Oregon South Coast Slides Study:

US 101 and Carpenterville Highway Traffic Control and Communications Plan

Study landslides include:

- Retz Creek South Slide
- Coal Point Slide
- North Brush Creek Hump
- Brush Creek Slide
- Arizona North Slide (part of Arizona Slide Complex*)
- Arizona Inn Slide (part of Arizona Slide Complex*)
- Christmas Tree Slide (aka Frankport North)
- Sisters Rock Sink
- Frankport Slide (aka Frankport South)
- Woodroof Creek Slide (aka Horneblenzer Slide, Skull Ridge Slide, Squire Slide)
- Eighty Acres Slides
- Burnt Hill Slide
- Hooskanaden Slide

South Coast Slides Study March 2023

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OVERVIEW OF DOCUMENT

The following Traffic Control and Communications Plan (TCP) outlines protocols for when landslide events occur on the south coast of Oregon between Port Orford and Brookings. The TCP includes phased approaches for temporary traffic control set-up, references to appropriate ODOT standard drawings for general temporary traffic control guidance, specific temporary traffic control plans for complex control points, and a communications plan.

This TCP was established as part of the South Coast Slide Study that reviewed 13 specific landslide locations on US 101. The TCP can be used to support actions for other landslide events within the slide area, but it provides the most specific guidance for South Coast Slide study landslides. The study landslides were grouped into three slide areas based on the location of regional destinations and availability of alternative routes around the slide. Study landslides in each slide area include:

- Humbug Mountain Slide Area
 - o Retz Creek South Slide
 - o Coal Point Slide
 - o North Brush Creek Hump
 - o Brush Creek Slide
 - o Arizona North Slide (part of Arizona Slide Complex)
 - o Arizona Inn Slide (part of Arizona Slide Complex)
 - o Christmas Tree Slide (aka Frankport North)
 - o Sisters Rock Sink
 - o Frankport Slide (aka Frankport South)
 - Woodroof Creek Slide (aka Horneblenzer Slide, Skull Ridge Slide, Squire Slide)
- Eighty Acres Slide Area
 - o Eighty Acres Slide
- Hooskanaden Slide Area
 - o Burnt Hill Slide
 - Hooskanaden Slide

The TCP is organized into five sections. This first introduction section is an overview of the document and includes the Communications Plan and Phased Approach for Temporary Traffic Control that is relevant for all landslide event locations and scenarios. Scenarios could include all lanes on US 101 being closed due to a landslide event or only some of the lanes on US 101 being closed.

- Section1 focuses on the Humbug Mountain Slide Area.
- Section 2 focuses on the Eighty Acres Slide Area.
- Section 3 focused on the Hooskanaden Slide Area.
- Section 4 focuses on Carpenterville Highway Slide Area. No specific study landslides from Carpenterville Highway were included in the South Coast Slides Study. Therefore, this section provides broader guidelines that are relevant for any of the unstable slope locations that may impact this roadway.

COMMUNICATIONS PLAN – ALL LANDSLIDE EVENTS

Independent of which landslide location and which scenario is occurring for a landslide event, the following communications plan provides a step-by-step approach for ODOT staff during and after a landslide event.

Stakeholders and Impacted Groups

When a landslide event occurs and impacts US 101 and/or Carpenterville Highway, communication is key for the safety and timely recovery for the traveling public. Key stakeholders and impacted groups that need to be notified include:

- ODOT, including the following divisions/units
 - o Transportation Maintenance Managers (TMM)
 - Traveler information team, supporting website, TripCheck, 511, and social media updates and activities
 - o Geotechnical
 - o Dispatch and transportation operations center (TOC) operators
 - o District maintenance and response crews
 - o ITS, supporting VMS operations
 - Motor carrier
 - o Traffic Management Centers (TMCs)
 - Traffic incident management
- Caltrans, Curry County Department of Transportation, and local city transportation departments
- Public transportation providers
- Law enforcement agencies, such as Oregon State Police (OSP), county sheriff's department, and local police departments
- Emergency responders and dispatchers
- Utility companies
- Forest Services
- Contractors, flaggers, and construction crews
- Fuel and freight providers, trucking companies
- Private property owners with impacted property
- Traveling public
- Media

Communication Plan Steps

The following highlights the communication and coordination steps for ODOT to take when a landslide event occurs that blocks one or more lanes on US 101 or Carpenterville Highway.

- 1. **Event occurs and is reported** to ODOT (likely by a member of the public).
- 2. The local Transportation Maintenance Manager (TMM) receives the notification and notifies ODOT dispatch, geotechnical, and public information groups.
- 3. **ODOT and partners inform the traveling public**. The public information officer handles public notifications. ODOT's TripCheck system will show any closures. The public information officer with notify:
 - a. Local news stations, who will broadcast information more widely.
 - b. Local agency partners, who can then further notify residents via their protocols.
 - c. Curry County, who will send emergency text alerts as needed.
 - d. Local bicycle and pedestrian groups, who can notify their memberships.
- 4. ODOT geotechnical staff work together to **determine the type of occurrence and what should be done**. Determine if US 101 can stay open (for a slow-moving landslide for example), partially open, or fully closed.
- 5. **ODOT dispatch staff sends out response staff and any needed contractors**. This effort will depend on the type of impact and needed traffic control. ODOT maintenance staff, contracted flaggers, and construction crews may be part of the response. For any lane or full closures, ODOT maintenance staff will be there 24/7 for liability reasons.
- 6. On-site ODOT staff, and any needed contractors, set up initial road closure, if needed. For lane or full roadway closures, this step may include flagging stations and signage, including both PCMS set up locally and VMS alerts on the highway network (which may be for all vehicles or for freight vehicles only depending on the temporary traffic control scenario). Equipment to be dispersed primarily from the maintenance facilities in Gold Beach and Port Orford.
- 7. Dispatch will automatically **make a request to impacted groups**, such as:
 - a. Caltrans, who may need to set up VMS boards with highway closure alerts.
 - b. Motor Carrier, who may need to provide assistance with length, width, and/or weight restrictions, such as operating weight masters on either side of a detour route or segment of US 101 that cannot accommodate all freight vehicle sizes. If lanes on US 101 remain open, there may be vehicle restrictions. Per the ODOT Mobility Procedures Manual, the minimum horizontal clear width for 2-lanes of traffic is 28 feet and for one lane of traffic is 22 feet.
 - c. Fuel and freight providers, who may have disruptions in the supply chain to local communities due to environmental restrictions on US 199. Early notification will allow providers to consider options like sending smaller but more frequent freight/fuel trucks to provide similar loads.
 - d. Emergency responders, who may have disruptions to their routes and dispatch processes.
- 8. On-site ODOT staff, and any needed contractors, reinforce and complete local traffic control setup, if needed.
 - a. Determine how best to support bicyclists and pedestrians in the impact area. Actions that may support these users, depending on the specific event context, include:
 - i. Warning and wayfinding signage.
 - ii. Space allocation to allow bicyclist and pedestrian to travel past the work zone, if feasible.
- 9. ODOT coordinates with stakeholders to support freight movement.

- a. If Carpenterville Highway is used as a detour route, ODOT staff will handle pilot cars for trucking companies.
- b. For over-dimensional loads, TMM or TMCs will assist in coordinating loads traveling over US 101 if open or local detour route Carpenterville Highway.
 - i. Dedicated phone line for emergency coordination efforts: 541-247-0098
 - ii. Phone will be forwarded to the Office Coordinator phone line. During the initial closure time, this line may be forwarded to a designee to help manage coordination efforts until such time that the local crew (ODOT South Coast Maintenance) can resume coordination efforts.
 - iii. While line is forwarded to external ODOT member (not on South Coast crew), the designee will work with the South Coast TMM/Coordinator in the coordination efforts to get over-dimensional loads through or around the impacted area.
 - iv. Over-dimensional loads can only be moved during "off peak" hours.
- c. Example Trucking Advisory announcement from February 2019's Hooskanaden event recovery:



For more information: (503) 373-0000, option 1 for information about over-dimension loads; (503) 378-6699 for information about registration services

U.S. 101 is currently closed in both directions at MP 344, about 12 miles north of Brookings, due to a slide. Carpenterville Highway is a detour, but the Motor Carrier Transportation Division would like to remind commercial motor vehicle operators that the highway is limited to the following lengths:

- Truck Tractor and Semitrailer Combinations (fifth wheel hitch) 60 feet overall length, 40 foot trailer length.
- Truck and Trailer Combinations (pintle hitch) 65 feet overall length, 40 foot trailer
- Doubles Combinations 65 feet overall length, 40 foot trailer length.
- Other length limits as shown on Group Map 1.

Carpenterville Highway is a narrow, two-lane highway, with sharp corners and limited site distance. For carriers hauling divisible loads, a permit is not available to exceed these length limits. Carriers exceeding the length limits on Carpenterville Highway should use other alternate routes.

- ODOT works with Curry County Public Transportation Service District to determine whether bus/van operations can be maintained or rerouted to support community members that rely on transit.
- 11. ODOT works with key service providers, such as emergency vehicles, deliveries, utility companies, and waste collections to determine whether operations can be maintained or rerouted to support community members.
- 12. ODOT contacts and works with private property owners with impacted property, as needed.
- 13. ODOT watches and evaluates. Make sure that the staff and material resources are appropriate. Watch the weather and the landslide to see if adjustments need to be made, especially for locations where ODOT has elected to try to keep US 101 open.
- ODOT discusses finances and creates action plan for repairing and reopening any. closed lanes.

GENERAL APPROACH FOR TEMPORARY TRAFFIC CONTROL – ALL EVENTS

This section outlines the general process to follow for all temporary traffic control measures during a full or partial closure of US 101 resulting from a slide event. Straight line, location-specific diagrams are also provided in the next section for each slide showing the traffic control points to establish for a full roadway closure.

