Scott Avenue Reconnection Project

Council Briefing Workshop

31 March 2014

Meeting Goals

Council Briefing Workshop

- Meeting Goals
  - Provide Background and Project Update
  - Next Steps

Today's Agenda

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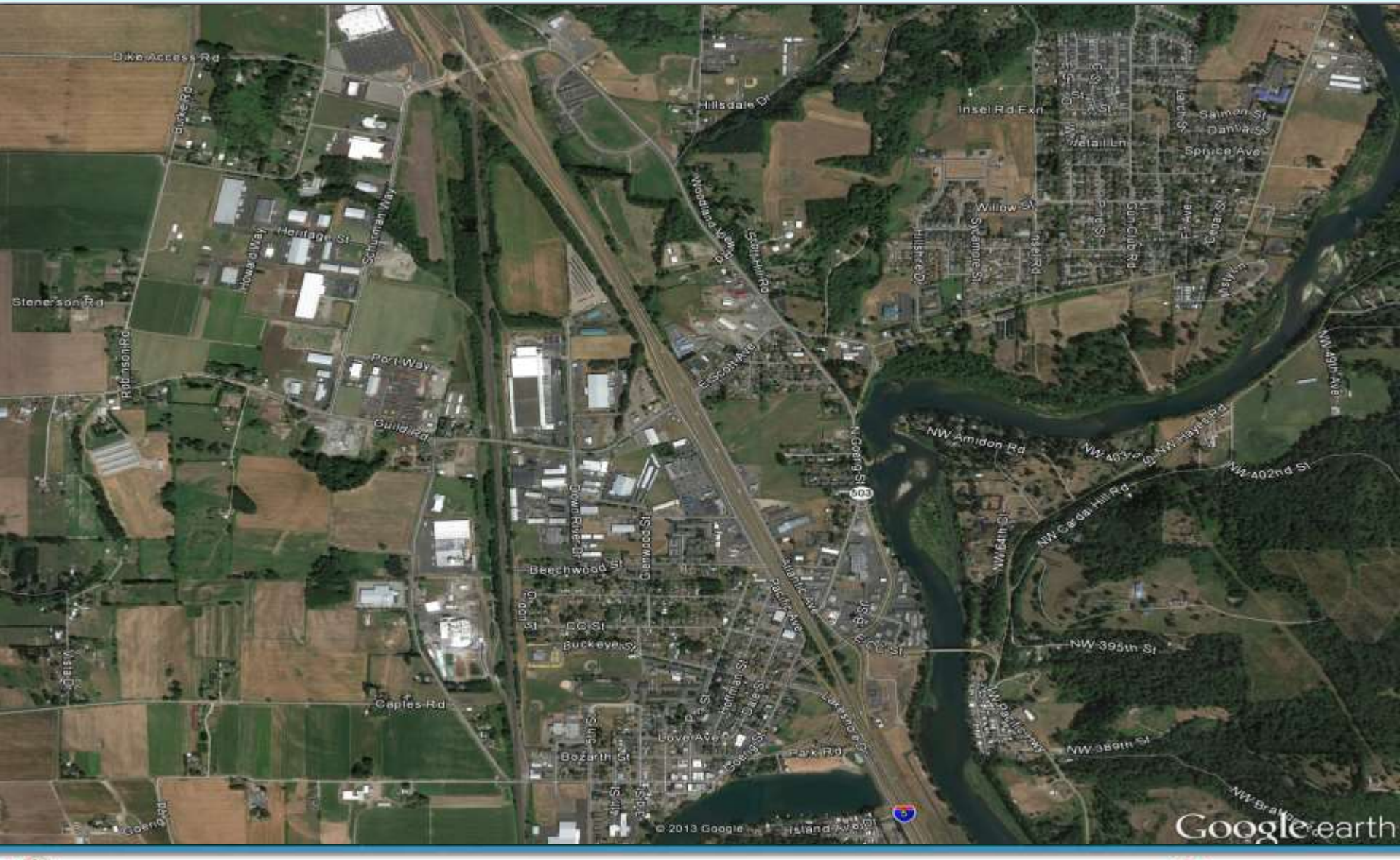
- Discussion Topics
  - History/Background *– 5 min*
  - Interchange/Freeway Design Process *– 10 min*
  - Alternatives *– 50 min*
    - Identification, Screening & Value Analysis
  - Public Involvement *– 5 min*
  - Decision Items & Future Process & Questions *– 50 min*

History & Project Background

History & Background



History & Background

Why is Third Crossing Important?

