

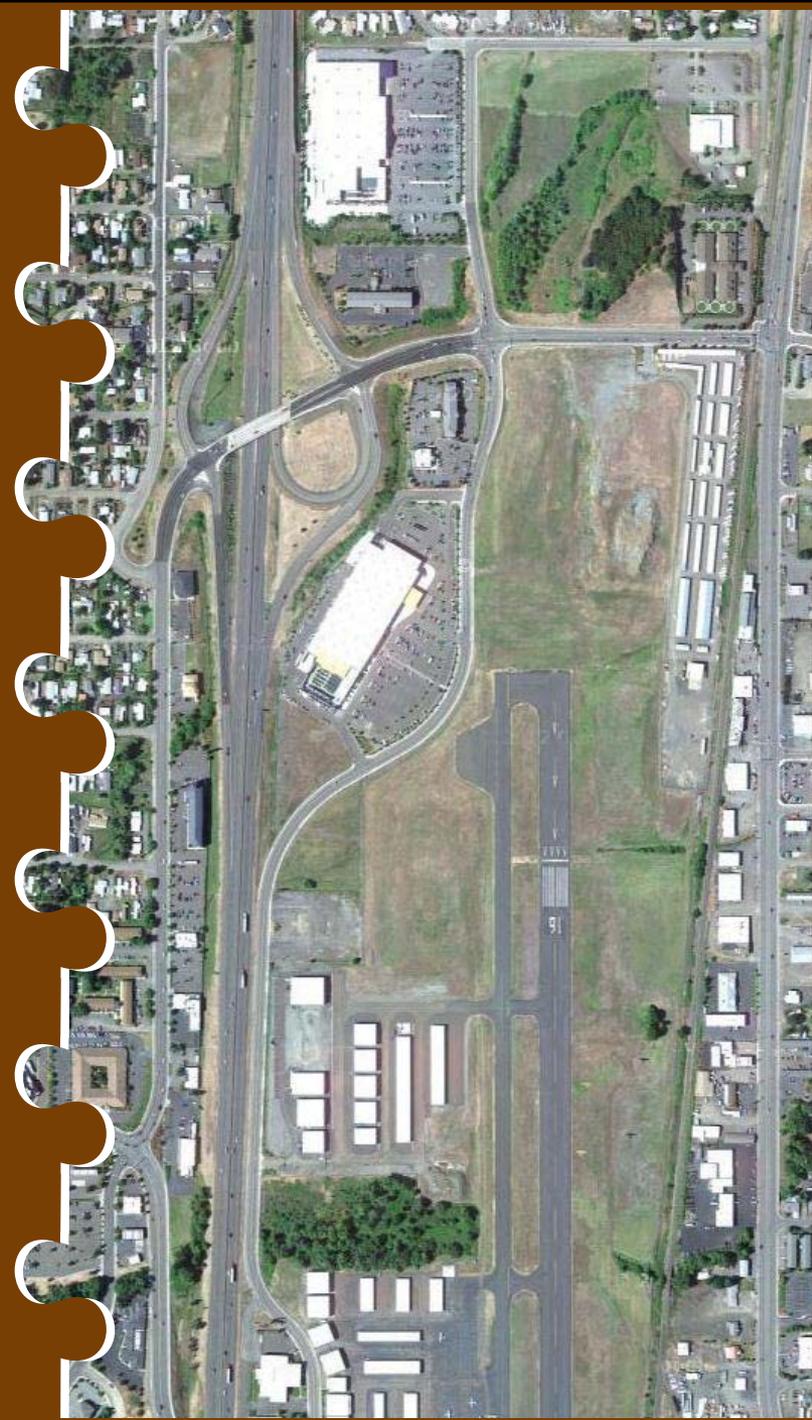
COMPLETE THE PICTURE. BUILD THE PLAN.

# Interstate 5 Exit 127

Interchange Area Management Plan (IAMP)

August 12, 2013

# WELCOME

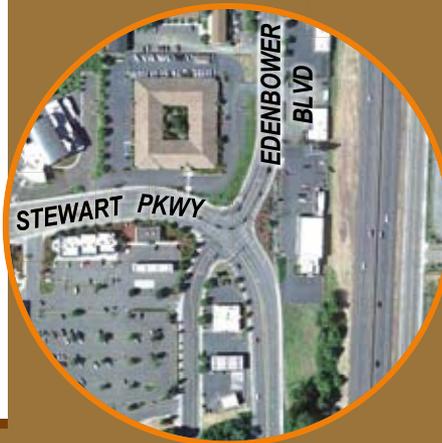


# What is an IAMP?



- A plan for managing the interchange and surrounding areas through the year 2035
- A plan to protect the function and capacity of the interchange and cross streets
- A plan expressing the management objectives of ODOT, Roseburg, and Douglas County

