From ambition to action: State commitments and local actions on climate

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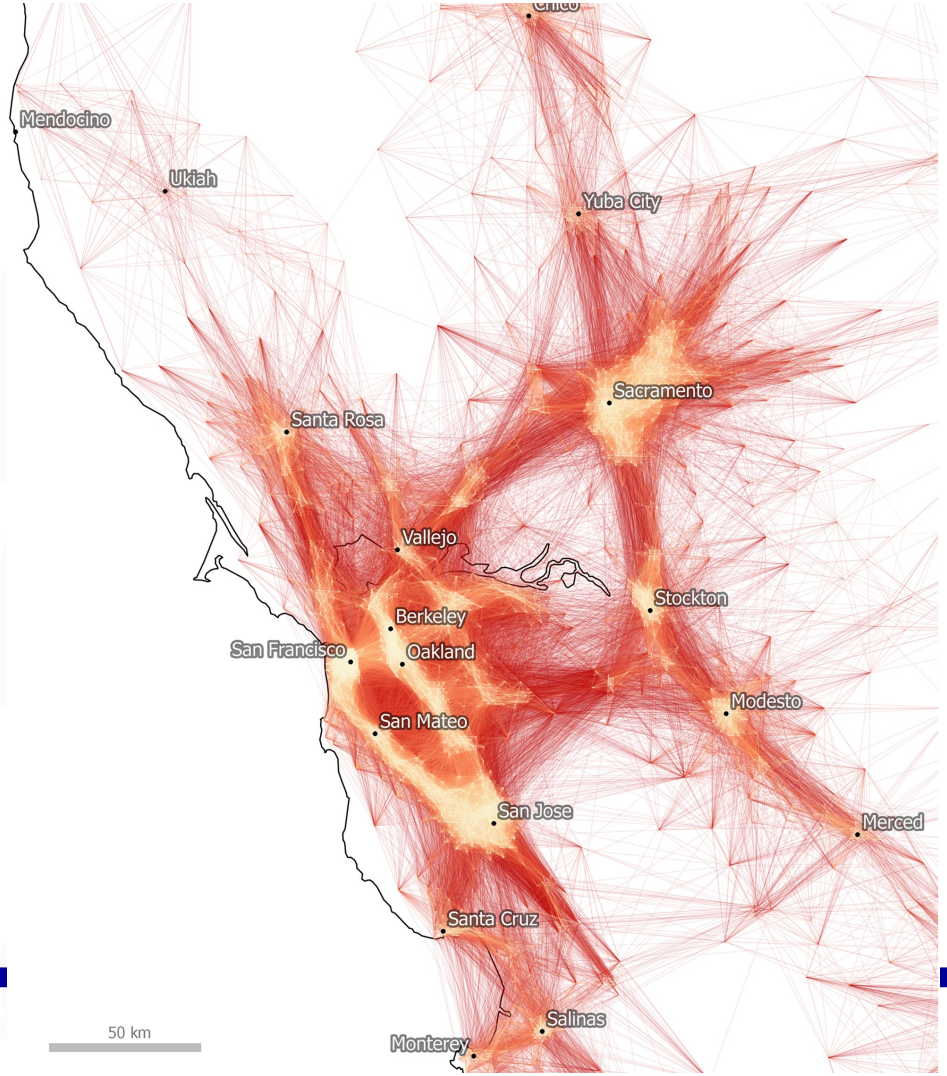


Key points for today

- The reality: We face climate risks and change today.
- Our commitments: Our state has ambitious climate goals but we need to do more to meet our goals.
- Who needs to act: There is a major role for local actors, especially cities and counties.
- The opportunity: There are resources available to support the transition – and a major opportunity to rethink our communities and economy.

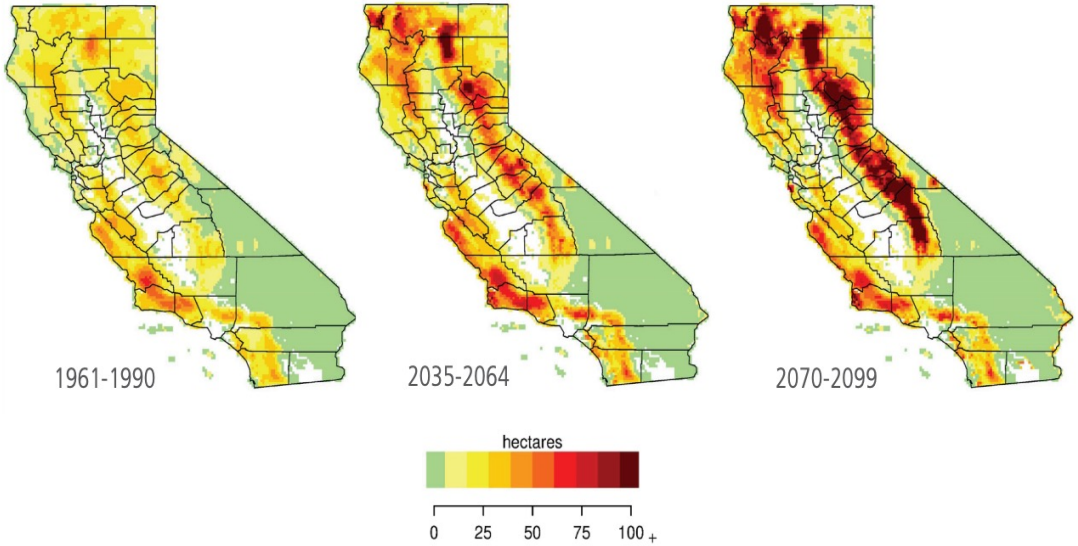
Climate-Related Risks

We are already experiencing the impacts of climate change.

What are some of the major climate impacts we are already seeing?

