



2015 WEST LINN TRANSPORTATION SYSTEM PLAN UPDATE

Planning Commission #2

March 4, 2015

Project Staff:

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DJ Heffernan, Daniel Heffernan Company





AGENDA

- Project Updates
- Overview of Technical Memorandums 6-9
 - Memo 9 - Regulatory Solutions
 - Memo 6 – Safe Routes to School
 - Memo 7 - Needs Analysis
 - Memo 8 - 10th Street Interchange Area
- Next Steps





PROJECT UPDATES

- Completed Draft Tech Memos 6-9
- Reviewed Memos 6-9 with TAC

Upcoming Meetings:

- Transportation Advisory Board Meeting #2 – 3/5/15
- Community Meeting and Virtual Meeting #1 – 3/10/15
- TAC Meeting #3 – 4/2/15
- TAB Meeting #3 – 4/2/15



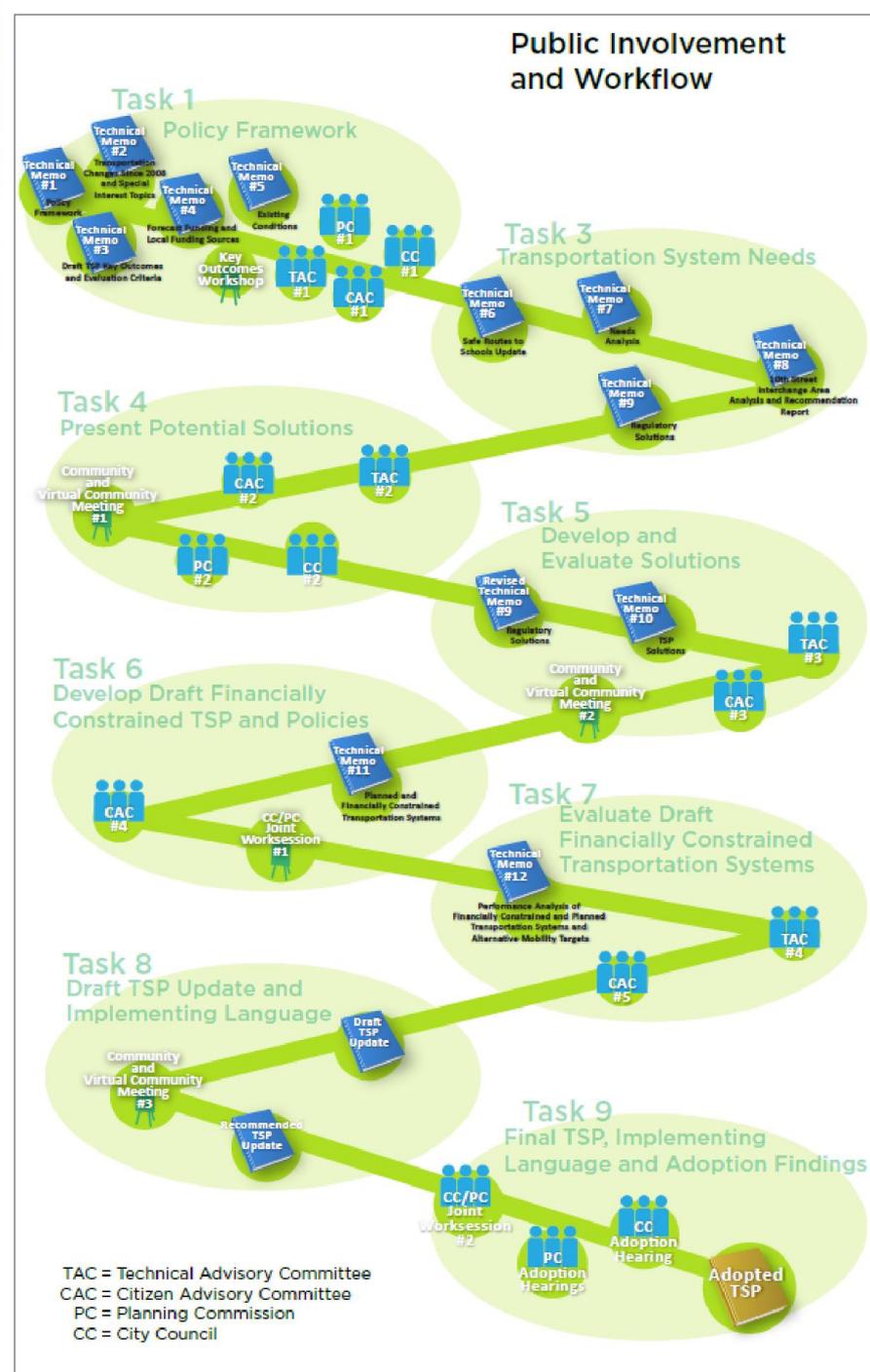


PROJECT SCHEDULE

June 2015: Draft TSP Document

Summer 2015: Additional public involvement and work sessions

Fall 2015: Adoption process





TECH MEMO 9: REGULATORY SOLUTIONS

Purpose for review:

Regulatory Review (external)

- Compliance with the Regional Transportation Functional Plan (RTFP)
- Compliance with the State Transportation Planning Rule (TPR)

Consistency Review (internal)

- Internal consistency between the West Linn Comprehensive Plan elements, and its implementing measures.





TECH MEMO 9: REGULATORY SOLUTIONS

What are West Linn's TSP Implementing Measures?

- West Linn Community Development Code (CDC) - zoning and development regulations that affect transportation improvements related to development.
- West Linn Public Works Standards – engineering drawings and standards that establish construction requirements for transportation infrastructure.
- West Linn Trails Master Plan - particularly those segments that are planned “on-street”.
- Neighborhood Plans – refinements to the comprehensive plan (when adopted into the Comp Plan by ordinance).





TECH MEMO 9: REGULATORY SOLUTIONS

What are the implementing measures supposed to do?

- Improve safety for all modes of transportation.
- Improve mobility and mode choices for city residents (bike, ped, transit, and automotive use).
- Reduce Single Occupancy Vehicular (SOV) traffic, especially in “Mixed-Use Commercial Districts”.
- Guide investment in solutions that are cost effective.





TECH MEMO 9: REGULATORY SOLUTIONS

How is the TSP adopted?

- The TSP is adopted as an element of the Comp Plan;
- City's fundamental policy document for transportation;
- Approval involves a legislative amendment to the plan;
- Planning Commission serves in an advisory capacity to Council in the adoption process.

And the Implementing Measures?

- They also are adopted through a legislative process;
- Establish procedures and rules for developing system improvements over time;
- Establish standards for the various system components.