Soft and Hard Closure Locations

The traffic control and communication plan includes the location of soft closures and hard closures in response to full closure of US 101. Hard closures are located to:

1. Prohibit road users from entering an active work zone.

The following rationale was used to locate hard closures:

- Locate 1 hard closure on each side of the closed section of roadway (for this analysis the landslide area documented by ODOT was used).
- The hard closure extents should include the limits of the slide influence area, in case that whole area is prone to have a subsequent event.
- Locate the hard closure at the next access point from the highway. The hard closure should be located to still allow access to that access point, as long as the landslide or work zone do not prevent access.
- Where possible, locate the hard closure at a place that has a turnaround area available.
- If the hard closure restricts access to a driveway or other street, note the restricted access.

Soft closures are located to:

Control - All EVENTS

- 1. Inform road users in advance of full closure of the highway and allow for alternative routes to be planned for and taken.
- 2. Reduce the number of road users approaching an active work zone and needing to turn around.

The following rationale was used to locate soft closures:

- Locate at least 1 soft closure on each side of the closed section of roadway, in advance of the hard closure.
- Locate at detour decision point, if a detour route is available.
- Locate the soft closure at a point beyond which most road users do not need to travel. For example, locate the soft closure at the next major intersection or attraction. If possible, locate the soft closure so there are only residential driveways between the soft closure and the hard closure.
- Locate the soft closure at a point that has a turnaround available. Ideally the turnaround should be able to accommodate a WB-67.

The minimum turning path for interstate semitrailer (WB-67) is provided in Figure 2-24 of the AASHTO A Policy on Geometric Design of Highways and Streets 2018. The minimum turning radius is 45 feet and the width required for a complete u-turn is about 60 feet. If a total surface width (including gravel shoulders/turnouts) is greater than 60 feet, a WB-67 and other road users are expected to be able to easily turn around. If the available surface width is less than 60 feet, it should be noted. A complicated turn may be required, or if a vehicle cannot turn around, the vehicle may be stuck until the highway is reopened. In areas where this would be the case, a flagger should be stationed to assist with traffic management as the turning movement is completed.

Phased Approach to Set Up Temporary Traffic Control

The phased approach for implementation of traffic control for all slides includes:

- 1. Set Initial Lane Closure
- 2. Reinforce/Complete Local Traffic Control Setup
- 3. Evaluate Setup and Determine Next Steps

ALL LANES CLOSED (WITH I-5 DETOUR ONLY)

Temporary traffic control should be set up according to ODOT's standards:

If a landslide event occurs that closes all lanes of US 101, follow temporary traffic control guidelines from ODOT's Traffic Standard Drawings TM800 series found at the following link: https://www.oregon.gov/odot/Engineering/Pages/Drawings-Traffic.aspx

If the road closure will be operating for three days or less, review the Oregon Temporary Traffic Control Handbook found at the following link:

https://www.oregon.gov/ODOT/Engineering/Pages/OTTCH.aspx

For additional guidance as needed, refer to Part 6: Temporary Traffic Control of the Manual on Uniform Traffic Control Devised for Streets and Highways found at the following link: https://mutcd.fhwa.dot.gov/index.htm

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US 101 and Carpenterville Highway Traffic Control and Communications PlanGeneral Approach FOR Temporary Traffic Control – All EVENTS

Phase 1: Set Initial Road Closure

Step 1 Set initial road closure flagging stations at hard closure locations.

Use the straight line diagrams to determine the hard closure locations for an event. For landslide events in slide area that are not at study locations, utilize the guidance provided to determine locations.

Determine if the flagging stations will utilize flaggers or AFADs.

Step 2 Traffic control setup for event activity area.

Follow OTTCH and TM800 series for setup.
Use extended queues for both flagging stations.

Step 3 Setup Priority 1 VMS Boards

Dispatch to contact District TMM's and activate Priority 1 VMS from the US 101 Closure Altert Strategy -.

Contact Caltrans to set up VMS boards at US 101 & Hwy 199 Junction and I-5 at Redding.

Phase 2: Reinforce/Complete Local Traffic Control Setup

Step 1 Set soft closure locations.

Use the straight line diagrams to determine the soft closure locations. For landslide events that are not at study locations, use the guidance provided to determine locations.

Use type 3 barricades, barrels, and "ROAD CLOSED, TO THRU TRAFFIC, LOCAL ACCESS ONLY" sign [OR11-4a (48"x30" black on white)]. Follow OTTCH and TM800 series for setup.

Step 2 Set hard closure locations.

Use the straight line diagrams to determine the hard closure locations. For landslide events in slide area that are not at study locations, guidance provided to determine locations.

Use type 3 barricades, barrels, and "ROAD CLOSED" sign. Follow OTTCH and TM800 series for setup.

Determine if the flagging stations will utilize flaggers or AFADs.

Step 3 Setup Priority 2 and Priority 3 VMS Boards, as Needed

Dispatch to contact District TMM's and activate Priority 2 and Priority 3 VMS as needed based on the specific event. Follow the US 101 Closure Altert Strategy. March 2023 Page 11
US 101 and Carpenterville Highway Traffic Control and Communications PlanGeneral Approach FOR Temporary Traffic Control – All EVENTS

Phase 3: Evaluate Setup and Determine Next Steps

Step 1 Evaluate resources and effectiveness of setup.

Step 2 Make necessary adjustments based on evaluation.

Step 3 Determine next steps for the long-term repair of the landslide event area.

Determine construction/maintenance needs to return to full operations.

Secure funding.

Work with ODOT staff or select a contractor to move forward.

PARTIAL LANE CLOSURE (ALLOWS BI-DIRECTIONAL TRAFFIC)

Temporary traffic control should be set up according to ODOT's standards:

If a landslide event occurs that allows one or two travel lanes to be open for bi-directional traffic, follow temporary traffic control guidelines from ODOT's Traffic Standard Drawings TM800 series found at the following link:

https://www.oregon.gov/odot/Engineering/Pages/Drawings-Traffic.aspx

If the lane closure will be operating for three days or less, review the Oregon Temporary Traffic Control Handbook found at the following link:

https://www.oregon.gov/ODOT/Engineering/Pages/OTTCH.aspx

For additional guidance as needed, refer to Part 6: Temporary Traffic Control of the Manual on Uniform Traffic Control Devised for Streets and Highways found at the following link: https://mutcd.fhwa.dot.gov/index.htm

Phase 1: Set Initial Lane Closure

Step 1 Set initial lane closure flagging stations on either side of the event activity area.

Use ODOT's traffic standard drawings series TM800 to determine location.

Determine if the flagging stations will utilize flaggers or AFADs.

Step 2 Traffic control setup for event activity area.

Follow OTTCH and TM800 series for setup.
Use extended queues for both flagging stations.

Step 3 Dispatch will automatically make request to:

Contact Motor Carrier and request assistance with any length and time restrictions for US 101 based on the specific traffic control setup needed. Determine if VMS alerts are needed based on any restrictions.

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US 101 and Carpenterville Highway Traffic Control and Communications PlanGeneral Approach FOR Temporary Traffic Control – All EVENTS

Phase 2: Reinforce/Complete Local Traffic Control Setup

Step 1 Traffic control setup on either side of the event activity area.

Follow OTTCH and TM800 series for setup.

Use extended queues for both flagging stations.

Phase 3: Evaluate Setup and Determine Next Steps

Step 1 Evaluate resources and effectiveness of setup.

Step 2 Make necessary adjustments based on evaluation.

Step 3 Determine next steps for the long-term repair of the landslide event area.

Determine construction/maintenance needs to return to full operations.

Secure funding.

Work with ODOT staff or select a contractor to move forward.

HUMBUG MOUNTAIN SLIDE AREA







Section 1 Humbug Mountain Slide Area

The following section of the TCP outlines protocols for when landslide events occur in the Humbug Mountain slide area. Study landslides in the Humbug Mountain slide area include:

- Retz Creek South Slide.
- Coal Point Slide.
- North Brush Creek Hump.
- Brush Creek Slide.
- Arizona North Slide (part of Arizona Slide Complex)
- Arizona Inn Slide (part of Arizona Slide Complex)
- Christmas Tree Slide (aka Frankport North)
- Sisters Rock Sink
- Frankport Slide (aka Frankport South)
- Woodroof Creek Slide (aka Horneblenzer Slide, Skull Ridge Slide, Squire Slide)

Within the Humbug Mountain slide area, a full closure of US 101 would not have a local detour route available for general traffic. The available detour route would utilize I-5, OR 42/OR 42S, and US 199. The graphic to the right highlights the detour route that would be used for a vehicle

