

# LAST CHANCE GRADE

California Transportation Commission

August 2021



February 2021- Emergency  
Repairs for a Medium Slide

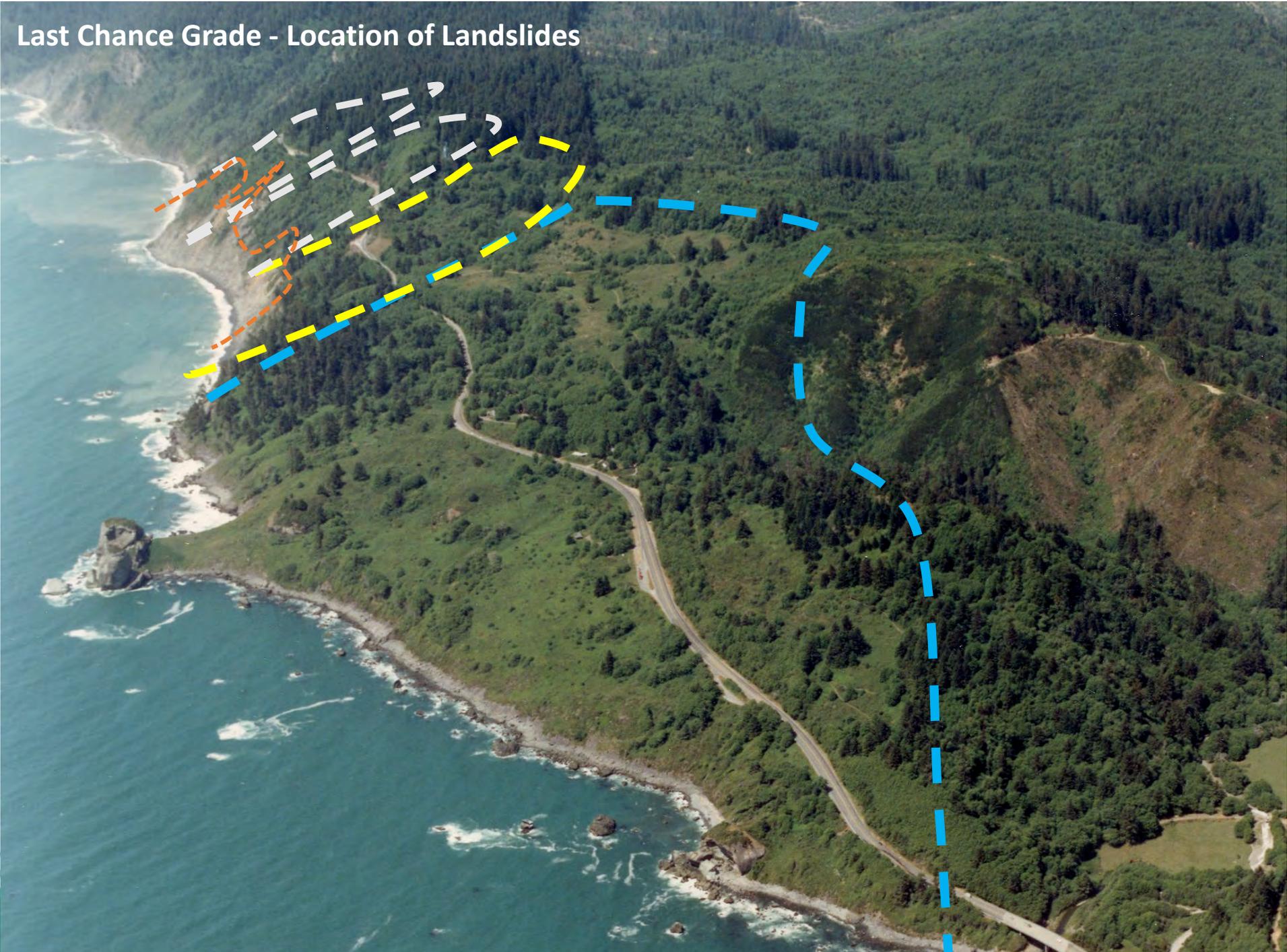


Hwy 101

2021 slide repairs



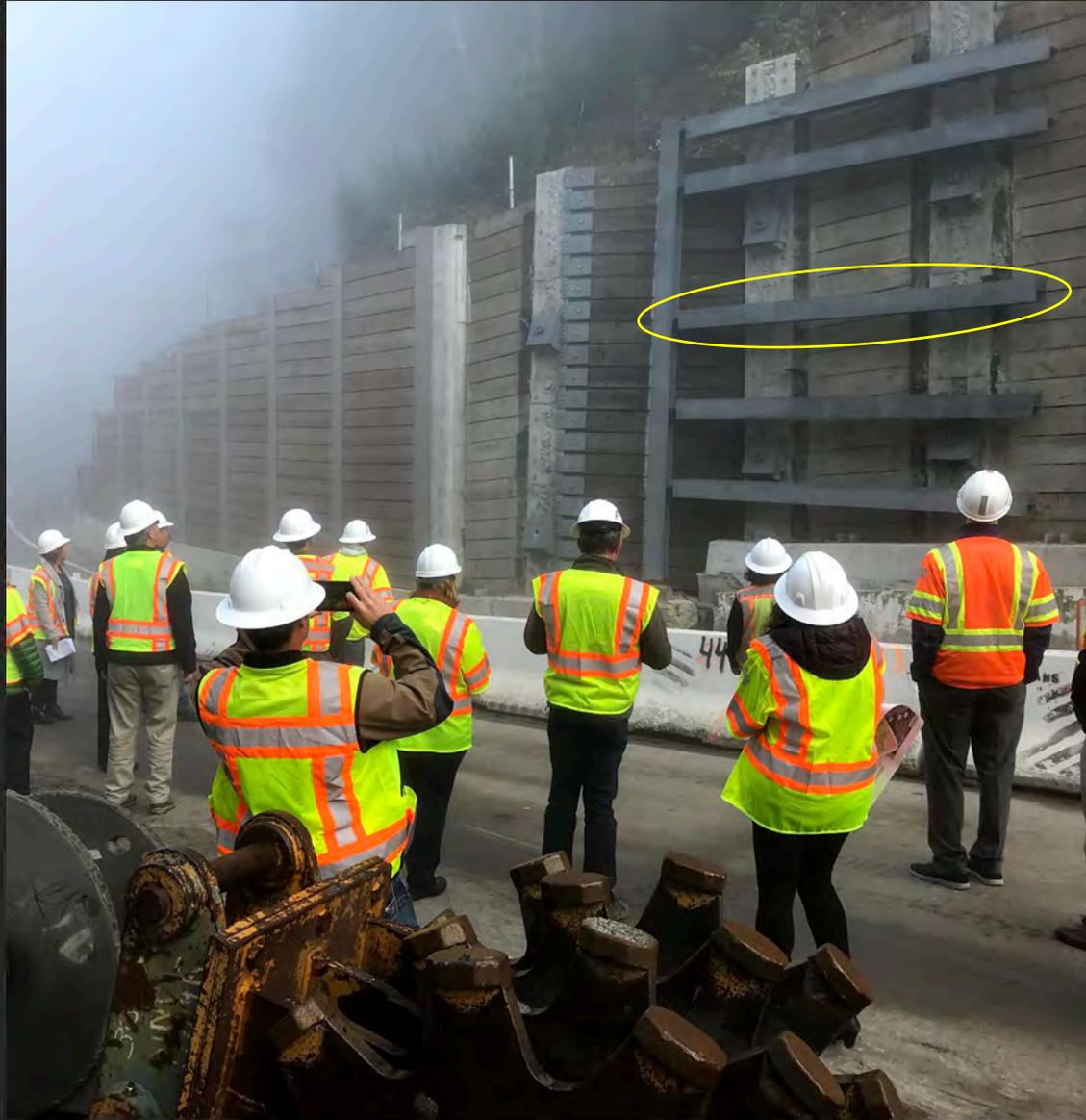
# Last Chance Grade - Location of Landslides