- Wildfires
- Heavy precipitation
- Flooding
- Extreme heat events
- Drought
- Rising temperatures
- Declining snowpack
- Sea level rise
- Ocean acidification

Future threat of wildfire burns, California



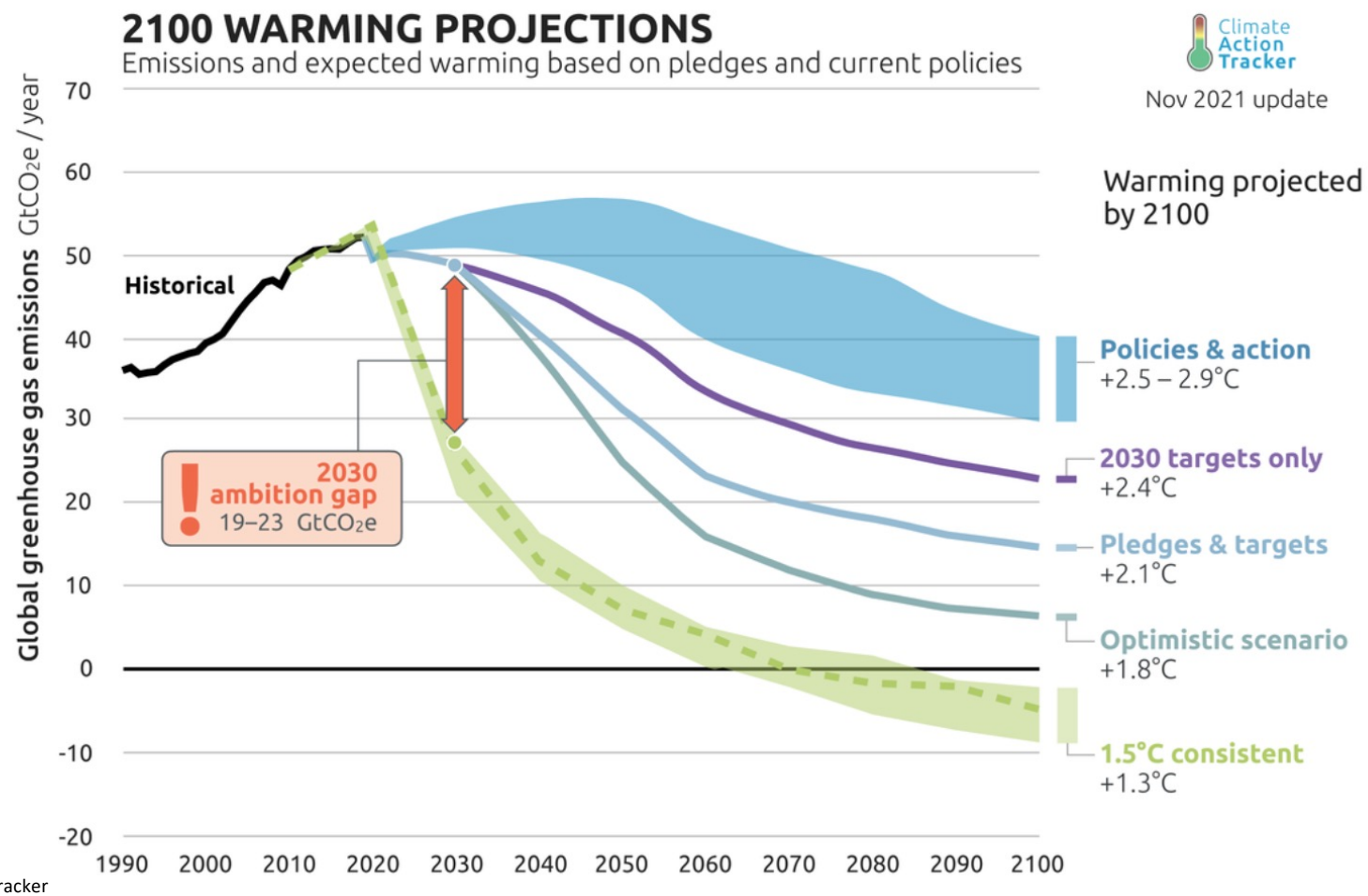
This image shows the modeled area burned by wildfires from current time (modeled as 1961-1990), for mid-century (2035-2064), and for late century (2070-2099). By the end of the century, California could experience wildfires that burn up to a maximum of 178% more acres per year than current averages.

DEFINITIONS

» **Adaptation** is an action or set of actions that reduce climate risk.

» **Resilience** describes a state of readiness to face climate risks.

And there's an urgency to act over the next decade to minimize impacts.

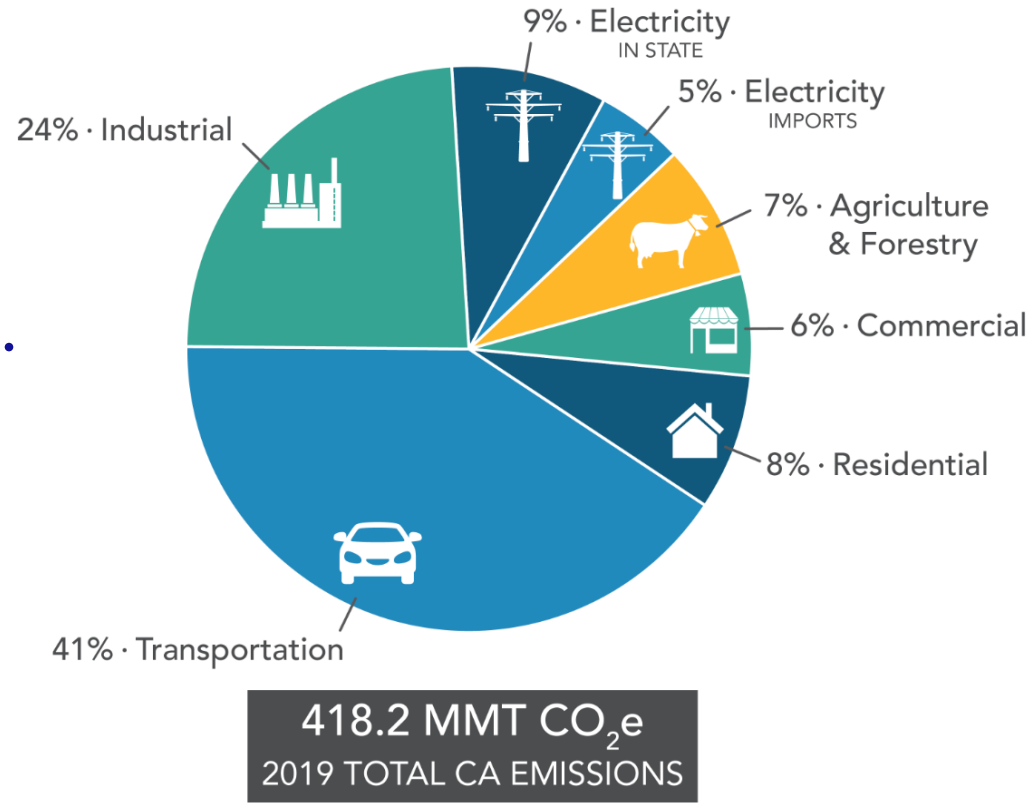


Source: Climate Action Tracker

What are the sources of GHG emissions?

