

# Last Chance Grade Feasibility Study Summary of January 2015 Community Workshops

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April 2015

**Last Chance Grade Feasibility Study**





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# **Last Chance Grade Feasibility Study Summary of January 2015 Community Workshops**

## **I. INTRODUCTION**

The “Last Chance Grade” (LCG) is a 3-mile segment of US Highway 101 in Del Norte County, California located between Klamath and Crescent City. Last Chance Grade is an area of highway prone to geological activity. Landslides and road failures have been an ongoing problem for decades and substantial funds have been invested in repairs. The road is currently safe to use, but a long term solution is needed to ensure continued safe and reliable transportation on US 101.

Caltrans, the California Department of Parks and Recreation, the National Park Service, the Yurok Tribe, the Smith River Rancheria, and the Elk Valley Rancheria are collaborative partners in the development of the Last Chance Grade Feasibility Study, which is currently underway. The study is an investigation that considers a full range of needs, options, ideas, opportunities, and constraints. Once completed, the feasibility study will be used as a reference document identifying potential improvement projects, enabling the Partners to respond to and compete for various project funding sources as they become available. The Partners meet on a monthly basis and will continue to meet for the duration of the study.

During January 2015, the LCG Partners hosted three community workshops presenting possible alternatives for future study, and provided opportunities for stakeholders and the public to submit input regarding the alternatives.

## **II. SUMMARY OF KEY FINDINGS**

A number of key themes emerged from input provided by stakeholders and the public, as summarized below.

### ***Impacts of Road Failure and Urgent Need to Expedite***

The majority of participants expressed their concern that road failure at LCG is both inevitable and possibly imminent. They noted that fixes to the current alignment are only “band-aids” and that a permanent solution must be expedited. They emphasized that the alternatives chosen for future study must be those most likely to move forward. They also expressed frustration at delays caused by construction and lane closures. They stated that, regardless of what alternative is pursued, the road needs to be kept open during project construction.

Many participants detailed the impacts of road failure at LCG, describing the cost of losing road access as greater than that of any alternative. Total disconnection would cut off access to vital community and emergency services, impact the integrity of alternative routes, and have a profound negative effect on business and tourism. These impacts were described as extending well beyond Del Norte County to the entire state,

and even the rest of the county and the world, given the scope of tourism driven by the area's natural resources.

### ***Safety and Reliability***

The majority of participants emphasized the crucial importance of a safe, reliable road at Last Chance Grade. Many noted that the current experience of driving the road made them feel nervous and uncertain and worried about their own and others' safety. They emphasized that human safety is equally or more important than any other impacts and that it should be given weight in decision making. They expressed their concern regarding the geological instability of the area and that geotechnical study is necessary to identify a lasting solution that will survive major events and will not have the effect of worsening landslides.

Participants also addressed other aspects of road safety including safe speeds and the need for safety features such as median barriers on curves, turnouts, pullouts with rest areas, wider shoulders, and possibly bicycle lanes. A few participants stated that they would like to see a four-lane road through the area to ease congestion and make passage easier for trucks and other large vehicles using the road for goods movement and services.

### ***Project Funding and Costs***

Participants expressed various concerns regarding project funding and the cost of constructing and maintaining the selected alternative. They urged that cost be taken into account and that the Partners consider which alternatives are most likely to get funded – possibly those that are less expensive without high annual maintenance costs. They suggested early identification of funding sources, identifying and leveraging the Partner's own resources, and "thinking out of the box." A number of specific funding options were suggested including a toll road, an Enhanced Infrastructure Finance District (EIFD) and selling any redwoods that need to be cut down to benefit the project.

### ***Environmental, Cultural and Recreational Impacts***

Impacts to natural resources such as old growth redwoods; creeks, fisheries and fish habitat; and wildlife habitat were another frequently mentioned concern. Many participants strongly urged the selection of an alternative with the least environmental impact, possibly one of the shorter alternatives. However, participants also allowed that this must be weighed against long-term viability and safety.