# IAMP Planning Area



## Legend

- Interchange Management Study Area (IMSA)
- Urban Growth Boundary (UGB)
- City Limits
- School
- Intersections to be Studied
- Interstate
- Highway
- Arterial Road
- Local Road
- Rivers

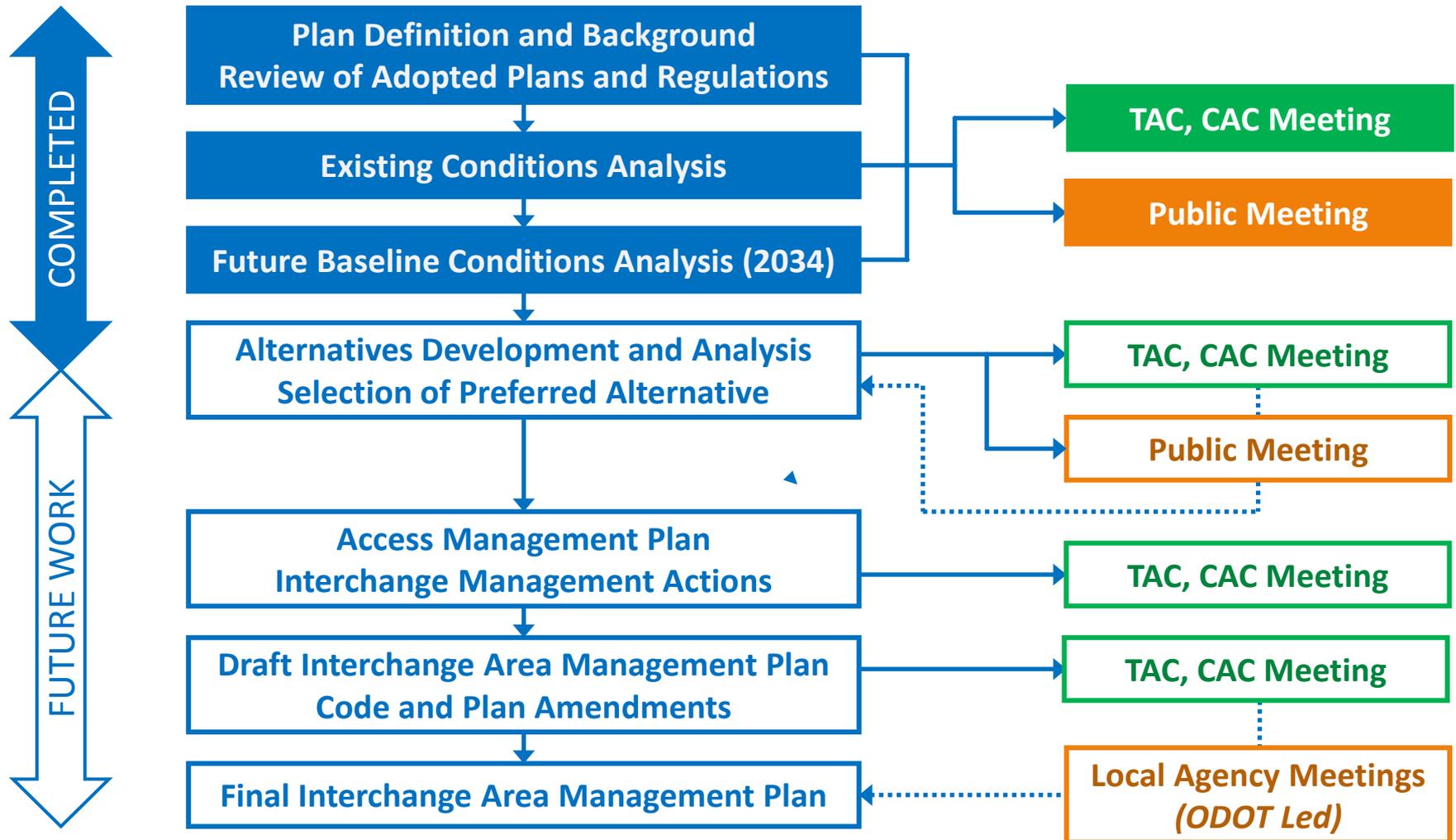
# IAMP Goal & Objectives



Develop a plan for improvements for Interchange 127 that can be implemented over time to maximize the function of the existing interchange and address the long-term needs of Roseburg and other nearby Douglas County communities.

- Protect the function of the interchange and Edenbower Road.
- Develop concepts to improve safety and maximize operational efficiency.
- Address future growth needs of Roseburg and Douglas County.
- Identify local system projects that connect and complement the interchange.
- Incorporate bicycle and pedestrian elements.
- Develop an access management plan for safe and acceptable operations.
- Coordinate planning efforts with other plans and projects in the study area.
- Prioritize IAMP improvements considering potential funding.

