

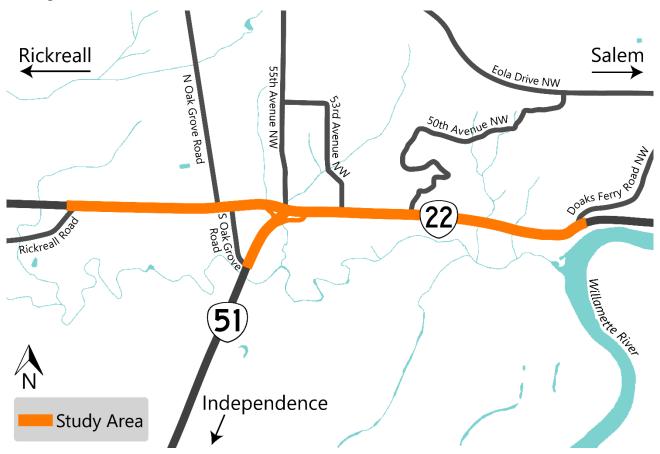
OR 22 & OR 51 Intersection Safety Improvements

Project purpose

The purpose of this safety project is to address the existing crash history on OR 22 between Rickreall Road and Doaks Ferry Road.

We are:

- Evaluating interchange concepts at the intersection of OR 22 and OR 51.
- Reviewing the existing local roads, residential and business accesses along OR 22 to understand how they fit in with proposed interchange concepts.
- Designing the required access roads that links local roads, private residents and businesses to the interchange at OR 22 and OR 51.
- Working with the public to reduce impacts to both the built and natural environment during design.



Why are we undertaking this project?

Our safety program identified the intersection of OR 22 and OR 51 as a priority site due to the high number and severity of crashes. There have been 154 crashes reported from 2016 to 2020 between Rickreall Road to Doaks Ferry Road.

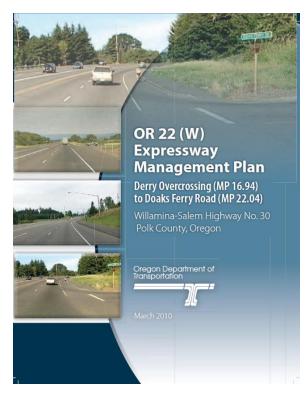
- Of the 154 crashes, 10 were classified as fatal and serious injury crashes related to or occurring at the OR 22 and OR 51 intersection.
- Of the 154 crashes, 55 were turning related, 37 rear end related, 25 fixed-object crashes and 19 sideswipe overtaking related.

The intersection has been flagged as a high crash location in the State for the last five years¹ and the primary crash or collision type is turning crashes with the predominant errant turning vehicle traffic making left turns from OR 22 onto OR 51 and from OR 51 onto OR 22, toward the coast.

What have we done previously?

In March 2010, we completed the <u>OR 22W Expressway</u> <u>Management Plan</u> (OR 22 EMP). The OR 22 EMP assessed potential solutions to address the comprehensive safety issues along this corridor.

The plan concluded that a grade separated interchange is necessary at the OR 22 and OR 51 intersection to meet operations goals and to improve safety within the corridor. A grade separated interchange means building an overpass to separate the two roads vertically, removing the traditional intersection and eliminating crossing conflicts at the intersection. The plan studied four potential interchange layouts but did not identify a preferred interchange concept.

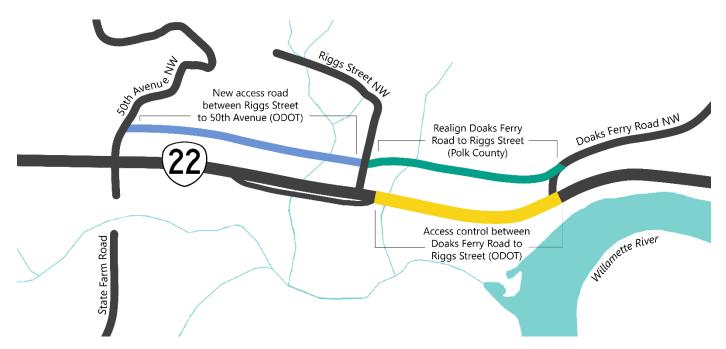


The plan proposed constructing an access road parallel to the highway for drivers to enter and exit private properties.