- Improve industrial area connections to the east side of the City and northbound I-5
- Improve connections to commercial area on Pacific from residential eastside
- Provide another route for school buses
- Emergency vehicle access to middle of City
- Improve traffic flow throughout City (not just Interchange 21)
- Provide a crossing that meets seismic standards

Steering Committees

Steering Committees

- Executive Committee
- Technical Advisory Committee
- Public Advisory Group

Executive Committee

- Members
  - Grover Laseke – *Mayor, City of Woodland*
  - Mike Karnofski – *Cowlitz County Commissioner*
  - Paul Cline – *Port of Woodland Commissioner*
- Meetings
  - Two combined and two single group meetings

Technical Advisory Committee

- Members
  - Bart Stepp – *Woodland Public Works Director*
  - Amanda Smeller – *Woodland Community Development Planner*
  - *Port of Woodland Executive Director*
  - Brad Bastin – *Cowlitz County Engineer*
  - Scott Patterson – *CWCOG Executive Director*
  - Lynn Rust – *WSDOT Highways and Local Programs*
  - Rick Keniston – *WSDOT SW Region Project Development Engineer*
- Meetings
  - Two combined and five single group meetings

Project Advisory Group

- Members
  - Michael Green – *Woodland School District*
  - Tina Greenslade – *Safeway*
  - Richie Harsh – *Gardner Trucking*
  - Darlene Johnson – *Woodland Truck Lines*
  - Dave Lester – *Topper Floats*
  - Jeff Leuthold – *Jeff Leuthold Incorporated*
  - Mark Stillman – *Scott Avenue Resident*
  - Lydia Work – *American Paper Converting*
- Meetings
  - Two combined and two single group meetings

Project Mission Statement & Goals

Project Mission Statement

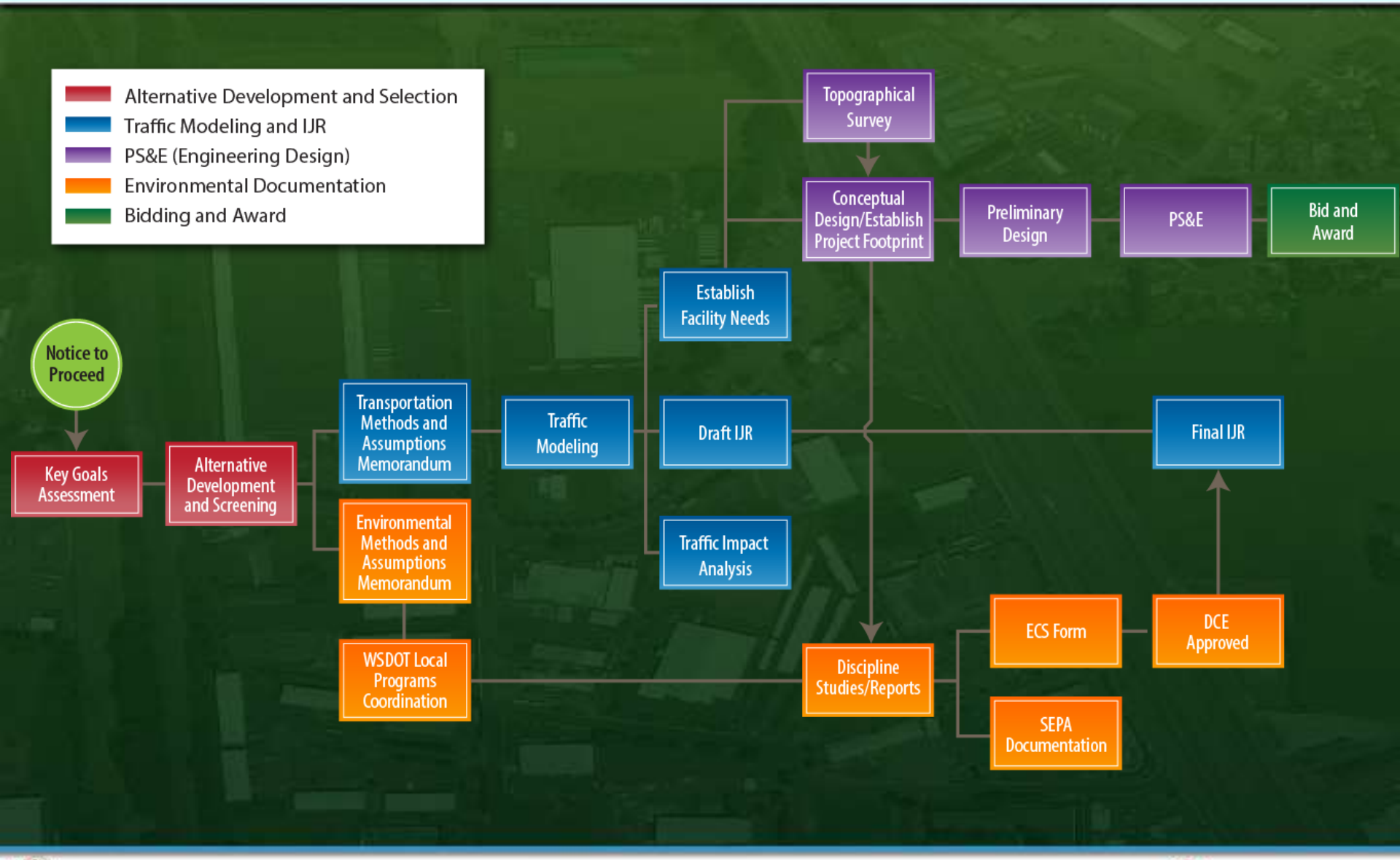
To identify a preferred third east/west connection within the vicinity of Scott Avenue that will improve access to I-5, businesses, residential areas and industrial properties in Woodland while improving reliability, safety and reducing congestion for public and emergency vehicle access at the I-5/SR 503 interchange.