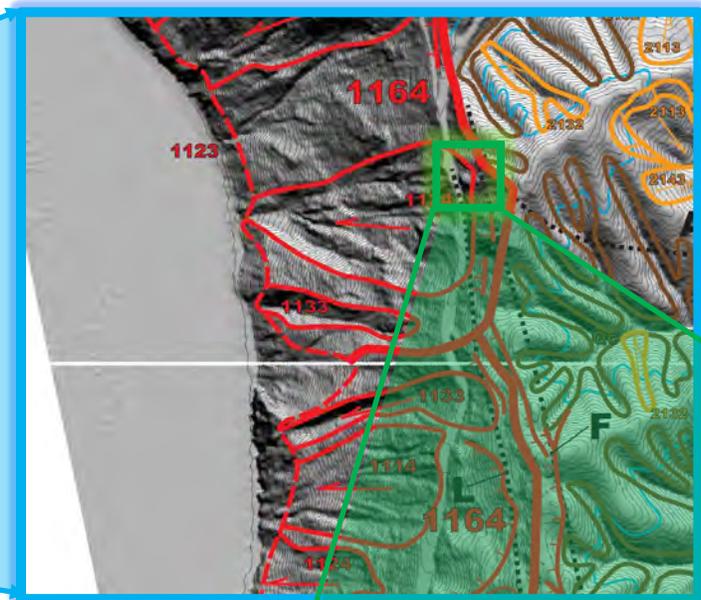
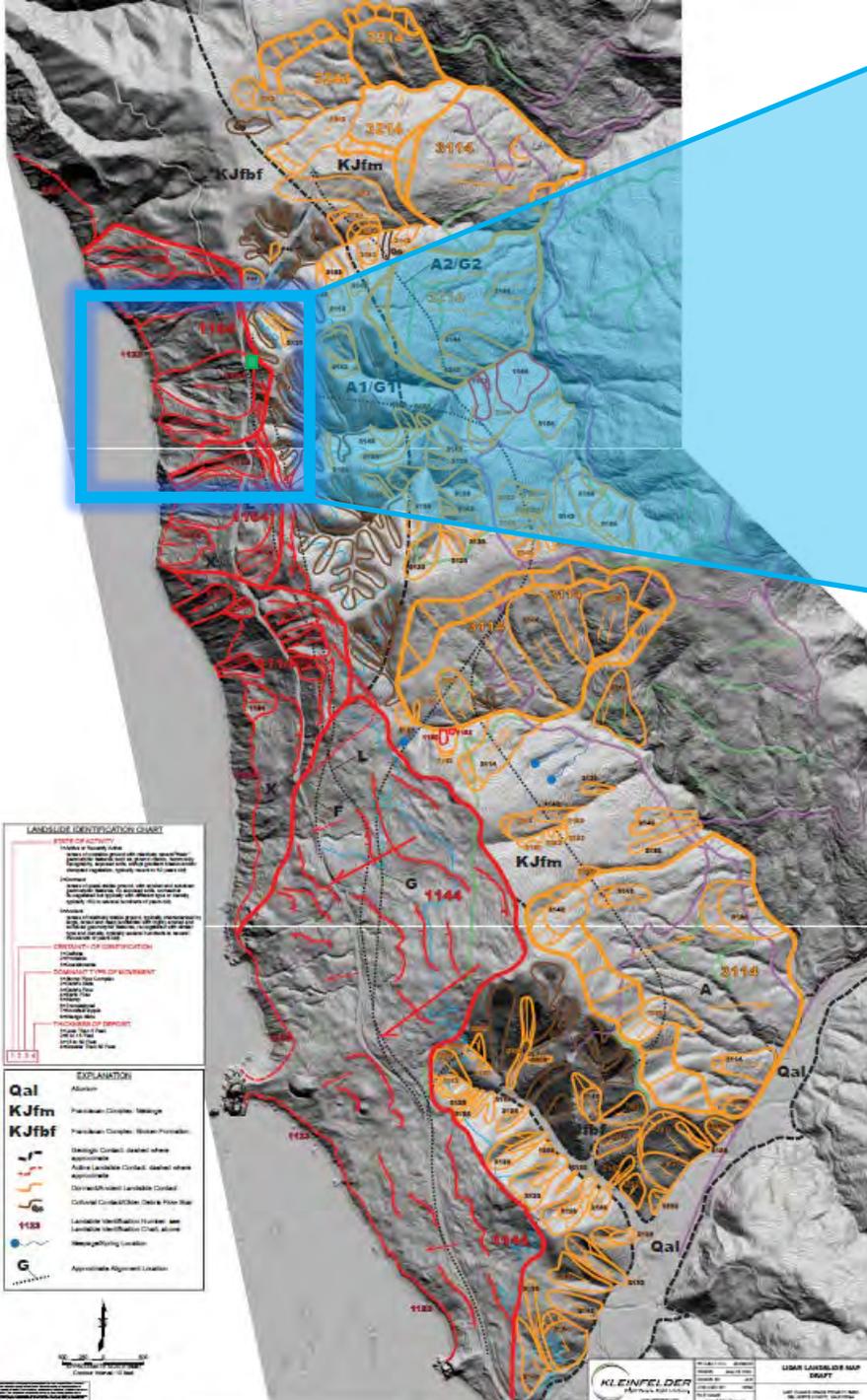




# presentation overview

- Project Summary, Schedule, and Actions
- Alternatives for Further Study
- Questions







- An emergency closure of the current highway would require a 320-mile, 6-hour detour between Eureka and Crescent City
- Cost of one-year closure:
  - \$236M in travel costs
  - \$41M in foregone trips
  - 3,800 jobs lost
  - \$456M in reduced business output