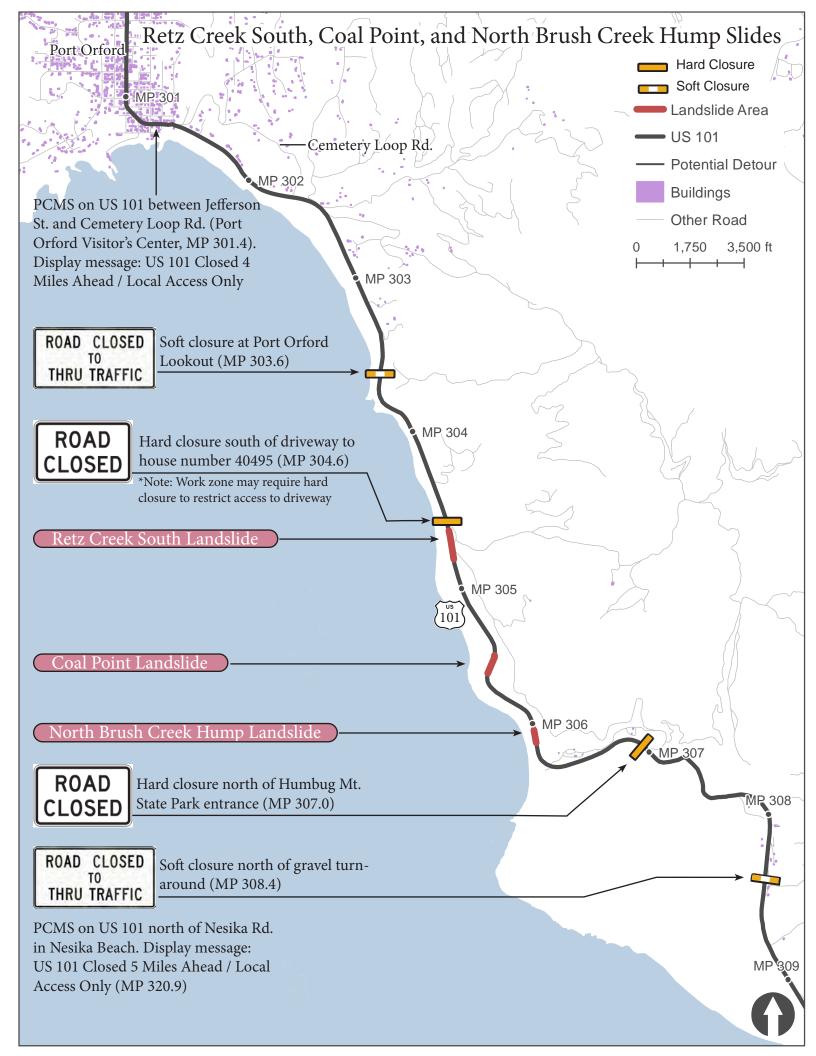


traveling between Gold Beach and Port Orford if all lanes of US 101 are closed.

Although there is not an official detour route available, there is a restricted access route for this slide area. Emergency vehicles, construction vehicles, and other ODOT-sanctioned vehicles would be directed to use Elk River Road/NF 5502/Euchre Creek Road during event recovery and as able based on vehicle type to reduce travel times. The restricted access route will not be signed for public use but will remain open for local traffic.

Retz Creek South, Coal Point, and North Brush Creek Hump Slides

- **Retz Creek South Slide**. Located at approximately MP 304.72 and impacts approximately 950 feet of US 101. Within this area, US 101 has three travel lanes.
- Coal Point Slide. Located at approximately MP 305.53 and impacts approximately 640 feet of US 101. Within this area, US 101 has two travel lanes.
- North Brush Creek Hump. Located at approximately MP 306.12 and impacts approximately 430 feet of US 101. Within this area, US 101 has three travel lanes.



Humbug Mountain Day Use at Bruch Creek (MP 307.7) – Northbound traffic



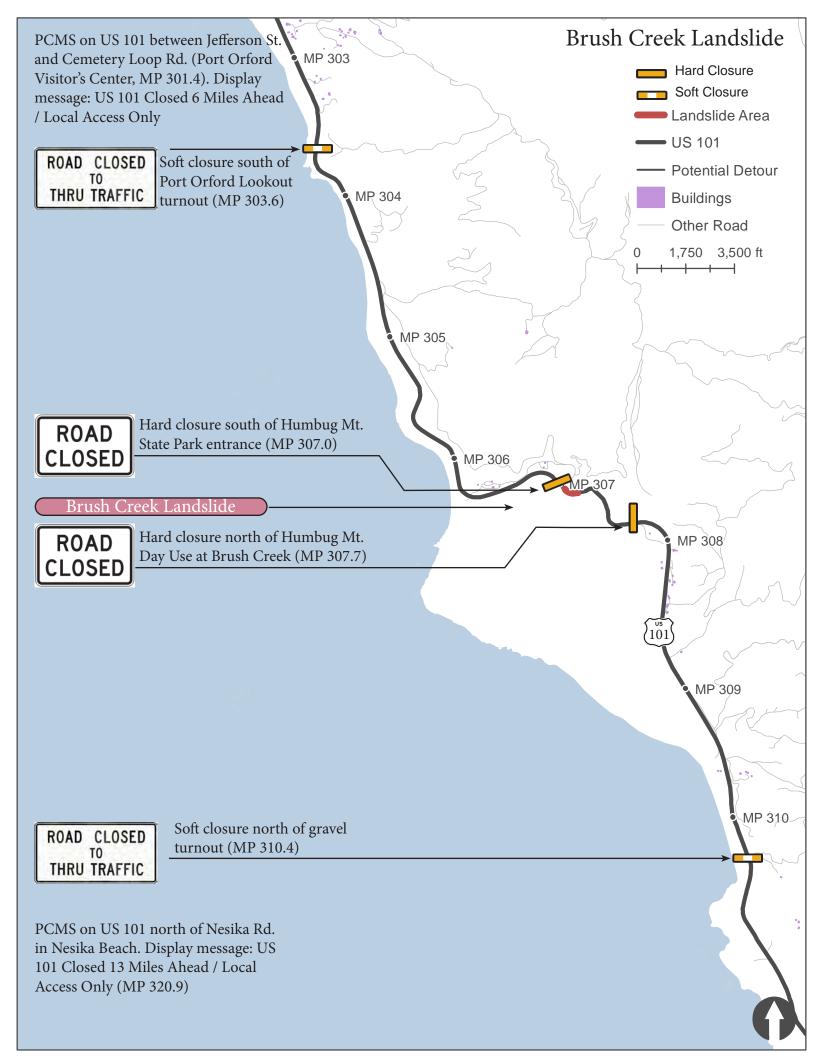
Port Orford Lookout (MP 303.6) – Southbound traffic



Brush Creek

The Brush Creek slide is located at approximately MP 307.10 and impacts approximately 60 feet of US 101. Within this area, US 101 has two travel lanes.





Humbug Mountain Day Use at Bruch Creek (MP 307.7) – Northbound traffic



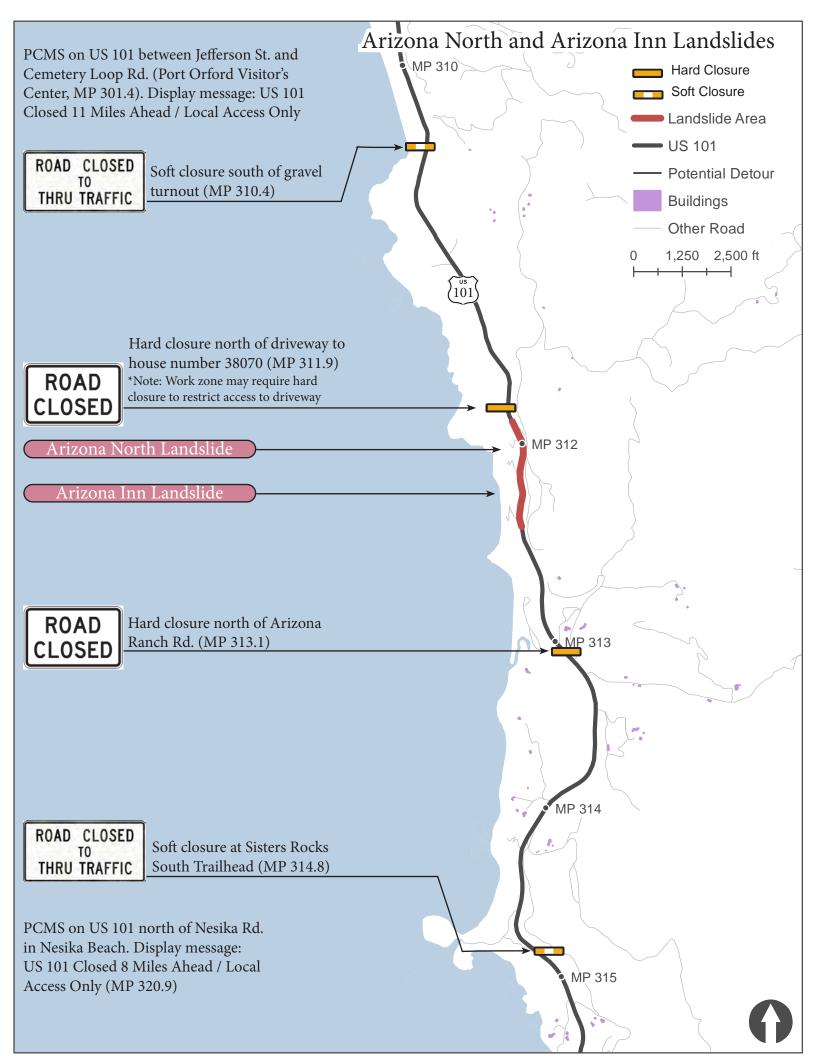
Gravel turnout (310.4) - Northbound traffic



Arizona North Slide (part of Arizona Slide Complex)

- Arizona North Slide is located at approximately MP 312.00 and impacts approximately 1,480 feet of US 101. Within this area, US 101 has three travel lanes.
- Arizona Inn Slide is located at approximately MP 312.39 and impacts approximately 1,270 feet of US 101. Within this area, US 101 has three travel lanes.