Project Objectives

- Contracted Work Elements
  - *Identify Preferred Alternative*
  - *Complete NEPA documentation*
  - *Complete IJR (if necessary)*
  - *Preliminary Engineering*

Interchange/Freeway Design Process

Project Process



Alternatives Development

Alternatives Development

- Three Categories
  - East/West Connection Alternatives
  - Alternatives for Improved I-5 Access
  - Alternatives for Revisions of I-5/SR503 Interchange
- Total of 17 Alternatives

East West Connections

Baseline Option – I-5 Overpass at Scott Ave

Alternative 1 – Scott Overcrossing

Alternative 3 – Scott Overcrossing Realignment

Alternative 4 – Realignment with Surface Connections

Scott Ave Interchange / Access to I-5

Alternative 7 – Scott Ave Full Diamond

Alternative 8 – Scott Full Diamond + Realignment

Alternative 9 – Scott Ave Direct Flyovers

Alternative 10 –OC, Realignment + Flyovers

Scott Ave Interchange / Access to I-5

Alternative 11 – Slip Ramps

Alternative 12 – Collector Distributors

Lewis River Rd Interchange Improvements

Alternative 13 – Lewis River Road Intersection

Alternative 14 – Lewis River Road Roundabout

Alternative 15 – Lewis River Road added lane

Lewis River Rd Interchange Improvements

Alternative 16 – Pacific & Lewis River Intersections

Alternative 17 – Lewis River Road Parclo

Alternatives Screening

Two Tiered-Screening

- Level 1 – Qualitative Analysis
  - *Does it meet the project's purpose and need?*
  - *Is the cost of the project feasible and consistent with costs for other similar projects in the region?*
  - *Is the alternative likely to receive key permits and approvals? (e.g. NEPA and IJR)*
- Level 2 – Quantitative Analysis

Level 1 Screening Results

(6 Alternatives)

Baseline Option – I-5 Overpass at Scott Ave

Alternative 3 – Scott Overcrossing + Realignment

Alternative 4 –Realignment with Surface Connections

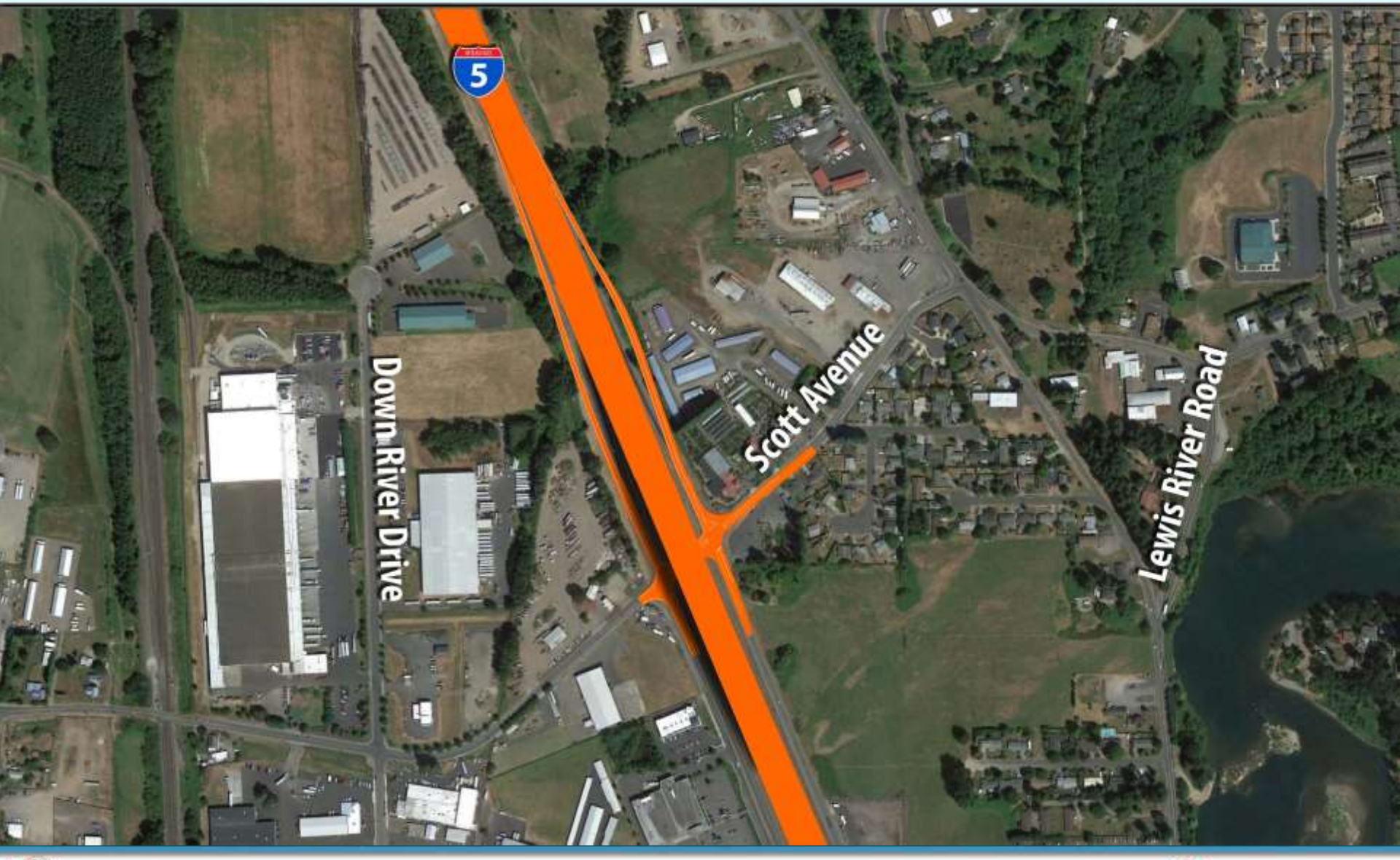
Alternative 4a –Realignment with E&W Surface Connections

