrality and community resiliency. In doing so, Sacramento funds would be divested from Wall Street banks with insecure schemes and the underwriting of future fossil fuel projects.
- Recommend local jurisdictions research and introduce climate program funding mechanisms to accelerate the implementation of climate mitigation and adaptation programs.
- 4. Ensure success in reaching the City's Climate Emergency Declaration's 2030 Carbon Neutral Goals by implementing as well as inspiring and educating the public with the City's annual goals up to the 2030 deadline such as the following:
 - a. SMUD's forward thinking campaign: "Clean Power City by 2030"
 - b. "Drive Less Sacramento"- walk, bike or ride more
 - c. Make public transportation irresistible: "Why Drive?" Further incentivize City, State and County workers to "park and ride" by adequately funding more rapid and efficient public transportation.
 - d. "Make your next car an EV" and to borrow from the Sonoma collaborative, "EV access for All": Collaborate with SMUD and the County to install EV chargers and with GIG car companies.
 - e. "Electrify for your Health"- Gas appliances increase the risk of asthma in Kids by 40%!
 - f. Develop and advertise an ordinance for Rideshare, car rental and cab companies to convert 10% of their vehicle fleets each year to reach all EV's by

- 2030. (Shenzen, China, a city of 12 million achieved an all electric taxi fleet by 2020.)
- g. Kick the Single use Habit-" Plastic is Choking our Planet." City ordinances to ban styrofoam and encourage reusable takeout ware by customers and entrepreneurial companies.

Most of us are now aware of the dramatically accelerated pace of climate change: Just this October, we Sacramentans experienced a record setting 212 continuous days without rain and then a severe storm with the most amount of rain ever recorded in our city's history. Catastrophic wildfires, storms, and droughts plague our thoughts. "Seas are warming and rising faster, putting more cities at risk of tidal flooding or worse. Glaciers are melting at a pace many researchers did not expect for decades....scientists from the Potsdam Institute for Climate Impact Research in Germany and other institutions warned that the acceleration of ice loss and other effects of climate change have brought the world "dangerously close" to abrupt and irreversible changes, or tipping points...the consideration of tipping points helps to define that we are in a climate emergency," (NYT Henry Fountain, Dec. 2019, updated Nov. 2021)

In view of the above, and the recent devastating California wildfire seasons we can no longer use the State's 2045 Carbon neutral goal as it is out of date with the scientific consensus.

We must act with urgency and clarity to implement the 2030 carbon neutral goal which the City set forth when it declared a Climate emergency in 2019! Since elected officials are always forced to look at the bottom line and public safety in deciding on a project, we ask you to consider the astronomical costs of climate inaction or a slow response (in this case, the 2045 carbon neutral goal) -a subject that has been the topic of numerous assessments and research papers lately.

Here are some of the typical costs:

- 1. Financial
- 2. Human Losses
- 3. Species Extinction

Financial

"If we do not address the climate crisis with the urgency it demands, we will soon be spending hundreds of billions of dollars a year to deal with the damage and destruction" and will be no better off than before the expenditures! (Democratic Senate Monograph on the costs of climate inaction).

A study done by the European Central Bank utilizing data from 2.3 million businesses and 1600 banks looked at outcomes to the economy of three scenarios of climate action: Rapid; late climate action starting after 2030; and a scenario of business as usual (or doing nothing) to combat climate change. The study revealed that the costs of doing nothing were forty percent more than rapid action and the risks of company default was much higher. "The short-term costs of transition pale in comparison with the costs of unfettered climate change in the medium to long term." This study was done only for businesses which generally have no responsibility to rescue, shelter and compensate the victims of disasters as governments do.

According to a report by ProPublica, "Eliminating as much carbon dioxide emissions as possible now would reduce the cost to taxpayers later. The National Climate Assessment estimates that limiting warming to around 2 degrees Celsius would reduce economic harm in many cases by 30% to 60%." (Article by A. Lustgardten 10-28-21)

2020 set a new record with 22 separate billion-dollar weather and climate disasters in a single year. The cost of California wildfires in 2018 was \$149 billion - over two-thirds of the annual budget! (Per the Climate Center's Webinar Human and economic costs of climate inaction 11-2021) The largest ever survey of 738 climate economists conducted by the Institute of Policy Integrity in New York found that "Costs are often cited as a reason to delay or avoid strong action on climate change, but . . . the weight of evidence is on the side of rapid action." A recent Reuters poll of climate economists in Europe, Asia and the Americas, conducted before the Glasgow UN talks on Oct, 31 - Nov. 12, 2021, showed a strong consensus of views on the benefit of early and coordinated action.

A comprehensive study by researchers set out in an article published in Nature Communications addressed the cost of inaction. The study found that although there is a large abatement cost in the short-term, inaction to climate change will lead to substantial socioeconomic losses in the future. A self-preservation strategy balances the long-term benefit obtained by climate mitigation and the short-term abatement cost. (Wei, YM, Han, R., Wang, C., et al.) Self-preservation strategy for approaching global warming targets in the post-Paris Agreement era. Nat. Community 11, 1624 (2020), https://doi.org/10.1038/s41467-020-15453-z).

ARkStorm scenario "addresses massive U.S. West Coast storms analogous to those that devastated California in 1861-62 and with magnitudes projected to become more frequent and intense as a result of climate change." (USGS website) This simulation was a result of a gathering of over 9 scientific organizations including NOAA, USGS, FEMA, CalEMA, and others, calculated that the cost of such storms would be nearly \$1 trillion in today's funds according to Daniel Swain, a climate scientist from UCLA. This simulation also calculated that approximately 1.5 million people would have to be evacuated. "That's just one specific hypothetical example of one major regional disaster for which the odds are increasing due to climate change. There's no reason why this couldn't happen more than once in the same region.

. ."

The studies discussed above show the high economic cost of waiting to take action. These increased costs, which could be avoided by taking action now, will be borne by government entities, businesses in our communities, and the people who live and work in our region.

Human Costs

Per the World Health Organization, "Climate change is the biggest threat to humanity Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhea and heat stress." In California many vector borne illnesses have been increasing. Drought appears to increase the prevalence of West Nile Virus. Of the two other significant mosquito borne viruses the WEEV (Western Equine Encephalitis Virus) prevalence decreases with increasing temperatures whereas SLEV (Saint Louis Encephalitis Virus) increases with increasing temperatures.

Two new invasive mosquitoes have been found in California-the yellow fever mosquito and the Asian Tiger mosquito which could potentially transmit several viruses, including Zika, dengue fever, chikungunya, and yellow fever viruses. (Office of Environmental Health Hazard Assessment, California Environmental Protection Agency (2018). Indicators of Climate Change in California.) "Prolonged hot dry periods may reduce tick abundance and therefore decrease Lyme disease risk in some locations, although if relative humidity is maintained, an increase in temperature may increase the number of infected ticks." (Eisen et al., 2003)

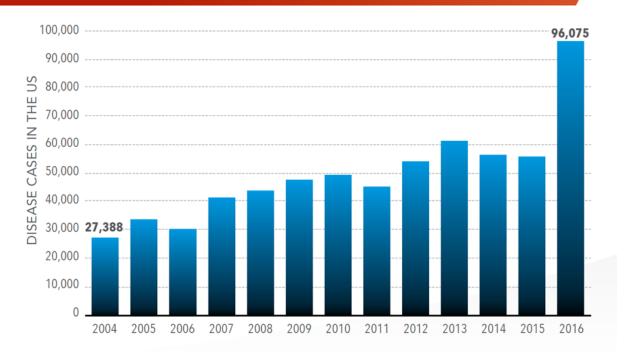
According to The Climate Reality Project, vector borne illnesses including Lyme disease, West Nile virus, Malaria and vibrio (flesh eating bacteria) have significantly increased rates and geographic ranges. Specifically, in the US, the number of cases of Lyme disease doubled

between 2004 and 2016 due to warmer temperatures and shorter winters.

By 2050 it is estimated that there will be 3 times the number of lives lost due to heat waves in the US alone. According to ProPublica's A. Lustgarten, in the southern half of the US, without rapid climate action, "... heat alone will cause as many as 80 additional deaths per 100,000 people — the nation's opioid crisis, by comparison, produces 15 additional deaths per 100,000." Unless we initiate a rapid and just transition to carbon zero, communities of color and of lower socioeconomic status will suffer the largest consequences of climate change.

Asthma, cardiovascular disease and diabetes, among others, will continue to be brought on by exposure to fossil fuels in California homes, roads and populated sites near fossil fuel extraction sites. Disadvantaged Communities will suffer especially from these environmental injustice issues if we do not reach Carbon zero by 2030 or faster. EPA website)

Disease cases from infected mosquitoes, ticks, and fleas have tripled in 13 years.



SOURCE: CDC Vital Signs, May, 2018

Although there is no causal link to climate change, there is a definite correlation, in the above table, with increasing temperatures over the last ten years.

With unabated global warming, climate refugees will increase not just in Africa but all over the globe. "Across the United States, some 162 million people — nearly 1 in 2 — will most likely experience a decline in the quality of their environment, namely more heat and less water. For 93 million of them, the changes could be particularly severe. In Central America, 5 consecutively severe years of drought and multiple hurricanes have been devastating: "In Honduras, 31% of the population is experiencing crisis levels of food insecurity, as is 23% in Guatemala and 10% in El Salvador, according to the UN's global report on food crises." (Bloomberg Businessnews) These conditions have contributed to the ranks of refugees in the southern US border.

Species Extinction

According to a UN Report from May 2019, "1,000,000 species [are] threatened with extinction" (Report from the UN Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) bit.ly/IPBESReport). According to IPBES Chair, Sir Robert Watson the report "tells us that it is not too late to make a difference, but only if we start now at every level from local to global," and "through 'transformative change', nature can still be conserved, restored and used sustainably. "(UN Website) The National Academy of Sciences states that by

sticking to the Paris agreement we would stand to lose fewer than 2 out of 10 species, ". . .But if humans cause larger temperature increases, we could lose more than a third or even half of all animal and plant species, based on our results." (USA Today 2-14-2020)

According to EDF's David Festa, by controlling methane emissions, and assisting farmers in regenerative agriculture, extinctions can be prevented: "Working lands can provide invaluable breeding grounds and migratory corridors for threatened species" as is the case with many pollinators upon which California's \$11.7 billion pollinator crops and human food security depend.

What we Stand to Gain with Rapid and Definitive Action: The accelerated phasing out of fossil fuels could simultaneously solve many of our other societal issues by:

- 1. generating thousands of well-paying jobs in the green energy, conservation, sustainable mass transit and other green infrastructure fields;
- 2. eliminating the environmental injustice that for years has harmed lower income communities and communities of color where fossil fuel extraction, and fossil fuel plants have been located;
- 3. expanding efficient public transportation and safely transitioning our streets for bicycle use and other active modes of transportation which will help tackle our society's lack of human connection and regular joyful exercise; and
- 4. significantly decreasing air, water and soil pollution due to the elimination of diesel and other fossil fuel exhaust, fracking operations and environmental toxicity from plastics.

In the words of President Biden: "The most unaffordable path forward is inaction."

Collaboration

We recommend that the City and County:

The City, County and SMUD need to work together to meet their common carbon free by 2030 goals;

The City and County should:

- 1. Develop a joint plan that identifies high priority projects
- 2. Adopt ordinances and regulations

We believe that the City and County of Sacramento should formally collaborate with other agencies to ensure the 2030 Carbon Free goal of their mutual climate emergency declarations are met. Benefits include:

- Leads to more efficient execution of projects. Faster!
- Leads to <u>more inclusive</u> public engagement, meets more environmental justice needs.
- Agencies will see cost savings.
- Agencies experience a collective impact– they get a lot more done!
- Allows for creation of an <u>oversight</u> committee or Board to monitor progress.

Only by working together to take immediate action will the world solve the climate crisis. We can role model this here in Sacramento!

From: Mike Isle

To: Kennedy. Patrick; Desmond. Rich; Frost. Sue; Nottoli. Don; Supervisor Serna

Cc:PER. climateactionplanSubject:Sacramento County CAP

Date: Wednesday, March 23, 2022 9:21:23 AM

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX) and as a Sacramento County resident interested in the provision of affordable housing opportunities, I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Best regards,

Mike Isle

Michael Isle, AICP
Teichert Land Co./Stonebridge Properties
3500 American River Drive
Sacramento, CA 95864
(916) 296-3884 (Cell)
misle@teichert.com

From: Marion Randall

To: PER. climateactionplan

Subject: RE: Revised Final Draft of CAP

Date: Wednesday, March 23, 2022 9:22:09 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear County Supervisors, I am unable to attend the in-person meeting regarding the revised final draft of the CAP. That said, please see my comments below.

Dear Supervisors,

As a person of faith and a citizen of our planet, I am discouraged that the County's Revised Final Climate Action Plan (CAP) is so weak. Time is of the essence and a bold response is required. Much work needs to be done to strengthen this woefully inadequate CAP. Here are some examples of actions you could choose to take:

- Because transportation is one of our region's biggest producers of greenhouse gas emissions, I urge the County to combat sprawl by focusing on infill development and funding our public transit system, not our highway system.
- We need to focus on infill development, to revitalize decaying suburbs and make areas around SacRT's existing transit system more walkable and livable.
- I live in Tahoe Park where we are blessed with a healthy tree canopy. Please work to increase the tree canopy in underserved communities like West Arden Arcade and South Sacramento, communities which suffer the worst effects of air pollution and extreme heat events.

Tuesday's <u>Sacramento Bee</u> reported that 90-degree weather is arriving a month early and the UN General Secretary says the world is "sleepwalking to a climate catastrophe." Today the Sacramento Bee talked about pending water cuts due to multiple years of drought. Last year, you wisely declared a Countywide "Climate Emergency." Please rise to meet this challenge and reflect this state of emergency by strengthening the CAP as recommended by scores of environmental and environmental justice organizations and by neighborhood leaders.

Sincerely, Marion K. Randall From: coyote1@surewest.net
To: PER. climateactionplan

Subject: Comments on County Climate Action Plan

Date: Wednesday, March 23, 2022 10:03:40 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Comments on Electrification Measures in Sacramento County Climate Action Plan

I am writing in support of my 350 Sacramento colleague Rosie Yakoub's comments on the electrification measures in the proposed County Climate Action Plan.

First, let me add my appreciation for accepting our proposed corrections to some of the draft's original calculations, specifically:

- The use of an incorrect carbon emissions factor for natural gas and
- The over estimation of the projected emissions for SMUD's Zero Carbon Plan impacts.

I would also reiterate that the new building electrification recommendations will only be effective if the Board directs staff to immediately enact ordinances revising the Building Codes and submitting the proposed changes for certification to the California Energy Commission. The City of Sacramento is already on that pathway and the necessary cost effectiveness studies have already been done. It provides no value to have good intentions in the Plan without this necessary follow-up action.

The situation is similar for the Plan's ambitious recommendations to mandate electric appliance replacement upon burn out of existing gas appliances. This case will not only require changes to the County's Building Codes, but additional measures to assure actual compliance. Currently, less than 10% of appliance changeouts state-wide pull the necessary permits; locally this means that the majority of replacement installations will be able to avoid the mandate. The City of Davis, by contrast, enjoys a better than 95% permit compliance rate because all permit-requiring building changes in that jurisdiction must be certified at time of sale. However righteous the intentions in the Plan, if the County is serious about decarbonization in its existing building stock, it must enact and enforce such strict permit compliance requirements.

Finally, we would like to see the reference to "natural gas" in the electrification measures amended to include the use of propane, which can be common in some rural County locales.

Thank you,

Rick Codina

350 Sacramento Electrification Team

From: Karen Gale

To: PER. climateactionplan

Subject: Stronger, More Detailed, Enforceable, Accountable CAP Needed!

Date: Wednesday, March 23, 2022 10:53:50 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Supervisors,

Please strengthen the Climate Action Plan.

Please show that you are not in denial about the urgent need to of take specific and enforceable action.

Include detailed actions and ways to review their efficacy.

Encourage people to read "We Are the Weather" by Jonathan Safran Foer.

Every one of us can easily save water and fight climate change three times a day with a Plant Forward diet.

Thank you, Karen Gale

pingpongforall.net

From: Amy Terrell

To: Frost. Supervisor

Cc:Clerk of the Board Public EmailSubject:Comments for 3-23-22 meeting Item 3Date:Saturday, March 19, 2022 9:01:37 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Comments on draft Sacramento Climate Action Plan at 3-23-2022 workshop, Item #3. 3-19-2022

Dear Supervisor Frost,

I am Amy Terrell, resident of District 4, and I am with <u>350sacramento.org</u>.

The Climate Action Plan (CAP) needs to be real in its objective to reduce greenhouse gas emissions, have means of measuring carbon reduction, and be enforceable. As currently presented, it is not any of these. Furthermore, because projects fitting the current CAP will not have environmental review, it locks us into future increasing emissions that must be avoided by making a true Climate Action Plan today.

For example, to make it effective in reducing fuel emissions:

Forbid development beyond the urban growth boundaries.

Favor in-fill development.

Make it difficult, expensive, and inconvenient to move within the county by car.

Make it easy and safe to use public transit and bicycles.

During Covid, I saw cleaner air and calmer streets, because we couldn't drive as much. It was empowering to feel safe riding a bicycle to get a small load of groceries. We have already seen the benefits of greatly reduced vehicle miles traveled. However, today's traffic shows that we as individuals won't change unless we are forced to. Please ask staff to develop an Action Plan that truly does greatly reduce vehicle miles traveled.

Be strong, acknowledge that we are in a climate emergency. A climate emergency that needs you to authorize tools to severely reduce our emissions now. The development and transportation policies of the past are not relevant to the present or the future. This Climate Action Plan is your chance to make Sacramento a real climate change player with action and measurable objectives. This is really important.

Thank you.

Amy Terrell 7934 Holly Drive Citrus Heights CA 95610 (916) 721-3770 From: Dan W

To: <u>Clerk of the Board Public Email</u>

Subject: Fwd: Comments for 3/23 Board Meeting: Climate Emergency Mobilization Task Force, and Climate Action Plan

Date: Sunday, March 20, 2022 5:03:17 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Board Clerk,

I am forwarding you the below comments I sent to Supervisor Serna. My comments are for the upcoming March 23, 2022 Board Meeting; specifically in regards to Section II, Items 2 (Climate Emergency Mobilization Task Force) and 3 (County Climate Action Plan).

Can you make sure that these comments are distributed to the Board Supervisors, and included in the public comments for the 3/23 Board meeting?

Thank you, and please let me know if you have any questions and/or need any additional information from me. Take care,

Dan

Daniel (Dan) Woo dan.j.woo1@gmail.com

----- Forwarded message -----

From: **Dan W** < <u>dan.j.woo1@gmail.com</u>> Date: Sun, Mar 20, 2022 at 4:58 PM

Subject: Comments for 3/23 Board Meeting: Climate Emergency Mobilization Task Force,

and Climate Action Plan

To: < SupervisorSerna@saccounty.net>

Dear Supervisor Serna,

My name is Dan Woo, and I am a constituent in your District. I am also a public health professional specializing in addressing the human health impacts of climate change, and also possess nearly two decades of professional experience in the fields of urban and community planning, environmental policy and planning, and climate change and health equity policy and planning.

I am writing to provide comments for the upcoming March 23 Sacramento County Board of Supervisors meeting. Specifically, I am submitting comments for two of the meeting items:

1) Climate Emergency Mobilization Task Force

I strongly support the establishment of the County's Climate Emergency Mobilization Task Force, and support the compensation for Task Force members. I also generally support the proposed composition of the Task Force, but I would recommend an additional member with expertise in the area of public health to provided dedicated attention in addressing non-air quality health factors -- such as social, economic, and physical environmental conditions that contribute to physical activity / active lifestyles and healthy eating, all of which are significant

determinants of long-term health outcomes and in reducing chronic diseases, improving mental health, and ultimately preventing premature deaths.

To provide some contextual information, chronic conditions such as heart disease, respiratory diseases, stroke, cancer, diabetes, obesity, and dementia are among the top causes of death (pre-COVID; and contribute to underlying conditions that increase risk of serious illness or death from COVID). Increased physical activity -- including those resulting from clean and healthy mobility options such as walking, cycling, and taking transit, along with healthy eating primarily of lower-carbon intensity foods (plant-based/focused, low/no amount of processed red meats, etc.) sourced locally, can help to prevent the development or worsening of chronic conditions, and ultimately prolong life expectancy.

Healthy and active lifestyles that involve walking and other forms of physical activity, as well as eating healthy, low-carbon, and locally-sourced diets are significant "win-win" strategies for reducing emissions and promoting health. Additionally, these strategies often disproportionately benefit populations and communities facing inequities (often communities of color and lower-income communities). By providing greater access to active modes of transportation and public transit, as well as to neighborhood grocery stores serving fresh and healthy produce and foods, local farmers markets, community gardens, and other sources of locally produced plant-based foods -- all can help reduce barriers and inequities for marginalized communities and help enable healthy behaviors and lifestyles. In the public health field, there is a common saying: make the healthy choice the easy choice. Here, these strategies help make the low-carbon and healthy choice the easy choice. It is thus important to have someone with broader public health expertise and training (beyond just air quality) on the Task Force to advance these types of climate action and health equity strategies. As such, I recommend a new Task Force member / focus area representing "Public Health."

As an alternative, if adding an additional subject matter expertise / topic area to the Task Force is not feasible, then I strongly recommend broadening the focus area from simply "Air Quality", to the "Public Health."

2) A Stronger County Climate Action Plan

I am in support of all Climate Action Plan proposed measures for fighting climate change that also have public health, social / racial equity, and community resilience benefits; and, I am strongly asking you/the Board to strengthen the proposed Climate Action Plan.

I would recommend the County utilize racial equity analyses, and health impact analyses in a systematic way to assess and prioritize climate action strategies that can in fact help to advance health, equity, and climate goals. Additionally, using tools like the California Healthy Places Index, and the California Department of Public Health's Climate Change and Health Vulnerability Indicators, can help to better understand existing conditions of community health (former tool), and climate-related health risks/vulnerabilities (latter tool) to inform implementation of climate actions. Prioritization of County investments, resources, and projects can use tools like these to prioritize investing in and supporting communities and populations facing greater health inequities and/or climate and health vulnerabilities.

Additionally, I would recommend the County utilize other tools that can help inform planning and implementation on actions and projects to build community resilience to climate impacts. For example, the California Heat Assessment Tool (CHAT) is another tool that can help the

County plan for extreme heat and prevent the health harms associated with extreme heat.

I would also strongly recommend the County's Planning and other staff working to implement the Climate Action Plan work closely with / consult with the County's Public Health Department. Partnership and collaboration with County public health colleagues can help to inform climate actions and planning with public / community health data -- including using the County's understanding of community health needs and existing barriers to community health (down to things like access to health care, medications, etc. but also around broader "social determinants of health" -- such as lack of affordable housing, lack of access to active transportation and transit, lack of access to healthy food options, lack of safe and low-carbon jobs, etc.) to better show which populations and communities to target interventions that benefit climate, health, and equity.

Finally, community resilience depends largely on the existing / baseline health of communities -- this means that having more equitable, healthier, socially-cohesive, civically engaged constituents and communities to begin with, before any climate disasters hit, will enable communities to be more resilient when climate disasters hit. All the County's climate action strategies and measures should aim to also build underlying community resilience and cohesion. Climate actions should of course focus on reducing emissions, but they should also include community-based programs, for example, like neighbors checking in on neighbors (particularly older neighbors, un-housed neighbors, and more) during climate disasters such as extreme heat waves, wildfires and smoke, and more. They can include mutual support networks, which we saw during the COVID pandemic, in providing basic needs and support to community members. They can also include close partnerships and collaborations with community-based organizations, who have developed trust with the community and know how to reach community members in culturally and linguistically appropriate ways. These community-based organizations need to have the financial support (as much as the County can provide) in order to provide these services before, during, and after climate impacts. Community engagement and empowerment (including participatory budgeting, communitydefined planning and decision-making, and more) are vitally important to develop plans, policies, and programs that truly serve the needs of communities in the face of the climate crisis. The Climate Action Plan should incorporate meaningful opportunities for community engagement, and incorporate equity in process and in outcomes throughout all steps and actions related to the Climate Action Plan.

This is a lot that I've touched upon -- but the bottom line is, I strongly recommend the County utilize a "climate, health, and equity in all policies" approach -- to think about the potential benefits (and possible harms) of all climate actions and decisions in terms of how they not only help the County to work towards zero carbon, but also in how they can promote public health outcomes, advance social, economic, and racial equity, and built community resilience.

Thank you sincerely for your time and attention -- I look forward to the Sacramento County's Board of Supervisors championing and further strengthening the important work to address the climate emergency!

Take	care,
Dan	

Daniel (Dan) Woo

dan.j.woo1@gmail.com (530) 632-0629 Sacramento County District 1 Resident From: <u>Steve Wirtz</u>

To: Kennedy. Patrick; kennedy.supervisor@saccounty.net; Supervisor Serna; supervisornatoli@saccounty.net;

Nottoli. Don; Frost. Supervisor; Rich Desmond; Desmond. Rich

Clerk of the Board Public Email

Subject: Item #3 CAP Workshop March 23rd - Strengthen this Revised CAP!

Date: Sunday, March 20, 2022 2:01:34 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Supervisor Kennedy and Board of Supervisors,

I want to express my deep concern about the IMMEDIATE IMPACTS GLOBAL WARMING is having on California and our community in particular – drought, fires & smoke, heat related illness, air pollution, energy costs, etc. Not only is the present, but also our future is at stake. It is critical that every community ACT IMMEDIATELY AND BOLDLY. The message to us all is clearly - THINK GLOBALLY BUT ACT LOCALLY NOW.

The revised Climate Action Plan you will be reviewing this Wednesday is clearly an improved document from the initial plan presented to the Planning Commission (due in large part to the community input and concrete suggestions provided), but still falls far short of meeting the challenges facing us today (e.g., **Carbon Neutrality by 2030!)**.

First, I will highlight a few of the negatives about the revised CAP, and then I will propose some suggestions for how the Board can move forward with a stronger CAP and get public support behind it.

Fundamentally, it fails to **reduce future auto traffic**, the County's largest Green House Gas (GHG) source. The CAP should be proposing the immediate use of the County's land use authority to **prioritize infill and stop new "developer land speculation" sprawl development projects**. The current and planned land development projects would allow many times more housing units than will be needed for decades and will thus lead to leapfrog partial developments that will require increase car traffic and GHG emissions!

We should be moving on other aspects of the CAP now with no delay, for example, **electrification** requirements for existing and new building should be started **NOW!**

Unfortunately although the revised CAP includes language from the Board's 2020 Declaration of a Climate Emergency, it doesn't "explain the County's approach to ... achieve carbon neutrality by 2030". Nor does it "evaluate the resources necessary ... and ... emergency action required ... [and] identify [funding] gaps and... recommendations" as required by the Declaration.

The attempt to by-pass the reasonable requirement for an Environmental Impact Review (EIR) is nearsighted and potential illegal (and may generate an unnecessary and costly [monetarily & environmental delay] legal battle like happened in San Diego). A CAP without a current EIR will allow all future developments to proceed without their own current EIR, putting real progress toward our carbon neutrality, and ultimately carbon zero, goals out of reach!!!

Finally, any professional (CQEA compliant) and practical CAP needs to have performance measures that are evidence based, enforceable, funded, and developed with consideration of feasible alternatives (i.e., infill growth, compact development) with clear economic analyses and timelines. The current revised CAP **perpetuates delay** by presenting poorly detailed measures and deferring further development to future planning (e.g., "subject to feasibility/cost-effectiveness").

Now for the solution side of things, I have a few positive suggestions for how the Board can approach the strengthening of the CAP and building community support for the **necessary and hard choices** we face. I suggest we all work to re-frame the message about the need for BOLD climate change NOW. Our language should not just be about STOPPING the use of fossil fuels, sprawl, and reducing auto traffic. Rather I believe we should focus on the **positive economic growth potential** from going green. I think we should use the CAP to promote the **opportunities** to revitalize, renovate, and remake our existing

communities. Every District in the county has areas that are in need of redevelopment. We need to use the CAP investments to implement **redevelopment for the suburban hubs and urban core of the county**. The CAP should promote and use its recommendations and plans to create local jobs (e.g., compact development; traffic calming; public transportation), increase public safety (e.g., revitalize parks and public spaces, reduce pollution) and promote equity (e.g., affordable housing; infill; job training and employment). Infill is a major part of the solution (e.g., "**Green Means Go**" zones). I believe this type of re-framing of the message about global warming would better activate public opinion behind improving existing communities and creating local community "Climate Champions" to improve the lives of County residents.

Please take this opportunity during the Workshop to strengthen the CAP and propose concrete ways to make the CAP a true transformational, but practical, roadmap for our green future! Each community must do its part and Sacramento should be a leader for the state and nation.

Thank you for your consideration, Steve Wirtz,PhD District 2 wirtzsjw@aol.com From: goli sahba

To: Supervisor Serna

Subject: Action: Comments regarding Revised Climate Action Plan

Date: Thursday, March 17, 2022 8:39:06 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Supervisor Serna,

I am writing to thank you and the County for your efforts in helping our County rapidly transition to Carbon Neutrality so that we have a chance for a livable future! We appreciate how responsive you, Todd Smith and John Lundgren have been to the community's input and applaud much of the revisions to the County's CAP, most importantly demonstrating a clear sense of urgency by prioritizing the 2030 Carbon Neutrality goal and all of the ways that they have identified to reach this ambitious and necessary goal. I have sent detailed list of points to consider when finalizing the CAP to Todd Smith. However, realizing your time constraints I will limit my comments to these main points:

- 1. I applaud and support the County's efforts and response to community input on the CAP and request that in finalizing the CAP to <u>provide</u> <u>additional timelines</u> for each of the areas of action mentioned in the CAP as a way of ensuring that the 2030 Carbon zero goal will be achieved. <u>Climate Change is accelerating and we're nearing the tipping points so we must also accelerate our efforts!</u>
- 2. Since you recognize the urgency of our climate crisis, we ask that you act as quickly as possible on the CAP to ensure that we will have maximal time to reach our goals, and
- **3. Recommend** County, City and SMUD to collaborate in a Committee on Climate Emergency Program Funding Mechanisms to accelerate the implementation of climate mitigation and adaptation programs. Your electrification MOU is to be commended!
- 4. Initiate a committee to research and consider forming a <u>Public Bank of</u>
 Sacramento (joint venture with City/County/even SMUD) as has been done in 25 other states and 18 California municipalities including San Francisco and Los Angeles. This could safely generate funds to defray many of the costs associated with building the green infrastructure, generating the sustainable jobs, and assisting with housing the unhoused- all of which are necessary to achieve carbon neutrality and community resiliency. In doing so, Sacramento funds would be divested from Wall Street banks with insecure schemes and the underwriting of future fossil fuel projects.
- 5. Protect and expand out Native and Heritage Oaks and other trees from unaware developers and consider an ordinance to require at least half of all new trees in developments and parking areas to be native trees to prepare for worsening droughts and preventing further disappearance of bird and insect habitats as well as helping with carbon sequestration.
- 6. To decrease the GHG's from the largest polluting sector, transportation, we will need to prioritize rapid transit and active mobility over automobile dependence. I would like to see much more focus on changing Sacramento's car culture by expanding safe bicycle highways and reducing car lanes and also fully funding RT so that public rail is fast and free.

