

Santa Cruz County Climate Adaptation Vulnerability Assessment and Priorities Report (CAVA)

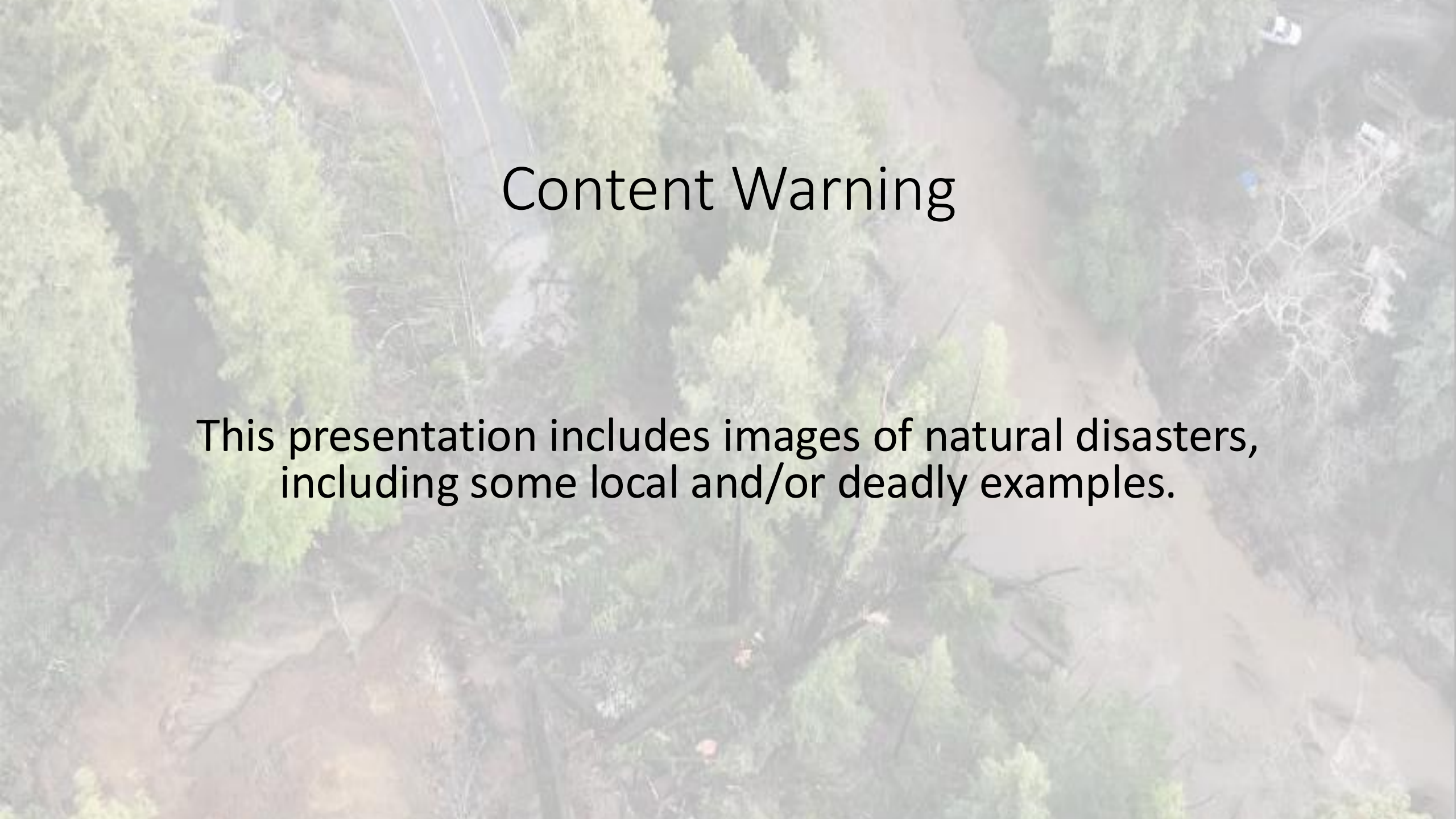
Public Workshop Milestone 1 – Framework Development October 2023

Santa Cruz County Regional Transportation Commission (SCCRTC)

SCC Office of Response, Recovery, and Resilience (SCC OR3)

SCC Community Development & Infrastructure (County Public Works and Planning)



An aerial photograph of a flooded forest. A road runs diagonally from the top left towards the center. A white car is visible on the road in the upper right. The surrounding area is filled with dense green trees, many of which are partially submerged in brown floodwater. The overall scene depicts a significant natural disaster, likely a major flood.

Content Warning

This presentation includes images of natural disasters, including some local and/or deadly examples.



