CONGESTION RELIEF TASK FORCE

A Technical Review of Transportation Infrastructure Options

DKS

Prepared by DKS Associates

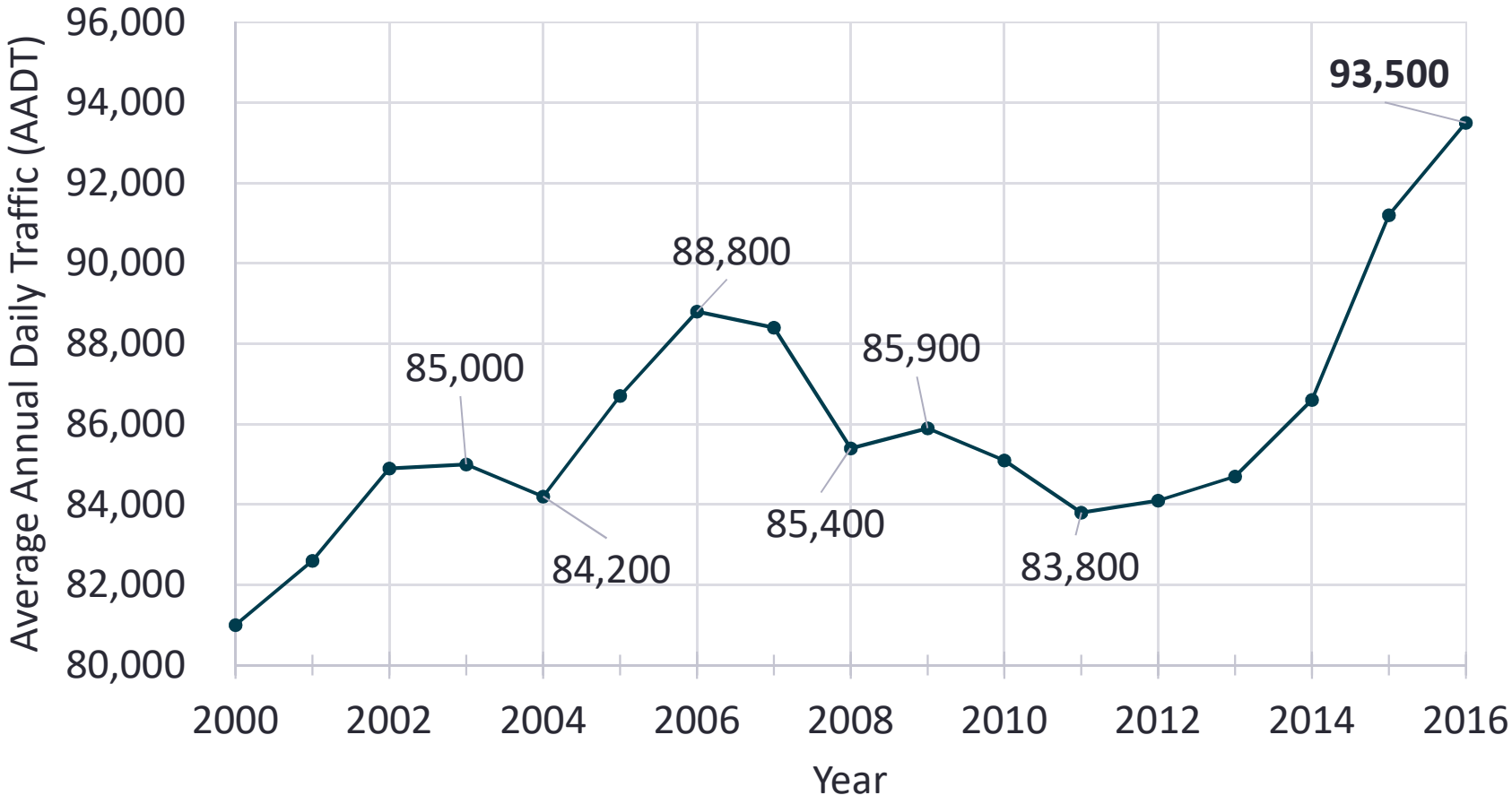
CITY OF Salem
AT YOUR SERVICE

Agenda

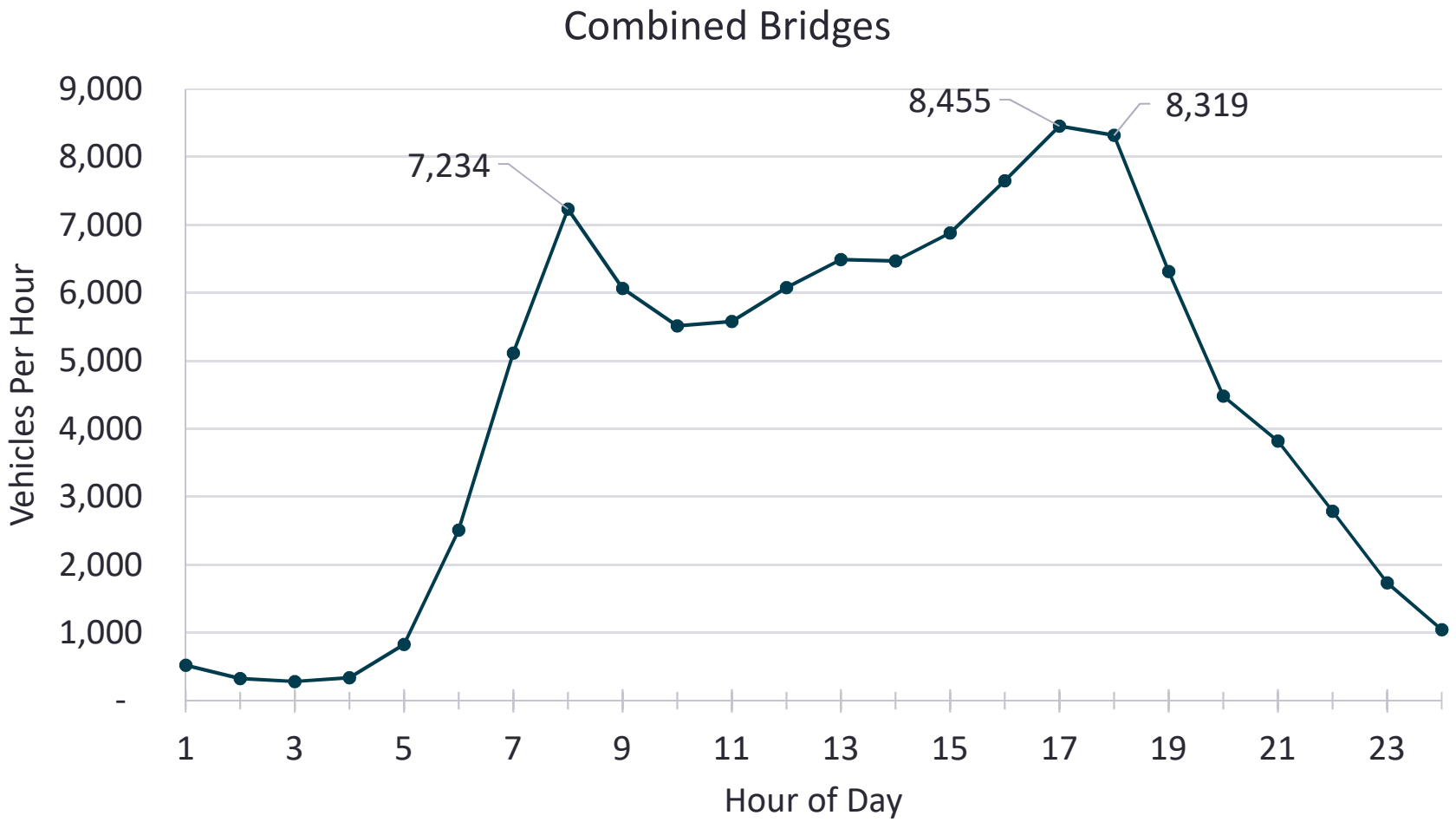
- Agenda Review and Meeting #1 Recap
- Future Transportation Conditions
- Transportation Solution Ideas
- Evaluation Criteria (handout)
- Wrap up and Next Steps

Traffic Growth Over the Years

Using data from ODOT Traffic Recorders, traffic across the Salem Bridges has increased by 12% from 2011 to 2016 or an average of 2.3% per year