Alternative 16 –Pacific & Lewis River Intersections

Alternative 8 –Full Diamond + Realignment

Renderings

Alternative 0 – *I-5 Overpass at Scott Ave*



Alternative 0 – *I-5 Overpass at Scott Ave*

Alternative 0 – *I-5 Overpass at Scott Ave*

Alternatives 3, 4 & 4a – *Scott Overcrossings*

Alternatives 3, 4 & 4a – *Scott Overcrossings*

Alternatives 3, 4 & 4a – *Scott Overcrossings*

Alternative 8 – *Full Diamond I/C*

Alternative 8 – *Full Diamond I/C*

Alternative 16 – *Pacific & Lewis River Intersections*

Renderings – *Alternative 16*

Traffic Modeling Results

Alternative	Vehicle Miles Travelled	Vehicle Hours a Day	Traffic Volume Crossing I-5 (vehicles/hour)	I-5 Ramp Traffic Volume (vehicles/hour)
No Build	Baseline	Baseline	Dike Access Rd: 1,770 Scott Ave: 0 Lewis River Rd: 4,320 **Total: 6,090**	Dike Access Rd: 2,115 Scott Ave: 1,555 Lewis River Rd: 3,465
Alternative 0	-920	-37	Dike Access Rd: 1,080 Scott Ave: 2,125 Lewis River Rd: 2,850 **Total: 6,055**	Dike Access Rd: 2,000 Scott Ave: 1,840 Lewis River Rd: 3,456
Alternative 3	-120	N/A	Dike Access Rd: 1,715 Scott Ave: 585 Lewis River Rd: 3,795 **Total: 6,095**	Dike Access Rd: 2,195 Scott Ave: 1,700 Lewis River Rd: 3,365
Alternative 4	-120	-12.8	Dike Access Rd: 1,675 Scott Ave: 620 Lewis River Rd: 3,755 **Total: 6,050**	Dike Access Rd: 2,185 Scott Ave: 1,645 Lewis River Rd: 3,345
Alternative 4a	-280	-16.9	Dike Access Rd: 1,610 Scott Ave: 665 Lewis River Rd: 3,670 **Total: 5,945**	Dike Access Rd: 2,095 Scott Ave: 1,680 Lewis River Rd: 3,395
Alternative 8	-150	N/A	Dike Access Rd: 1,440 Scott Ave: 820 Lewis River Rd: 3,535 **Total: 5,795**	Dike Access Rd: 2,120 Scott Ave: 1,995 Lewis River Rd: 3,030
Alternative 16	0	N/A	Dike Access Rd: 1,770 Scott Ave: 0 Lewis River Rd: 4,320 **Total: 6,090**	Dike Access Rd: 2,115 Scott Ave: 1,555 Lewis River Rd: 3,465

Level 2 Screening Results

(3 Alternatives)

