Recommendations

Central Salem **Mobility Study**



The Central Salem Mobility Study evaluated a range of multimodal transportation issues affecting downtown Salem, including circulation, access, and safety for people traveling to, through, and within central Salem.

Recommendations were prepared based on two tiers of transportation analysis and feedback from the project's Stakeholder Advisory Committee, Technical Advisory Committee, and the public at three public forums. While several options for improving connectivity between downtown and north downtown were evaluated, final recommendations will depend on how that area redevelops. Projects were only recommended if they were able to provide adequate traffic flow while improving multimodal accessibility. Recommendations were designed to minimize parking impacts in the short term, with the understanding that management of the parking system may change over time.

To aid in implementation, the recommendations have been separated into three phases:

- Short-Term (Within 10 years)
- Medium-Term (Within 15 years)
- Long-Term (Within 25 years)

Transportation *Improvements* Considered:

- One-Way/Two-Way Street Conversions
- Family-Friendly **Bikeways**
- **Dual Turn Lane** Removal and Crosswalk Openings
- North Downtown Street Connectivity



Header photo courtesy of Ron Cooper.

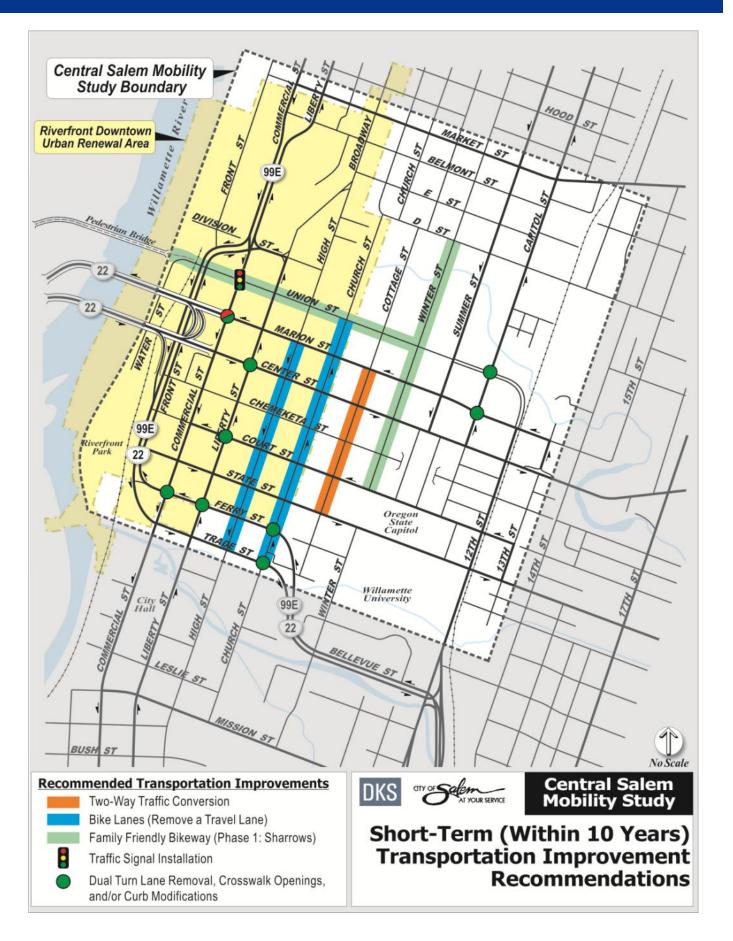
Short-Term (Within 10 Years) Improvement Recommendations