# Planning Process



# Public Involvement Process



## Technical Advisory Committee (TAC):

*Provides technical and policy guidance and will serve as the primary body making recommendations about the project. Composed primarily of ODOT and local jurisdiction staff.*

I-5  
Exit 127  
IAMP

**Public Open House:** *Intended as informational exchanges where staff and consultant present and explain project information and the general public can provide input and comment on issues and concerns of importance to them.*

## Citizen Advisory Committee (CAC):

*Provides stakeholder input and offer recommendations to the TAC. Composed of interested citizens, property owners, business representatives, and other stakeholders.*

**Local Agency Meetings:** *Provides additional opportunities for citizen and business input during the adoption process.*



- Concepts are intended to address identified deficiencies
  - Existing and Future Conditions (2012 and 2035)
  - Operations (congestion, delays, queuing)
  - Safety (crash patterns, potential conflicts)
  - Geometry
- Concepts were developed to meet IAMP Objectives

# Types of Improvements



- Intersection Improvements  
*Potential improvements to improve traffic flow, provide additional capacity, or address safety concerns at individual intersections.*
- Interchange Ramp Improvements  
*Potential ramp modifications to address concerns about driver expectation.*
- Multi-Modal Improvements  
*Potential improvements to enhance safety and continuity of pedestrian facilities.*

# Concept Evaluation Criteria



- **Traffic Operations and Safety**
  - *Does the improvement address existing operational or safety concerns?*
  - *Does it address system deficiencies?*
  - *Would it cause additional concerns?*
- **Basic Roadway Geometry and Right of Way (ROW)**
  - *How might the improvement look?*
  - *Would it require additional right of way?*
  - *Are there additional factors to consider in design?*
- **Environmental and Land Use**
  - *Would it have any potential impact to environmental resources?*
  - *How would it affect adjacent land uses?*
- **Cost Opinion\***
  - *How much would it cost?*

*\* Cost opinions do not include estimates of ROW costs or mitigation.*



# Concept 2, Option B – Create Eastbound Shared Left-Through Lane



**Purpose:** Improve operations

## **Description:**

- Convert one through lane on EB Stewart Pkwy to a shared left-through lane
- Restripe Edenbower Blvd and widen to provide second NB receiving lane
- Modify signal timing

## **Traffic Operations & Safety:**

- Improves operations from over capacity conditions with no changes to demand at 80% of capacity (meets standards)
- Reduces queuing and delays for EB left turns
- May improve safety by reducing conflicts between left-turn queues and through traffic
- Requires merge on NB Edenbower Blvd
- May require access control in merge area
- Does not improve sight distance on Stewart Pkwy

## **Basic Roadway Geometry & Right of Way (ROW):**

- No widening on Stewart Pkwy
- Less widening on Edenbower Blvd than Option A because second NB lane partially accommodated by reallocating lanes on the SB approach

## **Environmental & Land Use:**

- Impacts parking lots where widening occurs
- Less potential for impacts to wetland corridors associated with Sweetbriar and Newton Creeks than Option A

## **Cost Opinion:**

- \$700,000

# Concept 1, Option C – Convert an Eastbound Through Lane to a Left-Turn Lane



**Purpose:** Improve operations

## **Description:**

- Convert one through lane on EB Stewart Pkwy to a dedicated left-turn lane
- Restripe Edenbower Blvd and widen to provide second NB receiving lane

## **Traffic Operations & Safety:**

- Improves operations from over capacity conditions with no changes to demand at 80% of capacity (meets standards)
- Reduces queuing and delays for EB left turns
- May improve safety by reducing conflicts between left-turn queues and through traffic
- Requires merge on NB Edenbower Blvd
- May require access control in merge area
- Does not improve sight distance on Stewart Pkwy
- Converting EB through lane to dedicated left-turn lane can “trap” some drivers who intend to go straight

