THE DREAM IS POSSIBLE:
World-Class Transit In The San Diego Region

CLIMATE ACTION
C A M P A I G N

INTRODUCTION

Every San Diegan deserves access to high-quality, affordable, and sustainable mobility options. Success starts with a transportation system that connects people to basic needs—from good jobs, education, and medical care to grocery stores and parks.

Today, that system does not exist.

The purpose of this report is to identify the key problems with the San Diego region's transportation system, and to outline Climate Action Campaign's vision for an equitable transportation future.

KEY PROBLEMS

Diminished Mobility: San Diegans are being locked into longer and longer car commutes from far-away homes to job centers. 1 out of every 5 transit users in the region does not have access to a car, and only 7% of low-income San Diegans have access to fast and frequent transit service.
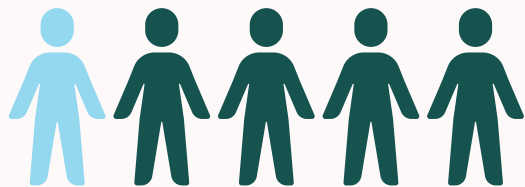
1 OUT OF EVERY 5 TRANSIT USERS IN THE REGION DOES NOT HAVE ACCESS TO A CAR.

Exposure to Air Pollution: Ozone, a harmful pollutant in smog, is emitted by cars and trucks. The San Diego region has the 6th worst ozone pollution in the country and some of the most polluted areas in the state. Historically redlined neighborhoods have much higher rates of hospital visits due to asthma.

6 *"The San Diego region has the 6th worst ozone pollution in the country."*

REGIONS WITH THE WORST OZONE POLLUTION:
1) LOS ANGELES-LONG BEACH, CA 2) BAKERSFIELD, CA 3) VISALIA-PORTERVILLE-HANFORD, CA 4) FRESNO-MADERA,CA 5) SACRAMENTO-ROSEVILLE, CA 6) SAN DIEGO-CARLSBAD, CA
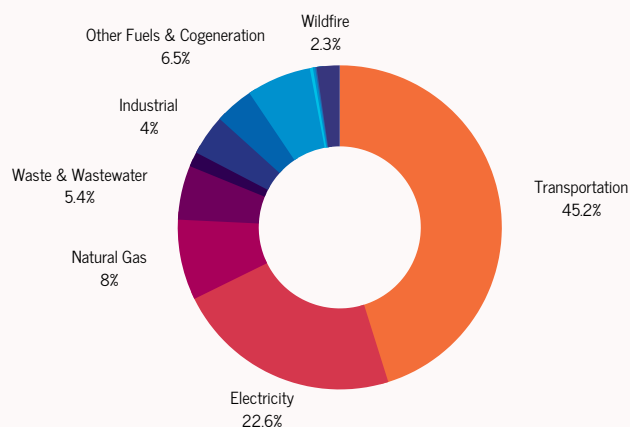
KEY PROBLEMS CONT.

Low Access to Economic Opportunity: A car-owner in San Diego can access <u>30 times more jobs than a public transit user</u>. The median travel time to work of those using transit is double that of drivers.

"A San Diegan car-owner can access up to thirty times more jobs than transit users."

Climate Crisis: Transportation accounts for <u>almost half</u> of our region's greenhouse gas emissions. Plus, cornerstones of our existing public transit network, like the LOSSAN corridor, are not ready for climate impacts, like sea level rise.

Our fossil fuel cars and car-centric transportation systems are fueling the climate emergency, polluting our air, and limiting our access to economic opportunity.

Other Fuels & Cogeneration
6.5%

Wildfire
2.3%

Industrial
4%

Waste & Wastewater
5.4%

Natural Gas
8%

Transportation
45.2%

Electricity
22.6%

<u>TOTAL GREENHOUSE GAS EMISSIONS IN THE SAN DIEGO REGION, 2012</u>

SOLUTIONS AND ACTIONS

We believe a transportation system that centers equity and slashes emissions towards Zero Carbon is achievable.

Over the next 2 years, San Diego will face three game-changing opportunities to secure a better transportation future:

1) SANDAG's Regional Transportation Plan
2) The City of San Diego's Climate Action Plan Update
3) The County of San Diego's Climate Action Plan

For each of these opportunities, equity must be at the center. Investments should be prioritized in the communities most impacted by the climate crisis, environmental injustice, and the harmful impacts of our current transportation system.