Highway 1, Watsonville by Santa Cruz Sentinel



Holohan Way, Watsonville by KSBW



Highway 1, Santa Cruz by Santa Cruz Sentinel



Graham Hill Road, Felton by New York Times



Paulsen Rd, Watsonville by Good Times



Highway 9, Ben Lomond by Valley Press Banner



Highway 17 by KTLA



Bear Creek Road, Boulder Creek by KRON



Santa Cruz County by CBS



West Cliff Drive, Santa Cruz by AFP



West Cliff Drive, Santa Cruz by LA Times



Highway 9, Boulder Creek by CHP



Main Street, Soquel by Getty Images



Sonoma, by ABC



Paradise, by Getty Images

Agenda

1. Meeting goals
2. Project overview
 1. Team
 2. Milestones
 3. Objectives
3. Study approach
 1. Hazards
 2. Assets
 3. Metrics
4. Next steps

Meeting Goals

- Learn about how recent climate change accelerated wildfire and extreme weather events have impacted your travel – **See Activity #1**
- Receive recommendations on the project framework including:
 - Climate hazards – **See Activity #2**
 - Prioritization metrics – **See Activity #3**

Project Overview - Team



SCCRTC

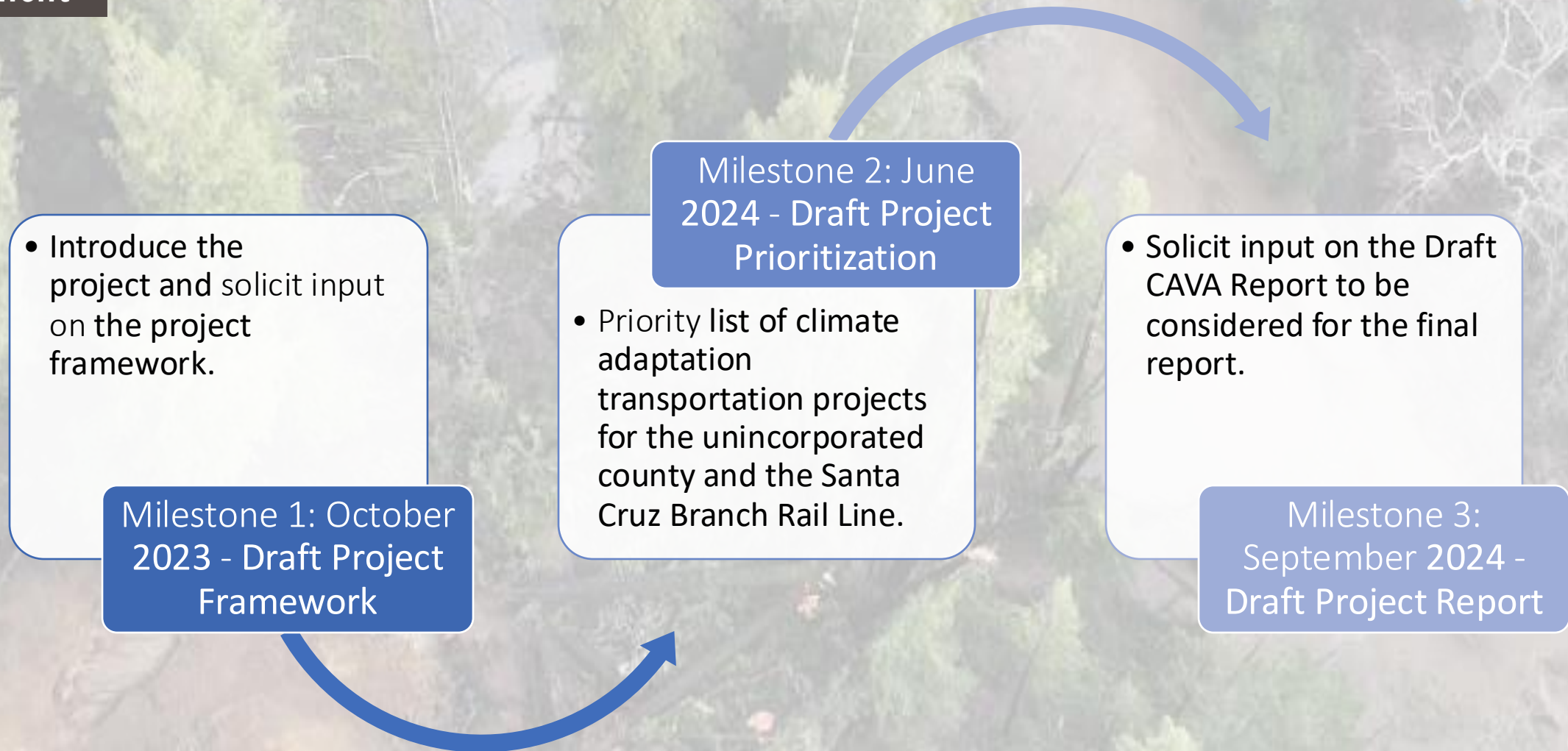
- Brianna Goodman – Project Manager
- Shannon Munz - Outreach



County of Santa Cruz

- Dave Reid – OR3
- David Carlson – Planning
- Steve Wiesner – Public Works

Project Overview - Public Engagement Milestones



Project Overview – Objectives

- Extreme weather and wildfires have caused devastating impacts on our county infrastructure
- Project will **identify the order in which transportation assets in unincorporated county and Santa Cruz Branch Rail Line** should undergo detailed climate assessments.