Location	Recommendation	Comments	Cost
One-Way/Two-W	/ay Street Conversions		
High St and Church St	Phase 1: Remove a travel lane and restripe as bike lane (Alternative 1: One-Way, Bike Lane)	May be future candidates for two-way conversion (long-term)	\$600,000
Cottage St	Phase 1: Convert to two-way with sharrows (Alternative 1: Two-Way, Sharrows)	 Requires modification to traffic signals Curb extensions included in long-term Consider removal of Chemeketa St signal 	\$700,000
Family-Friendly B	ikeway Improvements		
Union St	Phase 1: Install traffic signal at Commercial St to facilitate crossings and provide sharrows from the railroad bridge to Winter St	 Addresses most critical bicycle/pedestrian barrier (i.e., crossing Commercial St) Reevaluate traffic control (i.e., stop signs) 	\$1,300,000
Winter St	Phase 1: Add sharrows (Alternative 1)		\$25,000
Dual Turn Lane R	emoval and Crosswalk Openings		
Commercial St/ Marion St	Remove westbound left-turn movement from shared lane (restriping)	Do not remove southbound dual turns (volumes too high)	\$20,000
Liberty St/ Center St	Remove eastbound left-turn and northbound right-turn movements from shared lanes (restriping)	 May increase eastbound queuing for left-turn (impacts isolated to one lane) Coordination needed with ODOT on eastbound left turns Could consider curb extension on northeast corner (cost not included) 	\$20,000
Capitol St/ Marion St	Remove northbound left-turn movement from shared lane (restriping)		\$20,000
Union St/ Capitol St	Remove westbound right-turn movement from shared lane (restriping)		\$20,000
Court St/ Liberty St	Remove westbound right-turn movement from shared lane and extend curb on northwest corner across from westbound right-turn lane		\$120,000
Ferry St/ Commercial St	Remove westbound left-turn movement from shared lane and extend curb on southwest corner		\$120,000
Liberty St/ Ferry St	Extend curb on southwest corner by approximately one lane to shorten pedestrian crossing distance (results in reduction from four to three receiving lanes on west leg)	Requires change in which receiving lanes serve the northbound turn movements	\$120,000
Ferry St/ Church St	Remove westbound right-turn movement from shared lane and add bicycle lane (restriping)		\$20,000
Trade St/ Church St	Remove eastbound left-turn movement from shared lane and open north leg crosswalk (restriping)		\$20,000
		TOTAL	\$3,105,000

Short-Term Improvement Notes

- Short-term dual turn lane removals and crosswalk openings could be funded with a variety of sources, including possible Riverfront Downtown Urban Renewal Area (URA) funding. These projects should be coordinated with the next repaving project or implemented as standalone projects. Ongoing coordination is needed with ODOT for intersections within their jurisdiction.
- The short-term alternatives have negligible impacts to parking.
- The first phase of the Union St family-friendly bikeway addresses the most critical barrier (i.e., crossing Commercial St).
- Costs are planning level estimates in current (2013) dollars and will need to be reviewed and refined when projects advance to design and construction.

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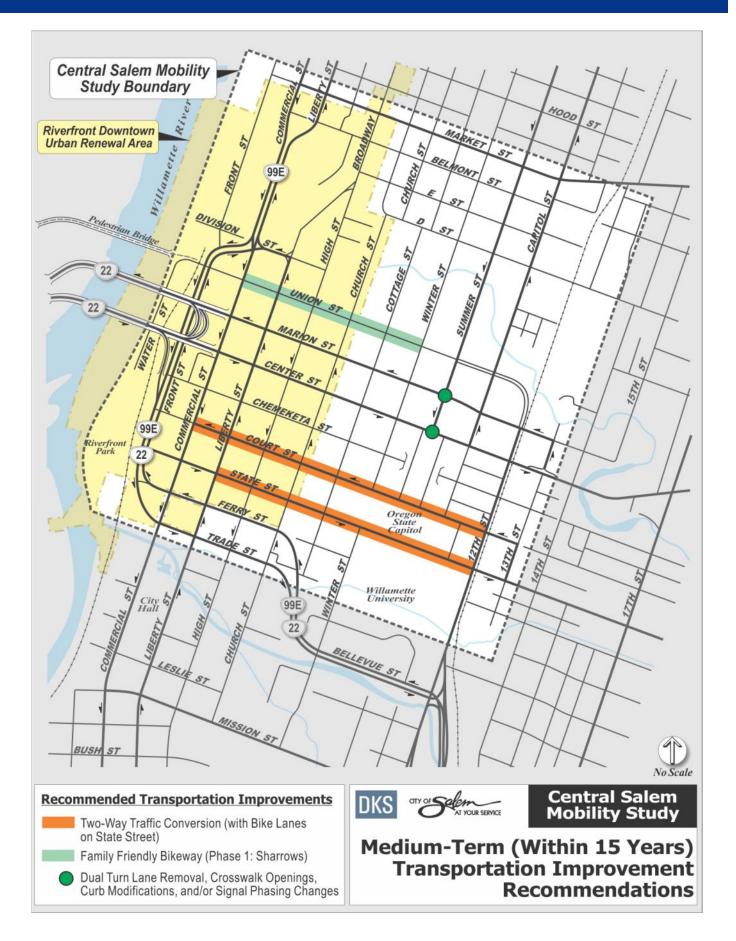


