# **Cornelius Pass Road Safety Improvements**



#### Overview

- What's Been Done
  - 2007 2009 County improvements
  - 2008 Road Safety Audit
  - 2008 2010 County improvements
  - 2011 ODOT Report
- Current Projects
  - 2013 ODOT projects

(continued)

#### Overview

## Current Projects (continued)

- 2013 15 County improvements
  - Project Funding, Schedule
  - Public Input So Far & Future
    Opportunities
- Questions

## 2008 Road Safety Audit

- Formal safety performance examination
- Independent, multidisciplinary team
- Identified 18 safety issues



## 2008 Road Safety Audit

- 1: Hazards in the Clear Zone
- 2: Centerlines
- 3: Existing Guardrails and Barriers
- 4: Vehicles Crossing over Centerline
- 5: General Signing
- 6: Signing for Curves
- 7: Maintenance of Signs and Delineators
- 8: Intersection Sight Lines
- 9: Sheltered Nook Road

## 2008 Road Safety Audit Issues

- 10: Road Network Analysis
- 11: Geometry of Highway 30 Intersection
- 12: Evaluating Posted Speed
- 13: Sightlines around Curves
- 14: Emergency Communication
- 15: Safety Corridor Designation
- 16: Ice and Snow Management
- 17: Driver Guidance at T-Intersections
- 18: Driver Perception at Skyline Road

## 2007 – 2009 Safety Improvements Made by County (Before Audit)

- No-passing zone
- Realignment of S-curves and barrier
- Reflectors
- Lighting
- Advisory speed signs



## 2011 - 2012 County Projects

- Rumble Strips
- Flashing beacons at Sheltered Nook
- Speed signs

## 2011 – 2012 County Projects

#### Maintenance

- Vegetation removal
- Clean signs/reflectors
- Striping



# **ODOT 2013 Projects**



US 30 intersection with Cornelius Pass Road

## **2013 ODOT Projects**

Construction Spring - Fall 2013

#### US30/Cornelius Pass intersection

- Widen & extend right turn onto CP Rd.
- Add right & left turn lanes on CP Rd.
- Upgrade signal, improve signs
- Bike shoulders & ped island

#### Pave US30

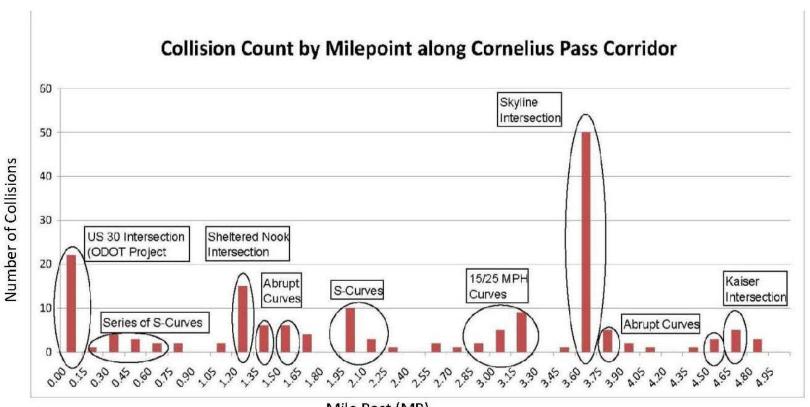
From McNamee to near county line

## **JTA Final 2011 Report**

- Evaluated safety of CP Rd. in MultCo
- Requested by Legislature
- Provided to Legislature in 2011
- Report available on ODOT website (link via <u>www.multco.us.roads</u>)

## JTA Report Findings

- Existing Conditions Assessment
  - Collect & analyze collision data for corridor



## **JTA Report Findings**

## **Collision Analysis**

- Looked at various conditions
- Closer look for specific areas or specific conditions



