

District Climate Change Vulnerability Assessment

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Transportation Infrastructure



Ports



Rail



Scenic Routes



Rural Communities



Trails



Rural Routes

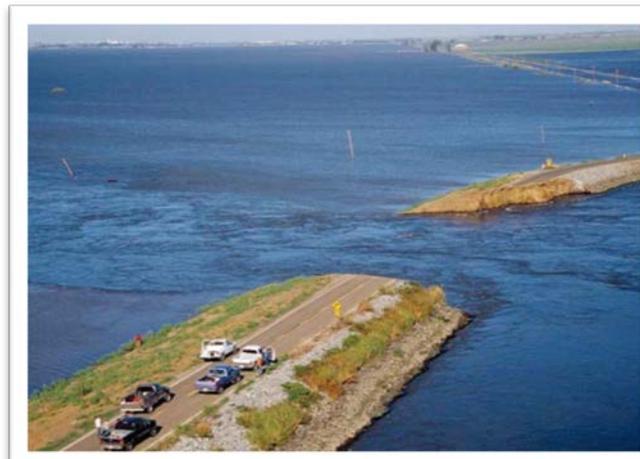
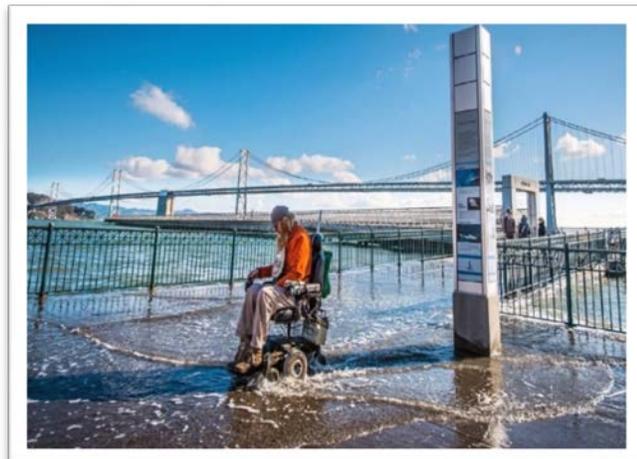


