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MEMORANDUM

Date:	June 18, 2018	Project #: 21266.6
To:	Gerald Fisher and Dan Huff, City of Molalla Gail Curtis, Oregon Department of Transportation	
From:	Matt Bell and Nick Gross, Kittelson and Associates, Inc.	
Project:	Molalla Transportation System Plan (TSP) Update	
Subject:	Final Tech Memo 8: Planned and Financially Constrained Transportation	on Systems

The purpose of this memorandum is to identify the projects included in the planned and financially constrained transportation systems for the Molalla Transportation System Plan (TSP) update. Previous technical memorandums documented existing and future transportation system needs, see *Tech Memo 5: Future Needs Analysis*, and potential solutions to address the needs, see *Tech Memo 6: TSP Solutions*. The information provided in these and other tech memos was combined to develop projects for the planned transportation system and identify priorities for the financially constrained transportation system based on the goals and objectives and evaluation criteria, see *Tech Memo 2: Goals and Objectives and Evaluation Criteria*. The information provided in this memo reflects input from the project team, the project advisory committees, the Molalla Planning Commission and City Council, and the general public. The projects identified in this memorandum for the planned and financially constrained transportation systems will be incorporated in the Molalla TSP update.

PROJECT EVALUATION CRITERIA AND PRIORITIZATION

The project evaluation criteria were used to evaluate projects included in the planned transportation system and identify priorities for the financially constrained transportation system. The projects were identified as high, medium, and low priority projects based on how well they address the goals of the TSP update. The goals are documented in *Tech Memo 2: Goals and Objectives, and Evaluation Criteria* and summarized below.

- **Goal 1: Mobility** Provide a balanced, safe, and efficient transportation system for all members of the community.
- Goal 2: Connectivity and Accessibility Develop an interconnected, multimodal transportation system that connects all members of the community to destinations within the City and beyond.
- Goal 3: Safety Provide a transportation system that enhances the safety and security of all transportation modes.

- **Goal 4: Health** Provide a transportation system that enhances the health of local residents by promoting active modes of transportation.
- Goal 5: Strategic Investment Provide a sustainable transportation system through responsible stewardship of assets and financial resources
- Goal 6: Coordination and Integration Ensure that the local transportation system is integrated with county and state transportation systems and objectives, and with other related aspects of the community in Molalla, including land use planning, natural resource protection, housing and economic development.

The evaluation criteria are included in Attachment A. Attachment A also indicates how the evaluation criteria were used to evaluate and prioritize the projects. A summary of the evaluations for the pedestrian, bicycle, and motor vehicle plan projects is included in Attachment B.

PLANNING LEVEL COST ESTIMATES

Planning level cost estimates were developed for the projects based on average unit costs for similar projects within the Pacific Northwest. The cost estimates for the pedestrian, bicycle, and motor vehicle projects were developed based on a review of the existing physical characteristics of the roadways, while the cost estimates for other projects were developed based on similar projects. The cost estimates help provide a realistic plan that reflects the City's financial forecast.

TRANSPORTATION FUNDING

The TSP will include a planned transportation system, which identifies all of the projects and programs needed to address all of the transportation needs within the city and a financially constrained transportation system, which identifies the projects and programs the City anticipates being able to fund over the next 22 years. Per *Tech Memo 3: TSP Financial Forecast*, the amount of local funds that is expected to be available for capital projects in the TSP over the next 22 years is \$0. Per Tech Memo 3, the City is expected to have a deficit of approximately \$16.5 million, which is equivalent to a deficit of roughly \$750,000 per year.¹

PLANNED TRANSPORTATION SYSTEM COST SUMMARY

Table 1 summarizes the costs associated with the planned transportation system. As shown, the full cost of the planned transportation system is approximately **\$91 million** over the 22-year period, including **\$11 million** in high priority projects, **\$43 million** in medium priority projects, and **\$37 million** in low priority

¹ This number does not account for potential funding from state and federal grants such as the Statewide Transportation Improvement Program (STIP) and House Bill (HB) 2017 Transportation Investments. While it is likely that these funds will be used to fund some transportation improvements within the city over the next 22 years, because of the uncertainty in acquiring grant funds, these funding sources are not accounted for in the City's revenue forecast.

projects. Based on the anticipated funds available from System Development Charges, there will be > 1.0 million to fund the financially constrained plan. This suggests **the city will need to identify other potential revenue sources to fund transportation**, including implementation of the TSP projects over the 22-year period.