TECH MEMO 9: REGULATORY SOLUTIONS

The “Easier” Issues:

Comprehensive Plan Amendments

- Goal 12 – Transportation Narrative out of date (e.g. 10th Street Interchange)
- Metro 2040 Growth Plan Map (update to the 2014 version)
- Comp Plan/TSP street classifications (e.g. neighborhood routes, shared streets);
- Policy to establish Sidewalk Fee-in-lieu program and dedicate revenue to pedestrian improvements (e.g. a Sidewalk Fund);
- Require a TPR compliance review for transportation improvement projects not included in the TSP.





TECH MEMO 9: REGULATORY SOLUTIONS

The “Easier” Issues:

WL-CDC

- Fee-in-lieu Program: Clarify where/when it is available.
- Connectivity: When street connections are not required or feasible, require land division applicants to show connections for bike/ped/transit mode access;
- Approval Criteria: Clarify the approval criteria for transportation improvements (e.g. when/where shared streets or alternative designs are permitted);





TECH MEMO 9: REGULATORY SOLUTIONS

The “Tougher” Issues:

Comprehensive Plan Amendments

- Statement that West Linn’s mixed-use commercial districts function like “town centers” and will be planned accordingly (e.g. transit orientation, multi-modal connectivity, pedestrian friendly, etc.);
- Boundaries for mixed-use areas;
- Transportation Options (Demand Management) policy;
- Clarify city policy re: Neighborhood Plans.





TECH MEMO 9: REGULATORY SOLUTIONS

The “Tougher” Issues :

WL-CDC

- Transportation Options (TO) Program: The TPR requires for “major development and redevelopment” and for all conditional use applications;
- Mixed-Use Areas: Adopt development requirements that differ from other employment districts (i.e. TO, transit access, housing/employment uses, etc.);
- Discretionary Review: Reduce the number of applications that undergo discretionary review (e.g. establish an administrative review process for development in mixed-use areas that meet specific design criteria);





TECH MEMO 9: REGULATORY SOLUTIONS

Public Works Design Standards Issues:

“Easier” Issue

- Include design standards and cross section drawings for the following street types and features:
 - Shared Street;
 - Neighborhood route;
 - On-street trail segment.

“Tougher” Issue

Develop design standards and cross section drawings for including “green street” features in lieu of typical street design:





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Outline

- Background
- Methodology
- Findings
- Recommendations
- What's missing?





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Background – *benefits to safety, public health and performance of transportation system*

- City Council has repeatedly expressed interest in improving opportunities to walk and bicycle to schools
- This TSP Update provides an opportune time to add SRTS Plan because of multi-modal emphasis
- City plays a role in the health of residents through land use patterns that promote or hinder walking and bicycling
- 20-30 percent of AM rush hour traffic attributable to parents dropping of children





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Analysis

- Intended to ID needed safety improvements along SRTS for TSP project development and prioritization
- Focus on:
 - Primary schools in West Linn only
 - Gaps in the existing sidewalk network
 - Lighting
 - Best practices in other communities





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Findings

- 4 of 5 primary schools have sidewalks along less than 50 percent of their SRTS

School Facility	Pct. of SRTS (total distance) where sidewalks are present
Bolton Primary	28
Cedar Oak Primary	0
Sunset Primary	47
Trillium Creek Primary	95
Willamette Primary	35