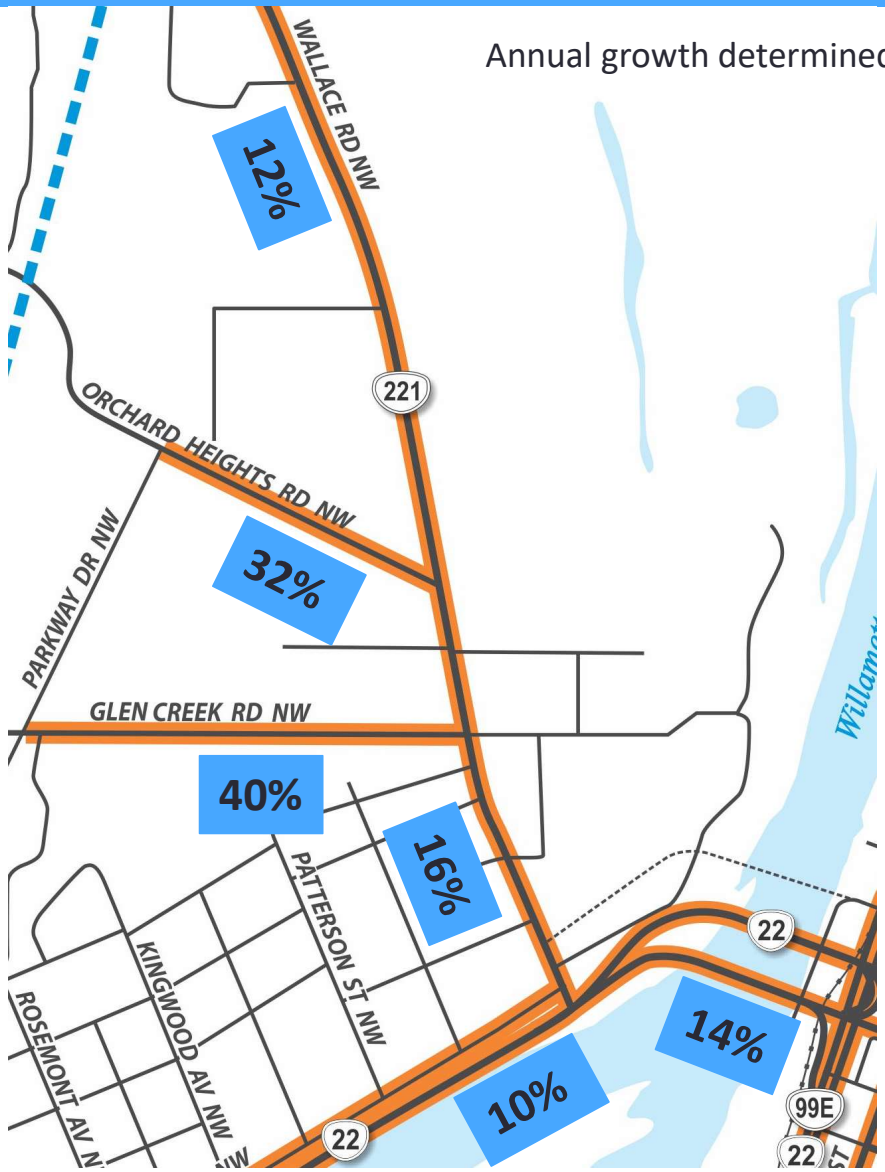
Average Hourly Weekday Volumes



Bi-directional volume data from ODOT ATR #24-014, typical weekday April to June of 2017