Performance Attribute Definitions

PERFORMANCE ATTRIBUTE AND REQUIREMENT DEFINITIONS	
Scott Avenue Reconnection Project	
Standard Performance Attribute	***Description of Attribute***
Improve East-West Connectivity	An assessment of travel time, length of travel path, and volume at I-5.
Local Level of Service	An assessment local intersection level of service.
Improve I-5 Access	An assessment of, I-5 traffic volume, interchange I-21 congestion.
Geometric Approval	An assessment of geometric approval of interchange spacing.
Minimal / Reasonable ROW Impacts	An assessment of feasibility to purchase or acquire necessary ROW to construct the alternative.
Business/Local/Emegency Access	An assessment the impacts to local/adjacent businesses and houses and emergency/police vehicle access.
Minimal or Mitigatable Environmental Impacts	An assessment of environmental impacts include air quality from vehicle miles traveled and effect on hazardous sites.
Construction Complexity	An assessment of the complexity of construction.
I-5 Level of Service	An assessment of I-5 level of service

Performance Attribute Rating

PERFORMANCE ATTRIBUTE MATRIX

Scott Avenue Reconnection Project

Which attribute is more contributes more to the overall success of the project?

									TOTAL	%
Improve East-West Connectivity	**A**	A	A/C	A/D	A	A/F	A	A	A/I	7.0	15.6%
Local Level of Service	**B**	C	D	B	B/F	B	H	I	3.5	7.8%
