Board of Directors, Transportation Committee, and Regional Planning Committee Joint Meeting Agenda

Friday, February 14, 2020
9 to 11 a.m.
SANDAG Board Room
401 B Street, 7th Floor
San Diego

Agenda Highlights

- Greenhouse Gas Emissions and Vehicle Miles Traveled: An Overview of State Requirements and SANDAG Modeling Tools

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Message from the Clerk

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Mission Statement

The 18 cities and county government are SANDAG serving as the forum for regional decision-making. SANDAG builds consensus; makes strategic plans; obtains and allocates resources; plans, engineers, and builds public transit; and provides information on a broad range of topics pertinent to the region’s quality of life.

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Item No. | Recommendation
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1. | Public Comments/Communications/Member Comments

Public comments under this agenda item will be limited to five public speakers. Members of the public shall have the opportunity to address the Board on any issue within the jurisdiction of SANDAG that is not on this agenda. Other public comments will be heard during the items under the heading “Reports.” Anyone desiring to speak shall reserve time by completing a “Request to Speak” form and giving it to the Clerk of the Board prior to speaking. Public speakers should notify the Clerk of the Board if they have a handout for distribution to Board members. Public speakers are limited to three minutes or less per person. Board members also may provide information and announcements under this agenda item.

2. | Policy Advisory Committee Chairs' Report

Policy Advisory Committee Chairs will provide updates on key committee activities.

3. | Executive Director's Report

*Hasan Ikhrata, SANDAG*

An update on key programs, projects, and agency initiatives, including San Diego Forward: The 2021 Regional Plan and the Airport Connectivity project, will be presented.

**Report**


*Kate Gordon, Director, Governor's Office of Planning and Research, Senior Advisor to the Governor on Climate*

*Dr. Jennifer Gress, Chief, Sustainable Transportation & Communities Division, California Air Resources Board*

*Ellen Greenberg, Deputy Director, Sustainability, Caltrans*

*Ray Major, Coleen Clementson and Elisa Arias, SANDAG*

An overview of state laws related to vehicle miles traveled, greenhouse gas emission reductions, and modeling tools will be presented. Panelists will discuss how these state requirements apply to the 2021 Regional Plan, including what has changed since the 2015 Regional Plan was adopted.
5. **Continued Public Comments**

   If the five-speaker limit for public comments was exceeded at the beginning of this agenda, other public comments will be taken at this time. Subjects of previous agenda items may not again be addressed under public comment.

6. **Upcoming Meetings Information**

   The next Board Business meeting is scheduled for Friday, February 28, 2020, at 9 a.m.

7. **Adjournment**

   + next to an agenda item indicates an attachment

   * next to an agenda item indicates that the Board of Directors also is acting as the San Diego County Regional Transportation Commission for that item
Greenhouse Gas Emissions and Vehicle Miles Traveled: Overview of State Requirements and SANDAG Modeling Tools

Overview

The 2021 Regional Plan must comply with both state greenhouse gas (GHG) emissions reduction targets and federal air quality conformity requirements. As the region’s transportation planning agency, SANDAG uses models to determine the impact of infrastructure improvements and growth on the region’s ability to meet these state and federal standards.

Key Considerations

California Greenhouse Gas Reduction and Vehicle Miles Traveled Requirements

California’s near-term targets for reducing GHG emissions for 2020 and 2030 are codified in Assembly Bill 32 (Nunez, 2006) and Senate Bill 32 (Pavley, 2016), which require California to reduce GHG emissions to 1990 levels by 2020, and 40% below 1990 levels by 2030, respectively.

The California Air Resources Board (CARB) developed and periodically updates a Scoping Plan to outline the strategies for attaining these targets while also looking forward to long-term goals of carbon neutrality by 2045 and a reduction in GHG emissions of 80% below 1990 levels by 2050. In addition to reducing GHG emissions, California is preparing for current and future impacts of climate change. The Governor’s Proposed 2020-2021 Budget for Climate Resilience reflects an increased focus on these climate goals (Attachment 2).