Project Type	High Priority (Financially Constrained Plan Projects)	Medium Priority	Low Priority	Total	
	P	lanned Transportation Syster	n		
TSMO ¹	\$25,000	\$25,000	\$60,000	\$110,000	
TDM ¹	\$50,000	\$100,000	\$50,000	\$200,000	
Access Management	\$0	\$0	\$0	\$0	
Safety	\$25,000	\$0	\$50,000	\$75,000	
Pedestrian	\$8,980,000	\$8,345,000	\$3,680,000	\$21,005,000	
Bicycle	\$115,000	\$120,000	\$195,000	\$430,000	
Transit	\$0	\$160,000	\$0	\$160,000	
Motor Vehicle	\$1,830,000	\$34,070,000	\$33,305,000	\$69,205,000	
Total	\$11,025,000	\$42,820,000	\$37,340,000	\$91,185,000	
	Available Funding				
	Total				

Table 1: Planned Transportation System Cost Summary

TSMO: Transportation System Management and Operations

TDM: Travel Demand Management

1: Includes annual costs occurred every year.

TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS (TSMO) PLAN

Transportation System Management and Operations (TSMO) is a set of integrated transportation solutions intended to improve the performance of existing transportation infrastructure. Transportation Demand Management (TDM) and Transportation System Management (TSM) strategies are two complementary approaches to managing transportation and maximizing the efficiency of the existing system. TDM addresses the *demand* on the system: the number of vehicles traveling on the roadways each day. TDM measures include any method intended to shift travel demand from single occupant vehicles to non-auto modes or carpooling, travel at less congested times of the day, etc. TSM addresses the *supply* of the system: using strategies to improve the system efficiency without increasing roadway widths or building new roads. TSM measures are focused on improving operations by enhancing capacity during peak times, typically with advanced technologies to improve traffic operations.

Transportation System Management (TSM)

Transportation System Management (TSM) focuses on low cost strategies that can be implemented within the existing transportation infrastructure to enhance operational performance. Finding ways to better manage transportation while maximizing urban mobility and treating all modes of travel as a coordinated system is a priority. TSM strategies include traffic signal timing and phasing, traffic signal coordination, traffic calming, access management, local street connectivity and intelligent transportation

systems (ITS). Traffic signal coordination and ITS typically provide the most significant tangible benefits to the traveling public. The primary focus of TSM measures are region-wide improvements, however there are a number of TSM measures that could be used in a smaller scale environment such as Molalla. *Tech Memo 6: TSP Solutions* identifies several TSM measures that could be implemented within the City of Molalla. Table 2 summarizes the TSM projects for the TSP update.

Project/Program Number	Name	Description	Priority	Cost Estimate	
TSM1	Signal System Improvements	Update signal timing plans and coordinate signals to better match prevailing traffic conditions; implementing adaptive or active signal control, traffic responsive control, and/or truck signal priority	High/Medium/Low	\$5,000/year	
TSM2	Real-Time Traveler Information	Work with mobile and web applications to increase information on traffic and road conditions, general public transportation and parking information, interruptions due to roadway incidents, maintenance, construction, and weather conditions.	Medium	TBD	
TSM3	Real-Time Transit Information	Work with transit agencies or third-party sources to disseminate schedule and system performance information to travelers through a variety of applications, such as in-vehicle, wayside, in-terminal dynamic message signs, live schedule arrival boards, as well as the internet or wireless devices.	Medium	TBD	
TOTAL High Priority Costs					
TOTAL Medium Priority Costs					
	TOTAL Low Priority Costs				
TOTAL Program Costs (22 years)					

Table 2: Transportation System Management Projects

Transportation Demand Management (TDM)

Transportation Demand Management (TDM) is a general term used to describe any action that removes single occupant vehicle trips from the roadway during peak travel demand periods. As growth in the city occurs, the number of vehicle trips and travel demand in the area will also increase. The ability to change a user's travel behavior and provide alternative mode choices will help accommodate this potential growth in trips.