In CA, the biggest sources of greenhouse gas emissions is transportation.

How we build out our communities shapes how much people need to drive.



Source: Air Resources Board Scoping Plan

Our state has ambition commitments and timelines to reduce emissions.

- Carbon Neutral by 2045.
- 55% reduction in GHG below 1990 levels by 2030.
- 100% of all new cars sold zero emissions by 2035.
- 30% of natural and working lands preserved by 2030.
- 90% clean electricity by 2035 (up to 100% by 2045)

- Plus implementation mechanisms:
  - AB 32 / SB 32 – statewide all of economy reductions and targets
  - SB 375 – regional targets for GHG reduction from driving

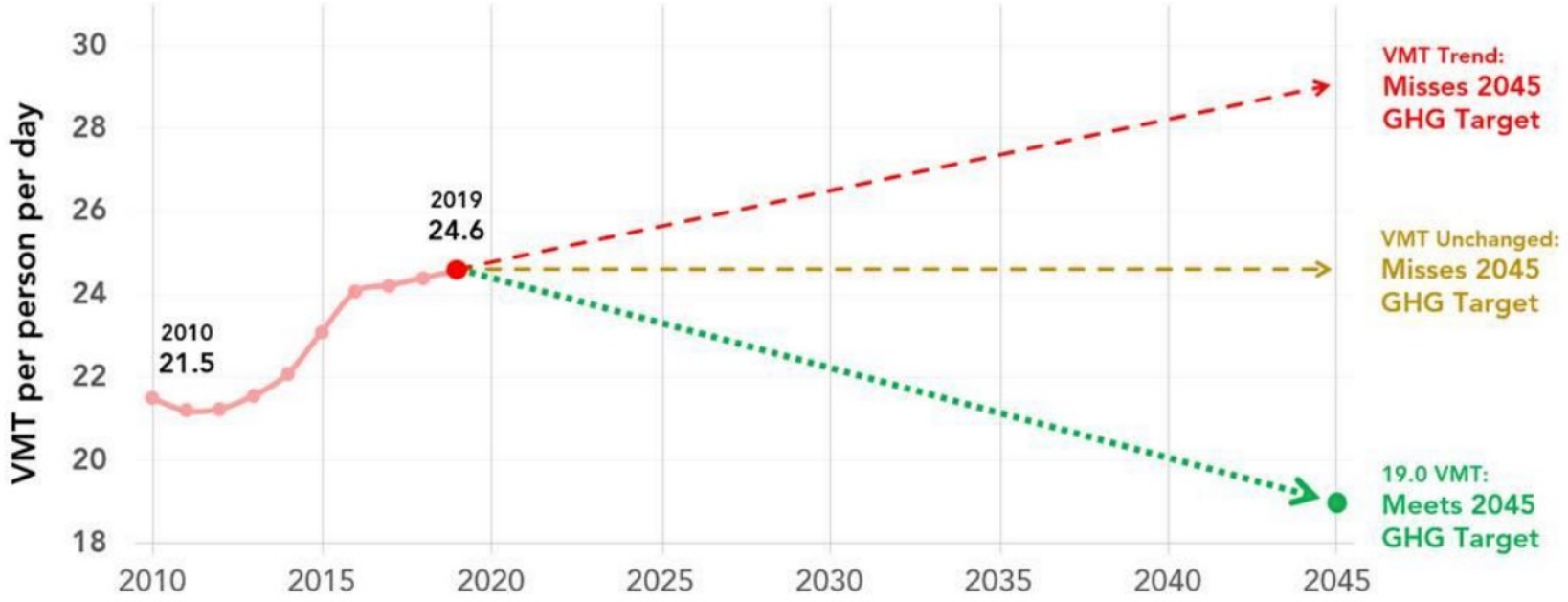
One example:
The state is focusing on how to shift investments.

Executive Order N-19-19

- CAPTI: Leverage the state's **transportation spending** to reverse the trend of increased fuel consumption and reduce GhGs associated with the transportation sector.
- Also
  - Leverage the state's **investment portfolio** to advance CA's climate leadership, protect taxpayers, and support the creation of high-road jobs.
  - Leverage the state's existing **owned and leased assets** to minimize the state's carbon footprint.
  - Accelerate progress toward the state's goal of **5 million ZEVs** by 2030

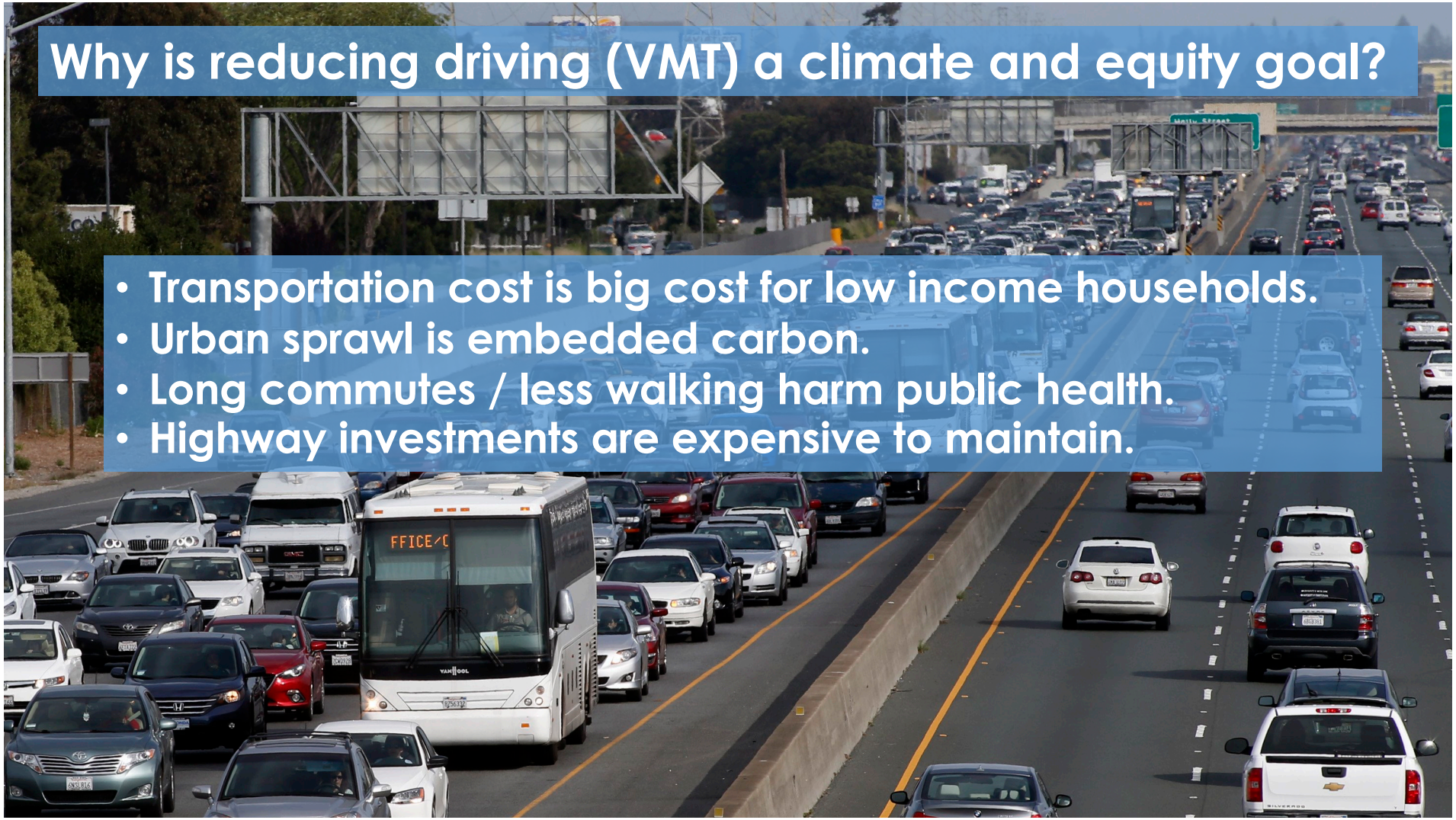
The data shows that zero emissions vehicles are necessary – but insufficient. We also have to reduce driving to meet our climate commitments.