While California is on track to reach the 2020 target, accelerated emissions reductions are needed to attain the 2030 target. On-road transportation is the largest source of GHG emissions (both statewide and for the San Diego region). The Scoping Plan describes the need for substantially greater reduction in vehicle miles traveled (VMT), increases in the sales of zero-emission vehicles, and increases in fuel efficiency standards and use of renewable transportation fuels.

In support of this, and as described below, Senate Bill 375 (Steinberg, 2008) and Senate Bill 743 (Steinberg, 2013) aim to influence regional and local planning to change how communities and transportation systems are planned and built in order to reduce GHG emissions and VMT.

SB 375 and Sustainable Communities Strategy Requirements

SB 375 requires CARB to set regional targets for GHG emissions reductions from passenger vehicle use, and it requires each of the 18 Metropolitan Planning Organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) as a part of its Regional Transportation Plan that demonstrates how the region will meet its targets. In 2010, CARB established the original SB 375 regional GHG reduction targets for each MPO for years 2020 and 2035. For the San Diego region, the reductions were set at 7% and 13% for cars and light trucks from 2005, respectively. In 2018, CARB approved updated targets that reflect more aggressive GHG reductions of 15% for 2020 and 19% for 2035. Pursuant to SB 375, CARB is required to review each MPO’s proposed technical methodology for quantifying GHG emission reductions from the SCS as well as the final quantification.
Upon adoption of the 2021 Regional Plan and its SCS, SANDAG must submit the 2021 Regional Plan and its SCS to CARB. CARB must either accept or reject the SANDAG Board of Directors determination that the SCS would achieve the applicable GHG emission reduction targets when implemented within 60 days.

In November 2019, CARB published the Final SCS Evaluation Guidelines. The Guidelines reflect greater attention on the strategies, key actions, and investments committed by the MPOs in their SCSs and include additional reporting and tracking guidance.

SB 743 and Evaluating Transportation Impacts Under the California Environmental Quality Act

SB 743 required changes to the California Environmental Quality Act (CEQA) guidelines regarding the analysis of transportation impacts and streamlines CEQA review for infill development. In 2018, the California Natural Resources Agency certified and adopted changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project’s transportation impacts on the environment. As a result, starting no later than July 1, 2020, automobile delay, “level of service,” and other similar metrics generally no longer constitute a significant environmental effect under CEQA. The Governor’s Office of Planning and Research developed a Technical Advisory on Evaluating Transportation Impacts in CEQA with recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. In general, transit, active transportation, and roadway capacity reduction projects reduce VMT and are presumed to cause a less-than-significant impact on transportation. Projects that increase roadway capacity generally induce VMT, and if those effects are significant, mitigation or alternatives would need to be considered.

Federal Air Quality Conformity

The U.S. Environmental Protection Agency sets air quality standards to protect public health and ecosystems. These standards are reviewed every few years and revised based on new scientific studies. The San Diego region has made significant progress over the past few decades in improving air quality. However, the region does not meet the 2008 and 2015 ozone standards and as such, is considered a “non-attainment” area for these standards.

SANDAG, as the region’s MPO, must make a transportation air quality conformity determination for regional transportation plans and regional transportation improvement programs to ensure that federally funded or approved activities are consistent with the State Implementation Plan, which is the plan that demonstrates how the region will reduce air pollution to meet the national standards.

As part of the conformity determination, the San Diego region conducts air quality analyses for ozone. One of the chemicals that forms ozone contributes to GHG emissions (oxides of nitrogen). Therefore, reducing the levels of ozone also helps reduce GHG emissions.

SANDAG Modeling Tools

SANDAG Transportation Modeling is extremely complex, with over 86 sources of data. These data sets include information on land use, how people travel, algorithms, mode choice, synthetic populations, demographic distribution, housing, jobs, and much more.