Medium-Term (Within 15 Years) Improvement Recommendations

Location	Recommendation	Comments	Cost
One-Way/Two	o-Way Street Conversions		
Court St	Convert to two-way without bike facilities (Alternative 1: Two-Way)	 Requires modification to traffic signals Adjacent streets (the signed bike route on Chemeketa St and the proposed improvements on State St) would be better bike facilities May require modification of curb extension at Court/Liberty as recommended in short-term projects 	\$850,000
State St	Phase 1: Convert to two-way with bike lanes (Alternative 2: Two-Way, Bike Lane)	 Requires modification to traffic signals Reduces parking by 25% Requires adjustments to curb extensions 	\$1,400,000
Family-Friend	ly Bikeway Improvements		
Union St	Phase 1B: Provide family-friendly bicycle facilities on Union Street between Commercial Street and Winter Street. Options may include one-way or two-way cycle tracks, buffered bike lanes, shared-use paths, or other facility types	 Consider based on success of other bicycle improvements and community support Reduces parking (varies by roadway section and enhancement alternative) Additional parking could be added within right-of-way for additional cost but would impact trees 	\$1,500,000
Dual Turn Lan	e Removal and Crosswalk Openings		
Summer St/ Marion St	Remove southbound right-turn movement from shared lane and remove fourth westbound lane east of Summer St and start it as an add lane for the southbound right-turn movement (instead of starting the lane about a block east as it currently does)		\$120,000
Summer St/ Center St	Add exclusive pedestrian phase for crossing east crosswalk that is pushbutton actuated and includes a variable "No Turn on Red" sign that lights up to inform southbound vehicles when pedestrian phase is active		\$25,000
		TOTAL	\$3,895,000

Medium-Term Improvement Notes

- The inclusion of bike facilities on State St and Union St would reduce parking because it would require either conversion of diagonal parking to parallel parking (State St) or removal of existing on-street parking (Union St). These would be the only significant shortterm or medium-term parking reductions throughout the study area.
- The dual turn lane removal at Summer St/Marion St is outside the URA and requires curb extensions.
- Costs are planning level estimates in current (2013) dollars and will need to be reviewed and refined when projects advance to design and construction.
- Projects and phasing should be reevaluated in future years to ensure they continue to address City and Urban Renewal Agency priorities.



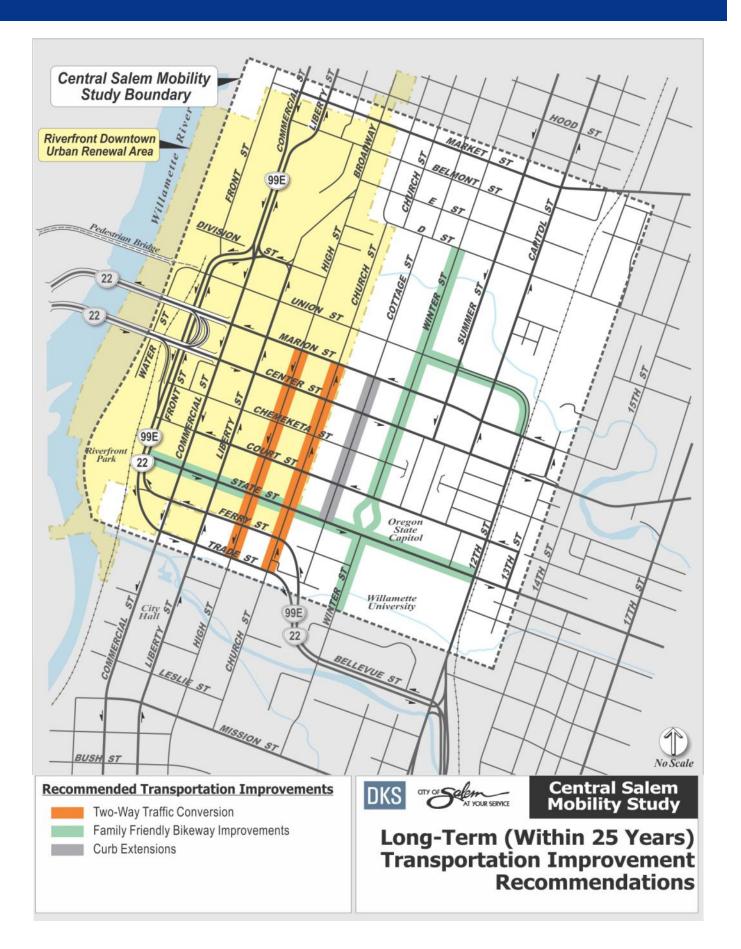
Long-Term (Within 25 Years) Improvement Recommendations