¹ We use a data-driven Safety Priority Index System (SPIS) to aid us in prioritizing safety funding and improvements. SPIS compares crashes on the entire roadway network across Oregon, including city streets, county roads and state highways. It generates both "on-state highway" and "off-state highway" annual reports, listing public roadway segments with a calculated SPIS score. The SPIS score is based on crash rate, frequency and severity over the prior three calendar years. The higher a SPIS score, the higher the potential safety needs for the identified roadway segment. The consistent, data-driven and unbiased methodology of SPIS enables the ranking and comparing of roadway safety at local, regional and statewide levels. Visit our SPIS webpage to learn more.

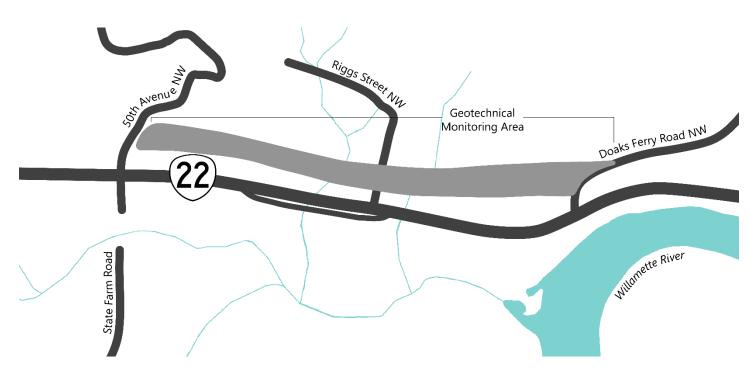
In 2015, the first phase of project development was creating the access road to connect Doaks Ferry Road to 50th Avenue NW. This phase of the project had three parts that we planned to work on in partnership with Polk County:

- Polk County was responsible to realign Doaks Ferry Road NW to Riggs Street NW, known as the Doaks Ferry Road Realignment project.
- We were responsible for developing a new road connecting Riggs Street NW to 50th Avenue NW.
- We were responsible for closing driveway access to OR 22 between Doaks Ferry Road to Riggs Street NW.



In 2016, our geotechnical studies detected that the ground north of OR 22 was slowly moving because of ancient landslides between the BPA substation and 50th Avenue NW. This location was where we planned to have the access road from Doaks Ferry Road to 50th Avenue NW. We recommended Polk County put their part of the project on hold to allow for a more detailed investigation of landslide activity.

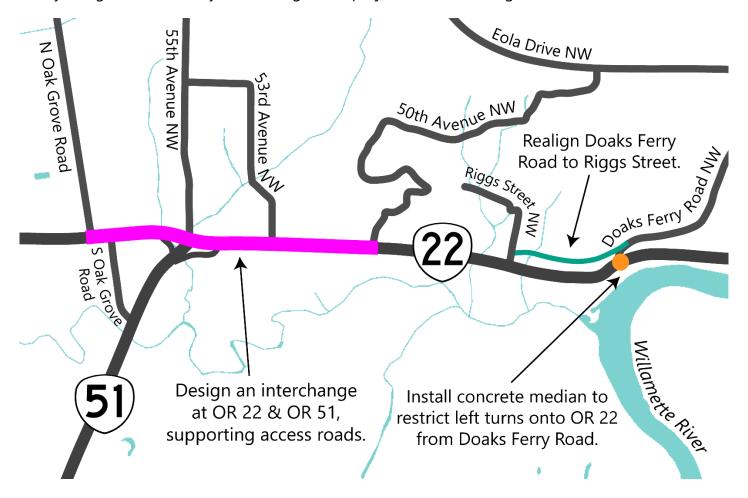
Between 2016 and 2019, we completed geotechnical monitoring between Riggs Street NW and 50th Avenue NW and completed the first report in February 2019. At the time, we did not have the needed funds to fix the geotechnical issues within the project area. Because of this, we decided to focus on designing an interchange at the OR 22 and OR 51 intersection only, addressing the primary corridor issues.



In May 2019, we focused on improving safety at the intersection of OR 22 and Doaks Ferry Road NW. The intent was to design a permanent concrete median to prevent left turns from OR 22 to Eola Inn, now Edgewater Auto Center. In August 2019, we installed signs and striping on Doaks Ferry Road NW to prevent left turns onto OR 22.