SANDAG uses an activity-based model (ABM) that is state of the practice and has powerful analytic capabilities. The model has been tailored specifically to meet SANDAG analytical needs, considering current and future plans, and also taking into account unique sources of travel demand that exist in the San Diego region.

Staff will provide a comprehensive overview of the tools used by SANDAG that help show how various policies impact VMT throughout the region. These tools help implement and support the use of VMT as one of the metrics for determining transportation impacts based on policy and infrastructure decisions. Detailed information will include why we use an ABM Model, how the model works, how people travel in the region, and how different variables affect modeling results.
**Next Steps**

This panel is part of a series of informational agenda items related to the 2021 Regional Plan. Another future topic will focus on Environmental Impact Reports.

**Hasan Ikhrata, Executive Director**

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Elisa Arias, (619) 699-1936, elisa.arias@sandag.org

Attachments:
1. Panelists Biographies  
2. Governor’s Proposed 2020-21 Budget Summary: Climate Resilience
Panelist Bios

Kate Gordon

Director of the Governor’s Office of Planning and Research

Kate Gordon has spent the past two decades working at the intersection of climate change, energy policy, and economic development. Gordon was appointed Director of the Governor’s Office of Planning and Research and Senior Advisor to the Governor on Climate by Governor Gavin Newsom on January 7, 2019. Trained as a community organizer, and later in law and regional economic development, her focus has long been on bringing diverse groups together to work toward a more sustainable, inclusive economy. Prior to being appointed OPR Director, Gordon was the founding director of the Risky Business Project, which focused on quantifying the economic impacts of climate change on U.S. energy demand, crop yields, and coastal infrastructure as well as on human health and mortality. As part of this work, Gordon consulted numerous investors and corporations on strategies to reduce climate risks across investments and assets, and also served as a co-author on the Fourth National Climate Assessment’s chapter on “Reducing Risks Through Adaptation Actions.”

Prior to her work on Risky Business, Gordon served in senior leadership positions at several nonpartisan think tanks including the Henry M. Paulson Institute, the Center for the Next Generation, the Center for American Progress, and as a nonresident Fellow at the Center on Global Energy Policy at Columbia University. Gordon got her start on energy and climate issues working to craft progressive policies at the intersection of labor, business, community, and environmental interests at the national Apollo Alliance, where she ultimately served as co-Executive Director until the merger with the Blue-Green Alliance in 2011. Under her leadership, the Apollo Alliance drafted key parts of the American Recovery And Reinvestment Act of 2009 including the Advanced Manufacturing Tax Credit and a competitive grant program for green jobs training, and also partnered with the AFL-CIO to draft the “just transition” portions of the proposed American Clean Energy and Security Act (aka the “Waxman-Markey bill”). Gordon earned a J.D. and a Masters in City and Regional Planning from the University of California-Berkeley, and an undergraduate degree from Wesleyan University. Along with her role in state government, Gordon regularly co-teaches a course at Stanford Law School entitled “Climate: Politics, Finance, and Infrastructure.”

Jennifer Gress, Ph.D.

Chief, Sustainable Transportation and Communities Division, California Air Resources Board

Dr. Jennifer Gress is the Chief of the Sustainable Transportation and Communities Division at the California Air Resources Board, and is focused on promoting policies that provide a range of affordable housing and transportation options that reduce vehicle miles traveled and accelerate the transition to a zero-emission future. Prior to this position, Dr. Gress was a Senior Policy Advisor to Sacramento Mayor Darrell Steinberg, where she was responsible for policy development related to housing and community development, transportation, and sustainability. From 2011 until 2017, Dr. Gress served as the Legislative Director for the California Air Resources Board. In that role, she served as the Board’s representative to the California Legislature, advised Board Chair Mary Nichols and the Executive Office on legislative matters, and made policy recommendations to the Chair, the Secretary for Environmental Protection, and the Governor’s Office on pending legislation. From 2005 until 2011, she worked as a consultant to the Senate Transportation and Housing Committee, where she focused on air quality, ports and goods movement, active transportation, and public-private partnerships, among many other transportation-related issues. Dr. Gress has a Ph.D. in Social Ecology from the University of California, Irvine, where she studied housing and community development.
Ellen Greenberg, FAICP

