Salem River Crossing Project

Salem City Council Work Session
January 30, 2019

Robert D. Chandler, PhD, PE
Assistant Public Works Director
January 30, 2019 Salem River Crossing Project Council Work Session

Phillip Ditzler – Division Administrator, Oregon Division, Federal Highway Administration

Mike Morrow, PE – Senior Field Operations Engineer, Oregon Division, Federal Highway Administration

Emily Cline – Acting Environmental Manager, Oregon Division, Federal Highway Administration

Matthew Garrett – Director, Oregon Department of Transportation

Sonny Chickering, PE – Region 2 Manager, Oregon Department of Transportation

Terry Cole – Region 2 Transportation Planning Manager, Oregon Department of Transportation

Lisa Nell – Region 2, Area 3 Manager, Oregon Department of Transportation

Mike Jaffe – Transportation Planning Director, Mid-Willamette Valley Council of Governments

Julie Warncke – Transportation Planning Manager, Salem Public Works
City Council Motion

That City Council hold a work session to discuss all potential issues concerning the Environmental Impact Statement for the third bridge, including but not limited to its effect on neighborhoods, Wallace Marine Park, Edgewater Drive, the Rosemont exit, projected congested areas and travel times under Build and No Build options, and financing options.

November 26, 2018
City Council Motion

That City Council hold a work session to discuss all potential issues concerning the Environmental Impact Statement for the third bridge, including but not limited to its effect on neighborhoods, Wallace Marine Park, Edgewater Drive, the Rosemont exit, projected congested areas and travel times under Build and No Build options, and financing options.

November 26, 2018
The Process Leading to FHWA Record of Decision

Salem City Council Work Session
January 30, 2019

FHWA = Federal Highway Administration
What is a Record of Decision?

The Record of Decision:
- Final step in the Environmental Impact Statement process
- Identifies all the alternatives considered
- Identifies the Selected Alternative
- Presents the basis for the decision
- Provides information on the means to avoid, minimize, and compensate for impacts

Once issued, a Record of Decision:
- Requires commencement of initial right-of-way acquisition or initial construction
- Does not expire (may require review of environmental impacts)
Process to an Federal Highway Administration (FHWA) Record of Decision

Overview

Notice of Intent (Nov '06)

Alternatives Developed (Feb '08)

Alternative 4D (Aug '12)

Draft EIS (Apr '12)

Salem Alternative (Jun '13)

Preferred Alternative (Feb '14)

Joint Public Hearing (Oct '16)

Council passes Ord 14-16 (Dec '16)

Congestion Relief Task Force (Oct '18)

LUBA Remand (Aug '17)

Council Action (Feb '19)

Record of Decision Preferred Alternative

Proceed toward completing land use actions

Final EIS

Not proceed on land use actions

Record of Decision No Build Alternative

EIS = Environmental Impact Statement
LUBA = Land Use Board of Appeals

ROD = Record of Decision

Q/A: Glossary, 2.d, 5.c

★ = Sept 30, 2019 FHWA Deadline for ROD
Developing the Preferred Alternative

Salem City Council Work Session
January 30, 2019
Developing the Preferred Alternative

**Terms**

**SKATS** – Salem-Keizer Area Transportation Study  
The federally-mandated Metropolitan Planning Organization (MPO) for the Salem-Keizer area. SKATS focuses on transportation planning activities, plans, and studies for transportation facilities of regional significance.

**Task Force** – Salem River Crossing Project  
Members include leaders of neighborhoods on both sides of the river as well as representatives of local and regional business groups, advocates for different bridge user groups, and local public agencies. Advises Oversight Team.

**Oversight Team** - Salem River Crossing Project  
Elected or appointed officials from City of Salem, City of Keizer, Marion County, Polk County, Cherriots, ODOT. FHWA is a non-voting member. Advises local governments, SKATS, ODOT, and FHWA.
Developing the Preferred Alternative

- (Jun '02) General Corridor Evaluation
  - 13 Alternatives
    + No Build
- (Nov '06) Notice of Intent

1997 SKATS initiates General Corridor Evaluation

SKATS = Salem-Keizer Area Transportation Study [The regional metropolitan planning organization]
Potential Bridge Corridors