7. Significantly limit sprawl.

Thank you for your unwavering efforts for our community!

Sincerely,

Goli Sahba MD 2504 Capitol Ave. Sacramento

--

Goli Sahba M.D., IFMCP (Institute for Functional Medicine Certified Physician), ABFM, Family Physician, ABIHM, Holistic Health and Nutrition Coach

From: Jim Wiley [jwiley@taylor-wiley.com]
To: Serna. Phil [SernaP@saccounty.net]

Subject: CAP

Date: Tuesday, March 22, 2022 13:34:34

Supervisor Serna,

We are writing to you on behalf of the Jackson Township Specific Plan and the West Jackson Master Plan regarding the proposed Climate Action Plan (CAP). We are not opposing the CAP, however, it has changed significantly since the Planning Commission meeting. We see the CAP as a work in progress with two key matters we believe still need to be addressed:

- 1) Equitability; and,
- 2) Program details to make certain that the CAP will be effective and timely.

As these items require some detail, we would ask that staff meet with us to discuss them further. Thank you for this opportunity to comment.

Jim

Jim Wiley TAYLOR & DILEY 500 Capitol Mall, Suite 1150 Sacramento, CA 95814 916.929.5545

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From: Norman, John [John.Norman@brookfieldpropertiesdevelopment.com]

To: Supervisor Serna [SupervisorSerna@saccounty.net]

Subject: Sacramento County Climate Action Plan

Date: Tuesday, March 22, 2022 14:56:40

Attachment 1: image001.png

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors:

Regarding the 2022 Climate Action Plan, I am concerned that some of the measures may drive up the cost of housing in Sacramento. I am a builder here in Sacramento County and we respectfully urge you to please:

- Oppose Requirements for Immediate Carbon Neutral
 Housing (Measure GHG 30) This will stop housing and force homeowners
 to drive even further to Sacramento.
- Support feasibility criteria in meeting the conversion to all-electric appliances (Measure GHG 7)
- Oppose requirements for Tier 4 construction equipment as there is simply not enough equipment in the market to even meet current demand or to comply with this requirement in 2023. (Measure GHG 8)

Thank you!

John Norman

VP, Entitlement | Land & Development | Land & Development

Brookfield Properties
2271 Lava Ridge Court, #220, Roseville, CA 95661
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https://www.brookfieldproperties.com/development/overview/

This message, including any attachments may contain confidential information intended only for the person(s) named above. If you are not the intended recipient or have received this message in error, please notify the sender immediately by reply email and permanently delete the original transmission from the sender, including any attachments, without making a copy. Thank you.

From: <u>laura lunetta</u>

To: PER. climateactionplan
Subject: Climate action plan

Date: Wednesday, March 23, 2022 11:16:23 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Sacramento County Board of Supervisors,

Regarding the 2022 Climate action plan:

- * Strong, detailed, effective and reviewable climate solutions are needed!
- * Please bolster the Sacramento County Action Plan. Please make climate smart actions enforceable.
- * Project Drawdown is a good resource for specific, effective solutions. Also, read "We Are the Weather" by Jonathan Safran Foer.
- * Educate Sacramento County residents about the actions they can take to be part of the solution!
- * A plant rich diet helps save water, land and human health.

Take action now, it is already almost too late.

Thank you, Laura Lunetta From: Chris Paros

To: <u>Clerk of the Board Public Email; Supervisor Serna</u>

Cc: Chris Paros

Subject: 3/23/22 BOS, Comments submittal, Agenda item 3

Date: Wednesday, March 23, 2022 9:35:17 AM

Attachments: CommentsCP 2022-0322SacCoClimatePlan.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Hello,

Please find attached my submitted comments re Agenda item 3, countywide Climate Action Plan (CAP) on tonight's 3/23/22 BOS meeting.

This is an updated version of my Planning Commission post-meeting comments sent to you on 12/7/21 that I just discovered were somehow not included in the 3/23 agenda packet.

Please forward these comments to all supervisors and applicable Staff/Consultants for their awareness before tonight's meeting..

Thanks for your time and efforts, Chris Paros Date: 3/22/2022

To: Sacramento County Board of Supervisors, Staff

Subject: Comments, PLNP2016-00063, Communitywide Climate Action Plan (CAP)

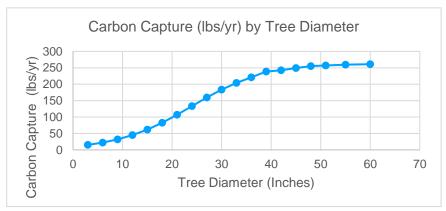
Ref: 03/23/22 Bd of Supervisors(BOS)meeting Agenda Item 3

Supervisors,

As a 25+year resident and retired Engineer, I've seen our air staying hazier, and I've seen the sobering effects of climate change as I travel around our dear California state. I fully support Staff and Consultant proposals, but we also must have more immediate-action plans in the Countywide Climate Action Plan (CAP).

To that end, I submit the following proposals as immediately-actionable initiatives that could make a difference. These are achievable now and relatively cost-effective:

- 1) <u>Proposal 1</u>: Establish a countywide tree removal policy based on the removed tree's climate mitigation value. BOS directive: 1) require Carbon Capture Capability (CCC) assessment for proposed tree removals in project and construction applications, tree loss removals, etc., 2) Require replacement of removed trees with enough trees to equal the removed tree's CCC.
 - <u>Background</u>: Under current practice, when a tree is removed for a proposed project or construction need, the mature tree is replaced one-for-one with a young, typically 15-gal tree. Yet, as shown below, a mature tree of 20" diameter provides <u>seven times more</u> Carbon Capture Capability (**CCC**) (107.1 lbs/yr) than a young, 15-gal tree (15.2 lbs/yr).



Data source: NC State University Carbon Calculator, TREES (ncsu.edu)

• <u>Justification</u>: Larger trees provide much more CCC than smaller trees. It takes 10-20 years for a tree to become large. California has lost 4M+ trees to wildfires and many large trees are stressed/dying NOW from drought. Most importantly, tree forests also *attract rain clouds & rain* (ref. "The Hidden Life of Trees" by P. Wohlleben). Generic proposals to expand urban forests are great, but we need an *immediate-action plan* to value and preserve our existing, larger trees as the highly-efficient and beneficial drought and GHG mitigation tools they are.

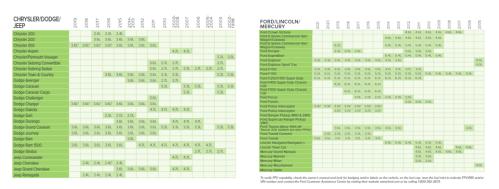
Filename: CommentsCP_2022-0322SacCoClimatePlan

- 2) <u>Proposal 2:</u> BOS directive: Require and/or incentivize all countywide gasoline-powered vehicle purchases to be flex-fuel vehicles that use both gasoline and biofuels. Require/Incentive ongoing use of E-85 or other biofuels to not only reduce GHG, but to also reduce vehicle maintenance costs (no carbon buildup in engines), county fuel costs (much cheaper than gas), and to utilize the tons of recycled food waste that will be collected by the County under new State requirements.
 - <u>Background</u>: Per the CAP, on-road vehicle emissions are 34% (over 1/3!) of the County's total emissions (agenda packet(ap) p.26). The County's own vehicle fleet produces 24% of total government GHG (ap p.32). Transitioning the entire county fleet to EV and hybrid vehicles is expensive and will take many years. There is no interim plan addressing this major source of GHG.
 - <u>Justification:</u> Clean-burning Ethanol (E-85) exists now and is available at many gas stations for much less cost per gallon than gasoline. As the screenshots below show, numerous vehicle models are flex fuel capable (ref. <u>www.E85vehicles.com</u>). Even the sportscar racing circuit uses biofuels. Climate activists dismiss E-85 because it has a "carbon footprint". But we cannot wait for EVs, and EV's rely on a power grid that can undermined by wildfires & low reservoir water levels. Though not all vehicle models can be converted to flex fuel use, many models can be converted for \$500 or less.

One gallon of gasoline produces 19.5 lbs of CO2 (ref. www.eia.org). If a 15-mpg county vehicle drives a 15-mile daily commute (1 gallon used per day), using a biofuel vehicle would save:

(19.5 lbs/gal x (15 mi./15 mpg) x 5 days) = 97.5 lbs CO2 per week 100 biofuel vehicles would avoid almost 5 tons (9, 750 lbs) of added CO2 per 5-day workweek

In addition to reducing GHG, using E-85 will reduce County fuel costs, vehicle maintenance costs. The County may also be able to negotiate to get E-85 in exchange for collected food waste.



Samples from Flex Fuel Vehicle List. See www.E85vehicles.com for GM & other models

3) <u>Proposal 3</u>: Require homebuilding project applicants to offer more climate-related homebuyer purchase options in new home developments. Examples: Rainwater retention systems (e.g. rain barrels or cisterns connected to roof drains), light-colored roof tiles/materials, irrigation brown-water recycling systems, smart sprinklers, wildfire "hardening", and a prefab wall location for solar panel battery packs. (Note: these are not all GHG items, but they are climate action needs).

- <u>Background/Justification</u>: Sacramento has thousands of new homes being built that will tax our water supply and air quality. Mitigate this problem now by mandating these "turn-key" options. Many homebuyers are willing to pay for climate-mitigating home-purchase options if made available.
- 4) <u>Proposal 4:</u> Establish CAP initiative to replace the many trees removed for levee repairs with their CC equivalent in young trees (minus any replacements already planted). Mitigate now to prevent the large, year-over-year GHG increase that resulted from this loss. Request Federal funding, if needed. Ideally new trees would be planted together on nearby vacant county land to also attract precipitation.
 - <u>Background</u>: In the past 5 years, hundreds of very large trees have been removed from the Sacramento and American River levees due to levee repair requirements of the Army Corps of Engineers. In particular, the air near the airport has become considerably worse due to increased air traffic at the airport, and freeway congestion on both I-5 and highway 99. Relatively few trees have been planted to replace this huge CC loss.
 - <u>Justification</u>: Unfortunately, I could not find a total for levee trees removed. I therefore assumed 50% (400 trees removed) from an online estimate of 800 trees for Natomas Basin levee repairs. Assuming the average removed tree had a 20" diameter (most were much larger trees):

Carbon Capture loss = 400 trees x(107.08 lbs/yr/tree) = 42,832 lbs/yr = 21.42 tons/yr add'l GHG

Per this conservative estimate, over <u>21 extra tons of GHG</u> is now filling our air year after year from the loss of these trees. It is important to act now to mitigate this large, unplanned GHG impact, especially near the airport where increasing cargo air traffic, and traffic jams are increasing GHG.

There is no time for any further delay on our urgent Climate crisis in Sacramento. With the loss of millions of trees, our droughts and air quality will only get much worse if we do not act quickly and decisively. Please implement the above proposals above that are actionable now. Our county CAP needs projects/initiatives that are concrete, actionable, and measurable now.

Thanks for your urgency, your time and your consideration of my proposals. I love Sacramento and have lived here for over 30 years. But I now realize I may need to move elsewhere if our air quality continues to get worse.

3

Sincerely,

Chris Paros Sacramento resident, district 1 Chrisp552@gmail.com

Filename: CommentsCP_2022-0322SacCoClimatePlan

From: Muriel Strand

To: <u>Clerk of the Board Public Email</u>

Subject: BOS march 23 agenda iem #3 comment
Date: Wednesday, March 23, 2022 9:57:12 AM
Attachments: BOS CAP comments march 23.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

dear clerk, please find my comments attached. please forward them to supervisors. thanks, muriel

Muriel Strand, P.E.

Advertising is a private tax.

- Andre Schiffrin

Good science and financial profit are mutually exclusive.

- me

www.nisenan.org/

www.bio-paradigm.blogspot.com/

www.work4sustenance.blogspot.com

https://www.researchgate.net/profile/Muriel-Strand/publications

March 23, 2022

To: Sacramento County Board of Supervisors

From: Muriel Strand, P.E.

Re: March 23 Agenda Item #3

Workshop on Sacramento County Draft Climate Action Plan

I have been generally following various planning processes on the local and state level as we confront the realities of approaching climate chaos. It appears to me that most people who are not climate deniers think that we can graft our fossil fuel lifestyles onto PVs, windmills, and batteries. I don't agree.

While it may be possible for California to succeed in doing so, it just does not scale nationally, let alone globally. It's also a solution that's not really affordable for many essential workers, for the homeless, nor for the climate refugees we can expect to arrive in the coming years.

So I have spent considerable time attempting to discern and outline a vision for fundamental and radical change. One example that would offer everyone an easy way to begin practicing such changes would be to ban leafblowers and then all landscaping equipment that uses engines or motors to accomplish tasks that are well within human muscular capability: http://motherearthhome.blogspot.com/

The county's Draft CAP refers to the 2017 scoping plan developed by the California Air Resources Board, pursuant to AB32. As it happens, I have been following and commenting on the series of workshops organized to gather public input on various aspects of the 2022 scoping plan on how California will achieve the netzero goals approved by the Legislature. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/scoping-plan-meetings-workshops?utm_medium=email&utm_source=govdelivery

It appears to me that the 2022 plan will be noticeably more ambitious than the 2017 plan, motivated by the increasingly dire predictions coming from the IPCC and elsewhere. So I recommend that county planning staff consider reviewing the draft 2022 scoping plan which will be presented to their Board in the next few months, before finalizing Sacramento County's CAP. In my comments, I have presented a variety of ideas and information outlining an alternative perspective that's about adjusting our lifestyles so as to graft them onto the natural world and the ecology that we absolutely depend on. My various comments over the past months are available via: https://www.arb.ca.gov/lists/com-attach/8-sp22-publichealth-ws-WyhTNII8WXoHaFQ6.pdf

A few highlights:

- 1. About 25 years ago, I calculated that **fossil fuel energy is very cheap.** It takes about 100 hours for a healthy adult to generate, such as on a bicycle generator, the amount of energy available from a gallon of gasoline. Comparing the minimum wage to the price at the pump, that's a huge cost ratio, and very different than the conditions we were evolved to live in.
- 2. Fossil fuel energy is physical energy. Our physical needs are: clean air and water, healthy food, cooking, comfy shelter, and plenty of sleep and exercise. We would be wise to

plan how to meet those needs without fossil fuels as soon as possible. That means substituting humanpower and manual tools for engines and motors as soon and as much as possible. Current mining and refining technologies for key metals and minerals (including those required for manufacturing PVs, windmills, and batteries) require fossil fuels for key processes: https://www.youtube.com/watch?v=TFyTSiCXWEE

- 3. One strategy which I believe would be very effective in inducing substantial and speedy changes would be to require that all goods and services be priced in terms of embedded kwhr & GHG emissions, as well as in dollars. Economic theory posits that perfect consumer information leads to perfect markets and allocation. This kind of parallel-price market information would support consumers in making choices that would crowd climate-related externalities out of the monetary economy, in large part by making explicit the financial bias enjoyed by fossil fuels that is outlined in #1 above.
- 4. The sustainable discount rate is zero. Fossil fuels that are still in the ground are not stranded assets; they are assets whose real value is now negative but will be positive in a few centuries if we can figure out how to live within our means.

Thank you for the opportunity to comment.

From: Farla Kaufman

To: Supervisor Serna

Subject: Comments on the Sacramento County Climate Action Plan

Date: Tuesday, March 22, 2022 6:02:47 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

I received an automated reply requesting information I should have included to begin with, so once again:

Neil M Dubrovsky 2724 18th Street Sacramento, 95818 916-997-6584

Issue: Comments re the draft Sacramento County Climate Action Plan.

Dear Supervisor Serna,

The last several summers have offered us just a glimpse of the frightening future that we face with our current trajectory, trapped in our homes by toxic air quality and triple digit heat. Meanwhile, sprawl continues unabated – without regard to previous development plans or consideration of the real limits imposed by our dwindling water supply. Unfortunately, the pitifully small savings achieved by voluntary water conservation measures this past year shows that too many individuals are not sufficiently motivated to take action. That is why it is critical for the County to have a rigorous Climate Action Plan (CAP): if our leaders won't show the way, then evidence suggests a grim future for our children.

Unfortunately, the current draft CAP is definitely not sufficient. Without enumerating the many small deficiencies, I will mention a few critical themes.

- The "plan" is aspirational rather than analytical. During my 35 years planning regional-to-national water resources investigations, I have never seen a document so short on three critical elements: analysis, explicit outcomes/metrics, and clear timelines. Detailed analysis of available options and the cost/benefit of each is lacking in many cases. Similarly, in many cases, the goal is clear yet the stepwise measures that will get us there are wishful rather than concrete. And with regard to timing, for example, the statement "by 2030" is meaningless if there are no intermediate mileposts to gauge progress.
- Sprawl shouldn't even need to be mentioned, but it is clear that the CAP fails to adequately address it. Too often we've seen development approved for areas that are outside the County growth boundary. This will impact every aspect of our infrastructure transportation, energy, water in ways that will make it more difficult to meet our climate goals.
- Growth is all but inevitable, hence the CAP needs to be more proactive re enhancing our water resources. We have the enormous benefit of having two major rivers adjacent to us; consequently, the County should be engaged with the other water resources entities in identifying and setting aside the land most suitable for artificial recharge (paleochannels) be it via flood water ("FloodMAR") or other sources to achieve groundwater sustainability. We take it for granted that the groundwater resource will be there when the rain doesn't come; currently local conditions are adequate, but we've depleted this resource in the past, and the County should have an active role in attaining sustainability beyond that alluded to in the CAP.
- Lastly, many of the goals assume that voluntary, unenforceable action will be sufficient to achieve a desired outcome; case-in-point, our voluntary reduction in water use last year was pitiful. Well, one of the areas I've worked extensively in is the impact of agriculture on water quality, and if voluntary actions were sufficient, then our streams, rivers, and coastal water wouldn't be awash in excess nutrients and pesticides. Sadly, we know they are. I want

to emphasize this point of "magical thinking": the glowing results achieved by tests of "best practices" conducted by researchers are seldom achieved by the lay public, hence even willing volunteers will not be successful without explicit expert guidance in the form of codes, workshops, etc.

The residents of Sacramento County deserve a strong Climate Action Plan (CAP). I hope you will consider these comments, along with others, and ask your staff to revise and strengthen the CAP so that we can prosper – rather than suffer – in the future.

Sincerely,

Neil M. Dubrovsky, PhD

From: Chris Paros

To: <u>Clerk of the Board Public Email</u>; <u>Supervisor Serna</u>

Cc: Chris Paros

Subject: Comments submittal, County 2030 Climate Action Plan (CAP)

 Date:
 Tuesday, December 7, 2021 2:35:25 PM

 Attachments:
 Comments-2021-SacCoClimateActionPlan.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Board Clerk,

Please forward my attached comments letter regarding the Sacramento County 2030 Climate Action Plan (CAP) to all County Supervisors and applicable staff. I was not able to find a BOS meeting agenda date and item number for it but know it will be going to the BOS soon. I also went to the CAP website but could not find a link to submit these comments.

This CAP was presented to the Sac County Planning Commission in their 10/25/2021 meeting.

Thanks for your time and efforts. I would appreciate a reply letting me know what action you take.

Best regards, Chris Paros Date: 12/7/2021

To: Sacramento County Supervisors, Staff

Subject: Comments, Sacramento County 2030 Climate Action Plan (CAP)

Supervisors,

I watched the 10/25/21 Planning Commission hearing video on the County's proposed 2030 Climate Action Plan (CAP). I fully agree the CAP needs to be an "urgent action" plan.

To that end, I am submitting the following initiative suggestions for your Board's consideration (listed by related CAP project). These are achievable now and fairly cost-effective:

1) Preserving/Expanding Urban Forest:

Background: Trees are highly efficient and productive climate mitigation tools. Besides providing CO2 removal, trees also produce Oxygen, add humidity, provide wildlife habitat, reduce heat, and add healthy, calming shade to neighborhoods. Most importantly, trees also attract rain clouds & rain to forests (ref. "The Hidden Life of Trees" by P. Wohlleben) This alone is of high value to mitigate droughts.

Under current practice, when a tree is removed for a proposed project or construction need, the mature tree is replaced one-for-one with a young, typically 15-gal tree.

- Proposal:

1A) Establish a tree removal policy based on the removed tree's climate mitigation value.

- Calculate a "Climate Mitigation Value" (CMV) for a typical mature tree of each major local tree species (e.g. a 30-year old Oak) based on its value in mitigating climate impacts (i.e. items listed herein).
- Use this CMV factor to establish the number of 15-gal trees needed to equal the CMV of that average mature tree.
- Establish a rule/ordinance for both county construction and development application projects that requires a removed tree to be replaced with enough 15-gallon trees to equal the removed tree's CMV (i.e. ensure net-neutral CMV).

1B) Establish a project fund for neighborhood street projects that homeowners and/or neighborhood groups apply for to "Green Up" their streets or neighborhoods (help build our urban forest and green spaces). Prioritize working class neighborhoods with few trees. Where planting trees, plant more diverse tree species. Experts have learned that biodiversity is essential to a healthy forest and to reducing disease susceptibility.

2) Reduce Vehicle Miles Traveled:

- Background: 1) Sac County has numerous surface streets with high vehicle traffic and few or no sidewalks. Bike lanes are often too narrow and dangerous to use. 2) The County has a very high rate of pedestrian-vehicle accidents. This is a big lawsuit cost risk.
- Proposal: Implement "Strong Towns" concepts on more streets and roads (ref. www.strongtowns.org) to reduce short-trip vehicle traffic to/from local jobs and schools.
 - Select some "target-rich" corridors connecting to jobs/schools, implement the strongtown concepts, then measure results, including neighborhood feedback.
 Specifically, separate bike/pedestrian lanes from car traffic with a large curb or other

barrier. Make the bike/ped lane 5' min. width in each direction (ex: Rod Beaudry Drive, Sacramento midtown J St). Though this may remove a traffic lane, vehicles end up moving more efficiently too.

- Enabling safer biking to jobs and schools could be especially beneficial in working class neighborhoods where a car is very expensive to own and operate.
- Studies in other cities have proven that when biking is truly made safe, more people do bike and walk. Our county's bike lanes just aren't safe enough.

3) Reduce Green House Gas (GHG) Emissions:

Background: 1) Though electric vehicles are great, they are expensive. At best case, it will take 20 years to transition to electric vehicles. What do we do in the interim about the millions of polluting vehicles? 2) Electric cars need an electricity source to "fuel up". What happens if a climate catastrophe(s) damages or undermines the electricity infrastructure? (e.g fires, drought)? 3) In 2022, the state will start requiring counties to recycle food waste. This can be very costly.

Proposal:

3A) Encourage residents to help "save our air" by using biofuels (EA-85) too in addition to going electric. Use this as an interim "step" for GHG reduction until most vehicles become electric. Don't underestimate what advertising can do to inform and promote change. "Help Green Up Sacramento" awareness ads about our GHG reduction goals, what it means if they have a "flex fuel' vehicle (many people don't know), and how they can help "spare the air" by using EA-85 if they have a flex fuel car could alone bring large benefit.

3B) Where hybrid or electric vehicles can't be used, require purchase of more County flex fuel fleet vehicles that use biofuels. Track and measure results in pounds of CO2 avoided for the gallons of EA-85 used vs. gas or diesel.

Note: 1) Biofuels are not carbon-neutral. Many environmentalists don't like this approach for that reason. But biofuels are *clean-burning*, and could reduce GHGs greatly. 2) EA-85 is often **\$1/gal or more cheaper than gasoline**. 3) Though not all vehicle models can be converted to flex fuel use, many models can be converted for \$500 or less. 4) The auto-racing industry uses biofuels. Why don't we?

- One gallon of gasoline produces 19.5 lbs of CO2 (ref. Energy Institute of America, www.eia.org). If only 1000 vehicles convert to biofuel use, this would prevent 19,500 lbs of CO2 emissions for every one gallon of biofuel they use.
- Driving a 15-mile commute with a 15 mpg vehicle (1 gallon used per day), these 1000 drivers would save **97,500 lbs of CO2 per workweek** (19,500 x 5 days)

3C) Could collected trash bin food waste be traded to a biofuel manufacturer (e.g. Pacific Ethanol Corp.) in exchange for EA-85 biofuel that powers many county fleet vehicles? What a cost-benefit that could be if done.

4). <u>Background</u>: Sacramento has thousands of new homes being built. Many homebuyers are willing to pay for climate-mitigating home-purchase options that are not currently offered.

Proposal:

4A) Urge or require developer applicants to offer more climate-mitigating homebuyer purchase options in large new home developments. Examples: Rainwater retention systems (e.g. rain

barrels connected to roof drains), light-colored roof tiles/materials, irrigation water recycling systems, smart sprinklers, wildfire "hardening", and a prefab wall location for solar panel battery packs. (Note: these are not all GHG items, but they are climate action needs). Don't underestimate what can happen if homebuyers have a choice to purchase these items.

4B) Offer some of these items for sale by the county to residents for existing homes.

4C) Require commercial/industrial /office building roofs to be white or light-colored. Require solar-panel-covered parking lots in all projects where feasible.

I love Sacramento and have lived here for over 30 years. But I now realize I may need to move elsewhere if our air quality & traffic continue to get worse. There is no time for any more delays. Our county CAP needs projects/initiatives that are concrete, actionable, and measurable *now*. Please consider implementing the above proposals that are actionable now.

Sincerely,

Chris Paros Sacramento resident, district 1 Chrisp552@gmail.com From: Ken Giberson

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Subject: Draft 2022 Climate Action Plan - Industry Concerns

Date: Tuesday, March 22, 2022 7:12:30 PM

Dear Sacramento County Supervisors:

Regarding the 2022 Climate Action Plan, we are concerned that some of the measures being considered for inclusion in the 2022 Climate Action Plan may drive up the cost of housing in Sacramento. I am a land development engineering and planning consultant here in Sacramento County and we respectfully urge you to please:

- Oppose Requirements for Immediate Carbon Neutral Housing (Measure GHG 30) This will stop housing and force homeowners to drive even further to Sacramento.
- Support feasibility criteria in meeting the conversion to all-electric appliances (Measure GHG 7)
- Oppose requirements for Tier 4 construction equipment as there is simply not enough equipment in the market to even meet current demand or to comply with this requirement in 2023. (Measure GHG 8)

Thank you!

Best Regards,

Ken

Ken Giberson, PE, LS
President & Principal

MacKay & Somps Civil Engineers, Inc. | 1025 Creekside Ridge Drive, Suite 150 |

Roseville, CA 95678 | P: 916.773.1189 | C: 916.307.7599 | E: kgiberson@msce.com | W: www.msce.com

From: Taylor Bollinger
To: Supervisor Serna
Subject: Sacramento County CAP

Date: Wednesday, March 23, 2022 8:53:43 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Councilmember Serna:

Regarding the 2022 Climate Action Plan, I am concerned that some of the measures may drive up the cost of housing in Sacramento. I am a builder here in Sacramento County and we respectfully urge you to please:

- Oppose Requirements for Immediate Carbon Neutral Housing (Measure GHG 30) This will stop housing and force homeowners to drive even further to Sacramento.
- Support feasibility criteria in meeting the conversion to all-electric appliances (Measure GHG
 7)
- Oppose requirements for Tier 4 construction equipment as there is simply not enough equipment in the market to even meet current demand or to comply with this requirement in 2023. (Measure GHG 8)

Thank you,

Taylor Bollinger

VP Land Acquisition & Forward Planning
Beazer Homes – N. California
2710 Gateway Oaks Dr, Ste 190-N | Sacramento, CA 95833

Cell: 916.606.5327

From: <u>Steven Sander</u>

To: <u>Clerk of the Board Public Email; Kennedy. Supervisor</u>

Cc: Supervisor Serna; Nottoli. Don; Frost. Supervisor; Rich Desmond

Subject: Steven Sander – 3/23/2022 6:00:00 PM Board of Supervisors Meeting – Agenda Item #3 – Public Comment

Date: Tuesday, March 22, 2022 8:14:11 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Steven Sander – 3/23/2022 6:00:00 PM Board of Supervisors Meeting – Agenda Item #3 (County CAP) – Public Comment

Dear Supervisors:

I am Steve Sander (he/they), and I am an environmental justice practitioner and organizer in District 2. I am a member of the City of Sacramento's Environmental Justice Collaborative Governance Committee (EJCGC) as well as the Sacramento Climate Coalition.

I have followed the County's Climate Action Planning efforts since at least 2017 and, like many of you, have been frustrated with the lack of progress to date.

This latest iteration, I'm sad to say, suffers from many of the issues that have plagued the Plan to date. Chief among them is a lack of ambition and outside-of-the-box thinking on the part of the staff charged with authoring and updating the document. This latest draft doesn't meet the moment.

Furthermore, it remains clear that the public has not been adequately consulted about all the various pieces contained in the Community CAP document. Most people are still simply unaware of the efforts and recommendations being put forth.

Moreover, the CAP does not even attempt to get the County to net-zero carbon emissions by 2030, despite that being what the Board has explicitly called for in recognizing and declaring a climate emergency. The discontinuity with other policy documents will impede progress and justify future foot-dragging when it comes to making meaningful emissions reductions. The CAP must lay out a clear path to get to 2030. Projects found to be inconsistent with the CAP must either be disallowed or be subject to a separate CEQA review process.