Figure W. VMT and California GHG reduction goals



Source: California Air Resources Board, Draft 2022 Scoping Plan, Appendix E https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp-appendix-e-sustainable-and-equitable-communities_0.pdf

Why is reducing driving (VMT) a climate and equity goal?



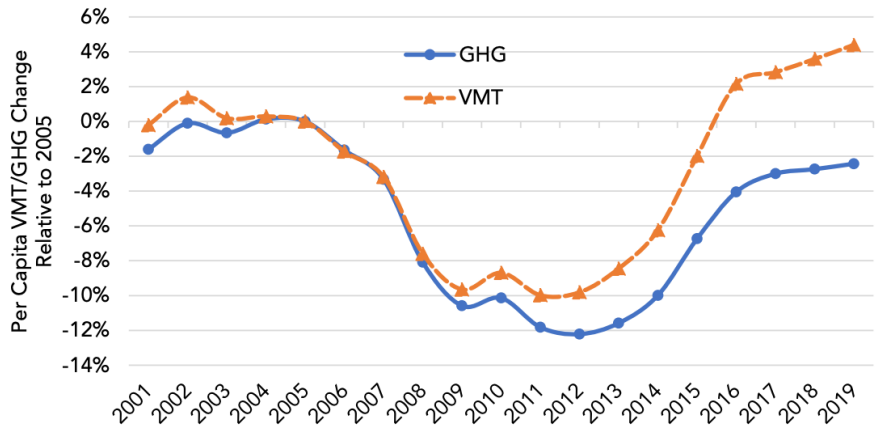
- Transportation cost is big cost for low income households.
- Urban sprawl is embedded carbon.
- Long commutes / less walking harm public health.
- Highway investments are expensive to maintain.

But we are not on track to meet commitments.

Per capita GHG (greenhouse gas) emissions and driving ("VMT" or vehicle miles traveled) are increasing.

Statewide since 2005

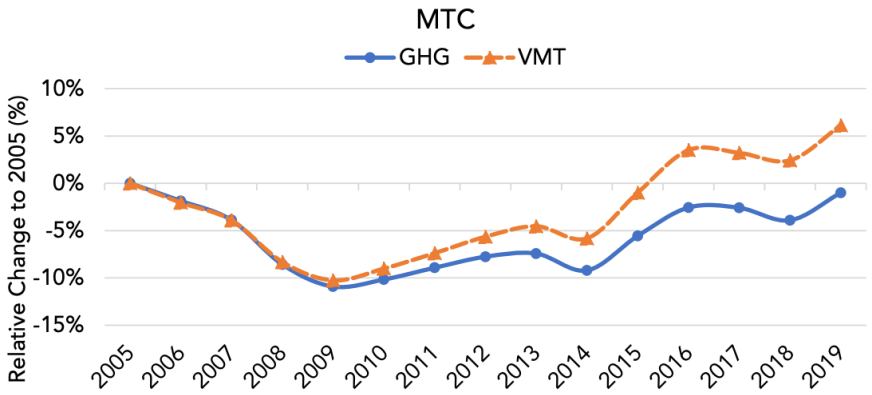
Figure 7. Statewide per capita GHG emissions and VMT relative to 2005



