Happy Valley
Gladstone
Lake Oswego
Wilsonville
Sandy
West Linn
Oregon City
Estacada
Molalla

Clackamas County
US26: Salmon River - Zigzag
ODOT - Clackamas County

Project Description

Repairs pavement on US26 (Mt. Hood Highway) between Salmon River and Zigzag and upgrades the existing crosswalk at E Salmon River Road near Welches Elementary School.

Purpose And Need

This section of US26 has deteriorated due to heavy traffic, including studded tires, and is expected to worsen significantly in the next five years. The existing crossing at E Salmon River Road provides important access but is not up to standards.

Proposed Solutions

• Repave US26 between Salmon River and Zigzag.
• Upgrade existing pedestrian crosswalk near Welches Elementary School.

Anticipated Benefits

• Increased safety by upgrading the crossing at Salmon River Road, increasing visibility of users.
• A smoothed out ride for travelers by repaving US26, reducing maintenance costs and improving safety.

Cost

- Pavement Preservation: $9,229,874
- Active Transportation Leverage: $787,526
- Bridge: $114,600
- Estimated Total Cost: $10,763,000

www.Oregon.gov/ODOT/STIP Draft 2021-2024 Oregon Statewide Transportation Improvement Program
Project Location on OR35 at US26.

Existing bridge rail.

Project Description

Anticipated Benefits
• Increased safety with a bridge rail that meets current safety standards.

Purpose And Need
The bridge rail on the OR35 structure over US26 does not meet current standards. A new rail will increase safety for travelers.

Proposed Solutions
• Replace the substandard bridge rail.

Cost
Bridge $613,496
Estimated Total Cost $613,496

OR35: US26 Overcrossing Bridge
ODOT - Clackamas County

www.Oregon.gov/ODOT/STIP Draft 2021-2024 Oregon Statewide Transportation Improvement Program
OR99E: Clackamas River (McLoughlin) Bridge (Design Only)
ODOT - Clackamas County

Project Description
Design for a future project to repaint the Oregon 99E (McLoughlin Boulevard) bridge over the Clackamas River in the City of Gladstone.

Anticipated Benefits
• The design phase will determine how to repaint the structure to protect the steel from corrosion and extend the lifespan of the bridge.

Purpose And Need
The bridge is a steel structure. New paint will protect the steel from corrosion and extend its lifespan.

Proposed Solutions
• Design a future construction project to paint the structure.

Cost
<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge</td>
<td>$250,000</td>
</tr>
<tr>
<td>Estimated Total Cost</td>
<td>$250,000</td>
</tr>
</tbody>
</table>

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

www.Oregon.gov/ODOT/STIP Draft 2021-2024 Oregon Statewide Transportation Improvement Program
OR213 at MP 15.71 (Toliver Road)
ODOT - Clackamas County

Project Description
Installs a roundabout at the intersection of Oregon 213 (Cascade Highway South) and Toliver Road to improve safety. The City of Molalla is contributing a share of the project costs. Some project funding comes from the 2018-2021 STIP.

Purpose And Need
Currently, this intersection, with Toliver Road controlled by a stop sign, experiences high truck volumes and an increased frequency of rear-end crashes caused by turning vehicles. A roundabout will improve safety by reducing sharp turns while allowing for increased traffic from nearby development.

Proposed Solutions
• A roundabout to improve safety.

Anticipated Benefits
• Improved safety and traffic flow. A Road Safety Audit to assess conditions and determine possible solutions was conducted with 2018-2021 STIP funds. Studies determined a roundabout will bring the greatest safety benefits.
• Reduced crashes and severity of crashes by slowing vehicles entering the intersection while continuing to allow through traffic and turns.

Cost

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-2021 STIP</td>
<td>$700,000</td>
</tr>
<tr>
<td>All Roads Transportation Safety</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>State Highway Leverage</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>City of Molalla</td>
<td>$2,247,990</td>
</tr>
<tr>
<td>Estimated Total Cost</td>
<td>$8,976,249</td>
</tr>
</tbody>
</table>

Existing travel conditions on OR213 at Toliver Road

Project location OR213 at Toliver Road in Molalla

www.Oregon.gov/ODOT/STIP Draft 2021-2024 Oregon Statewide Transportation Improvement Program
**Project Description**
Installs improvements on Oregon 213 (Cascade Highway South) between Interstate 205 and Oregon 211 (Woodburn-Estacada Highway), including signals, reflective back plates, advance intersection warning signs, flashing lights, speed feedback signs and stop bars.