I must bring to your attention the fundamental lack of understanding on the part of County staff when it comes to issues related to environmental justice.

As a specific instance of this, take for example "GHG-24: Increase Organic Waste Diversion." The chief implementation step is to have the County "streamline the permitting process." However, when it comes to organic waste, it is usually not the County's permitting process that is impeding the siting of organic waste facilities. Moreover, there are processes in place for good reasons—it's so that these facilities don't harm the surrounding community. We should not cause harm to overburdened communities by encouraging facility siting in disadvantaged communities (DACs) as established by CalEnviroScreen 4.0.

With respect, I urge you to have the planning staff take this document back and revise it so
that it is in harmony with the 2030 carbon neutrality goals laid out previously. Then, they need
to run it by the community before bringing it back to the Board.

Respectfully submitted,

Steven Sander

From: <u>Jane Lamborn</u>
To: <u>Nottoli. Don</u>

Cc: Clerk of the Board Public Email

Subject: Workshop on Climate Action Plan, March 23, 2022

Date: Wednesday, March 23, 2022 1:31:04 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Supervisor Nottoli,

I am writing about the Climate Action Plan that is the topic of the workshop on March 23, 2022. Having an effective Climate Action Plan is critical if we are to meet our goals of reducing greenhouse gases (GHG). I think the current Plan is comprehensive and includes many essential projects. However, I also think it needs to include more support for increasing the use of electric vehicles and promoting solar power.

Increasing the use of electric vehicles is a critical part of reducing GHG emissions, and to do this we need charging stations that will be accessible to the public. Due to its central location, Sacramento has many long-range travelers who pass through this region, and providing charging stations for these vehicles is important. Gas stations should provide these stations and any new permits for gas stations should require that there is one or more electric charging stations on their premises. Charging stations can also be located at area hospitals, shopping centers and large event venues.

The County should also do more to promote solar power use by households living in multiple family buildings than what is provided in the present plan. The County should invest in the development of solar panels and microgrid systems in these buildings so that lower income families can transition to solar power. The County can also invest in developing solar power systems in communities where residents of single family residences cannot afford to install their own solar panels.

I also think it is important for the County to work with the City of Sacramento and SMUD in developing solar power infrastructure. By working together, these entities can fund development of infrastructure, establish microgrid systems, and install solar panels and battery storage units. This collaboration would greatly Increase the reduction of GHG and would decrease the time and effort needed to accomplish it as the three entities could work together more efficiently than they can separately.

I am encouraged when I see the work that has been done in developing the Climate Action Plan, and I am hopeful that it can be finalized and implemented quickly. We need these actions to protect our communities' futures, and we need them to be taken as soon as possible. Thank you for your work in getting this done. It is truly appreciated.

Thank you,

Jane Lamborn 9401 Montevideo Drive Wilton, CA 95693 916-505-1356 From: Anabel Crouch

To: <u>Clerk of the Board Public Email</u>

Subject: Agenda item #3, County CAP, Meeting March 23, 2022

Date: Wednesday, March 23, 2022 11:10:57 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Honorable Supervisors, Board Clerk, and Staff,

Carbon Neutrality by 2030.

Such a simple concept, yet Life Altering to get there and Life Altering if we don't.

Of all the many faceted inclusions of the CAP, my comments are solely regarding Carbon Sequestration.

Our planet is an amazing living entity with the ability to create, sustain, and regenerate life. One example of this revealed itself early on in our Covid-19 pandemic as local and global transportation came to virtual standstill. While we were at home working remotely, our air and waterways began to clear. This irrefutable evidence shows that when we reduce our GHG emissions the planet has he opportunity to regenerate.

Let's be clear when referring to carbon offsets. Carbon offsets is not carbon sequestration. Polluting is polluting. For example, allowing those who can, to purchase peat land over seas as an offset to their continued polluting is not GHG reduction.

Although we are currently and continuing to make forward progress, however; we find ourselves drastically running out of time.

Mechanical sequestration, (not all but some forms), should be considered. There is one which is as organic as possible that allows for safe capture and storage using sodium carbonate.

I would ask that the County seriously consider safe mechanical sequestration as it continues looking for solutions to reaching Carbon Neutrality by 2030.

Thank you for your time.

Anabel Crouch Constituent, District 5 Sent from Yahoo Mail on Android From: <u>Jasmine Ripoyla</u>

To: <u>Clerk of the Board Public Email</u>

Subject: Board of Supervisors Meeting Comment -- March 23, 2022

Date: Wednesday, March 23, 2022 12:01:28 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Good morning,

This is a written comment for the Board of Supervisors meeting on March 23, 2022 for agenda item no. 3 (Workshop on the Communitywide Climate Action Plan).

I am dissatisfied with the proposed Climate Action Plan and am demanding more from the Board of Supervisors of Sacramento County.

- The proposed Climate Action Plan (CAP) does not meet State requirements. Measures must be enforceable, funded, developed with consideration of feasible alternatives, and supported by substantial evidence. We need to prioritize infill by utilizing the available space within the confines we have already started to develop on, instead of continued sprawl. Key measures must be enforced in our county, not voluntary e.g. carbon sequestration by farmers and electrification and energy efficiency upgrades by homeowners. We want you to identify budgeting costs and funding sources for County outreach, incentive programs, and future planning on this front.
- This CAP defies the County's Climate Emergency Declaration, which
 directed staff to outline how the County could reach carbon-neutrality by 2030,
 identify funding gaps, and make recommendations. Instead, the CAP delegates
 this work to a future volunteer task force. This isn't good enough for us and
 shifts the responsibility off of the Board, whose job it is to take care of this, and
 onto the community. This is wrong and must be fixed!
- This CAP does not fulfill previous promises. In 2011 the County <u>legally promised</u> to adopt a CAP in one year; to include "detailed" programs and performance measures, economic analysis, and timelines; and to consider "shifting development patterns to an emphasis on compact development." These promises were not kept. Now, eleven years later:
 - Measures are still vague, relying on future planning to determine the specifics and feasibility of proposed electrification requirements, carbon sequestration, and carbon offsets.
 - There is no economic analysis.
 - There are no timelines, only a 2030 goal with few or no interim milestones to show beforehand whether that goal will be met.
 - There is no serious discussion of changing County planning from sprawl to more compact development.

We want a CAP that reduces future auto traffic, the County's largest greenhouse

gas source. We want economic analysis on a Climate Action Plan that will actually take steps toward change, not just continue kicking the can down the road for our communities to deal with in the future. We want funding dedicated to taking actual, measurable steps toward carbon neutrality, a future all Sacramento County residents NEED. We want a timeline that you will stick to, that will help us track progress and determine whether you are making a difference. We want interim milestones to show and prove that you are keeping your promises this time around. We want changes to be enforced, funded, and supported, not on a voluntary basis. We want you to take action right now.

It is the County's responsibility to determine that measures are feasible and cost-effective before proposing them, not after they're adopted in the CAP. Having measures contingent on future analysis means we don't actually know what we'll end up with, and how effective it will be. Any necessary studies need to be done now, with results reflected in the CAP – so the public and Supervisors know what the County is actually committing to.

We are paying attention to this because this matters to us. This is something that will affect the entire world, and we need you to do something about it.

--

Thank you, **Jasmine Ripoyla**County District 3

Sacramento, CA

From: Kent Lacin

To: Clerk of the Board Public Email

Subject: County Climate Action Plan Workshop

Date: Wednesday, March 23, 2022 11:08:35 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

To: County Board of Supervisors

Re: Climate Action Plan

To the Board,

I have been following the development of the County CAP for over a year. The document had great potential. It could be a real roadmap to get Sac County to carbon zero over the next 10 years.

However, soft aspirational language, no real mechanisms for measuring results and a disregard for sprawl development have rendered the CAP ineffective.

I appreciate the changes you have made in the various drafts over the last year. Clearly though, they are not enough to even come close to achieving the carbon reductions we need. And it is clear, in great detail, why they are ineffective; organizations, like SMUD, who are much more knowledgeable than I am, have listed multiple specific changes that need to be made to correct the CAP.

I am not an climate expert, nor an engineer, nor a scientist. I am just a resident in this county who is very concerned with how lightly you are treating the issue of climate change as an existential threat.

I request that you treat this matter with the utmost seriousness and reflect in action and design the concerns you all were willing to share when you issued the Climate Emergency Document last year.

The clock is ticking. If you don't do anything significant to address climate change, soon we won't have any choices left.

Thanks very much, Kent Lacin From: Cheryl Marcell

To: PER. climateactionplan; Clerk of the Board Public Email

Subject: Comments on the Climate Action Plan

Date: Wednesday, March 23, 2022 1:56:35 PM

Attachments: image002.png

image002.png image003.png Sac County CAP Comments.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Enclosed please see our comments regarding the Climate Action Plan that is in workshop this evening at the Board of Supervisors.

Best Regards, Cheryl

Cheryl Marcell

CEO



PHCC Of California | PHCC GSA Training Facility 1820 Tribute Road, Suite A | Sacramento, CA 95815

Main: 916-925-7390 | Email: CEO@caphcc.org | Web: www.caphcc.org





March 24, 2022

Todd Smith, Principal Planner Office of Planning and Environmental Review 827 7th Street Sacramento, CA 95814

Dear Mr. Smith,

I am submitting comments on Sacramento County's Revised Final Climate Action Plan (CAP) on behalf of the Plumbing-Heating-Cooling Contractors Association of California (CAPHCC). Our statements relate to proposed implementation dates and the feasibility of requiring new and existing buildings to adopt all-electric water heating technology. We appreciate the opportunity to provide the perspective of the front-line men and women of the plumbing industry who will be charged with implementing these new mandates and explaining them to consumers.

CAPHCC is part of the Plumbing Heating Cooling Contractors Association, the premier organization for the p-h-c professional; PHCC provides legislative advocacy, education, and training to approximately 3,300 plumbing and HVACR contractors and 65,000 technicians. Our members work in the residential, commercial, new construction, industrial, and service and repair segments of the construction industry.

Members of PHCC have access to a wide variety of resources and services, strengthening their reputation as the best choice for professionalism, reliable products, and knowledgeable service—and as a proud protector of public health and safety and the environment. In addition, approximately 125 state and local association affiliates like CAPHCC are part of PHCC's chapter network.

Measure GHG-04 sets target dates for replacing natural gas water heating in existing commercial and non-residential facilities.

CAPHCC strongly opposes the proposed deadlines for the following reasons:

• The recently adopted 2022 California Energy Code does not require existing commercial and non-residential buildings to be updated to be all-electric. However, the code does not provide a suggested pathway for most commercial end-users to comply. Furthermore, costeffectiveness studies have not demonstrated that electric technology is cost-effective for most end uses compared to natural gas.

- A requirement that existing commercial and non-residential buildings be retrofitted to use all-electric water heating technology will require considerable time, money, and collaboration by manufacturers, contractors, and plumbing trade associations to train the workforce to ensure quality installations. This is not an effort that can be done in months as proposed by the CAP, but an effort that will take years as the technology becomes commercially available.
- CAPHCC does not believe there is sufficient commercially available HPWH technology to support installations every time a permit is required. In addition, a measure like this one will further deter installations from obtaining building permits from the proper authorities and need building authorities to grant exceptions to allow natural gas equipment to be used to restore hot water service quickly.

Measure GHG-05 sets target dates for using electric water heating technology in commercial and non-residential new construction.

CAPHCC opposes the proposed deadlines for similar reasons to GHG-04.

Measure GHG-06 sets target dates for replacing natural gas water heating in existing residential facilities.

CAPHCC suggests that the County revisit the proposed measure implementation dates. While existing buildings represent the bulk of the opportunity to decarbonize the County as identified in the CAP, much of the existing building stock is historical and not constructed to today's building standards, thus increasing the complexity of retrofitting to all-electric appliances. Therefore, it is imperative to have both manufacturers and local business owners participate in the conversation regarding electrifying existing buildings. Without a broader group of stakeholders being involved in these conversations to determine the timing and strategy to roll out GHG-06, we are concerned that the success of measure GHG-06 would be limited.

CAPHCC thanks the environmental planning staff and county supervisors for the opportunity to provide feedback on the County of Sacramento's CAP. Please let me know if you have any questions or would like any additional information.

Sincerely,

Cheryl Marcell

Chief Executive Officer

Cc: Supervisors Nottoli, Desmond, Frost, Kennedy, and Serna

From: Jil

To: PER. climateactionplan; Kennedy, Supervisor; Rich Desmond; Supervisor Serna; Nottoli, Don; Frost, Supervisor

Cc: Edith Thacher

Subject: CCL Sacramento Comments on Revised Final Draft CAP

Date: Wednesday, March 23, 2022 4:01:19 PM

Attachments: Final CCL Comments on County RFD March 23 22.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Good afternoon,

Please find attached comments from the Sacramento Chapter of Citizens' Climate Lobby regarding the Revised Final Draft Climate Action Plan released in February 2022.

Thank you for the opportunity to comment. Our organization appreciates your consideration of the concerns raised in this letter.

Jill Peterson Local Issues Lead, CCL Sacramento



March 23, 2022

The Honorable Patrick Kennedy: SupervisorKennedy@saccounty.net

The Honorable Rich Desmond: richdesmond@saccounty.net

The Honorable Phil Serna: SupervisorSerna@saccounty.net

The Honorable Don Nottoli: nottolid@saccounty.net

The Honorable Sue Frost: SupervisorFrost@saccounty.net

Sacramento County Office of Planning and Environmental Review

827 7th Street

Sacramento, CA 95814 c/o

ClimateActionPlan@saccounty.net

Re: Citizens' Climate Lobby, Sacramento Chapter-Public Comment on Sacramento County Climate Action Plan Final Draft dated February 2022

Dear Supervisors Kennedy, Desmond, Serna, Nottoli and Frost and Staff at the Office of Planning and Environmental Review:

We are writing on behalf of the Sacramento Chapter of Citizens' Climate Lobby (CCL) in response to the Sacramento County Climate Action Plan Revised Final Draft dated February 2022 (RFD) for which the County is seeking public comment. Our organization submitted comments to the Sacramento County (County) staff on January 17, 2021, regarding the Administrative Draft of the County's Climate Action Plan. In addition, we submitted comments in April 2021 relating to Draft #1 of the CAP and again in October 2021 regarding the "Final Draft" of the CAP.

We welcome the opportunity to comment on this draft. Our overriding focus is the need for the County to tackle VMT, as emissions from on-road vehicles is the largest single source of GHG. The way to reduce GHG is by ending our reliance on sprawl development. This can be accomplished by freezing development in greenfield areas and focusing on infill near existing transportation and commercial corridors. The County should also work to serve underrepresented areas with better and more frequent transit so that these areas also can support infill development. While the most recent RFD is an improvement over prior drafts, it still lacks a focus on land use policies.

We have heard from staff that any needed changes in land use policies must wait for a general plan update. However, the Phase I Strategy and Framework document (Strategy document) prepared by the County lists land use decisions as the first authority the County can exercise to address climate change. (See Strategy document at pg. 14)

The County's Authority and Functions in Addressing Climate Change Sacramento County recognizes that local governments are on the front line, both in reducing GHG emissions and preparing the community for the impacts of a changing climate. For example: • Sacramento County has direct authority over land use decisions within the unincorporated County (cities make those decisions in the incorporated areas.) Land use patterns have a direct impact on transportation needs and options, which, in turn, affect energy consumed and GHG emissions associated with transportation. Land use planning also plays a role in adapting to climate change. Sacramento County's agriculture industry may be impacted by changes in temperature and rainfall patterns and an increase in pests and diseases.

The purpose of the Strategy document is set out in its Introduction:

This document, the first component of the County's Climate Action Plan, is a key step in realizing that vision. It describes the strategy and framework for the County's program to mitigate impacts and adaptto a changing climate.

The Strategy document goes on to repeatedly reference the County's land use authority as a key tool in addressing climate change:

There are many factors over which County government has no or limited control, such as auto fuel efficiency, alternative fuels, or choices that individual residents make regarding transportation use. However, the County influences emissions from transportation in several ways. **As the land use planning authority** for the unincorporated county, Sacramento County determines land use patterns, which in turn affect transportation patterns and therefore associated GHG emissions. (Strategy document at pg 6)

Local governments play an integral role in achieving the target emission reductions through their discretionary land use and transportation planning authority as well as in other sectors such as energy, waste reduction and recycling, and water use. (Strategy document at page 12)

As VMT is directly tied to how communities are planned and developed, reducing VMT will require changes to and coordination of land use and transportation policy and practice. Channeling new development to urban areas and increasing overall land use mix and connectivity can increase walking, bicycling, and transit use and reduce per capita transportation- related emissions. Shifting development patterns to an emphasis on compact development and complemented by smart transportation policies, can significantly reduce carbon emissions. For example, compact development clustered around transit lines can reduce VMT per capita from 20% to 40%. (Ewing, 2008) Mixing compatible uses and developing more compactly yields permanent GHG reduction benefits that compound over time as this development pattern comprises a greater and greater proportion of the community's total land use. (Strategy document at page 33).

The Strategy document (which provides the framework for the County's mitigation in its CAP) makes clear that the County's land use authority should be central to its Climate Action Plan. Yet, land use is not listed as a strategy under Section 2 of the RFD which is clearly inconsistent with the intent behind the Strategy document. If the County seized upon its own land use authority to address climate change, the CAP would be a vastly different document and the kind of CAP anticipated by the language in the Strategy document. It would also be a far better tool for fighting climate change. Why this has not happened is incomprehensible and a failing-why is the County unwilling to use the best tool it has at its disposal?

Our organization has been very clear about our concerns in our comments to the three previous drafts of the CAP. We offered specific alternatives for the County to consider, however, the County has accepted little of the feedback provided by us as well as public comment from others made during the past year. The RFD is not the roadmap the County needs to reach carbon neutrality by 2030 nor does it set forth the actions the County needs to take to address climate change. Finally, the RFD includes many of the regulatory defects we identified in the prior drafts.

The Planning Commission and the Board of Supervisors should reject the RFD for the following reasons:

- 1. It is not designed nor intended to reduce VMT, which is by far the largest source of GHG in our County. Any measures purportedly focused on VMT offer offsets that do not reduce VMT.
- 2. It provides for carbon offsets to such a degree that otherwise potentially effective measures are rendered inconsequential. For example, a proposed reduction of 15% in VMT from new developments can be satisfied through offsets of GHG from sources other than VMT. The measure without the offset will be effective, but the offsets undermine it.
- 3. It includes significant changes in numbers and calculations with little or no explanation which makes them appear arbitrary.
- 4. It does not meet the requirements in the County's own Final EIR (FEIR) for the General Plan Update in 2010—which required that the CAP have "timelines," "detailed programs and performance measures," and the "estimated amount of reduction expected from each measure."
- 5. It defies the Board's directive in December 2020 that the CAP explain how the County will reach Carbon Neutrality by 2030 and that it identify funding gaps. The RFD ignores the fact that the Board determined it was the responsibility of County staff to determine the path to carbon neutrality when it said, "County staff shall evaluate the resources necessary to achieve carbon neutrality by 2030, and the emergency actions required to eliminate emissions by 2030. Where existing funding or resources do not support the level of action required, County staff shall identify gaps and provide recommendations to the County Executive and Board of Supervisors."
- 6. It does not meet California's regulatory requirements because it conspicuously lacks:
 - "[specific] measures or a group of measures, including performance standards, that **substantial evidence demonstrates**, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

[A] mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and [Adoption] in a public process following environmental review."

The lack of substantial evidence in the RFD means that the County cannot rely on these measures as a source of mitigation for its 2010 General Plan Update. In addition, the EIR Addendum (included in the Final Draft for the first time), is not compliant with the California Environmental Quality Act (CEQA). The County must do an environmental impact report and cannot rely on the FEIR prepared 10 years ago as a substitute for a full environmental review. This is a critical failing considering that in the past ten years increased temperatures, drought and wildfire smoke have become part of the new "normal" in Sacramento.

- 7. The proposed measures in the RFD will not result in the necessary reductions in GHG emissions. Instead, as a weak and ineffective plan, it will streamline the approval of development into greenfield areas, which the County already acknowledges will increase GHG emissions beyond their current levels.
- 8. There was insufficient public outreach. The plan was developed with a scattering of meetings over the past year with a few individuals. Any other meetings regarding the plan occurred 3-4 years ago. Meetings that occurred 3-4 years ago when the RFD was not available do not suffice for public engagement.

Our organization took the Board at its word when it stated in December 2020 in its Climate Emergency Declaration (CED) it intended to address our climate emergency by setting a goal of carbon neutrality in 2030. The CED states the CAP will set forth the strategies needed to reach that goal. The RFD readily acknowledges that it does not explain the County's path to carbon neutrality by 2030 despite the clear directive to do so. Equally significant is that under the RFD developers will have an easier time building out greenfield areas creating sprawl, more traffic, and an increase in VMT and emission of GHG.

The RFD states the actions needed to bring about carbon neutrality by 2030 will be released in a Climate Emergency Response Plan (CERP) which will purportedly be completed in a year after adoption of the CAP. This CERP is the responsibility of the Climate Task Force which is a voluntary task force with little to no resources available. This Task Force will not come to fruition until applications are solicited and members selected, which process has yet to begin. The assertion in the RFD that the Task Force will determine the actions to be taken to reach carbon neutrality within a year defies logic.

It could be argued that the Board should adopt the RFD so the County can at least get started on the goal of carbon neutrality. This position assumes that the County can take no actions without a CAP in place. This is not the case. Nothing prevents the County from taking actions to move forward toward that goal. Nothing is stopping the County from, for example, moving forward with the electrification provisions, educating farmers on carbon sequestration, or the other proposed measures. In fact, the County needs to move forward with these measures in order to have ordinances in place by 2023 to address electrification. The Emergency Declaration indicates these actions should be taken now and thus provides the framework for moving forward.

Since nothing is preventing the County from moving forward with these measures even without a CAP, there is no rush to adopt a CAP that is inadequate. County residents have waited over 10 years for the CAP, which is how the County decided to mitigate the impacts from its 2010 update of its general plan. They need and deserve a strong mitigation document. Our organization is not eager to passage of a weak CAP that will streamline development but not serve as either a meaningful mitigation document or as a roadmap to carbon neutrality. In addition, the County has not met the requirements of CEQA which necessitate the preparation of an EIR prior to the adoption of the CAP.

Therefore, our organization does not support the adoption of the RFD without substantial change and the preparation of an EIR prior to the Board adopting any climate action plan.

Our Analysis of the RFD is based on:

- 1. County FEIR-Under Mitigation Measure CC-2 of the County FEIR dated April 2010,
- B. The County shall adopt a second-phase Climate Action Plan within one year of adoption of the General Plan update that includes economic analysis and detailed programs and performance measures, including timelines and the estimated amount of reduction expected from each measure. Emph. Added. (FEIR at Page I-32)

2. Regulatory Requirements:

- 14 CCR § 15183.5 sets forth the requirements for a CAP. Under subsection (b) it states:
 - (b) Plans for the Reduction of Greenhouse Gas Emissions. Public agencies may choose to analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions or similar document. A plan to reduce greenhouse gas emissions may be used in a cumulative impacts analysis as set forth below. Pursuant to sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances.
 - (1) Plan Elements. A plan for the reduction of greenhouse gas emissions should:
 - (A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
 - (B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;
 - (C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;
 - (D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level:

- (E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;
- (F) Be adopted in a public process following environmental review.

3. State Guidelines:

Chapter 8 of the General Plan Guidelines prepared by the Governor's Office of Planning and Research (OPR) (https://opr.ca.gov/) provides clear guidelines for CAPs which can be found at https://opr.ca.gov/docs/OPR C8 final.pdf.

Here are our comments and recommendations regarding the RFD:

I. The RFD Should Provide Explanation for the Change in Many of the Projections and Calculations That Were Included in Prior CAP Drafts

We appreciate that the County did not adopt the Final Draft it issued in September 2021, as proposed by staff at that time. Rather, staff spent time amending that draft and one noticeable difference is the several changes in the charts produced in relation to projected emissions and reductions. Here are a few examples:

Chart 1 is titled "Sacramento County Baseline and Forecast GHG Emissions by Sector." The RFD version of this chart deviates substantially from the version of Table 1 in the prior drafts. The Table now adjusts baseline numbers by reducing them by the amount projected to be saved in Table 2. Table 2 includes "Legislation or Regional Policies Resulting in County GHG Emissions Reductions by 2030." This does not make sense; why would a baseline number be reduced in such a manner, and the change appears for the first time in the fourth draft of the CAP without explanation.

Chart 3 sets forth the projected reductions in GHG emissions resulting from community measures. The projections for 7 of these measures have been changed from the last draft. The RFD does not explain why and how these numbers were changed. Chart E-7 in Appendix E is titled" Modeling Assumptions for Quantified Community GHG Reduction Measures." This chart is supposed to explain the basis for the numbers in Chart 3. It does not explain in any meaningful way why the numbers in Chart 3 have been changed. For example, regarding GHG-01 Carbon Farming, Chart E-7 shows that the number of acres projected to engage in carbon farming has been reduced from 622, 858 to 81,381. The RFD does not explain why the reduction was made and how the reduction should be calculated. There is even less information regarding the changes in other projected reductions. Any adjustments to calculations in the RFD should be explained thoroughly to generate confidence in the document and allow the public to better understand the basis for these changes. Absent such information, we can only speculate about the motivation and/or basis for these changes.

If the changes in the projected reductions that appear in the Charts in the RFD represent more realistic savings than were in the FD Draft, we applaud them. However, we cannot determine the basis for these reductions and what new data or assumptions replaced those in the previous draft. Overall, the projected reductions in the RFD resulting from Community Measures indicate a substantially lower reduction in GHG from that reflected in the Final Draft CAP issued last fall. The

projected reductions went from 772,095 MTCO2e in the Final Draft CAP to 482,513 MTCO2e in the RFD, which represents a reduction of 38% percent. (See Chart 3) We raised several issues in our prior comments about the ability of the County to reach the savings projected in the Final Draft and the basis for those numbers. If the County has now examined our concerns and determined many projections were too high, the County should be transparent about why and how these new savings were calculated. Otherwise, these changes appear arbitrary and undermine the public's confidence.

II. As Drafted GHG 030 Does Not Deliver The Needed Change in Land Use Policies

We also applaud the staff's effort to introduce the concept of a carbon-neutral development measure in this draft (See GHG-033). However, the manner in which this measure is drafted is concerning to us. Rather than require a carbon neutral development, the measure allows developers to "invest" in other measures in the CAP by paying money to fund other measures in the CAP in order to "offset" the carbon that will be released if their developments are approved. This approach is antithetical to the very reason to have a CAP. If a developer can pay for the right to build out on greenfield, that payment is grossly inadequate to offset the GHG produced for the next 50+ years from that development. In addition, if the other measures in the CAP simply serve as offsets for development, we are not reducing GHG overall but simply neutralizing the impact of additional development. Allowing developers to remain in the driver's seat and to continue a pattern of sprawl and leapfrog development, is not the path to addressing climate change.

In addition, the carbon offset program does not require that if a developer needs to obtain offsets for VMT, that the offsets themselves must be for VMT. The County's efforts must focus on VMT and allowing VMT to be offset by reduced emissions from other GHG sources does not accomplish this. It is difficult to imagine how any calculation of the required offsets for VMT resulting from development, can fully compensate for such things as inflation during the life of the development, and the life span of the actual offset. For example, if money goes toward electrification of a building to offset a development, what is the life of the building being electrified? Is it the same as the life of the development? If not, how is that factored into the offset calculation. In addition, it is not clear that the offsets must remain in County. For example, under GHG 030 it states:

Implementation: Future development projects that request an amendment to the UPA and/or USB shall include a GHG analysis that calculates project GHG emissions during construction and full buildout and reduces these emissions to 0 MT CO₂e through advanced project designs that incorporate energy efficiency, renewable energy generation, clean transportation, carbon sequestration, and/or investments in initiatives with validated GHG reduction benefits. ... The offset program could allow for investments in GHG reducing activities occurring outside of the County's control. Emph. Added

This vague reference to investments says nothing about where the investments would be located. The statement that the offset program could include investments occurring outside of the County's control also suggests offsets outside the County. This opens up many possibilities for carbon offsets well outside the boundaries of the County. Such offsets would not contribute to reduced GHG in the County. Moreover, the specifics of the offset program need to be spelled out to see if they are truly viable options.

III. The Electrification Measures in the CAP Need to be Feasible to Be Relied Upon for Reductions

We also applaud the electrification measures included in the RFD. These are important building blocks toward reducing GHG emissions. We are concerned, however, about two aspects of these measures. First, Measures GHG 05 and GHG 07 require the enactment of a reach code. However, the implementation of such a code is subject to future studies:

Implementation: Prepare an ordinance for review by the Board of Supervisors. The cost-effectiveness studies and feasibility analyses should include at a minimum consideration of supply chain availability of parts, prices of component parts, and projects for which natural gas lines have already been constructed on site or approved in improvement plans. The County will periodically re-assess and update reach codes in response to updates to the building code.

This language in the RFD indicates that although the projected GHG emissions reductions are being relied upon by the County in reaching its target, they may or may not be feasible. How can the County rely upon a measure that it acknowledges may not be implemented or may have limited implementation based on the preparation of vaguely defined studies? These studies should be completed prior to the County claiming any reductions from their implementation. In addition, these measures allow developers who cannot meet the electrification requirements to purchase offsets. The ability to offset undermines the effectiveness of measures and the projected reductions are rendered unreliable.

IV. The CAP Must Meet the Requirements of the County's Own FEIR

Climate action plans are not required under state law. The County, however, had to prepare a CAP because it relied on the CAP as the key mitigation measure when it approved its general plan update in 2010. The County acknowledges that its 2010 General Plan Update had adverse environmental impacts. It was the County that identified the preparation of a community wide CAP within a year as a key mitigation measure for its General Plan. In setting forth this mitigation measure the FEIR stated the CAP shall include: "economic analysis," "timelines," "detailed programs and performance measures," and the "estimated amount of reduction expected from each measure." The RFD fails on these requirements.