## **Basic Roadway Geometry & Right of Way (ROW):**

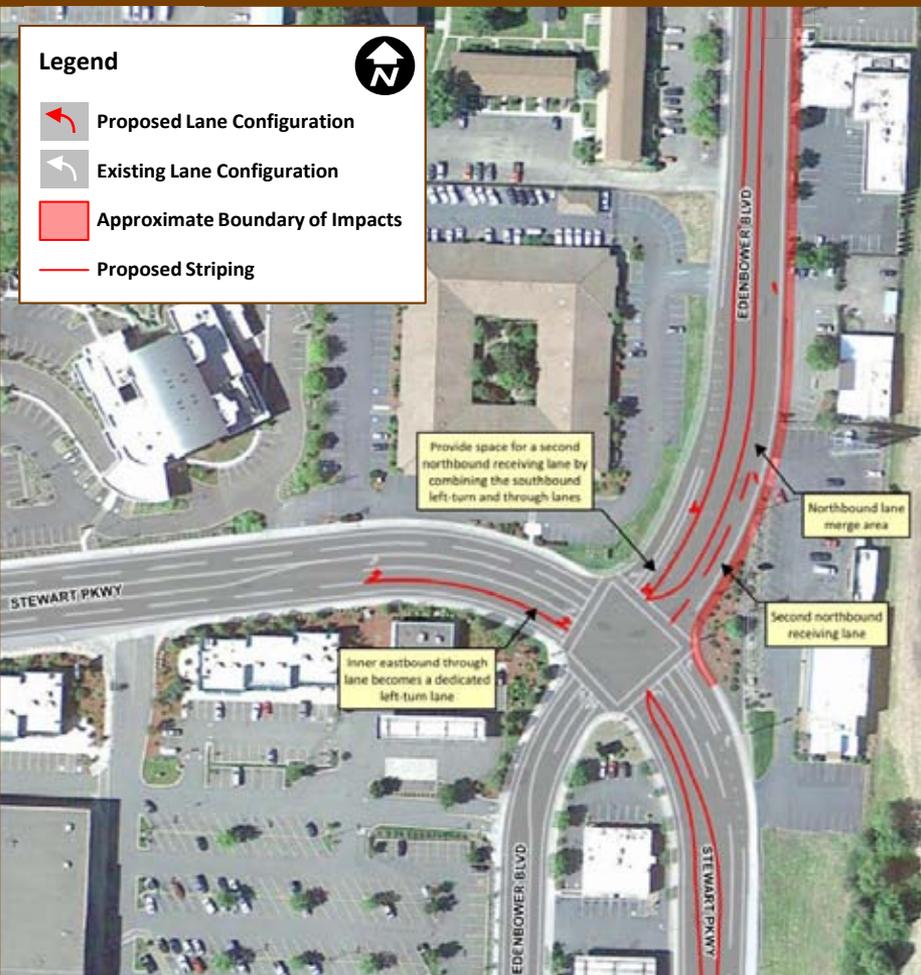
- No widening on Stewart Pkwy
- Less widening on Edenbower Blvd than Option A because second NB lane partially accommodated by reallocating lanes on the SB approach

## **Environmental & Land Use:**

- Parking lot impacts similar to Option B
- Less potential for impacts to wetland corridors associated with Sweetbriar and Newton Creeks than Option A

## **Cost Opinion:**

- \$700,000



# Concept 2 – Install Multi-Lane Roundabout



**Purpose:** Improve operations and safety

**Description:**

- Install multi-lane roundabout with dual approach lanes on all legs

**Traffic Operations & Safety:**

- Improves operations from over capacity conditions with no changes to demand at 85% of capacity (meets standards)
- Roundabouts reduce conflict points and generally have both fewer and less severe crashes
- Improves sight distance on Stewart Pkwy
- Bicyclists may have trouble traveling with vehicular traffic but can travel as pedestrians through the intersection
- Pedestrian crossing widths shortened

**Basic Roadway Geometry & Right of Way (ROW):**

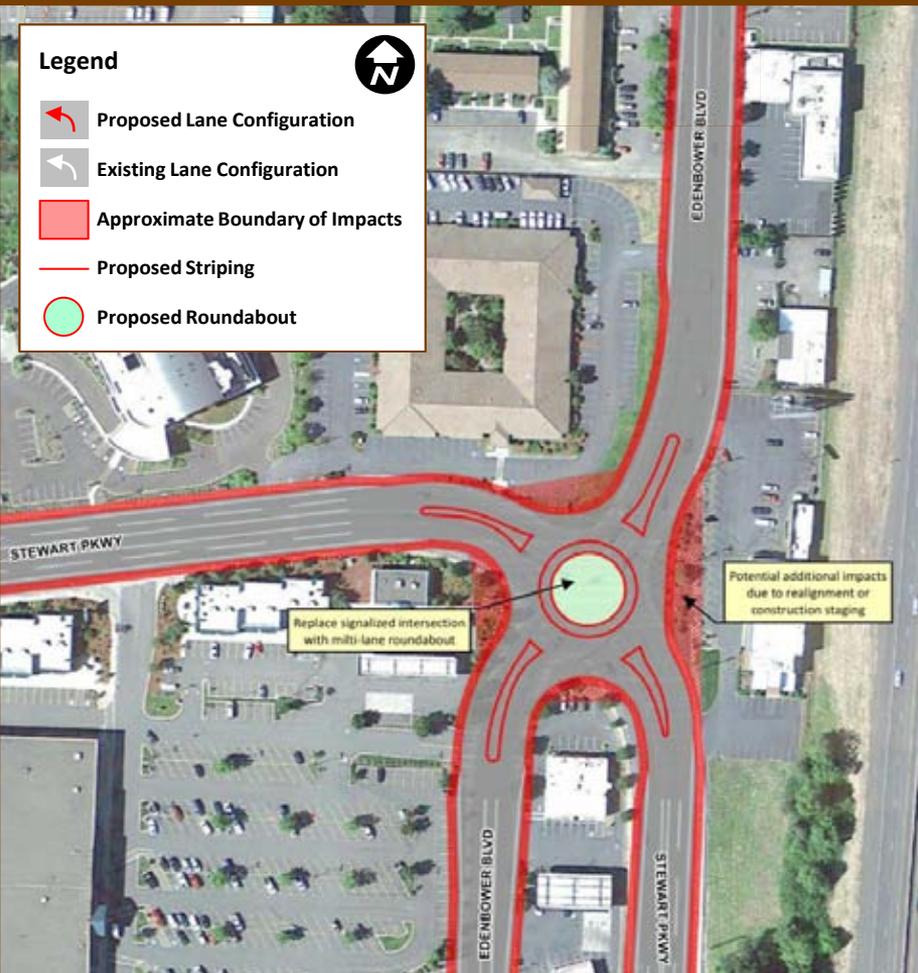
- All approaches require widening or realignment to accommodate footprint of multi-lane roundabout
- All quadrants surrounding the intersection would incur ROW impacts