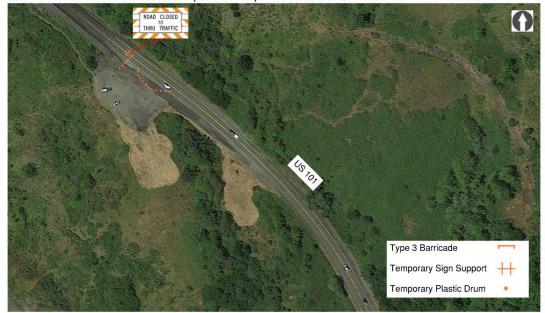




Gravel turnout (310.4) - Southbound traffic



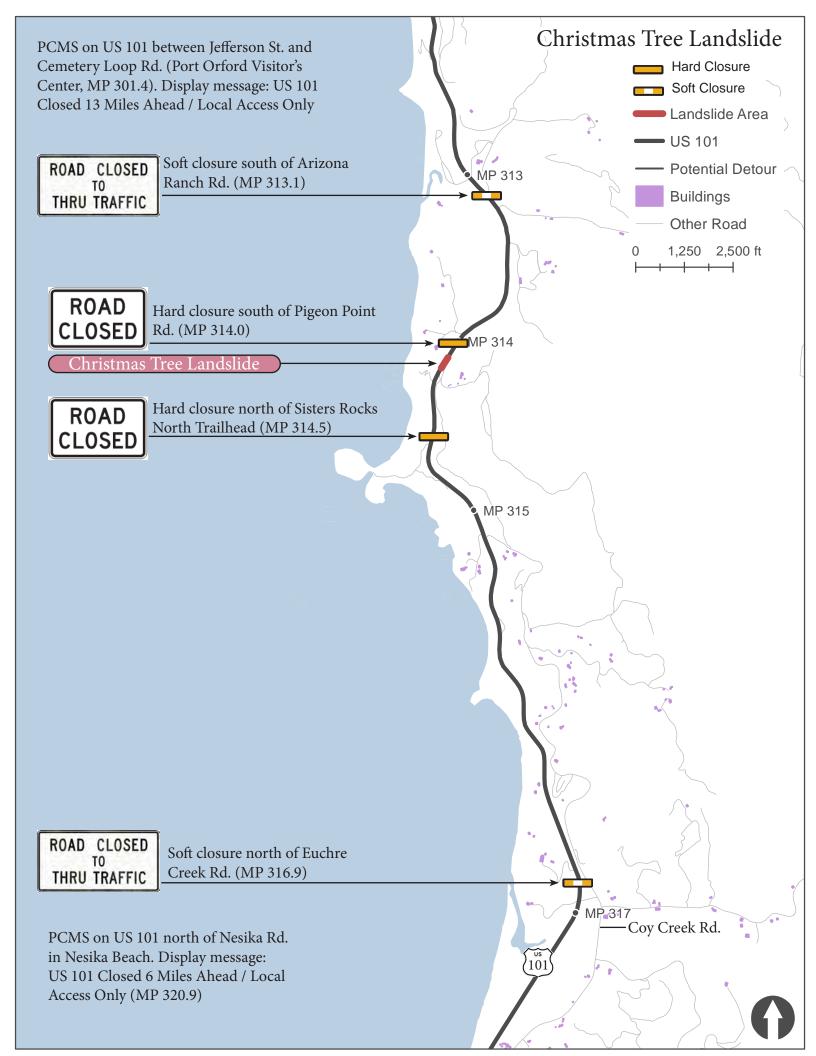
Sisters Rocks South Trailhead (MP 314.8) – Northbound traffic

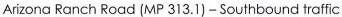


Christmas Tree Slide (aka Frankport North)

Christmas Tree Slide is located at approximately MP 314.10 and impacts approximately 310 feet of US 101. Within this area, US 101 has two travel lanes.









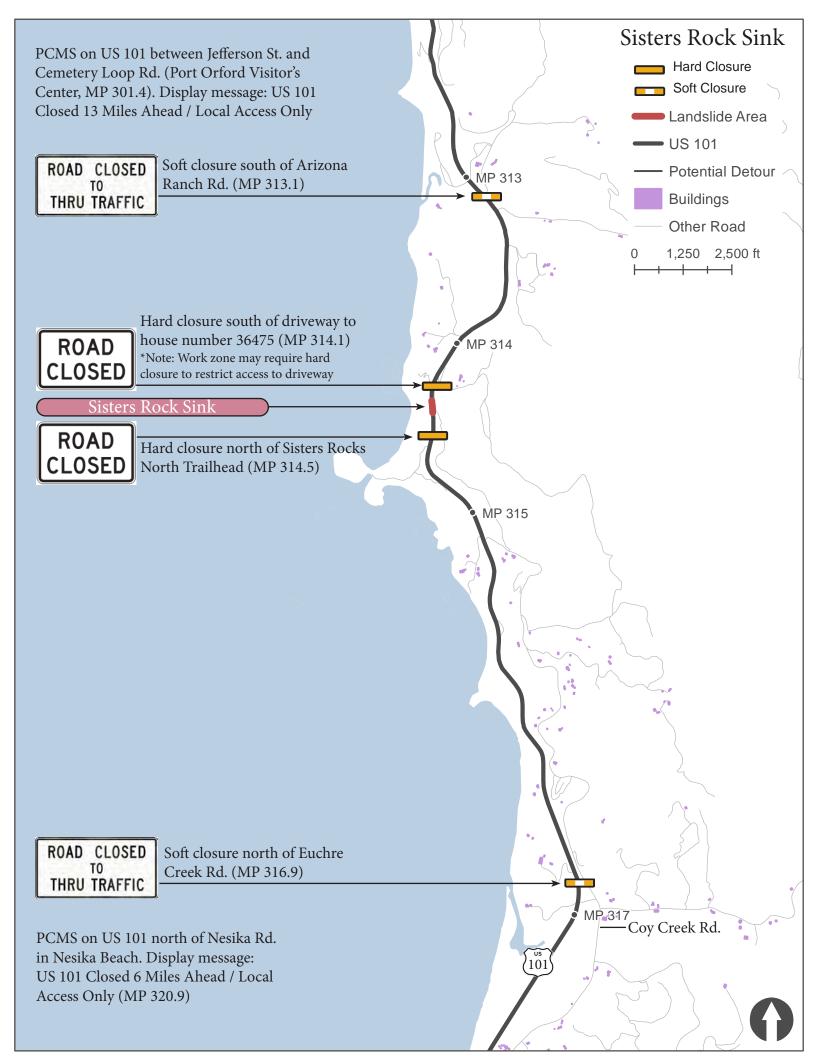
Euchre Creek Road (MP 316.9) – Northbound traffic

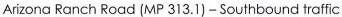


Sisters Rock Sink

Sisters Rock Sink is located at approximately MP 314.32 and impacts approximately 320 feet of US 101. Within this area, US 101 has two travel lanes.









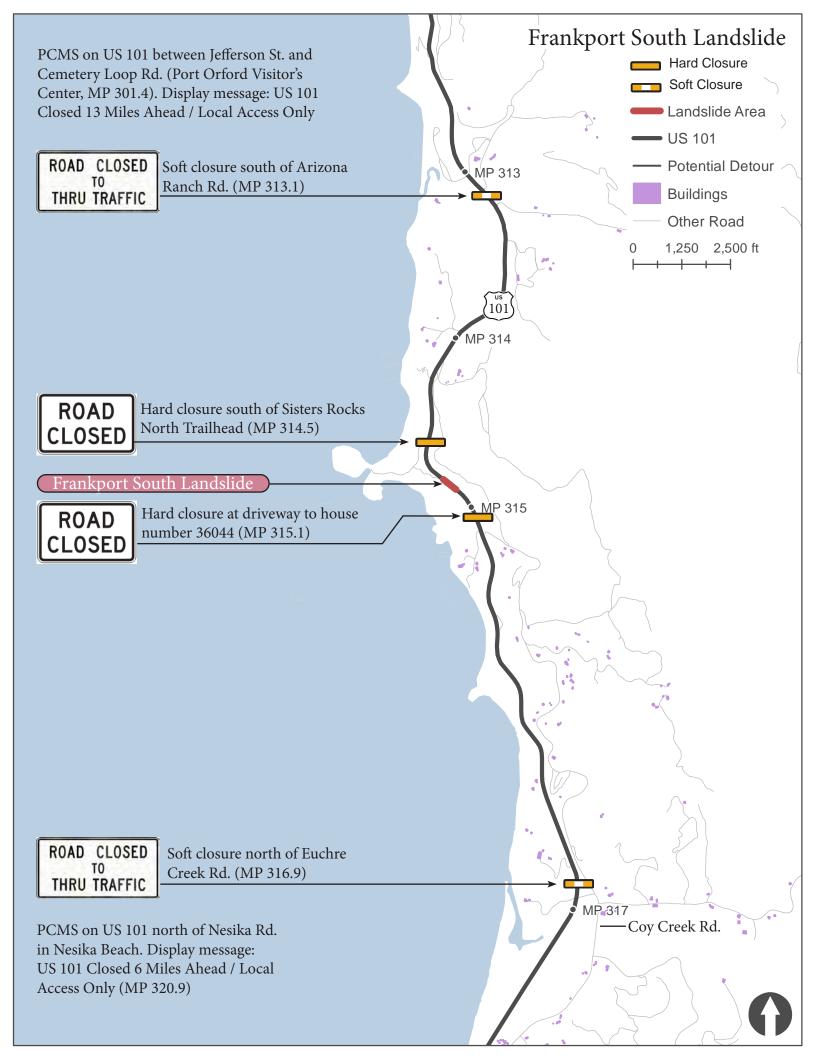
Euchre Creek Road (MP 316.9) – Northbound traffic



Frankport Slide (aka Frankport South)

Frankport Slide is located at approximately MP 314.79 and impacts approximately 430 feet of US 101. Within this area, US 101 has two travel lanes.