The design and implementation of these projects must include meaningful participation from community members and organizations on the frontlines of these crises.

Plus, massive investments in transportation infrastructure are a boon for job creation and economic growth. As we move away from the fossil fuel economy, good jobs in clean transportation are key for a just transition. Here are the three opportunities:

1) SANDAG'S 2021 REGIONAL PLAN:

Our regional planning agency—SANDAG—is working on a plan to reimagine how people and goods will move around our region.

SANDAG is the most powerful space when it comes to winning major regional transportation investments (see the "Policy Prescription" section of this paper for a survey of sustainable transportation options).

This plan should exceed state-mandated emissions reduction targets and maximize the shift towards sustainable modes like biking, walking, and transit.

SOLUTIONS AND ACTIONS

2) THE CITY OF SAN DIEGO'S CLIMATE ACTION PLAN UPDATE:

The City's 2015 CAP made a bold commitment: 50% commuting by bike, walk, and transit by 2035 (in Transit Priority Areas).

Annual monitoring—and our own Annual Report Card—have found that we're making little progress towards those transportation targets, known as mode share targets.

For the CAP Update, the City must create a detailed mode shift roadmap outlining the projects and actions needed to achieve our mode share targets.

3) THE COUNTY OF SAN DIEGO'S CLIMATE ACTION PLAN:

Sprawl development is one of the region's greatest sources of skyrocketing transportation emissions.

Instead of ignoring these impacts, the County CAP should commit to the equitable development of housing near jobs and transit, while pursuing innovative strategies to aggressively reduce vehicle miles travelled (VMT) in rural areas.

The climate emergency is here—devastating wildfires, historic droughts, flooding, sea level rise, and more—and we cannot wait to take bold, unprecedented action at SANDAG, the City, and the County.

A CAR-OWNER IN SAN DIEGO CAN ACCESS 30 TIMES MORE JOBS THAN A PUBLIC TRANSIT USER.

TRANSPORTATION ACCOUNTS FOR ALMOST HALF OF OUR REGION'S GREENHOUSE GAS EMISSIONS.

ONLY 7% OF LOW-INCOME SAN DIEGANS HAVE ACCESS TO FAST AND FREQUENT TRANSIT SERVICE.

SAN DIEGO HAS THE 6TH WORST OZONE POLLUTION IN THE COUNTRY.

THE PROBLEM

San Diego's current transportation system is harming our environment and our health, and limiting our opportunities.

By applying the Greenlining Institute's Mobility Equity Framework to San Diego, three central injustices can be found:

1) Diminished Mobility (pages 8-9)

2) Exposure to Air Pollution (pages 9-10)

3) Low Access to Economic Opportunity (page 11)

> ## ONLY 7% OF LOW-INCOME SAN DIEGANS HAVE ACCESS TO FAST AND FREQUENT TRANSIT SERVICE, AND THE MEDIAN TRANSIT TRAVEL TIME TO WORK IS DOUBLE THAT OF DRIVERS.

DIMINISHED MOBILITY

Due to our history of building housing far away from job centers, most people are left with long car commutes or even longer, unreliable transit trips.

Nationwide, Americans spend an hour everyday driving, and for those who cannot afford the heavy cost-burden of car ownership, time lost to commuting is even worse.

Only 7% of low-income San Diegans have access to fast and frequent transit service, and the median transit travel time to work of those using transit is double that of drivers. 1 out of every 5 transit commuters in the San Diego region does not have access to a car.

Auto-centric transportation is not only financially inaccessible, but it is also unsafe. Nationally, between 2008 and 2017, nearly 50,000 pedestrians were killed by drivers, and San Diegans living in low-income neighborhoods are up to 10 times more likely to be hit by a car.