1. Lockhaven Drive
2. Chemawa Road
3. Tryon Street
4. Pine Street
5. Shipping Street
6. Hood Street
7. Market Street
8. Division Street
9. Union Street
10. Pringle Parkway
11. Mission Street
12. Cross Street
13. Kuebler Road
14. No Build
Potential Bridge Corridors

City Council Work Session
Feb 25, 2008
Developing the Preferred Alternative

Alternatives Recommended for Further Study in the Draft Environmental Impact Statement

- **Alternative 1**: No Build (required)
- **Alternative 2A**: Widen Existing Bridges
- **Alternative 2B**: New Bridge, OR 22/Marine Drive to Commercial
- **Alternative 3**: New Bridge, Hope to Tryon
- **Alternative 4**: New Bridge Hope to Pine/Hickory
  - **Alternative 4A**: New bridge
  - **Alternative 4B**: New bridge + widen existing bridges
  - **Alternative 4C**: New bridge + Hwy 22 and Salem Parkway direct connection. Pine/Hickory ends at Broadway
  - **Alternative 4D**: New bridge, Hwy 22 and Salem Parkway direct connection, Pine/Hickory ends at Liberty
  - **Alternative 4E**: New bridge + Hwy 22 and Salem Parkway direct connection. Pine/Hickory ends at Broadway, avoids direct impacts to west side of Wallace Marine Park
Developing the Preferred Alternative

1997 SKATS initiates General Corridor Evaluation


(Jun '02) General Corridor Evaluation
13 Alternatives
+ No Build

(Feb '08) Oversight Team
Approved for Draft EIS
8 Alternatives
+ No Build

(Aug '12) Draft EIS
8 Alternatives
+ No Build

(Jun '13) City Council
Rejects Alternative 4D
Approves “Salem Alternative”

(Nov '06) Notice of Intent

(Draft EIS Development)

(Feb '08) Oversight Team
Approved for Draft EIS
8 Alternatives
+ No Build

(Aug '12) Oversight Team
Alternative 4D
“Preliminary Preferred Alternative”

(Feb '14) Oversight Team
Approves “Preferred Alternative”

SKATS = Salem-Keizer Area Transportation Study
EIS = Environmental Impact Statement
Developing the Preferred Alternative

Alternative 4D to Salem Alternative
- Six-lane bridge → Four-Lane Bridge
- Elevated Bridge Approaches → Removed
- Marine Drive Extended → Removed
- Orchard Heights Realigned → Removed
- Glen Creek Widened → Removed
- Elevated Bridge Approaches → Removed
- Elevated Roadway → Removed
- Braided Ramps → Removed

Future closing Rosemont exit from Highway 22
Future planning study on reconfiguring access to Highway 22

Q/A: 2.d
Alternative 4D to Salem Alternative

- Six-lane bridge → Four-Lane Bridge
- Elevated Bridge Approaches → Removed
- Marine Drive Extended → Removed
- Orchard Heights Realigned → Removed
- Glen Creek Widened → Removed
- Elevated Bridge Approaches → Removed
- Elevated Roadway → Removed
- Braided Ramps → Removed

Future closing Rosemont exit from Highway 22

Future planning study on reconfiguring access to Highway 22
Developing the Preferred Alternative

**Preferred Alternative**

- A four-lane bridge, either a single structure or two side-by-side structures; multiuse paths
- Bridge approaches and distribution networks at bridge approaches
- Widening intersection/add turn lanes of Wallace Road at Orchard Heights
- Marine Drive at grade
- Roundabout at Riverbend/Marine Dr.
- Two, one-lane elevated roadways connecting Marine Drive at Glen Creek Road to Highway 22.
Developing the Preferred Alternative

1997 SKATS initiates General Corridor Evaluation

2002

(Oct '02) General Corridor Evaluation
13 Alternatives + No Build

2003

(Feb '08) Oversight Team
Approved for Draft EIS
8 Alternatives + No Build

2004

(Oct '08) Oversight Team
Draft EIS
8 Alternatives + No Build

2005

(Nov '08) Notice of Intent

2006

(Oct '12) Draft EIS
8 Alternatives + No Build

2007

(Jun '13) City Council
Rejects Alternative 4D
Approves “Salem Alternative”

2008

(Aug '12) Oversight Team
Alternative 4D
“Preliminary Preferred Alternative”

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2017

(Feb '14) Oversight Team
Approves “Preferred Alternative”

Final EIS Development

Council Action
(Feb '19)