Concerns were also stated regarding impacts to cultural resources, which are hard to mitigate. Participants also sought more information regarding these resources and possible impacts. Finally, participants expressed concerns about the effect of environmental impacts on scenic views and tourism, which is largely driven by interest in the area's beauty and natural features.

## ***Partnering and Outreach Process***

Participants commented on the LCG partnering and outreach processes. They suggested that the Partnership be expanded to make it less subject to political influence and suggested various stakeholder groups that should be more involved. They stressed the importance of engaging interest groups early in the process and of continued information to and gathering of input from the community. They also expressed their appreciation of the process and partnering efforts so far.

Participants asked about the Partners' preferred alternatives and level of agreement. They expressed concern that there is too much focus on protecting the environment at the expense of public safety and health and the economy and urged that knowledge gained from previous bypass projects in the area be utilized.

## ***Considerations and Criteria for Selection of a Preferred Alternative***

Participants made general comments on considerations and criteria for selecting alternatives and also commented on their specific alternative preferences.

In terms of general considerations, participants expressed that the number of alternatives for further study must be narrowed down. Some noted that the community will agree on any route which will continue to work over the long term but that this must be balanced with environmental concerns. Others urged the Partners not to discount viable alternatives due to cost, impacts or other considerations noted, given the impact of total road failure. Other considerations included maintaining access to current roads and trails and ensuring that the new road is easy to travel as possible.

In terms of specific preferred alternatives, there was slightly greater support for the shorter alternatives, particularly the "A" and "B" options, due to their lower environmental impacts, lesser cost and shorter construction time. The "D" and "E" alternatives were not as well supported due to the perception of greater impacts on both environmental and cultural resources. Participants stated positions both strongly in favor of and against Alternative F1, which proposes a tunnel built in the current alignment. Supporters expressed that it would have less impact, avoiding old growth redwoods and creeks. They called out examples of other lengthy tunnels that have worked, including some in seismically active areas. Those who objected to the idea of a tunnel or tunnels expressed that it did not seem safe, would entail higher maintenance costs, would not be long enough to avoid the danger zone and would lose the view which is important to tourism. Some participants also urged the consideration of a "no action" alternative or an alternative that focuses on improvements to support the current alignment.

Finally, participants suggested a number of alternatives not on the list, including an ocean bridge or causeway; coastal trail alignment; a four-lane bypass similar to Drury Parkway; Rudisill, Hunter Creek or Mill Creek Roads as alternative routes; ferries or shuttle buses; and a "no-build" alternative maintaining/improving the current alignment.

### **III. METHODOLOGY**

In January 2015, the Partners hosted three community workshops and provided an opportunity to submit comments via written or email correspondence in order to receive input on a range of possible alternatives that would provide a long-term solution for Last Chance Grade.

The alternatives were developed based on a review of previously proposed planning studies and discussions with the Partners to identify additional alternatives. Fourteen alternatives were identified and shared with the public.

#### ***Outreach Methods***

Participation opportunities were promoted and advertised through a variety of methods including:

- Postcard mailing and e-mail announcements to existing stakeholder lists and to stakeholder groups including:
  - County, state and city elected officials
  - Local public agencies including transportation, community development and community services agencies
  - Natural resources agencies including State and National Parks, State and National Fish and Wildlife, regional and national coastal and water commissions, and USDA Forest Service
  - Native American Tribes
  - Local and regional public transportation providers
  - Bicycle and pedestrian advocacy groups
  - Safety groups including CHP, CalFire and local fire departments, paramedics and emergency responders
  - Hospitals and clinics
  - Special interest organizations including environmental organizations
  - Chambers of Commerce
  - Local businesses
  - Schools and universities
- Posting on dedicated Caltrans webpage at [www.dot.ca.gov/dist1/d1projects/last\\_chance\\_grade](http://www.dot.ca.gov/dist1/d1projects/last_chance_grade)
- Press releases and media coverage including local and regional online and print newspapers, radio and TV. Local news coverage received included articles in the *Del Norte Triplicate* and *Eureka Times-Standard*.