DIMINISHED MOBILITY CONT.
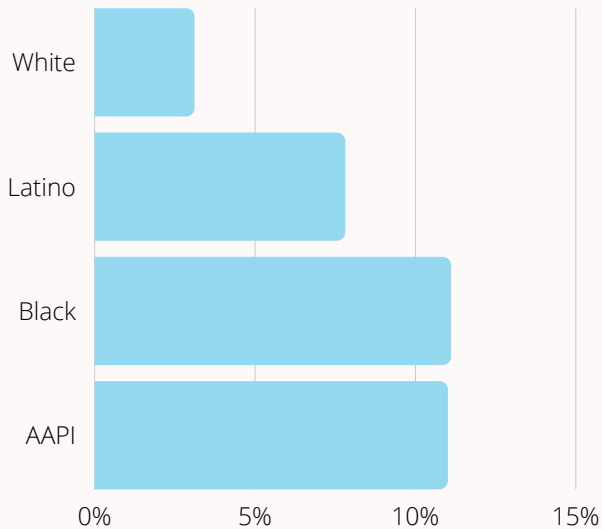
PERCENTAGE OF WORKERS COMMUTING BY PUBLIC
TRANSIT BY RACE AND LATINO ETHNICITY, 2011-2015

Across the country, these disparities in mobility <u>fall along racial lines</u>.

Latinx, Asian-American, and Black workers are 2-3 times more likely than their white counterparts to not have a car at home, and, in some places, up to 6 times more likely.

Latinx, Asian-American, and Black commuters take public transit 3-4 times more often than white workers.

## SAN DIEGO HAS THE 6TH WORST OZONE POLLUTION IN THE COUNTRY.

EXPOSURE TO AIR POLLUTION

The San Diego region has the <u>6th worst</u> ozone pollution in the country, and this can be traced back to our current transportation system.

Ozone is a harmful pollutant in smog, emitted by cars and trucks (among other sources), and it causes inflammation, asthma, shortened life expectancy, and a host of other health impacts.

CalEnviroScreen (CES) 3.0 is a statewide, data-based mapping tool that identifies communities most affected by pollution.

EXPOSURE TO AIR POLLUTION CONT.

SB 535 Disadvantaged Communities

Census Tracts from CalEnviroScreen 3.0
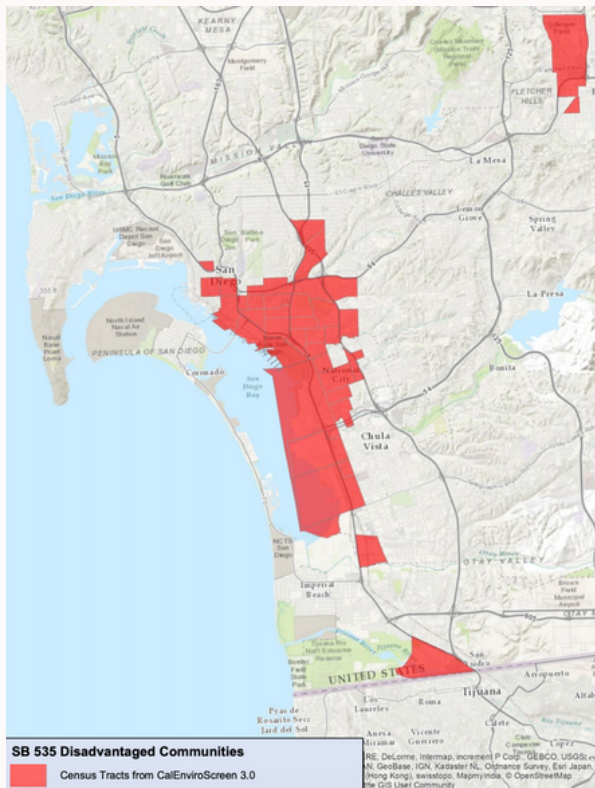
CAL EPA SAN DIEGO DIEGO CES MAP

The CES includes indicators like exposure to traffic density and diesel particulate matter, linking our auto-centric system to high levels of dangerous air quality. It shows that areas such as Barrio Logan, western National City, Chula Vista, Southeast San Diego, San Ysidro, and El Cajon are some of the most polluted neighborhoods in California.

The neighborhoods with the worst air quality, are also the areas that were subject to redlining, the systematic process of racial segregation and neighborhood disinvestment in communities of color that marked much of the 20th century—a practice that continues to this day.

Historically redlined neighborhoods in San Diego, whose residents are largely people of color, see much higher rates of asthma-related emergency hospital visits.

Highways, a major source of dangerous pollutants such as ozone, have been routinely constructed through redlined neighborhoods, resulting in disproportionate rates of asthma, heart disease, and other chronic illnesses for those same residents.

"A San Diegan car-owner can access up to thirty times more jobs than transit users."