Tech Memo 6: TSP Solutions identifies several policies and programs that may be effective for managing transportation demand in the city, especially within the next 10 to 20 years. Table 3 summarizes the TDM projects for the TSP update. Given Molalla's lack of experience with TDM, it is important that decision-makers understand their long-term costs and benefits and are able evaluate these along-side arguments from opponents in achieving outcomes that best reflect the City's vision and goals while effectively reducing travel demand.

	Table 3: T	'ransportation	Demand	Management
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Program/Project Number	Name	Description	Priority	Cost Estimate		
TDM1	Carpool Match Services Service	Coordinate rideshare/carpool programs to allow regional commuters to find other commuters with similar routes to work.	High/Medium/Low	\$5,000/year		
TDM2	Collaborative Marketing	Work with nearby cities, employers, transit service providers, and developers to collaborate on marketing for transportation options that provide an alternative to single-occupancy vehicles	High/Medium/Low	\$5,000/year		
TDM3	Limited and/or Flexible Parking Requirements	Update the Molalla Municipal Code to limit and/or allow for flexible parking requirements	Medium	\$25,000		
TDM4	Parking Management	Develop a parking management plan for downtown Molalla to impose time limits in commercial areas and allow for the potential to charge for parking	Medium	\$25,000		
	TOTAL High Priority Costs					
TOTAL Medium Priority Costs						
TOTAL Low Priority Costs						
	TOTAL Program Costs (22 years)					

Other potential TDM projects include:

- Support continued efforts by ODOT and Clackamas County to develop productive TDM measures that reduce commuter vehicle miles and peak hour trips.
- Encourage the development of high speed communication in all part of the city (fiber optic, digital cable, DSL, etc.). The objective would be to allow employers and residents the maximum opportunity to rely upon other systems for conducting business and activities than the transportation system during peak periods.
- Encourage developments that effectively mix land uses to reduce vehicle trip generation. These plans may include development linkages (particularly non-auto) that support greater use of alternative modes.

Neighborhood Traffic Management (NTM)

Neighborhood Traffic Management (NTM) is a term used to describe traffic control devices that reduce travel speeds and traffic volumes in residential neighborhoods. NTM is also commonly referred to as traffic calming because of its ability to calm traffic and improve neighborhood livability. NTM solutions have been implemented in locations throughout the city; however, there are many areas where additional NTM could be considered in the future.

While no specific NTM projects are identified for the TSP update, they are an important part of the City's ongoing effort to improve livability. Any future NTM projects should be coordinated with emergency service providers to ensure public safety is not compromised. NTM engineering solutions are limited to local streets. Implementation of NTM solutions on collector and arterial streets is counterproductive and can lead to cut through traffic onto local streets. NTM is also restricted on collector and arterial street to avoid conflicts with emergency access/public safety as well as conflicts with public transit.

ACCESS MANAGEMENT PLAN

Access management is a set of measures regulating access to streets, roads, and highways, from public roads and private driveways. Access management is a policy tool which seeks to balance mobility, the need to provide efficient, safe and timely travel with the ability to allow access to individual properties. Proper implementation of access management techniques could result in reduced congestion, reduced crash rates, less need for roadway widening, conservation of energy, and reductions in air pollution. Measures may include but are not limited to restrictions on the type and amount of access to roadways, and use of physical controls, such as signals and channelization including raised medians, to reduce impacts of approach road traffic on the main facility.

The City's current access management policy is limited; however, it maintains and enhances the integrity (capacity, safety, and level of service) of city streets. Numerous driveways or street intersections increase the potential for collisions and decrease mobility and traffic flow. The city needs a balance of streets that provide access with streets that serve mobility. *Tech Memo 6: TSP Solutions* identifies a number of potential access management techniques and strategies that help to preserve transportation system investments and guard against deteriorations in safety and increased congestion. Table 4 summarizes the Access Management policy recommendations for the TSP update.

Project Number	Name	Description	Priority	Cost Estimate
AM1	Access Spacing Standard Modification	Modify city-wide access spacing standards according to a roadway's functional classification	Medium	TBD
AM2	Access Variance Process	Define a variance process for when the standard cannot be met	Medium	TBD
AM3	AM3 Access Consolidation Establish an approach for access consolidation over time		Medium	TBD
TOTAL Low Priority Costs				
TOTAL Program Costs (22 years)				

Table 4: Access Management Policy Recommendations

TRAFFIC SAFETY PLAN

Traffic safety has a significant impact on how people use the transportation system within Molalla, particularly in areas where real or perceived safety risks prevent people from using more active travel modes, such as walking, biking, and taking transit. The traffic safety solutions identified in *Tech Memo 6: TSP Solutions* are largely focused on systemic issues that occur along roadways and at intersections throughout the city. While projects that address the systemic issues have not been identified for the TSP update, a toolkit that includes a variety of potential treatments the city can implement will be developed for the TSP update. Table 5 identifies the traffic safety projects for the TSP update. Additional safety projects and improvements are identified as part of the pedestrian, bicycle, transit, and motor vehicle plans later in this memo. Figure 1 illustrates the traffic safety plan projects.