Overturned truck in 2013

## **JTA Report Findings**

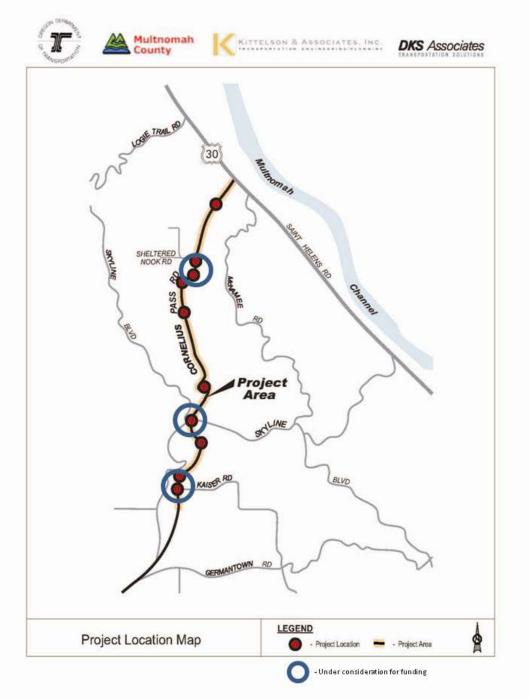
- Conceptual improvement projects list
  - Categories:
    - Location specific improvements (intersection geometric improvements)
    - Corridor-wide improvements (i.e. lighting)
    - Policy considerations (corridor design guide)
  - Identified 27 potential safety projects
  - Cut to 13 projects, using evaluation criteria
  - Estimated cost and benefit of each
  - 6 projects rose to top

## **Six Highest Rated Projects**

Map ID	Projects	Benefit Estimate	Cost Estimate	B/C Ratio
1	Series of S-Curves at MP 0.15-0.60	\$773,000	\$1.38 Million	0.56
2	Sheltered Intersection	\$3.89 Million	\$1.82 Million	2.14
3	S-Curves and Intersection at MP 1.5	\$636,000	\$191,000	3.33
4	S-Curves and Intersection at MP 1.8-2.1	\$100,000	\$914,000	0.11
5	Tight 15/25-mph Curves at MP 2.8-3.3 (Minor Widening)	\$75,000	\$260,000	0.29
6	Tight 15/25-mph Curves at MP 2.8-3.3 (Realignment to the West)	\$675,000	\$13.50 Million	0.05
7	Skyline Boulevard Intersection (Roundabout)	\$9.79 Million	\$3.75 Million	2.61
8	Skyline Boulevard Intersection (Realignment and Access Management)	\$6.58 Million	\$5.30 Million	1.24
9	Curve at MP 4.5	\$1.70 Million	\$1.3 Million	1.31
10	Intersection	\$960,000	\$200,000	4.80
**	Corridor Roadway Lighting	\$2.82 Million	\$1.00 Million	2.82
**	Improve Corridor to 45-mph Facility	\$29.1 Million	\$26.8 Million	1.08
**	Corridor Design Guide and Policies*	-	-	-

# Report Project Areas

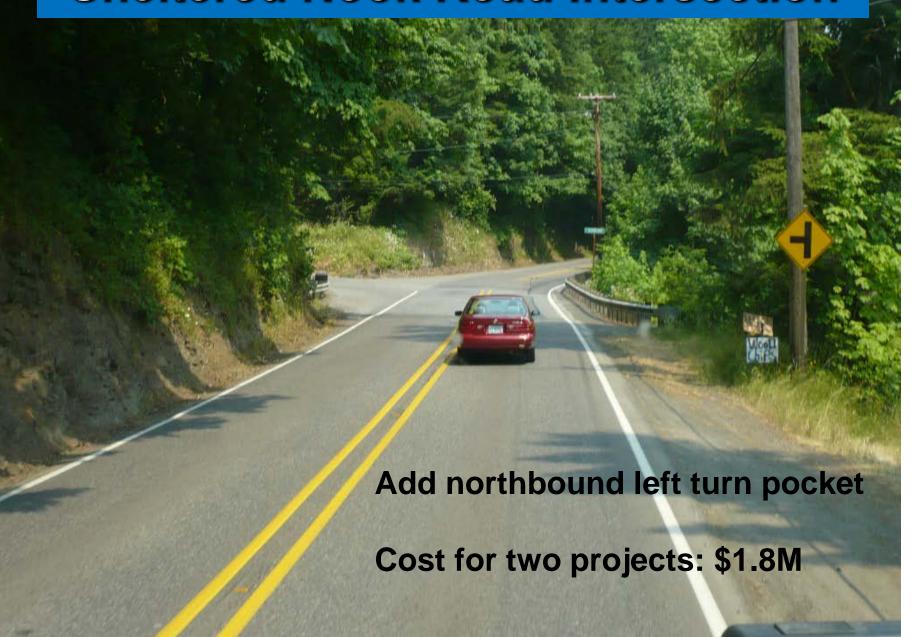
- Sheltered Nook Rd.
- Skyline Blvd.
- Kaiser Rd.