**Environmental & Land Use:**

- Impacts parking lots where widening occurs
- Could have minor impacts to wetland corridors associated with Sweetbriar and Newton Creeks
- Widening could affect Edenbower Blvd trail accessing Charles S. Gardiner Park
- Project should be vetted with Mercy Hospital

**Cost Opinion:**

- \$2.6 million



# Concept 3 – Realign Intersection to East- West “T”



**Purpose:** Improve operations and safety

**Description:**

- Realign intersection to better accommodate major vehicular traffic movements
- Close access to Edenbower Blvd south of intersection

**Traffic Operations & Safety:**

- Improves operations from over capacity conditions with no changes to demand at 83% of capacity (meets standards)
- Redirects traffic from south leg of Edenbower Blvd → increased travel distance and more inconvenience
- Reduces volume of vehicles turning left, decreasing the likelihood of turning/angle crashes
- Addresses sight distance issues on Stewart Pkwy
- May require access control in merge area

**Basic Roadway Geometry & Right of Way (ROW):**

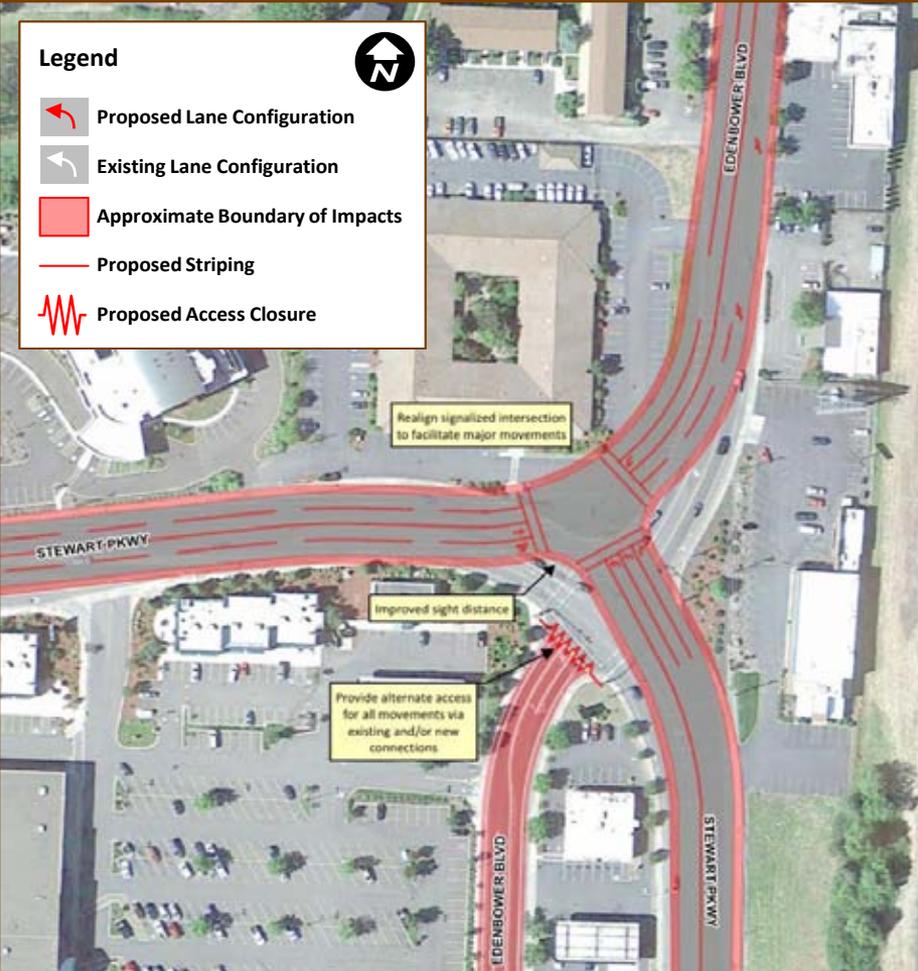
- Intersection realignment will require property acquisition
- Does not include local network or access connections to address closure of south leg of Edenbower Blvd