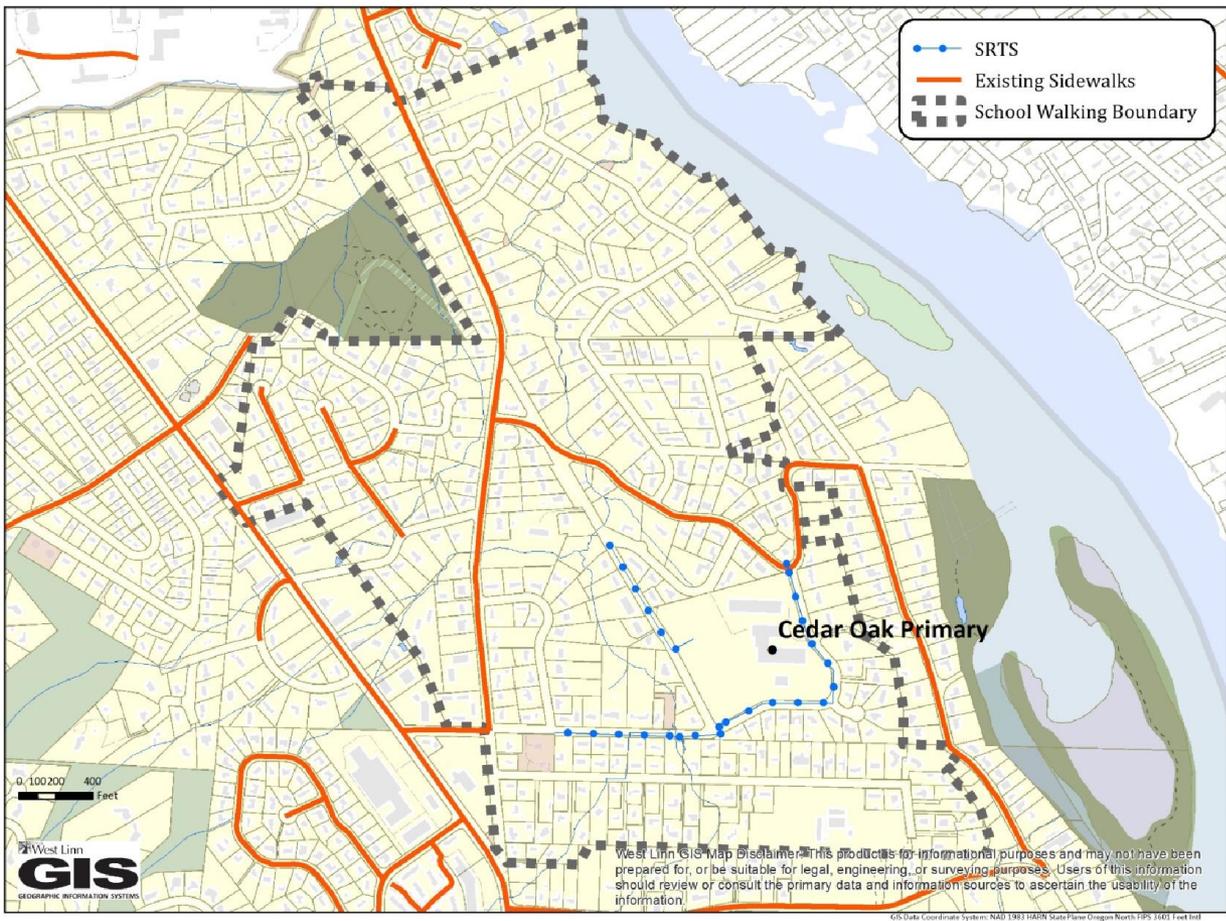


TECH MEMO 6: SAFE ROUTES TO SCHOOL



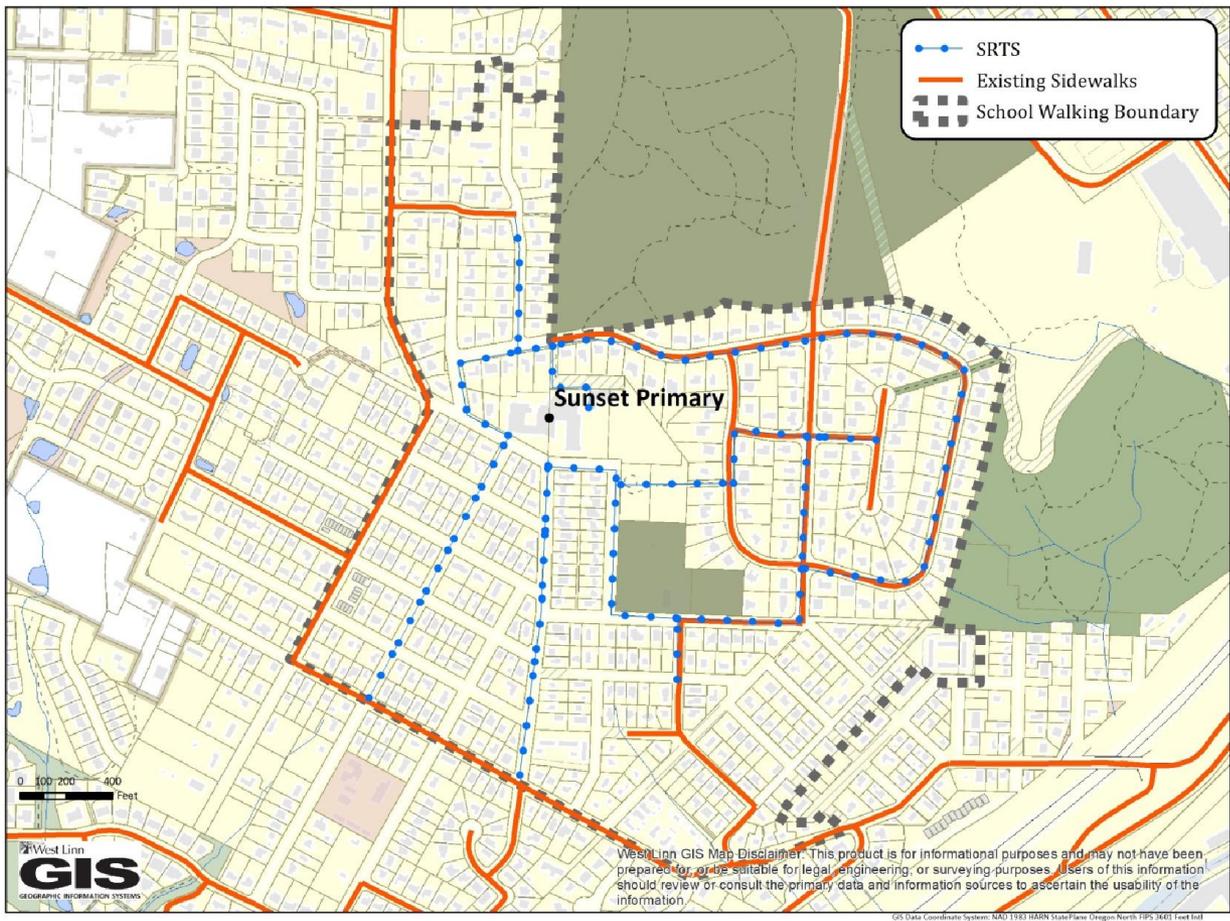


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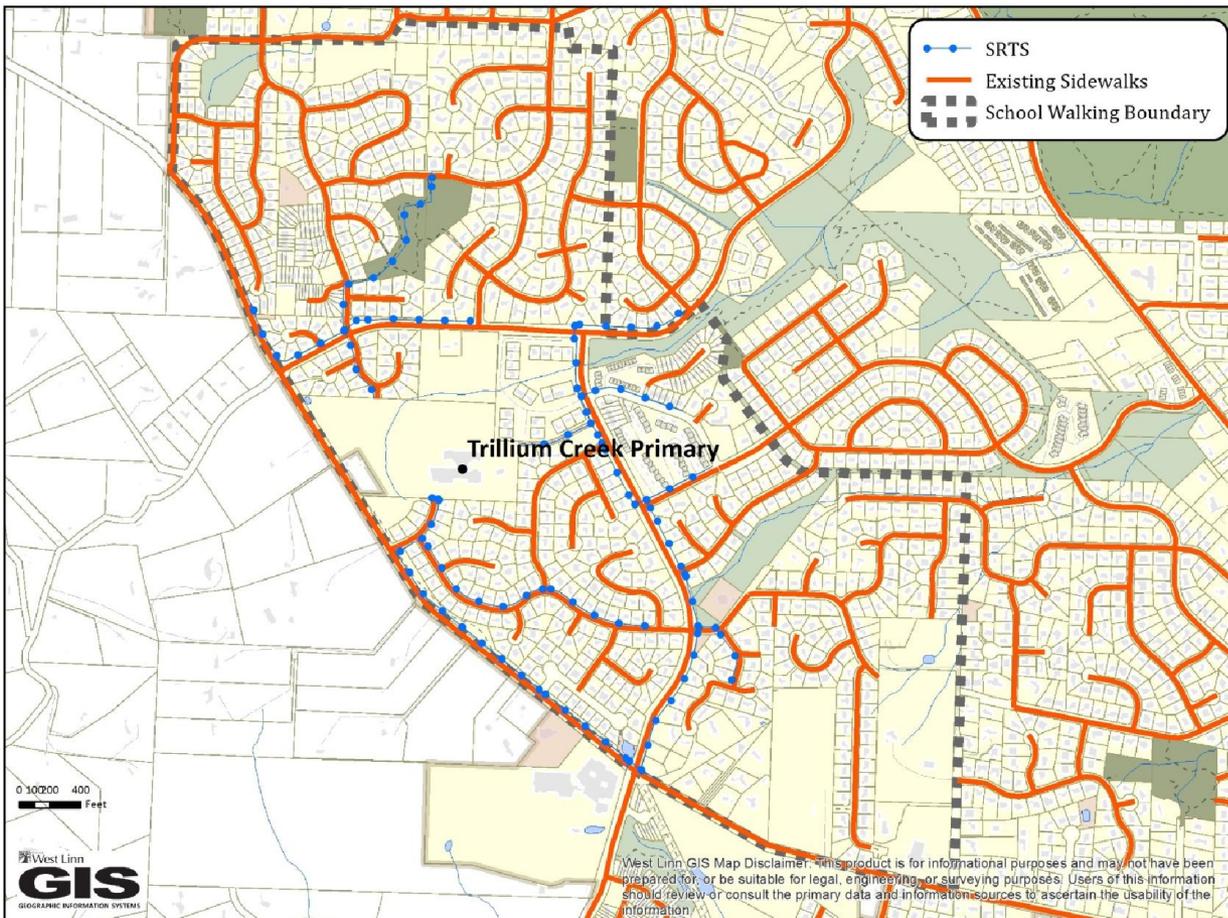