Delta/Wetlands



Airports

Climate Change Impacts to the Transportation Infrastructure



Caltrans Climate Change Efforts

Greenhouse
Gas
Mitigation

Reduced emissions from
operations by 24%

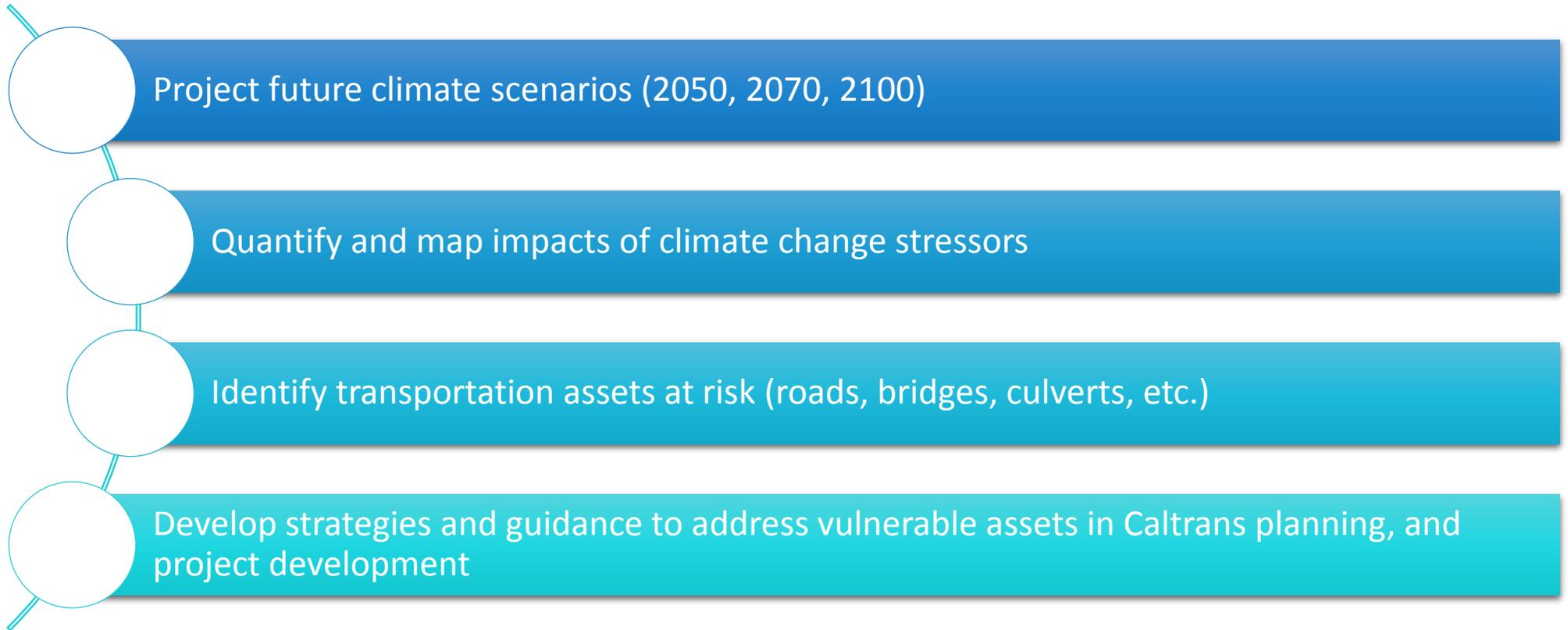
Climate
Change
Adaptation

Guidance and research
on incorporating climate
change into projects

Climate Change
Vulnerability
Assessments



Scope of Climate Change Vulnerability Assessment Studies





Vulnerability Assessment Study – Delivery Schedule