For more information, see Appendix A, "Outreach Materials."

#### ***Community Workshops***

From January 26th through 28th, three public workshops were conducted by the Last Chance Grade Partners, with assistance provided by MIG, Inc., a planning, design and



communications firm headquartered in Berkeley, California. MIG is Caltrans' On-Call contractor whose participation is made available through funding and resources provided through the statewide Public Participation and Engagement Contract.

The workshops were held in the three main communities located along the route: Crescent City, Klamath and Eureka. All workshops were held at ADA-accessible locations.

The following workshops were held:

<b>Location</b>	<b>Address</b>	<b>Date and Time</b>
Crescent City	Del Norte County Fairgrounds Arts & Crafts Building 421 Highway 101 North Crescent City, CA	Monday, January 26, 2015 5:30-7:30 p.m.
Eureka	Wharfinger Building Great Room Eureka Public Marina, #1 Marina Way Eureka, CA	Tuesday, January 27, 2015 5:30-7:30 p.m.
Klamath	Yurok Tribal Office Klamath Community Room 190 Klamath Boulevard Klamath, CA	Wednesday, January 28, 2015 5:30-7:30 p.m.

### **Staff Facilitation Training**

To build capacity within the LCG Partners to facilitate group discussions both during the workshops and throughout the length of the project, MIG conducted a staff facilitation training on Monday, January 26 at the Del Norte County Fairgrounds prior to the first workshop. Approximately 30 LCG Partner staff members participated in the training. Many of these participants assisted with facilitation and note taking activities for the small group discussions conducted during the workshops.

### **Workshop Format**

All three workshops followed the same interactive format which allowed participants to learn about the history of Last Chance Grade and proposed alternatives, ask questions of LCG Partner staff, and comment on their preferences for the alternatives.

### ***Open House and Workshop Materials***

Each workshop began with a brief Open House period. After attendees signed in, they were able to view maps and displays which provided information about the project and the alternatives currently under consideration. The maps and displays included the following:

- Location Map showing the location of the project area in relation to Del Norte and Humboldt Counties, local roads, rivers, watersheds and National and State Parks
- Preliminary Alternatives Map showing the 14 alternatives currently being studied; their position in relation to the existing Last Chance Grade alignment, Highway 101, and State and National Parks; and the topology of the region
- Cultural and Environmental Resources Map showing the general location of environmental resources including old growth redwoods, coastal zones and streams as well as areas of cultural significance.
- Geological Survey Map showing landslides that have been mapped by USGC study of the Highway 101 corridor along Last Chance Grade, color-coded by type

Attendees were also provided with the following handouts:

- Agenda packet with workshop information, Agenda, Location Map, Feasibility Study Process and Preliminary Alternatives Map
- Alternatives Summary Matrix consisting of short descriptors lengths, additional travel time, footprint, timelines, costs and acreage of habitat impacts
- Comment Card that could be filled out during the workshops or mailed to Caltrans at a later date

There was also a table with a display of materials related to emergency preparedness provided by the Partners. Last Chance Grade Partner staff members were available to answer questions.

### ***Presentation***

After a fifteen-minute Open House period where participants could view information displays, Caltrans staff made a PowerPoint presentation. Talitha Hodgson, Last Chance Project Manager, detailed the history and geology of Last Chance Grade, and Jason Meyer, Associate Environmental Planner described the preliminary alternatives.

The presentation included:

- A history of Last Chance Grade, including details of various emergency events and consequent repair projects undertaken as well as public concern and requests for action, cost history from 1981 to present, completed documents and data on road movement due to seismic activity;
- A summary of the geology of Last Chance Grade including major landslides;
- An overview of the difficulties involved in developing alternatives;
- A review of the project timeline;
- A synopsis of the fourteen preliminary alternatives; and
- The conclusions of the Last Chance Grade Economic Impact Study.

The presentation was followed by a brief question-and-answer session.

For reproductions of the workshop displays and handouts and the full presentation, please see Appendix B, “Workshop Materials.”