LOW ACCESS TO ECONOMIC OPPORTUNITY

The location of one's neighborhood and their mobility options have a major impact on their economic opportunity and financial security. For example, a San Diegan car-owner can access up to thirty times more jobs than transit users.

The City of San Diego's Climate Equity Index (CEI) maps neighborhoods and their levels of access to opportunity by combining socioeconomic indicators (unemployment, poverty rate, etc.) with mobility (commute burden, access to public transit, etc.) and various other indicators.

According to the CEI, the 13 census tracts with "very low" access to opportunity are Barrio Logan, Lincoln Park, Nestor, the Tijuana River Valley, Logan Heights, Palm City, Mountain View, Stockton, Grant Hill, Southcrest, Teralta East, and Shelltown. 96% of residents in these neighborhoods identify as people of color. The 48 census tracts with "low" access to opportunity are made up of 81% of people of color.

Communities of Concern throughout the city and region with the lowest access to opportunity—such as the Portside neighborhoods, City Heights, Southeast San Diego, and the border communities—must be the first to receive investments that reduce car dependency while improving local transportation choices and air quality.

"THE 48 CENSUS TRACTS WITH "LOW" ACCESS TO OPPORTUNITY ARE MADE UP OF 81% OF PEOPLE OF COLOR."

CLIMATE CRISIS AND ADAPTATION

42%
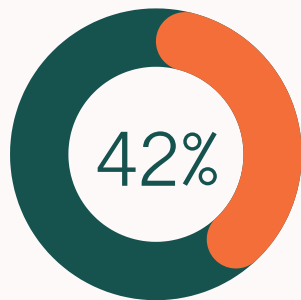
REGIONAL % OF EMISSIONS
FROM TRANSPORTATION

The climate crisis is largely driven by our fatally-flawed transportation system: **42% of San Diego's greenhouse gas (GHG) emissions come from the transportation sector alone.**

Cars, in particular, account for a whopping 17% of carbon emissions in the U.S. To put the climate impact of driving into perspective; if SUVs were their own country, they would be the seventh worst polluter of carbon emissions in the world.

"If SUVs were their own country, they would be the seventh worst polluter of carbon emissions in the world."

CLIMATE CRISIS AND ADAPTATION CONT.

What's more, we need a transportation system that is ready to weather the impacts of climate change. For example, the LOSSAN rail corridor, which carries over 7 million passengers and $1 billion in goods annually, is precariously situated on top of the bluffs in Del Mar.

Due to sea level rise, the bluffs are eroding rapidly, causing regular bluff failures within feet of the tracks. Long-term solutions to adapt to our existing infrastructure in the face of the climate crisis are politically hard and expensive, but absolutely essential.

Finally, the climate crisis and environmental injustices impact low-income communities of color first and worst because of environmental racism. Communities of color are disproportionately burdened by proximity to toxic-waste sites, freeways, and power plants. At the same time, decades of underinvestment have made communities less resilient to extreme weather events like heat storms, flooding, and wildfires. These are the same communities who are the least likely to own cars, but who are far more likely to experience the disastrous effects of our car-centric cities.

WHY WORLD CLASS TRANSIT?

The most recent climate science, including the UN IPCC Special Report on Global Warming of 1.5 °C, tells us that, at every level, we must fully transition away from fossil fuels by mid-century to stave off the worst effects of climate change.

If we want to ensure a livable future, we must get people out of their polluting cars and into more sustainable modes of travel.

The fate of the planet depends on a Zero Carbon transportation system.

Our transportation future must also reverse decades of racial, economic, and environmental injustices that have plagued low-income communities of color for far too long.

All climate investments, and especially transportation improvements, must first center the voices of transit-dependent riders, and be prioritized in communities on the frontlines of the climate crisis.

For strong examples of this, see the Oakland Equitable Climate Action Plan and The Greenlining Institute's Mobility Equity Framework.

> ## EVERY $1 BILLION INVESTED INTO TRANSIT WILL CREATE 49,700 NEW JOBS AND $5 BILLION IN ADDITIONAL GDP.

WHY WORLD CLASS TRANSIT? CONT.

As we transition away from the fossil fuel economy, sustainable transportation projects will create thousands of good jobs. Investments in transportation infrastructure are a boon for job creation and economic growth.