**Environmental & Land Use:**

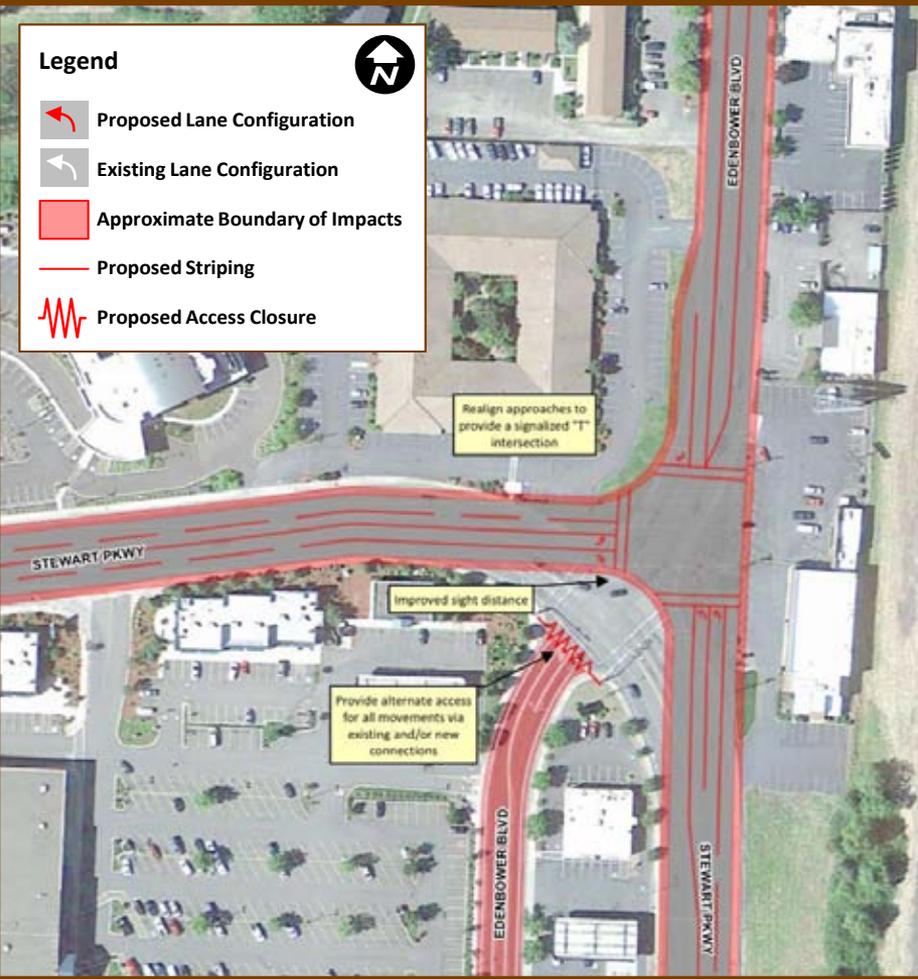
- Impacts property and parking lots, particularly on northwest corner of intersection
- Closing south leg of Edenbower Blvd would have economic impacts to businesses served by roadway
- Low potential for impacts to wetland corridors associated with Sweetbriar and Newton Creeks
- Could affect Umpqua Transit but stop

**Cost Opinion:**

- \$1.9 million



# Concept 4, Option A – Realign Intersection to North-South “T”



**Purpose:** Improve operations and safety

## **Description:**

- Realign intersection to north-south perpendicular “T”
- Close access to Edenbower Blvd south of intersection
- Provide single EB left-turn lane on Stewart Pkwy

## **Traffic Operations & Safety:**

- Improves operations from over capacity conditions with no changes to demand at 90% of capacity (not standard)
- Circulation impacts same as Concept 3
- Addresses sight distance issues on Stewart Pkwy
- May require access control near realigned intersection

## **Basic Roadway Geometry & Right of Way (ROW):**

- Does not include local network or access connections to address closure of south leg of Edenbower Blvd
- Intersection realignment will require property acquisition
- Does not require any roadway widening beyond area affected by realignment

## **Environmental & Land Use:**

- Impacts property and parking lots where realignment occurs
- Economic impacts same as Concept 3
- Transit impacts same as Concept 3
- Low potential for impacts to wetland corridors associated with Sweetbriar and Newton Creeks