Arizona Ranch Road (MP 313.1) – Southbound traffic



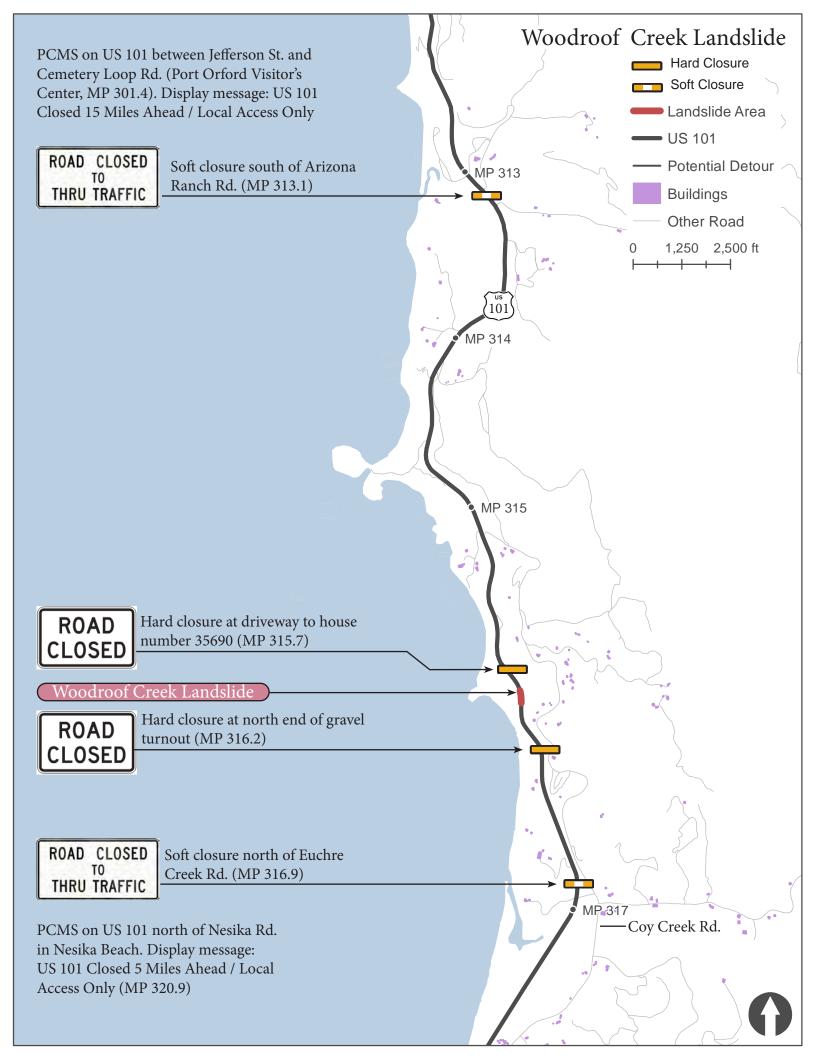
Euchre Creek Road (MP 316.9) – Northbound traffic



Woodroof Creek Slide (aka Horneblenzer Slide, Skull Ridge Slide, Squire Slide)

Woodroof Creek Slide is located at approximately MP 315.93 and impacts approximately 320 feet of US 101. Within this area, US 101 has three travel lanes.







Arizona Ranch Road (MP 313.1) – Southbound traffic

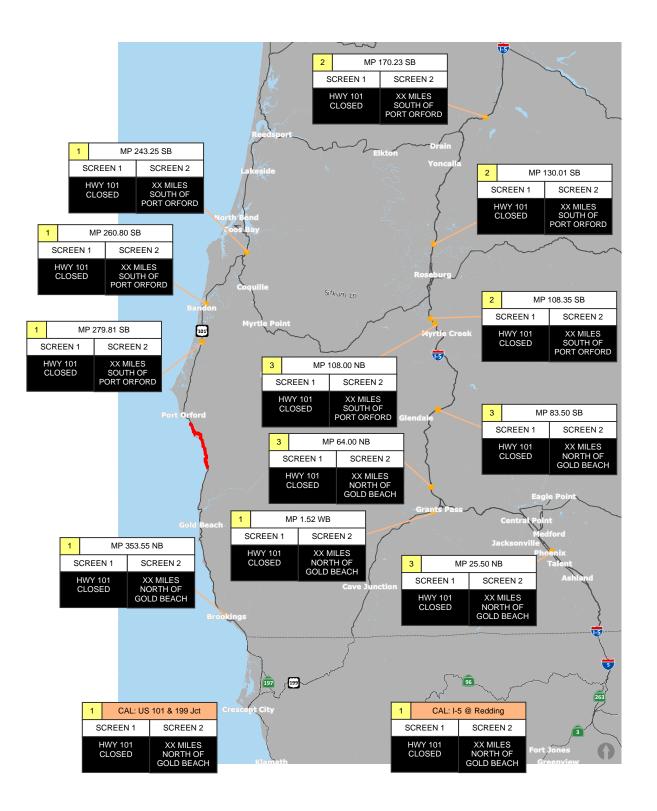




US 101 Closure Alert Strategy

The following graphic shows the closure alert strategy to use across Region 3 and California highways if a full roadway closure occurs in the Humbug Mountain slide area. Use the ODOT Variable Message (VMS) Sign Operations Manual to help implement the US 101 Closure Alert Strategy shown in the map below.

(https://www.oregon.gov/odot/Engineering/Documents_TrafficStandards/VMS-Guidelines.pdf)



US 101 Closure Alert Strategy - Humbug Mountain Landslide Area

US 101 Closure from MP 303.6 to MP 316.7

= US 101 Closure Area



Variable MessageSign (VMS) Locations

- Priority #1 VMS in place or working towards setting up when closure is expected to cause delays.
- Priority #2 After Priority #1 boards in place, set up when delays/closures are expected to be longer than 3 hours.
- Priority #3 Set up when delays/closures expected to exceed 12 hours.

EIGHTY ACRES SLIDE AREA



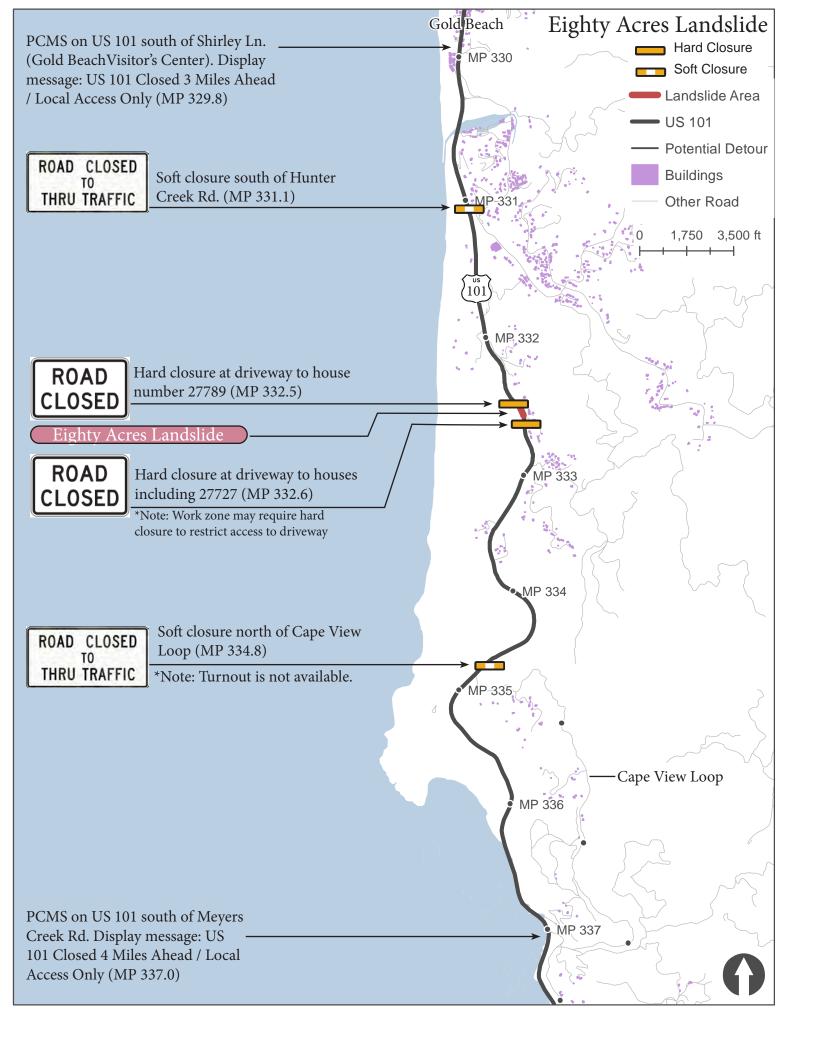
Section 2 Eighty Acres Slide Area

Eighty Acres Slide is located at approximately MP 332.55 and impacts approximately 270 feet of US 101. Within this area, US 101 has three travel lanes.

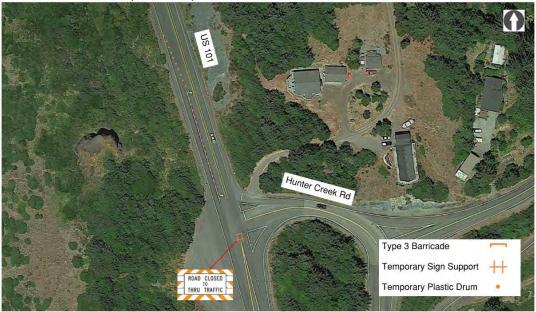
Within the Eighty Acres slide area, a full closure of US 101 would not have a local detour route available for general traffic. The available detour route would utilize I-5, OR 42/OR 42S, and US 199. The graphic to the right highlights the detour route that would be used for a vehicle traveling between Gold Beach and Brookings if all lanes of US 101 are closed.

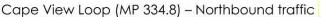
In addition, there is not an available restricted access route for this slide area. Emergency vehicles, construction vehicles, and other ODOT-sanctioned vehicles would also utilize the official detour route.