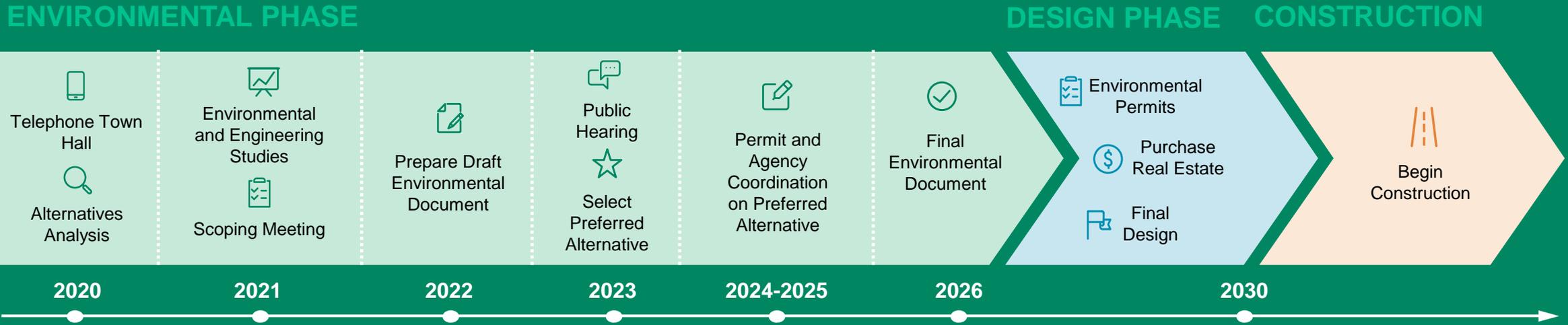


# Objectives and Challenges

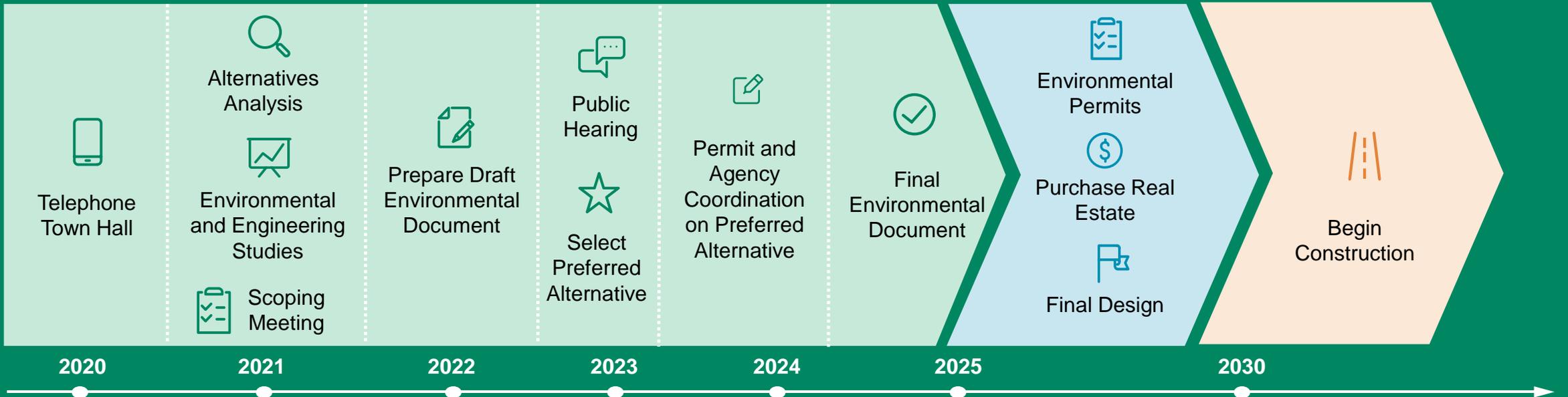
- 3 major objectives:
  - ◆ Long-term safe and reliable roadway
  - ◆ Reduce maintenance costs
  - ◆ Protect economy, natural and cultural resources
- 3 major challenges:
  - ◆ Environmental sensitivity and complexity
  - ◆ Maintaining partnerships
  - ◆ Understanding the geology
- 3 major risks:
  - ◆ Environmental litigation
  - ◆ Mitigation impasse
  - ◆ New geotechnical discoveries that delay project