### ***Small Group Discussion and Report***

Following the presentation, attendees were asked to split into small groups according to the number that appeared on the name badges received at sign-in. Each group had a facilitator and a note-taker. Facilitators led their groups through a discussion of the following three subjects:

1. What’s your experience like traveling through Last Chance Grade?
2. Talk about your general reaction to the alternatives that were discussed. What issues and concerns came to mind while you were listening to the presentation? What criteria do you think should be emphasized as these are evaluated for further study?
3. Are there any alternatives that haven’t been considered and should be?

At the end of the discussion period, each group identified a reporter, who shared the highlights of their group’s discussion with the reconvened larger group.

### ***Next Steps and Closing Comments***

The presenters concluded each workshop with comments regarding the next steps in the process, and provided contacts for more information.

## **IV. COMMUNITY WORKSHOP PARTICIPATION AND RESULTS**

### ***Community Workshop Participation***

Approximately 150 people from throughout the region attended the community workshops. They represented a wide variety of organizations and interests, including:

- Local and regional transportation agencies
- Law enforcement agencies
- County and municipal governments
- Fire departments and Community Service Districts
- Regional and local planning staff
- Native American tribal governments
- Emergency and medical services providers
- Environmental organizations
- Bicycle and pedestrian advocacy groups
- National and State Parks and natural resources agencies
- Statewide, regional and local transportation providers
- Tourism organizations
- Local civic and cultural organizations

- Local educators, schools and colleges
- Political organizations
- Local and regional Chambers of Commerce
- Local business interests and labor unions
- Local news media
- Area residents

## ***Community Workshop Results***

### **Presentation Questions**

Questions asked by participants during the question-and-answer period following the presentation included:

- Why are the City of Crescent City and Del Norte County not included in the Partnership? Can other partners be added?
- Why is funding being sought only after the selection of alternatives for study? Can't those processes occur in parallel?
- Why only two lanes? Can this become a four-lane road?
- Can bicycle lanes be added?
- What is the highest elevation of the area – i.e., is snow a concern?
- Will the road be closed during project construction?
- Has the road ever been closed completely during repairs?
- Is there a “no action” alternative?
- Can the current road alignment be maintained (and improved)?
- Is Caltrans aware that the U.S. Postal Service plans to relocate their main area center to Medford, Oregon, making postal delivery more dependent on the road remaining open through this area?

Answers to these questions will be posted on the Last Chance Grade website under the heading “Frequently Asked Questions.”

### **Small Group Discussion Comments**

Comments made by participants during the small group discussions are summarized below. For a full transcription of flipchart notes made during small group discussions, please see Appendix C, “Small Group Discussion Notes.”

### ***Experience of Driving Last Chance Grade***

Many participants travel LCG for both business and personal reasons with frequencies ranging from multiple times a month to daily. Several business owners also noted that their clients drive LCG or that they rely on shipping goods through this section so they are economically dependent on the road remaining passable. Participants also travel the road for recreational purposes. Some of the recreational users bike this section in

addition to travelling by car and noted that the narrowness of the road and shoulders make it particularly dangerous for bikes. This is a particular issue in summer when there are cyclists on the road.

The response to the experience of driving LCG most frequently mentioned by participants was that it made them feel nervous or uncertain. There are noticeable changes in the road and participants feel unsure of road conditions. Several noted that the sense of inevitable and possibly imminent road failure has them “holding their breath” when traveling this section. As one participant who travels to Eureka every other day for medical reasons put it, “I set out every time thinking, is this the day?” Others mentioned that their spouse or families worry about them when they need to drive LCG. Participants also expressed their frustration at delays caused by construction and lane closures, which impact businesses and make people late for appointments.

Participants did mention one enjoyable aspect of travelling LCG; it is extremely scenic. Several voiced a preference for selecting an alternative that would preserve this aspect of the road if possible. However, it was also noted that the scenic aspect also causes a safety issue when travelers, particularly bicyclists, pause to enjoy the views.

### ***Issues and Concerns Regarding Last Chance Grade and Alternatives***

Participants noted a number of issues and concerns regarding Last Chance Grade and the various alternatives shared at the workshop.