Deputy Director for Sustainability, California Department of Transportation

In 2016 Ellen Greenberg was appointed as the California Department of Transportation Deputy Director for Sustainability by then-Governor Jerry Brown. Ellen’s team at Caltrans is leading culture change in the Department with new initiatives to move the state away from auto-dependency, promote zero emission vehicles, prepare for the impacts of climate change, and integrate equity considerations into the Department’s work. Ellen is currently leading the Caltrans effort to implement SB 743.

Ellen has over 30 years’ experience working with cities, transportation agencies, and non-governmental organizations to guide transportation, development, and conservation decisions. She holds degrees in Geography; City and Regional Planning; and Transportation Engineering from UC Berkeley. Ellen is a Fellow of the American Institute of Certified Planners.
CLIMATE RESILIENCE

For California, climate change is a real and present danger. In the past year, the state has experienced extreme winds and devastating wildfires, extreme heat, and flooding and mudslides. The state also continues to address longer-term, chronic climate impacts like sea level rise and the increasing volatility of its water supply.

California continues to lead in mitigating the risks from current climate impacts while aggressively reducing greenhouse gas emissions. The state must continue to be proactive in the face of clear threats to infrastructure and communities, critical ecosystems, and food systems, and continue to meet ambitious targets to reduce the very emissions that are responsible for these impacts. The state must do so with the recognition that climate policies are also economic and workforce policies, with the potential to help create a more inclusive and sustainable economy for all Californians.

REDUCING CLIMATE RISK WHILE TRANSITIONING TO CARBON NEUTRALITY

As a responsible member of the global community, the state must reduce climate risk, especially in the most climate-vulnerable communities, while transitioning to a carbon neutral economy by 2045. Key to this transition is achieving maximum decarbonization while also investing in land-based carbon removal strategies across all regions, sectors, and areas of government. At the same time, the state must invest in resilience in the face of an already-changing climate. Investing in these forward-looking strategies today will save lives and dollars tomorrow.
Executive Order N-19-19 directed the Department of Finance, in consultation with the Governor's Office of Planning and Research and the California Department of Human Resources, to develop a Climate Investment Framework for the California Public Employees' Retirement System, California State Teachers' Retirement System, and the University of California Retirement Plan. The framework will include an analysis of sound investment practices and where each pension fund currently stands in relation to statewide goals to support sustainable investments. The Department of Finance anticipates completion of the framework in spring 2020.

The Budget reflects the following priorities to address both short- and long-term climate risks:

- Transportation—Decarbonization in the state's largest sector of emissions by providing clean vehicles, clean fuels, low-carbon transportation options, and transit-oriented development, with enhanced prioritization on short-term environmental and public health benefits in disadvantaged and vulnerable communities.

- Natural and Working Lands—Strategies that increase sequestration and reduce emissions from the state's forests, agricultural lands, and conservation lands, and that support resilience across water systems.

- Climate Resilience—Assistance to regions and communities to become more resilient in the face of current and future climate impacts.

To tackle these goals at the scale and speed the science demands, the Administration proposes creating an integrated and comprehensive Climate Budget that prioritizes using government dollars to strategically leverage private sector capital in all three priority issue areas.