Location	Recommendation	Comments	Cost			
One-Way/Two-Way Street Conversions						
High St and Church St	Phase 2: Consider converting to two -way with bike lanes (Alternative 2: Two-Way, Bike Lanes)	 Consider based on success of additional bike facilities in downtown and impacts to access in/out of transit mall Requires modification to traffic signals Reduces parking by 30% Requires adjustments to curb extensions 	\$3,000,000			
Cottage St	Phase 2: Add curb extensions (Alternative 1: Two-Way, Sharrows with Curb Extension Design Option)	Construct curb extensions	\$1,200,000			
Family-Friendly E	Family-Friendly Bikeway Improvements					
Union St: (Winter St to Marion St) and Winter St	Phase 2: Provide family-friendly bicycle facilities that provide important multimodal connections to the Union St Bridge, Willamette University, and other locations around downtown. Options may include one-way or two-way cycle tracks, buffered bike lanes, shared-use paths, or other facility types	 Consider based on success of other bicycle improvements and community support Reduces parking (varies by roadway section and enhancement alternative) Requires adjustments to curb extensions Some sections would require coordination with the State or Willamette University Union St connection to 12th St Promenade should consider feasibility of adding railroad undercrossing at Mill Creek and opening the undercrossing near North High School 	\$1,200,000 (Union St) ^a \$800,000 (Winter St)			
Enhanced Bikewa	ay Improvements					
State St	Phase 2: Provide enhanced bicycle facility that provides important multimodal connections to Willamette University, intersecting facilities, and other locations around downtown. Options may include one-way or two-way cycle tracks or buffered bike lanes	 Consider based on success of other bicycle improvements and community support Reduces parking (varies by roadway section and enhancement alternative) Requires adjustments to curb extensions Some sections would require coordination with the State or Willamette University 	\$1,000,000			
_		TOTAL	\$7,200,000			

^a Union St cost assumes a mix of buffered bike lanes and cycle track as shown on the Union Street Family-Friendly **Bikeway Conceptual Drawing**

Long-Term Improvement Notes

- One-way bicycle facilities on Union St would extend from Commercial St to Summer St and then transition to a two-way facility on the south side of the roadway. The two-way bicycle facility would follow the Union St -12th St curve and end at Marion St.
- There are no long-term recommendations related to the dual turn lane removals and crosswalk openings.
- Costs are planning level estimates in current (2013) dollars and will need to be reviewed and refined when projects advance to design and construction.
- Projects and phasing should be reevaluated in future years to ensure they continue to address City and Urban Renewal Agency priorities.

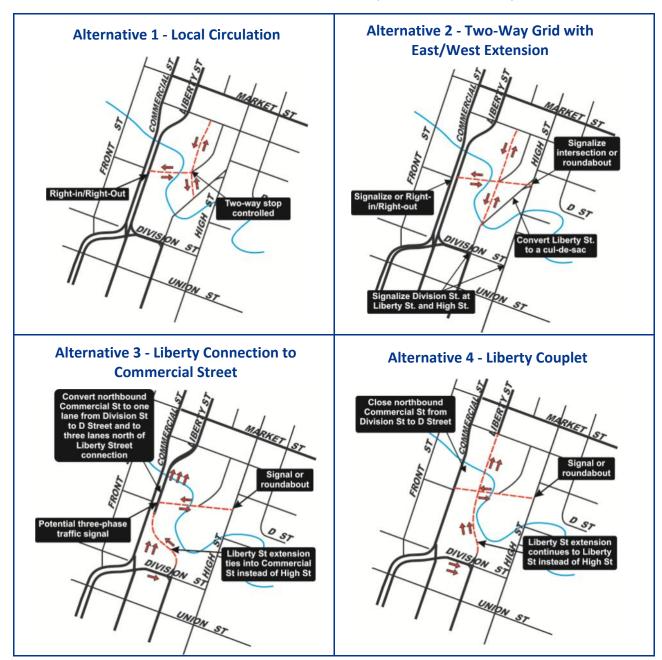


North Downtown Street Connectivity - Preliminary Analysis

One important transportation issue considered by the Central Salem Mobility Study was the north downtown street connectivity. The purpose of the analysis was to identify recommendations to support redevelopment of the area and improve connectivity between North Downtown and the Downtown Core.

During the initial screening phases of this study, four general connectivity alternatives were identified, as

shown below. These alternatives were presented to City staff, stakeholders, and consultants working on the current North Downtown Housing Study. Based on this coordination, it was recommended that the City wait until there is greater certainty regarding redevelopment (such as land use types and general locations) before selecting a recommended alternative. Future analysis should build off of the work performed in this study.



Note: Alternative 1 expected to most benefit residential redevelopment. Alternatives 2, 3, and 4 also considered a potential D Street extension, but various obstacles exist that would make this extension problematic and unlikely to gain community support.