First, there are no timelines in the RFD. There are time frames, which are broadly described as: "Near-term (2020-2023), Mid-term (2024-2026), and Long-term (2027-2030)." See RFD at page 1-0. The dictionary defines a timeline as a schedule of events or procedures; a timetable; a plan that shows how long something will take or when things will happen. A timeline provides a schedule for when and how a task or program will be completed or realized.

A time frame, is in contrast much vaguer and is not intended to set forth a plan to accomplish something but, rather, a period of days, weeks, months, etc. within which an activity is intended to happen.

While comparing these two terms may seem like splitting hairs, it is significant here. The result being that a lack of the required timelines means there are no steps, or deadlines set regarding how the measures in the RFD will be achieved.

Hand in hand with the lack of a timeline, is the lack of detailed programs and performance measures for the measures in the RFD. To have timelines, the RFD measures would need to be fleshed out and explained in detail and include incremental steps to completion and assign responsibility for each step along with clear timelines. So, there is a domino effect, no details, thus no plan, and therefore no real timeline. In addition, the implementation plans are no more than a few sentences and often speak of education, outreach or posting something on the web.

The Sacramento Metropolitan Air District pointed out the weaknesses in the assumed savings tied to GHG-01 carbon farming when they commented on the Draft CAP. These same comments apply to the RFD:

Comments on Section 2.1, Community Greenhouse Gas Reduction Measures GHG-01: Carbon Farming (p.8) The County is relying on this measure to deliver nearly 50 percent of its reductions, but we have concerns with this measure. Soil carbon sequestration is inherently uncertain: a ton of carbon emissions reduced is permanently avoided, but a ton of carbon sequestered can be released in the future due to land use change, development, changes in soil management practices, or other disturbances. The carbon stored in no-till farms are largely lost again, for example, if the land is tilled again; fallowed land, too, will lose its stored carbon if the land returns to agricultural use. For this strategy to be effective, the County must be able to guarantee permanence – that the agricultural lands will not be developed, and that any adopted farming practices be maintained for decades, if not more. We recommend agricultural easements, preserves, or other permanent mechanism to ensure consistent land use in carbon farming areas. Carbon farming comes with other challenges. The costs of measurement and verification of soil carbon storage can be high; the County should consider who will pay for these costs, and the timeframe over which it will be measured, which, again, leads back to the permanence question. What happens if the land is sold, developed, or the farmer or rancher decides to abandon carbon-farming practices at the end of the measurement period? As carbon sequestration cannot be guaranteed with certainty to be permanent, and no emissions are being reduced, only removed from the atmosphere (temporarily), this should not count as a carbon reduction strategy without significant changes. If this is intended as offsets to help meet the County's carbon neutrality goal, note that the California Air Resources Board requires offsets generally to be permanent, real, verifiable, and quantifiable. See Letter dated April 9, 2021, at page D-111-112 included in Exhibit D to Final Draft CAP.

The RFD also does not include the required economic analysis set forth in the FEIR, nor the resource analysis the Board mandated in December 2020 as part of the CED. The only source of funding for the measures in the RFD are the monies resulting from carbon offsets provided to developers which cannot meet the requirements of Measures GHG-11 and GHG 30. In addition, funding for infill will be generated by sprawl development under RFD measure GHG 23. Basing funding for these measures on the continuation of sprawl development is antithetical to the very reason for the CAP.

The only monetary information provided in the RFD is found in Exhibit G in which there is a chart of the measures, and the following explanation: "This analysis includes a high-level assessment of the administrative costs for the County to implement the measures, considering staff time and

resources needed to create policies and enforce actions associated with the measure. The total staff time and resources needed are estimated and reported using a ranking of low (\$), medium (\$\$) or high (\$\$\$)..." This does not constitute an economic analysis as required by the FEIRs It has no actual dollars associated with it, nor does it consider any cost outside of County staff time.

Exhibit G also does not meet the requirements the Board set forth in December 2020 as part of the CED:

County staff shall evaluate the resources necessary to achieve carbon neutrality by 2030, and the emergency actions required to eliminate emissions by 2030. Where existing funding or resources do not support the level of action required, County staff shall identify gaps and provide recommendations to the County Executive and Board of Supervisors." Emph. Added.

Besides not identifying the costs of the measures, the RFD identifies no funding sources to pay for such costs. Nor does the CAP identify the gaps in funding and provide recommendations to the Board. An unfunded mitigation measure cannot reach the projected GHG savings. It is not apparent that any effort was made to include a true analysis of the cost to reach the GHG reductions nor are there any recommendations as to how to fund them other than through offsets. As a result, no potential or expected reductions in GHG emissions from the CAP's measures can be relied upon in determining the County's overall GHG emissions reduction.

V. The CAP Must Follow the Express Instructions of the Board.

In its December 2020 Declaration, the Board committed the County to

[B]uilding on existing climate action commitments and taking (sic) significant steps to sustain and accelerate short term communitywide carbon elimination and all efforts and actions necessary to eliminate emissions by 2030, recognizing that such a goal will only be achieved through regional collaboration between multiple partners;The

Communitywide Climate Action Plan shall explain the County's approach to reduce greenhouse gas emissions in order to achieve carbon neutrality by 2030, building on recommendations and analysis from community partners, and suggested mitigation measures from climate experts, urban and regional planners, community members, and economists. Development and implementation of the plan shall be guided by science, data, best practices, and equity concerns. Emph. Added. [See Climate Emergency Declaration (CED)]

The CAP does not provide the required "approach to reduced greenhouse gas emissions in order to achieve carbon neutrality by 2030." Each draft of the CAP has had different explanations as to why the CAP does not include the roadmap that the CED requires. Why the explanation has to change is unclear, but each draft, including the RFD expressly recognizes the CAP does not do what the CED directed. The RFD's explanation is found at page 7:

While this version of the CAP does not meet the carbon neutrality goal through quantified measures, itdoes provide the flexibility for the plan to change over time to take additional steps that will meet the goals of the Climate Emergency Resolution. Specifically, the County commits to the following steps:

► Meet or exceed the Statewide target identified above by proceeding with GHG reduction and carbon sequestration measures defined in Section 2 this CAP.

- ► The County's Sustainability Manager will form the Climate Emergency Mobilization Task Force asspecified in the Climate Emergency Resolution.
- Review forthcoming updates to the State's Climate Change Scoping Plan⁸ (2022 Scoping Plan) and Natural and Working Lands Climate Smart Strategy⁹. These plans will be the State's roadmap to achievecarbon neutrality consistent with adopted executive orders and will provide necessary guidance to local governments on feasible GHG reduction and carbon sequestration measures.
- Develop the CERP and submit it to the Board of Supervisors within 1 year of CAP adoption. The CERP will set a communitywide carbon neutrality target for 2030 and evaluate the feasibility of additional County and communitywide actions for GHG reduction supplemental to those indicated in Section 2 ofthe CAP. These actions would be aimed at closing the Countywide emissions gap in Table 3 to achieve carbon neutrality by 2030. Actions that should be evaluated for feasibility in the CERP would include but not be limited to: prohibiting issuance of business licenses to business related to fossil fuels; requiring all-electric retrofits at point-of sale; implementing toll roads; and other measures that were previously dismissed in Appendix F.2. If GHG reduction toward carbon neutrality has not occurred, the County would prohibit the issuance of building permits for projects which exceed the GHG threshold of 2.0 MT CO₂e in 2026 (Table F.1, Appendix F). See Appendix F for a more detailed discussion.
- ► Initiate a comprehensive update to the General Plan that includes land use and transportation policiesthat further promote infill development and vehicle miles traveled (VMT) reduction.
- ▶ Update the CAP's GHG inventory and forecasting to reflect changes associated with the documents described above.
- ▶ Update the CAP with targets for Countywide carbon neutrality by 2030, and/or net zero targets for specific emissions sectors as described in the strategy options contained in Appendix F and new GHGreduction strategies to incorporate local actions recommended by the State in the 2022 Scoping Planand Natural and Working Lands Climate Smart Strategy.

This RFD language indicates that the steps to reach carbon zero will be identified in a Climate Emergency Response Plan (CERP) to be prepared, "Within 1 year of CAP adoption." There is no reason provided for linking the preparation of the CERP to CAP adoption. Nor is there a rationale for ignoring the clear language of the CED which states that the CAP will include the roadmap to carbon neutrality.

The CERP is explained in the CED. The CED required that the County:

Establish a permanent Climate Emergency Mobilization Task Force composed of climate experts including but not limited to representatives of the scientific community and academia to oversee thedevelopment and implementation of a climate emergency response plan (CERP) utilized by all departments within the County of

Sacramento, and each department shall assign a point person to provide regular updates to the Task Force and the Board of Supervisors concerning departmental progress in reducing emissions;

The CED does not say that the path to carbon neutrality should be part of the CERP nor does it say anything about the roadmap being tied to CAP adoption. With no apparent authority for doing so, the RFD ignores the clear directives of the CED.

The failure to outline a path to carbon neutrality in the RFD is at complete odds with the Board's Climate Emergency Declaration which expressly states the CAP will outline the steps that the County will take to achieve carbon neutrality. The Board clarified that the County intended to take strong action on Climate Change in the CAP, but the RFD fails to do so.

In December 2020 the Board directed:

The County staff shall evaluate the resources necessary to achieve carbon neutrality by 2030, and the emergency actions required to eliminate emissions by 2030. Where existing funding or resources do not support the level of action required, County staff shall identify gaps and provide recommendations to the County Executive and Board of Supervisors.

Staff has not done so. Since the CED states that the Task Force shall oversee the development of the CERP, the language of the RFD makes it the responsibility of the volunteer Task Force to create the roadmap to carbon neutrality when the CED said this was the responsibility of staff. This contradicts the clear directive of the Board when it said the CAP was to be the roadmap for carbon neutrality and that County staff was to evaluate the emergency actions needed. It seems unlikely that a panel of volunteer community members can prepare a plan that the staff (and its outside consultant paid well over half a million dollars) have failed to complete.

On page 7, the RFD includes alternatives to be considered as part of the options to reach carbon neutrality and include:

prohibiting issuance of business licenses to business related to fossil fuels; requiring all-electric retrofits at point-of sale; implementing toll roads; and other measures that were previously dismissed in Appendix F.2. If GHG reduction toward carbon neutrality has not occurred, the County would prohibit the issuance of building permits for projects which exceed the GHG threshold of 2.0 MT CO₂e in 2026 (Table F.1, Appendix F). See Appendix F for a more detailed discussion.

These are serious ideas that might result in meaningful GHG reductions. Why weren't these alternatives discussed in depth with any stakeholder groups? Why weren't experts consulted on their feasibility? Why weren't these included in the CAP itself rather than saying a volunteer group of individuals would do the analysis and come up with a plan?

Appendix F also includes a number of alternative measures, some of which the County dismisses based on its assertion that the Phase I Strategy and Framework document does not identify modified land uses as a strategy to address VMT:

Strategy options described in this section entail changes to the underlying assumptions used to prepare the CAP, such as modified land uses or setting targets for GHG reduction that were not identified as part of the Phase 1 Strategy and Framework document....

As described at the beginning of this comment, the 2011 Phase I Strategy and Framework Document cited by the County expressly states that the County's "direct authority over land use," can be used to address VMT and associated GHG emissions. This means that several of the strategies in Appendix F, as well as many others, are viable options.

The CAP must be redrafted based on the goal of carbon neutrality by 2030, consistent with directives issued by the Board in December 2020 and include the evaluation the Board mandated in December 2020.

VI. The CAP Must Provide Substantial Evidence the Measures will Result in GHG Emission Reductions

Under 14 CCR § 15183.5 (B) (1)(B) the plan must: "Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level..." Emph. Added.

This requirement is also discussed by the OPR guidelines:

Feasibility and Enforceability CEQA Guidelines sections 15168(b)(4) and 15168(c)(3) recognize that programmatic documents like a general plan or CAP provide an opportunity to develop mitigation plans that will apply on a project-specific basis. As a result, a CAP needs to include measures that will achieve the reduction target. How the plan achieves those targets, whether through mandatory or a mix of voluntary and mandatory measures, is up to the lead agency, so long as substantial evidence supports the conclusion. When addressing greenhouse gas emissions, like all other technical analysis, the methodology and calculations should be transparent and replicable with the goal of providing substantial evidence supporting the assumptions, analysis and conclusions. Measures should also be real and verifiable, through either full enforceability or through substantial evidence in the record supporting an agency's conclusion that mitigation will be effective. A number of published court cases address the need for feasible and enforceable emission reduction measures. (Id. at p. 94).

The mitigation measures in the RFD are vague and weak. For example, the County relies on GHG-01 for 30% of its projected reductions. This measure proposes carbon farming will substantially reduce GHG emissions but fails to describe how this will occur. Rather, the proposal is simply that the County will educate farmers about existing resources and somehow this will spontaneously result in the farmers converting acres to carbon farming practices. Although the RFD has drastically cut the number of acres that will engage in carbon farming, it does not explain how it arrived at the final number of acres. Nor does the RFD provide any additional explanation as to actions that will be taken beyond the education previously proposed. There is no information on costs of converting this acreage and impact of the cost on farmers. There is also nothing in the RFD to indicate these conversions will be permanent. If the acreage goes back to its former use, the carbon will be released. To include these reductions in its calculations, the County must make the sequestration permanent through conservation easements. The

County should set forth a plan to work with conservation groups to determine how to convert such land into permanent sources of sequestration.

The Sacramento Metropolitan Air Quality District (Sac Metro Air) recognized this weakness in the letter it wrote in April 2021 about the proposed measure. The criticisms it raised have not been addressed in the RFD.

These caveats aside, this measure contains only light actions such as providing education on cobenefits and available resources and is generally lacking in detail. It seems unlikely that without more robust actions – such as direct incentives or prescriptive regulation from the County – that a sufficient scale of farmer participation will be mobilized to achieve the quantity of carbon sequestration currently envisioned. We recommend the County consider augmenting this measure with more direct strategies, such as financial incentives, policies, and ordinances to minimize or eliminate farmland conversion from land use development, and strategies to expand compost use. Farmers and other stakeholders will likely need financial mechanisms to provide compensation for any losses, should any change in practice (e.g., organic composting) result in a decline in yield. This type of insurance can help assuage any hesitancy stakeholders may feel about the risks of adopting new practices. The County should also develop **interim targets** for carbon farming acreages, as well as contingency strategies should participation in carbon farming practices remain low.

The majority of the measures lack any substance and fall far short of the required substantial evidence; there is virtually no evidence in these measures they will result in GHG reductions. As Sac Metro stated in its April letter:

While many of the draft CAP's measures can effectively reduce GHGs, the implementation strategies lack detail and instead focus on soft actions such as education, outreach, and promotion. Most measures do not have concrete, enforceable requirements, policies, ordinances, or other hard mechanisms necessary to achieve quantifiable reductions. Moreover, for many measures, responsibility and leadership are devolved onto partner organizations and programs. Ultimately, these measures rely upon voluntary actions by the community in response to the County's outreach efforts, but behavior change is extremely difficult and requires considerable investment in marketing, public relations agencies, and advertisements to effectively make an impression amidst the inundation of information that surrounds us.... To fully support its declaration of a climate change emergency, the County should develop mandatory strategies that would help deliver real, ambitious reductions. Emph. Added.

The lack of detailed implementation actions that include concrete, enforceable requirements, policies, ordinances, or other hard mechanisms to achieve quantifiable reductions renders these measures ineffective at reaching the proposed reductions. Thus, the RFD has nowhere near the required substantial evidence mandated by state law.

VII. The RFD will cause higher rates of GHG emissions because it paves the way for sprawl development.

Land use management is not listed as one of the greenhouse reduction strategies under Section 2 of the RFD. It is universally recognized that land use management and a focus on infill vs sprawling development is a key to reduction of GHG. By not including greenhouse reduction strategies the RFD fails to utilize one of the most effective tools to reducing GHG. The California Air Resources Board in a paragraph on Cross-Sector Interactions, clarifies: "more compact development patterns reduce per capita energy demands, while less-compact sprawl increases them."

Senate Bill 375 requires CARB to develop and set regional targets for greenhouse gas (GHG) emission reductions from passenger vehicles. CARB has set regional targets, indexed to years 2020 and 2035, to help achieve significant additional GHG emission reductions from changed land use patterns and improved transportation in support of the State's climate goals, as well as in support of statewide public health and air quality objectives. Metropolitan planning organizations (MPOs) must prepare a sustainable communities strategy (SCS) that will reduce GHG emissions to achieve these regional targets, if feasible to do so.²

Not only does smart growth and infill reduce GHG emissions, it promotes improved public health and air quality, something the County should also prioritize.

Other jurisdictions recognize the key role land use plays in addressing climate change and have made land use management one of their key strategies in their Climate Action Plans: Yolo County, Solano County, and City of San Francisco, among others.

The City of Sacramento recognizes the key role land use policies play in the reduction of GHG. Its first recommendation under Built Environment is Sustainable Land Use. As stated on page 16 of the Final Report of the Mayors' Commission on Climate Change:

Evidence on land use and driving shows that compact development will reduce the need to drive between 20 and 40 percent, as compared with development on the outer suburban edge with isolated homes, workplaces, and other destinations (according to Growing Cooler authors Reid Ewing, Keith Bartholomew, Steve Winkelman, Jerry Walters, and Don Chen).

They propose it is realistic to assume a 30 percent cut in VMT with compact development. Making reasonable assumptions about growth rates, the market share of compact development, and the relationship between CO2 reduction and VMT reduction, smart growth could, by itself, reduce total transportation-related CO2 emissions from current trends by 7 to 10 percent as of 2050. This reduction is achievable with land-use changes

¹ https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf, pg 67 2 https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plantargets#:~:text=CARB%20has%20set%20regional%20targets,health%20and%20air%20quality%20objectives

alone. The authors calculate that shifting 60 percent of new growth to compact patterns would save 85 million metric tons of CO2 annually by 2030.

As a result of recognizing the significance of land use in addressing GHG, the Final Report of the Mayors' Commission on Climate Change recommends at page 24:

Built Environment Recommendation #1: Sustainable Land Use Support infill growth consistent with the regional Sustainable Communities Strategy to ensure: 90% of the cities' growth is in the established and center/corridor communities and is 90% small-lot and attached homes by 2040.

The County CAP must include the same specific measures regarding land use by the City. This would mean the County would prioritize infill through policies, budget priorities and by saying no to greenfield development. This results in not only GHG reductions, but more affordable housing. In addition, any measures regarding land use, must have specific targets and interim measures.

The RFD offers up GHG 11 and 23 regarding infill development and potential sprawl. These two measures not adequately address sprawl. Instead, developers may have to pay a fee or offsets if their project cannot meet the required standards. Some developers already say they are not bound to pay such a fee because it was not part of their Development Agreement with the County (See e.g., Letter from Gregory Thatch, at page D-28-30 of Exhibit D to the Final Draft CAP).

The County believes that payment of this fee will somehow reduce overall GHG. It is difficult to imagine how such a small fee would discourage developers from pursing their lucrative projects in greenfield areas. Notably the amount of "potential" GHG reductions from this measure are not quantified. This proposal will cause an increase in GHG if we simply allow sprawl to occur so long as a "fee" is paid(and then passed onto the homeowner). At a minimum offsets must be offsets in VMT, not reductions in other GHG emission sources. These offsets must also be in County. Even with these caveats, it is difficult to envision an offset program that compensates for 50 or more years of VMT created by sprawl development.

The County currently plans on approximately 103,000- dwelling units to be located on greenfield sites. These plans are contrary to efforts to curb GHG emissions resulting from VMT. Housing needs in our area can be met without the sprawl and increased GHG created, should these developments go forward. The County's available infill capacity of 33,000 DU is almost enough to handle all SACOG-projected housing growth to 2040. The available infill capacity could accommodate SACOG's entire Regional Housing Needs Allocation of 27,200 DU for this decade. And it could easily accommodate more than the 10,000 DU the County has proposed for the GHG-reducing Green Zones, which lie within infill areas.³

The County should freeze development on greenfield sites and use existing infill capacity to meet housing needs. Only decisive action will cause sustainable land use policies that will address climate change in our region. At a minimum, the CAP should set a specific commitment to infill development and not offer offsets as an option for developers.

Our analysis shows the RFD is based on assumptions without evidence, lacks specificity, and has no teeth. Not only does the County want to use the CAP to meet the requirements of the FEIR, but the County also wants the CAP to be a "plan" document that will streamline development projects.

Thus, a weak CAP opens the door to more development since meeting its requirements will be very easy for developers and will enable them to move forward more easily with their planned developments.

The County expressly acknowledges its intent to streamline the approval process in the RFD:

These described components are included in the CAP so that it may serve as the County's qualified "plan for the reduction of GHG emissions," in accordance with criteria identified in Section 15183.5 of the California Environmental Quality Act (CEQA) Guidelines. This would allow the CAP to facilitate streamlining of GHG emissions analyses for individual development projects that comply with the requirements in the CAP by utilizing the CAP Consistency Review Checklist (Appendix I).

We cannot allow the climate-busting sprawl to continue. The County must have a meaningful CAP to meet the challenge of climate change. The CAP must include measures that will ensure infill development which can provide the affordable housing we need and can help us to provide housing to our homeless population. If we continue to allow a high proportion of greenfield development, not only will GHG worsen, but so will our housing crisis.

VIII. The CAP Must Include more Specific and Measurable Strategies/Measures to Address GHG Emitted by Vehicles on the Road.

Figure 2 is very telling. This chart, included below, identifies the sources of GHG starting in 2015 and sets forth the anticipated reductions in each source by 2030. Not surprisingly, on road vehicles are by far the largest source of GHG in 2015. However, the RFD shows virtually no reduction in GHG from this source by 2030. This is at the core of what makes the RFD so weak. The failure of the CAP to meaningfully address land use and to set forth a comprehensive transportation plan that will take more cars off the road will cause not only a failure to address climate change but worsen air quality and negatively impact public health.

The CAP must include clear and broad measures to use transportation (both active and shared) to the fullest extent possible in Sacramento County to reduce GHG by taking cars off the road. These measures must be followed up with implementation steps, targets, and methods for monitoring the progress on each measure. In addition, no master plans should be approved until there are meaningful transportation options. Land use and transportation go hand in hand and that is one of many reasons infill makes sense as it compacts developments near public transportation hubs.

The CAP must include more ambitious and specific strategies and measures to reduce the GHG from vehicles on the road through establishing comprehensive transportation and land use policies that work hand in hand.

¹ Sacramento County 2030 General Plan 2020 Annual Report, ATT 2 - pg. 3. Annual Housing Element Progress Report, Appendix A, Table B Regional Housing Needs

- 2 Allocation Progress SACOG Green Means Go, Locally Nominated Green Zones, updated 12/4/20
- 3 SACOG RHNP REGIONAL HOUSING NEEDS PLAN 2013–2021, Executive Summary Table 1 Allocations Total and by Income Category, pg. 5
- 4 SACOG Regional Housing Needs Plan Cycle 6 (2021-2029), Adopted March 2020, pg. ES-3
- 5 Sacramento County 2030 General Plan 2020 Annual Report, County Growth, Infill, pg. 11
- 6 SACOG 2020 MTP/SCS, Appendix C: 2020 MTP/SCS Land Use Forecast, pg. 12, Preferred Scenario GROWTH 2016-2040
- 7 Sacramento County 2030 General Plan 2020 Annual Report, ATT-1, Table 3, Land Use Summary for Approved Growth Areas, pg. 15
- 8 Sacramento County 2030 General Plan 2020 Annual Report, ATT-1, Table 4 Land Use Summary for Pending Master Plans, pg.15

IX. The CAP Must Include Additional Reduction Targets Beyond 2030.

The RFD identifies a target for 2030, with no additional targets beyond 2030. Such an approach does not follow the recommendations of the OPR which points out how setting only one near target can cause inaccurate assessments of the plan. The guidance states:

Selecting a single reduction target year does not typically allow an agency to accurately assess the trajectory of the plan. Given the long-term nature of the effects of climate change, understanding the effects of the plan on long-term emissions reductions is necessary to determine whether the plan will reduce emissions to a less than significant level. Examining the long-term trajectory also allows a lead agency to determine whether the emissions reductions in the plan are sustainable, or will be overtaken by population growth, increased driving, or other shifts in emissions. Take for example, a plan that sets only a near-term target. Such a plan might rely on increasing building energy efficiency to achieve near-term goals. Looking further out, however, might demonstrate that steady increases in vehicle miles traveled will counteract those reductions, and result in an emissions trajectory that increases rather than decreases. Setting targets out to the general plan horizon year or beyond allows a lead agency to consider the full suite of measures that might be necessary to achieve long-term reduction goals. See https://www.opr.ca.gov/docs/OPR_C8_final.pdf at pages 226-227.

X. The CAP Must Set Target Indicators between Now and 2030.

Section 15183.5(b) (1) (e) states CAPS should, "Establish a mechanism to monitor the plan's **progress** toward achieving the level and to require amendment if the plan is not achieving specified levels." Emphasis Added.

The very few target indicators in the RFD are almost all indicators measured in 2030. To monitor progress towards the 2030 goals, specific target indicators should be set for time periods between now and 2030. If there is no monitoring of the progress made between now and 2030, the County will not know whether the measure is effective or if other actions need to be taken to reach the 2030 goal. Section 15183.5 clarifies these interim measures are needed to determine whether the plan needs amendment if it is not achieving specified levels.

XI. The County Must Do an EIR Prior to Adopting any CAP

The EIR Addendum created along with the RFD purportedly meets the requirements for appropriate environmental review of the CAP. The Public was given its first chance to even review this Addendum when the Final Draft was released in the fall; it was not part of prior drafts.

There is no dispute the CAP will cause environmental impacts. But the RFD claims that the Environmental Impact Report (EIR) done in 2011 adequately evaluated and mitigated the impacts of any CAP. This claims defies logic. How can a document created 10 years ago analyze the current CAP? It did not exist at the time. In addition, climate events have become more significant and stronger action is required than in 2011. This is demonstrated by the Board's December 2020 Emergency Declaration, which also occurred well after the FEIR prepared in 2011.

The Environmental Impact Report is the heart of CEQA. The EIR is the environmental "alarm bell" whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. Why would the County want to forego this important and required part of the process? There is no logical or legal basis for doing so. An EIR must be done prior to adopting any proposed CAP.

We urge the County to act boldly and decisively to address climate change in our region and follow the clear directives provided by the Board in its December 2020 Climate Emergency Declaration. Our future and that of our children depend on it. Do not enact the RFD as proposed. It does too little, and it may already be too late. But do move forward immediately on electrification as enacting an ordinance to be effective in January 2023 cannot be delayed any longer.

Sincerely,

/s/

Edith Thacher
Chapter Lead, Sacramento Chapter, CCL

/s/

Jill C. Peterson
Local Issues Lead, Sacramento Chapter, CCL

From: moly@caliberstrat.com
To: PER. climateactionplan

Subject: A. O. Smith Comments to Revised Final CAP Draft Date: Wednesday, March 23, 2022 4:25:20 PM

Attachments: 03.23.2022 AO Smith Comments to Sac Count CAP FINAL.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Good afternoon:

Please find attached comments to the Sacramento County Revised Final Climate Action Plan Draft. Let me know if you have issues with opening the attachment.

Thank you.

Rohimah Moly
CALIBER STRATEGIES
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March 23, 2022

County of Sacramento 827 7th Street, Room 225 Sacramento, California 95814

RE: A. O. SMITH COMMENTS TO THE SACRAMENTO COUNTY REVISED FINAL CLIMATE ACTION PLAN DRAFT

A. O. Smith appreciates the opportunity to submit comments to the County of Sacramento (County) regarding the Revised Final Climate Action Plan (CAP) Draft that was released on February 18, 2022. The Revised Final CAP Draft identifies measures to reduce Sacramento County's contribution to climate change while addressing how it will contribute to the state's broader climate change goals. Our comments are limited to the draft measures for residential and commercial buildings.

A. O. Smith recommends a stepwise and pragmatic approach to reach building decarbonization goals, and we look forward to working with the County, other local agencies as well as the state in this regard. Recognizing the various challenges to building decarbonization, A. O. Smith respectfully requests that the County consider the following:

- Align New Construction Requirements Implementation Dates: Align the effective date for new construction to be all-electric for single and multi-family housing buildings to 2026.
- Amend Dates for Retrofitting Existing Building Stock: Delay the implementation date for retrofitting existing buildings for single and multi-family residences with three stories or less to 2026, and for existing buildings with four stories or more to 2030.
- **Develop a System of Prioritization for Retrofits**: Create a process by which to prioritize buildings for retrofits, including identifying buildings that do not require main panel and electrical service upgrades, which could be retrofitted first.
- Include Grid-Interactive Electric Resistance Storage Water Heaters as an Eligible Upgrade: The
 states of Oregon and Washington include grid-interactive electric resistance storage water
 heaters as well as Heat Pump Water Heaters as eligible for electrification programs. California and
 Sacramento County should follow suit.

I. ABOUT A. O. SMITH

A. O. Smith is a global leader applying innovative technology and energy-efficient solutions to products manufactured and marketed worldwide. Globally headquartered in Milwaukee, Wisconsin since 1874, our company is one of the world's leading manufacturers of residential and commercial water heating equipment and boilers, as well as a manufacturer of water treatment and air purification products. Along with its wholly owned subsidiaries, A. O. Smith is the largest manufacturer and seller of residential and commercial water heating equipment, high efficiency residential and commercial boilers, and pool heaters in North America.

As a leading manufacturer of both residential and commercial heat pump water heaters (HPWHs), A.O. Smith has a keen interest in the Revised Final CAP Draft. The path to achieving carbon neutrality will require a number of changes in California. HPHWs will play a vital role in two key California policy priorities – reducing the carbon footprint of our buildings as the state transitions water heaters from primarily gasfired to electricity and helping to manage the integration of increasing amounts of renewable energy as HPWHs may shift load and serve as thermal energy storage devices.

HPWHs and grid-interactive electric storage water heaters offer the ability to provide thermal storage serving as a battery for assisting the integration of renewable energy into local distribution grids in both residential and commercial applications. Flexible demand [or smart] water heaters, which include grid-interactive electric resistance storage water heaters and HPWHs, also have additional controls that allow a utility or third-party aggregator to control their energy use (e.g., load shifting) during the course of the day. Within a given local territory, a fleet of water heaters can be controlled to be a flexible energy storage system that can adjust the load on the grid. Given that every home in the state has a water heater, smart water heaters can play a key role in load management and carbon reduction within the built environment.