Preferred Alternative vs.
No Build

SKATS = Salem-Keizer Area Transportation Study

EIS = Environmental Impact Statement

= Sept 30, 2019 FHWA Deadline for ROD
Funding the Preferred Alternative

Salem City Council Work Session
January 30, 2019
Possible phasing of the Project

The Bridge(s)
- A single structure with four lanes
- First phase if bridge with two lanes, followed by a Second phase of second bridge with two lanes

Bridge approaches and distribution networks at:
- Wallace Road and newly constructed Marine Drive
- Vicinity of Pine and Hickory Streets

Marine Drive - at grade
- Bridge north to Riverbend Road

Marine Drive - at grade
- Bridge south to Glen Creek Road

Marine Drive - Connecting to Highway 22
- At grade at Glen Creek Road to elevated flyovers to Hwy 22

Bridge(s) + Approaches
- $300M if four lanes
- <$300M if two lanes

Marine Drive $10M
Marine Drive $20M
Ramps to/from Highway 22 $100M
### Funding the Preferred Alternative

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Cost</th>
<th>Funding Source</th>
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<td>Phase B</td>
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<td><strong>Total Project Cost</strong></td>
<td><strong>$430,000,000</strong></td>
<td><strong>$40 M</strong>*</td>
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*Potential MWACT STIP allocation
**Would require legislative action

See Table 2 in Q/A Report (p 38)

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Oversight Team December 11, 2014

"Funding Workshop – Participant Guide December 3, 2014"
### Dec 3, 2014 - Funding Workshop Purpose

- "Step through interactive funding tool…"
- "Understand tradeoffs between potential funding sources"
- "Discuss the proposed construction phases…"

### Dec 11, 2014 – Oversight Team

- "Conceptual funding strategy"
- "Guiding framework for the future"
- "This is an iterative process"
- "No decision regarding actual funding commitments"

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<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Total Project Cost</th>
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<tr>
<td>Phase B</td>
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<td>$175 M</td>
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</tbody>
</table>

* = Potential MWACT STIP allocation  
** = Would require legislative action

See Table 2 in Q/A Report (p 38)
On Local/Regional Funding

Voter approval required for:
- Gas Tax
- Vehicle Registration Surcharge
- Property Tax Levy

Tolling
- Requires OTC approval
- Requires FHWA approval

Vehicle Registration Fee
- Can only be levied by counties

Gas Tax and Property Tax
- Can be levied by cities or counties

See Table 2 in Q/A Report (p 38)
Q/A: Section 4, Section 6, Section 7

Notice of Intent (Nov '06)

Draft EIS Development

Alternatives Developed (Feb '08)

Draft EIS (Apr '12)

Salem Alternative (Jun '13)

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Final EIS Development

Council Action (Feb '19)

Record of Decision
Preferred Alternative

Proceed toward completing land use actions

Not proceed on land use actions

Record of Decision
No Build Alternative

Final EIS

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Record of Decision
No Build Alternative

Q/A: Section 4, Section 6, Section 7

= Sept 30, 2019 FHWA Deadline for ROD

Council Discussion

Salem City Council Work Session
January 30, 2019
These were provided as handouts to Council
Congestion Relief Task Force

Salem City Council Work Session
January 30, 2019
Average Annual Daily Traffic Volumes

Year | Average Annual Daily Traffic (AADT)
--- | -------------------
2000 | 85,000
2002 | 84,200
2004 | 88,800
2006 | 85,400
2008 | 85,900
2010 | 83,800
2012 | 83,800
2014 | 93,500
2016 |
Widen Marion and Center Street Bridges?

**Center Street Bridge Package**
- Free right turn at Front St. north-bound off-ramp
- Widen Wallace Rd. and bridge on-ramp to 3 lanes southbound
- Add 5th lane
- Front St. south-bound dual lane off-ramp

**Marion Street Bridge Package**
- Widen Wallace Rd. to 3 lanes northbound
- Triple southbound right on Commercial St.
- Add 5th lane
- Note: Weaving is still present
- Additional lane on Marion St.