**Purpose And Need**
There is a pattern of rear-end and turning movement crashes at non-signalized intersections on OR213 and rear-end crashes at the intersection of OR213 and Beavercreek Road. Improvements to increase visibility and driver awareness are needed to improve safety.

**Proposed Solutions**
- Upgrade signal heads and install reflective back plates.
- Install advance intersection warning signs, flashing beacons and speed feedback signs.
- Upgrade stop signs and install stop bars.
- Trim trees.

**Anticipated Benefits**
- Increased sight distance and better visibility of signs, intersection markings and signals.
- Increased safety at turns and intersections to reduce crashes with upgraded stop signs.

**Cost**
- All Roads Transportation Safety: $536,748
- Estimated Total Cost: $536,748
**OR224 at SE Monroe St**

**Purpose And Need**

This intersection is a high-crash site with 13 crashes between 2013 and 2017, including a crash involving a cyclist. The new traffic signal will include bicycle detection and push buttons for users, improving accessibility, enhancing connections for neighborhoods and businesses, and providing safer access across the highway.

**Proposed Solutions**

- Replace the entire traffic signal, including new bicycle detection and push buttons, improving safety, accessibility and connections.
- Install accessible curb ramps and curb extensions, paint and signs for bicycle lane, traffic separators and turn configuration changes.

**Cost**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>$2,481,274</td>
</tr>
<tr>
<td>Safety Entrace</td>
<td>$3,076,643</td>
</tr>
<tr>
<td>Estimated Total Cost</td>
<td>$5,557,917</td>
</tr>
</tbody>
</table>

**Anticipated Benefits**

- Improved safety and operations at the intersection for all modes of traffic.
- Coordination with a City of Milwaukie greenway project on Monroe Street to increase efficiency.

**Project Description**

Replaces the outdated traffic signal at the intersection of Oregon 224 (Clackamas Highway) and Monroe Street to increase safety for all modes of traffic.
Project Description
Design for a future project to repave Oregon 224 (Milwaukie Expressway) between SE 17th Avenue and Oregon 213 (SE 82nd Avenue).

Purpose And Need
The pavement on this section of the Milwaukie Expressway is cracking and needs to be repaved to extend its lifespan and smooth out the ride for travelers.

Proposed Solutions
• Design the repaving plan, including accessible sidewalk curb ramp improvements.

Anticipated Benefits
• The design phase will determine how to repave the highway to extend its lifespan and smooth out the ride for travelers.
• The design work supports the future project that will repair the driving surface, reduce maintenance costs, and improve accessibility to meet Americans with Disabilities Act requirements.

Cost
- Pavement Preservation: $2,017,734
- Estimated Total Cost: $2,617,734

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

ODOT - Clackamas County
OR224: SE 17th Ave - OR213 (Design Only)
www.Oregon.gov/ODOT/STIP Draft 2021-2024 Oregon Statewide Transportation Improvement Program
**OR224: SE 17th Ave - Rainbow Campground**

**ODOT - Clackamas County**

**Project Description**
Installs signs, stop bars, rumble strips, signals, reflective back plates and lighting to increase safety on Oregon 224 (Clackamas Highway) between Molalla and Estacada.

**Anticipated Benefits**
- Increased safety through improved lighting, signal visibility, signage and sight distance improvements.

**Purpose And Need**
OR224 is a suburban/rural highway with some curves limiting visibility and less than adequate lighting at some intersections. Crash data shows turning, rear-end and angle type crashes on this stretch of the highway.

**Proposed Solutions**
- Install signs, stop bars and rumble strips.
- Install new signal heads, right turn signals, reflective back plates and illumination.
- Trim trees.

**Cost**

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Roads Transportation Safety</td>
<td>$1,865,202</td>
</tr>
<tr>
<td>Estimated Total Cost</td>
<td>$1,865,202</td>
</tr>
</tbody>
</table>

**Existing travel conditions on OR224**

Beavercreek Rd: Molalla Ave - S Maplelane Rd (Oregon City)
Oregon City - Clackamas County

Project Description
Installs signals, signs, flashing lights and signal connectivity improvements to increase safety on Beavercreek Road in Oregon City.

Anticipated Benefits
- Updated signal timing will improve traffic flow in the corridor and help vehicles making the decision to stop or continue through an intersection, improving traffic operations and increasing safety.

Purpose And Need
Beavercreek Road between Molalla Ave and S Maplelane Rd has many rear-end crashes, especially from the northern approach and from both approaches on Beavercreek Road.

Proposed Solutions
- Improve signal hardware, install signage and remove trees throughout the corridor.