## **Cost Opinion:**

- \$1.6 million

# Concept 4, Option B – Realign Intersection to North-South “T” with Dual Left Turns



**Purpose:** Improve operations and safety

**Description:**

- Realign intersection to north-south perpendicular “T”
- Close access to Edenbower Blvd south of intersection
- Provide two EB left-turn lanes on Stewart Pkwy
- Widen Edenbower Blvd for second NB lane

**Traffic Operations & Safety:**

- Improves operations from over capacity conditions with no changes to demand at 60% of capacity (meets standard)
- Circulation impacts same as Concept 3
- Addresses sight distance issues on Stewart Pkwy
- May require access control near realigned intersection and along Edenbower Blvd

**Basic Roadway Geometry & Right of Way (ROW):**

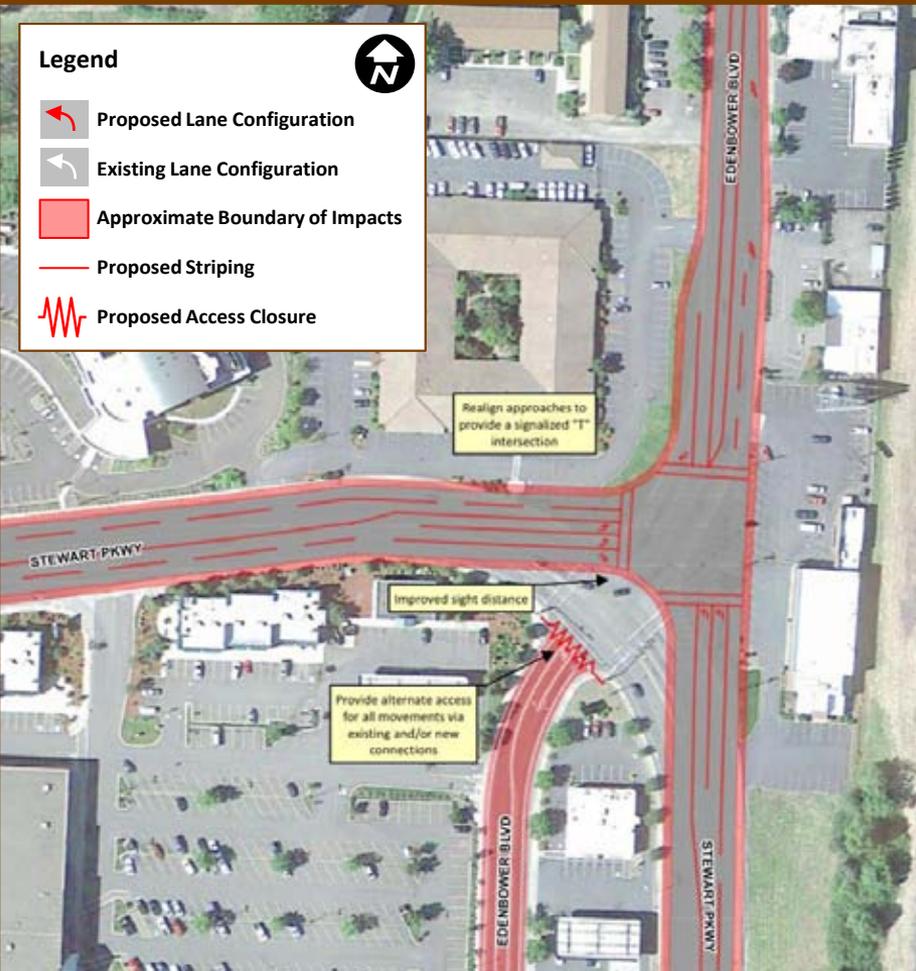
- Does not include local network or access connections to address closure of south leg of Edenbower Blvd
- Intersection realignment will require property acquisition
- Widens Edenbower Blvd to add NB merge lane

**Environmental & Land Use:**

- Same impacts as Option A for northwest corner
- Property and parking impacts on Edenbower Blvd north of intersection for merge lane
- Same economic and transit impacts as Concept 3
- Low potential for impacts to wetland corridors associated with Sweetbriar and Newton Creeks

**Cost Opinion:**

- \$1.9 million



# Concept 5 – Extend Westbound Right-Turn Bay



**Legend**

-  Proposed Lane Configuration
-  Existing Lane Configuration
-  Approximate Boundary of Impacts
-  Proposed Striping
-  Proposed Extension



**Purpose:** Address queuing concerns

**Description:**

- Extend WB right-turn bay at the intersection of Aviation Dr and Edenbower Blvd

**Traffic Operations & Safety:**

- Improve safety by allowing the right-turn traffic to get out of the way of through traffic
- Keeps bike lane clear of stopped vehicles

**Basic Roadway Geometry & Right of Way (ROW):**

- Widens Edenbower Blvd to extend westbound right-turn lane on north side of roadway
- Lighting and sidewalks need to be relocated