AM Estimated 10-year Trip Growth

Annual growth determined using MWVCOG model



PM Estimated 10-year Trip Growth

Annual growth determined using MWVCOG models

2035 Estimated AM Queuing

See Handout

Southbound Wallace Road

Eastbound Orchard Heights Road

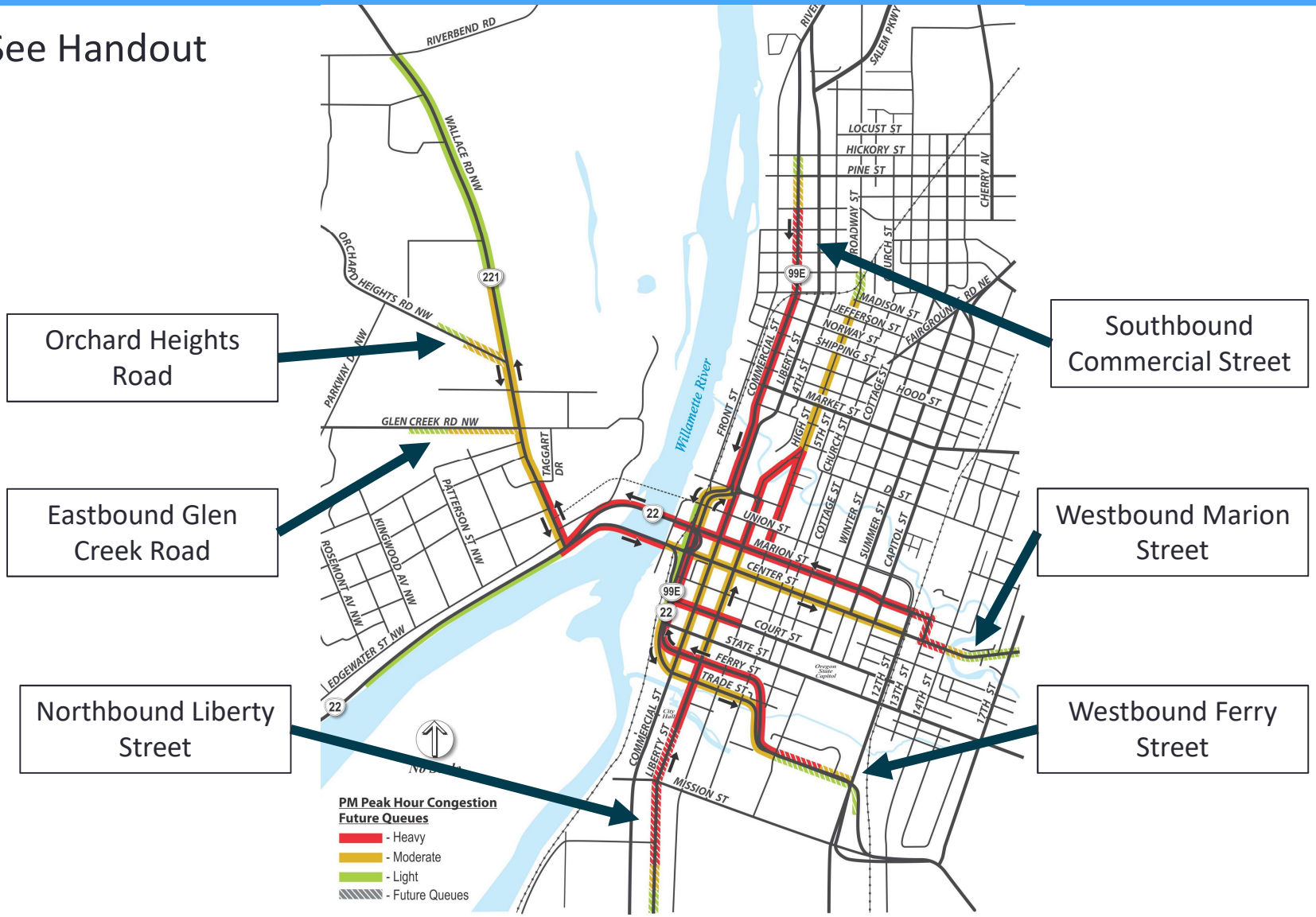
Eastbound Glen Creek Road

Eastbound HWY 22

Northbound Liberty Street

2035 Estimated PM Queuing

See Handout



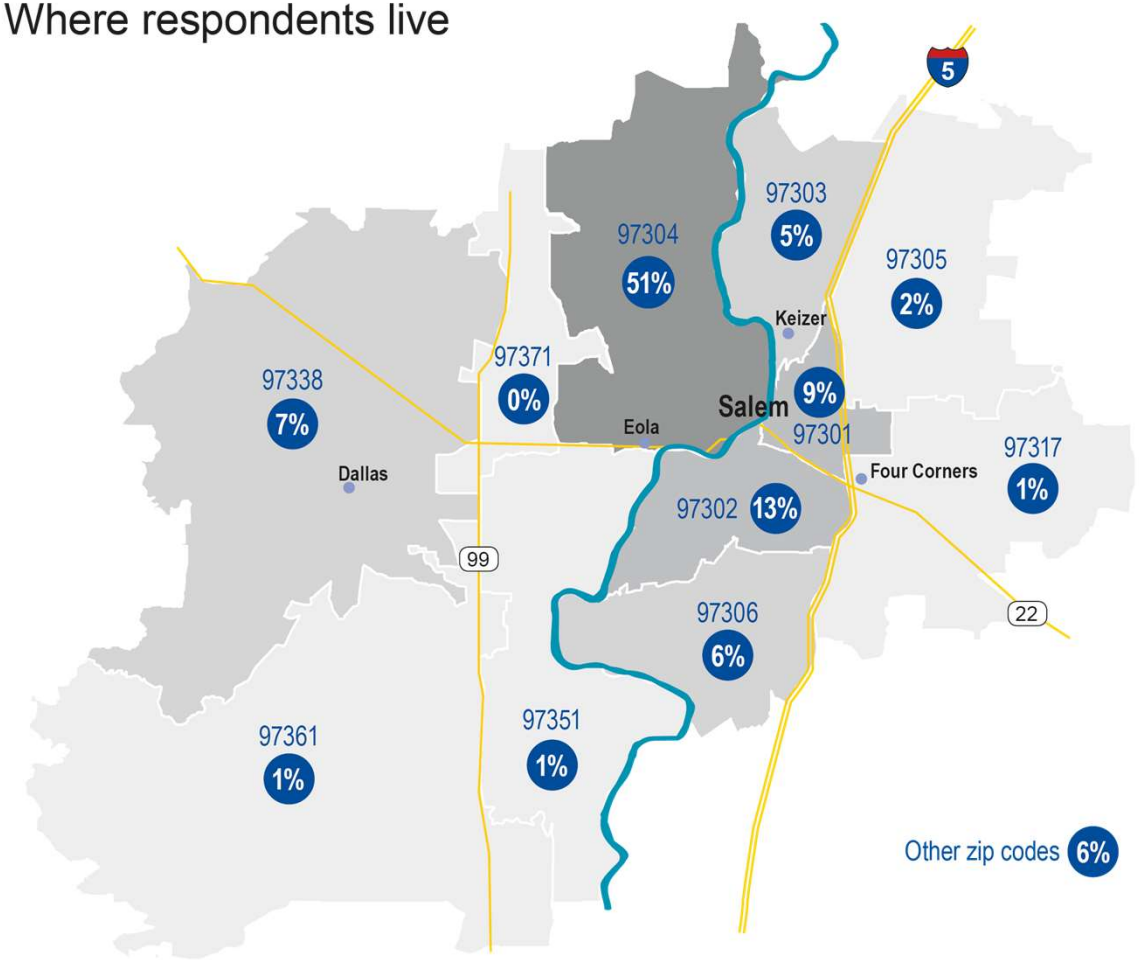
CONGESTION RELIEF TASK FORCE

A Technical Review of Transportation Infrastructure Options

My Ideas Questionnaire

Public Responses

Where respondents live



Online and hard copy questionnaire, non-scientific, distributed via City website and social media from 2/24/18 to 3/10/18, asking for ideas to relieve traffic congestion in the project area.

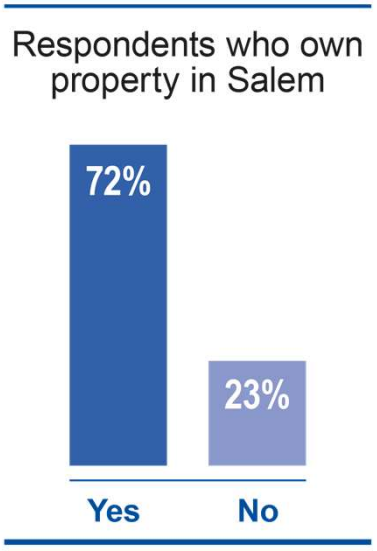
1,300 RESPONSES
99 PAGES OF COMMENTS