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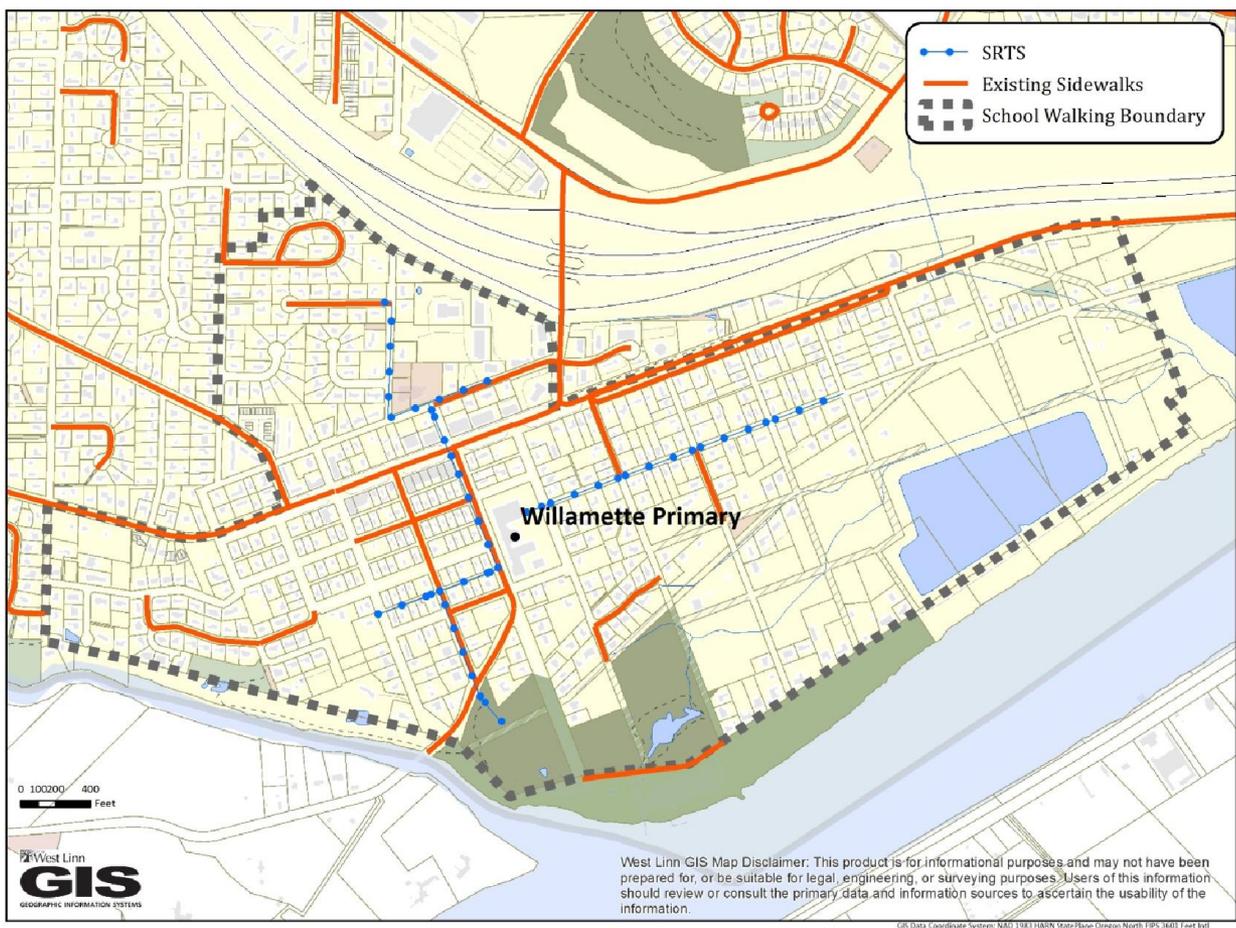


TECH MEMO 6: SAFE ROUTES TO SCHOOL





TECH MEMO 6: SAFE ROUTES TO SCHOOL





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Findings

- Most SRTS have adequate lighting coverage
- TAB Capital Project recommendations closely align with existing gaps
- School District is ahead of the ball





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Recommendations

- *Education*
 - Educate students, parents, citizens and elected officials of benefits of SRTS
 - City should actively participate in decisions regarding SRTS
 - Encourage WLWV to expand curriculum around safe walking and bicycling
 - Encourage WLWV to communicate directly with elected officials and parents of SRTS benefits
 - City should seek more input from students during project development and implementation





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Recommendations

- *Enforcement*
 - Continue PD patrols near schools
 - SRTS task force should develop list of high priority areas in need of enforcement and share with local law enforcement
 - Utilize signage, radar trailers and other similar equipment around schools to encourage more courteous motor vehicle behavior
 - City should expand outreach to WLWV regarding local traffic safety committee





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Recommendations

- *Engineering*
 - Sidewalk infill near Cedar Oak, Bolton, and Willamette Primaries
 - Improved crossings and other safety improvements near Cedar Oak, Bolton, and Willamette
 - Improved lighting through Sunburst Park, Sunset Park and along Trillium Drive
 - Misc. safety enhancements (crossings, signage, wayfinding) near Trillium Creek Primary





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Recommendations

- *Encouragement*
 - Promote events to raise awareness and make walking and biking fun
 - Walking school bus





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Recommendations

- *Evaluation*
 - Collect, share and monitor data to identify trouble spots, success, etc.
 - Refine projects and programs based on feedback





TECH MEMO 6: SAFE ROUTES TO SCHOOL

Comments and/or questions?