# Key Steps in the Environmental Process

ORIGINAL SCHEDULE



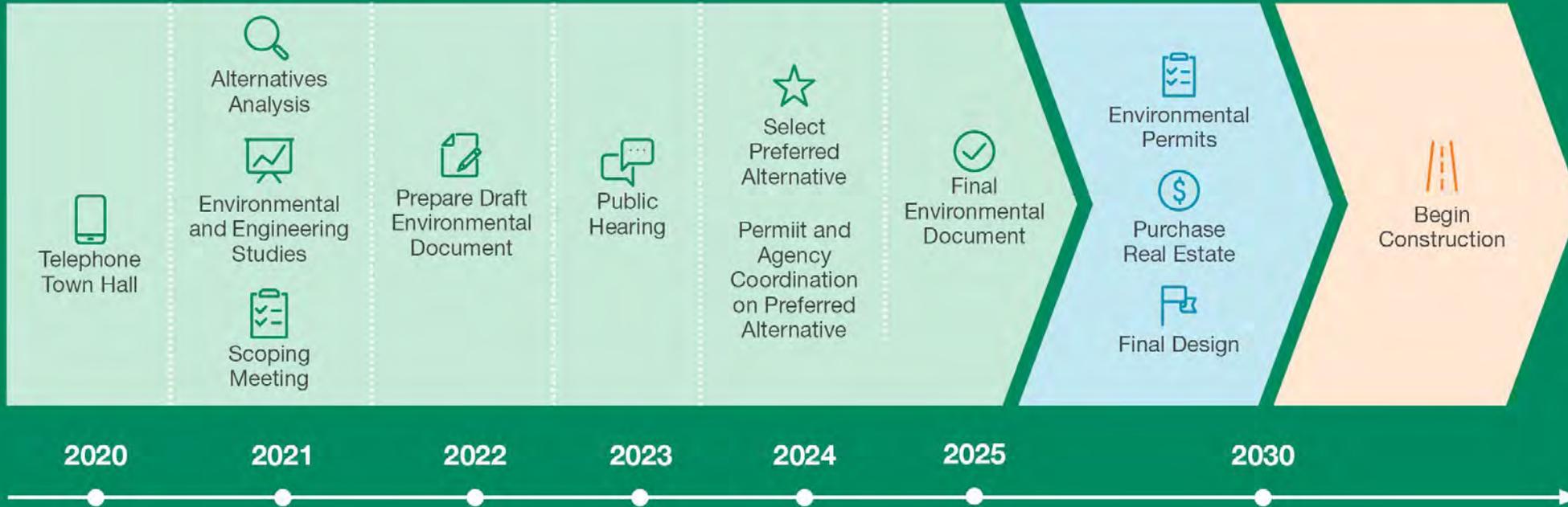
REVISED SCHEDULE



## ENVIRONMENTAL PHASE

## DESIGN PHASE

## CONSTRUCTION



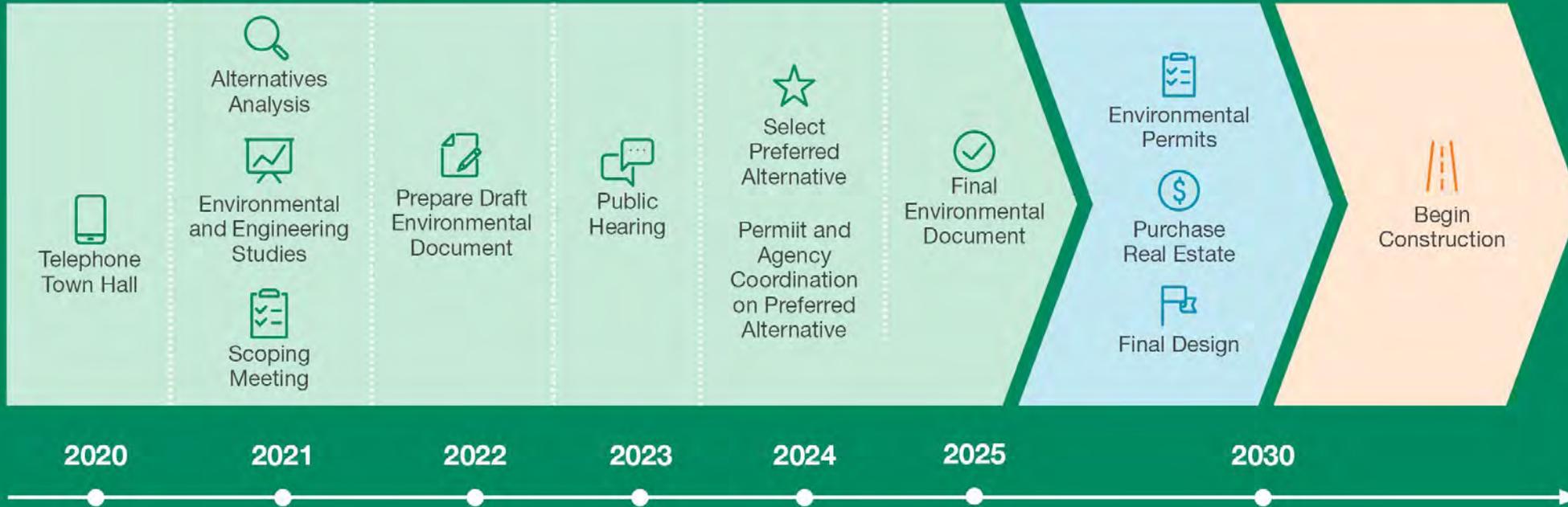
Since 2020 Commission Update:

- ◆ Completed Alternatives Analysis-  
*Alternatives chosen for further study save a year on the schedule and \$10M in costs*
- ◆ Completed Phase 4 of geotechnical studies
- ◆ Completed initial environmental, engineering studies on time