San Francisco Bay Area since 2005

Figure 8. Per capita GHG emissions and VMT relative to 2005 for individual MPOs

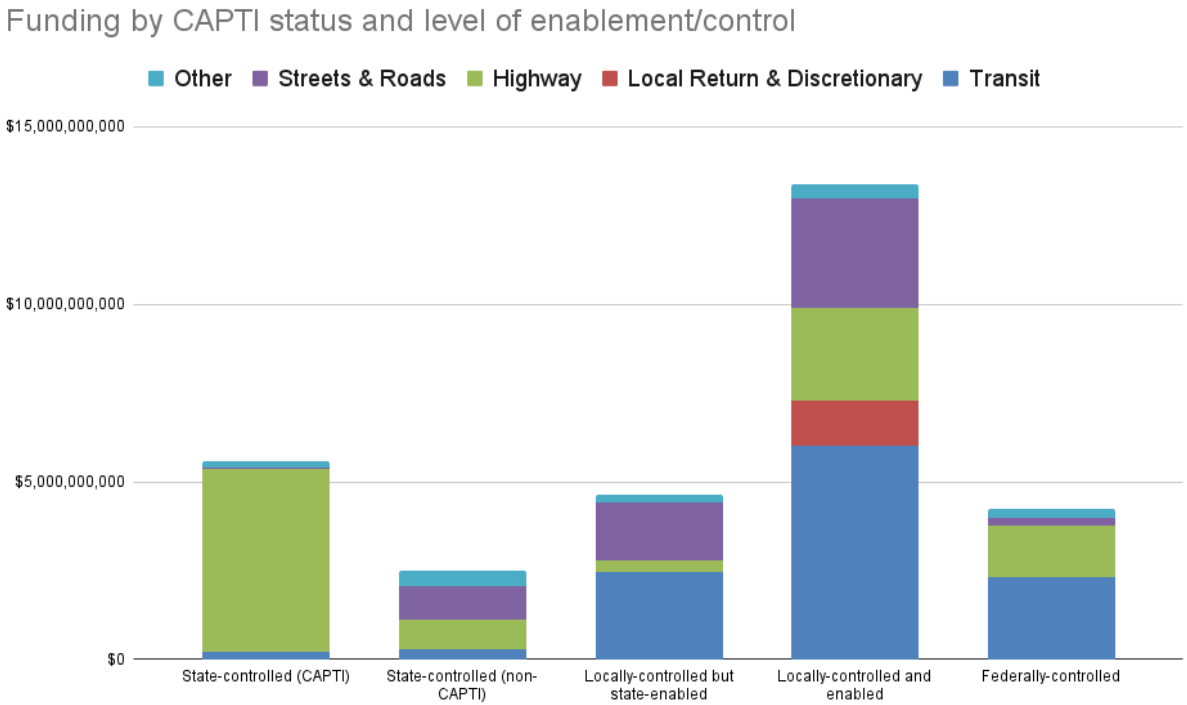
Big 4 MPOs



According to CARB: We will not meet these goals without "**significant changes to how communities and transportation systems are planned, funded, and built**."

Source: Air Resources Board, SB 150 report, 2022

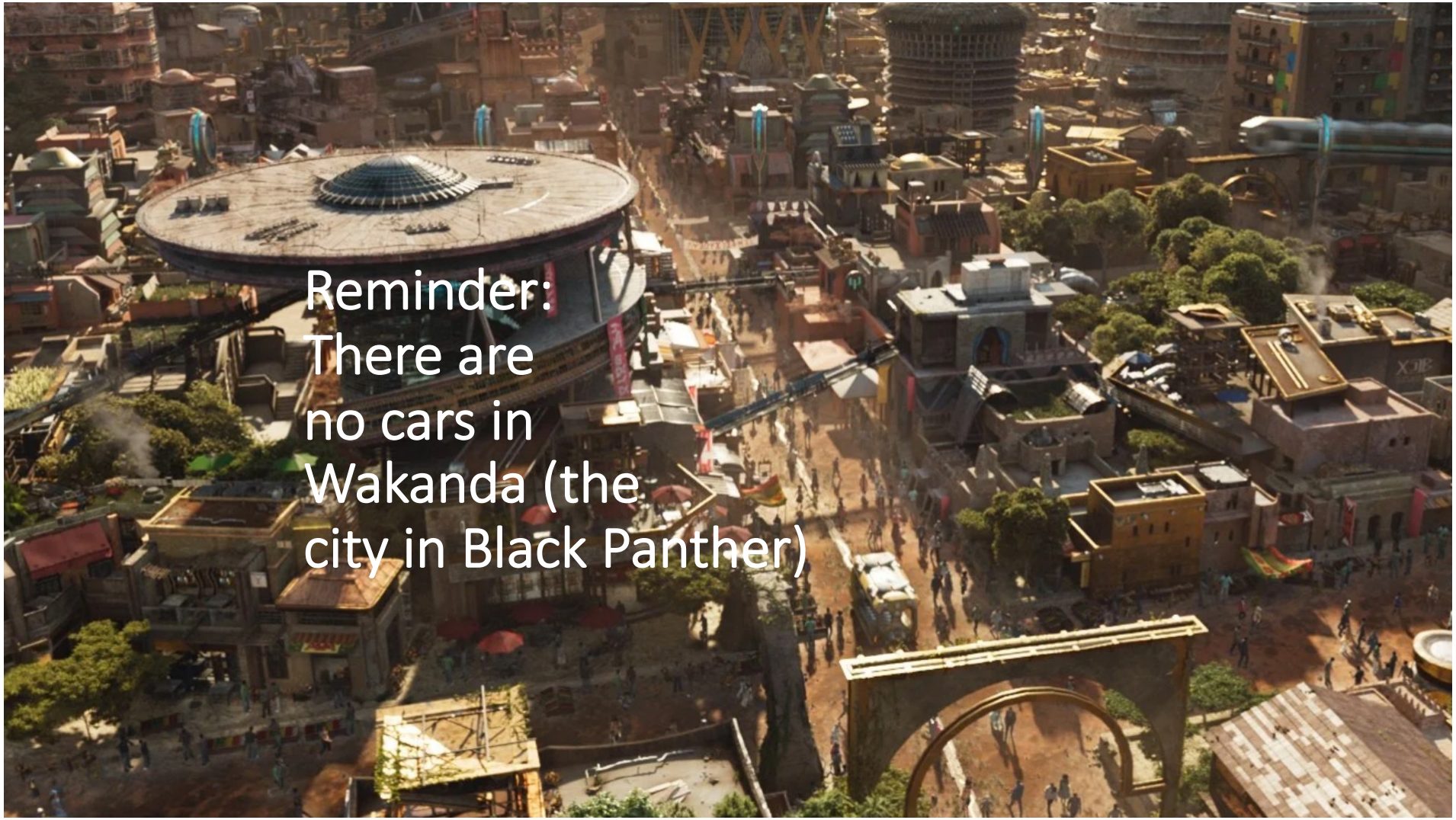
About half of the $30 billion in annual transportation expenditures in California are from local/regional sources.



- The largest single source of funds for transportation are local sales tax measures.
- Opportunity: Engage on local sales tax measures to shape outcomes that support climate goals.