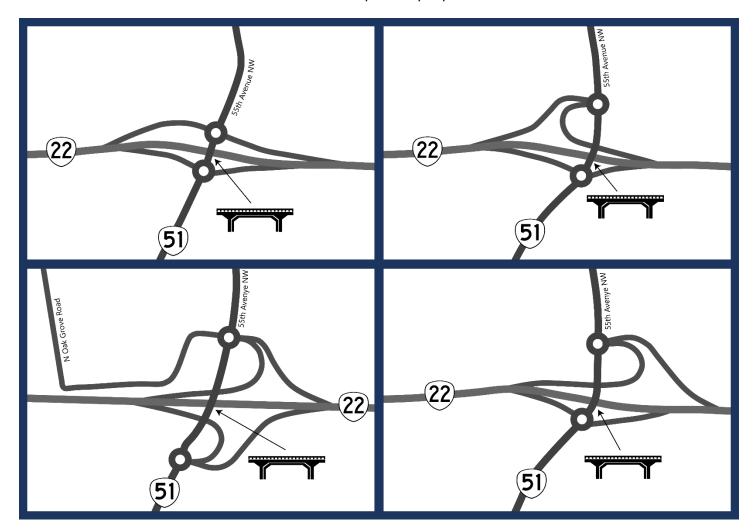
In November 2019, as we were focusing on developing an interchange at OR 22 and OR 51, we also reviewed the required access roads to make the interchange operate safely and efficiently. We evaluated more cost effective concepts that did not have as severe of geotechnical impacts.

In April 2020, we came up with an adjusted budget proposal and found that we did not have enough funding to construct the work at OR 22 and Doaks Ferry Road. Polk County reviewed our proposal and suggested that the cost to complete the intersection improvement was comparable to the county's original Doaks Ferry Road realignment project even with the geotechnical issues.



In June 2020, we worked with Polk County and agreed to revisit the Doaks Ferry Road realignment project. We decided to carry out further geotechnical investigations to see if it could be a standalone project, meaning without reconnecting the realignment to 50th Avenue NW. Because OR 22 is relatively straight and flat at Riggs Street intersection, this location makes it easier for drivers making the turn to see oncoming traffic in both directions.

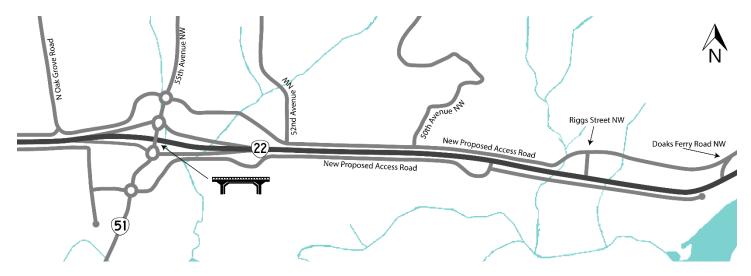
In March 2021, we reviewed four different grade separated interchange concepts at the intersection of OR 22 and OR 51 and the required access roads. We found that we needed two access roads to the east of the OR 22 and OR 51 intersection, one north of OR 22 for all private properties to 50th Avenue NW and the second to the south of OR 22 for all private properties to Pheasant Lane.



In April 2021, we completed our further geotechnical investigations for the Doaks Ferry Road Realignment project and found that the county could continue design with ongoing monitoring. Since we found that the access road option to the north of OR 22 extended to 50th Avenue NW, the county was still interested in seeing if we could make a connection from 50th Avenue NW to Riggs Street NW.

In June 2021, we modeled an access road located between OR 22 and the front of private properties and demonstrated that 50th Avenue NW could connect to Riggs Street NW. We are working on further investigations to see if this proposed access road avoids some of the geotechnical issues that halted project development efforts in 2016.

In October 2021, we worked with Polk County and agreed to combine the three separate project efforts together to review the OR 22 corridor between Rickreall Road and Doaks Ferry Road.



Note – The interchange concept and the alignment of the access roads have yet to be confirmed. This drawing is meant to show you the area that we're studying, a possible interchange and changes to how the roads may access the highway.

What are we doing now?

We are in the process of partnering with a consultant team to help us gather survey data, geological data and environmental resource data on wetlands, waterways, historic and cultural resources.

As we consider different design concepts, the collected data will help inform our decision by the type and extent of impacts identified to each of these resources.

We currently only have funding for preliminary design of this project, not construction. With the funding we have, we are:

- Designing the OR 22 and OR 51 interchange layout.
- Confirming the access road layout, which will include connections to Doaks Ferry Road.
- Creating a detailed estimate to seek further project funding for right of way, utilities relocation and construction.
- Determining existing environmental conditions and constraints.