II. BUILDING ELECTRIFICATION REQUIRES SIGNIFICANT INVESTMENTS

Conventional wisdom suggests that California is on a path towards an all-electric requirement for new buildings as early as 2026. However, new building construction makes up a small percentage of all building stock in the state. In California, about 75 percent of homes (or 9.75 million) were built before 1990. Older homes are less likely to have adequately sized electric panels to accommodate all electric appliances.¹ In addition to the cost of the electric appliance, an older home may also require an electric panel upgrade. The California Energy Commission (CEC) estimates that a panel upgrade can cost between \$2,500 - \$4,000² and would likely be borne by the home or property owner. In a scenario where every house built before 1990 requires an electric panel upgrade, an investment between \$25 - \$40 billion

¹ California Energy Commission. *California Building Decarbonization Assessment - Final Commission Report*, August 13, 2021, pg 109.

² Building Decarbonization Coalition. *Towards an Accessible Financing Solution*. June 2020, pg 14.

dollars would be required. Another study on building electrification by the not-for-profit organization, Pecan Street, found that it would cost approximately \$100 billion to upgrade electric panels in the residential sector across the country. Regardless of the exact amount, it's important to note that just one component of electrification, updating the main electrical panel of a home, will require a tremendous financial investment. The figures shared here do not account for the cost of upgrading electric appliances that in many cases are more expensive than their gas counterparts. According to the Building Decarbonization Coalition, the cost to electrify low-to-moderate income (LMI) households in California would require investments in the magnitude of \$72 - \$150 billion over the next several decades.³

The figures above are representative for statewide electrification. Nevertheless, it is critical that County of Sacramento consider the economic impacts of retrofitting hundreds of thousands of households and commercial buildings and the need for sustained programs and incentives for property owners and businesses. A. O. Smith is pleased that the Revised Final CAP Draft includes the development of an incentive program in partnership with the Sacramento Municipal Utility District (SMUD) to reduce costs associated with any necessary electrical panel and/or branch circuit upgrades to support additional electric appliances for residential homes. Consistent and long-term funding for greenhouse gas (GHG) reduction programs and incentives is essential in aiding consumers in making different purchasing decisions and accepting new technologies.

III. MEASURE GHG-06: INCREASE ENERGY EFFICIENCY AND ELECTRIFICATION OF EXISTING RESIDENTIAL BUILDINGS

In order to reach carbon neutrality across the entire building stock in California, a massive investment will be required from both the public and private sectors given California's current building and electric grid infrastructure. Measure GHG-06 would require existing single homes to upgrade natural gas appliances or pieces of equipment to an electrically powered equivalent at the end of the current natural gas appliance's life cycle, or at the point of appliance replacement if earlier than the end of its life cycle. Additionally, the measure would require that permits for additions or alterations to existing building structure that include HVAC and/or water heating appliances will be required to include electrically powered appliances. And permits for additions or alterations that do not include HVAC and/or water heating appliances will be required to upgrade an electrical panel or branch circuit to support these electric appliances in the future. These requirements would take effect on the following timelines:

- Building permit applications filed on or after January 1, 2023, for buildings that are three stories or less; and
- Building permit applications filed on or after January 1, 2026, for buildings that are four stories or more.

Clarification of Applicability of the Measure to Single-Family and Multi-Family

³ CEC California Building Decarbonization Assessment - Final Commission Report, August 13, 2021, pg 84.

As currently structured, it is unclear that Measure GHG-06 requirement for replacement of the gas appliance at the end of life also applies to multi-family housing. The measure specifically calls out "single-family mixed-fuel homes" and not multi-family housing. The next sentence in the measure is about requirements for alterations and additions that would apply to both single family and multi-family dwellings. A. O. Smith seeks clarification on whether end-of-life replacements apply to multi-family housing.

Proposed Implementation Date

A.O. Smith supports the County's GHG reduction goals and recommends that the County take a pragmatic stepwise approach to building decarbonization. It is likely that the next energy code cycle adopted by the California Energy Commission will require new construction to be all-electric by 2026. However, and as mentioned earlier, most of the California building stock are older homes built in 1990 or earlier. Switching from a gas-fired water heater to a HPWH involves several factors including cost of the appliance and the age of the infrastructure which may require electrical upgrades. For property owners, the financial costs may be in tens of thousands of dollars, which may not be financially feasible. Thus, A. O. Smith recommends that the County begin an education and awareness campaign now and delay implementation to 2030 for the specific measure requiring existing building stock to switch from gas-fired water heater to a HPWH. This would allow time for the County to implement a streamlined installation process to effectively transition the market to electric storage water heaters.

Development of Prioritization for Replacements in Existing Building Stock

HPWHs do not yet have widespread adoption in California. In most cases, a property owner will replace their gas-fired heater when it is no longer functioning. Unlike other technologies where customers are accustomed to waiting (as in the case of adding solar or storage to a home), a water heater is a critical piece of home and public health infrastructure and residents expect replacement within hours, not days, or weeks, or months. The age and characteristics of some of the existing building stock can prove challenging to electrify. In addition to a panel upgrade, space constraints of an older home can make it difficult to install a HPWH. Most gas-fired water heaters are placed inside a small closet, whereas a HPHW requires more space for the appliance to function efficiently and as intended. Given that some homes may lend themselves to a cheaper, faster, and overall easier transition to electrification, A. O. Smith recommends a system of prioritization to help target homes that are immediately ready for replacement while continuing to develop plans for buildings that are harder to electrify. In the State of New York, for example, some local jurisdictions are pursuing a stepwise approach for building electrification by completing energy audits of buildings (residential and commercial) as a first step to identify, tier, and prioritize which buildings can transition to all-electric end-uses ahead of others.

Inclusion of Electric Storage Resistance Water Heaters

In addition to HPWHs, A. O. Smith recommends allowing eligible upgrades to also include electric storage resistance water heaters, which uses most of the energy it receives to warm water, making it more energy-efficient than its gas counterpart. Also, electric storage water heaters offer a natural ability to provide forms of thermal storage serving as a battery for the grid in both residential and commercial applications. Flexible demand water heaters have additional controls that allow a utility or third- party aggregator to control their energy use during the course of the day. Furthermore, electric storage resistance water heaters are typically more affordable and easier to install.

MEASURE GHG-07: ELIMINATE FOSSIL FUEL CONSUMPTION IN NEW RESIDENTIAL BUILDINGS

The Revised Final CAP Draft includes a measure to require prewiring for all-electric appliances and equipment in all new residential and commercial buildings constructed prior to January 1, 2023, effective upon adoption of the CAP. The proposed measure also will require all new residential construction in the County to be all electric per the following requirements subject to cost-effectiveness studies and feasibility analyses:

- building permit applications filed on or after January 1, 2023, for newly constructed residential buildings that are three stories or less to be all-electric buildings and
- building permit applications filed on or after January 1, 2026, for newly constructed residential buildings that are four stories or more to be all-electric buildings.

The measure also includes specific exemptions for all newly constructed residential buildings after 2023. A. O. Smith supports the inclusion of exemptions where all-electric may not be feasible due to construction costs, supply chain issues and affordable housing. A. O. Smith also recommends that the County delay implementation date for buildings with three stories or less to 2026. For buildings with four stories and higher, we recommend the implementation date go in effect in 2030.

IV. MEASURE GHG-04: INCREASE ENERGY EFFICIENCY AND ELECTRIFICATION OF EXISTING COMMERCIAL/NONRESIDENTIAL BUILDINGS AND FACILITIES

The Revised Final CAP Draft will require existing non-residential buildings to increase energy efficiency and electrify existing water and space heating appliances that currently use natural gas with the following timelines:

- building permit applications filed on or after January 1, 2023, for buildings that are three stories or less and
- building permit applications filed on or after January 1, 2026, for buildings that are four stories or more.

Retrofitting existing commercial (i.e., non-residential) buildings have similar issues as retrofitting a residential home: type and size of equipment, age of the building, and space constraints. However, the primary challenge in commercial applications is being able to match the customers hot water needs (i.e., load) in converting from a gas-fired product to a HPWH. In certain applications, the economics of the

conversion will not be favorable, including the potential to increase the annual operating costs to the business owner or property owner. According to a report on the assessment of building decarbonization by the CEC, small business owners and property owners of small and medium size commercial buildings could incur retrofit costs of up to \$40,000.⁴ Therefore, ensuring the correct application of the equipment will be critical.

A. O. Smith is pleased that this measure would include feasibility exemptions for manufacturing and industrial facilities as well as essential medical facilities. Allowing high efficiency gas condensing equipment to be used in limited cases where there is no viable HPWH alternative is a stepwise approach to reaching electrification goals. Using hybrid heat pumps with options for gas/electric back-up may also be necessary for certain space constrained and larger thermal load applications, such as health care facilities.

As with Measure GHG-07, A. O. Smith also recommends that the County delay implementation for buildings with three stories or less to 2026. For buildings with four stories and higher, we recommend the implementation date to go in effect in 2030.

V. STREAMLINED PROCESS FOR ELECTRIFYING EXISTING BUILDINGS

Californians need a streamlined, easy-to-use program to assist homeowners and property owners to successfully meet building decarbonization goals. Programs developed to incent customers to switch from gas-fired water heaters to HPWHs must be easy to use. Inspections of installations are critical to ensure that work was performed to required specifications and that appliances are working efficiently. Nevertheless, in-person inspections can further delay projects. A. O. Smith is encouraged that the City of San Jose has implemented an online permitting and inspection program for HVAC with heat pump technology which includes training for inspectors on heat pump technology installations so that they have the knowledge of what to look for in a quality heat pump installation. An online permitting process and remote inspections through virtual verification through pre and post pictures of installations should be considered by Sacramento County as it continues to build out its electrification programs.

VI. ADDRESSING THE SHORTAGE OF EXPERIENCED HPWH INSTALLERS

There is currently a shortage in California of plumbing contractors that have HPWH experience because the majority of water heating systems in California are gas-fired. The current pool of trained contractors and installers is limited which keeps the HPWH market from growing a consistent and stable workforce. As such, we recommend that local and state agencies work together to explore barriers to the market, including licensing requirements which can help to address the HPWH contractor shortage that many manufacturers see taking place currently.

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⁴ CEC Draft 2021 Integrated Energy Policy Report Volume I: Energy Efficiency and Building, Industrial, and Agricultural Decarbonization, pg 16.

PROVIDING MANUFACTURERS WITH BUSINESS CERTAINTY

The CEC assumes a turnover rate of 7 percent in water heaters in existing single-family homes and multi-family units, which equates to 861,000 water heaters being replaced annually. To capture even 10 percent of this market means installing 86,000 units per year. The number of HPWH units shipped annually across the entire country in 2020 was approximately 100,000. To convert the entire annual California market of water heaters to HPWHs would require a ten-fold increase of nationwide HPWH manufacturing capacity. These figures are meant to illustrate that meeting California's demand for HPWHs at even a modest pace would require significant ramp up of manufacturing and have vast impacts on the supply chain. This sort of increase takes time to orchestrate as new manufacturing capacity and production lines must be created. Therefore, having a clear and reliable policy scheme will be necessary to provide manufacturing capacity at this unprecedented scale.

VII. CONCLUSION

The transition away from utilizing natural gas for space and water heating, to electricity exclusively, presents significant challenges from funding and consumer awareness and acceptance to physical infrastructure and electricity grid modernization. A. O. Smith urges the County, state and other local agencies to take a pragmatic, clear and reliable approach as they build upon GHG reduction goals.

In addition to having consistent programs that provide incentives and consumer awareness and education on electric water heaters, we recommend that the County also focus on:

- Streamlining processes for installations.
- Providing manufacturers with the business certainty needed to make the necessary investments required to increase manufacturing capacity; and
- Continuing agency coordination to align federal, state, and local policies and rules to help achieve a smooth transition to reaching carbon neutrality.

⁵ ibid

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⁶ ENERGY STAR® Unit Shipment and Market Penetration Report Calendar Year 2020 Summary, pg 6.

Once again, A. O. Smith appreciates the opportunity to provide comments to the Revised Final CAP. We look forward to continuing the dialogue and working with the County to design a program that helps achieve our GHG reduction goals as effectively as possible.

Sincerely,

Joshua C. Greene

Corporate Vice President, Government and Industry Affairs

A. O. Smith Corporation

jcgreene@aosmith.com

From: Oscar Balaguer

To: <u>Clerk of the Board Public Email; PER. climateactionplan</u>

Cc: <u>County Executive</u>; <u>Josh Chatten-Brown</u>

 Subject:
 Sacramento Co CAP: 350 Sacramento Comments

 Date:
 Wednesday, March 23, 2022 4:31:45 PM

 Attachments:
 2022-03-23, 350SacCap RvsdFnIDft Cmmt.pdf

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear PER Staff and Clerk of the Board,

Please see attached comments addressed to County staff and Members of the Board, and distribute as appropriate.

Thank you very much.

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March 23, 2021

County Supervisors via Clerk of the Board

Honorable Don Nottoli: Chair, District 5

Honorable Phil Serna: District 1 Honorable Patrick Kennedy: District 2 Honorable Rich Desmond: District 3 Honorable Sue Frost: District 4

County Planning and Environmental Review

Via Email

REVISED FINAL DRAFT CAP: 350 SACRAMENTO COMMENTS

Dear Supervisors and Staff,

We appreciate this opportunity to comment on the County's February 17, 2022 Revised Final Draft Climate Action Plan (CAP). We recognize the current draft has considerable modified wording, and are gratified by some substantive improvements as noted; however we remain concerned about the CAP's continuing general problems, e.g.:

- Key measures are vague, unenforceable, deferred, and/or unfunded;
- Assumptions and conclusions about baseline conditions and measure efficacy, though now sometimes reduced, remain unsubstantiated;
- The County's major source of GHG, on-road auto traffic, is not seriously dealt with;
- The County incorrectly asserts its 2011 General Plan EIR adequately addresses the CAP's direct and indirect environmental impacts as a mitigation plan that will "streamline" environmental review of future projects.

We here incorporate by reference our earlier comments on the three previous drafts. Our current comments augment those previous remarks and focus on changes in the current draft. ¹.

Our most recent, October 8, 2021 comments remain valid except for references to statistics changed in the current CAP, and material superseded by these current remarks on new and revised CAP material.

² Earlier County commitments presented in the County's 2011 General Plan Update FEIR, and 2011 Phase 1 CAP *Framework and Strategy Document*, are detailed in our October 8, 2021 comments section III.A., "The Draft CAP is inconsistent with governing documents".

^{3:} Palmgren, Clais to Wiciams Goldberg, 1 Ph. DBR Boths Raminez, 2014 Williams com and DNV GL Energy Insights USA Ing. 620, 139 craffed Secretary Residential Appliances Saturation Stady (Palfanents) org

I. GENERAL COMMENTS

A. Comments applying to many CAP measures: The following deficiencies are common to many of the CAP's measures. They are further detailed below, but listed here in overview:

- There is a general lack in Appendix E or elsewhere of credible, transparent substantiation for claimed GHG reductions.
- No cost or funding source are identified for outreach, staff time, and other proposed County work.
- There is a general lack of interim targets to track whether implementation and GHG reductions are on schedule to meet the identified 2030 goals.
- There is a universal use of discretionary, aspirational language ("will", "should", "would", etc.) rather than binding statements affirming a commitment to implement ("shall", "must", etc.).

B. Future use of un-quantified measures will require separate CEQA analysis. The CAP states,

"... applicants who wish to utilize community measures for which GHG reductions have not been quantified must submit documentation ... subject to review and verification by the County or a qualified third party selected by the County" (p. 13)...

As defined in the CAP, non-quantified measures are not shown to be feasible, so cannot be considered CEQA implementation measures. Future use of such measures to claimpor project consistency with State standards is therefor subject to later project-specific CEQA review, not just verification by the County or "a qualified third party" through a currently undefined process apparently free of public or regulatory review.

II. MEASURE-SPECIFIC COMMENTS

A. REVIEW OF SELECTED QUANTIFIED MEASURES

Ten quantified measures provide 97 percent of the CAP's claimed County's GHG reductions. Some are better than others, but none of them clearly comply with all or most regulatory requirements and previous County promises. We review them below, as written, for consistency with selected CEQA requirements and County commitments², and summarize our conclusions in following Table 1. Measures are listed in the order of their claimed GHG reduction, from most to least.

Measure GHG-01: Promote and Increase Carbon Farming

Our October 8, 2021 comments discussed the previous version of this measure in some detail. The current version reduces the estimated participation by growers and the total GHG

² Earlier County commitments presented in the County's 2011 General Plan Update FEIR, and 2011 Phase 1 CAP *Framework and Strategy Document*, are detailed in our October 8, 2021 comments section III.A., "The Draft CAP is inconsistent with governing documents".

reduction, It remains otherwise unchanged, except for deletion of the previous draft's interim 2026 goal. It still is the largest contributor to the County's claimed GHG reductions, and suffers the deficiencies we detailed earlier, e.g.,

- it is entirely voluntary; there is no evidence for assumed grower participation rates; we
 have presented evidence that such participation rates are doubtful and that agricultural
 carbon sequestration is of dubious regulatory value; there is still no provision for
 conservation easements or other means to ensure any sequestration would be
 permanent, and County costs and funding sources are unstated.
- The measure is unsubstantiated, unfunded, and inconsistent with the County's 2011
 FEIR commitment that the CAP would include "economic analysis and detailed
 programs and performance measures, including timelines".

GHG-06: Increase Energy Efficiency and Electrification of Existing Residential Buildings

We applaud this measure in concept. It states the County will "adopt a ... requirement" that replacement residential space and water heating appliance shall be electric. The County would also undertake educational outreach and partner with SMUD. No details are provided for these aims.

- Please specify what form the "requirement" will take (e.g., building code amendment or other).
- The enforceable component of GHG-06 hinges on the use of permits to ensure replacement of gas appliances with electric models, but absent point-of home-sale checks or other enforcement mechanism, compliance is doubtful. Lack of permit compliance is a documented problem statewide, with less than ten percent of appliance replacements properly permitted³. GHG-06 does cite a target of establishing "a point-of-sale electrification retrofit program", but this seems to be an unintended carry-over from the previous draft.
- Please clarify whether point of home-sale or other enforcement is intended. If not, the claimed GHG-reductions from this measure should be appropriately reduced to account for unpermitted replacements with new gas appliances.
- The CAP credits GHG-06 with GHG-reductions of 140,819 MT CO2 e per year; however, the "target Indicator" is in another parameter, therms, and no conversion factor is provided.
- The measure without explanation seems to inappropriately identify "forecast natural gas consumption by 2026" as a target. To facilitate future determinations of whether this measure is on track, please identify year 2030 and interim milestone targets and indicators in a consistent parameter, e.g. MT CO2 e/yr.
- The measure is of dubious enforceability, unfunded, and inconsistent with the County's 2011 FEIR commitment that the CAP would include "economic analysis and detailed"

³: Palmgren, Claire, Miriam Goldberg, Ph.D., Bob Ramirez, Craig Williamson, and DNV GL Energy Insights USA, Inc. 2019. <u>2019 California Residential Appliance Saturation Study</u> (PDF p. 56). California Energy Commission. Publication Number: CEC-200-2021-005. https://www.energy.ca.gov/publications/2021/2019-california-residential-appliance-saturation-study-rass.

programs and performance measures, including timelines".

Table 1: Measure Compliance with Selected CEQA Requirements and FEIR / Phase 1 CAP Commitments

Y = Substantially Compliant N = Substantially Non-Compliant

Mea- sure No-	Measure Name	Pct of Co GHG Re- duct	Enforceable	Funded	Detailed	Time-Lines	Economic Analysis	LU-VMT Reduction
GHG- 01	Promote and Increase Carbon Farming	30	N	N	N	N	N	N
GHG- 06	Increase Energy Efficiency and Electrification of Existing Residential Buildings	29	N	N	N	N	N	N
GHG- 07	Eliminate Fossil Fuel Consumption in New Residential Buildings	10	YN	N	N	N	N	N
GHG- 24	Increase Organic Waste Diversion	8	N	N	N	N	N	N
GHG- 10	Implement Electric Vehicle Infrastructure Program	7	N	N	N	N	N	N
GHG- 11	Reduce Emissions from New Residential and Office/Business Professional Development Vehicle Miles Traveled	5	?	N	N	N	N	?
GHG- 12	Update Transportation System Management Plan for Nonresidential Projects	3	?	N	N	N	N	N
GHG- 04	Increase Energy Efficiency and Electrification of Existing Commercial/Nonresidenti al Buildings and Facilities	3	Y	N	N		N	N
GHG- 08	Require Tier 4 Final Construction Equipment	1	Υ	N	Υ	N	N	Z
GHG- 13	Revise Parking Standards for Nonresidential Development	1	Y	N	Y	N	N	Υ
Total		97						

GHG-07: Eliminate Fossil Fuel Consumption in New Residential Buildings

We strongly support the intent of this measures and its proposed ordinance, but it (and companion measure GHG-05) is of uncertain efficacy as stated because explicitly subject to future feasibility and cost-effectiveness analysis. We also believe its substantiation of assumed efficacy needs further explanation as discussed below.

- GHG-07, in other words, has not yet been determined be feasible, contrary to CEQA's most fundamental requirement for proposed mitigation measures.
- The proposed deferred determination, after CAP adoption, would be subject to the give-and-take of political discourse, so the critical details of the measures, and indeed whether they will be adopted at all, are not assured as CEQA requires.
- Substantiation of the measure as presented in Appendix E appears questionable. The assumed avoided therms is based on a forecast of 30,540 new dwelling units by 2030. The beginning period is unstated, but presumably coincides with the ordinance's effective dates for single- and multi-family homes January 1 of 2023 and 2026 respectively, and ends with 2029; i.e seven years for single- and four years for multi-family homes. However, SACOG projects that a total of 37,230 new DU will be needed through 2040. This measure seems to assume without explanation that over 80 percent of the growth expected through 2040 will occur in less than a decade during the 2030's. If inaccurate, this would mean the calculation of avoided therms could be inflated.
- <u>Early action measures</u>. The proposed feasibility analyses are on the critical path for ordinance adoption. They can and should proceed immediately, given the 2023 effective date. Cost-effectiveness analyses have already been prepared for the City of Sacramento and should accelerate needed review. Ordinance preparation and adoption should be expedited, consistent with the urgency of the Climate Emergency Declaration and without regard to CAP timing.
- The measure as written is unsubstantiated, unfunded, and inconsistent with the County's 2011 FEIR commitment that the CAP would include "economic analysis and detailed programs and performance measures, including timelines".

GHG-24: Increase Organic Waste Diversion

This measure would, "Increase local capacity for composting and processing of organic wastes". No description is provided for how this would be done, no costs or funding source are identified, and there is only a 2030 target with no interim milestones.

• The measure is unsubstantiated and inconsistent with the County's 2011 FEIR commitment that the CAP would include "economic analysis and detailed programs and performance measures, including timelines, including timelines".

GHG-10: Implement Electric Vehicle Infrastructure Program

This measure present a goal of installing EV chargers by "working with" unidentified third parties: cites a possible future plan update; and cites aspirational "infrastructure, fleet changes, funding mechanisms, utility coordination, and education" without further detail.

• This measure assumes (Appendix E) that 2,486 EV chargers will be in operation. No

basis for this number is presented, nor when that number will be reached; nor the period over which they are assumed to be operational. Further clarification is needed to verify the claimed GHG reductions.

• The measure is unsubstantiated and inconsistent with the County's 2011 FEIR commitment that the CAP would include "economic analysis and detailed programs and performance measures, including timelines".

GHG-11: Reduce Emissions from New Residential and Office/Business Professional Development Vehicle Miles Traveled

This measure would implement the County's *Transportation Analysis Guidelines*, which reflect the VMT-reduction thresholds of SB 743. The *Guidelines* would affect four large high-VMT greenfield projects currently planned in locations outside the County's adopted Urban Policy Area. There is no apparent way these projects can meet SB 743's goals, and GHG-11 would establish a "VMT mitigation program" to provide, "*VMT improvement projects or equivalent GHG emission reduction*" (emphasis added). Also see section II.B of these comments.

- GHG-11 lacks all detail and any protocol for ensuring it's efficacy, contrary to CEQA requirements
- The measure conflates VMT and GHG reduction, apparently assuming they are fungible. This appears to conflict with the terms of SB 375 and SB 743, both of which specifically direct VMT reduction.
- The measure as written would facilitate high-VMT sprawl with uncertain mitigation, and could thereby actually increase GHG emissions.
- The substantiation for this measure (Appendix E) states that the measure assumes all new development will achieve 15% VMT reduction, and "The County's protocol could amend the General Plan to add a policy requiring such reductions." No such caveat is included in the measure itself, throwing the enforceability of this measure into question.
- The measure is unsubstantiated and inconsistent the County's 2011 FEIR commitment that the CAP would include "economic analysis and detailed programs and performance measures, including timelines"

GHG-12: Update Transportation System Management Plan (TSMP) for Nonresidential Projects

This measure would update existing TSMP zoning code requirements. Possible future update areas are identified and a "monitoring and reporting mechanism" is mentioned but no specifics are offered on which to base GHG-reduction or enforcement efficacy.

- No information is offered on the efficacy or problems of the existing requirements and why updating is needed.
- Per Appendix E, this measure assumes a 4.2% reduction in VMT, but no basis for that
 assumption is provided. The vague statement, "Implementation could be achieved through
 a plan check or identifying a Transportation System Management Plan specialist" seems to
 indicate uncertainty in how implementation might be achieved, and therefor in its
 achievement, at all Further substantiation is needed.
- The measure is unsubstantiated and inconsistent the County's 2011 FEIR commitment that the CAP would include "economic analysis and detailed programs and performance

measures, including timelines.

GHG-04: Increase Energy Efficiency and Electrification of Existing Commercial / Nonresidential Buildings and Facilities

This measure proposes an ordinance by January 2023 requiring that existing non-residential buildings undergoing specified alterations or additions must switch to electric appliances and upgrade energy efficiency. Educational outreach would be provided to encourage voluntary energy efficiency/electrification retrofits.. Targets are identified for 2026 and 2030.

- We suggest that absent substantive justification, replacement with all-electric appliances on-burnout should be mandated for commercial applications, as is proposd for residential.
- Per Appendix E this measure assumes a voluntary retrofit rate of 10 percent. No basis
 for this assumption is provided. The bulk of energy reductions would be realized from
 mandatory upgrades during alteration work. Assumed reductions are presented for
 various building categories, but how these figures are derived is unexplained. In the
 interest of transparency further substantiation is required,
- The measure is unsubstantiated and inconsistent with the County's 2011 FEIR commitment that the CAP would include "economic analysis and ... timelines".

GHG-08: Require Tier 4 Final Construction Equipment

This measure would implement USEPA PM and NOx-reduction requirements for construction equipment, to be enforced through approval of plans and grading permits. Target indicators are identified for 2026 and 2030.

- Appendix E substantiation for this measure consists of several statistics, but how they
 are derived and used to calculate the claimed GHG reduction is unclear and
 unexplained.
- The measure is unsubstantiated and is inconsistent the County's 2011 FEIR commitment that the CAP would include "economic analysis and ... timelines".

GHG-13: Revise Parking Standards for Nonresidential Development

This measure would "study and revise" existing non-residential parking standards.

- No specifics of the proposed revisions are offered so it is unclear on what basis the claimed GHG-reductions were calculated. It assumes (Appendix E) a 2.5 percent reduction in commute VMT, but how this figure is derived is unstated.
- The measure is unsubstantiated and inconsistent the County's 2011 FEIR commitment that the CAP would include "economic analysis and detailed programs and performance measures, including timelines".

B. CARBON & VMT OFFSET PROVISIONS

Two in-lieu mitigation schemes are identified in the CAP:

- A Carbon Offset Program at CAP section 2.3
- A VMT Mitigation Program in GHG-11.

Use of these offset is mentioned in the CAP as a funding mechanism for other measures (e.g., GHG-04, GHG-06, GHG-10), and as a means of providing regulatory compliance (e.g., GHG-11, GHG-30).

We have the following concerns:

- California's most common offset protocols have been found to create illegitimate offsets, as cited in our October 8, 2021 comments.
- Such offsets have been found to be legally problematic by California courts, as cited in our October 8, 2021 comments; and the CAP does not indicate that the County recognizes or has a plan to address these legal constraints.
- Both offset proposals are entirely conceptual, without protocols or processes to ensure the legitimacy that courts have demanded.
- The VMT Mitigation proposal states that "VMT impacts" may be offset with, "... equivalent GHG emission reduction". This conflation of disparate VMT and GHG parameters is inconsistent with the requirements of SB 375 and SB 743 which explicitly direct reduction of VMT not GHG.
- The above concerns are more than theoretical. As the CAP states, "The County has several approved and pending master plans (Table 5) in locations that contribute to increased VMT and associated GHG emissions". Four of the pending planned projects (Jackson Township, Jackson West, GrandPark, and Upper Westside) lie in greenfields outside the County's adopted growth boundary and are very large, totaling over 55,000 new dwelling units (for comparison, SACOG projects that the unincorporated County will require a total of only about 37,000 new dwelling units through 2040).
- These outlying projects have the potential to generate an enormous amount of new VMT, far exceeding SB 743's thresholds and SB 375's regional VMT-reduction goals. Establishing, through adoption in the CAP, uncertain and undetailed offsets to mitigate these very large impacts could have significant adverse cumulative impacts. Such impacts can and should be considered at a programmatic level in the CAP, consistent with CEQA requirements.

III. APPENDICES

Appendix F. Additional options considered for the CAP. Appendix F (p. 1) erroneously states,

"Strategy options described in this section entail changes to the underlying assumptions used to prepare the CAP, such as modified land uses or setting targets for GHG reduction that were not identified as part of the Phase 1 Strategy and Framework document...."

In fact, as demonstrated in our October 2021 comments, section III.A.2, the County Phase 1 CAP addressed the land use/transportation/VMT/GHG nexus at length; noted the County's "direct authority over land use"; and identified infill land-use strategies to reduce GHG emissions (citing research documenting their efficacy).