KITTELSON & ASSOCIATES Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl Data Source: Metro Data Resource Center, City of Molalla

Table 5: Traffic Safety Plan Projects

Project Number	Location	Description	Priority	Cost Estimate	
S1	OR 213 ¹	Widen OR 213 from north city limits to OR 211 to include a center turn-lane, bike lanes, and sidewalks – Coordinate with Project M1	Medium	0 ³	
S2	OR 2111	Widen OR 211 from OR 213 to Shaver Avenue to include a center turn-lane, bike lanes, and sidewalks – Coordinate with Project M4	Medium	0 ³	
S3	OR 213/Toliver Road ¹	Widen OR 213 to provide separate left-turn lanes at the north and southbound approaches and install a traffic signal with protected or protected-permitted phasing at the northbound and southbound approaches when warranted – Coordinate with Project M17 ²	High	0 ³	
S4	OR 213/OR 2111	Install flashing beacons on the advanced warning signs at all approaches and improve the signal hardware (i.e. lenses, reflective back plates, size, and number) to improve the visibility of the signal heads	High	\$25,000	
S5	OR 211/Molalla Avenue ¹	Install a traffic signal with permitted phasing at all approaches when warranted – Coordinate with Project M22 ²	High	0 ³	
S6	OR 211/Leroy Avenue ¹	Widen OR 211 to provide a separate left-turn lane at the eastbound approach and install a traffic signal with protected or protected-permitted phasing at the eastbound approach when warranted – Coordinate with Project M20 ²	Low	0 ³	
S7	OR 211/Mathias Road ¹	Install a single lane roundabout ²	Low	\$0 ³	
S8	City-wide ¹	Evaluate bicycle and pedestrian safety along OR 213, OR 211, Toliver Road, Molalla Avenue, and other key corridors to identify appropriate counter measures	Low	\$50,000	
		TOTAL Hig	h Priority Costs	\$25,000	
		TOTAL Lo	w Priority Costs	\$50,000	
TOTAL Program Costs (22 years)					

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.

2. Future evaluation may be required to determine the appropriate form of traffic control at this location.

3. Project cost included in Motor Vehicle Plan.

PEDESTRIAN PLAN

Many city streets currently have sidewalks on at least one side of the roadway, with a few exceptions. Therefore, the pedestrian plan includes several projects to fill-in the gaps in the sidewalk network along the city's arterial and collector streets and a few local streets that provide access to essential destinations such as schools, parks, churches, etc. The pedestrian plan also includes several enhanced pedestrian crossings as well as multi-use paths and trails that augment and support the pedestrian system.

Table 6 identifies the pedestrian plan projects for the Molalla TSP update. As shown, the projects are separated into projects on arterials, collectors, and local streets as well as projects at intersections and in other locations throughout the city. The priorities shown in Table 6 are based on the project evaluation criteria and reflect input from the project team and the general public. The cost estimates are based on average unit costs for roadway improvements. The cost estimates do not include the cost of right-of-way or the cost of filling in the ditches. These costs are included in the motor vehicle plan as applicable. Figure 2 illustrates the location of the pedestrian plan projects.