## ENVIRONMENTAL PHASE

## DESIGN PHASE

## CONSTRUCTION



## Project Budget

- ◆ CTC Approved full funding of the environmental phase in 2019
- ◆ PA&ED Budget: \$50M
- ◆ Current Expenditures: \$19M



# Alternatives Analysis and Results

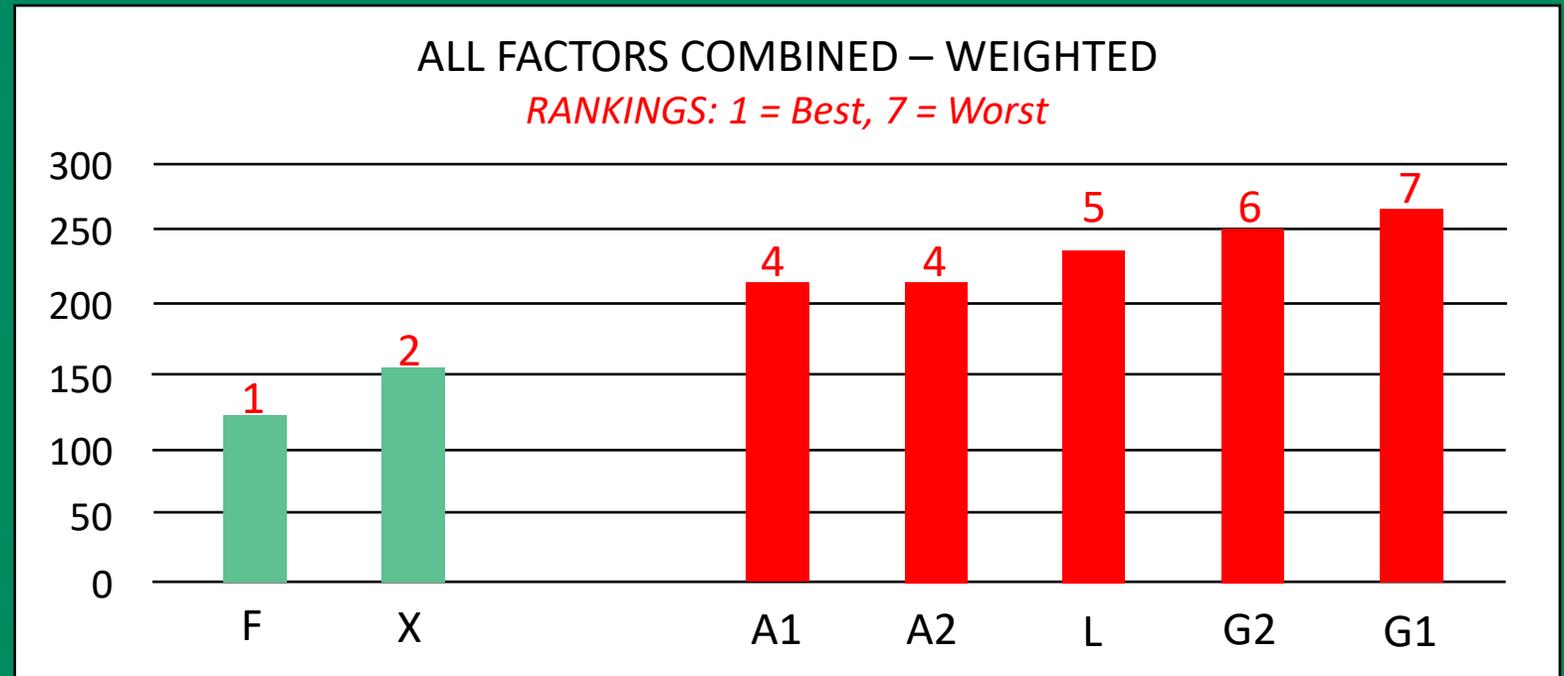
- Analyzed 7 build alternatives based on criteria and performance measures
  - ◆ 4 stakeholder working groups provided input through a series of 3 workshops
- Result: Alternatives F and X rose to the top
  - ◆ Other 5 eliminated from further study at this time

LAST CHANCE  
GRADE PROJECT

## Project Alternatives

Routes

- Highway 101
- Alternative F
- Alternative X



« OBITUARY: Phyllis Darlene Brown, 1933-2021

Beware of Ticks and Stay on Designated Trails,  
City of Arcata Reminds You »

THE ECONews REPORT / SATURDAY, JUNE 5 @ 10 A.M. / ENVIRONMENT

## ECONews REPORT: Enviros Cheer Caltrans? Last Chance Grade Planning Gets High Marks from the EcoNews



Photo: Caltrans.