Improve I-5 Access	**C**	C/D	C	C/F	C	C	C/I	7.0	15.6%
Geometric Approval	**D**	D	D/F	D	D	D/I	7.0	15.6%
Minimal / Reasonable ROW Impacts	**E**	F	G	E/H	I	1.5	3.3%
Business/Local/Emegency Access	**F**	F	F/H	I	5.5	12.2%
Minimal or Mitigatable Environmental Impacts	**G**	H	I	2.0	4.4%
Construction Complexity	**H**	I	4.0	8.9%
I-5 Level of Service	**I**	7.5	16.7%
									45.0	100%

Overall Performance Score

OVERALL PERFORMANCE AGAINST HIGHEST SCORE		Performance (P)
	Highest Score:	681
0	Alternative 0 - I-5 Overcrossing at Scott Ave	681
3	Alternative 3 - Scott Ave Overcrossing Realignment	570
4	Alternative 4 - Scott Overcrossing Realignment with East Surface Connections	579
4a	Alternative 4a -Scott Overcrossing Realignment with East and West Surface Connections	572
16	Alternative 16 - Interchange 21 Reconfiguration	513

Best Performance Score Alternatives – *0, 4, 4a*

Order of Magnitude Cost Estimates*

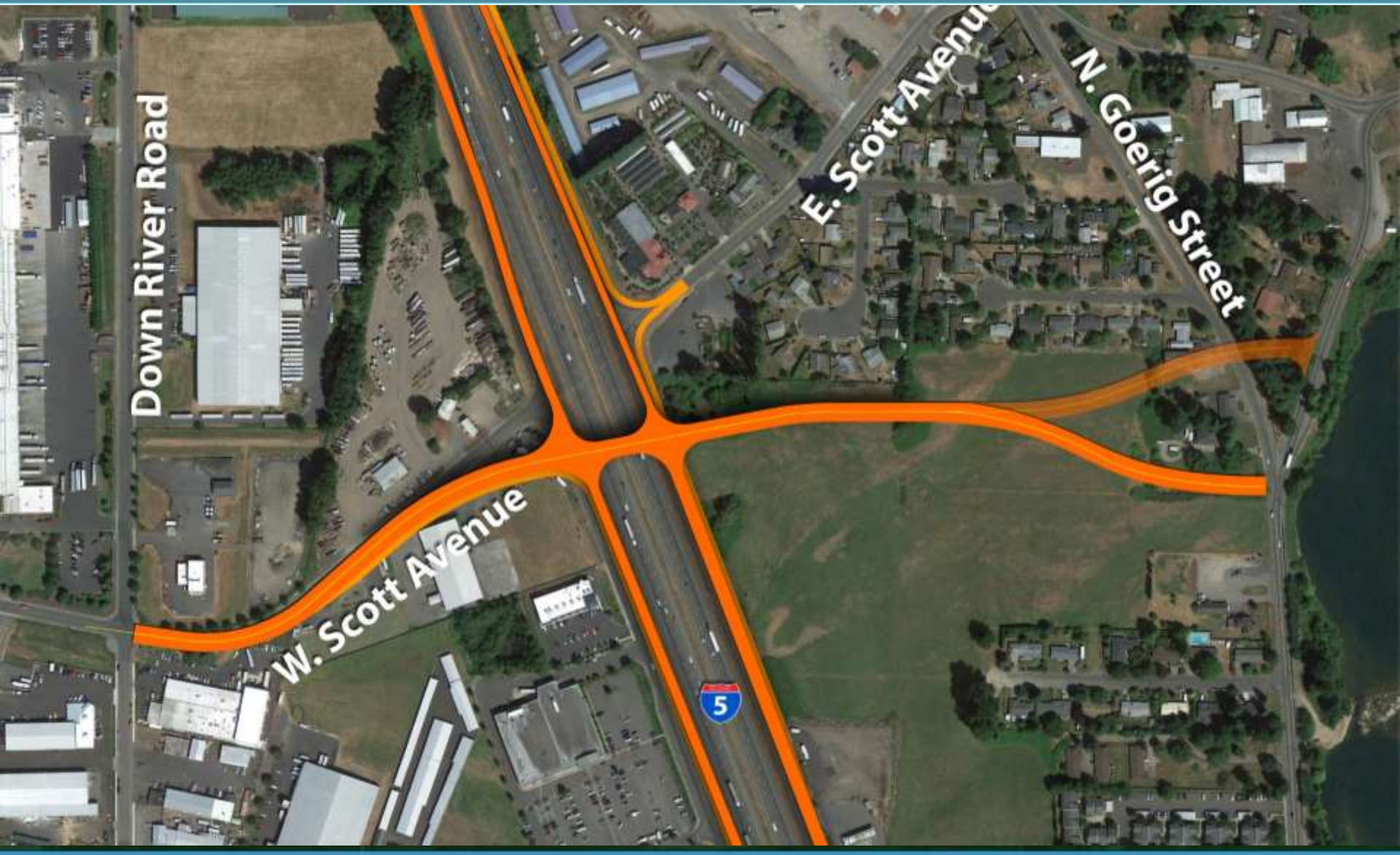
Alternative	Construction Cost	Right-of-Way Acquisition and Business Impacts	Total Estimated Cost	Total Estimated Cost + Life Cycle in 2020 Dollars	Total Benefits for 40 years	Benefit Over Cost Ratio in 2020 Dollars
	2018 Dollars	*2018* Dollars	*2018* Dollars	*2020* Dollars	*2020* Dollars	*2020* Dollars
Alternative 0	$80 M	$0.5 M	$80 M	$130 M	$108 M	0.83
Alternative 4	$30 M	$7.6 M	$40 M	$55 M	$25 M	0.45
Alternative 4a	$30 M	$11.7 M	$40 M	$61 M	$40 M	0.66