The majority of participants expressed two main concerns: first, the inevitability of road failure at LCG and its substantial impacts, making it necessary to expedite a permanent solution; and second, the safety and reliability of that solution.

### ***Inevitability, Impacts of Road Failure; Need to Expedite Solution***

One of the most frequent comments made by participants was that road failure at LCG is inevitable and possibly imminent—“a matter not of *if*, but of *when*.” Many participants agreed that the current road is in need of repair, but expressed that fixes to the current alignment are only “band-aids” and the situation has been going on for too long. Many expressed that a permanent solution must be expedited. Participants asked, “What can be done to move forward sooner rather than later?”

Many participants detailed the impacts of road failure at LCG, describing the cost of losing road access as greater than that of any alternative. Total disconnection would be devastating, cutting off access to vital services such as hospitals, medical care, schools and airports, and would also impact the integrity of alternative routes such as Highway 199. Participants described impacts that go beyond simply isolating Del Norte County; it would also affect Humboldt and Shasta Counties and Southern Oregon. Impacts to business and tourism, on which the area relies, would also be profound. The region’s natural resources are internationally recognized and it was noted that tourists come not only from the San Francisco Bay Area, but also from all over the country and the world.

Participants asked questions regarding what a short-term response to road failure might be. They also queried what circumstances short of complete failure would lead to an emergency declaration. It was noted that an emergency declaration functions to cut red tape and make it possible to move forward faster. However, it was also pointed out that the alternative advanced must be feasible and not likely to be stopped by a lawsuit based on environmental grounds.

Finally, participants noted that regardless of what alternative is pursued the current road needs to be kept open during project construction.

### ***Safety and Reliability***

Several participants noted that safety and reliability are more important than the cost or other impacts of any solution. Several participants requested that Caltrans modify its presentation to include information on the number of fatalities and accidents that have occurred along this section. They wanted the human impacts to be noted more prominently in the LCG information and for these impacts to be given more weight in decision making.

Participants also asked questions including whether there is a permanent solution and whether remediation projects carried out to date have improved safety and slowed the impact of the slides. It was noted that the median barrier added on the curve near Cushing Creek—the former site of several head-on collisions—has improved safety considerably.

Many participants expressed their concern regarding the geological instability of the area causing relatively rapid movement of the roadway. They noted that given the area's location in the Cascadia Subduction Zone as well as the likelihood of a major event, it is crucial to do the geotechnical study to identify alternatives that will survive such an event and will meet all compliance standards. Participants also wondered about whether any of the alternatives would have the effect of worsening landslides.

### ***Road Width and Turnouts/Pullouts***

Some participants in all three workshops asked whether it was possible to create a four-lane road through this section. It was suggested that this would ease congestion and make passage easier for large trucks that must use the road for goods movement and services. Some noted that if a four-lane road is not possible, the two-lane road must have wider shoulders wherever possible. They would also like to see turnouts and pullouts provided, including some with rest areas, which would allow truckers to take a break and tourists to safely pause to enjoy the scenery.

### ***Project Funding and Costs***

Participants expressed their concerns regarding project funding and the cost of constructing and maintaining the selected alternative. They urged that costs be taken into account and expressed that it is important to consider which alternatives are most

likely to get funded. Some noted that funding agencies are more likely to favor less expensive alternatives and those without high annual maintenance costs.

Participants also suggested that the Partners initiate identification of funding sources earlier in the process, referring to the community's experience with the Highway 199/197 project. They asked questions about funding, including:

- What funding is available?
- Where does it come from—private, federal, and/or state sources?
- What resources do the Partners have?

Participants recommended leveraging the Partner's own resources and also "thinking out of the box."

Some participants suggested specific funding options including making the alternative a toll road, an Enhanced Infrastructure Finance District (EIFD), and using the money from selling any redwoods that need to be cut down in the process. As an alternative to the latter, they suggested donating the funds raised or the wood itself to the tribes.

