

Caltrans Climate Change Planning Efforts

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Climate Change Vulnerability Assessments



- Identify climate vulnerabilities along the State Highway System
- Gain understanding of the magnitude of climate change impacts statewide through the end of the century

Six climate stressors studied:

- Change in Temperature
- Change in Precipitation
- Wildfire
- Sea Level Rise
- Storm Surge
- Cliff Retreat



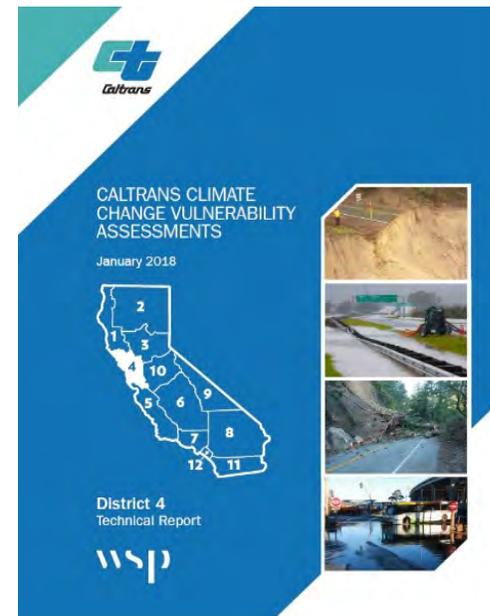
Climate Change Vulnerability Assessments

Completed Oct. 2019

Summary Report



ArcGIS Online Webmap



Technical Report



Statewide Vulnerability Assessment Summary

Vulnerability Assessment Key Takeaways

- District 2 (Northern California) has the greatest wildfire exposure, with over 1,500 miles of its State Highway System passing through medium, high, or very high exposure areas by end of century
- By 2100, 160 lane miles will be affected by sea-Level rise statewide
- The Northern and Central California coast is most susceptible to cliff retreat



Adaptation Priority Reports

Completed March 2021

- The Reports prioritize assets exposed to projected climate hazards for adaptation
 - Strategically prioritizes identified vulnerabilities on the SHS for adaptation investment
 - Assets were prioritized 1 to 5 based on exposure and consequence
 - Focused on Culvert, Bridge, and Pavement assets



Adaptation Priority Reports - [Link](#)

Adaptation Priority Report Key Takeaways

- Completing the Adaptation Priority Reports concluded the multistep process of understanding climate change vulnerability along the State Highway System
- The asset prioritization list will help ensure that adaptation investment is focused on assets at highest vulnerability to climate risk



Next Steps

- Develop Statewide Adaptation Priority Report
 - A statewide, 'priority 1' list will help by identifying assets at highest risk of climate change
 - Asset list can be further refined to meet criteria of funding program guidelines
 - Statewide prioritization data is available and is intended to be overlaid with data associated with equity and disadvantaged communities.
- Incorporate Climate Change into State, Regional, and System Planning processes
- Develop guidance, tools and training for how climate adaptation should be addressed during Planning to programming process
- Support the implementation of Caltrans plans and policies

Climate Change Integration

Vulnerability Assessments

Adaptation Priority Reports

2021 State Highway System Management Plan

(SHSMP)

Long Range System/Corridor Planning

In-depth analysis in Project Initiation Document

(PID)

Project Delivery

Questions?