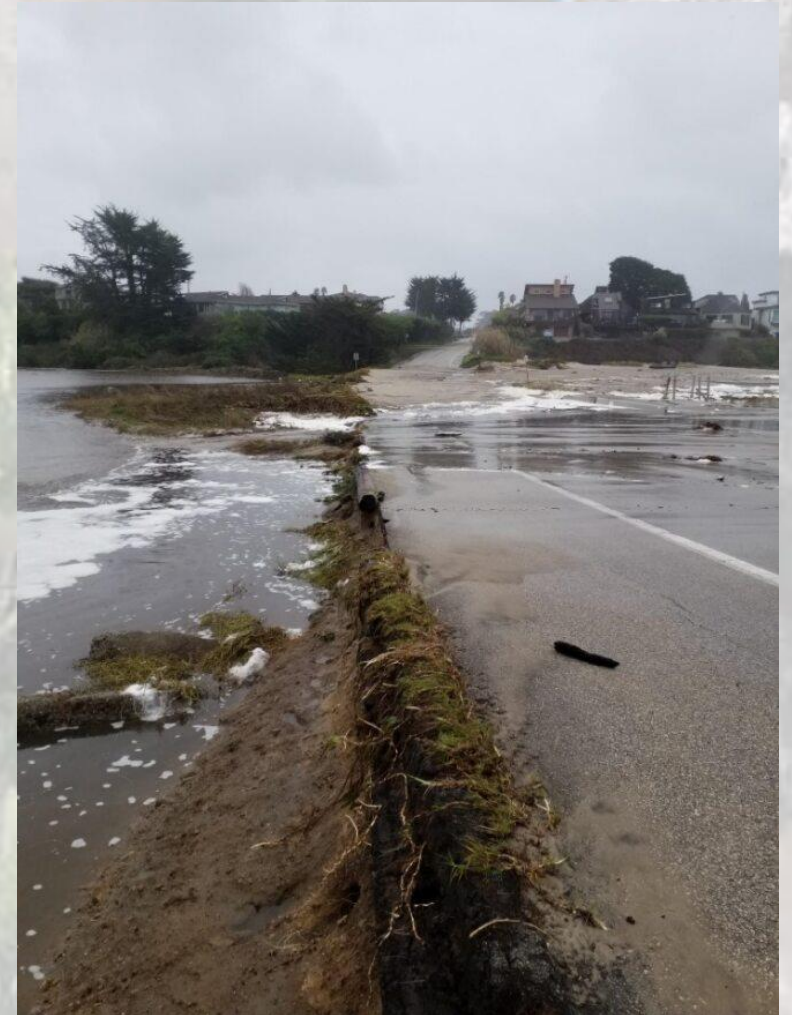
Project Overview – Outcomes

- **Determine when and where** transportation infrastructure will be vulnerable to climate hazards (utilizing previous work where applicable)
- **Develop prioritization metrics**
 - severity of climate hazards
 - how critical the asset is
 - impacts to disadvantaged/vulnerable populations
- **Develop a priority list of transportation projects** for further analysis and adaptation
- Identify funding sources



Study Approach – Climate Hazards

- Climate hazards being considered include:
 - Coastal flooding
 - Coastal erosion
 - Riverine/localized flooding
 - Debris flow
 - Slope failure
 - Extreme wind
 - Wildfire
 - Extreme heat/drought
 - Others? - **See Activity #2**



Study Approach - Assets

- Culverts and drainage
- Retaining walls and embankments
- Bridges
- County Roads
 - Pavement
 - Sidewalks
- Santa Cruz Branch Rail Line
 - Rail, ballast, ties
 - Trails (built and designed)



Study Approach – Possible Metrics

Potential **hazard** metrics include, but are not limited to:

- Length of asset exposed to climate hazard
- Timing of impact (sooner versus later)
- Timeframe of regular maintenance replacement of asset
- Likelihood of climate hazard
- Past exposure to climate hazard impacts
- Others? - **See Activity #3**

Study Approach – Possible Metrics

Potential **consequence** metrics include, but are not limited to:

- Cost to adapt the asset
- Cost of disruption to the public
- Traffic volumes
- Location within/nearby disadvantaged communities
- Location on one-way in/out roadway
- Detour time and length
- Location near critical facilities such as schools, hospitals etc.
- Presence of bike facility or transit route along asset
- Location along planned passenger rail between Watsonville and downtown Santa Cruz
- Others? - **See Activity #3**

Next Steps

1. Formalize project framework based on available data and input received
2. Framework brought to RTC/County Board in December for acceptance
3. Model climate hazard impacts to SCC in the next 100 years using latest climate science
4. Develop draft priority list of transportation projects for input during Milestone 2

Thank you

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