**Cost estimates are for planning purposes only and are only intended to identify order of magnitude differences between alternatives.*

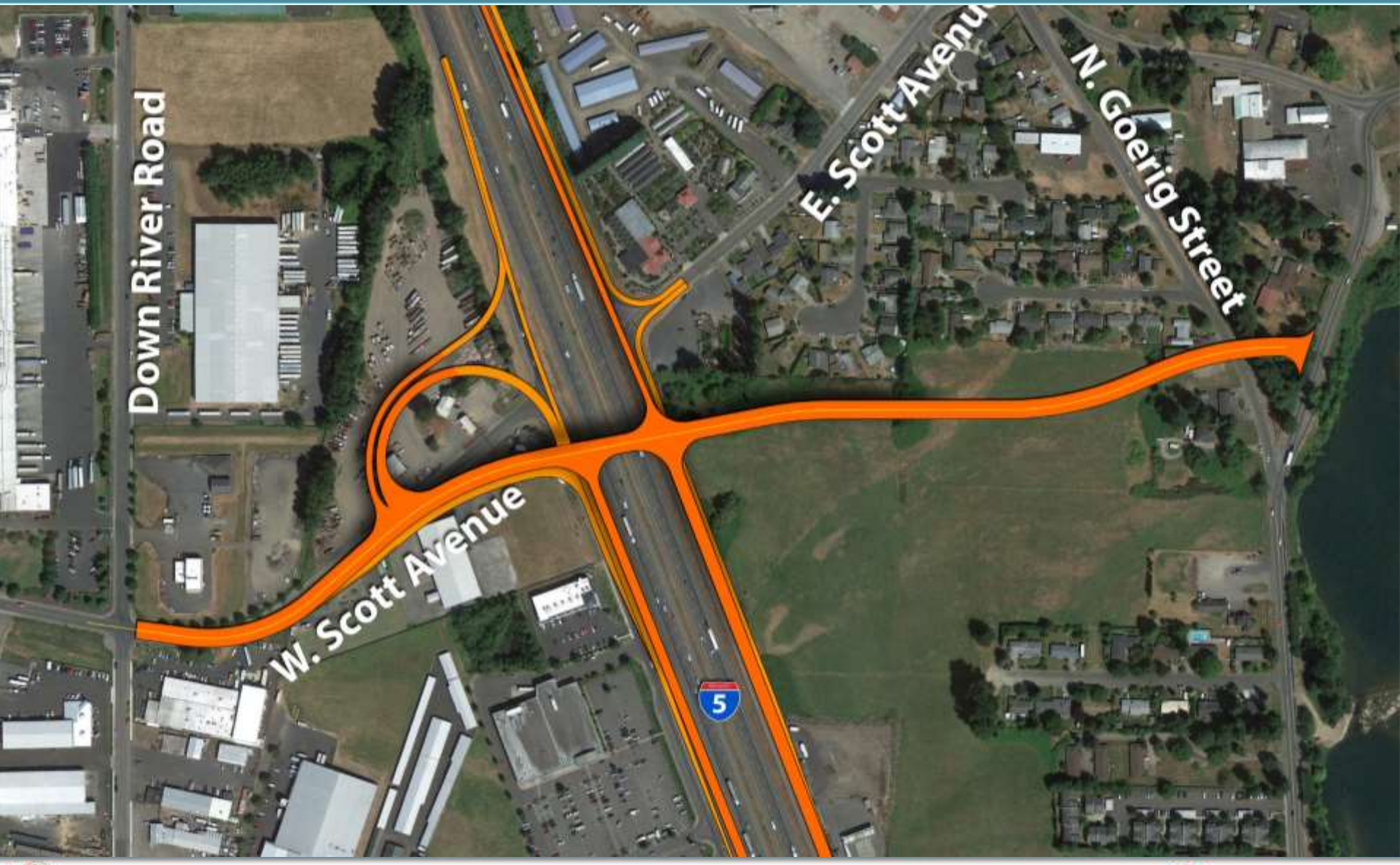
Value Analysis Workshop

Alternative – VA10

Alternative – VA18a



Alternative – VA18b



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Alternative 4	-120	-12.8	Dike Access Rd: Scott Ave: Lewis River Rd:	1,675 620 3,755	Total: 6,050	Dike Access Rd: Scott Ave: Lewis River Rd:	2,185 1,645 3,345
Alternative 4a	-280	-16.9	Dike Access Rd: Scott Ave: Lewis River Rd:	1,610 665 3,670	Total: 5,945	Dike Access Rd: Scott Ave: Lewis River Rd:	2,095 1,680 3,395
Option AR-10	-100	+13	Dike Access Rd: Scott Ave: Lewis River Rd:	1,700 400 3,950	Total: 6,050	Dike Access Rd: Scott Ave: Lewis River Rd:	2,250 1,380 3,360
Option IA-18a	-200	+22	Dike Access Rd: Scott Ave: Lewis River Rd:	1,430 1,450 3,080	Total: 6,100	Dike Access Rd: Scott Ave: Lewis River Rd:	2,230 1,900 3,400
Option IA-18b	-480	-22	Dike Access Rd: Scott Ave: Lewis River Rd:	1,340 1,670 3,090	Total: 6,100	Dike Access Rd: Scott Ave: Lewis River Rd:	2,210 1,810 3,530

Order of Magnitude Cost Estimates*

Alternative	Construction Cost	Right-of-Way Acquisition and Business Impacts	Total Estimated Cost	Total Estimated Cost + Life Cycle in 2020 Dollars	Total Benefits for 40 years as	Benefit Over Cost Ratio in 2020 Dollars
	2018 Dollars	*2018* Dollars	*2018* Dollars	*2020* Dollars	*2020* Dollars	*2020* Dollars
Alternative 0	$80 M	$0.5 M	$80 M	$130 M	$108 M	0.83
Alternative 4	$30 M	$7.6 M	$40 M	$55 M	$25 M	0.45
Alternative 4a	$30 M	$11.7 M	$40 M	$61 M	$40 M	0.66
Option AR-10	$20 M	$5.6 M	$30 M	$40 M	-$10 M	-0.25
Option IA-18a	$40 M	$4.4 M	$40 M	$68 M	-$16 M	-0.24
Option IA-18b	$40 M	$7.8 M	$50 M	$69 M	$60 M	0.87

**Cost estimates are for planning purposes only and are only intended to identify order of magnitude differences between alternatives.*

Public Involvement

Public Involvement

Involvement Strategies

- Individual Stakeholder Meetings
- Chartering & Alternatives Brainstorming Meetings
  - *PAG, TAC, Exc Joint Meetings – 25 July & 26 September 2013*
- PAG Meetings
  - *17 October 2013 & 13 February 2014*
- Project Website
  - *www.scottreconnect.com*
- Project Mailers
  - *November 2013 & March 2014*
- Public Open House
  - *10 December 2013*

