

CALTRANS CLIMATE ADAPTATION PLANNING

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CLIMATE CHANGE IMPACTS TO THE STATE HIGHWAY SYSTEM



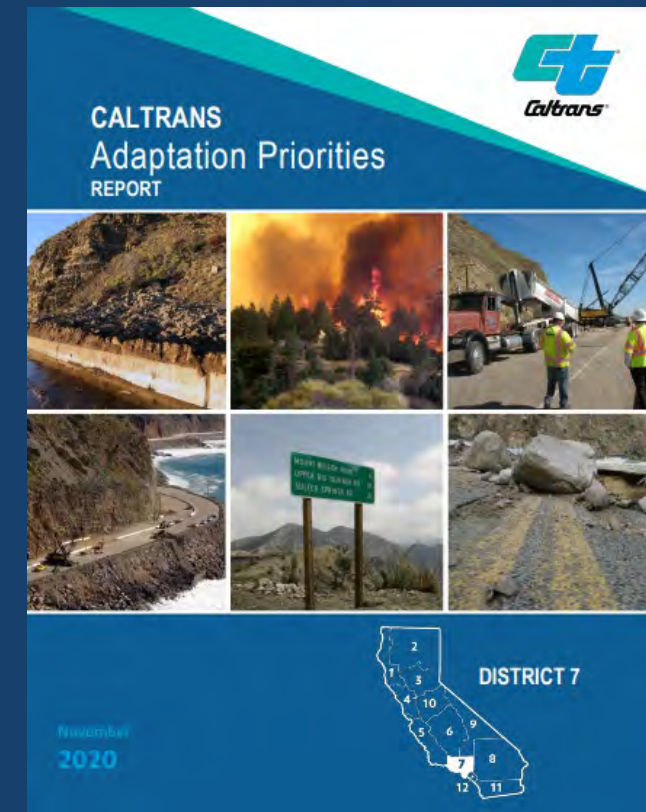
- Climate Change impacts along the state highway system are driving the need for Vulnerability Assessments statewide
- Caltrans is legislatively mandated to consider climate change in every project



CLIMATE CHANGE PLANNING PRODUCTS: SYSTEM ASSESSMENT

PROJECTED CLIMATE CHANGE VULNERABILITY

- District Vulnerability Assessments – Completed 2019
 - Identifies projected climate vulnerabilities on the SHS
 - Sea Level Rise, Storm Surge, Cliff Retreat, Precipitation, Wildfire, and Higher Temperatures
- Statewide Vulnerability Assessment Summary – Completed 2021
 - Summarizes identified projected climate vulnerabilities on the SHS
- District Climate Adaptation Priority Reports – Completed 2021
 - Strategically prioritizes identifies vulnerabilities on the SHS for adaptation investment based on exposure and consequences.
- ArcGIS Online Mapping Tool
 - Statewide climate vulnerability data available via ArcGIS Webmap