The American Public Transit Association estimates that, by the end of a 20-year period, each $1 billion investment would yield approximately $5 billion in additional GDP, and this would be equivalent to about 49,700 jobs per $1 billion invested.

World-class transit has the potential to profoundly reshape San Diego into an equitable, healthy, climate-safe region that finally works for all.

Read on for a survey of key elements of San Diego's transportation future.

POLICY PRESCRIPTION

PUBLIC TRANSIT

Let's set the record straight—expanding highways does not reduce congestion. Following years of conclusive research, experts now recognize the concept of _induced demand_, which says that if you build more lanes on the highway, more drivers will use that highway.

Transportation agencies have spent a jaw-dropping amount of money—hundreds of billions of dollars—adding more lanes to highways, which has only led to even more congestion.

> Between 1993 and 2017, local governments in the 100 most urbanized areas added 30,511 miles of freeway lanes—a 42% increase. **Those same areas have seen a 144% jump in congestion.**

It's simple. Expanding highways will not solve the problem of congestion on our roads. Public transportation, on the other hand, can offer an efficient, reliable, and connected system, while reducing emissions and connecting residents to essential needs.

PUBLIC TRANSIT RECOMMENDATIONS

Here are some key components of what that public transportation could look like in San Diego:

Bus Rapid Transit (BRT): BRT is a "bus-based rapid transit system" that can quickly move a high number of riders through the use of separated bus lanes, bus priority traffic signals, and other methods of prioritization and efficiency.

BRT allows a city to gain the benefits of a rail network at a significantly lower cost, especially cities that have historically been dominated by auto-centric design. By allocating more road space to bus lanes, we can ensure more accurate schedules, quicker rides, and fewer delays, resulting in high service quality, reduced car trips, and reduced emissions.

In California, transit agencies must operate 100% zero-emissions bus fleets by 2040, ensuring a clean, green future for bus travel. Accelerating the adoption of battery electric buses is a great way to create strong union job opportunities in the transition to a cleaner transportation system. For example, see LA Metro's WIN-LA program.

Youth Opportunity Passes (YOP): No-cost transit passes for youth riders 24 and under are a key transportation investment that community members have called on for a decade. YOP will help young people access the jobs, education, and essential services they need to succeed, while encouraging increased transit ridership and reducing emissions.

PUBLIC TRANSIT RECOMMENDATIONS

Light Rail and Commuter Rail: San Diego's trolleys were, in fact, the first light rail transit (LRT) system in the United States. Light rail, typically consisting of a small number of electric passenger cars, shares many of the same advantages as BRT. It can run on already-built rights-of-way, so it does not require the same degrees of infrastructure and investment necessary for various types of heavy rail, such as tunnel-digging for subways.

Commuter rail, however, can move many more passengers at much higher speeds, and is particularly important for a region like San Diego, as it would provide residents with fast and flexible access to dense job centers, leading to significantly reduced vehicle miles travelled.

Most importantly, rail offers incredible greenhouse gas emissions reductions—76% less per heavy rail passenger and 62% less per light rail passenger when compared to people driving single occupancy vehicles. A connected network of rail allows commuters to travel to and from jobs efficiently while minimizing congestion and travel time.

> *Compared to single occupancy cars, light rail and heavy rail emit 62% and 76% less greenhouse gas emissions per passenger.*

ACTIVE TRANSPORTATION

What is commonly known as the "first mile/last mile" problem describes the distance between one's destination and the closest transit stop. Biking, walking, and various types of shared micromobility not only act as healthy and sustainable modes of transportation, but they also increase access to public transportation connection points, further increasing transit ridership and reducing car trips.

Biking and Walking: Biking, walking and other forms of active transportation have great potential to replace shorter car trips, which is essential to reducing emissions from the transportation sector. In fact, half of all car trips in U.S cities are 3 miles or less. To induce these sustainable modes of transit, while also improving the health of our communities, we must design our streets so they are safe for cyclists and pedestrians.

50% Half of all car trips in U.S. cities are 3 miles or less.

Local jurisdictions should set ambitious targets for the percentage of commute trips that will be made by biking and walking (and transit)—known as mode share targets—to ensure commuters are transitioning away from car trips. VMT-reduction targets are also important for reducing emissions, but mode shift targets are key, as they encourage cities to do the hard work of allocating more street space to sustainable modes of travel, and less for fossil-fueled travel. Redesigning our roads for more sustainable travel is important because mode shift towards biking and walking will not increase without the necessary, protected infrastructure.