	Location	Туре	Project	Priority	Cost Estimate			
Arteria	Arterials							
P1	OR 213 ¹	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from the north city limits to OR 211 with sidewalks of appropriate width	High	\$1,240,000			
P2	OR 213 ¹	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from OR 211 to the south city limits with sidewalks of appropriate width	Medium	\$870,000			
Р3	OR 211 ¹	Sidewalks	Install sidewalks on both sides of the roadway from the west city limits to OR 213	High	\$750,000			
P4	OR 2111	Sidewalks – Fill in gaps	Fill in the gaps on both sides of the roadway from OR 213 to Molalla Avenue with sidewalks of appropriate width	High	\$1,710,000			
P5	OR 211 ¹	Sidewalks – Fill in gaps	Install sidewalks on both sides of the roadway from Mathias Road to the east city limits	High	\$940,000			
P6	OR 211 ¹	Lighting	Evaluate light levels and install new street lighting as necessary ²	Low	\$450,000			
Р7	N Molalla Avenue	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from the north city limits to Heintz Street with sidewalks of appropriate width	High	\$485,000			
P8	S Molalla Avenue	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from 5 th Street to the south city limits with sidewalks of appropriate width	High	\$955,000			
Р9	Molalla Avenue	Lighting	Evaluate light levels and install new street lighting as necessary ²	Low	\$450,000			
Collecto	Collectors							
P10	Toliver Road	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from the west city limits to OR 213 with sidewalks of appropriate width	Medium	\$575,000			
P11	Toliver Road	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from OR 213 to Molalla Avenue with sidewalks of appropriate width	High	\$1,730,000			

Table 6: Pedestrian Plan Projects

	Location	Туре	Project	Priority	Cost Estimate
P12	Shirley Street	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from N Molalla Avenue to OR 211 with sidewalks of appropriate width	Medium	\$1,240,000
P13	Ridings Avenue	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from Toliver Road to OR 211 with sidewalks of appropriate width	Medium	\$795,000
P14	Leroy Avenue	Sidewalks – Fill in gaps	Fill in gaps on the east side of the roadway from Toliver Road to West Lane with sidewalks of appropriate width	Medium	\$295,000
P15	E 5 th Street	Sidewalks	Install sidewalks on both sides of the roadway from Stower Road to Mathias Road	Medium	\$330,000
P16	Cole Avenue	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from Frances Street to OR 211 with sidewalks of appropriate width	Medium	\$270,000
P17	Mathias Road	Sidewalks	Install sidewalks on both sides of the roadway from OR 211 to the south city limits	Medium	\$1,405,000
P18	Frances Street	Sidewalks – Fill in gaps	Fill in gaps on the south side of the roadway from N Molalla Avenue to Christopher Street with sidewalks of appropriate width	Medium	\$350,000
Neighb	orhood Streets				
P19	Toliver Drive	sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from north of Berwick Court to Toliver Road with sidewalks of appropriate width	Low	\$280,000
P20	Kennel Avenue	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from Ross Street to OR 211 with sidewalks of appropriate width	Medium	\$130,000
P21	E Heintz Street	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from N Molalla Avenue to Fenton Street with sidewalks of appropriate width	Medium	\$385,000
P22	Industrial Way	Sidewalks – Fill in gaps	Fill in gaps on the east side of the roadway from Toliver Road to the southern roadway terminus with sidewalks of appropriate width	Medium	\$110,000
P23	Industrial Way	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from the northern roadway terminus to OR 211 with sidewalks of appropriate width	Medium	\$170,000
P24	Stowers Road	Sidewalks – Fill in gaps	Fill in gaps on both sides of the roadway from OR 211 to 7 th Street with sidewalks of appropriate width	Medium	\$470,000
P25	E 7 th Street	Sidewalks	Install sidewalks on both sides of the roadway from Stowers Road to Mathias Road	Low	\$335,000
Interse	ctions				
P26	OR 213/ Meadow Drive ¹	Enhanced crossing	Install an enhanced pedestrian crossing at the OR 213/Meadow Drive intersection ³	Medium	\$150,000
P27	OR 213/ Toliver Road ¹	Enhanced crossing	Install an enhanced pedestrian crossing at the OR 213/Toliver Road intersection ³	Medium	\$150,000
P28	OR 211/ Hezzie Lane ¹	Enhanced crossing	Install an enhanced pedestrian crossing at the OR211/Hezzie Lane intersection ³	High	\$150,000
P29	OR 211/Molalla Forest Road ¹	Enhanced crossing	Install an enhanced pedestrian crossing at the OR 211/Molalla Forest Road intersection ³	High	\$150,000
P30	OR 211/Grange Ave/Berkeley Avenue ¹	Enhanced crossing	Install an enhanced pedestrian crossing at the OR 211/Grange Avenue/Berkel Avenue intersection ³	Medium	\$150,000
P31	OR 211/ N Cole Avenue ¹	Enhanced crossing	Install an enhanced pedestrian crossing at the OR 211/Cole Avenue intersection ³	High	\$150,000