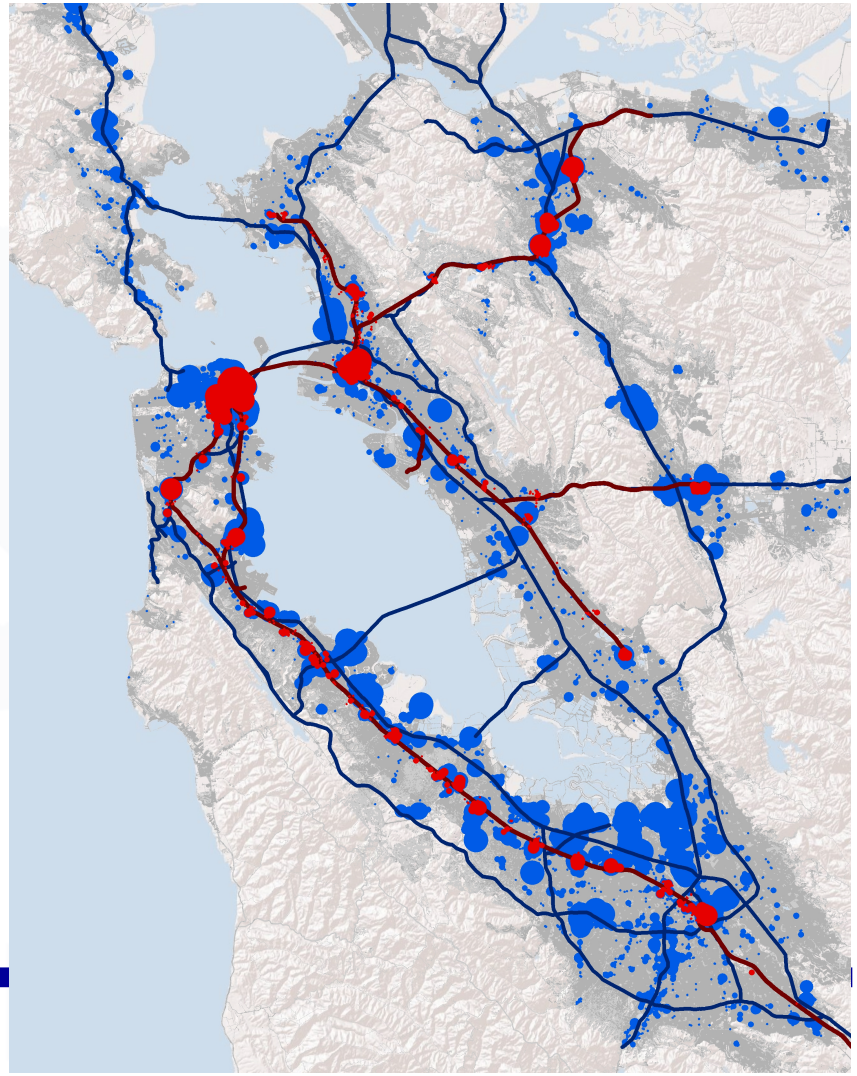
Source: UCLA ITS analysis for CA Strategic Growth Council, California Transportation Assessment (AB 285) report. https://sgc.ca.gov/resources/docs/20220831-AB_285_Final_Report.pdf


What we are facing is one of the biggest changes in transportation and the built environment in history...
But also a great opportunity to reshape our economy, create and reshape industries, and revitalize our existing communities.


Reminder:
There are
no cars in
Wakanda (the
city in Black Panther)

Drilling down to our region: Most jobs are near highways, not transit. And most people drive alone for most trips.

- 75% of office space are within ½-mile of freeway off-ramp
- Less than 25% of office space is within ½-mile of regional transit
- Yet…lots of employment areas are 1-3 miles from transit – a perfect distance for e-bike or shuttles.