**CLIMATE BUDGET**

The Climate Budget takes a disciplined approach to government investment in meeting the state's priority climate goals of reducing climate risk while achieving carbon neutrality. The Climate Budget will invest $12.5 billion over the next five years, including the following key components:
Climate Budget
(Dollars in Millions)

<table>
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<tr>
<th>Funding Mechanism</th>
<th>2020-21 Total</th>
<th>5 Year Total</th>
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<tr>
<td>Climate Resilience Bond</td>
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<td>Cap and Trade Expenditure Plan</td>
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<td>Climate Catalyst Fund</td>
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<td>General Fund Ongoing Expenditures</td>
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<td>Existing Bond and Special Fund Expenditures</td>
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<td><strong>Total</strong></td>
<td><strong>$1,727</strong></td>
<td><strong>$12,483</strong></td>
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Climate Resilience Bond

The Administration is proposing a $4.75 billion climate resilience bond for the November 2020 ballot to support investments over the next five years to reduce specific climate risks across California through long-term investment in natural and built infrastructure, especially in the state’s most climate-vulnerable communities. The bond is structured based on climate risks, and approximately 80 percent of the funds are allocated to address immediate, near-term risks (floods, drought, and wildfires), while the remaining funds lay the groundwork for addressing long-term climate risk (sea level rise and extreme heat). The bond aligns with the Administration’s draft Water Resilience Portfolio in addressing drought and flood risks, and also makes strategic investments in community resilience. If approved by the voters, the bond will help the state move toward achieving carbon neutrality and carbon sequestration goals, and provide funding for programs that result in multiple benefits, leverage non-state funding, and help address liabilities such as the Salton Sea. For additional information on the draft Water Resilience Portfolio, see the Infrastructure chapter.
## Climate Resilience Bond
(Dollars in Millions)

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<tr>
<th>Investment Category</th>
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<th>Program</th>
<th>Amount</th>
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<td>Department of Fish and Wildlife</td>
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<td>Nature-Based Solutions to Build Resilience</td>
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<td>Demonstration Projects to Protect Critical Infrastructure</td>
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**DRINKING WATER, FLOOD, AND DROUGHT**

Across various categories of water resilience approaches, 62 percent of the bond focuses on reducing risks to communities from climate impacts on water systems,
including floods, droughts, and degraded drinking water quality. The bond takes a regional and integrated state approach to these issues, recognizing that each area of the state faces different challenges and opportunities. These funds will be allocated to:

- **Regional and Inter-regional Water Resilience**—$1 billion to support various water management programs and projects with a focus on regional and inter-regional water projects, including but not limited to: Integrated Regional Water Management projects; multi-benefit stormwater management; wastewater treatment; water reuse and recycling; water use efficiency and water conservation; water storage; water conveyance; watershed protection, restoration, and management; and water quality. This funding specifically supports the regional resilience approach identified in the draft Water Resilience Portfolio.

- **Sustainable Groundwater Management**—$395 million to support local groundwater sustainability agencies implementing projects and programs related to the groundwater sustainability plans for critically overdrafted basins.

- **Safe Drinking Water**—$360 million to provide grants and loans to disadvantaged communities to improve access to safe drinking water, including funding capital infrastructure costs for improved water supplies, treatment, and distribution to make vulnerable communities more resilient to the effects of climate change.

- **Flood Control: Urban/U.S. Army Corps of Engineers Projects**—$340 million for Urban Flood Risk Reduction projects that provide the projected state cost share needs for various priority projects through 2024-25.

- **Flood Control: Systemwide Multi-benefit**—$270 million to support multi-benefit flood risk reduction and ecosystem restoration efforts.

- **Salton Sea**—$220 million to support Salton Sea habitat and air quality mitigation projects necessary for the 2018 Salton Sea Management Plan.

- **Environmental Farming Incentive Program**—$200 million for grants, incentives, and demonstration projects to enhance agricultural lands for soil health, water quality and efficiency, biodiversity, resiliency, and habitat benefits. Specific projects include healthy soils, water efficiency, nutrient management, and other conservation practices on farms and ranches.