CLIMATE CHANGE PLANNING PRODUCTS: SYSTEM ASSESSMENT

REGIONAL CLIMATE CHANGE VULNERABILITY



2070-2099 Wildfire Risk, District 2



1.75m of Sea Level Rise, District 4



CLIMATE CHANGE PLANNING PRODUCTS: SYSTEM ASSESSMENT

NEXT STEPS: IMPLEMENTATION THROUGH INTEGRATION & ADVOCACY

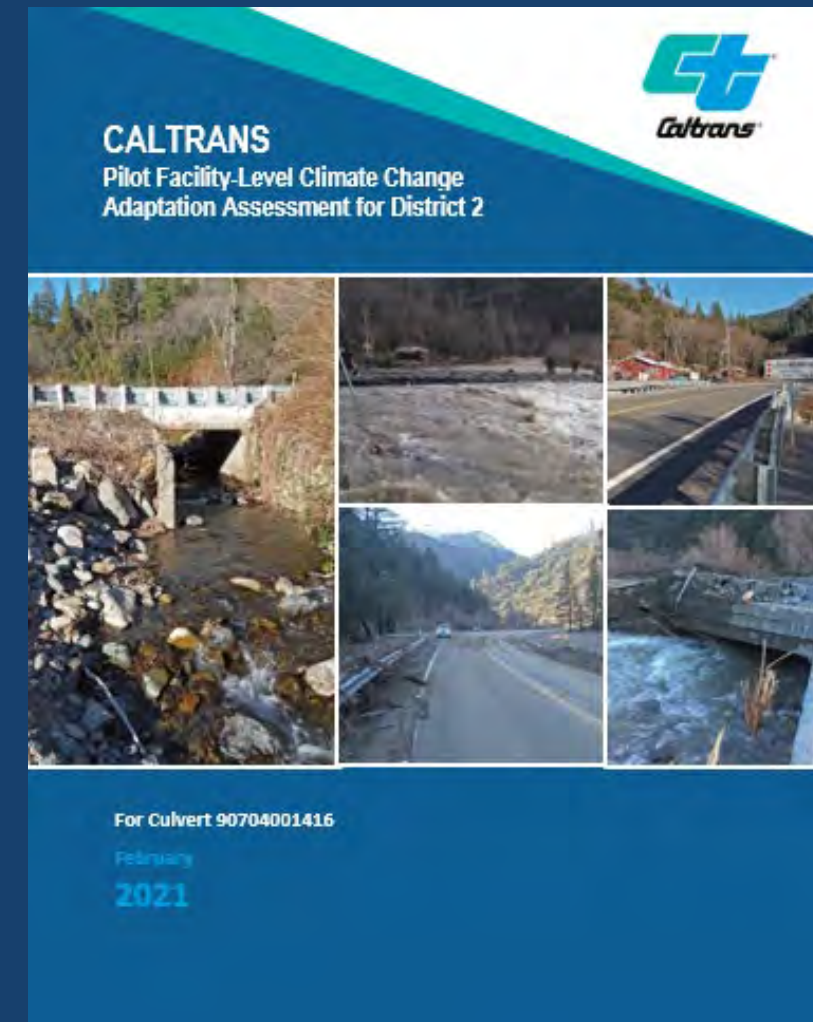




CLIMATE CHANGE PLANNING PRODUCTS: PROJECT ANALYSIS

PILOT FACILITY LEVEL CLIMATE CHANGE ADAPTATION ASSESSMENT

- Pilot facility level assessment: Climate change adaptation assessment for Culvert which conveys Little Indian Creek under California State Route 70 in Plumas County.
- Pilot results: Methodology was validated; however, implementation on a large scale was not practical due to cost, time and effort.
- Modified Approach: Integrate analysis into existing planning and project delivery process.