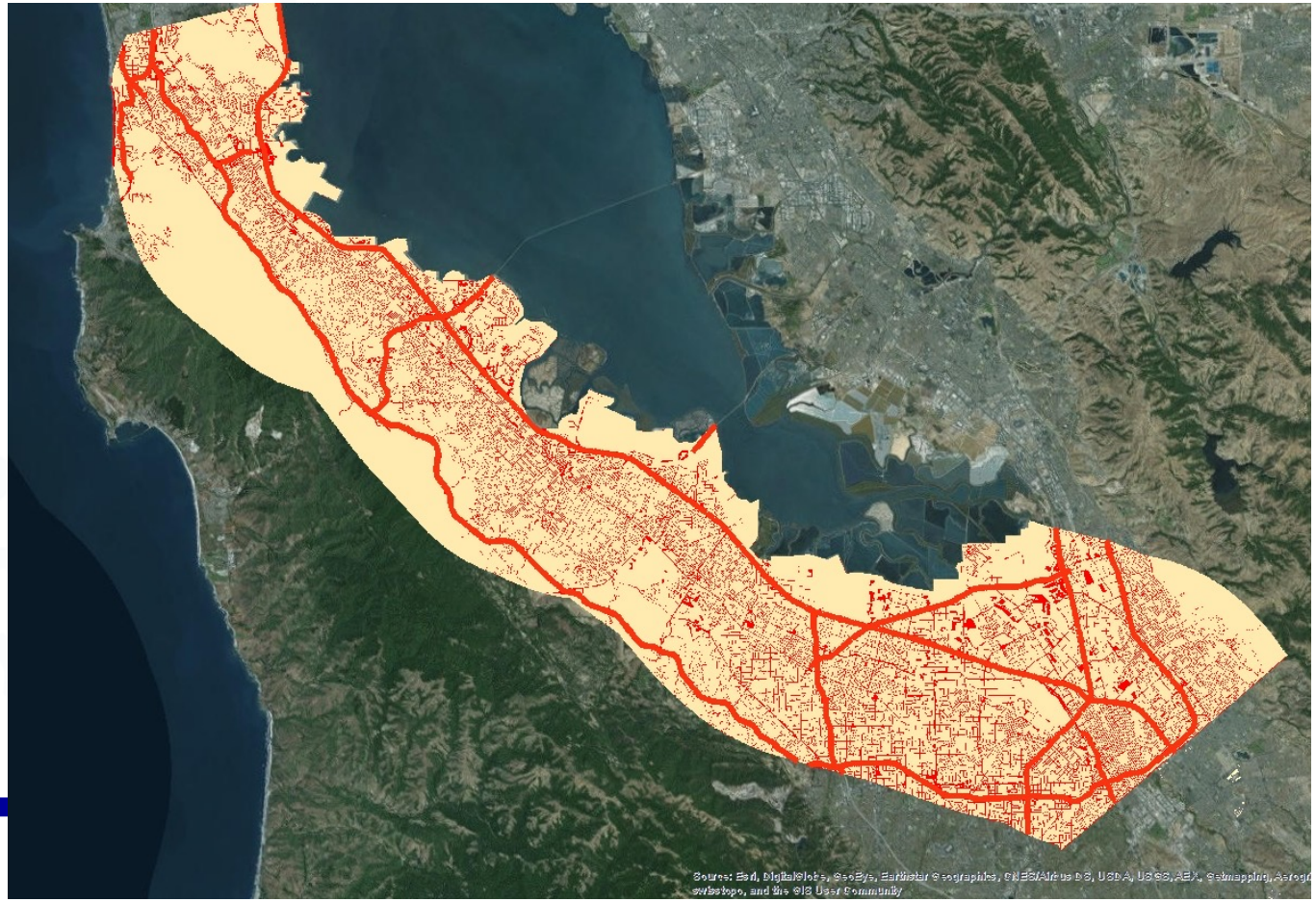


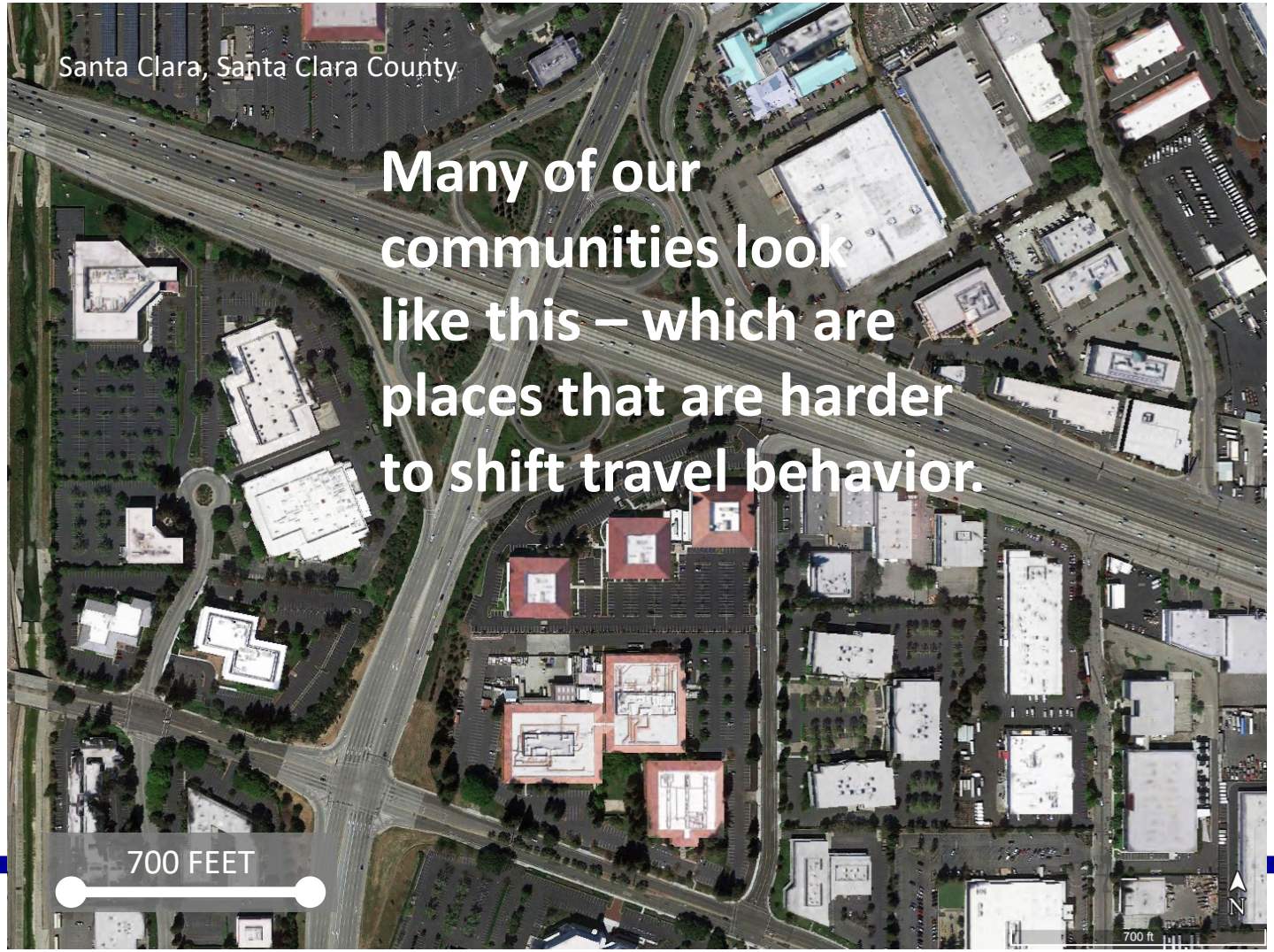
Source: SPUR analysis for "The Urban Future of Work"