	Location	Туре	Project	Priority	Cost Estimate
P32	OR 211/ Stowers Road ¹	Enhanced crossing	Install an enhanced pedestrian crossing at the OR 211/Stowers Road intersection ³	Medium	\$150,000
P33	OR 211/ Metzler Street ¹	Enhanced crossing	Install curb extensions with American's with Disabilities Act (ADA) accessible curb ramps with tactile warning strips on the north and south sides of the roadway ³	Medium	\$150,000
P34	Toliver Road/ Industrial Way	Enhanced crossing	Install an enhanced pedestrian crossing at the Toliver Road/Industrial Way intersection ³	Medium	\$50,000
P35	Toliver Road/ Zimmerman Lane	Enhanced crossing	Install an enhanced pedestrian crossing at the Toliver Road/Zimmerman Lane intersection ³	Low	\$50,000
P36	Toliver Road/ Leroy Avenue	Enhanced crossing	Install an enhanced pedestrian crossing at the Toliver Road/Leroy Avenue intersection ³	Medium	\$50,000
P37	Toliver Road/ Ridings Avenue	Enhanced crossing	Install an enhanced pedestrian crossing at the Toliver Road/Ridings Avenue intersection ³	Medium	\$50,000
P38	Toliver Road/ Kennel Avenue	Enhanced crossing	Install and enhanced pedestrian crossing at the Toliver Road/Kennel Avenue intersection ³	Medium	\$50,000
P39	Leroy Avenue/ Heintz Street	Enhanced crossing	Install an enhanced pedestrian crossing at the Leroy Avenue/Heintz Street intersection ³	Low	\$50,000
P40	5 th Street/ May Street	Enhanced crossing	Install an enhanced pedestrian crossing at the 5 th Street/May Street intersection ³	Low	\$50,000
P41	5 th Street/ Stowers Road	Enhanced crossing	Install an enhanced pedestrian crossing at the 5 th Street/Stowers Road intersection ³	Low	\$50,000
Off-stre	et Improvements				
P42	Molalla Forest Road	Shared-use Path	Install a shared-use path along the former Molalla Forest Road right-of-way from Toliver Road to OR 211	High	\$720,000
P43	Molalla Forest Road	Shared-use Path	Install a shared-use path along Molalla Forest Road from OR 211 to S Molalla Avenue	Low	\$0 ⁴
P44	Molalla Western Railway Spur	Shared-use Path	Install a shared-use path along the former Molalla Western Railway Spur right-of-way from the north city limits to OR 211	Low	\$1,965,000
TOTAL High Priority Costs					\$8,980,000
			TOTAL Med	ium Priority Costs	\$8,345,000
			TOTAL	Low Priority Costs	\$3,680,000
TOTAL Program Costs (22 years)					\$21,005,000

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.

2. Street lighting will require an intergovernmental agreement (IGA) with the City for maintenance.

3. The types of enhanced crossing treatments are to be determined.

4. Project cost included in Motor Vehicle Plan.



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BICYCLE PLAN

On-street bike lanes and other bicycle facilities are currently provided on a limited number of roadways within the city. Therefore, the bicycle plan includes several projects along the city's arterial and collector streets and a few neighborhood route and local streets that provide direct access to essential destinations. The bicycle plans also includes several enhanced bicycle crossings as well as other off-street amenities that augment and support the bicycle system.

Table 7 identifies the bicycle plan projects for the Molalla TSP update. As shown, the projects are separated into projects on arterials, collectors, neighborhood route, and local streets as well as projects at intersections and in other locations throughout the city. The priorities shown in Table 7 are based on the project evaluation criteria and reflect input from the project team and the general public. The cost estimates are based on average unit costs for roadway improvements. The cost estimates do not include the cost of right-of-way or the cost of filling in the ditches. These costs are included in the motor vehicle plan as applicable. Figure 3 illustrates the location of the bicycle plan projects.