TECH MEMO 7: NEEDS ANALY

- Pedestrian System Needs
 - Sidewalks
 - Crosswalks
 - Multi-Use Paths and Trails
 - Neighborhood Connections

- Considerations
 - West Linn Safe Routes to School Plan
 - West Linn Trails Master Plan
 - Metro Regional Pedestrian Network



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**Pedestrian System Needs
West Linn, Oregon** Figure 3

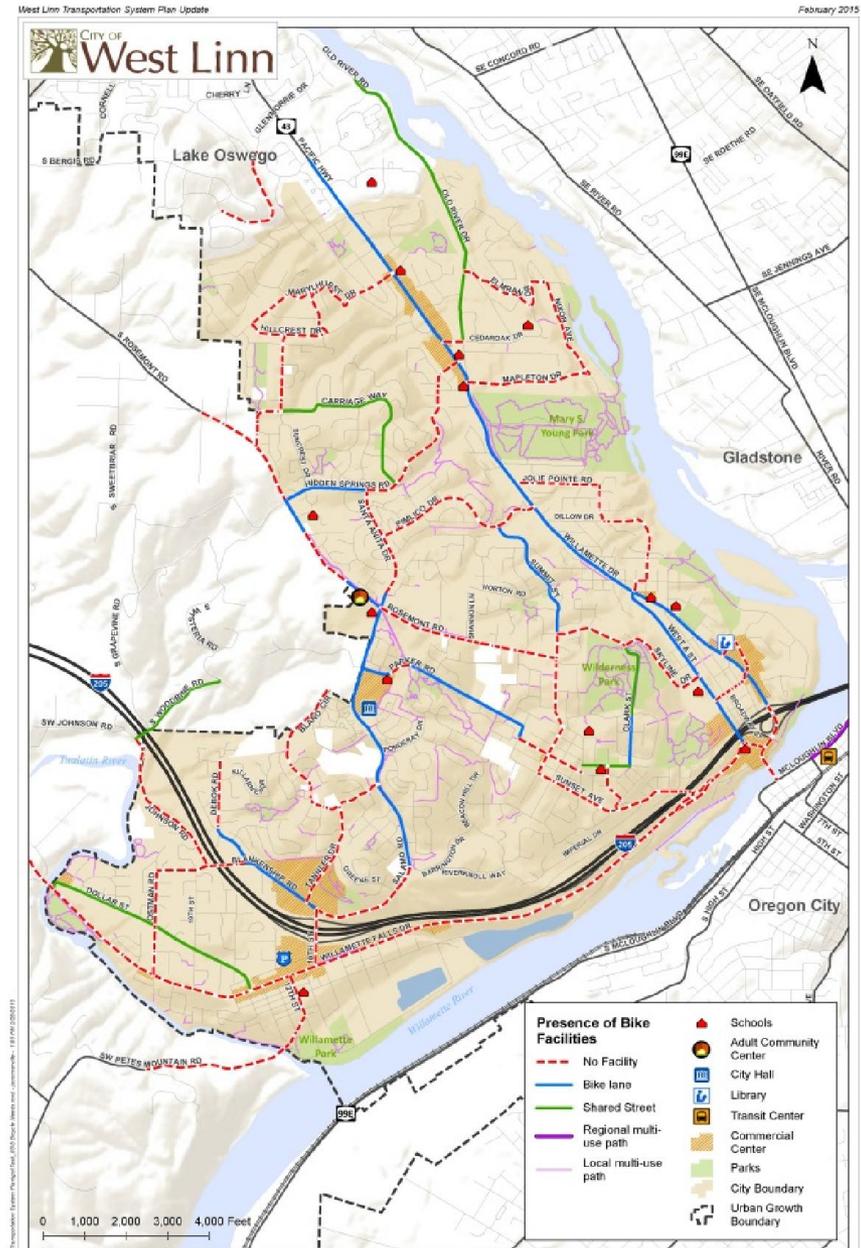
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Data Sources: City of West Linn, Photo Data Resource Center
Terrain Sources: Esri, GEBCO, NOAA



TECH MEMO 7: NEEDS ANALYSIS

- Bicycle System Needs
 - On-Street Bike Lanes
 - Shared-Use Streets
 - Bicycle Crossings
 - Bicycle Parking

- Considerations
 - West Linn Safe Routes to School Plan
 - Metro Regional Bicycle Network



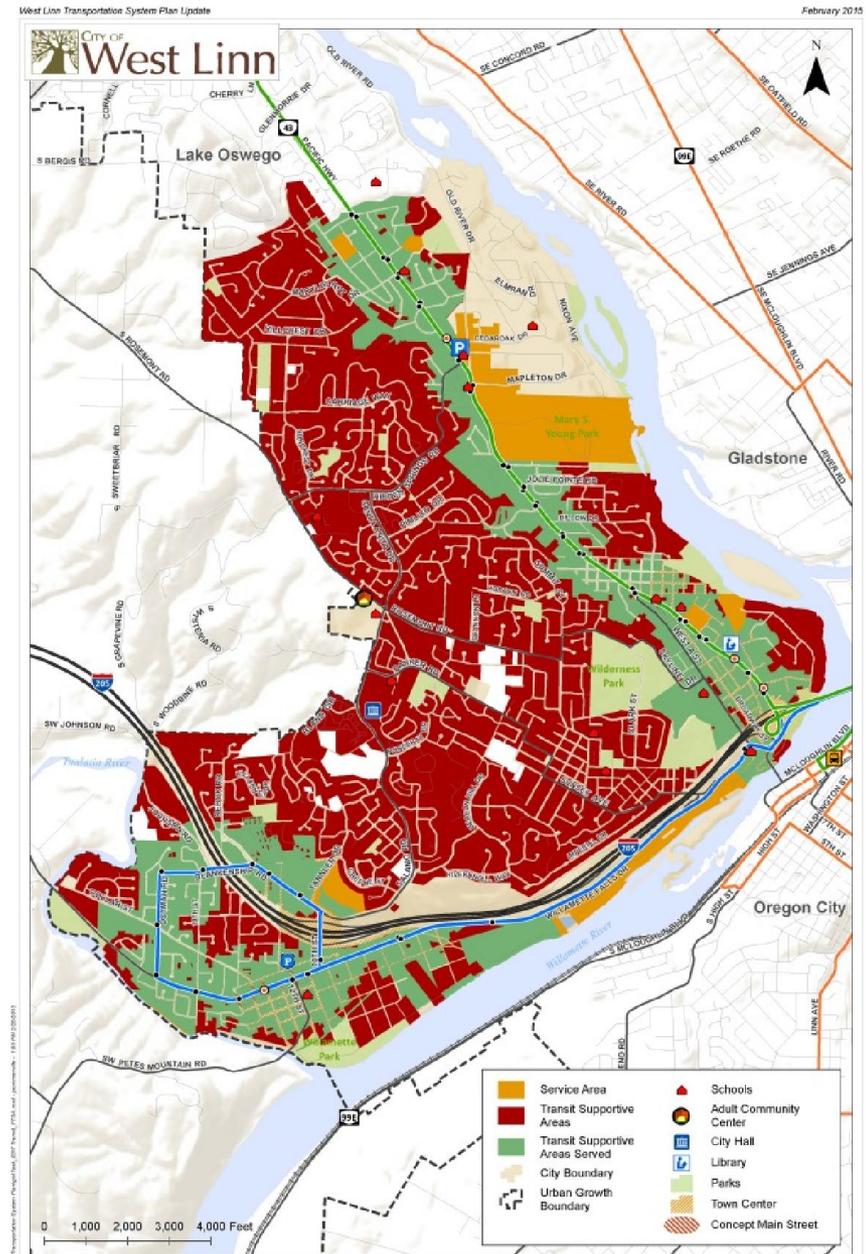
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**Bicycle System Needs
West Linn, Oregon** Figure
5