Cost
- All Roads Transportation Safety: $1,120,822
- Oregon City: $94,556
- Estimated Total Cost: $1,215,378

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Knights Bridge Road: Molalla River Bridge (Canby)
Clackamas County

Project Description
Repairs the Knights Bridge Road over the Molalla River in Canby.

Purpose And Need
This bridge is in fair condition, but needs upgrades to help protect from erosion around the bridge columns in the water.

Proposed Solutions
• Rehabilitate the existing bridge including seismic retrofit to superstructure, rust removal, painting, joint repair and deck work.
• Address the erosion concerns around the bridge columns in the water (scour) and repair the columns.

Anticipated Benefits
• Extended lifespan of the bridge, reduced erosion concerns around the columns and improved safety.

Cost
<table>
<thead>
<tr>
<th>Local Bridge Program</th>
<th>$1,231,086</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clackamas County</td>
<td>$1,300,852</td>
</tr>
<tr>
<td>Estimated Total Cost</td>
<td>$3,601,086</td>
</tr>
</tbody>
</table>

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

www.Oregon.gov/ODOT/STIP Draft 2021-2024 Oregon Statewide Transportation Improvement Program
## Project Description
Installs High Friction Surface Treatment (HFST), signs and edge/fog line striping on curves on S Redland Road between Oregon 213 (Cascade Highway South) and Springwater Road.

## Purpose And Need
A Road Safety Audit conducted in 2017 identified 178 crashes on this corridor, including 2 fatal crashes and 5 severe injury crashes.

## Proposed Solutions
- Apply HFST on curves. HFST is a thin layer of small engineered gravel placed on the road using a very strong type of glue. HFST improves skid resistance, including on curved roads in wet and slick conditions.
- Improve signage and markings to better inform drivers of curves in the roadway.

## Anticipated Benefits
- Increased safety for travelers on S Redland Road with the installation of HFST, which will increase skid resistance and decrease crashes.
- Increased safety by reducing crashes with upgraded signage and edge/fog striping.

## Cost
<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Roads Transportation Safety</td>
<td>$508,541</td>
</tr>
<tr>
<td>Clackamas County</td>
<td>$26,013</td>
</tr>
<tr>
<td>Estimated Total Cost</td>
<td>$534,358</td>
</tr>
</tbody>
</table>

www.Oregon.gov/ODOT/STIP Draft 2021-2024 Oregon Statewide Transportation Improvement Program
SE Johnson Creek Blvd: 79th Pl - 82nd Ave (Clackamas County)

Clackamas County

Project Description
Installs a traffic signal at the intersection of Johnson Creek Boulevard and SE 79th Place in Clackamas County.

Purpose And Need
This intersection is a high-crash location with 48 crashes from 2011 through 2015. This intersection is one of the highest ranked safety sites in Clackamas County. The primary cause for crashes at this location is related to turns.

Proposed Solutions
- Install a new signal at the intersection of SE Johnson Creek Blvd and SE 79th Place.
- Install a raised median from SE 79th Place to SE 82nd Avenue and allow only right-in, right-out turns at SE 80th Avenue at the Fred Meyer shopping complex driveway.

Anticipated Benefits
- Improved safety by restricting some turns to reduce crashes from drivers turning in and out of driveways.
- Increased safety for all modes of traffic, including pedestrians, with a new signal and crossing at SE 79th Place.

Cost
- All Roads Transportation Safety: $1,460,436
- Clackamas County: $123,208
- Estimated Total Cost: $1,583,644

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

www.Oregon.gov/ODOT/STIP Draft 2021-2024 Oregon Statewide Transportation Improvement Program
Additional projects in Clackamas County:

• OR213 (82nd Ave): SE Foster Rd - SE Thompson Rd (21177)
• Portland Metro and Surrounding Areas Traffic Monitoring and Control (21600)
• Portland Metro and Surrounding Areas Variable Message Signs (21601)
• Portland Metro and Surrounding Areas Traffic Signal Upgrades (21603)
• Portland Metro and Surrounding Areas Traffic Pavement Marking (21604)
• Portland Metro and Surrounding Areas Signal Detection (21605)
• Portland Metro and Surrounding Areas Traffic Monitoring (21609)
• Portland Metro and Surrounding Areas Rockfall Mitigation (21610)
• Portland Metro and Surrounding Areas Operations (21611)
• Portland Metro and Surrounding Areas Audible Crosswalk Signals (21618)
• Portland Metro and Surrounding Areas Safety Reserve (21715)

View more information on each project in the Various/Multiple Counties section.

A section of OR35 in Clackamas County is included in the OR281, OR282 and OR35 signs, signals and lighting project in Hood River County.