District 1

- Completed

District 4

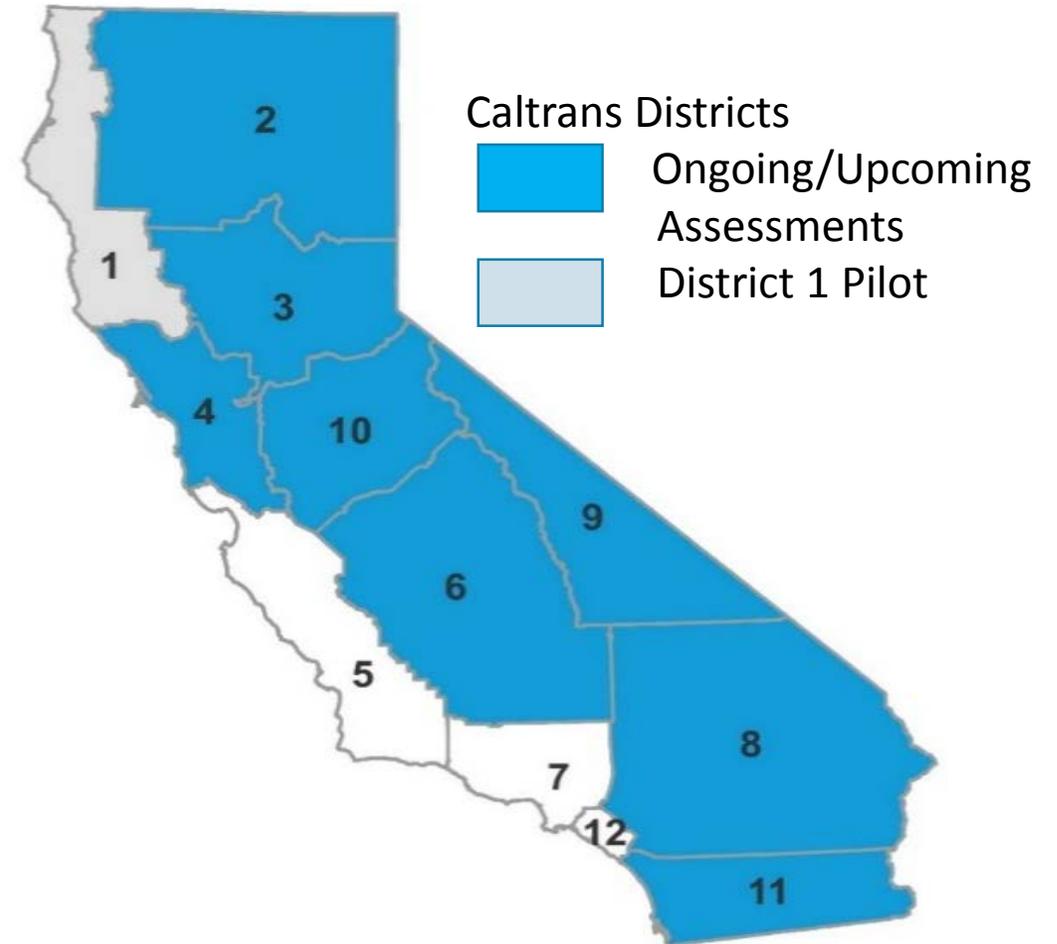
- February 2017

Districts 2, 9, 3, 8, 6, 10 & 11

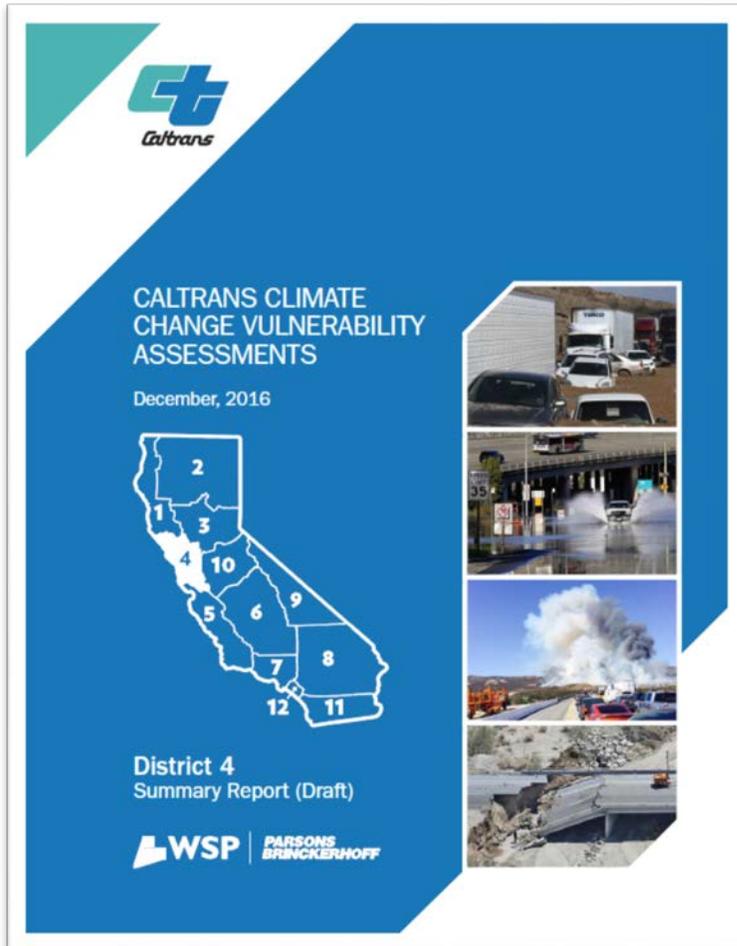
- By the end of 2017

Districts 5, 7 & 12

- Pending sea-level rise data by the US Geological Survey



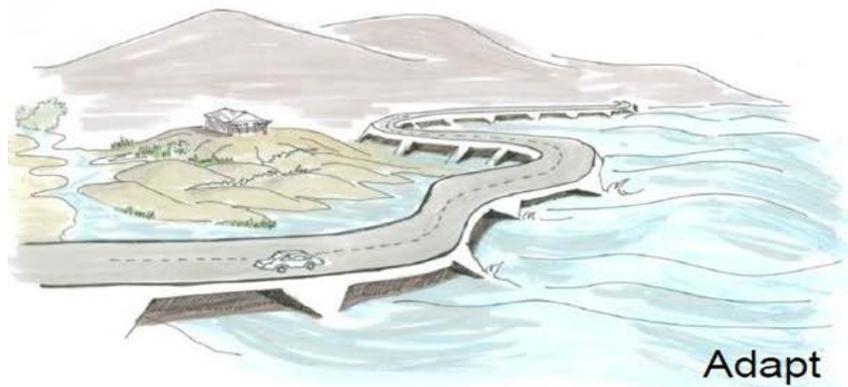
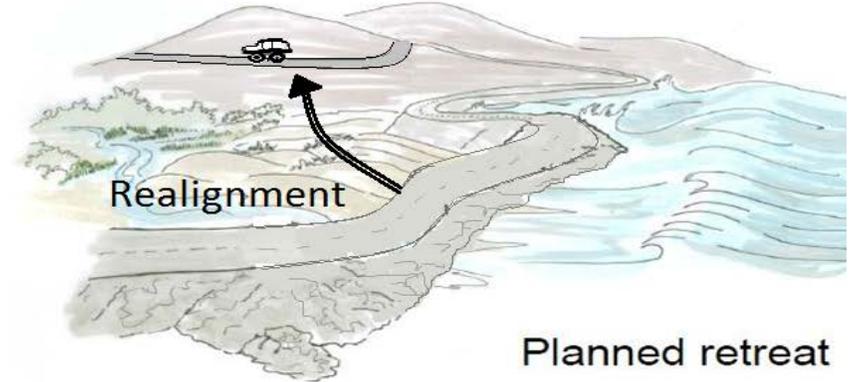
Draft Climate Change Vulnerability Report District 4 - San Francisco Bay Area