ACTIVE TRANSPORTATION CONT.

One key advantage of active transportation infrastructure is that it can be implemented quickly, and is an extremely cost-effective method of reducing car trips. Cities across the country have used paint, flexposts, and temporary barriers to install new bike lanes. In 2020, Seattle committed to 20 miles of permanent, car-free "Stay Healthy Streets" to incentivize more sustainable modes. By updating intersection signals and crosswalks to prioritize pedestrians, residents can feel safer from the threat of cars, and therefore be more comfortable walking.

Shared Micromobility: Shared micromobility devices, a category that encompasses all forms of shared, small, human powered and/or electrified vehicles, have skyrocketed in use in recent years.

In 2019, the number of trips taken on shared bikes, e-bikes, e-scooters, and the like jumped <u>60 percent</u> from the previous year. Often, these methods are used specifically for easier connection to transit stops. We must capitalize on the popularity of shared micromobility to further facilitate the transition away from short car trips.

"In 2019, the number of trips taken on shared bikes, e-bikes, e-scooters, and the like jumped 60 percent from the previous year.

> ## MORE THAN 1/5 HOUSEHOLDS IN THE REGION EARNING LESS THAN $50,000 ANNUALLY DO NOT HAVE A BROADBAND SUBSCRIPTION.

A NOTE ON TELEWORK

As has been observed throughout the coronavirus crisis, telecommuting policies can be implemented quickly and have the potential to significantly reduce vehicle miles travelled and air pollution. While public and active transportation infrastructure are essential to ensuring a connected, accessible region, the benefits that telework poses for stopping climate change must be considered.

However, the extent to which greenhouse gas emissions are reduced from telework is still unclear, and more research is necessary. Teleworkers may take more nonessential car trips, and it is possible that they are less likely to connect individual trips together, ultimately resulting in more car miles.

Most importantly, jobs that are teleworkable are disproportionately held by white, affluent workers. Low-income San Diegans are much more likely to have jobs that cannot be done at home, and more than 1 in 5 households in the region earning less than $50,000 per year do not have a broadband subscription.

Telecommuting policies must be carefully crafted with local context in mind, and companion policies must also work to expand broadband access to broaden the potential for telework opportunities.

A NOTE ON EVS

Electrifying our cars as soon as possible is crucial, but <u>not nearly enough</u> to tackle our transportation challenges. For one, car-ownership is expensive! A transportation system that depends on electric vehicles cannot help us achieve a more accessible, connected, and equitable region.

The California Air Resources Board's <u>2017 Climate Change Scoping Plan</u> stated that we simply <u>cannot meet climate law</u> with EVs alone —we have to also reduce vehicle miles travelled.

We know that we <u>cannot switch our cars to all-electric fast enough</u>. We must get fossil fuel cars off the road, and we should do so while making strategic investments in transit, biking, and walking, all to reduce car trips.

Plus, roads come with a <u>host of hidden impacts</u>, like urban heat islands from pavement and loss of natural lands from sprawl. Relying solely on EVs while further entrenching our dependence on cars and roads will not address these problems either.

ACTIONS

In the next two years, there will be three once-in-a-generation opportunities to secure a climate-safe transportation future in San Diego.

1) SANDAG'S 2021 REGIONAL PLAN:

Our regional planning agency—SANDAG—is tasked with updating a Regional Plan every 4 years. The 2021 Regional Plan—known as the 5 Big Moves—will outline major transportation investments needed over the next 30 years to fundamentally reshape how people and goods move around San Diego.

SANDAG is made up of mayors, council members, and supervisors representing each of the 19 local jurisdictions in the region. These elected officials must finalize and adopt the 2021 Regional Plan by the end of this year. This is the most powerful space when it comes to winning the biggest and most expensive commitments to things like rail, rapid bus infrastructure, and physically protected bike lanes.

We're calling on SANDAG to commit to a transportation future that exceeds state-mandated emissions reduction targets and maximizes mode shift towards sustainable modes, while prioritizing investments in Communities of Concern.

ACTIONS CONT.