### *Environmental and Cultural Impacts*

Participants expressed their concerns regarding potential impacts of the various alternatives. These related both to impacts on environmental resources such as old growth redwoods, fisheries and wildlife habitats and to impacts on areas of cultural significance.

Impacts to natural resources were a frequently mentioned concern. Many participants strongly urged the selection of an alternative with the least possible environmental impact while allowing that this must be weighed against the long-term stability of the solution. Some suggested that the shorter alternatives were better because they had fewer environmental impacts.

Many felt strongly that it is crucial to protect old growth redwoods. Others suggested that sometimes it's necessary to remove trees and that three acres of old growth are not an issue versus human safety. It was suggested that if the selected alternative impacts some trees, the impact can be mitigated by protecting the trees in the former alignment.

Many participants also felt strongly about avoiding impacts to fisheries and salmon habitats. Wilson Creek was seen as particularly vulnerable; it was suggested that starting farther south, perhaps at Minor or Hunter Creek, might be an option.

Some participants also stated their concerns about impacts to cultural resources, which were not detailed in the handout. They noted that impacts on cultural resources are hard to mitigate, and recommended focusing impacts on those resources that can be more easily mitigated.

Finally, participants also expressed concerns about the effect of environmental impacts on the scenic views and on tourism. People come to the area to see the redwoods, the salmon, and the scenery. However, it was suggested that the alternatives might open up new view opportunities, particularly on the other side of the mountain.

### ***Partnering and Outreach Process***

Participants also made comments on the LCG partnering and outreach processes. They suggested the Partnership be expanded so it was less likely to be subject to political influence. Participants suggested various other stakeholder groups that should be more involved, including the Yurok Tribe, local municipalities and counties, the Harbor Districts, Community Service Districts, the Local Transportation District, Tourism and Visitor Bureaus, Chambers of Commerce and the Golden Gate Bridge District. They stressed the importance of engaging interest groups early in the process and of continued community input. They also noted that LCG is not the only vulnerable spot on Highway 101 and that this affects a much larger area. Some participants expressed their appreciation for the efforts to coordinate decisions with the local tribes.

Participants asked whether the Partners have preferred alternatives and whether they all share the same preferences. Some expressed that the Partners should go with whatever alternative the State and National Parks were most in agreement with. Others expressed concern that there is too much focus on protecting the environment at the expense of public safety and health, the economy and protection from natural hazards. The Partners were also urged to utilize knowledge gained from previous bypass projects in the area.

### ***Comments on Alternatives***

Finally, discussion participants commented on the alternatives presented. They made comments on general considerations and criteria regarding the choice of alternatives for further study. They also called out the specific alternatives they most favored. Participants' opinions varied widely. There was no overall consensus on one desired alternative.

### ***General Criteria and Considerations Regarding Alternatives***

Participants expressed that there were too many alternatives proposed and that the choices must be narrowed down. They suggested a number of general considerations to be taken into account in choosing alternatives for further study. Some participants noted that the community will agree on any route which will work continually over the long term, but cautioned that this must be balanced with environmental concerns. However, given the impact of total road failure, others urged the Partners not to discount viable alternatives due to cost, impacts on resources or other considerations noted on the Alternatives Summary Matrix. They expressed that added travel time is not great and is not a big factor, especially compared to reliability.



Participants noted that it's important to consider maintaining access to Highway 101 and trails as well as the location of existing power lines. They urged that any new road be as easy to travel as possible, offering a "smooth ride" and avoiding extreme curves or uphill climbs—pointing out that it's difficult to encourage economic growth if the road is hard to traverse.

Some participants also urged that a "no action" alternative or an alternative that focuses on improvements that would support the current alignment should be added to the list.

### ***Specified Preferences***

Participant opinion was split in terms of whether they preferred the shorter or longer alternatives. Many preferred the shorter routes as most direct, least expensive and most efficient to construct. They did not like the greater impacts of the longer routes. However, some expressed that the longer routes may be more economical and durable in the long run.