By implication, a number of the options presented in Appendix F may in fact be feasible and supported by the Phase I CAP's *explicit* policy-level recognition of the importance of "modified land uses" to reduce GHG emissions.

Thank you for considering our comments.

Sincerely,

Justin Tweet, Co-Chair: 350 Sacramento CAP Team:

Oscar Balaguer, Co-Chair 350 Sacramento CAP Team

cc: Ann Edwards, County Executive Josh Chatten-Brown, CBCM



March 23, 2022

SupervisorSerna@saccounty.net nottolid@saccounty.net desmondrf@saccounty.net frostsu@saccounty.net KennedyP@saccounty.net

Subject: 2022 Climate Action Plan

Dear Sacramento County Supervisors:

Regarding the 2022 Climate Action Plan, we are concerned that some of the measures may negatively impact the industry's ability to meet the current housing demand in Sacramento County. We provide engineering services to many builders in Sacramento County and urge restraint in moving forward with the plan.

While the shortage and high cost of housing is already apparent, there is a shortfall of contractors and equipment that can meet the current construction demands. Imposing Tier 4 construction equipment requirements in 2023 would unnecessarily limit available equipment and restrict the ability to provide new housing to an already strained market. In this case, the benefits do not outweigh the costs.

Again, we urge restraint in moving forward with the plan.

If you have any questions or comments regarding this letter, please contact us and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated

Mark Gilbert, PE, GE

Principal

mg/ue/dt

From: arvail@sbcglobal.net

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Subject: 2022 Climate Action Plan

Date: Wednesday, March 23, 2022 10:19:52 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors:

RE: Proposed 2022 Climate Action Plan

It appears the right hand, which complains about the need for housing and the cost of same, isn't speaking to the left hand, which promotes carbon neutral housing that assures there will be fewer homes that cost more while causing people to commute longer distances to work.

Sincerely.

Alan R. Vail Managing Partner VCS Consulting, LLC PO Box 675 Fair Oaks, CA 95628

916-716-5522

arvail@sbcglobal.net

From: <u>Leah Frame</u>
To: <u>Supervisor Serna</u>

Subject: CAP

Date: Wednesday, March 23, 2022 2:13:16 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Hi Mr. Serna,

I'm writing to express my concern regarding the current county climate action plan. It does not seem like it has any meaningful plan for how to reduce traffic. Furthermore what about an updated environmental impact report? I urge you to work to make a better climate action plan that includes ways to enforce it and reduce traffic.

Climate change is something that keeps me up at night. You have the power to make a difference in ensuring our county does its part.

Thank you.

Sincerely, Leah Frame 4416 53rd St Sacramento 95820

Sent from my iPhone

From: <u>Stephanie Craft</u>

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Subject: County CAP for tonight"s discussion

Date: Wednesday, March 23, 2022 1:30:16 PM

Attachments: PastedGraphic-2.png

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.

Thank you!

Stephanie Craft, Marketing Consultant to the A/E/C Industry

M A R K E T L) N K

Stephanie Craft, MBA D: 916.681.1110 C: 916.690.5111 www.marketlinkaec.com craft@marketlinkaec.com From: Meghan Cook

To: <u>Clerk of the Board Public Email</u>
Cc: <u>Supervisor Serna; Lozano. Monica</u>

Subject: Public Comment - BoS Meeting 3.23.22 - Agenda Item 2

Date: Wednesday, March 23, 2022 2:20:12 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Phil Serna

County Supervisor, District 1

RE: Sacramento County Climate Action Plan (CAP)

Dear Supervisor Serna:

As a constituent of District 1, I wish to comment on Agenda Item 2 of the Board of Supervisors meeting scheduled for March 23, 2022. This item relates to the County's Climate Action Plan (CAP).

I find the CAP in its current form to be inadequate, given the threats that climate change poses to Sacramento residents both now and into the future. This CAP continues a pattern of delay, as it lacks meaningful timelines, performance metrics, or measures of enforcement. The CAP does not properly utilize the County's land use authority to limit urban sprawl or reduce future auto traffic. While the CAP does include promising electrification proposals, they are contingent on future analyses of cost and feasibility. This is unacceptably vague and furthers the unconscionable delay on County climate action.

This CAP fails to fulfill the commitments made by the County over a decade ago to adopt a detailed, enforceable CAP. In that time, County residents have suffered years of recordbreaking heatwaves, droughts, floods, and fires as a direct result of climate change. The people of Sacramento County cannot afford continued half-measures and procrastination.

I ask you not to adopt the CAP in its current form, but to instead direct staff to draft a CAP with clearly defined policies and timelines to reduce urban sprawl and vehicle miles traveled within the County. The CAP must incorporate well-defined goals, a strict timeline, a clear process for accountability and opportunities for public participation.

In 2020 the Board of Supervisors declared a climate emergency, which I applaud. This CAP must align with that sense of emergency. No other County efforts will be more impactful on the future health and prosperity of all Sacramento County residents. If we get this right, the CAP will provide economic co-benefits such as job creation, more desirable, livable cities, and the avoided long-term costs of disasters to property and public health. Thank you for your time and consideration.

Sincerely,

Meghan Cook Sacramento County Resident, District 1 From: <u>Steve Letterly</u>

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Subject: Sacramento County Final CAP Concerns Regarding Housing Affordability/Production and Support for BIA

Comment Letter CAP Workshop 3 23 22

Date: Wednesday, March 23, 2022 1:53:27 PM

Dear Sacramento County Supervisors:

Regarding the 2022 Climate Action Plan (CAP), as a practicing city planner I have concerns regarding certain CAP provisions and implementation of the California SB-8 Housing Crisis Act of 2019.

According to the SB-8 Housing Crisis Act of 2019 California housing has become the most expensive in the nation. "The excessive cost of the state's housing supply is partially caused by activities and policies of many local governments that limit the approval of housing, increase the cost of land for housing, and require that high fees and exactions be paid by producers of housing. Among the consequences of those actions are discrimination against low-income and minority households, lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration. California has a housing supply and affordability crisis of historic proportions" (CA SB-8 Housing Crisis Act of 2019 Section 65589.5 (1) (B)(C) (2)(A)).

As declared by the Legislature in SB-8 "...the housing crisis is robbing future generations of the chance to call California home, stifling economic opportunities for workers and businesses, worsening poverty and homelessness, and undermining the state's environmental and climate objectives. The crisis has grown so acute in California that supply, demand, and affordability fundamentals are characterized in the negative: underserved demand, constrained supply, and protracted unaffordability. California has accumulated an unmet housing backlog of nearly 2,000,000 units. The majority of California renters, more than 3,000,000 households, pay more 30 percent of their income toward rent and more than 1,500,000 households pay more than 50 percent of their income toward rent. California's overall homeownership rate is at its lowest level since the 1940's" (CA SB-8 Housing Crisis Act of 2019 Section 65589.5 (2)(A)(C)(D)(E)(G)).

The findings in SB-8 continue by stating that "An additional consequence of the state's cumulative housing shortage is a significant increase in greenhouse gas emissions caused by the displacement and redirection of populations to states with greater housing opportunities, particularly working and middle-class households. California's cumulative housing shortfall therefore has not only national but international environmental consequences" (CA SB-8 Housing Crisis Act of 2019 Section 65589.5 (2)(I)).

The CAP should assist not hinder housing production. As previously noted, the lack of housing production has substantial social and economic implications. The CAP measures may drive up the cost of housing in Sacramento. As a city planner striving to provide housing near jobs and adjacent to existing urbanized areas, I'm concerned that several provisions of the CAP will significantly hinder the ability to produce a range of housing to meet the unmet housing needs already in existence in Sacramento County. Consistent with the letter from the BIA I respectfully urge you to please:

• Oppose Requirements for Immediate Carbon Neutral Housing (Measure GHG 30) – This will stop housing and force homeowners to drive even further to Sacramento. There is no legal mandate for carbon neutrality. In fact both the Sacramento Metropolitan Air

Quality Management District and Bay Area Air Quality Management District guidance require new developments to reduce emissions but not to carbon neutrality

- Support feasibility criteria in meeting the conversion to all-electric appliances (Measure GHG 7)
- Oppose requirements for Tier 4 construction equipment as there is simply not enough equipment in the market to even meet current demand or to comply with this requirement in 2023. (Measure GHG 8)

Thank you

Steve Letterly

From: <u>John Lane</u>

To: Supervisor Serna; Nottoli. Don; Desmond. Rich; Frost. Sue; Kennedy. Patrick

Cc: Alberto Ayala; Clerk of the Board Public Email

Subject: BOS 3/23/22 Meeting, Agenda Item #3. Request modification of GHG-08 and TEMP-07 to avoid unintended

consequences.

Date: Wednesday, March 23, 2022 3:42:37 PM

Dear Supervisors:

Teichert has a long history of working closely and collaboratively with Sacramento County and our regional stakeholders on many issues including the issues of climate change and air quality. While the current Draft of Sacramento County Climate Action Plan (CAP) has many positive measures which will play critical roles in meeting County, the State and Federal climate and air quality commitments. The CAP also, however, contains two measures which I would like to address in their current form. While I recognize the intent in development of these two measures, I believe that both will have significant unintended negative consequences if left in their current form. With this brief correspondence, I hope the Board will ask staff to reconsider current language.

The two CAP measures in question:

• GHG 8 – REQUIRE TIER 4 OR CLEANER FINAL CONSTRUCTION EQUIPMENT

<u>Current Measure:</u> Require all Tier 4 final diesel engines or cleaner in new construction projects when electric-powered, hybrid, or alternatively fueled construction equipment is infeasible or unavailable.

Recommended Measure: Require all Tier 4 final diesel engines or cleaner in new construction projects **WHEN Tier 4 or cleaner engines are reasonably available AND** when electric-powered, hybrid, or alternatively fueled construction equipment is infeasible or unavailable.

Issue: While Tier 4 engines are available in most off-road construction equipment, it is <u>NOT</u> readily available or available at all at this time for their largest equipment such as Caterpillar D-11 dozers, 988 Loaders, and 637 Scrapers. This situation is not unique to Caterpillar for large off-road equipment. The problem resides in the fact that production of these large units are very limited due to the small demand and very high cost of these units. They are typically used only on large land clearing projects and other earth moving industrial operations such as large highway and infrastructure jobs, landscape scale housing, and projects such as Regional Sanitation. Although the manufacturers and operators will eventually be able to comply, currently contractors and rental agencies would not be able to comply at this time to meet the requirement. This would lead to more equipment and operators to complete large jobs in many cases which can lead to increased time, increased cost and more net emissions with more equipment in use for a given job.

<u>Recommendation:</u> Include the ability to demonstrate if Tier 4 equipment is not readily available for a given project or use. The County could establish the criteria for a contractor to demonstrate reasonable availability. This is current in practice in several areas. It allows for reasonable accommodation but also forces measure compliance as the engine manufacturers catch up with their big equipment.

• TEMP-07: USE COOL PAVEMENT TECHNOLOGY AND REDUCE THE EXTENT OF PAVED SURFACES

<u>Current Measure:</u> Require the use of cool pavement technology in both the replacement and construction of new roads, sidewalks, parking areas, and bikeways.

Recommended Measure: Prioritize the use of cool pavement technology in both the replacement and construction of new roads, sidewalks, parking areas, and bikeways **WHEN** it is demonstrated that a particular cool pavement technology will provide a net-positive environmental benefit.

Issue: While the issue of heat island effect is well documented and real, the use of cool pavement technology is very much a site by site solution. Mandating the use of cool pavement technology ignores impacts created by light albedo surfaces and ignores full life cycle cradle to grave GHG impacts. The text included in TEMP-07 supporting the statement above was pulled from a 2017 report from the Heat Island Group. When contacted this week in relation to TEMP-07, one author of the 2017 report noted that several points in that report were omitted in the justification for TEMP-07, specifically:

- Cool pavement materials can require more energy and carbon to manufacture than conventional pavement materials.
- The energy and carbon saved in buildings is typically much less than the extra energy and carbon needed to make the cooler pavements.
- Raising by 0.20 the albedo of all paved surfaces is projected to reduce summertime outdoor air temperatures in California cities by about 0.1 to 0.5 °C (about 0.2 to 0.9 °F), depending on city geography and climate.
- It is a challenge to create cool pavement materials that reduce life-cycle energy, carbon, and cost.

Recommendation: Remove the requirement to use cool pavement technology and evaluate technologies or action on a project by project basis to determine which technology (if any) are best suited to reduce the heat impact of a particular paved surface. In some cases one surface will provide a net positive environmental benefit and in another case, the same surface would create a net-negative overall impact. In many cases, simply providing adequate tree canopy would eliminate the need for a cool surface technology while providing other significant benefits. A global requirement ignores the science and the opinions of the very experts that are referenced in the measure.

I hope that the recommendations and reasoning provided above are informative and useful. If County staff or the Board are interested, Teichert staff will be available to meet with County or other stakeholders to discuss our comments and recommendations in more detail.

Sincerely,
John Lane
Environmental Manager
Teichert Materials
3500 American River Drive
Sacramento, CA 95864

<u>jlane@teichert.com</u>

(916) 484-3256 direct

(916) 837-3375 mobile

From: Rebecca Cotterman

To: Frost. Supervisor

Cc: Clerk of the Board Public Email

Subject: Sacramento County Climate Action Plan

Date: Wednesday, March 23, 2022 3:24:43 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Supervisor Frost,

I am concerned that the Sacramento County Board of Supervisors is not taking the county CAP seriously, and is trying to streamline projects without considering greenhouse gas emissions analysis and mitigation.

Reducing greenhouse gas emissions is extremely important, as we don't have time to delay anymore. The time for planning for climate change is now.

The auto traffic now and in the future must be reduced by infilling rather than out filling in the country growth boundary.

I also feel that the county is pandering to special development interests, as there is no green building program, and no development fee to fund the CAP. Excess approvals do not create new housing.

New housing is built on the whim of developers who now have the power to build when and where they want in their approved tracts.

There will be inefficient use of the greenfield tracts which will increase traffic and vehicle mileage, and can't be serviced with transit. I would rather see growth redirected to aging suburbs and underdeveloped areas near me which would facilitate my use of transit and maybe put some things within walking distance. I think that improvements to neighborhoods like mine are being ignored in favor of new, pretty housing projects.

In addition, the county has not fulfilled the California Environmental Quality Act because it has not had a proper environmental review. Measures are not enforceable. AND this CAP negates the county's own Climate Emergency Declaration.

I would very much like to see support for electric vehicle charging stations in the entire county. Many people would like to get electric vehicles at this time. The one at Fair Oaks library is always occupied. Even Placer county put charging stations at the Galleria.

I am a resident of Orangevale

Thank-you for your time, Rebecca Cotterman From: <u>Susan Solarz</u>

To: PER. climateactionplan
Cc: Rich Desmond; Smith. Todd

Subject: Sacramento County Climate Action Plan

Date: Wednesday, March 23, 2022 4:57:32 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Thank you for the opportunity to comment on the Sacramento County Climate Action Plan. I would like to commend the county for their most recent revisions that take into consideration the Climate Emergency Declaration and greater focus on environmental justice. I reside in Carmichael, and a resident in Supervisor Rich Desmond's district. I have been participating as a member of a team of environmental groups -- including ECOS, Sierra Club, Citizens Climate Lobby, and 350 Sacramento -- that have been meeting weekly to discuss the status of the county's CAP. I am a member of Sacramento Area Congregations Together (SacACT) 's Climate Justice Team. I retired from my career as a state scientist and regulator and spent my last years with the California Air Resources Board

We are all familiar with the threats posed to our world and to our communities from climate change. In my career, we worked to protect the most sensitive groups and the most vulnerable and we worked to engage these communities in finding solutions. We know that residents in many disadvantaged areas are likely to be disproportionately impacted by climate change. Many of the measures to reduce greenhouse gas emissions can significantly reduce impacts to disadvantaged communities. I am focusing my comments on these areas and will comment on a few additional areas briefly.

1. Infill Development: All people are entitled to live in areas with access to healthy food, medical care, schools, green spaces, and jobs.

Development should focus on these geographic areas, thus reducing the need for automobile travel over great distances to achieve basic needs. Rezoning may be necessary to achieve these goals. New affordable homes, especially of modest size and rezoning to allow multiple units such as duplexes in these areas rather than in areas outside the urban limit can reduce our greenhouse gas emissions.

Provide incentives to invest in our urban core using existing funding sources such as Green Means Go to address EJ areas such as West Arden Arcade and South Sacramento.

Funding infill from sprawl development is a double edged sword with developers paying for the mitigation. However, this creates a system which may rely on further development rather than curbing development.

- 2. Augmented Transportation Options In the Short Term (GHG 14, 15, 17):
 - Investing in our urban core can increase residential and commercial density to warrant creation of more bus lines and links to light rail for county suburban areas such as North Highlands and Carmichael.
 - I commend the county for its alternative transportation plan to improve pedestrian and bicycle alternative modes of transportation.
- 3. Electrification: Development of an ordinance requiring all electric new affordable carbon neutral homes and retrofit of existing homes must be a high priority for Near Term timeframe.
- 4. Investment in Tree Canopy in Disadvantaged Areas: will reduce the heat impact to people who may not have adequate air conditioning and cannot afford adequate

landscaping. Adding parks in disadvantaged areas will have the dual benefit of reducing heat impacts and improving quality of life.

- 5. Continue to Engage Representatives of EJ Communities: I support the involvement of EJ representatives on the Climate Emergency Task Force to guide in implementation of CAP measures and to implement measures to engage local communities.
- 6. Water: I applaud the electrification of water pump apparatus but also encourage working with water districts to further water conservation measures. Can we consider measures that allow greywater use for landscaping purposes?

Thank you again.

Sincerely, Susan Solarz 1260 Los Rios Drive Carmichael 95608 916-212-9265 From: <u>susanherre@gmail.com</u>

To: Nottoli, Don; Kennedy, Supervisor; Rich Desmond; Supervisor Serna; Frost, Supervisor; Clerk of the Board Public

Fmail

 Cc:
 Smith. Todd; PER. climateactionplan; Alexandra Reagan; "Ralph Propper"

 Subject:
 ECOS Comments on County CAP - testimony at CAP Workshop on Mar 23, 2022

Date: Wednesday, March 23, 2022 4:59:07 PM

Attachments: 220323 SENT ECOS LETTER to SacCounty - re CAP, RP testimony.pdf

Dear Supervisors:

Please see the attached letter from ECOS related to the County CAP for the CAP Workshop tonight, Mar 23, 2022.

Sincerely,

Susan Herre ECOS President



ENVIRONMENTAL COUNCIL OF SACRAMENTO Susan Herre AIA AICP, ECOS President

https://www.ecosacramento.net/ susanherre@gmail.com, 202-747-4087



Post Office Box 1526 | Sacramento, CA 95812-1526

March 23, 2022

nottolid@saccounty.net
SupervisorKennedy@saccounty.net
richdesmond@saccounty.net
SupervisorSerna@saccounty.net
SupervisorFrost@saccounty.net
ClimateActionPlan@saccounty.net
smithtodd@saccounty.net
BoardClerk@saccounty.net

Sent via email and County website

Drom Dem

RE: March 23, 2022 - Item 3, PLNP2016-00063. Workshop On The Communitywide Climate Action Plan

Dear Supervisors:

Below is the testimony of Ralph Propper, Past President of ECOS and current Chair of the ECOS Climate Committee before the Board tonight on the County's Climate Action Plan. Thank you for your leadership on this important issue.

Sincerely,

Susan Herre ECOS President

I am Ralph Propper. I was a research specialist in the Climate Science Section of the Air Resources Board, and subsequently taught chemistry at UC Davis. Although the extreme threat from climate change was obvious to me for many years, it's been frustrating to see the general reluctance to accept the fact that we need make major changes to survive. That's why I'm now chairing ECOS' Climate Committee.

As Barry Broome indicated, our county's economy will benefit from becoming a leader rather than a laggard in making these needed changes.

We're grateful for the effort that County staff has made developing this CAP draft. However, it doesn't address the biggest change we need to make: we need to increase housing in ways that don't increase commute distances and thereby make our air and climate less healthy.

A month ago, the Intergovernmental Panel on Climate Change issued its most dire report yet. UN Secretary-General Guterres said he had seen many scientific reports in his time, but nothing like this, calling it "a damning indictment of failed climate leadership,"

With that as a backdrop, let's consider the role of Sacramento County. Sacramento County is the largest jurisdiction by population in the six-county SACOG region. And the smaller cities and unincorporated areas have a million more people than the largest city, Sacramento.

So, where the County goes, I would say, so goes the region.

To go into a bit of context:

In 2004, the six counties created a nationally acclaimed plan called the Sacramento BLUEPRINT.... The spirit of the Blueprint is to integrate land use and transportation planning to curb sprawl, cut down on vehicle emissions, and give options for walking and taking transit.

In 2008, SB375 was passed by the legislature. It was meant to apply the BLUEPRINT principles statewide. Pursuant to this law, CARB directed for our region a 19 percent per capita reduction of GHG emissions from passenger vehicles by 2035.

As we know, SACOG is now developing the next iteration of the Blueprint. The goal is not deviate from the original principles but in fact to fulfill them over the next thirty years. This new Blueprint effort will consider three pathways –

Business as Usual, All-Infill, and something in between.

The region can make the goal. It can achieve the required 19 percent reduction – but only if Sacramento County does not continue its own Business as Usual approach. So it is a serious concern that the CAP is structured around the BAU approach.

It is not exaggeration to say we need to make major changes to survive. SACOG has told us our region barely met the GHG target in 2020. And we now have a Climate Emergency. The last 20 years focused on development in outlying areas. The next 20 must be focused on transit-served inner suburbs. There is plenty of capacity, and we can revitalize these areas so that people of all incomes can live decently without a car.

- If we miss the 19 percent, the region will be ineligible for fed+state transportation funds.
- The BAU approach will ultimately violate state law. The state may step in and override local jurisdictions as it has done for HOUSING.
- The County's tax revenue from inner suburbs will continue to decline.
- Finally, VMT from greenfield sprawl development will grow and will not be mitigated.

The County has a huge role in shaping the prospects for the region. I ask you to cease approvals of greenfield sprawl projects, and to commit to infill development, and to revise the CAP to reflect these major changes that are needed for us to survive.

Thank you very much for your leadership on this.

From: <u>Jordy Burns</u>
To: <u>Supervisor Serna</u>

Subject: Sacramento County Climate Action Plan (CAP)

Date: Wednesday, March 23, 2022 3:36:06 PM

Attachments: <u>image001.png</u>

image002.png image003.png

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors:

As a member of the Sacramento Regional Builders Exchange (SRBX), I request you support the points made by SRBX, BIA and ABC to do the following in the 2022 Climate Action Plan:

- Oppose GHG 30 Requirements for Carbon Neutrality would essentially implement a moratorium on future growth, without any prior analysis on economic, legal or planning impacts.
- Support GHG 7 SUPPORT feasibility criteria in meeting the conversion to all-electric appliances
- Oppose GHG 8 There is not enough Tier 4 construction equipment to meet current demand or to comply with this requirement.



Jordan Burns President

8655 Washington Blvd., Roseville CA 95678 o. (916) 624-8404

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Taylor. Todd

Subject:Comments to CAPAttachments:20220323180142044.pdf

From: Nicholas Avdis < NAvdis@thomaslaw.com>
Sent: Wednesday, March 23, 2022 5:48 PM
To: Smith. Todd < smithtodd@saccounty.net>
Cc: Defanti. David < defantid@saccounty.gov>

Subject: Comments to CAP

Todd, the attached will be provided to the Board this evening. Look forward to continuing this discussion.

Nicholas S. Avdis Of Counsel

THOMAS LAW GROUP

455 Capitol Mall, Suite 801, Sacramento, California 95814 One Kaiser Plaza, Suite 875, Oakland, California 94612

Phone: 916.287.9292 Fax: 916.737.5858 navdis@thomaslaw.com www.thomaslaw.com

TLG Thomas Law Group

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NICHOLAS S. AVDIS Of Counsel

Telephone: (916) 287-9292 Facsimile: (916) 737-5858 www.thomaslaw.com

March 23, 2022

Hon. Don Nottoli, Chair Sacramento County Board of Supervisors 700 H Street Sacramento, CA 95814

RE: Comments to Revised Final Draft Climate Action Plan

Dear Supervisors Serna, Kennedy, Desmond, Frost, and Nottoli:

On behalf of the Upper Westside Specific Plan Project, we appreciate the opportunity to provide comments for tonight's workshop on the long-awaited Climate Action Plan (CAP). As you know, the County has been in the process of preparing the CAP for several years with the goal of developing a plan that will significantly reduce greenhouse gas (GHG) emissions and prepare the County for climate-related impacts. The Upper Westside Specific Plan applicant team has participated in the County's planning process and looks forward to ultimate approval of a CAP. However, it appears the Revised Final Draft CAP before you this evening was amended following the Planning Commission hearing on October 25, 2021 to add a measure (GHG-30), which requires development projects that need an amendment of the Urban Policy Area and/or Urban Services Boundary (UPA/USB) to demonstrate carbon neutrality. This standard was incorporated without discussion by the Planning Commission or analysis in the CAP supporting documentation and would impose an undue burden on several master planning efforts currently underway that are already required to achieve robust GHG standards.

The Upper Westside Specific Plan Project presents a unique development opportunity in the County given its close proximity to existing development and the City of Sacramento downtown urban core. Locating growth in this area will result in vehicle miles traveled (VMT) that are below the County's significance threshold, as shown in the Transportation Impact Analysis prepared for the Project, leading to reductions in GHG. Placing additional requirements for carbon neutrality could make projects like this infeasible, leading to development being pushed further from the urban core and increased VMT, thus defeating the purpose and intent of the CAP. Given that projects outside the USB/UPA already have a high bar to meet in order to be considered for approval, we respectfully request that GHG-30 be removed from the Revised Final Draft CAP, particularly as nothing in the analysis done to date shows that such a measure is needed to advance the climate goals of the County.

Inclusion of GHG-30 in the CAP Was Not Adequately Analyzed

Following several years of development and stakeholder outreach, the first Draft CAP was released for public review on March 8, 2021. The County then released the Final Draft CAP for public review in September, 2021. The Final Draft CAP contained a new section in Appendix F, identifying "Strategy Options" that could be incorporated into the CAP "at the discretion of the County Board of Supervisors." (Final Draft CAP, Appendix F, p. F-1.) Among these options was Strategy F.1.2, Communitywide Carbon Neutrality, which would require all new development in the County to be carbon neutral. This strategy aligned with the County's Climate Emergency Declaration — a resolution passed in 2020 committing to achieving carbon neutrality in the County by 2030. A projection of emissions under this strategy in Appendix F shows that it would achieve the 2030 goal.

A second strategy option, Strategy F.1.3, Carbon Neutral New Development, was for future development projects needing an amendment to the UPA and/or USB to demonstrate carbon neutrality. Appendix F did <u>not</u> undertake any quantitative (or qualitative) analysis of Strategy F.1.3's impact on achieving the 2030 goal.

The Planning Commission considered the Final Draft CAP at a public hearing on October 25, 2021. County staff informed the Commission that they could recommend the Final Draft CAP as drafted, recommend disapproval, or recommend approval with one of the strategy options. There was significant debate during the Planning Commission meeting over whether the CEQA review undertaken was adequate and whether to recommend the CAP in its then-current state. After multiple votes failed to garner a consensus, the Commission passed on the item, moving it to the Board of Supervisors without a recommendation, without requesting that staff revise and return the matter to the Commission, and without providing further guidance. During the hearing, there was no vote or serious consideration of Strategy F.1.3, Carbon Neutral New Development.

On February 17, 2022, the County released what it referred to as the Revised Final Draft CAP. The Revised Final Draft CAP incorporates Strategy F.1.3 into the proposed CAP itself, as GHG-30. Again, Strategy F.1.3 was not recommended by the Planning Commission, nor meaningfully discussed at all during the hearing. The Revised Final Draft CAP offers no explanation for why it is now included in the CAP. Nor does it explain why Strategy F.1.2, which would have required all development to meet this standard, was not incorporated.

Without analysis, the County cannot show that imposition of GHG-30 is necessary to achieve the County's GHG reduction goals. Importantly, no quantification of whether GHG-30 would actually reduce GHG emissions per capita has been prepared. As the CAP's Revised Addendum makes clear, a main purpose of GHG-30 is to "discourage" growth outside of the UPA/USB. (Draft Addendum, pp. 3-6, 3-27, 3-79.) As such, GHG-30 could push development from areas like the Upper Westside Specific Plan area that benefit from proximity to the urban core, to areas further away from existing development, thus increasing regional VMT and GHG.

Further, and as discussed in more detail below, development outside the USB/UPA is already subject to a robust planning process that does not apply to other areas of the County. Again, if development outside the USB/UPA became infeasible based on carbon neutrality requirements and was pushed to areas of the County that do not have the same robust requirements, including GHG-30 in the CAP could result in increased GHG emissions per capita.

Existing Restrictions Already Address GHG Emissions from New Development

As referenced above, the County's current General Plan contains extensive requirements for development proposed outside of the UPA and/or USB through a master planning process. The master planning process includes requirements to regulate GHG emissions for such projects. Specifically, General Plan Policy LU-120 requires projects requiring amendment of the UPA and/or USB to meet one of two performance metrics: either a criteria-based metric or a VMT/GHG reduction metric. The former contains standards for unit density and proximity to transit services and employment that must be met. The Upper Westside Specific Plan has set a goal of achieving 24 points out of a possible 24 points as prescribed by the adopted General Plan, when only 18 out of 24 is required.

As such, under these existing requirements, any project that would require amendment to the UPA and/or USB must already achieve GHG reduction criteria. These criteria are only applicable to these projects and the County has provided no analysis to show that these existing measures would be inadequate to achieve the County's CAP goals.

The Upper Westside Specific Plan submitted its analysis of consistency with General Plan Policy LU-120 as part of its Master Plan Initiation Application and the applicant team has done significant work to complete technical studies and refine the Project to achieve consistency with design criteria contained LU-120. Adding a carbon neutrality standard at this stage would change the rules upon which the Project was created at a point when significant time and resources have been invested. Thus, adding a requirement for carbon neutrality would impose an undue burden on this Project that is already required to achieve robust GHG standards

* * * * *

In sum, GHG-30 was added to the CAP without any explanation, transparency, or recommendation by the Planning Commission. It has not been quantitatively analyzed and could have the unintended effect of pushing development to areas further from the urban core, allowing for increased VMT and GHG emissions per capita, and undermining the goals of the CAP.