**Summary**
- Improves Wallace Rd. and Front St.
- Bottlenecks still exist at both Commercial St./Front St. intersections
- Project Cost: $100–$137 million

**Summary**
- Improves Commercial St., Marion St., and Wallace Rd.
- Weaving (lane-changing) on bridge still occurs, and with five lanes
- No improvements for Front St. on-ramp to bridge
- Project Cost: $55–$65 million

Total Estimated Cost: $155-$202 million
[Does not include costs for seismic retrofitting.]
AM Peak Hour Travel Times

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<th>Start</th>
<th>End</th>
<th>AM Peak (Existing)</th>
<th>AM Peak (Build 2018)</th>
<th>AM Peak (No Build 2028)</th>
<th>AM Peak (Build 2028)</th>
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<td>D</td>
<td>E</td>
<td>5 mins</td>
<td>3 mins</td>
<td>7 mins</td>
<td>5 mins</td>
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</table>
AM Peak Hour Congestion and Queueing

AM Peak Hour Congestion (2018)

AM Peak Hour Congestion – No Build (2035)

Council Congestion Relief Task Force Report (October 19, 2018)
**PM Peak Hour Travel Times**

**PM Travel Times (mins)**

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>PM Peak (Existing)</th>
<th>PM Peak (Build 2018)</th>
<th>PM Peak (No Build 2028)</th>
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<td>8 mins</td>
<td>8 mins</td>
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<td>D</td>
<td>E</td>
<td>8 mins</td>
<td>8 mins</td>
<td>10 mins</td>
<td>10 mins</td>
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</tbody>
</table>
Summary of Costs

Salem City Council Work Session
January 30, 2019
### Costs of the Preferred Alternative

Compared to the No Build Alternative, in 2040 the costs of the Preferred Alternative include:

1. **Increased** congestion during PM peak north of downtown on arterials and approaches leading to the eastern bridge landing (Question 13b)
2. **Impacts** to views of Wallace Marine Park and from Union Street Railroad Bridge (Question 3e)
3. **Impacts** to Wallace Marine Park (Section 17)
4. **Impacts** to green space and businesses along south side of Edgewater (Questions 3g, 3j)
5. **Higher** Vehicle Miles Traveled during the AM and PM peaks (Question 13c, 13f)
6. **Higher** operational energy consumption (Question 19d)
7. **Closing** the Rosemont Avenue Exit from Highway 22 (Question 3k)
8. **Changing** Front Street in the vicinity of Pine/Hickory (Question 3h)
9. **Construction costs** (Question 3f, 9c, 9d, 9n):\(^a, b\)
   - ≈$300 million for bridge, approaches, multiuse paths, connections
   - ≈$100 million for flyover, Marine Drive to Hwy 22
   - Unknown cost for Hwy 22/Eola/Rosemont reconfiguration

\(^a\) Capital construction costs for new Marine Drive NW not included because project is in the Salem Transportation System Plan and may be built even under No Build Alternative.

\(^b\) Costs include acquisition costs, estimated at ≈$54.9 million total for all components including Marine Drive.

\(^c\) Queue lengths are for the year 2035.

### Costs of the No Build Alternative

Compared to the Preferred Alternative, in 2040 the costs of the No Build Alternative include:

1. **Increased** congestion at east and west bridgeheads of existing bridges, connecting arterials, and downtown (Question 13a)
2. **Increased** congestion downtown during the PM peak (Question 13b)
3. **Increased** congestion on Wallace Road during the PM peak (Question 13b)
4. **Higher** total bridge trips over the Marion and Center Street bridges (Question 15d)
5. **Higher** number of downtown intersections not meeting mobility standards (Question 13b)
6. **Higher** Vehicle Hours Delay (Question 13f)
7. **Higher** Vehicle Hours Traveled (Question 13f)
8. **Higher** average travel times (Question 16a)
9. **Longer** peak congestion periods (Question 13a)
10. **Longer** queue lengths on westbound Marion Street at High Street during both AM and PM Peaks (Question 13e)
11. **Longer** queue lengths during AM Peak on Wallace Road, Edgewater Road, and Commercial Street (Question 13e)\(^c\)
12. **Longer** queue lengths during PM Peak on Commercial Street, Marion Street, and Liberty Street (Question 13e)\(^c\)
13. **Higher** emissions of criteria pollutants (Question 19b)
14. **Higher** emissions of CO2 based on average speeds (Question 19c)
15. **Lower** average speeds (Question 19c)
16. **No** Final Environmental Impact Statement is issued (Question 4g, 4h)
17. **Sunk costs** of approximately $9-10 million total (Question 1i)

\(^c\) Queue lengths are for the year 2035.

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