Many of the discussion participants specified their preferred alternatives out of those presented. Overall there was slightly greater support for the shorter alternatives (A1, A2, B1 and B2), due to their lower environmental impacts, especially with regards to impacts on fisheries and aquatic habitat, lower cost, shorter construction time and perceived greater stability. There was also some support for alternatives C3 and C5. The "D" and "E" alternatives were seen as having greater impacts on both environmental and cultural resources and were not well supported.

### ***Preferences Regarding Tunnels***

Participants stated positions both in favor of and against the inclusion of a tunnel, particularly alternative F1, which proposes a tunnel built in the current alignment.

Those in favor of a tunnel expressed that it would have less impact and avoid old growth redwoods. They called out examples of other lengthy tunnels including the BART Transbay Tunnel, the English Channel Tunnel and the Mont Blanc Vehicular Tunnel between Switzerland and Italy. They noted that tunnels have been built in seismically active zones before, so it is not automatically a bad idea, if it can be proven to be safe. The suggestion was also made to build a series of shorter tunnels with viaducts in between be built.

Objections raised by those who were against the inclusion of a tunnel included:

- That it did not seem safe, particularly if the area is seismically active;
- That having a tunnel in a seismic zone would entail high maintenance costs;
- That Alternative F1 would be too short to entirely avoid the danger zone; and
- That there would be no view, which is important since tourists come to the area to see the scenery and redwoods.

### ***Bicycle and Recreational Use***

Some participants expressed concerns about impacts on bicycle or pedestrian travel through the area. They would like to see better bicycle facilities provided. They also questioned what would happen to the old alignment if a bypass is built. It was suggested that, if safe, it be used as a low-speed, possibly seasonal tourist destination for biking and hiking.

### ***Alternatives Not on List***

Participants suggested a number of additional alternatives to be considered. These included:

- A toll bridge, promontory bridge or causeway over the ocean which would create a significant tourist attraction. However, several other participants expressed that this was not very feasible given that it is open and unprotected ocean.
- An alignment on the coastal trail
- Rudisill Creek as an alternative
- Another four-lane bypass like Drury Parkway. Participants noted that that this area is also an important watershed, and questioned how this project got passed and whether the topography is similar to LCG.
- Ferries or buses to shuttle large numbers of people
- A “no-build” alternative that would maintain and improve the current alignment
- No action, with regular maintenance improvements.

### **Comment Cards and Correspondence**

Eighteen comment cards and four written letters were received from stakeholders and workshop participants. For a full transcription, please see Appendix D, “Comment Cards,” and Appendix E, “Correspondence.”

#### ***Comment Cards***

The majority of those submitting comment cards also attended the workshops and participated in the small group discussions. Therefore, many of the comment cards received gave additional details regarding suggestions and opinions already expressed.

#### ***Safety and Stability***

Some commenters reiterated the importance of safety and their fears regarding the danger of injury or loss of life, especially for daily or frequent travelers including schoolchildren. They also urged that solution be expedited and an alternative opened as soon as possible, noting that if a bridge in San Francisco were subject to this kind of threat it would be closed immediately and asking why this was not being treated as a similar emergency. They called out the lack of geological stability and the rapid growth of cracks in the road and cliffs, and suggested that the best geotechnical firm available be retained to study the feasibility and safety of all alternatives, especially those involving tunnels.

In regards to tunnels, commenters repeated both the pro- and anti-tunnel arguments stated during the discussions. Those in favor noted the lower impact on redwoods, less added travel time and length, and expressed that it seems a better route in the long run despite the longer construction schedule. They also urged that the tunnel might be safer if built in the sea floor like the English “Chunnel.” Those against the idea of tunnel commented that a tunnel would not be geologically sound—the coastline is too unstable, with the Cascadia Subduction Zone overdue for a large earthquake. They also expressed that it would be too expensive.

### ***Project Funding and Costs***

In regards to project funding and costs, commenters urged that the Partners identify more funding options and keep fiscal responsibility in mind while moving forward, suggested the establishment of an Enhanced Infrastructure Finance District or of a public-private partnership, and suggested that any redwood cut be sold to defray project costs or donated to the tribes for traditional uses.