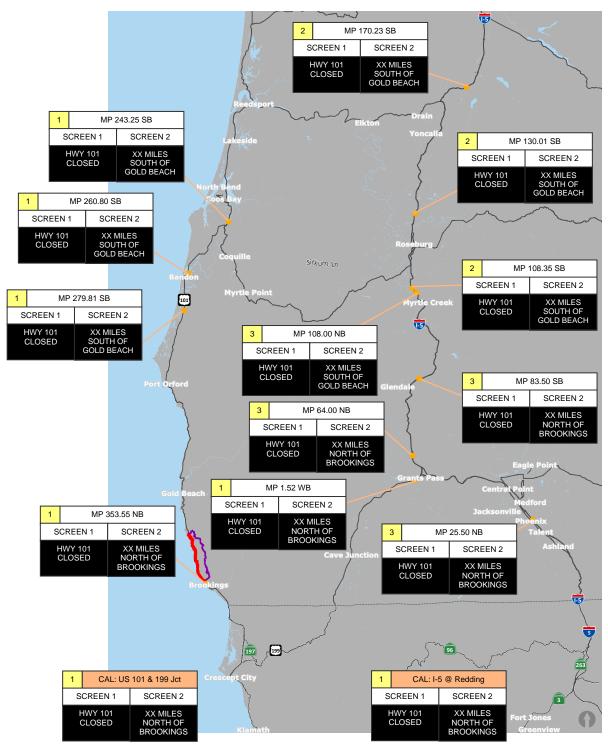




US 101 Closure Alert Strategy

The following graphic shows the closure alert strategy to use across Region 3 and California highways if a full roadway closure occurs in the Eighty Acres slide area.

Utilize the ODOT Variable Message (VMS) Sign Operations Manual (https://www.oregon.gov/odot/Engineering/Documents_TrafficStandards/VMS-Guidelines.pdf) to help implement the US 101 Closure Alert Strategy shown in the map below.



US 101 Closure Alert Strategy - Hooskanaden Landslide Area with Detour

US 101 Closure from MP 339.7 to MP 354.8

= US 101 Closure Area
= Detour Route

Provided How 101 Screen 2

HWY 101 Screen 2

HWY 101 Screen 2

HWY 101 Screen 2

South of XX MILES South of XXXXXX

Sign (VMS) Locations

- Priority #1 VMS in place or working towards setting up when closure is expected to cause delays.
- Priority #2 After Priority #1 boards in place, set up when delays/closures are expected to be longer than 3 hours.
- Priority #3 Set up when delays/closures expected to exceed 12 hours.

HOOSKANADEN SLIDE AREA





Section 3 Hooskanaden Slide Area

Study landslides in the Hooskanaden slide area include:

- Burnt Hill Slide
- Hooskanaden Slide

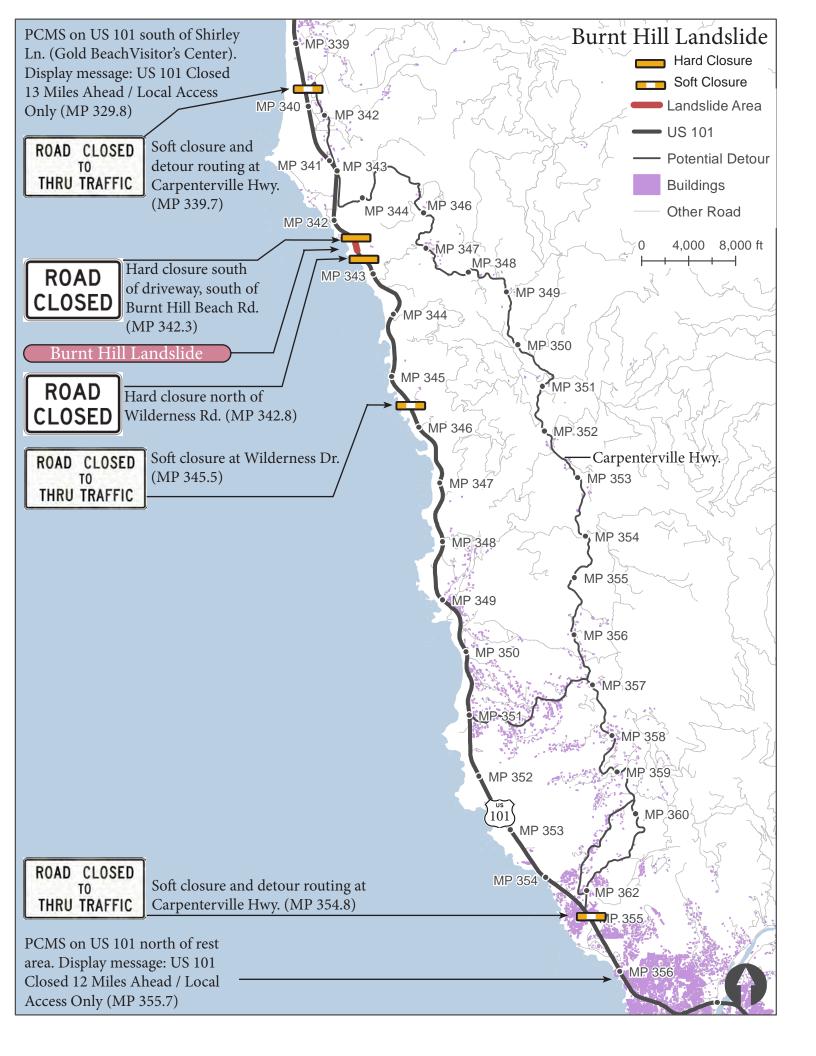
Within the Hooskanaden slide area, there is a local detour route option for general traffic if there is a full closure of US 101: Carpenterville Highway. There is no available restricted access route for this slide area. Emergency vehicles, construction vehicles, and other ODOT-sanctioned vehicles would also utilize the official detour route.

Although Carpenterville Highway is a detour route option, the roadway is also on unstable slopes and may be impacted by a landslide event at the same time as one of the landslides on US 101 in the area. Therefore, next scenario covers the traffic control needs if both US 101 and Carpenterville Highway have full road closures within the Hooskanaden slide area.

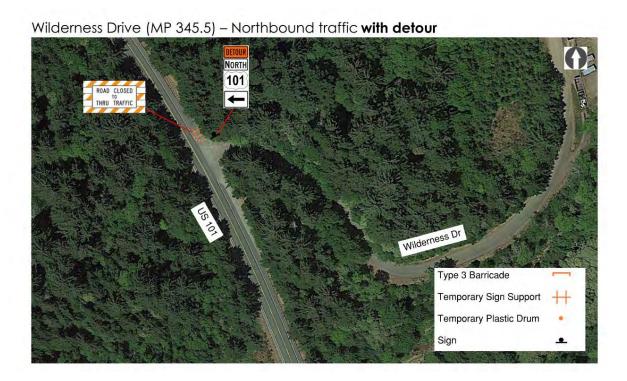
Burnt Hill Slide

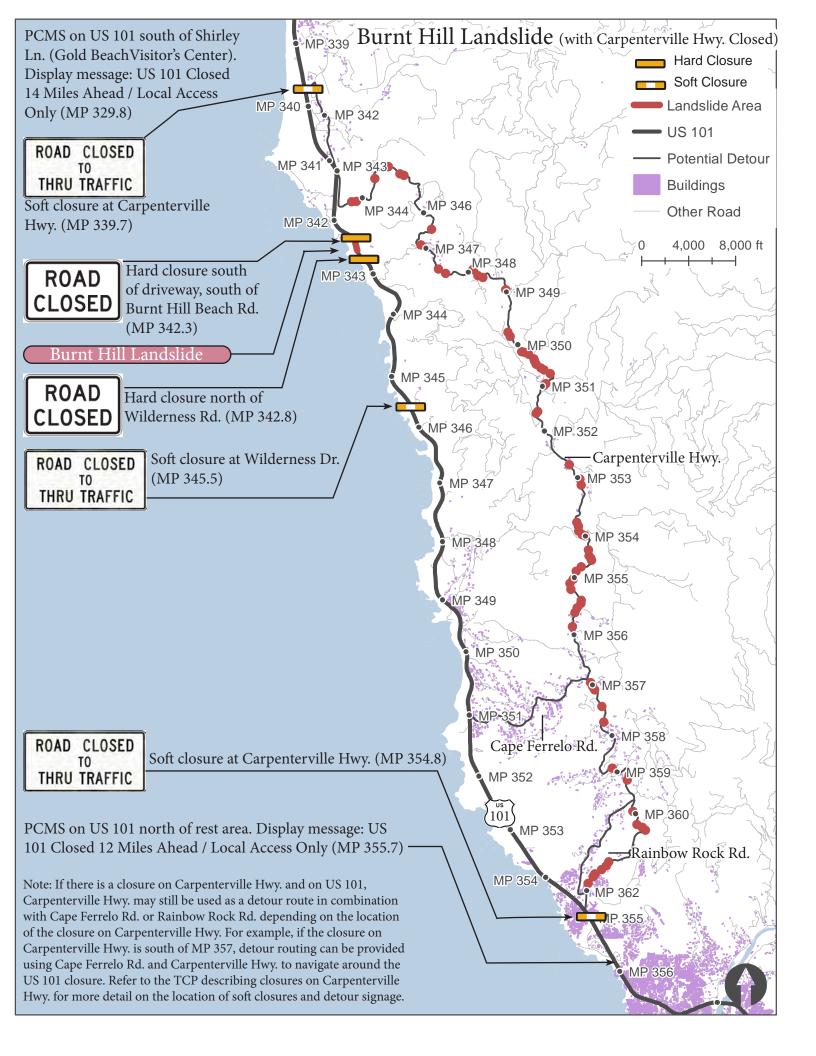
Burnt Hill Slide is located at approximately MP 342.55 and impacts approximately 640 feet of US 101. Within this area, US 101 has three travel lanes.