**Environmental & Land Use:**

- Mapped wetlands identified in close proximity although any roadside wetland area likely to be highly degraded
- Improvement not anticipated to extend into undisturbed area

**Cost Opinion:**

- \$75,000



# Concept 6 – Extend Left-Turn Bays



**Purpose:** Address queuing concerns

**Description:**

- Extend striped EB left-turn bay on Edenbower Blvd at Stephens St
- Extend NB left-turn bay on Stephens St at Edenbower Blvd

**Traffic Operations & Safety:**

- May improve safety by reducing conflicts between left-turn queues and through traffic
- May reduce delay for other travel movements

**Basic Roadway Geometry & Right of Way (ROW):**

- Project would occur within the existing paved roadway

**Environmental & Land Use:**

- No impacts

**Cost Opinion:**

- \$15,000

# Concept 7 – Delineate Gore Area with Chevron Paint



**Purpose:** Address driver expectation concerns

**Description:**

- Provide additional delineation in gore area of the northbound on-ramp with chevron striping

**Traffic Operations & Safety:**

- Provides visual cue to drivers of the appropriate time to merge
- No impact on capacity

**Basic Roadway Geometry & Right of Way (ROW):**

- Project would occur within the existing paved roadway
- Assumes 8" striping

**Environmental & Land Use:**

- No impacts

**Cost Opinion:**

- \$20,000

# Concept 8 – Install Visual Barrier



## Legend



- Proposed Visual Barrier (Concrete)

New visual barrier to focus drivers' attention on the roadway ahead, until the merge point nears.

Align the new barrier with the existing guardrail

Extra long gore is contrary to driver expectation

**Purpose:** Address driver expectation concerns

## **Description:**

- Install a visual barrier on the westbound to northbound on-ramp

## **Traffic Operations & Safety:**

- Prohibits drivers from looking at I-5 traffic before it is time to start merging
- No impact to vehicle carrying capacity since guardrail on west side currently defines unobstructed roadway width

## **Basic Roadway Geometry & Right of Way (ROW):**

- Project would occur within the existing paved roadway
- Assumes concrete barrier with glare shields

## **Environmental & Land Use:**

- No impacts

## **Cost Opinion:**

- \$100,000

# Concept 9 – Improve North Side Pedestrian Crossing



## Legend



Proposed Location for  
Pedestrian Improvements

Reduce crossing width  
and improve delineation

**Purpose:** Improve safety and continuity of pedestrian facilities

### **Description:**

- Improve east-west pedestrian crossing across NB on-ramp by adding a raised island or extending existing curb and sidewalk

### **Traffic Operations & Safety:**

- Shortens distance pedestrian has to cross intersection with raised island or curb and sidewalk extension
- Could include striped crosswalk to further increase driver awareness of pedestrian activity
- Reduces pedestrian exposure with vehicular traffic
- No reduction in vehicular capacity
- Vehicle carrying capacity would be similar to other on-ramps at interchange

### **Basic Roadway Geometry & Right of Way (ROW):**

- Construction of raised island or curb extension needs to meet geometric requirements for WB right turn and NB through movement from off-ramp
- Improvements would occur within existing paved roadway

### **Environmental & Land Use:**

- No impacts

### **Cost Opinion:**

- \$20,000

# Concept 10 – Enhance Pedestrian Crossing along Edenbower Boulevard



**Purpose:** Improve safety and continuity of pedestrian facilities

## **Description:**

- Enhance pedestrian crossings by installing striped crosswalks and directional ADA compliant curb ramps for north-south travel along west side of Edenbower Blvd

## **Traffic Operations & Safety:**

- Enhanced curb ramps improve directional guidance
- Striped crosswalks help identify the presence of pedestrian activity and increase visibility to motorists turning onto side streets
- Clearly defined and frequent crosswalks may encourage slower travel speeds along Edenbower Blvd
- No impact on vehicular capacity

## **Basic Roadway Geometry & Right of Way (ROW):**

- Improvements would occur within the available ROW

## **Environmental & Land Use:**

- No impacts

## **Cost Opinion:**

- \$25,000

# Next Steps



- Selection of Preferred Improvements
  - Analysis of modified or additional concepts
  - Recommendation for preferred combination of improvements

*We're looking for your input and ideas. Please take a few minutes to fill out a comment card.*

# How Did You Hear About the Open House?



- Radio ads
- Radio story
- Newspaper ad
- Newspaper story
- TV story
- Billboards
- Table Tents
- Website
- Flyer
- Chamber Newsletter

Help us keep you and others informed about future meetings. Place a sticker next to the advertising sources that brought the meeting to your attention.



Thank you for your participation!

*Keep an eye out for upcoming opportunities to learn about planning for other interchanges:*

- *I-5 Exit 124 (Harvard Avenue)*
- *I-5 Exit 125 (Garden Valley Boulevard)*