CODED TO REVEAL THEMES

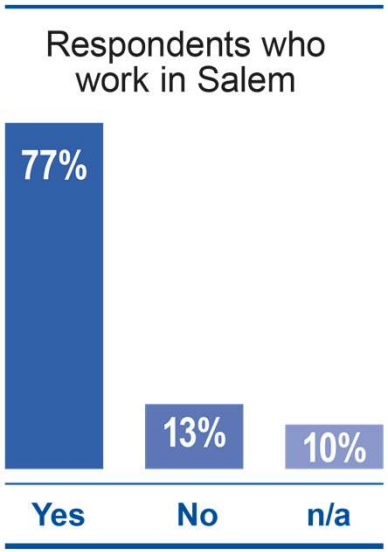
My Ideas Questionnaire

Public Responses

How respondents get around:

	Always	Mostly	Sometimes	Rarely	Never
Car, truck or motorcycle	73%	23%	4%	–	–
Bicycle	1%	1%	13%	20%	66%
Walking	1%	3%	37%	23%	26%
Bus	–	–	6%	13%	80%





Idea Goal

GOAL: Improving vehicular mobility and identifying ways to reduce vehicular congestion within the study area.

- Develop ideas to reduce traffic congestion and vehicular mobility in the:
  - Short term (within 5 years)
  - Medium term (within 10 years)
  - Long term (longer than 10 years)
- Select the most promising ideas for high-level traffic engineering analysis
- Conduct traffic engineering analysis on three selected ideas that include the following:
  - Estimated immediate improvement in traffic flow, delay, and queuing.
  - Estimated future improvement in traffic flow, delay, and queuing.