- **Enhanced Stream Flows and Fish Passage**—$140 million to remove barriers to passage of native fish species and provide enhanced water flows, and reconnect aquatic habitat to help fish and wildlife endure drought and adapt to climate change.
WILDFIRE

In recognition of the unprecedented wildfires the state has experienced in recent years, the bond allocates $750 million to harden critical public infrastructure in high fire-risk communities and makes additional investments in forest health. This forest health investment is complementary to the forest heath and fuel reduction activities supported by the Greenhouse Gas Reduction Fund, and to the investments the Governor and Legislature have required that utilities make in high-risk areas across the state. These funds will be allocated to:

- Hardening of Critical Community Infrastructure—$500 million to facilitate hardening of critical infrastructure, with a focus on low-income areas at significant risk of wildfires. Types of projects include hardening of drinking water infrastructure, emergency shelters (such as fairgrounds), and public medical facilities.
- Forest Health—$250 million to support various long-term forest health projects, including reforestation; conservation easements; activities that promote long-term carbon storage; and upper watershed, riparian, mountain meadow, and inland wetland restoration.

SEA LEVEL RISE

Sea level rise is a chronic long-term threat facing the state’s coastal communities. The bond invests $500 million in reducing risks from sea level rise and changing ocean conditions. This complements funding from Proposition 68 and the Greenhouse Gas Reduction Fund to support coastal communities in planning for sea level rise. These funds will be allocated to:

- Coastal Wetland Restoration—$320 million to support the restoration of coastal wetlands, which provide protection against sea level rise and flooding, enhance carbon sequestration, and provide benefits for biodiversity.
- Nature-Based Solutions to Build Resilience—$130 million to support projects that build resilience of ocean ecosystems, such as kelp forests, seagrass habitat, eelgrass beds, and marine protected areas.
- Demonstration Projects to Protect Critical Infrastructure—$50 million to support demonstration projects to protect infrastructure that is vulnerable to sea level rise and flooding such as roads, railways, sewage treatment plans, and power plants.
CLIMATE RESILIENCE

EXTREME HEAT

Extreme heat is both an immediate and chronic risk to many communities, especially in the Central Valley and inland regions. The bond invests $325 million in proven cooling techniques such as urban greening and urban forestry, as well as in advanced materials for buildings and transportation systems that are designed to reflect rather than trap heat. Both sea level rise and extreme heat are areas where strategic bond investments today will help to create stronger and more resilient infrastructure over the next several decades. These funds will be allocated to:

- Urban Greening and Forestry—$200 million to mitigate urban heat island impacts in the regions most affected by extreme heat. Funds would support urban forestry projects and an expanded urban greening program that supports the creation of green recreational parks in underserved areas.
- Cool Surface Materials—$125 million for a new program to incentivize the use of "cool materials" in projects (e.g., paving and roofing) within vulnerable communities.

COMMUNITY RESILIENCE

Finally, the bond provides $250 million to invest directly in communities to bolster community resilience centers, and support local preparedness, planning, and education around resilience. This community-level support will help to provide a pipeline of locally defined and driven climate resilience projects and programs that are effectively positioned to leverage state, federal, and private investment opportunities, including during emergencies. These funds will be allocated to:

- Community Resilience Planning—$25 million for planning activities to address community-specific climate risks and develop climate resilience plans.
- Community Resilience Centers—$225 million for the construction of new and retrofitting of existing facilities, including at fairgrounds, to support adaptation needs to address locally relevant climate risks. These centers will serve both as community evacuation and emergency response centers, and to build long-term resilience and recovery operations for local communities.

CAP AND TRADE EXPENDITURE PLAN

Another primary pillar of the Climate Budget is a proposed $965 million Cap and Trade Expenditure Plan. The Budget supports several existing ongoing programs (such as CAL
CLIMATE RESILIENCE

FIRE’s forest health and fuel reduction programs) while prioritizing emission reductions in the transportation sector, the largest greenhouse gas emissions source in California. To maximize and leverage appropriate resources as part of the integrated Climate Budget, the Cap and Trade Expenditure Plan focuses on areas that are most appropriate for direct government grant funding: support to disadvantaged communities and investments in research, capacity building, and workforce necessary to drive the state’s long-term transition to carbon neutrality.