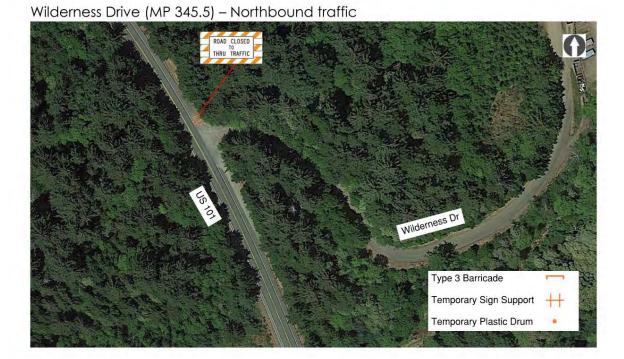








Temporary Plastic Drum



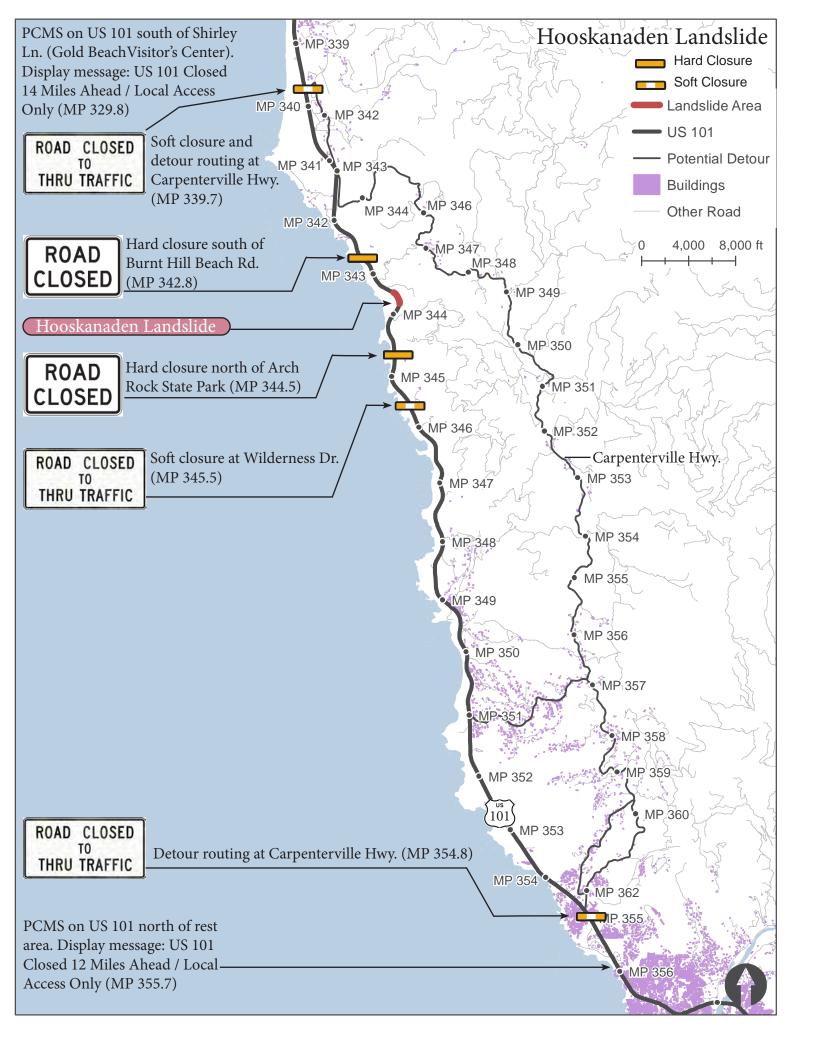


Soft Closure at Carpenterville Highway (MP 354.8) – Northbound traffic

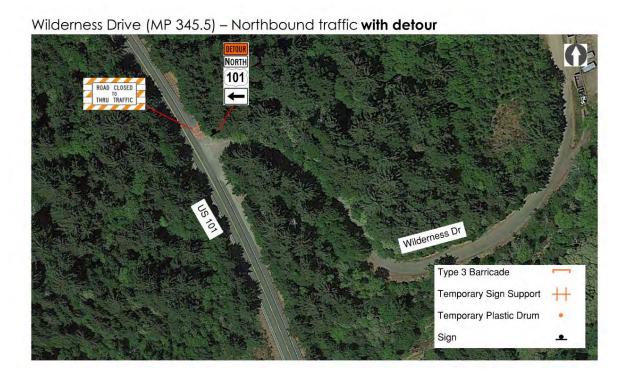
Hooskanaden Slide

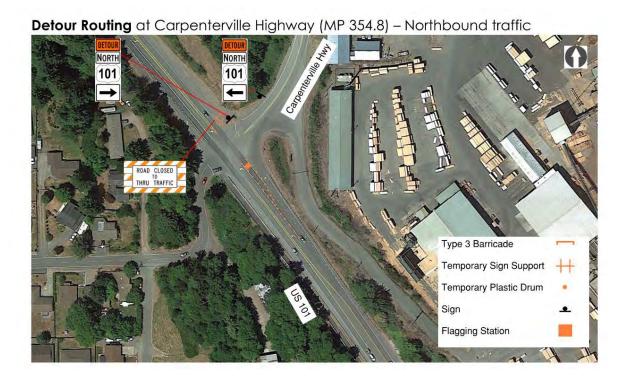
Hooskanaden Slide is located at approximately MP 343.63 and impacts approximately 1,300 feet of US 101. Within this area, US 101 has three travel lanes. Straightline diagrams show the traffic control with an available detour route (Carpenterville Highway) and without one.

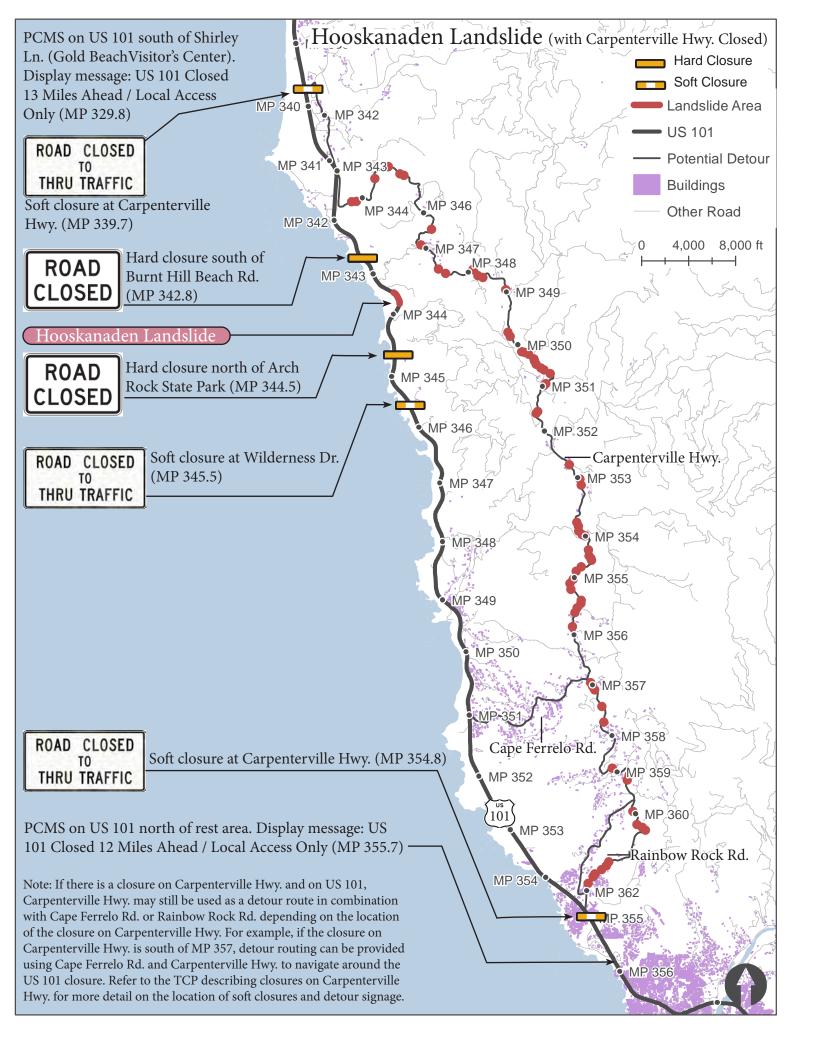






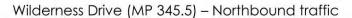


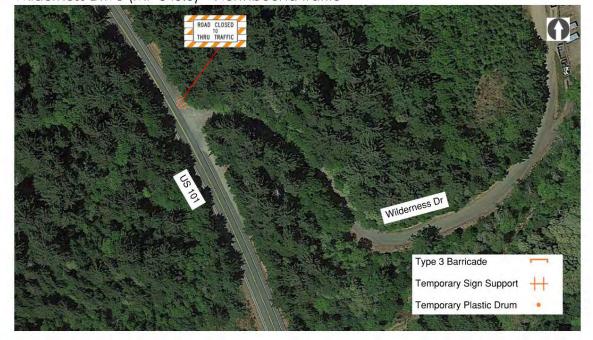






Soft Closure at Carpenterville Highway (MP 339.7) – Southbound traffic

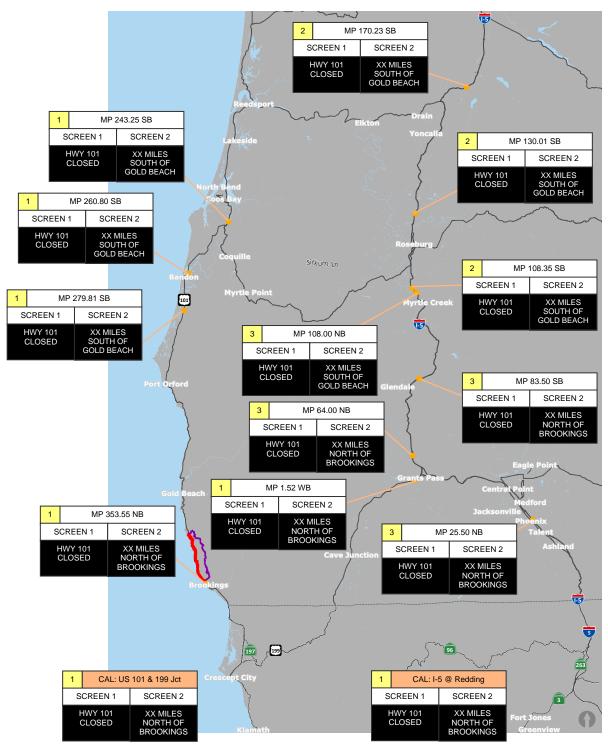




US 101 Closure Alert Strategy

The following graphic shows the closure alert strategy to use across Region 3 and California highways if a full roadway closure occurs in the Hooskanaden slide area with and without a detour route.