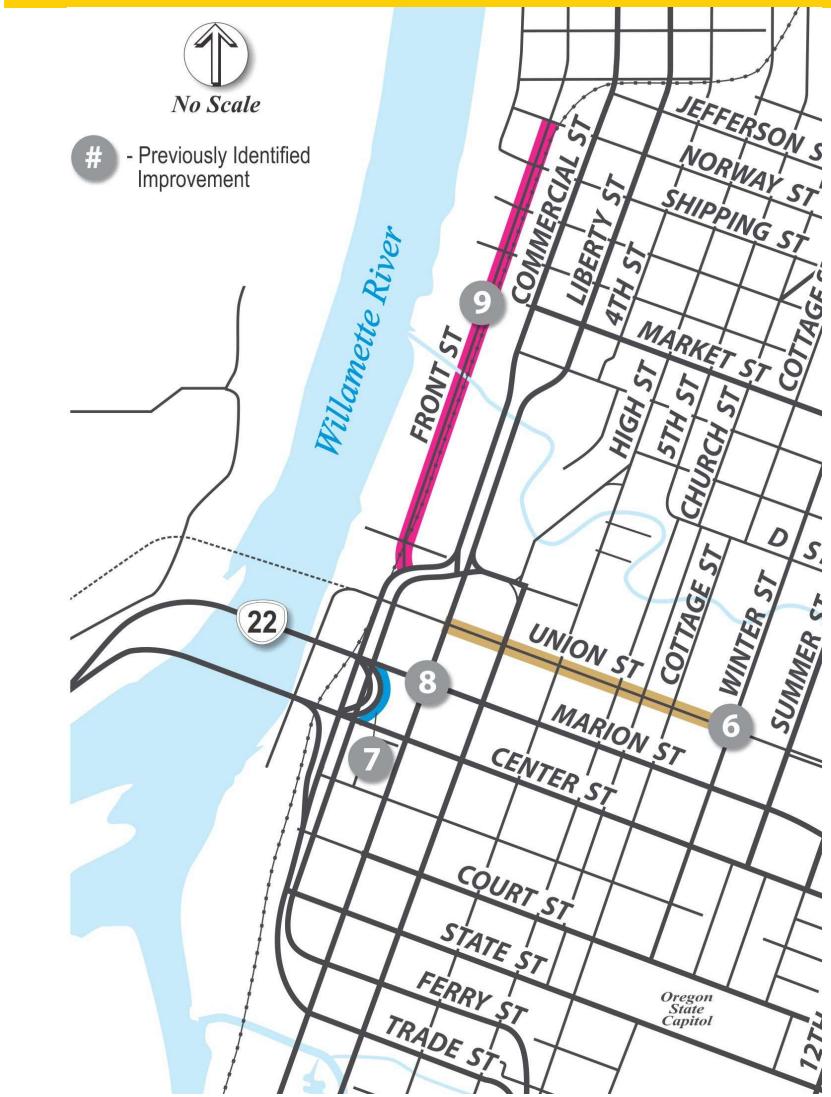
Solution Ideas

Previously Identified Transportation Ideas

	Ideas
5	Wallace Rd/Edgewater St: • Add eastbound and westbound lanes on Wallace Rd. • Improve geometry, and • Close Musgrave Ln.
9	Marine Dr. connector roadway
10	Multimodal grade-separated crossing at 2nd St/Wallace Rd
11	Marion Street Bridge increase to six westbound lanes and provide Marine Dr off-ramp
	Center St Bridge widen to five eastbound lanes
12	Wallace Rd improvements: Three ramp lanes and six-lane cross section
13	Signal at Edgewater/Patterson St
14	Murlark Ave. connector roadway to Glen Creek Rd

Solution Ideas

Previously Identified Transportation Ideas



	Ideas
6	Construct Union St bikeway
7	Widen ramp to two lanes or provide uncontrolled right turn
8	Commercial/Marion St Bridge capacity improvements: • Exclusive double right turn lanes *Alternatively* • Uncontrolled right turn ramp onto Marion St Bridge over park, no pedestrian crossing
9	Widen Front Street to a Minor Arterial standard.