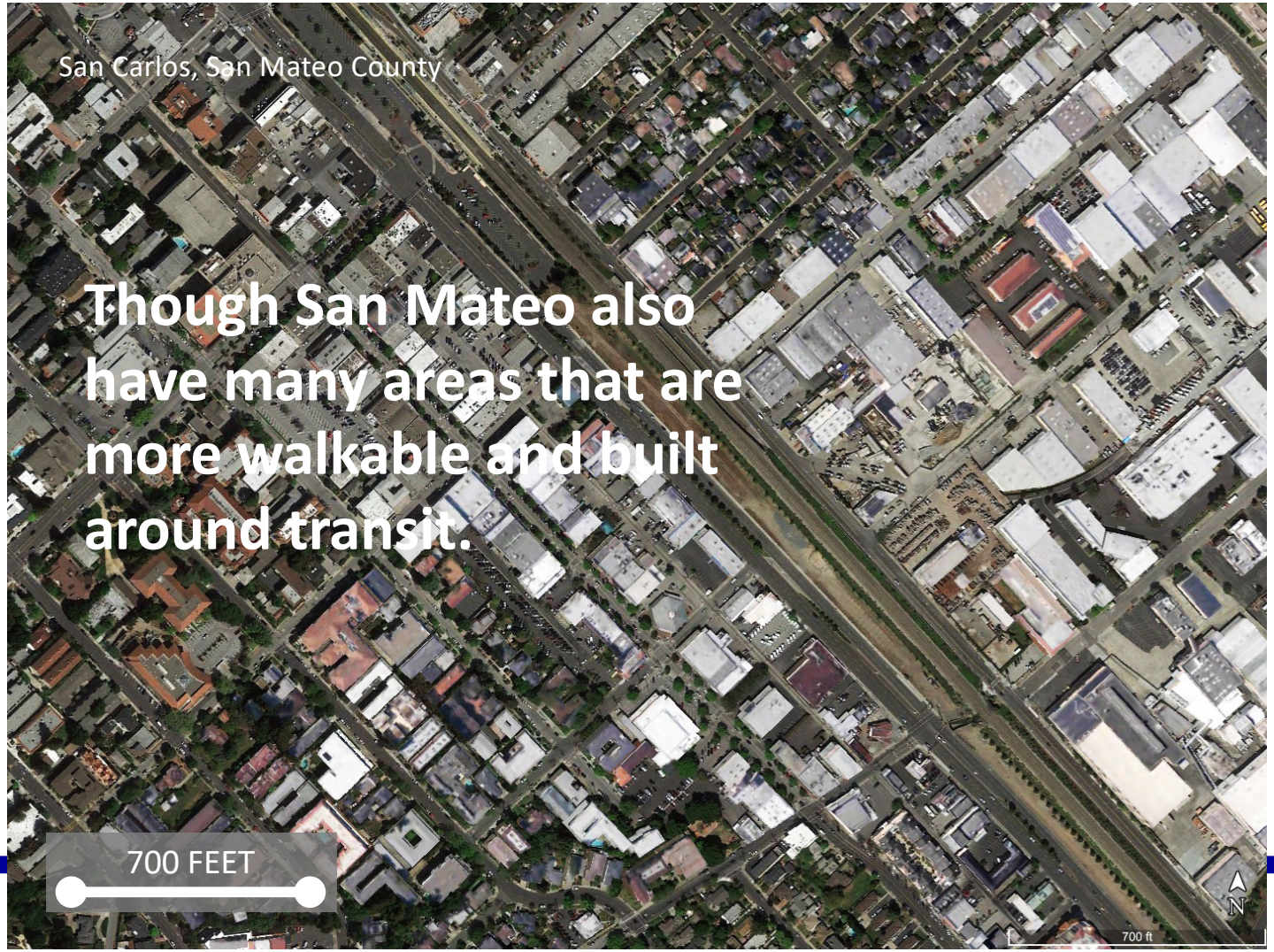
Roads and parking take up a lot of space

19% of land in
from Sand
Francisco
to San Jose is roads
and parking.

But these areas are also resources to use differently.




Santa Clara, Santa Clara County
Many of our communities look like this – which are places that are harder to shift travel behavior.
700 FEET
N
700 ft


San Carlos, San Mateo County
Though San Mateo also have many areas that are more walkable and built around transit.
700 FEET
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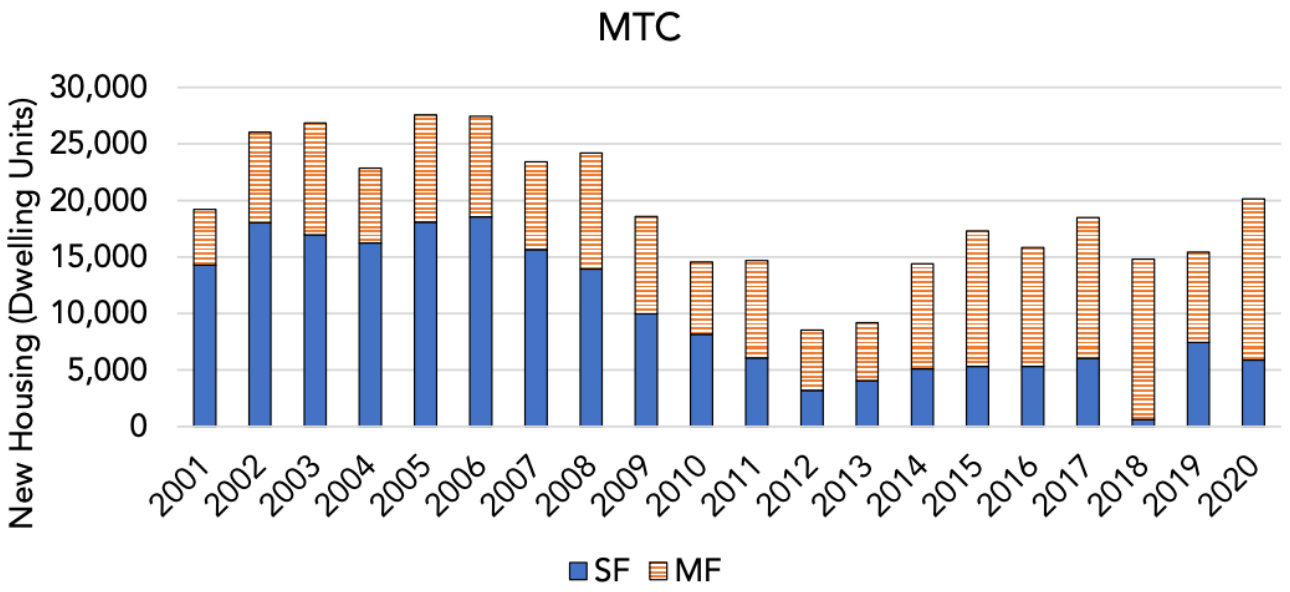
Fortunately, there are new state resources to meet these commitments

- REAP 2.0: $600 million to implement regional plans. $100 million for Bay Area.
- Community Economic Resilience Fund: $600 million for transition to carbon neutral economy. $5 million for planning in Bay Area.
- Affordable Housing and Sustainable Communities: 20% of cap and trade. $5 billion since inception.
- Billions in additional housing funds, ZEV, transit, and other infrastructure.

Local actions: Increase share of new housing that is multifamily, and locate the new homes in walkable areas near your town centers. Create JPAs to support infill infrastructure.

Figure 29. Trends of new housing units by type in the Big 4 MPO regions



SF = single family. MF = multi family

Source: https://ww2.arb.ca.gov/sites/default/files/2022-07/2022_SB_150_Appendix_A_Draft_ADA.pdf

The future is housing near jobs.

The housing and transportation linkage

Housing affordability include transportation choices (transport 2nd biggest cost for many).
More housing in high demand areas near job centers will provide alternatives to long commutes.
Less driving reduces wear and tear on roadways and reduce the need for expensive highway expansions.

The future is electric… (& shared)


The future is walking and biking.
People-focused not car-centric.

The future is taking an integrated approach: linking land use, transportation, climate.

And many of these are actions you can take in your communities on your own.

But there's an urgency for action – and opportunity - over the next 10-15 years.


Discussion
and questions
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