Utilize the ODOT Variable Message (VMS) Sign Operations Manual (https://www.oregon.gov/odot/Engineering/Documents_TrafficStandards/VMS-Guidelines.pdf) to help implement the US 101 Closure Alert Strategy shown in the map below.



US 101 Closure Alert Strategy - Hooskanaden Landslide Area with Detour

US 101 Closure from MP 339.7 to MP 354.8

= US 101 Closure Area
= Detour Route

Provided How 101 Screen 2

HWY 101 Screen 2

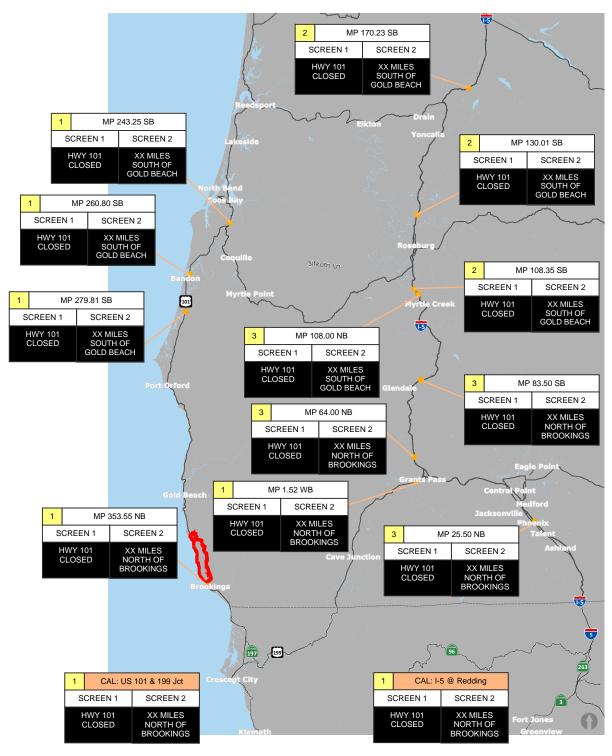
HWY 101 Screen 2

HWY 101 Screen 2

South of XX MILES South of XXXXXX

Sign (VMS) Locations

- Priority #1 VMS in place or working towards setting up when closure is expected to cause delays.
- Priority #2 After Priority #1 boards in place, set up when delays/closures are expected to be longer than 3 hours.
- Priority #3 Set up when delays/closures expected to exceed 12 hours.



US 101 Closure Alert Strategy - Hooskanaden Landslide Area - No Detour

US 101 Closure from MP 339.7 to MP 354.8

= US 101 and Carpenterville Hwy Closure Area



- Variable MessageSign (VMS) Locations
- Priority #1 VMS in place or working towards setting up when closure is expected to cause delays.
- Priority #2 After Priority #1 boards in place, set up when delays/closures are expected to be longer than 3 hours.
- Priority #3 Set up when delays/closures expected to exceed 12 hours.

CARPENTERVILLE HIGHWAY SLIDE AREA



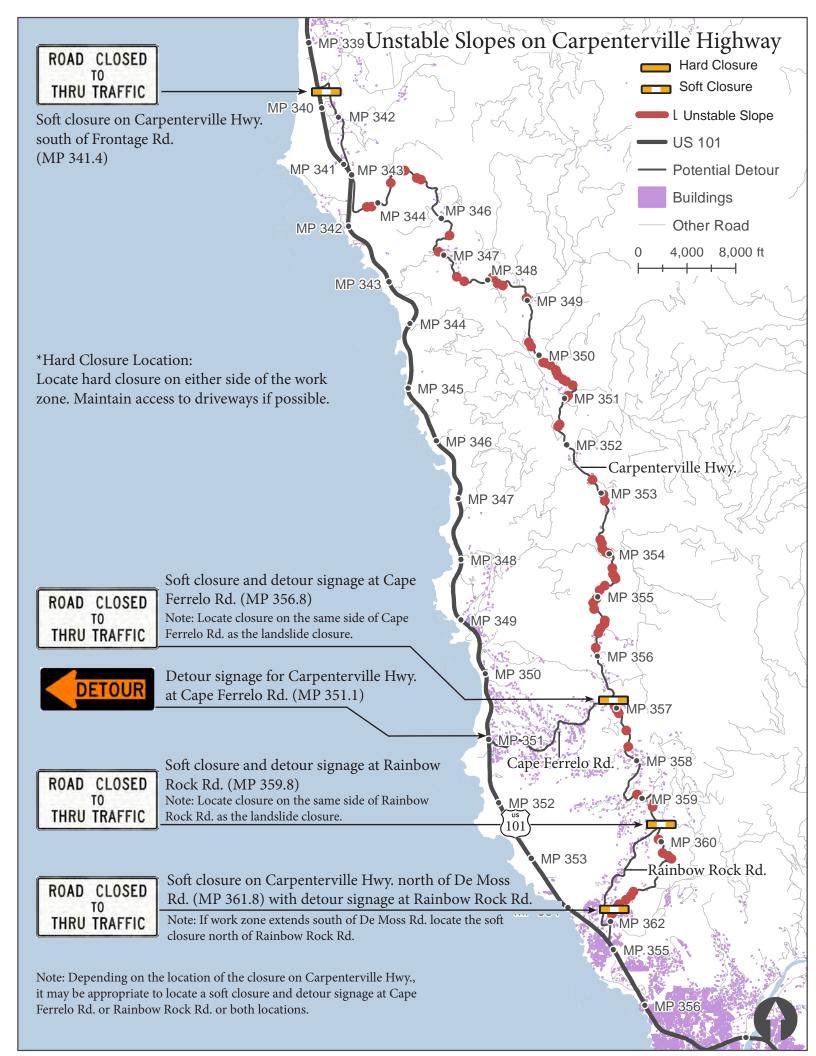




Section 4 Carpenterville Highway Slide Area

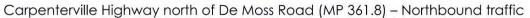
Carpenterville Highway runs parallel to US 101 for approximately 20 miles, connecting to MP 339.7 and 354.8 of US 101. It is a two-lane roadway with many unstable slopes.

If Carpenterville Highway has a full closure event but US 101 is still allowing bi-directional traffic, US 101 is the local detour route for Carpenterville Highway. If both Carpenterville Highway and US 101 are closed, there would not be a local detour route available for general traffic. The available detour route would utilize I-5, OR 42/OR 42S, and US 199.

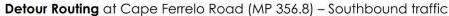














Detour Routing at Cape Ferrelo Road (MP 356.8) – Northbound traffic



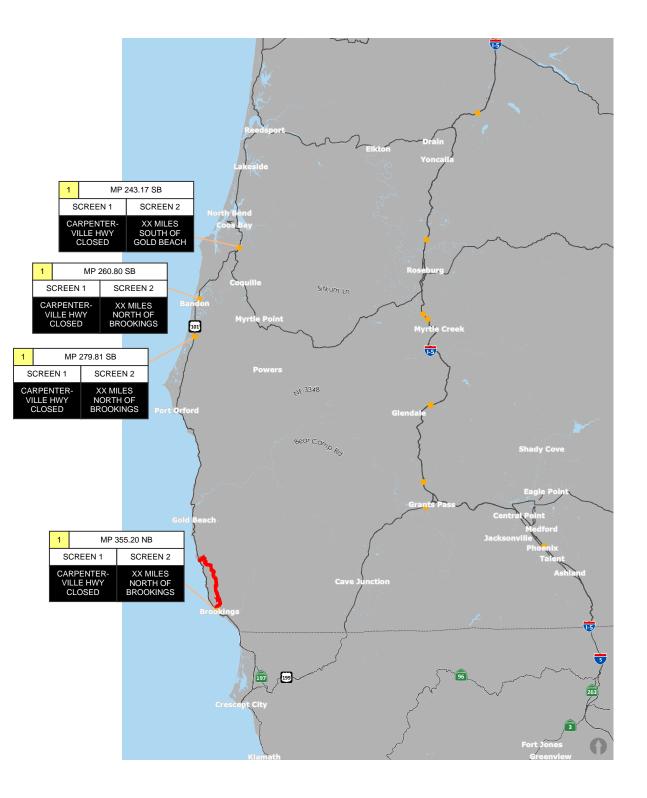




Carpenterville Highway Closure Alert Strategy

The following graphic shows the closure alert strategy to use across Region 3 highways if a full roadway closure occurs on Carpenterville Highway.

Utilize the ODOT Variable Message (VMS) Sign Operations Manual (https://www.oregon.gov/odot/Engineering/Documents_TrafficStandards/VMS-Guidelines.pdf) to help implement the Carpenterville Highway Closure Alert Strategy shown in the map below.



Carpenterille Hwy Closure Alert Strategy

Carpenterville Hwy Closure from MP 341.1 to MP 361.8



- = Carpenterville Hwy Closure Area
- Variable MessageSign (VMS) Locations
- Priority #1 VMS in place or working towards setting up when closure is expected to cause delays.
- Priority #2 After Priority #1 boards in place, set up when delays/closures are expected to be longer than 3 hours.
- Priority #3 Set up when delays/closures expected to exceed 12 hours.