In particular, the Cap and Trade Expenditure Plan continues a strong focus on community air protection, and community engagement generally, by providing $235 million to support the AB 617 program, which reduces exposure in communities most impacted by air pollution through community air monitoring and community emissions reduction programs. Complementing this funding is a focus on reducing emissions in the transportation sector and prioritizing disadvantaged communities and clean mobility options for lower-income households, which make up $400 million in Cap and Trade spending. Key among these programs are those aimed at truck, bus, off-road, and agricultural vehicles, where emissions have a disproportionate impact on disadvantaged populations in both urban and rural communities. These programs also provide targeted incentives for consumers to purchase both new zero-emission vehicles, but also to retire older, higher-polluting vehicles in favor of more low-emission alternatives—one critical strategy for improving clean mobility options for lower-income households.

The Cap and Trade Expenditure Plan includes $35 million in strategic investments to reduce short-lived climate pollutants, especially methane.

Finally, the Cap and Trade Expenditure Plan includes foundational support for the research, capacity building, technical assistance, and workforce training that underpins the entirety of the Climate Budget. These programs include the Fifth California Climate Change Assessment, which provides the foundation for state, regional, and local agencies and departments to work together to understand and address projected physical climate impacts across the state. This research, coupled with strategies to directly engage local and tribal leaders as partners on the Assessment and to build capacity at the local level to respond to climate threats, is included as a foundational element of a $25 million ongoing investment.
# 2020-21 Cap and Trade Expenditure Plan
(Dollars in Millions)

<table>
<thead>
<tr>
<th>Investment Category</th>
<th>Department</th>
<th>Program</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Toxic and Criteria Air Pollutants</td>
<td>Air Resources Board</td>
<td>AB 617 - Community Air Protection and Local Programs to Reduce Air Pollution</td>
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<td>AB 617 - Local Air District Implementation</td>
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<td>AB 617 - Technical Assistance to Community Groups</td>
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<td>Low Carbon Transportation</td>
<td>Air Resources Board</td>
<td>Clean Vehicle Rebate Program</td>
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<tr>
<td></td>
<td></td>
<td>Clean Trucks, Buses and Off-Road Freight Equipment</td>
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<tr>
<td></td>
<td></td>
<td>Enhanced Fleet Modernization Program, School Buses and Transportation Equity Projects</td>
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<tr>
<td></td>
<td></td>
<td>Agricultural Diesel Engine Replacement and Upgrades</td>
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<td>Healthy Forests</td>
<td>CAL FIRE</td>
<td>Healthy and Resilient Forests</td>
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<tr>
<td></td>
<td></td>
<td>Forest Carbon Plan: Prescribed Fire and Fuel Reduction</td>
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<td>2019 Fire Safety and Prevention Legislation</td>
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<td>Climate Smart Agriculture</td>
<td>Department of Food and Agriculture</td>
<td>Healthy Soils</td>
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<td>Short-Lived Climate Pollutants</td>
<td>CalRecycle</td>
<td>Waste Diversion</td>
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<td>Department of Food and Agriculture</td>
<td>Methane Reduction</td>
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<td>Integrated Climate Action: Mitigation and Resilience</td>
<td>Coastal Commission and SF Bay Conservation and Development Commission</td>
<td>Coastal Resilience</td>
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<td>California Conservation Corps</td>
<td>Energy Corps</td>
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<td>Research and Technical Assistance</td>
<td>Natural Resources Agency, California Energy Commission, Office of Planning and Research, and Strategic Growth Council</td>
<td>Climate Change Research, Technical Assistance, and Capacity Building</td>
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<td>Workforce Training</td>
<td>Workforce Development Board</td>
<td>Apprenticeships and Job Creation/Just Transition Strategies for a Carbon Neutral Economy</td>
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<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$965</strong></td>
</tr>
</tbody>
</table>