TOM WHEELER / FRIDAY, APRIL 30 @ 2:25 P.M. / GUEST OPINION

## GUEST OPINION: As Someone Who Has Two Active Lawsuits Against Caltrans, Let Me Say That Caltrans is Doing a Great Job With Last Chance Grade

[www.lastchancegrade.com](http://www.lastchancegrade.com)



# Alternatives for Further Study

LAST CHANCE  
GRADE PROJECT

## Project Alternatives

Routes

- Highway 101
- Alternative F
- Alternative X

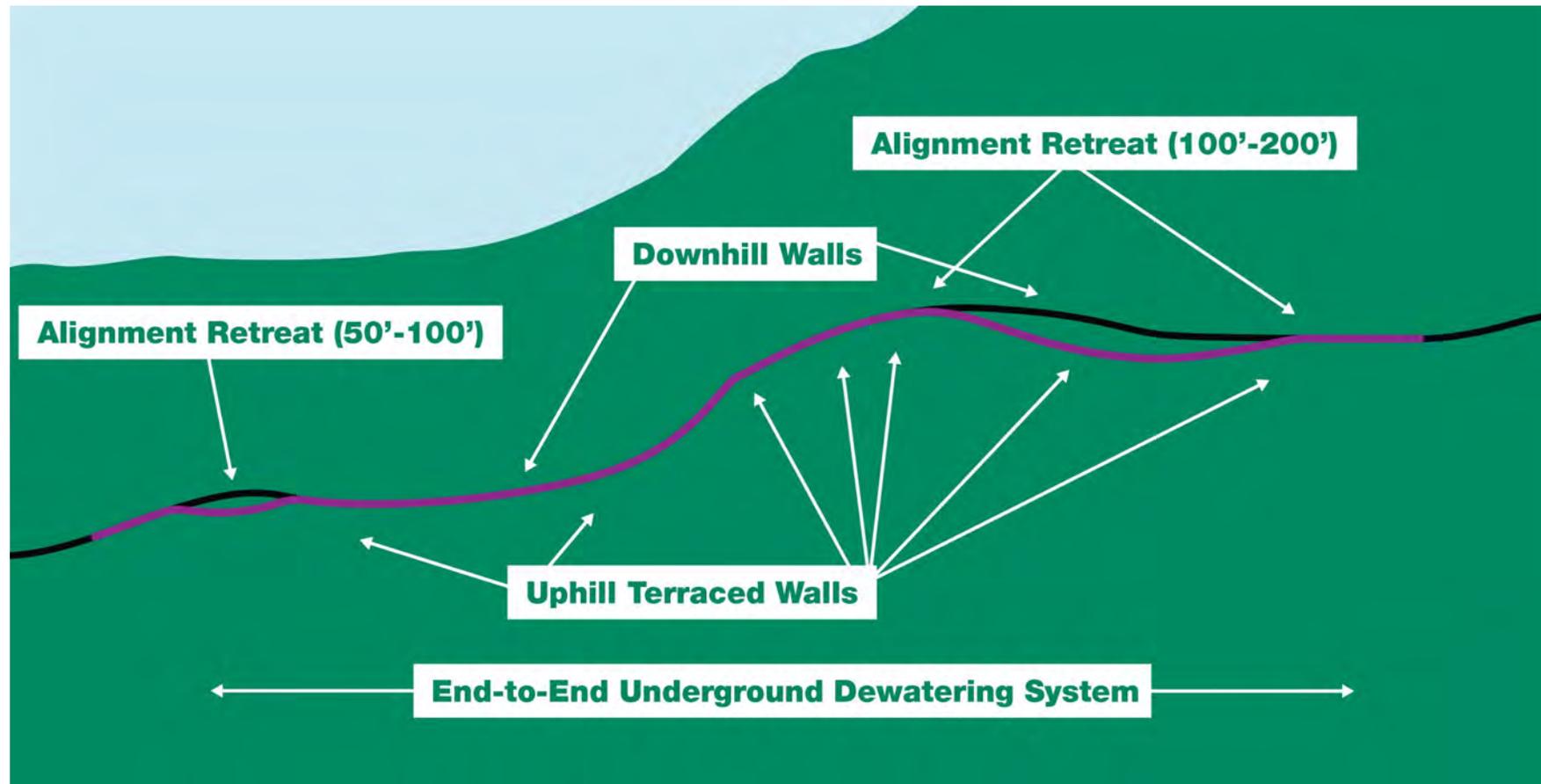


- Alternative F
  - ◆ Avoids landslide with tunnel bypass
  - ◆ Higher-cost but has lowest risk and environmental impacts
- Alternative X
  - ◆ Mitigates the landslide
  - ◆ Lower-cost but higher-risk