TECH MEMO 7: NEEDS ANALY

- Transit Needs
 - Fixed Routes
 - Transit Stops
 - Transit Level of Service
 - Transit Investment Priority
 - Regional High Capacity Transit
 - Transportation Disadvantaged



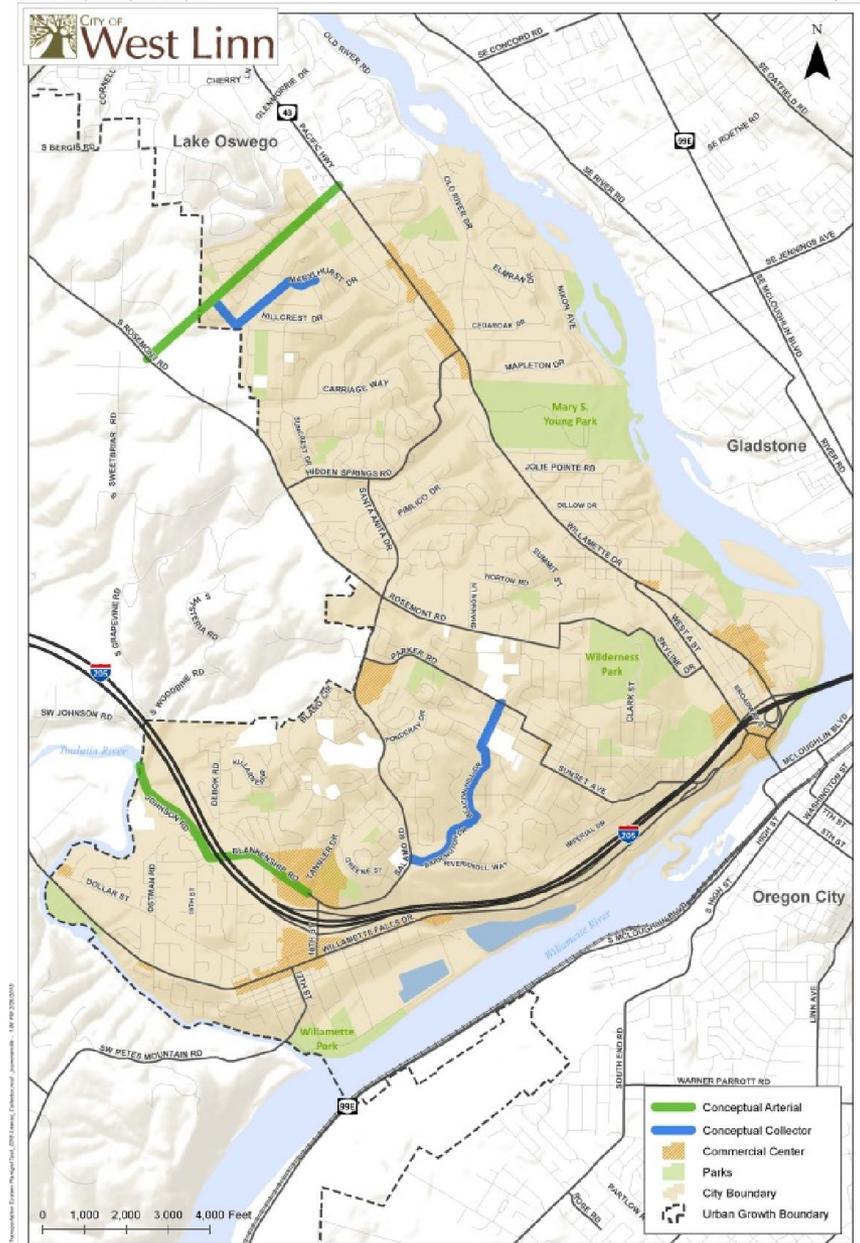
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Figure 7



TECH MEMO 7: NEEDS ANALYSIS

- Motor Vehicle Needs
 - **Arterial and Collector Street Connectivity**
 - Local Street Connectivity
 - Intersection Performance
 - Traffic Signal Warrants
 - Traffic Safety