### ***Concerns Regarding Impacts***

Several commenters stated their concern regarding environmental and cultural impacts, particularly to old growth redwoods, fisheries and creeks. They noted that impacts affect Oregon residents and travelers as well as Northern California locals. They also enquired where the cultural resources that might be impacted are specifically located and urged that more information on old growth redwoods be provided to help the public better understand their significance and scarcity.

### ***Outreach Process***

Comments made several suggestions regarding the ongoing outreach process, including:

- Before defining alternatives for further study, conduct interviews with those who are in a position to stop or halt construction due to concern over impacts, and provide an assessment and follow-up plan
- In summarizing input, weight responses by frequency; and
- Keep information coming to the public.

Comments also reiterated concerns that the process not be limited by political influence or overdue concern with environmental and other impacts versus human safety and the area’s economic health. Several commenters expressed their gratitude and appreciation for the work done thus far.

### ***Considerations and Preferences Regarding Alternatives***

Commenters expressed both general considerations and preferences for specific alternatives. These included:

- Choose the alternative that is least likely to experience delays;
- Balance the “triple bottom line” of people, environment and cost;

- Choose the most scenic alternative; make the new road four lanes, or at least choose an option that allows for later expansion;
- Provide pullouts and rest areas for trucks and RVs;
- Map out and take into account existing road/trail access and power lines; and
- Preserve the existing alignment for bicycle/pedestrian use or a seasonal, low-speed road.

Several commenters also specified the alternatives that they most favored. These included A2, B2, C3, C4 and D3. These were seen as having the lowest cost and least environmental impact while consideration good road terrain and travel time. C5, D5 and E5 were also supported as having the least impact on parkland and habitats, and it was recommended that this longer alternative be designed for four lanes which would raise the cost but increase safety and promote commerce. Another commenter reiterated the additional alternative of building an ocean causeway.

### ***Correspondence***

The Partners also received nine written letters via postal mail or email. These letters echoed several of the same themes covered in small group discussions and on the comment cards. Correspondents included representatives of regional environmental organizations and an area hospital, as well as local residents, some with significant experience regarding the issues at Last Chance Grade.

Several correspondents expressed the need for further and more detailed study of the feasibility and impacts of various alternatives. They suggested that there may be feasible alignments and alternatives in addition to those currently proposed including those that maintain or remain close to the current alignment. They called for complete transparency in the process with details of the studies such as criteria used to be shared with stakeholders and the public as study proceeds. They urged that the Partners work closely with all stakeholders, particularly environmental organizations concerned with habitat impacts so that the project may proceed without undue delay.

Several correspondents emphasized their concerns regarding the protection of environmental resources, particularly old growth redwoods. They noted that portions of the land identified as alternative routes are under deed restriction to public park purposes, as well as being designated as a World Heritage Site and Globally Significant Ecoregion. They suggested that mitigation should be implemented for any impacts that are truly unavoidable. They also supported engineering assumptions for the alternatives that are appropriate to the conditions including keeping the highway design as a 2-lane road limited to speeds of 55 mph or possibly even less.

Several correspondents commented on their preferences for specific alternatives. Some supported the shorter alternatives, particularly B2 and A2, noting that they offer the best chance of a fairly quick resolution due to their lower cost and lesser impact. Some also supported alternatives involving tunnels and/or viaducts. They offered several suggestions regarding these options, including building the tunnel underground

(drilling down to stable bedrock if possible) and studying other potential tunnel/viaduct alignments.

One correspondent also emphasized the crucial importance of a reliable north/south route between Crescent City/Curry County and Eureka to serve medical needs, including emergency hospital transfers and importing medical supplies and expertise.

## **Conclusion**

In conclusion, the level of interest for community members is very high. Participants, particularly those who drive the route regularly, emphasize the need for a permanent solution to be expedited. There are a broad range of issues and concerns for Caltrans and the Last Chance Grade Partners to respond to. The workshops did not yield any overall consensus on the best alternative.