# Alternative X: Realign and Strengthen

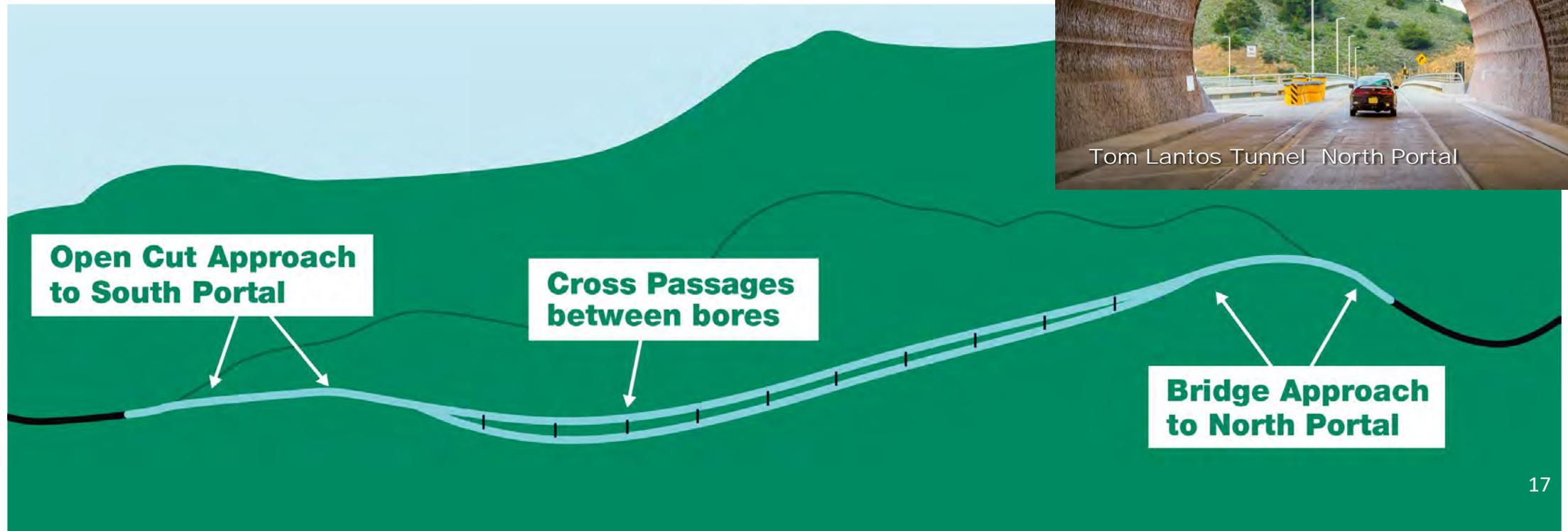
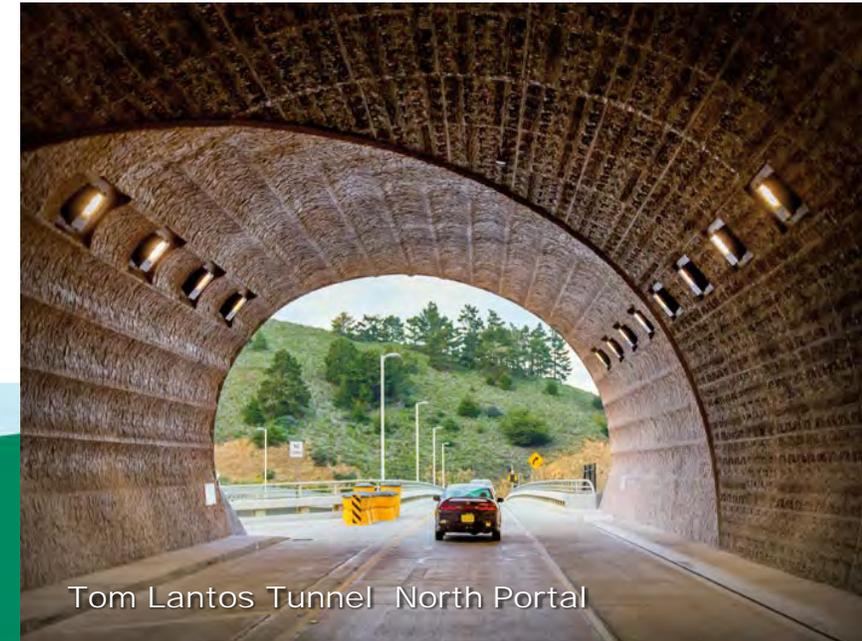
- Notably distinct from current system of emergency repairs to current alignment – from reactive to proactive
- Purpose-built engineering solutions from end to end to help stabilize road, mitigate landslide





# Alternative F: Tunnel Bypass

- Tunnel alignment avoids landslide
- Higher-cost but lower-risk
- Fewer environmental impacts



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