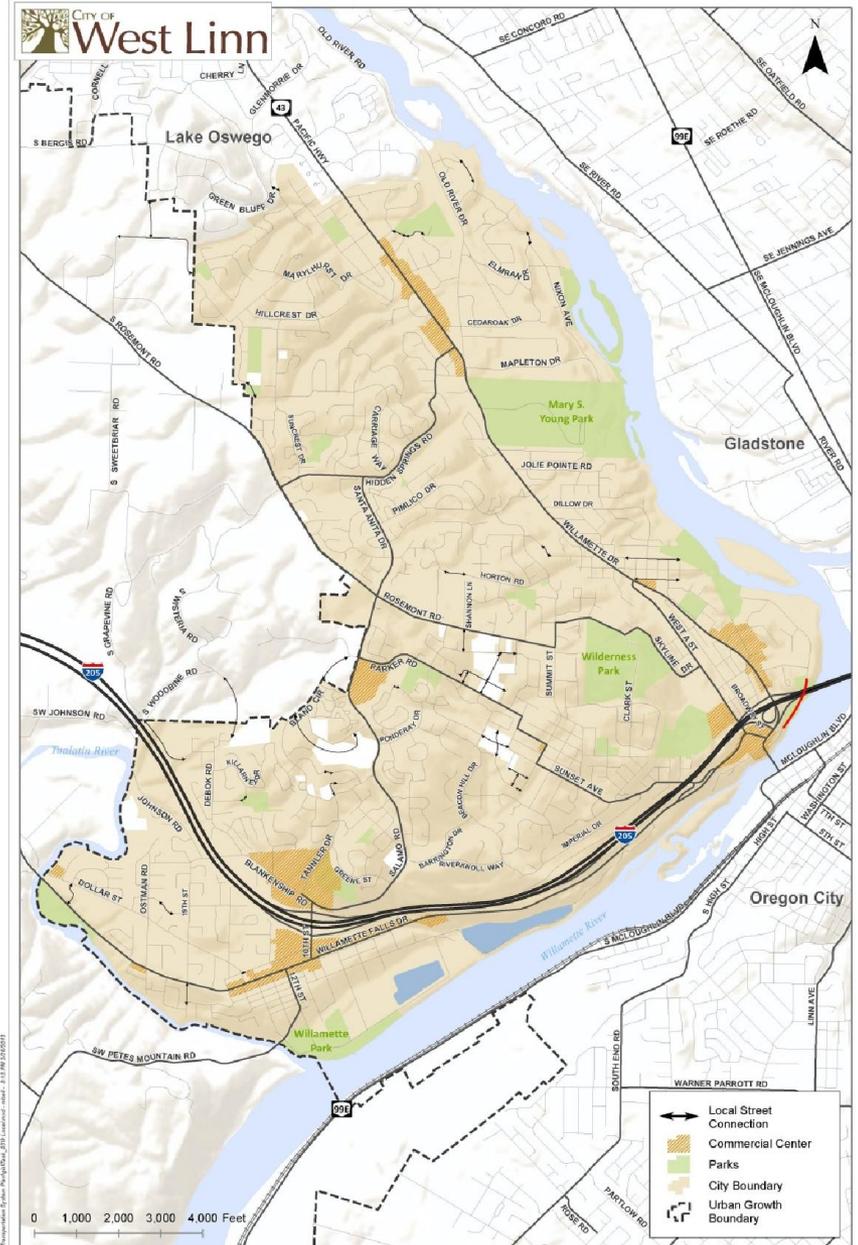
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**Arterial and Collector Street Connectivity
West Linn, Oregon** Figure 8



TECH MEMO 7: NEEDS ANAL

- Motor Vehicle Needs
 - Arterial and Collector Street Connectivity
 - **Local Street Connectivity**
 - Intersection Performance
 - Traffic Signal Warrants
 - Traffic Safety



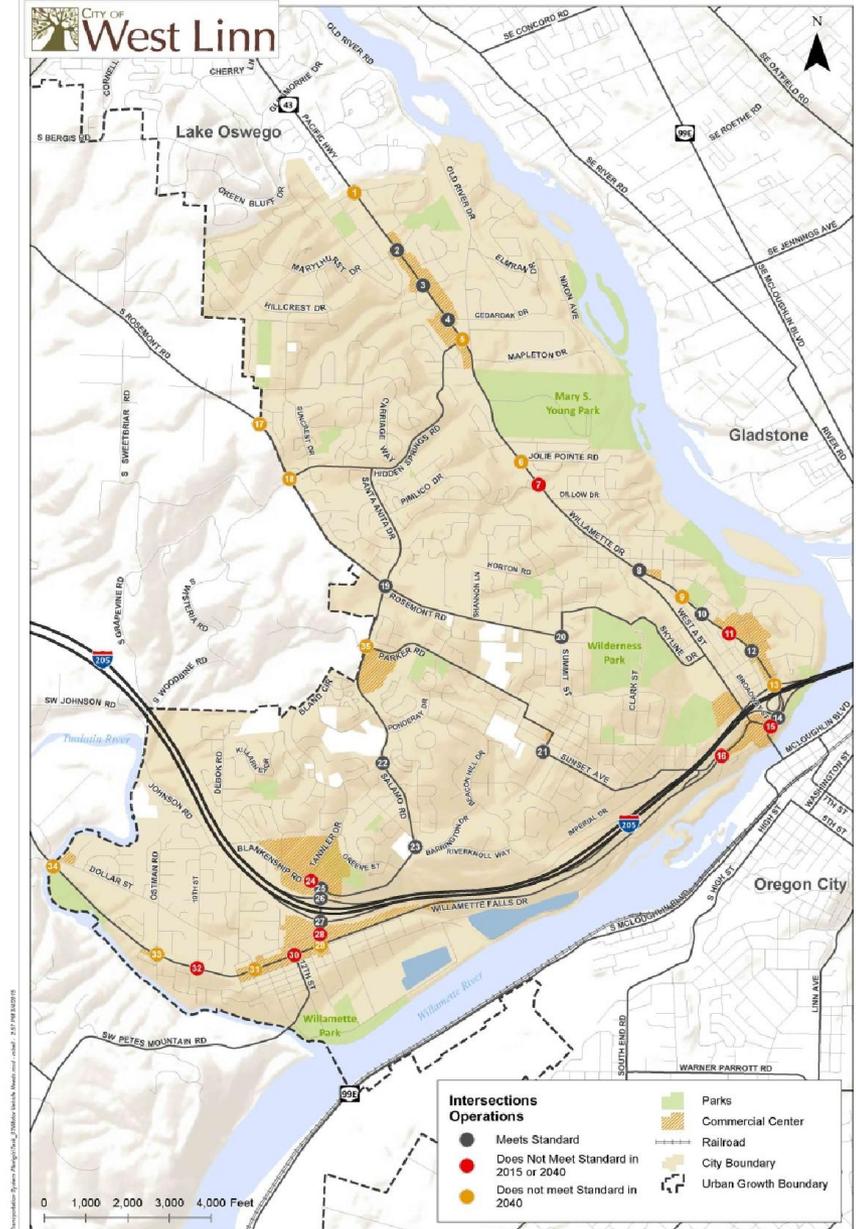
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Local Street Connectivity
West Linn, Oregon
Figure 9



TECH MEMO 7: NEEDS ANALY

- Motor Vehicle Needs
 - Arterial and Collector Street Connectivity
 - Local Street Connectivity
 - **Intersection Performance**
 - Traffic Signal Warrants
 - Traffic Safety