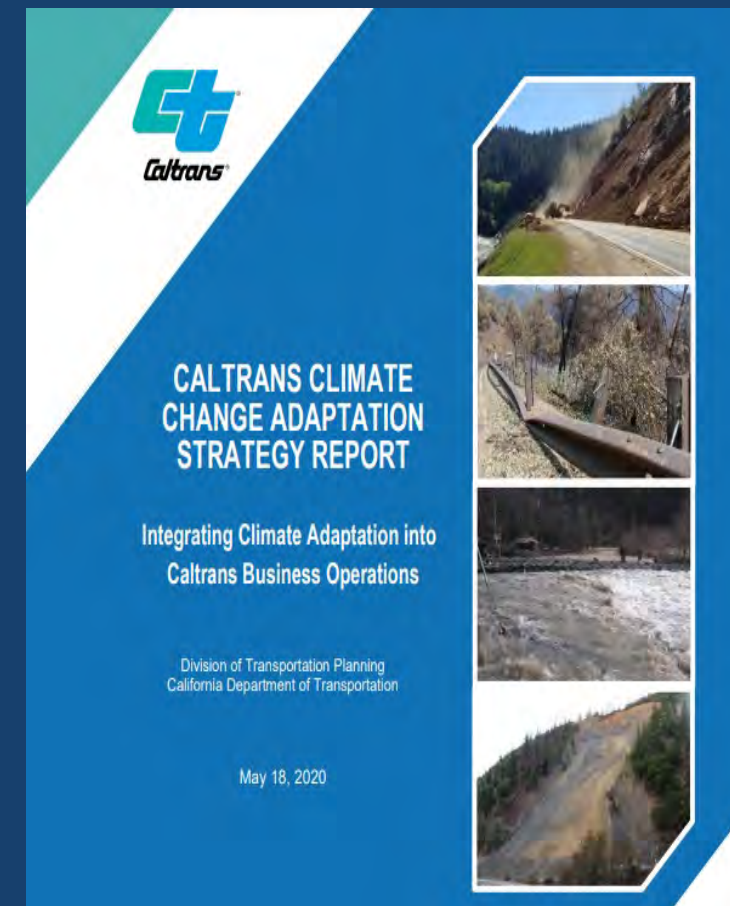




CLIMATE CHANGE PLANNING PRODUCTS: ORGANIZATION ASSESSMENT

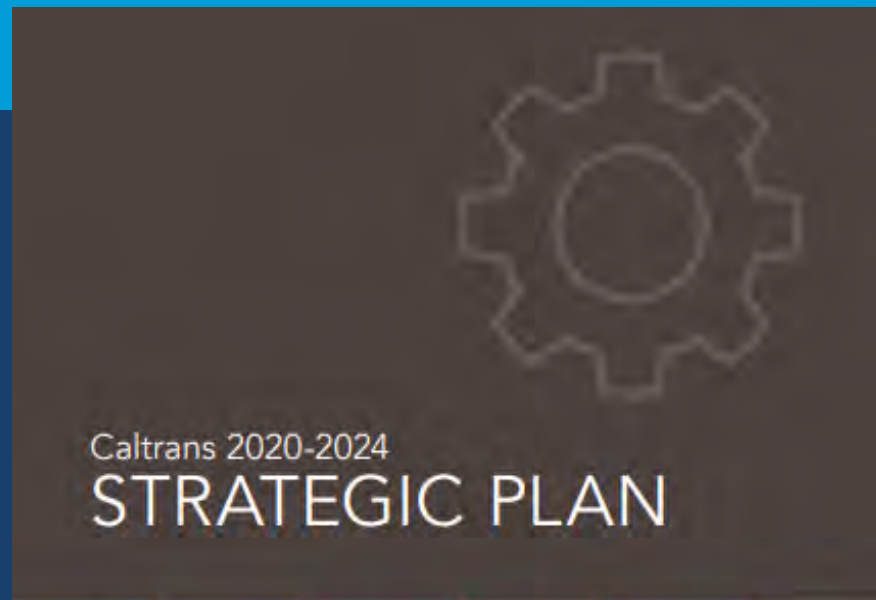
LEAD CLIMATE ACTION

- Greenhouse Gas Emission and Mitigation Report
 - Points to areas of activity for Caltrans to maximize its contribution to state GHG reduction efforts.
- Climate Change Communication Guide
 - Articulates best practices to educate, inform, and strengthen collaboration internally, among external partners, and with the public
- Caltrans Adaptation Strategy Report
 - Evaluates Caltrans procedures and processes and recommends how to incorporate long-term, agency-wide adaptation implementation strategies into Caltrans business operations.



CLIMATE CHANGE PLANNING PRODUCTS: NEXT STEPS

2020-2024 CALTRANS STRATEGIC MANAGEMENT PLAN



GOAL: LEAD CLIMATE ACTION

Actions related to this goal aim to achieve the following outcomes:

Mitigation — Reduce greenhouse gas emissions from the transportation sector.

Resilience — Strengthen our capability to withstand and recover from the impacts from climate change.

Leadership — Demonstrate leadership in climate action.

STRATEGIES:

- **Develop and start implementing a Caltrans Climate Action Plan that incorporates the CalSTA Climate Action Plan for Transportation Investments.**
- **Accelerate sustainable freight sector transformation.**
- **Establish a robust Climate Action program of education, training, and outreach.**
- **Partner and collaborate to lead on climate action.**
- **Establish a vehicle miles traveled (VMT) monitoring and reduction program.**
- **Engage with communities most vulnerable to climate change impacts to inform development and implementation of Climate Action activities.**



CLIMATE CHANGE PLANNING PRODUCTS: NEXT STEPS

IMPLEMENTATION THROUGH INTEGRATION & ADVOCACY

- Develop guidance, tools and training for how climate adaptation should be addressed during each phase – potentially stressor specific
- Develop Statewide Adaptation Priority Report
- Identify adaptation need for long term funding sources



CLIMATE CHANGE PLANNING PRODUCTS: CONCLUSION

QUESTIONS?