2) THE CITY OF SAN DIEGO'S CLIMATE ACTION PLAN UPDATE:

The City's 2015 Climate Action Plan (CAP) made a bold commitment—achieve 50% of trips in Transit Priority Areas by sustainable modes by 2035 (25% by transit, 18% by bike, and 7% by walk). This commitment helped make San Diego a real leader on climate action! As the City completes a comprehensive CAP update this year, we're urging them to double-down on these mode share targets.

Climate Action Campaign assesses CAP implementation in every jurisdiction through our annual Report Card, and we've found that the City is woefully behind on transportation. Annual monitoring confirms that we're making little progress towards those targets, and our mode share numbers have remained nearly stagnant.

The City must include a new Mobility Action Plan in the CAP update with a detailed roadmap outlining how they plan to achieve our ambitious mode share targets. This plan should include project costs, as well as priority corridors and specific improvements that will induce walking, biking, and transit-use. For a strong example, see Vancouver's Climate Emergency Action Plan.

This detailed roadmap is so crucial because, as this California Air Resources Board audit demonstrated, regional planning agencies are not moving fast enough to achieve greenhouse gas emissions reductions to meet state climate law. The City must collaborate with SANDAG to ensure that both the 2021 Regional Plan and the new Climate Action Plan will achieve our mode share targets.

3) THE COUNTY OF SAN DIEGO'S CLIMATE ACTION PLAN:

The County is in the process of redoing its Climate Action Plan, too. The County's CAP applies only to the unincorporated areas of the region, which are largely rural. As such, the Board of Supervisors <u>face unique challenges</u> when trying to reduce emissions.

Water 5%
Other 2%
Agr. 5%
Natural Gas 8.9%
Solid Waste 10.9%
Transportation 44.6%
Electric 23.8%
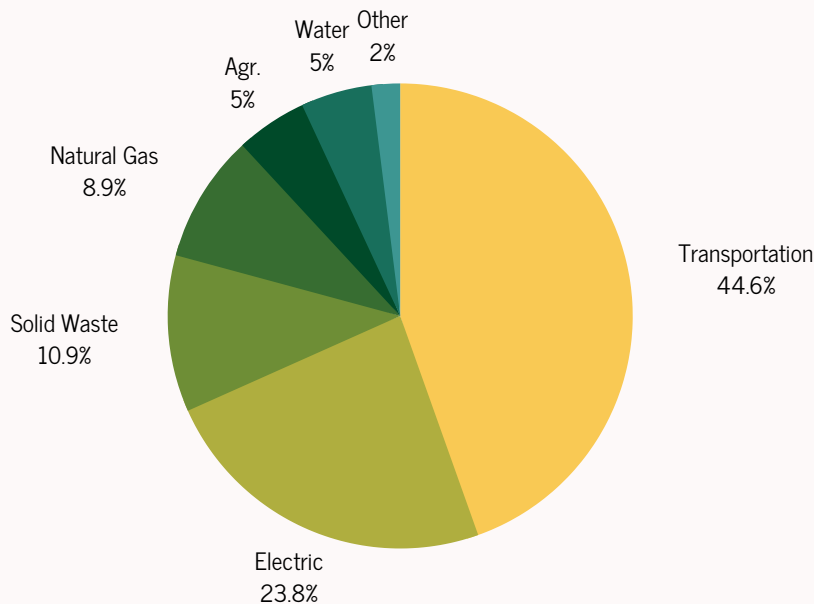
45% of the unincorporated County's emissions come from transportation alone, so aggressively reducing vehicle miles travelled is necessary to meeting the County's own <u>ambitious emissions reduction goals</u>.

With County residents driving long distances to and from far-away jobs, the County CAP should commit to VMT reduction strategies, such as:

- Safe pedestrian and bicycle infrastructure in village centers;
- An expanded network of electric vehicle charging stations;
- New rapid bus routes, vanpool, and other opportunities to reduce single occupancy vehicle trips to job centers;
- Community-specific telecommuting policies.

Importantly, the County CAP should also commit to equitable development of housing near jobs and transit. For more on the connection between land use, transportation, and climate, stay tuned for our white paper on this topic.

CONCLUSION

The San Diego region's auto-centric transportation system urgently needs an overhaul. Investments in public transportation, active transportation, and telecommuting will ensure a future with clean air, safe streets, economic opportunity, and climate justice.

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Links listed below are in the order that they appear in this paper as hyperlinks, including duplicates.

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