Further, projects outside the USB/UPA like Upper Westside are already subject to robust GHG reduction requirements and have been proceeding with their master planning efforts based on an understanding of those requirements. These planning efforts would be significantly burdened if required to now change course in an attempt to achieve carbon neutrality.

We therefore respectfully request that GHG-30 be removed from the Revised Final Draft CAP before it is considered for approval. We appreciate the County's attention to this important issue and look forward to continued work with County staff in the CAP approval process.

Very Truly Yours,

THOMAS LAW GROUP

Nick S. Avdis

From: Sacramento Sierra Club
To: PER. climateactionplan

Subject: Comments 3.23.22 County Climate Action Plan Workshop

Date: Wednesday, March 23, 2022 10:37:14 PM
Attachments: CAP 3.23.22 Comments BOS CAP workshop.docx

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

I'm forwarding my comments from this evening for inclusion in the CAP documents and am asking that the copy also be shared with the Supervisors.

Thank you.

Barbara Leary, Chair
Sierra Club Sacramento Group
909 12th Street, Suite 202, Sacramento, CA 95818
www.sierraclub.org/mother-lode/sacramento
sacramentosierraclub@gmail.com
Follow us on Facebook and Twitter!



March 23, 2022 Comments Shared at the Board of Supervisors Workshop on the proposed Climate Action Plan

Good evening Chair Nottoli and Supervisors, on behalf of the Sierra Club I'd like to thank staff and you for the time spent in meeting with us and other members of the environmental community throughout this process.

ACKNOWLEDGEMENTS

The Club was pleased to find the inclusion of some of our requests – such as mandating carbon neutral new development, albeit in limited areas, and we agree that this concept needs much further work but this should be implemented. We also appreciate the focus on improved urban forestry. However, the Club has ongoing concerns regarding land use and conservation, and the importance of addressing the negative climate change effects that will result if strong measures are not taken.

We are concerned about the Board's commitment to make some very tough decisions about how our region will meet housing demands without exacerbating an increase in greenhouse gas production and loss of lands that help to reduce carbon from our atmosphere.

• VALUE OF WORKING LANDS, HABITAT, FORESTS, AND THE 30X30 plan
Section 2 of the CAP emphasizes CONSERVATION OF OPEN SPACE with its statement about Greenhouse
Gas reduction strategies: "Natural and Working Lands: Sequester carbon dioxide from the atmosphere
by focusing on habitat preservation, increasing urban forest and connected open space, and carbon
farming." We support aggressive actions to preserve the forested lands in our region; though they only
account for 2 percent of the land area in our County they represent 8 percent of the carbon stored in
our area. We support the idea of Carbon Farming. However, a more aggressive plan for farmers to
engage in this on their lands must be created, and the land must be maintained as farmland to do this.

It is disappointing to find that Appendix F finds actions such as supporting the American River Parkway and other sustainable land use strategies infeasible. Additionally, the County's decision not to participate in the Natomas Basin Habitat Conservation Plan has limited the chances of success for the plan to actually implement section 2 strategies.

We encourage the County to become engaged with the Statewide 30x30 Plan which identifies the Sacramento Valley Region as having many important lands for conservation -including the Oak woodland habitats and grasslands throughout the Valley. Your participation in this effort can lead to implementation of the important conservation deemed infeasible in Appendix F.

IN COUNTY MITIGATION BANK – CARBON OFFSETS

The CAP mentions limiting mitigation for carbon production, yet CAP Section 2.3 allows for out of County offsets in areas outside of the County's control. All mitigation for loss of sequestration and increases in carbon must be done within the County.

DEVELOPMENT PATTERNS AND URBAN FORESTRY

Urban forestry can be an environmentally practical and economically efficient solution to increase carbon sequestration. However, newer high density, small lot housing developments in the County

preclude the planting of effective shade trees. Incorporating spaces for the planting of larger trees must become a greater part of housing and commercial development.

PUBLIC COST OF GREENFIELD DEVELOPMENT

The CAP acknowledges SACOG's 2020 Metropolitan Transportation & Sustainable Communities Strategy which calls upon jurisdictions in our region to lower GHG emissions "by accelerating infill development, reducing vehicle trips, and electrifying remaining trips." Yet, many pending projects are far from existing or planned transit corridors.

We must acknowledge the costs to the public that occurs with development into our greenfields. Although the initial outlay for infrastructure is arranged by the developers, the costs are ultimately shifted to homeowners via Mello-Roos assessments, school bonds, the increased cost of automobile ownership and operation, and ongoing tax measures to support maintenance and expansion of roadways.

The more economically sound model is the infill, transit-oriented model.

WE WANT TO SEE IMMINENT AND LONG-TERM POLICY CHANGE

Discretionary projects outside of the UPA/USB have been allowed to move forward and therefore are depleting the County's capacity of existing and potential carbon sequestering lands. We ask that the Board commit to reducing greenhouse gas emissions by establishing better development practices and improving carbon sequestration by protecting these lands.

We ask that the Board direct staff to begin implementing many of the CAP's measures now.

Nothing prevents the County from beginning to reduce its emissions by calling for the completion of the Community Emissions Reduction Program as soon as possible, instituting changes in Zoning Codes, and other legislative measures.

Thank you for your time.

Barbara Leary, Chair Sacramento Group, Sierra Club

From: Koehn. Jill

To: PER. climateactionplan

Subject: Sacramento Environmental Commission Comments on CAP Feb 2022

Date: Thursday, March 24, 2022 8:39:16 AM Attachments: Revised CAP Comments 3 21 2022.pdf

Hello,

Attached please find the SEC comment letter on the Revised Final Climate Action Plan (Feb 2022). Thank you.

Jill Koehn
Executive Secretary
Environmental Management Department
11080 White Rock Road, Suite 200
Rancho Cordova, CA 95670
(916) 875-8584 desk
(916)875-8513 fax
Emd.saccounty.net



SACRAMENTO ENVIRONMENTAL COMMISSION

Mark White, Chair Richard Hunn, Vice Chair Dr. Anthony De Riggi Stephanie Holstege Thomas J. Malson Laura Nickerson Kayla Rabey Eric Rivero-Montes

A JOINT COMMISSION APPOINTED BY:

County of Sacramento City of Sacramento City Folsom

City Folsom
City of Elk Grove
City of Galt
City of Isleton

Sacramento County, Office of Planning and Environmental Review Attention: Todd Smith, Principal Planner

827 7th Street

Sacramento, CA 95814

Transmitted via email to ClimateActionPlan.net on 3/24/2022

March 21, 2022

Subject: Sacramento Environmental Commission Comments on the Sacramento County Revised Final Climate Action Plan (February 2022)

Dear Mr. Smith,

The Sacramento Environmental Commission (SEC) submits the following comments on the February 2022 Climate Action Plan (CAP). The SEC met on March 21, 2022 to discuss and approve submitting these comments.

The SEC appreciates the effort to address and incorporate our September, 2021, comments on the Final Draft CAP. The improvements to the 2021 CAP include:

- Recognizing the County 2030 goal to achieve net zero carbon emissions,
- Acknowledging that the proposed CAP reduction measures will not achieve the 2030 zero carbon emission goal,
- Providing a general time frame to implement the proposed greenhouse gas (GHG) reduction measures,
- Reducing reliance on the carbon farming measure to offset existing and future emissions (Measure GHG-01),
- Re-enforcing the commitment to achieve the County 2030 net zero carbon emission goal by implementing actions through the County Sustainability Manager, the Climate Emergency Mobilization Task Force, and the Climate Emergency Response Plan (CERP).

The SEC reiterates our September, 2021, recommendations that the CAP be found adequate and complete. However, we continue to be concerned that the CAP be considered "Qualified" because of the lack of detail addressing how the measures will be implemented. Our concern is directed to the implementation of Measures GHG-01, GHG-06, GHG-07, GHG-11, and GHG-24 which will yield a cumulative GHG reduction of 397,563 MT CO₂e/year, or about 82% of the total planned GHG emission reductions in the CAP.

The SEC is supportive of many GHG reduction measures described in the CAP, however, without further information we are unsure if many measures can be implemented. The SEC suggests that priority be given to those measures that reduce GHG emissions, rather than offset existing emissions.

Two topics of concern warrant further consideration beyond the level addressed in the CAP:

- 1) Vehicle use is identified as the single largest emission sector in the County, yet the proposed reduction to this sector is minimal when compared to other GHG reduction measures. The County can substantially reduce future GHG emissions by encouraging infill development and requiring use of public transportation systems to serve new development in undeveloped areas. The reduction of vehicle miles traveled can substantially reduce the overall GHG emissions that may occur.
- 2) The CAP fails to identify the use of plastics as a significant GHG source. Because plastic is made from fossil fuels, continued production and consumption of single-use plastic products results in a substantial contribution to GHG emissions. Local measures to reduce consumption, increase recycling, and promote alternative products can ultimately play a significant role to reduce our overall GHG emissions.

We encourage the County to immediately proceed developing implementation plans to determine the CAP measures' feasibility and effectiveness. The SEC assumes that the CERP would become the vehicle for approving implementation of the individual CAP GHG reduction measures.

We strongly urge that certain measures be immediately implemented to begin reducing carbon emissions as preparation of the CERP proceeds. We believe certain measures can reduce GHG emissions while allowing for further planning and design of the more complex measures, such as carbon farming or transportation system improvements.

For instance, implementation of Measure GHG-09, *Trade-In GHG-Emitting Landscaping Equipment*, should be expedited with a firm commitment to replace County-operated equipment and ultimately equipment operated by private businesses. The program could be coordinated with interested municipalities located in the County, the Sacramento Metropolitan Air Quality Management District, and the Sacramento Municipal Utility District for increased effectiveness and sharing of knowledge from past trade-in programs.

The expedited implementation of this measure would also benefit affected environmental justice groups who own and operate many landscaping businesses, enabling them to contribute to reducing emissions from this significant GHG source. Other measures which should be immediately implemented include the 17-Government Operations GHG reduction measures identified in the CAP. Their implementation should proceed as soon as practicable within budget limits.

The SEC remains very interested in the implementation of the County's GHG reduction efforts. We intend to work closely with the County Sustainability Manager and offer the SEC as a platform for future public participation on this matter. We are encouraged by the County's commitment to complete the CAP and proceed with implementing the GHG reduction measures to achieve the 2030 net zero carbon emission goal.

Sincerely,

Mark White SEC Chair

Mull

Richard Hunn SEC Vice Chair

Richard Hann

From: <u>Laurie Rivlin Heller</u>
To: <u>PER. climateactionplan</u>

Cc: Kennedy, Supervisor; Rich Desmond; Frost, Supervisor; Supervisor Serna; Nottoli, Don

Subject: Post Workshop comments on the County CAP Date: Sunday, March 27, 2022 3:53:47 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Supervisors,

Post Workshop, I would like to add 2 comments re the County CAP:

- 1) Multiple contractors and realtors told you that sufficient equipment needed to make all buildings all-electric does not yet exist. Why not make Sacramento a manufacturing and distribution center for this equipment? And for training the next gen to install them? When the market tells us over and over they are in need of a product, some people see a business opportunity.
- 2) I am very sympathetic to problems related to implementing electrification *retrofits*. Not only do I live in an older home, but my late husband was a general contractor in Sacramento, who specialized in remodels. But avoiding this difficult transition in the future is one reason I support requiring *new* construction to be all-electric *now*. Why spend money to install gas infrastructure that will be abandoned a few years later?

Both of these problems could be addressed with infill development. Empty shopping centers could be transformed into training schools. Empty factories could be converted to new plants that make electric hot water heaters.

I heard the builders ask for it.

L. Heller

On Tue, Mar 22, 2022 at 9:32 PM Laurie Rivlin Heller < <u>laurierivlinheller@gmail.com</u>> wrote:

Dear Sacramento County Board of Supervisors,

It always disappointed me and my colleagues at the California Natural Resources Agency, when Sacramento County and the City of Sacramento rarely applied for funding from any of our grant programs. And when they did apply, often they were not competitive.

The programs I refer to are administered by Caltrans (Environmental Enhancement and Mitigation Program), the Strategic Growth Council (Urban Greening), the Natural Resources Agency (River Parkways) and the California Cultural and Historical Endowment (Museum Grant Program), among others. These programs award grants to local governments ranging from \$250,000 to over \$1 million, for capital projects that mitigate and adapt to climate change.

If you click on the links I've provided, you'll see the kinds of projects that do get funded. I personally visited many of them. These cities, counties, water districts, public works and parks departments, universities etc. are successful for a number of reasons. I'll mention just

a few of their best practices.

- 1) They develop projects hand-in-hand with local nonprofits, land trusts, environmental groups and neighborhood associations. These agencies can demonstrate extensive, long-term community support which stems from *their* long-term commitment to the communities in which the projects are based.
- 2) They have done their homework. Proposals are based on actual assessments which have identified the community's need, and are a puzzle piece in the long-term march toward sustainability. They are detailed, with timelines, budgets and matching funds already secured from partner agencies.
- 3) They have read SB 375 and take sustainable communities seriously. The projects reduce GHGs and focus on vulnerable neighborhoods. The projects get drivers out of cars, get cars off the road, give roads a diet. They improve neighborhoods that flood or suffer from heat, they reduce air pollution with trees and open spaces so people are happier and healthier. They expand public and active transportation to existing communities, where needed. They recycle historic buildings and make them available to local residents rather than paving a new parking lot.

Here are three examples:

- The Council for Watershed Health (LA County) received \$294,395 to retrofit an alley, alleviate flooding by converting an alleyway to pedestrian-friendly greenspace including walking path and bioswales to capture/infiltrate urban runoff and stormwater. The project will provide a safe pathway to nearby schools and catalyze other green street retrofits in the neighborhood. The project partners include Tree People; UC Riverside; US Bureau of Reclamation; California Department of Water Resources; Metropolitan Water District Southern California; City and County of Los Angeles; and Water Replenishment District of Southern California.
- City and County of San Francisco received \$848,059 to eliminate two lanes of traffic through an existing park, to be replaced with native plants, bioswales for onsite water retention/infiltration, and to create safe pedestrian/bicycle paths to schools and commercial centers. The project removes 10,000 sf impervious asphalt and replaces it with permeable surfaces. Partners include San Francisco Municipal Transportation Authority; San Francisco Bicycle Coalition and WalkSF.
- LA Bureau of Sanitation was awarded \$500,000 to expand the urban forest by planting 1,600 trees and other vegetation in a disadvantaged and park-poor community. New trees will be planted along a former rail line, redesigned by Metro Transit as a new multi-purpose path. The project will transform an urban landscape into a green corridor with native species, will sequester carbon, increase biodiversity, reduce temperatures, infiltrate stormwater, and encourage public transportation.

I show you this because much of the dream that is this Climate Action Plan intends to seek grant funds for implementation. But the groundwork has not been laid. The assessments have not been done. The partnerships are not in place. The community support is yet-to-be. There is no track record of commitment to climate-vulnerable communities. There is no vision for a new, clean-energy Sacramento, nor implementation steps to get there.

Yet, the CAP specifically states the County will seek funding from

- SACOG's "Green Means Go" which pays for infrastructure upgrades in infill areas;
- EPA's Safe Drinking Water which reduces exposure to lead in drinking water in

underserved communities;

- · Urban Greening grants which fund green infrastructure with priority to projects benefiting disadvantaged communities;
- Water Board's Funding Program to address drought and contamination in water systems serving low-income households.
- DWR's Integrated Regional Water Management grants for planning and implementation with disadvantaged communities.

This CAP is a plan to plan. Plus it's so full of caveats, it's clear the County intends to continue business as usual.

So much for climate change.

Laurie Heller

Etgen Family
3600 Whitney Avenue
Sacramento, CA 95821-3128
916-489-3864

March 25, 2022

Supervisor Phil Serna 700 H Street, Suite 2450 Sacramento, CA 95814

Dear Supervisor Serna,

Please ensure that the details of the Climate Action Plan allow our region to create a better community while addressing climate change. We first addressed the problems, and then provided solutions.

New Development

Problem: More housing is needed that rewards transit riders with lower rent and safer transportation and better service. There is no evidence or research in the transit literature to show that reducing minimum parking standards alone will increase transit ridership. Experience shows that higher densities without pedestrian, transit and cyclist access simply increase the amount of cars parked on the shoulders of surface streets on what had been used by pedestrians and bicyclists. This, and the speed of traffic, has seen bike and pedestrian numbers plummet on roads in the unincorporated section of the County. If anything, reducing minimum parking standards will increase automobile dependence by making rents cheaper and more money available for cars while making biking and accessing transit far more unsafe.

Solution: Any increase in density needs to be at (1) existing frequent transit service, at least 15 minutely seven days per week, and contingent on (2) marking bike-lanes, (3) providing sidewalks, crosswalks and shelters for pedestrians and bus riders, with onsite parking that both (4) has an electric vehicle charging port at each parking location and (5) all parking is available at an optional additional charge. These transit and safety improvements (1-3) should be paid through developers fees. The requirement for electric vehicle charging (4) can be paid through the parking fees (5).

Traffic Calming

Problem: The county currently refuses to implement any traffic calming measures on four lane roads. No speed bumps, crosswalks, or stop signs are allowed to be added to four lane roads. This needs to change. An appalling example is the four and five lane sections of Whitney Avenue. Whitney Avenue has transit service, the #82, and four schools, but because the County used imminent domain to widen the road, County planners now refuse to make them safe for pedestrians, cyclists, and transit riders.

Solution: Traffic calming needs to be implemented on the widest, fastest roads immediately. Roads with four and five lanes that have transit service and nearby schools must be the highest priority. These

corridors need speed enforcement using cameras, traffic calming, marked crosswalks for pedestrians' and transit riders' safety and marked bike lanes for cyclists' safety.

Bus Rapid Transit

Problem: Light rail misses most major traffic generators in Sacramento County. The most pressing need for bus priority measures, including bus lanes and signal priority are to connect light rail to the major traffic generators that it misses. In addition to using new bus ways and signal priority to connect light rail to major traffic generators with timed-connections and frequent, 15-minutely service, buses would then branch to create routes in the unincorporated portions of the county that each connect a mall and college to light rail. This can be done using Regional Transit's existing level of bus service. With faster and more reliable connections among major traffic generators and between them and light rail, the utility of the bus network in the unincorporated portions of the county would be dramatically improved.

Solution: Bus Rapid Transit, using new bus ways and signal priority, is needed for faster and more reliable connections (1) from University/65th Street Light Rail Station to CSUS, Arden Fair Mall, and Arden Del Paso Light Rail Station, (2) from the Blue Line at Watt/I-80 or Roseville Road to American River College, (3) from Marconi/Arcade Light Rail Station to Country Club. More capacity for buses and riders is needed at major traffic generators (CSUS, Arden Fair, American River College and Sunrise Mall) with well-lit waiting areas and off-street places for buses to connect. Each route would also connect a mall and college to light rail. Once the County builds bus ways, Regional Transit can provide the service using existing service hours.

Amtrak Service for Northeastern Sacramento

Problem: The downtown Amtrak station does not serve northeastern Sacramento County. A station on Watt Avenue at McClellan Business Park, with the region's most plentiful free parking, would create new riders and increase the Corridor's revenues. A quarter million people are within five miles of a station in northeastern Sacramento. Only three stations on the Corridor would serve more people. Residents of Sacramento County have funded the Capitol Corridor since its groundbreaking and are some of the poorest people in our region. A station advances both environmental and social justice objectives.

Solution: The county needs to build a station for the Capitol Corridor in northeastern Sacramento County on Watt Avenue, with the region's most abundant parking, serving a quarter million people within five miles. Once a station is built by the County the station's operations can be funded from additional fare revenue and existing tax revenue.

Ben-Et-

Thanks for your time addressing these pressing matters!

Sincerely,

Elizabeth Etgen

Elizabeth Etgen

Benjamin Etgen

William Etgen

Milliam Etgen

Taylor. Todd

Subject: Comments on County CAP and Drive to Net Zero

Attachments: 220330 Sac CAP Presentation Todd.pdf; SacEV attachment for Todd .pdf

From: Guy Hall < Guy.Hall@sacev.org > Sent: Thursday, March 31, 2022 6:10 PM
To: Smith. Todd < smithtodd@saccounty.net >

Cc: Dwight MacCurdy < <u>DWM22@sbcglobal.net</u>>; Cynthia Shallit < <u>cynthiashallit@gmail.com</u>>; Peter Mackin

<rpmackin2000@gmail.com>; Lundgren. John <lundgreni@saccounty.gov>

Subject: Comments on County CAP and Drive to Net Zero

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

March 31, 2022

Mr. Todd Smith
Principal Planner
County of Sacramento

Dear Todd:

Thank you very much for taking the time to engage with us regarding the County's Climate Action Plan. We appreciate the County's support of efforts to fight climate change by getting more electric vehicles on the road.

SUMMARY

Recognizing that each gas vehicle produces ~4MT of GHG/year, the best bang for the buck is to transition County employees and the community at large to zero emission vehicles, so we strongly recommend having County-wide EV adoption targets for these groups.

The gap between the CAP target and the County net zero target can be largely achieved by transitioning gas cars to clean EVs through the normal vehicle turnover process at low cost.

We believe the recent CAP is an excellent document with smart cost-effective solutions for Climate Actions. Accelerating EV adoption provides an effective, achievable, timely and affordable aspect of GHG reduction. Overall, there should be overriding targets for EV adoption, including by County staff and residents. There are several critical components in the CAP we support and we suggest additional measures, emphasis, and targets. Even though there are incentives and education programs by national, state, and regional governments and agencies, auto manufacturers, utilities, and more to support EV adoption, Sacramento County should leverage these efforts and implement programs with incentives, education, and outreach. County efforts can amplify the broader EV sea change to bring about significant GHG reduction and improved transportation for all.

Along these lines, we are attaching suggestions on 8 of the proposed GHG Measures and 7 of the GOV Measures for County adoption. The suggested steps can help Sacramento County develop a strong effective, achievable, timely and affordable CAP. We are willing to provide clarifications and

work with County staff on specific CAP wording for each of our suggestions. Also attached are four slides that provide a high level overview of how EVs can contribute to net zero.

We would like to set up a time to go over specifics on how we can close the gap between the CAP target and the County's net zero target.

Thank you for your consideration,

Guy Hall Dwight MacCurdy Cynthia Shallit

MEASURE GHG-04: INCREASE ENERGY EFFICIENCY AND ELECTRIFICATION OF EXISTING COMMERCIAL/NONRESIDENTIAL BUILDINGS AND FACILITIES

- Energy Efficiency and Electrification options should include EV charging infrastructure in every instance. EV charging infrastructure is especially important to achieving GHG reductions if technology to install all-electric water and space heating appliances is not available. Installing EV charging infrastructure can significantly reduce the CO2 footprint of commercial and MFH buildings when associated transportation is taken into account.
- The Target Indicator for electrification upgrades should include EV charging infrastructure.

MEASURE GHG-10: ELECTRIC VEHICLE INFRASTRUCTURE PROGRAM

- Sacramento Electric Vehicle Association was one of the eight entities that contributed to the "Sacramento Area Plug-In Electric Vehicle Collaborative's Electric Vehicle Readiness and Infrastructure Plan" in early 2017. The plan proposed charging levels based on EV model availability at the time. With the recent substantial increases in model availability, and with an even brighter EV future than was envisioned at the time, this plan needs updating to support the County CAP goals to accelerate transition of community and commuter vehicles to EV by 2030.
- Support of underserved communities is a key aspect of GHG-19 for new construction (residential and workplace) and should be a top priority. The majority of apartments / condos and older homes will not be helped by GHG-19, additional support is necessary for underserved communities via a sufficient number of appropriately located workplace EV charging stations and neighborhood Fast Charging, aligned with user dwell times. Given the current number of FC chargers is over 260¹, the Target Indicators of 160 installed by 2025 and 400 installed by 2030 are far too low. Outside of workplace and home charging, Level 2 charging is no longer a strong contributor to EV adoption.
- Target Indicator: The number of chargers is not the end goal. Rather the goal is a
 transition of vehicles from fossil fuel to electric. As stated at the top of our message the
 County needs to have an EV adoption goal, which this measure supports. The County EV
 registration goal should exceed its portion by 50% of the state's 2030 goal. This would be
 25% of all vehicles on the road to be electric by 2030. That is about 210,000 EVs on the
 road by 2030.
- When planning implementation of EV charging, the speed of charging, and time required to charge, should match the EV parking dwell time of the EV driver at that site, which may require a mix of EV charging stations with different charging speeds.
- The county should have goals for medium and heavy-duty vehicle charging / refueling as well. The county should conduct research and assess the state's Zero Emission Truck (ZET) goals, and how those goals will impact Sac County. Sacramento County can be a hub for ZET charging as the state capitol, with reasonable electric rates and a gateway to Reno/Tahoe/80 region.

GHG-11: REDUCE EMISSIONS FROM NEW RESIDENTIAL AND OFFICE/BUSINESS PROFESSIONAL DEVELOPMENT VEHICLE MILES TRAVELED

 We applaud the efforts to reduce VMT, but VMT should not be the sole mechanism to reduce GHGs. Encouraging transition to clean EVs for those unable or unwilling to reduce VMT should be a priority as EVs substantially contribute to GHG reductions.

¹ As of December 31, 2021, the countywide count is 1,813 (DCFC: 262, L2 1,464, L1: 87) This count appears to be for public charging stations and includes the City of Sacramento, SMUD, SACOG, SMAQMD, State DGS and others.

MEASURE GHG-12: UPDATE TRANSPORTATION SYSTEM MANAGEMENT PLAN FOR NONRESIDENTIAL PROJECTS

 We applaud the efforts to reduce trips generated by new projects as part of the TSM plan, but we recommend that EVs be included as a key component in the TSM planning process.

MEASURE GHG-13: REVISE PARKING STANDARDS FOR NONRESIDENTIAL DEVELOPMENT

 We support the appropriate sizing of non-residential parking. For parking spaces included in new construction, appropriate EV charging infrastructure needs to be included in the parking standards revisions, as described in GHG-19.

MEASURE GHG-14: IMPROVE TRANSIT ACCESS

- Low power EV charging should be provided at all light rail stations to reduce GHG along with VMT and parking congestion elsewhere.
- Consideration of locating mobility hubs in conjunction with transit and light rail.

MEASURE GHG-19: EV PARKING CODE

- The EV Parking Code proposal in GHG-19 is one of the **most impactful actions in the CAP**. It, along with GHG-10, opens EV adoption to residents in older homes, new apartments and condos, which comprise nearly a third of our community and are common in underserved communities.
- The phrase "EV charging capability" should be "EV Ready" as defined by the CalGreen code.
- The start date should coincide with the 2022 code update effective 1/1/2023.

MEASURE GHG-27: SHARED ELECTRIC VEHICLES AT AFFORDABLE HOUSING PROJECTS

We support this measure, particularly for residents who don't have their own vehicle.
 Experiencing electric vehicle driving is highly influential in the decision of a future vehicle purchase. The lower cost of EV ownership (new, used or shared) should be an option for all.

MEASURE GOV-EC-01: EMPLOYEE TRANSPORTATION PROGRAM

- We stress the importance of an education and incentives program for zero-emission commuters. We are glad to see the focus is on reduction of transportation related GHG.
- "Create two new staff positions", not just "an assignment", under the Chief of Fleets (or County Executive Office) to establish and operate a County Employee Transportation Demand Management Program" with their primary focus and goal to achieve a transition to zero emission employee commuting transportation. This is a low-cost investment that will yield high GHG reductions.
- The Transportation Demand Management Program should include acceleration of EV Adoption by employees. The target should show eight yearly steps towards a 2030 goal of 100%. Eight years ago, there were 19 EV models with only one having a range of over 200 miles and most had ranges under 100 miles. Today there are 87 models with most having over a 200-mile range or plug-in hybrids.

- We concur with providing incentives to employees who regularly walk, bike, or drive EVs.
 While a 10% participation goal (by 2030?) is mentioned, the 2030 goal assuming an average vehicle ownership is under 7 years² should be 100% participation by 2030.
- Develop online videos about buying, driving, and maintaining EVs, that are hosted on the County's website and linked to state
- The Target Indicator should reflect 100% participation of employees by 2030 with annual goals.

RE GOV-EC-02: TRANSIT SUBSIDY PROGRAM

- A similar EV adoption target should be set such as an alternative to use of gas vehicles. Incentives should match those in other subsidy programs.
- This measure should be integrated with GOV-EC-01.

MEASURE GOV-EC-05: PROVIDE CARPOOL-AT-WORK INCENTIVES

 Any carpool-at-work incentive should only apply if the shared transportation mode is zero emission.

MEASURE GOV-FL-01: FLEET CONVERSION PROGRAM

- The County fleet conversion program to zero emission vehicles should be at least as foresightful as the City of Sacramento program and should not be a laggard in contributing to reduced GHG emissions.
- Implement an Employee Workplace EV Charging Program wherever County employees park, aligned to employee dwell time or other low-cost approaches. This program should avoid the cost of monthly network fees whenever possible.
- Install EV charging stations at existing County parking facilities for visitor use, aligned to EV driver dwell time whenever possible.
- Replace every light duty vehicle that is a fossil fuel vehicle with a zero emission vehicle when the fossil fuel vehicle is retired, or sooner if possible.
- Establish an overall goal of transitioning the County fleet to zero emission vehicles with annual metrics to be established. The overall County Implementation and Target for new zero emission vehicle procurements should meet or exceed all State regulatory fleet requirements with the following over-arching goals:

FY 2023-24 - 2024-25 25% FY 2027-28 - 2025-29 50% FY 2029-30 - 2030-34 75% FY 2034-35 & thereafter 100%

Exceptions to purchasing zero emission vehicles should be EXTREMELY LIMITED, and
only if the replacement vehicle has significantly lower GHG emissions than the fossil fuel
vehicle it replaces, or it uses renewable fuels or advanced technology hybrids with the
lowest GHG emissions. Prior reasons that EVs are not suitable or are not convenient to
charge, are no longer applicable for many duty cycles due to technology improvements.