CONGESTION RELIEF TASK FORCE

A Technical Review of Transportation Infrastructure Options

Solution Ideas

Added Lanes

Add through and right turn lanes to Wallace Road from Hwy 22 to Brush College Rd

Add two SB lanes to Front Street (from Commercial St to Court St)

Add lanes to Commercial Street/Liberty Street

Extend two SB lanes on High St past Union Street (remove parking) & make SBRT free flow at Marion Street

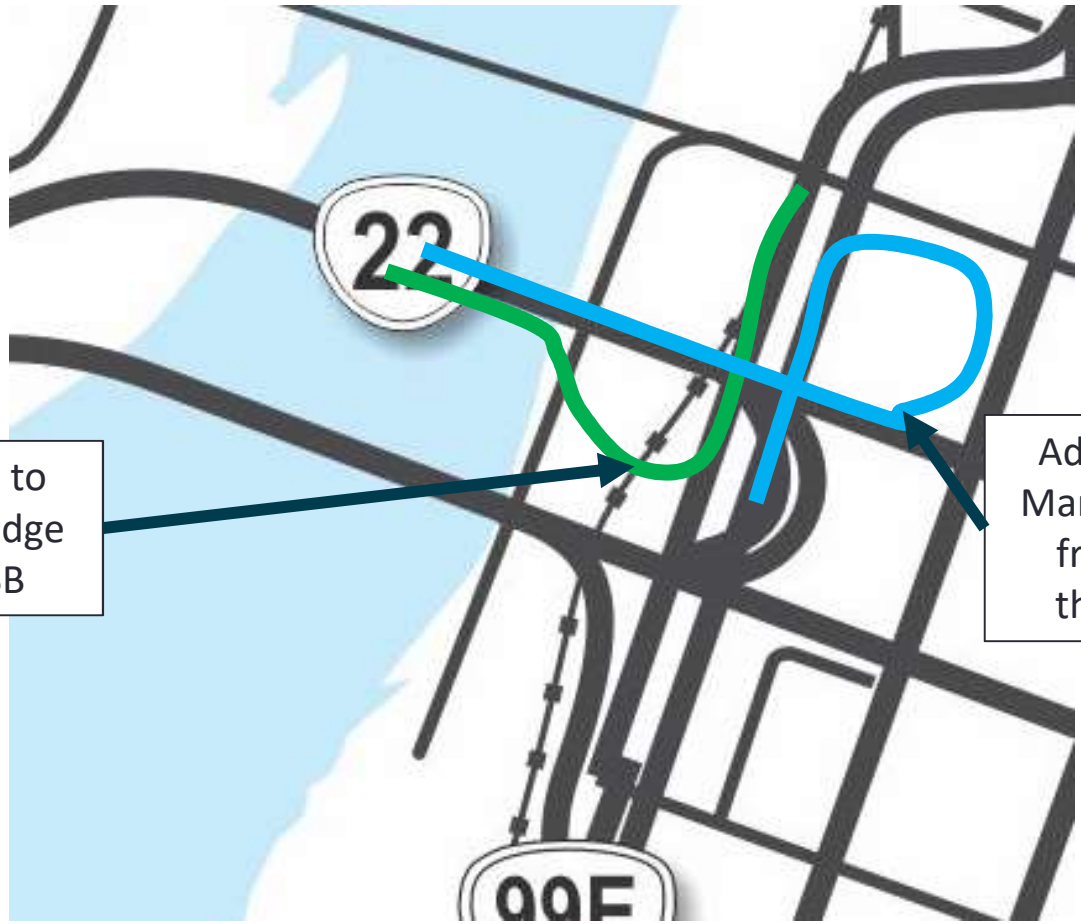
Triple Right Turn Lanes at Commercial St/Marion St onto Marion St Bridge