## TRANSIT AND SUSTAINABLE COMMUNITY INVESTMENTS

These Cap and Trade investments will build on the climate resilience and greenhouse gas emission reduction benefits of $1.5 billion of annual continuous appropriation programs.
The Affordable Housing and Sustainable Communities Program supports the Administration’s housing and transportation agendas by investing in integrated projects that have to date provided nearly 10,000 affordable housing units for low-income residents, as well as increased access to transit, walking, and biking. Additionally, the Transit and Intercity Rail Capital Program, Low Carbon Transit Operations Program, and High Speed Rail investments are building an integrated low-carbon transportation network and providing a foundation for sustainable community development, with a strong focus on the state’s most disadvantaged communities in terms of economic, community, and workforce development. Combined with the ongoing support for safe drinking water in disadvantaged communities, these Cap and Trade investments provide a model for how California can continue to grow and prosper even as the state’s population increases over the next decade.

**CLIMATE CATALYST FUND**

Recognizing the scale and immediacy of the climate problem and the need to dramatically increase and leverage private sector investment in these critical programs to maximize and direct state investments, the Budget includes a $1 billion General Fund investment ($250 million in 2020-21, with additional funding in later years) for a Climate Catalyst Fund, to be administered by the state’s Infrastructure Economic Development Bank in consultation with the Strategic Growth Council and the Labor and Workforce Development Agency. This revolving loan fund will provide low-interest loans for a portfolio of climate-related projects, prioritized in areas that help meet the state’s climate and equity goals, and where technologies and infrastructure exist that could be deployed at much greater speed and scale but face barriers in the private market.

As with the overall Climate Budget, the Fund will be structured and managed to simultaneously address the state’s climate goals while also building an inclusive and sustainable economy across all California regions and for all California businesses and workers.

Climate Catalyst Fund projects would be focused on the following key areas, with a commitment to re-examine the state’s climate priorities and adjust these investment areas as needed. Technologies listed below are examples, but not requirements, nor are they the only types of projects that may be considered.

- Transportation emission reduction—Zero-emission vehicles (ZEV) and charging infrastructure including light and heavy-duty ZEV vehicles (with a focus on those owned by individual operators and small businesses), transit and rail ZEV fleet and
CLIMATE RESILIENCE

equipment, advanced technology freight, electric school buses, and electric/hydrogen charging infrastructure.

- Climate smart agriculture and forestry—Dairy digesters, agricultural and off-road engine replacement (with a focus on vehicles owned by individual operators/small businesses), efficient on-farm irrigation, sustainable food processing, small business/landowner loans for forest management, and community hardening.

- Circular Economy—Municipal waste and recycling, compost, wood waste collection and utilization, and carbon/methane capture and utilization. This includes a special emphasis on small business owners and emerging technologies.

Other significant adjustments in the Climate Budget:

In addition to the components mentioned above, and to further help address immediate needs in anticipation of this proposed bond funding, the Climate Budget also includes the following:

- $103 million one-time General Fund for efforts to support the draft Water Resilience Portfolio, including groundwater management, the State Water Efficiency and Enhancement Program, as well as investments in the New River and the Tijuana River.

- $66 million one-time General Fund for Urban Flood Risk Reduction projects and for investments to help modernize operations for fish, wildlife, and habitat protection.

- $35 million ongoing General Fund to support various resources investments that align with the draft Water Resilience Portfolio, including Sustainable Groundwater Management Act implementation and enhancements to the Department of Fish and Wildlife.

- $257 million existing bond funds ($1.4 billion over the next five years, primarily from Proposition 68) to continue to support strategic natural resources programs.

- $51 million one-time Alternative and Renewable Fuel and Vehicle Technology Fund to the California Energy Commission to accelerate deployment of electric vehicle charging infrastructure.

This comprehensive approach supports programs that will achieve the state’s long-term climate goals while creating a sustainable and inclusive economy for all Californians.