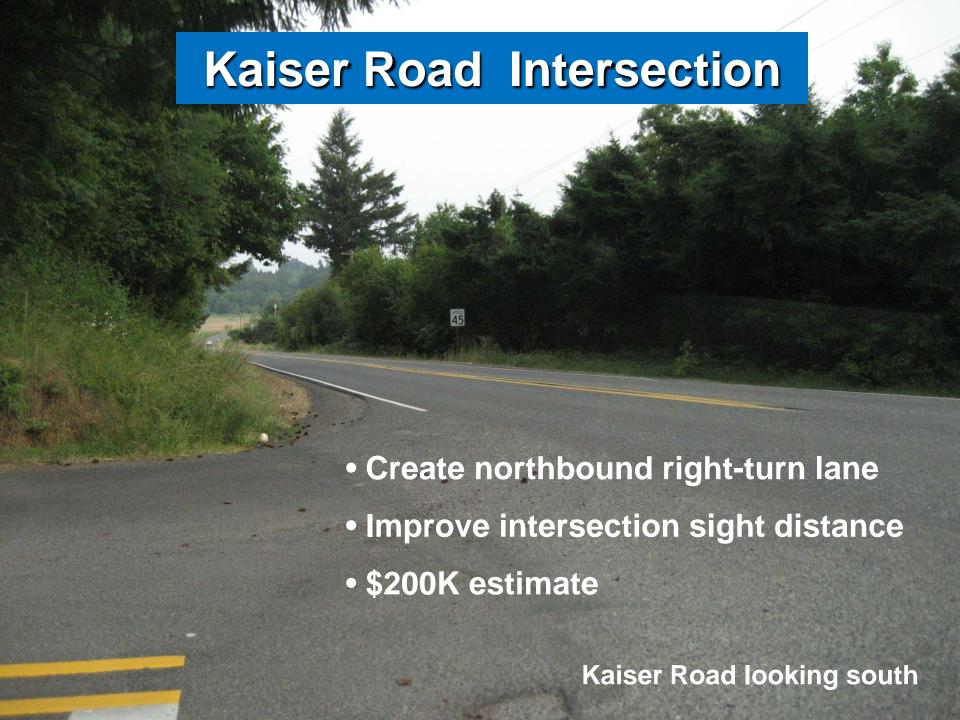
## **Sheltered Nook Road Intersection**



## **Sheltered Nook Road Intersection**







## **Curves & Vision Clearance**



## S Curves & 8th Ave. Intersection

- At MP 1.5
- Recommend tree & vegetation removal
  - Provide stopping sight distance on S curves
  - Provide intersection sight distance at 8<sup>th</sup> Ave.
  - \$191K estimate

#### **Curve north of Kaiser Road**

- At MP 4.5
- Improve stopping sight distance around curve
- \$1.3M estimate



# **Corridor Wide Lighting**

DO NOT PASS

- Corridor wide optimal lighting levels
- \$1M estimate

## **Funding**

- \$9.5 million awarded to County by Legislature for safety improvements
  - Administered through ODOT
  - Includes state and federal funds
- County funds used to begin work at Skyline Blvd.

#### Schedule

- Alternatives Analysis: 2013
  - Select project elements & phases
  - Key Stakeholders: Residents,
    Commuters, Freight, Emergency
    Responders, Agencies, etc.
  - Public meeting: Late summer/fall 2013
- Design: 2013/14
  - Public Meeting at 90% design (late summer/fall 2014)
- Construction: Late 2014 End of 2015

## Public input to date

- Speed Mixed
- Turn Lanes Mixed
- Roundabout Mixed
- Lighting Mixed/Negative
- Guardrails Supported
- Environmental Concerns



#### **For More Information**

- Project website:
  - www:multco.us/roads
- Staff contacts:
  - Sandy Prock, Project Manager, 503-988-5050 Ext. 29627
  - •Mike Pullen, Public Information, 503-209-4111

## **Questions & Discussion**