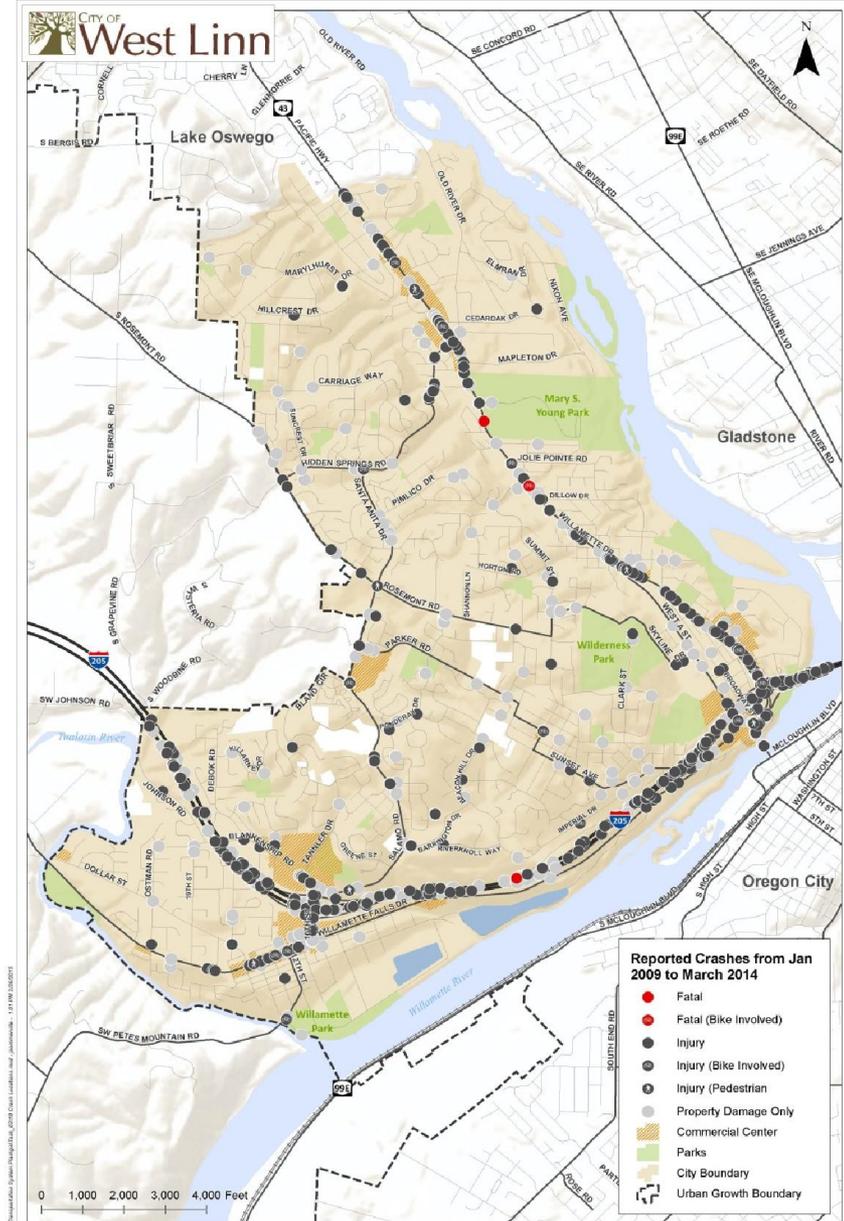


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TECH MEMO 7: NEEDS ANALY

- Motor Vehicle Needs
 - Arterial and Collector Street Connectivity
 - Local Street Connectivity
 - Intersection Performance
 - Traffic Signal Warrants
 - **Traffic Safety**



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Crashes
West Linn, Oregon
Figure 10



TECH MEMO 7: NEEDS ANALYSIS

- Other Travel Modes
 - Freight
 - Rail
 - Air
 - Water
 - Pipeline





TECH MEMO 8: 10TH STREET INTERCHANGE AREA ANALYSIS

- Background
 - West Linn Transportation System Plan
 - Recommended Pedestrian, Bicycle, and Transit Improvements
 - Recommended interchange reconstruction
 - 10th Street Study
 - Identified multiple alternatives for 10th Street
 - Recommended a raised median at 8th Avenue and a traffic signal with dual eastbound left at Willamette Falls Drive





TECH MEMO 8: 10TH STREET INTERCHANGE AREA ANALYSIS

- Existing Conditions
 - Pedestrian facilities are limited to the west side of the roadway north of 8th Avenue
 - No bicycle facilities are provided south of the I-205 NB Ramps
 - Transit facilities are provided on a limited basis by TriMet Line 154
 - Motor vehicles facilities:
 - Operational issues at 8th Avenue-Court
 - Queuing issues at the Blankenship-Salamo Road and the I-205 NB Ramp intersections





TECH MEMO 8: 10TH STREET INTERCHANGE AREA ANALYSIS

- Year 2040 (No-Build) Conditions
 - Motor Vehicle System
 - Operational issues at 8th Avenue-Court and Willamette Falls Drive
 - Queuing issues at the Blankenship-Salamo Road, I-205 SB Ramp, and I-205 NB Ramp intersections





TECH MEMO 8: 10TH STREET INTERCHANGE AREA ANALYSIS

- Alternatives Analysis - Corridor Improvements 1A
 - Near-Term Improvements
 - Restripe westbound approach to Blankenship-Salamo Road
 - **Install raised median island at 8th Avenue-Court**
 - Long-Term Improvements
 - Widen Blankenship-Salamo Road
 - Widen 10th Street to provide side-by-side lefts
 - **Extend 8th Court to Willamette Falls Drive**
 - **Install raised median at 8th Avenue-Court**
 - Install traffic signal **and dual eastbound lefts** at Willamette Falls Drive





TECH MEMO 8: 10TH STREET INTERCHANGE AREA ANALYSIS

- Alternatives Analysis - Corridor Improvements 1B
 - Near-Term Improvements
 - Restripe westbound approach to Blankenship-Salamo Road
 - Long-Term Improvements
 - Widen Blankenship-Salamo Road
 - Widen 10th Street to provide side-by-side lefts
 - **Install a traffic signal at 8th Avenue-Court**
 - Install traffic signal at Willamette Falls Drive
 - **Coordinate signal timing on 10th Street**





TECH MEMO 8: 10TH STREET INTERCHANGE AREA ANALYSIS

- Alternatives Analysis - Interchange Improvements
 - Diverging Diamond (DDI)
 - Single Point Urban Interchange (SPUI)
 - Recommended in previous TSP as potential long-term solution
 - Very expensive ~ 15 Million
 - Raindrop/Dumbbell Interchange
 - Tight Diamond Interchange





TECH MEMO 8: 10TH STREET INTERCHANGE AREA ANALYSIS

- Findings and Recommendations
 - All Pedestrian, Bicycle, and Transit improvements are recommended to be carried into TSP update
 - Alternatives 1A and 1B will be further evaluated in Tech memo 10 and the Draft TSP Update





NEXT STEPS - MEETINGS

Upcoming Meetings:

- TAB Meeting #2 – 3/5/15
- Community Meeting and Virtual Meeting #1 – 3/10/15
- TAC/TAB Meeting #3 – 4/2/15





QUESTIONS/DISCUSSION?

Visit our website @

www.westlinnoregon.gov/planning/transportation-system-plan-update

Thank you!

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