Stakeholder Input

Stakeholder Input

General Understanding and Awareness

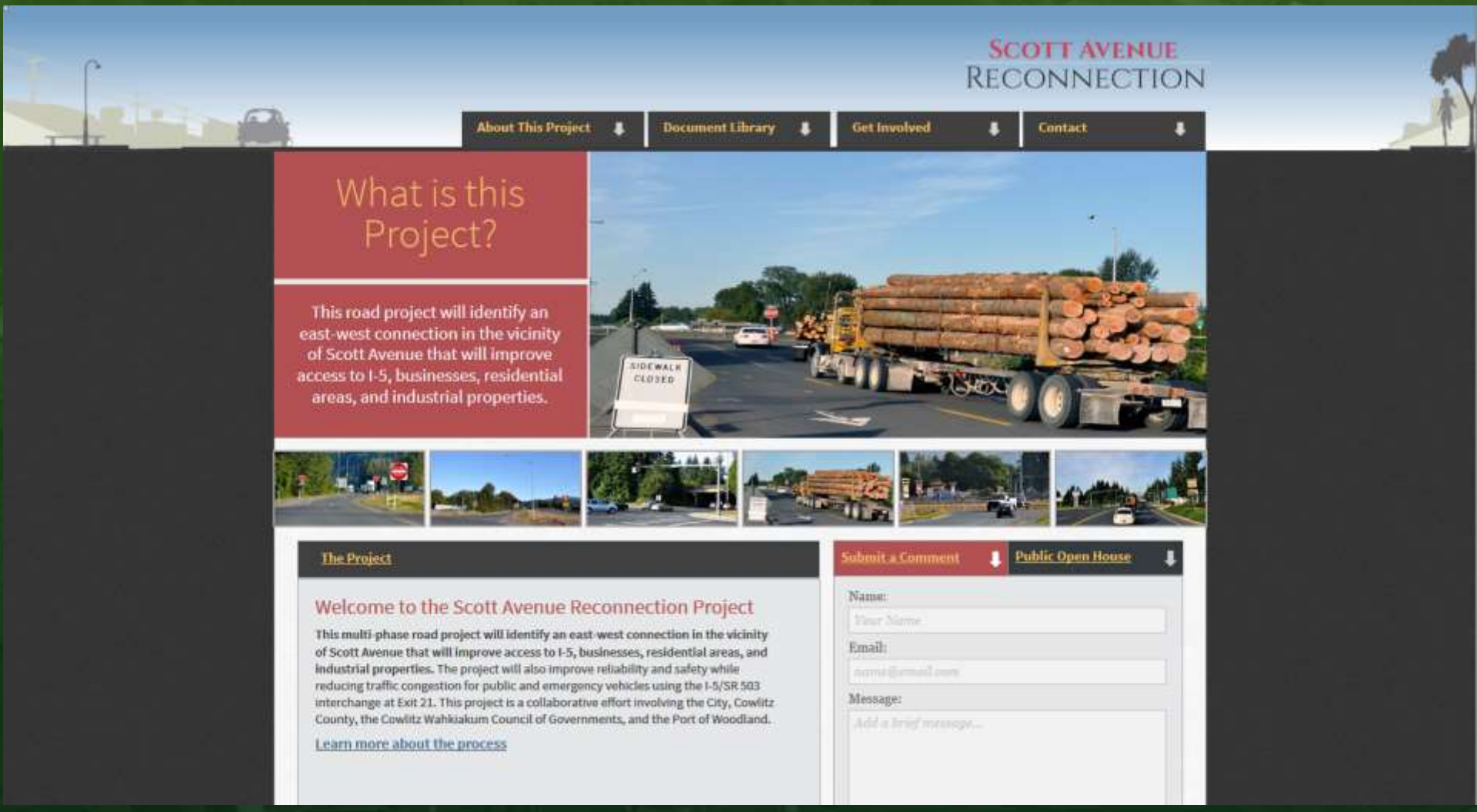
- Many but not all stakeholders generally aware of project
- A few stakeholders participated in previous planning work
- Some are aware of but not previously involved in project planning

Stakeholder Input

Project Needs/Concerns

- Project design must not prevent future improvement of the railroad crossing
- Project should seek to improve congestion at Exit 21
- Construction impacts would affect area businesses and residents
- Design could affect current and future property uses

Project Website



Open House

Open House

10 December 2013

- 5:30 pm to 7:30 pm
- Attendees = 15 people signed in
- Comment forms = 6 submitted

Open House


SCOTT AVENUE
RECONNECTION
I-5 OVERPASS
SCOTT AVENUE
RECONNECTION
INTERCHANGE 21 IMPROVEMENTS
PROS:
CONS:
COSTS:
SCOTT AVENUE
RECONNECTION
SCOTT OVERCROSSING REALIGNMENT WITH EAST AND WEST HOOK
PROS:
COSTS:

Open House

Comment Form Responses

- Most important issues for this project to address?
  - *Improved east-west traffic circulation for motorist and police/fire emergency vehicles*
  - *Relieve traffic congestion at SR 503 and Exit 21*
  - *Better freight access to Port and west side industrial area*
- Major project concerns
  - *Construction disruptions, make sure fix traffic*
- Major project concerns
  - *"Build both I-5 overpass and Interchange 21 improvements. Looks good!"*

Decision Items

Decision Items

- Top Alternatives
- Special Considerations

Remaining Alternatives

Alt 0

Alt 4

Alt 4a

Alt 10

Alt 18a

Alt 18b

Decision Items

Special Considerations

- *Property Takes*
- *Project Costs/Funding*
- *Final Alternatives Selection Process*

Next Steps

Next Steps

- Preferred Alternative Selection
- Continue NEPA Evaluation
- Begin Preliminary Engineering

Questions?