Report Includes:

- Sea-level rise projections
- Maps (data) for each climate stressor
- Identification of vulnerable roadway
- Case-study example of project-level analysis

Adaptation Approaches



Caltrans Example of Defend



Rock slope protection along 101

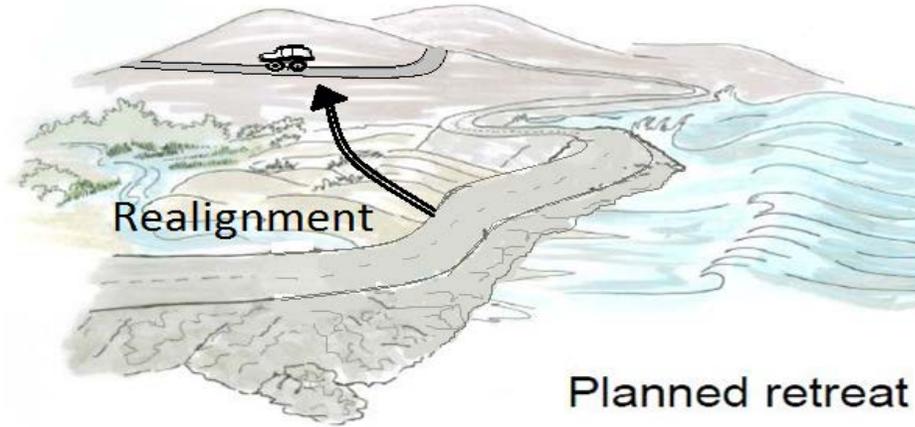


Major erosion event along 101 in need of repair



Seawall protecting 1 in Malibu

Caltrans Example of Planned Retreat



Storm surge on State Highway 1 near Piedras Blancas



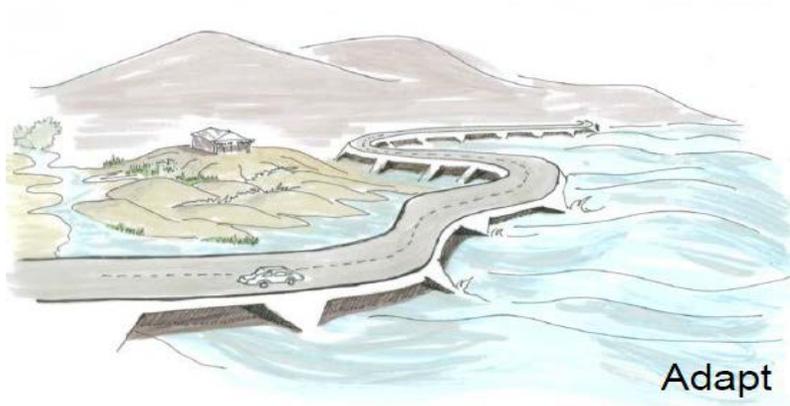
3-mile Realignment to protect HWY from erosion





California Sea Rise Adaptation Efforts Elkhorn Slough

This project is exploring green infrastructure techniques for coastal highway resilience along the Pacific Coast Highway (Hwy 1) along Elkhorn Slough in Monterey County.



Questions?

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