Solution Ideas

Ramps

Solution Ideas

Ramps



Add an on-ramp to Marion Street Bridge from Front St SB

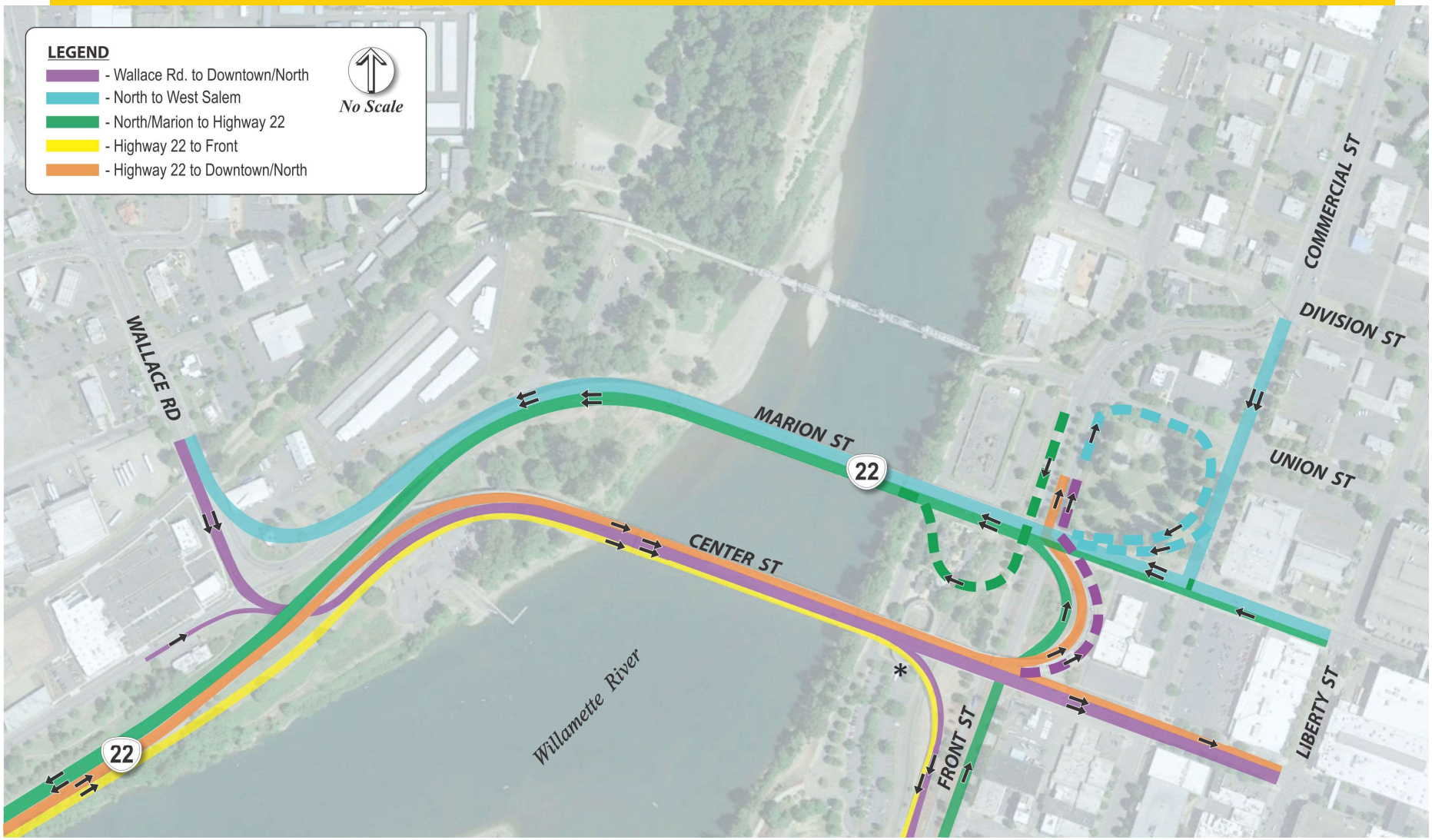
Add an on-ramp to Marion Street Bridge from Front St NB through the park

CONGESTION RELIEF TASK FORCE

A Technical Review of Transportation Infrastructure Options

Solution Ideas

Remove Weaving and Lane Changes on Bridges



Solution Ideas

Improved Operations

- Improved Signal Timing and Synchronization
  - Marion Street and Center Street
  - Wallace Road
  - Commercial Street
- Pedestrian Crossing Modifications
  - Increase Pedestrian Delays during peak periods (longer cycle lengths)
  - Add grade-separated crossing of Front Street between downtown and Riverfront Park
- Remove Traffic Signals
  - Commercial Street/Union Street
  - Edgewater Road/Wallace Road

Solution Ideas

Others

- Improve Signage
- Allow motor vehicle traffic on Union Street Bridge during peak congestion
- Add Bus Pull-out Lanes
- Reversible travel lanes
- Open Musgrave Avenue through Wallace Marine Park to Glen Creek Road

Solution Ideas

Travel Demand Management (TDM)

Transit

- Increase bus frequency to west Salem
- Downtown circulator
- Expanded Park and Ride services
- Dedicated transit/carpool lanes

Other

- Improve facilities for bicycles and pedestrians
- Discourage future development in west Salem
- Encourage high-density land use in downtown
- Incentives to change travel behavior: telecommuting, staggered work hours
- Implement tolls and increase gas tax and parking costs in downtown

Evaluation Criteria

See Handout

Questions?