MEASURE GOV-BE-03: EMPLOYEE GREEN BUILDING TRAINING

² According to IHS, the average length of ownership was a record 79.3 months, or nearly seven years.

 2021 CalGreen Building codes for charging infrastructure are significantly more complex than in prior years. Proper interpretation and implementation of the code will require training for employees in the County permitting office, as well as for architects and electrical engineers submitting permit applications, which should be provided by the County.

MEASURE GOV-BE-04: ELECTRIFY MUNICIPAL BUILDINGS

• The plan to be developed and implemented to electrify County-owned facilities should include actions to provide EV charging infrastructure for employees and visitors.

RE GOV-AR-01: AIRPORT FLEET REPLACEMENT

- This measure needs to be greatly expanded to go beyond shuttle buses³ and should include the transition to all electric vehicles, including all ramp and ground support vehicles, such as catering trucks, pushback tugs, belt loaders, baggage tractors and fueling trucks. They should purchase demonstration models by the end of 2022.
- As described above relating to equity, the county needs to provide charging stations for all airport employees. As with other staff, the county needs to focus on getting more airport workers into EVs. Most of these workers are private contractors and airline employees. Incentives, outreach, education, and marketing efforts, similar to those used with County employees will help.
- All county operated airports should be included: Sacramento International, Mather, Executive, and Franklin Field.
- The county should work with the vehicle rental agencies to create the infrastructure and program necessary for EV rental showcases at the airport.
- The Target Indicator should be far more aggressive and align with measure GOV-FL-01.

If you wolde like any additional information or would like us to discuss anything further with you, let us know. We look forward to working with the County to implement the Climate Action Plan.

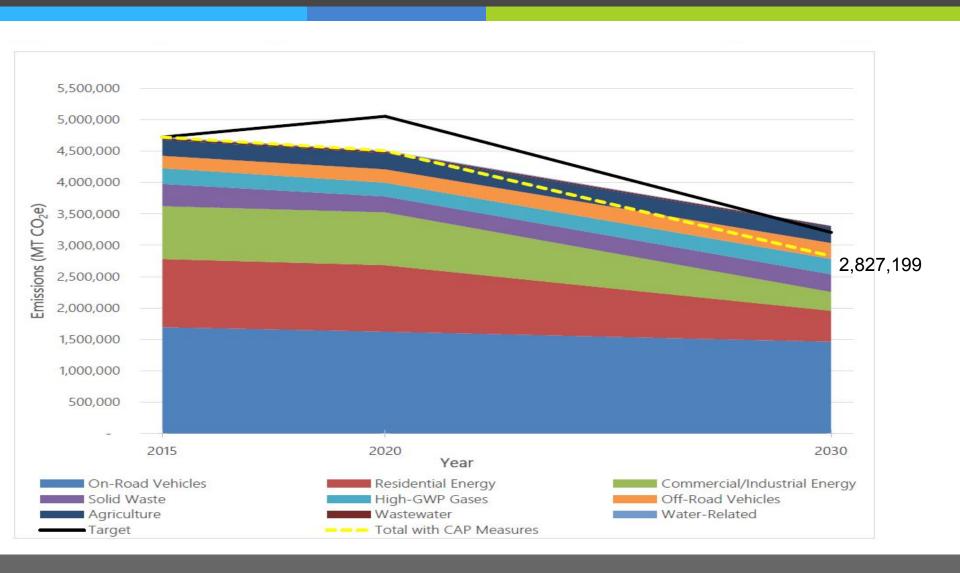
Sincerely,

Sacramento Electric Vehicle Association Guy Hall Dwight MacCurdy Cynthia Shalliti Peter Macklin

4

³ Target Indicator: 15 zero-emission electric shuttle buses purchased by 2030

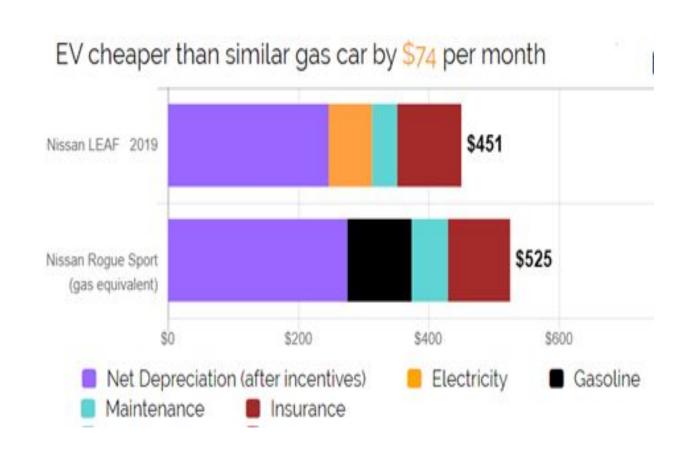
Challenge -Address the big target



CLIMATE ACTION PLAN: SEA CHANGE CAN SUPPORT CAP

EVs Can Help

- Sacramento's1.6M cars on the road
- ~4 Metric tons
 per year per gas
 car
- Leverage natural vehicle turnover



87 EV Models Available Today

Auto Manufactures are shifting their production & investments

Demand for EVs is outstripping supply. Carmakers ramping up now.



30 EVs by 2025 & only EVs by 2035;



10 EVs on market this year;



40% EV sales by 2026, 65% by 2030;



Halted F150 Electric reservations at 200,000



Will only launch EVs from 2026. *All sales to be EV by 2030.*



Double EV sales to 200,000 in 2022

John McElroy, Autoline TV

"Clearly we're in the last stages, (it's going to last a while), but we're in the final stages of the ICE age."

Kristen Balasia, VP S&P Global.

"To say the BEV landscape is growing exponentially is an understatement,"

CLIMATE ACTION PLAN: SEA CHANGE CAN DRIVE TO ZERO

Situation

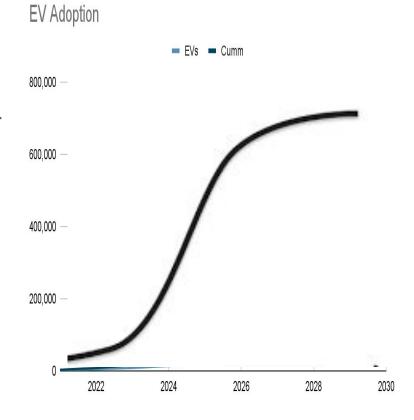
- CO2 Gap for Carbon Neutrality is 2,800,000 MT / y 2030
- Sacramento County has ~ 800,000 cars

Target

- Need ~ 700,000 ICEV -> EV by 2030
- Average Turnover <7 years 115,000 per year

Requires:

- EV Charging for all new construction
- Program Resources
 - Education and incentives
 - EV showcases
 - Experienced partners
 - Staffing



From: <u>Tom Suchanek</u>

Clerk of the Board Public Email

Subject: CONCERNS REGARDING THE COUNTY"S CLIMATE ACTION PLAN

Date: Wednesday, May 11, 2022 8:46:14 PM

Attachments: image001.png

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

PLEASE SEND THIS TO ALL 5 SUPERVISORS:

To: The Sacramento County Board of Supervisors (Serna, Kennedy, Desmond, Frost, Nottoli)

Re: The Sacramento County's CLIMATE ACTION PLAN

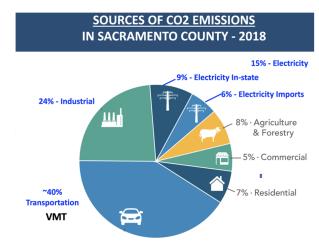
Date: May 11, 2022

From: Dr. Tom Suchanek (Climate Scientist, UC Davis)

I am a Climate Scientist from UC Davis who has been researching the effects of environmental contaminants my entire career and was previously the Director of the Environmental Contaminants Division at the US Fish & Wildlife Service Headquarters in Sacramento. Over the past 25 years I have focused specifically on carbon dioxide as the most critical global contaminant of our time, causing worsening Climate Change impacts every year. We DO NOT have time to waste in solving this problem. And Sacramento should take a lead role in setting an example for the entire State for a Climate Action Plan that will produce true accomplishments in reducing carbon emissions.

I am also a Sacramento County resident who is **deeply concerned** about the current status of the proposed <u>Sacramento County's Climate</u> <u>Action Plan</u>. I also represent about 100 people from District 3 who feel the same way. Our concern is that after several failed attempts, the Climate Action Plan is still not a functional document that accomplishes the goals of protecting us from rapidly increasing impacts of Climate Change. PLEASE either correct the deficiencies in the Climate Action Plan (see below), or <u>DO NOT</u> Vote to approve it! Below are some examples of the concerns that I and many others have about the plan:

WE KNOW that the most significant SOURCE of Green House Gas (GHG) Emissions in Sacramento County comes from transportation in the form of Vehicle Miles Traveled (VMT). See pie graph below:



As such, we need to reduce as much of these emissions as quickly as possible to avert the worst impacts of climate change. One of the biggest concerns is the expected increase in vehicle miles travelled as Sacramento County has promoted by encouraging SPRAWL to outer GREENFIELD areas instead of planning more INFILL into the URBAN landscape, thus creating more VMT between the urban and rural areas of the County, resulting in greater GHG emissions. Exactly opposite of what needs to happen.

Below are more concerns that address related issues that need to be addressed in the plan before any Vote should be cast to approve it.

- The CAP simply ignores Sprawl: Notwithstanding many "general" plan policies supporting Infill, the CAP ignores this issue except for GHG-30's, \$1K "Infill fee" per sprawl housing unit, which defeats the purpose of reducing Greenfield sprawl...
- Sac County Violates Its Own Limits: On where development should be placed to avoid increased Sprawl which leads to increased Vehicle Miles Traveled (VMT).
- Existing Sprawl Entitlements: Sacramento County has already approved/entitled almost 50,000 Greenfield dwelling units (DUs), far above the market demand.
- Additional Pending Projects: 55,000 more DUs are planned beyond the County's adopted growth boundary. The County's massive
 commitment to Sprawl will continue drawing investment away from Infill, producing more Sprawl that will permanently increase future VMT
 and GHG emissions.
- Just Say "No": The only way the County can prevent increasing its GHG emissions, and at no cost to taxpayers, is to stop approving more unneeded Sprawl development into Greenfield areas.
- Wild Areas: This plan also violates the state goals to protect Wild Areas (30% protected by 2030)... And we all know how important it is to have natural places for people to decompress and de-stress in nature!

• Electrification: We also know that electrifying MANY MORE vehicles and providing adequate charging stations for those vehicles is a MUST... and SOON. While the CAP does mention "aspirational" plans to accomplish some of these changes, there are no solid specific measures to accomplish these goals within a reasonable timeframe. 2030 as an "end goal" does not "cut it"! Where are INTERIM GOALS that are mandated to be met? Etc...

THE BOTTON LINE: CAP Deficiencies:

The CAP's measures are not credible: Not one of the CAP's measures meets the credibility test: they are simply not enforceable or assured...

They have no "teeth" to ensure they will be implemented in a timely manner.

These measures need to be: clearly stated, sufficiently detailed, with assumptions and conclusions that are substantiated, with a clear mandated implementation plan, and funded.

• LEGAL CONCERNS:

- 1. Sacramento County is not providing due diligence on the CAP's legality, potentially exposing the County to an expensive law suit.
- 2. Chatten-Brown, Carstens (CBC), the legal firm that successfully challenged San Diego's CAP in three appellate decisions, has stated to Sups in writing that Sac Co's CAP is similarly unlawful.
- 3. Sac County's Counsel addressed the CAP's legality at the 9/23 Workshop, but it was clear she had not done an independent analysis, and explicitly deferred to Ascent, the County's environmental consultant.
- 4. <u>Consultant's conflict of interest:</u> Ascent Environmental is the same firm that miss-advised San Diego County regarding their CAP, resulting in a Huge law suit that ended up costing San Diego County citizens millions of dollars in monetary and related programmatic changes to settle. Sacramento County risks that same outcome if we take the advice of the County's current consulting firm, Ascent Environmental.

PLEASE take these concerns/recommendations seriously. All of our futures and yours too, depend on it!

AGAIN: Please either correct the deficiencies in the Climate Action Plan, or **DO NOT** Vote to approve it!

THANK YOU...

Tom Suchanek In Carmichael

Tom Suchanek, Ph.D.
University of California, Davis
Dept. of Wildlife, Fish and Conservation Biology
and
Coastal and Marine Sciences Institute
(Bodega Marine Laboratory)
thsuchanek@ucdavis.edu
916-812-7025

Website: TomSuchanek.net
Researchgate:

researchgate.net/profile/Tom_Suchanek

From: <u>Diane Wolfe</u>

To: <u>Clerk of the Board Public Email</u>
Subject: Vote No on the current CAP

Date: Wednesday, May 11, 2022 8:26:54 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

(Please insure distribution to all members of the Board of Supervisors.)

Supervisors:

Please stand up to short sighted economic interests and have the courage and the determination to develop and adopt a

Climate Action Plan that will truly move the county forward to meet Greenhouse Gas reduction goals.

Please put a stop to facilitating sprawl into rural lands, which increases vehicular travel and the burning of gasoline. Focus on infill

developments with appropriate augmentation of public transportation.

Please recognize the litigation risk of the current plan. Please learn from the costly mistake San Diego County made. Use their loss

as a clear model for how our plan needs to be changed to avoid the same costly outcome.

Thank you for taking this on!

Diane Wolfe

From: <u>Pamela McClanahan</u>

To: Clerk of the Board Public Email
Subject: Urgent Climate concerns... CAP
Date: Friday, May 13, 2022 5:48:35 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors,

(Please send to ALL five (5) Supervisors)

Hello,

As a native Sacramento County resident, I am deeply concerned about the current status of the proposed Sacramento County **Climate Action Plan**.

I am concerned that it does not protect us adequately from climate change and endangers our future.

Please either correct the deficiencies in the Climate Action Plan (see below), or **<u>DO</u> <u>NOT</u>** let it be approved.

Below are examples of the concerns I have about the plan:

We need to be focused on minimizing sprawl which leads to increased VMT and protecting our precious wild areas.

- Sac County Violates Its Own Limits: On where development should be placed to avoid increased Sprawl which leads to increased Vehicle Miles Traveled (VMT).
- **Wild Areas:** This plan also violates the state goals to protect Wild Areas 30% protected by 2030... And we also know just how important it is to have natural places for people to decompress and de-stress in nature!
- Existing Sprawl entitlements: Sacramento County has already approved/entitled almost 50,000 Greenfield dwelling units (DUs), far above the market demand.
- Additional Pending Projects: 55,000 more DUs are planned beyond the County's adopted growth boundary. The County's massive commitment to sprawl will continue drawing investment away from infill, producing more Sprawl that will permanently increase future VMT and GHG emissions.
- The CAP ignores Sprawl: Notwithstanding many general plan policies supporting infill, the CAP ignores this issue except for GHG-30's, \$1K "infill fee" per sprawl housing unit, which defeats the purpose of reducing greenfield sprawl...

Please protect Sacramento County and correct the CAP.

Pamela

CELL # 916-694-9451 PamelaMcClanahan.com
LoveMattersMost.org
PamelaMcClanahan4@gmail.com

From: <u>Margie Tomenko</u>

To: <u>Clerk of the Board Public Email</u>

Subject: CONCERNS REGARDING THE COUNTY"S CLIMATE ACTION PLAN

Date: Saturday, May 14, 2022 9:56:53 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

PLEASE SEND THIS TO ALL 5 SUPERVISORS:

To: The Sacramento County Board of Supervisors (Serna, Kennedy, Desmond, Frost, Nottoli)

Re: The Sacramento County's **CLIMATE ACTION PLAN (CAP)**

From: Margie Tomenko, concerned resident of D-3

Sacramentos Board of Supervisors should set a good example for the entire State for a Climate Action Plan that will produce true accomplishments in reducing carbon emissions. However, this CAP version is not it.

The proposed Climate Action Plan, even after revisions, does NOT accomplishes the goals of protecting us from the rapidly increasing impacts of Climate Change. It does not contain any "action", and there is no "plan" in this document. PLEASE **DO NOT** approve it as-is.

The plan needs to address sprawl. Sacramento County OK'ed almost 50,000 Greenfield dwelling units. This is way over the demand. Along with more units is the vehicle increase, and that means more Green House Gases to contribute to more Climate Change.

Wild areas need to be protected. These areas are so critical for the population to be able to enjoy nature. And the goal to protect 30% of lands by 2030 needs to be considered in the CAP.

The existing CAP does not have any "teeth" in it. Flowery words that don't have any "action" in it. Such as providing electrical charging stations. To

"aspire" is nice, but give us numbers and a firm, measurable plan. Not just nice words.

Using the same firm that ill-advised San Diego's CAP cost taxpayers a fortune in legal fees, and it was found unlawful. So, why are we using the same firm?? This existing CAP is simply a lawsuit just waiting to happen.

Unless the CAP can be made a true "action plan" with firm commitments that are measurable, **Please Vote NO on this revision of the CAP!!!!!**

Thank You.

-Margie Tomenko

Sent from my happy little iPad

From: <u>Michael McClanahan</u>

To: Clerk of the Board Public Email
Subject: Sac County CAP - NEEDS CHANGES!!
Date: Tuesday, May 17, 2022 11:21:01 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors,

(Please send to ALL five (5) Supervisors)

Hello,

I am a Sacramento County resident who is deeply concerned about the current, proposed Sacramento County **Climate Action Plan**.

It doesn't protect us from climate change and puts our future at risk.

Please either correct the deficiencies in the Climate Action Plan (see below), or DO NOT let it be approved.

We need to be focused on minimizing sprawl which leads to increased VMT.

- Sac County Violates Its Own Limits: On where development should be placed to avoid increased Sprawl which leads to increased Vehicle Miles Traveled (VMT).
- Existing Sprawl entitlements: Sacramento County has already approved/entitled almost 50,000 Greenfield dwelling units (DUs), far above the market demand.
- Additional Pending Projects: 55,000 more DUs are planned beyond the County's adopted growth boundary. The County's massive commitment to sprawl will continue drawing investment away from infill, producing more Sprawl that will permanently increase future VMT and GHG emissions.
- The CAP ignores Sprawl: Notwithstanding many general plan policies supporting infill, the CAP ignores this issue except for GHG-30's, \$1K "infill fee" per sprawl housing unit, which defeats the purpose of reducing greenfield sprawl...

I hope you will take this matter seriously and promptly make the necessary corrections in order to protect our planet and Sacramento County.

Michael McClanahan 916-607-5799

<u>lovemattersmost.org</u>

From: <u>Debbie Koerner</u>

To: <u>Clerk of the Board Public Email</u>

Subject: Climate Action Plan

Date: Wednesday, May 18, 2022 12:01:00 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

PLEASE SEND TO ALL 5 COUNTY SUPERVISORS

Dear Supervisors,

I am a Sacramento County resident and I am writing to ask you to reconsider the proposed Climate Action Plan.

Climate Change is the most important problem we need to deal with and the proposed plan is just not enough to combat the environmental issues at stake. Please do not vote to approve the plan without making significant changes! Addressing sprawl/limiting building and saving our wild areas are critical areas to be addressed. In addition, the plan's lack of enforceability makes it pointless in making significant progress towards addressing climate change. Please do not rubber stamp this incomplete and limp excuse for a climate action plan. Sacramento can and should do better.

Thank you, Debbie Koerner

From: Kathy Dodson

To: <u>Clerk of the Board Public Email</u>

Subject: CAP concerns

Date: Wednesday, May 18, 2022 10:41:07 AM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Please send to all five county supervisors.

To: The Sacramento Board of Supervisors

Re: Concerns about the Sacramento County CLIMATE ACTION PLAN

May 18, 2022

From: Kathy Dodson

What do you think about a doctor who knows there is an effective, albeit difficult treatment available for a patient but fails to provide that treatment?

The health and lives of Sacramento County residents are in your hands. Please don't fail to provide the treatment, however difficult, that we need. We put our trust in you.

Sacramento is expected to experience 126 degree days by 2040.

I am sad but thankful that my children have chosen to raise their families in cities other than this polluted, ozone and particulate matter choked area.

Sacramento made it onto the top ten list of the most polluted cities in the U.S.

Is this what we want? It is shameful and contributing to resident's early deaths - yours included. We must stop sprawl which increases the Vehicle Miles Traveled in our area with the resultant negative health impacts.

Please either do not pass this deficient CAP or fix it. You know what to do.

More importantly, show the United States and the world that Sacramento leaders are not beholden to developers and are beacons of positive, challenging, but absolutely achievable change. We are counting on you.

Thank you, Kathy Dodson

Kathy katwillgo@gmail.com

From: Elisa Zitano

To: <u>Clerk of the Board Public Email</u>

Subject: CONCERNS RE SACRAMENTO COUNTY CLIMATE ACTION PLAN

Date: Wednesday, May 18, 2022 10:29:54 AM

Attachments: image001.png

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

CLERK: PLEASE DELIVER THIS MESSAGE TO ALL FIVE COUNTY SUPERVISORS

Dear Supervisors Serna, Kennedy, Desmond, Frost and Nottoli:

We are longtime residents of Sacramento County, and we are profoundly concerned with the current proposed Sacramento County Climate Action Plan (CAP), that is wholly inadequate to effectively and immediately address this existential issue in our county. The current proposed CAP simply fails to protect Sacramento County families from the rapidly increasing impacts of Climate Change.

We request that the Board of Supervisors take action to improve the CAP for real change in Sacramento County. If you cannot IMPROVE the current proposed CAP, please DO NOT VOTE TO APPROVE IT.

We offer some suggestions to correct the deficiencies and to improve the CAP:

- 1. **PREVENTING SPRAWL:** A primary goal of the CAP should be the prevention of development of open spaces where aggressive developers have wielded too much political clout and the needs of the community have been ignored. A perfect example of this is the development of the once beautiful hills in Folsom, south of Highway 50. Please note the following:
 - Sacramento County has already approved/entitled almost 50,000 Greenfield dwelling units (DUs) –which far exceeds market demand;
 - 55,000 more DUs are planned beyond the County's adopted growth boundary. This reckless "commitment to sprawl" will have a double impact of both endangering existing open areas and drawing resources and investment away from infill projects;
 - Facilitating Sprawl will permanently increase both Vehicle Miles Traveled (VMT) and Greenhouse Gas Emissions (GHG), further

polluting our already compromised air quality.

2. ENCOURAGING ELECTRIC VEHICLES: Sacramento County needs many more electric charging stations to encourage even more County residents to transition to this cleaner form of transportation. The current proposed "aspirational" plans -- without specific measures and timelines -- just sounds like "lip service" instead of the bold action that is needed to make a real difference.

Please do not do the politically expedient thing by approving a plan with no "teeth in it" to address Climate Change in Sacramento County, and to prevent the degradation of our local environment.

Our children and grandchildren are depending on you – our Sacramento County Board of Supervisors – to make meaningful changes that will improve the quality of their lives now and in their futures.

Thank you all for your thoughtful consideration of this email and for your service to our community.

Elisa R. Zitano David E. Smith



Elisa R. Zitano Attorney

ezitano@smithzitanolaw.com Smith Zitano Law Firm 641 Fulton Avenue, Suite 200 Sacramento, CA 95825 (916) 333-5933 | fax (916) 333-5338 http://www.smithzitanolaw.com

The contents of this email are confidential and may also be privileged. If you have received this email in error, please email the sender by replying to this message and then delete this email from your system. Thank you.

From: <u>Pamela McClanahan</u>

To:Clerk of the Board Public EmailSubject:Urgent Climate concerns... CAPDate:Friday, May 13, 2022 5:48:35 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

Dear Sacramento County Supervisors,

(Please send to ALL five (5) Supervisors)

Hello,

As a native Sacramento County resident, I am deeply concerned about the current status of the proposed Sacramento County **Climate Action Plan**.

I am concerned that it does not protect us adequately from climate change and endangers our future.

Please either correct the deficiencies in the Climate Action Plan (see below), or **<u>DO</u> <u>NOT</u>** let it be approved.

Below are examples of the concerns I have about the plan:

We need to be focused on minimizing sprawl which leads to increased VMT and protecting our precious wild areas.

- Sac County Violates Its Own Limits: On where development should be placed to avoid increased Sprawl which leads to increased Vehicle Miles Traveled (VMT).
- **Wild Areas:** This plan also violates the state goals to protect Wild Areas 30% protected by 2030... And we also know just how important it is to have natural places for people to decompress and de-stress in nature!
- Existing Sprawl entitlements: Sacramento County has already approved/entitled almost 50,000 Greenfield dwelling units (DUs), far above the market demand.
- Additional Pending Projects: 55,000 more DUs are planned beyond the County's adopted growth boundary. The County's massive commitment to sprawl will continue drawing investment away from infill, producing more Sprawl that will permanently increase future VMT and GHG emissions.
- The CAP ignores Sprawl: Notwithstanding many general plan policies supporting infill, the CAP ignores this issue except for GHG-30's, \$1K "infill fee" per sprawl housing unit, which defeats the purpose of reducing greenfield sprawl...

Please protect Sacramento County and correct the CAP.

Pamela

CELL # 916-694-9451
PamelaMcClanahan.com
LoveMattersMost.org
PamelaMcClanahan4@gmail.com

From: <u>Kitty Williamson</u>

To: <u>Clerk of the Board Public Email</u>

Subject: Comments on Sacramento County CLIMATE ACTION PLAN (CAP)

Date: Friday, May 20, 2022 12:30:36 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

I am writing with my concerns about the Sacramento County's draft *Climate Action Plan* (CAP). I am a resident of Sacramento County and live in Rich Desmond's district. However, I ask that you please forward this email to all five supervisors since they will be discussing and deciding on the draft CAP.

TO: Sacramento County Supervisors Phil Serna, Patrick Kennedy, Rich Desmond, Sue Frost, Don Nottoli

I am a concerned constituent who has been following the evolution of the Sacramento County *Climate Action Plan* (CAP). It is a disappointing story and so I am writing to ask that you <u>not</u> accept this current draft and require substantial revisions.

In recent courses given by the Renaissance Society at CSUS, I learned that Sacramento's largest source of greenhouse gas emissions is vehicle exhaust, which increases when more vehicle miles are traveled within the County. Clearly, the Sacramento CAP should have the goal of reducing greenhouse gas emissions by reducing total vehicle miles traveled. This is most directly done by promoting infill projects inside the urban area and avoiding extending suburban sprawl into rural areas. The CAP does not do this. I've learned that over 55,000 new dwelling units are planned beyond the County's growth boundary. Such expansive growth will only increase vehicle miles driven in the County and will thus increase greenhouse gas emissions.

Second, the CAP's measures don't meet obvious requirements of being clearly stated and enforceable.

Last, I've learned that the CAP in its current form may raise legal liability risks. Sacramento has used the same environmental consultant firm as San Diego County, and the San Diego CAP was successfully challenged in court, which cost San Diego County millions of taxpayer dollars in legal expenses and the costs of changing the CAP. Please be proactive and learn from San Diego's experience!

Thank you for listening to my concerns about the current draft CAP.

Sincerely

-- Katherine Williamson

Katherine Williamson 4805 Olive Oak Way Carmichael, CA 95608

From: Virginia Volk-Anderson

To: Clerk of the Board Public Email

Subject: Sacramento County CAP

Date: Wednesday, May 18, 2022 8:59:04 PM

EXTERNAL EMAIL: If unknown sender, do not click links/attachments.

To All Supervisors: I am a longtime resident of Sacramento County, District 3, who has been following the progress of the county's CAP for the past two years. I am appalled and disappointed that multiple drafts have failed to address the **urgency of the climate crisis** that we face and concerned that the final draft will do even less to curb greenhouse gas emissions than earlier versions. The CAP's failure to say NO to additional sprawl development in the county is a major deficit of the CAP. Although the county's General Plan supports infill, the CAP will allow greenfield developments, including 55,000 units beyond the county's adopted growth boundary, developments that will draw funds away from much needed redevelopment of the decaying suburban core. In addition to increasing vehicle miles traveled, adding more carbon and pollution to our already compromised environment, these sprawl developments will destroy mature trees - needed for carbon sequestration- and habitat, in violation of the state's goal to protect 30% of wild area's by 2030. There will be issues with water and issues with wildfire as more dwellings encroach on the undeveloped areas of the county.

The CAP is a weak document, replete with unenforceable, unfunded measures that will not bring us to carbon neutrality as specified inn the Climate Emergency Declaration adopted by the Board of Supervisors in 2020. Please do not adopt it in its current form. The citizens of this county deserve better.

From: <u>Cindy Suchanek</u>

To: Clerk of the Board Public Email
Subject: Upcoming Climate Action Plan
Date: Wednesday, May 18, 2022 5:36:58 PM

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To: The Sacramento Board of Supervisors

Re: The Sacramento County CLIMATE ACTION PLAN (CAP)

18 May 2022

From: Cindy Striplin Suchanek

As an environmental science instructor at Mira Loma High School for over 30 years, and being married to a climate scientist, the Sacramento County CAP is something I understand intimately. For those of us who grew up here, we have watched the serious decline of our environment over the past decades and seen the acceleration of climate related events.... Including but not limited to extreme droughts, abnormal heat waves and the insanity of wildfires, even in our own neighborhoods. These effects of climate change are real, scientifically proven beyond a shadow of doubt and affect every single one of your constituents.

The clock is ticking. Each of you is bright, cares about Sacramento and has to have concerns as you hear the reports coming from global entities (such as the IPCC, the UN etc.) down to local warnings by our own experts.

We need to get this right and I have serious concerns about the current CAP as it is being presented. You need to be **strong** – you are our voice in this most serious matter.

As it stands, this plan lacks teeth. It ignores sprawl, it does not protect wild areas, it lacks solid measures to help with essential electrification, which could help mitigate some of the carbon footprint we now leave with excess fossil fuel based transportation. I can go on and on, but simply put,

this plan is flawed deeply and should not be passed at this time.

I <u>strongly</u> urge you to reject this CAP and go back to the drawing board, develop a serious, strong CAP plan that will actually step up and make a difference for our region. We do not have decades to waste, we need bold, clear action sooner than later, not some wimpy plan that will do nothing to address the planet's climate issues here in our Valley.

With sincere concern,

Cindy Suchanek

National Environmental Science Teacher of the Year 2010 San Juan Unified Teacher of the Year 2000