Table	7:	Bicvcle	Plan	Proiects	
TUNIC		Dicycic	i iuii	110,000	

	Location	Туре	Project	Priority	Cost Estimate ¹
Arterial	S				
B1	OR 213 ¹	Buffered Bike Lane	Install buffered bike lanes on both sides of the roadway from the north city limits to OR 211	High	\$0 ³
B2	OR 2131	Buffered Bike Lane	Install buffered bike lanes on both sides of the roadway from OR 211 to the south city limits	Medium	\$0 ³
B3	OR 211 ¹	Buffered Bike Lane	Install buffered bike lanes on both sides of the roadway from the west city limits to OR 213	Medium	\$0 ³
B4	OR 211 ¹	Buffered Bike Lane	Install buffered bike lanes on both sides of the roadway from OR 213 to Shaver Avenue	High	\$0 ³
B5	OR 211 ¹	Shared-lane	Install priority shared-lane pavement markings (super sharrows) and signs on both sides of the roadway from Shaver Avenue to Fenton Street	High	\$15,000
B6	OR 211 ¹	Buffered Bike Lane	Install buffered bike lanes on both sides of the roadway from Fenton Street to the east city limits	High	\$0 ³
B7	N Molalla Avenue	Bike Lane	Install bike lanes on both sides of the roadway from the north city limits to Heintz Street	Medium	\$0 ³
B8	N Molalla Avenue	Shared-lane	Install shared-lane pavement marking (sharrows) and signs on both sides of the roadway from Heintz Street to OR 211	Low	\$20,000
В9	S Molalla Avenue	Shared-lane	Install shared-lane pavement marking (sharrows) and signs on both sides of the roadway from OR 211 to 5 th Street	Low	\$10,000
B10	S Molalla Avenue	Bike Lane	Install bike lanes on both sides of the roadway from the 5 th Street to the south city limits	Medium	\$0 ³
Collecto	ors				
B11	Toliver Road	Bike lane	Install bike lanes on both sides of the roadway from the west city limits to OR 213	High	\$0 ³
B12	Toliver Road	Bike Lanes	Install bike lanes on both sides of the roadway from OR 213 to Zimmerman Lane	High	\$0 ³
B13	Shirley Street	Bike Lanes	Install bike lanes on both sides of the roadway from N Molalla Avenue to OR 211	Medium	\$0 ³

	Location	Туре	Project	Priority	Cost Estimate ¹
B14	Leroy Avenue	Bike Lanes	Install bike lanes on both sides of the roadway from Toliver Road to OR 211	Medium	\$0 ³
B15	5 th Street	Bike Lanes	Install bike lanes on the south side of the roadway from May Street to Eckerd Avenue and on both sides from Stowers Road to Mathias Road	Medium	\$0 ³
B16	5 th Street	Bike Lanes	Install bike lanes on both sides of the roadway from Hart Street to S Molalla Avenue	Medium	\$0 ³
B17	Future 5 th Street	Bike Lanes	Install bike lanes on both sides of the roadway from OR 211 to Hart Street	Medium	\$0 ³
B18	Ridings Avenue	Shared-lane	Install shared-lane pavement markings (sharrows) and signs on both sides of the roadway from Toliver Road to OR 211	Low	\$15,000
B19	Cole Avenue	Shared-lane	Install shared-lane pavement markings (sharrows) and signs on both sides of the roadway from Frances Street to OR 211	Low	\$20,000
B20	Frances Street	Shared-lane	Install shared-lane pavement markings (sharrows) and signs on both sides of the roadway from N Molalla Avenue to Cole Avenue	Low	\$15,000
Neighbo	orhood Streets	1			
B21	Meadow Drive	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from OR 213 to Meadowlawn Place	Low	\$25,000
B22	Village Drive	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from Meadowlawn Place to Toliver Road	Low	\$10,000
B23	Thunderbird Street	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from N Molalla Avenue to Bronco Avenue	Low	\$10,000
B24	Bronco Avenue	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from Thunderbird Street to Toliver Drive	Low	\$5,000
B25	Toliver Drive	Shared lane	Install shared lane pavement markings (sharrows) and sign on both sides of the roadway from Bronco Avenue to Toliver Road	Low	\$10,000
B26	Kennel Avenue	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from Toliver Road to OR 211	Low	\$15,000
B27	Heintz Street	Bicycle Boulevard/ Shared lane	Install bicycle boulevard treatments, including shared lane pavement markings (sharrows) and signs on both sides of the roadway from N Molalla Avenue to Cole Avenue	Medium	\$15,000
B28	Center Avenue	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from Heintz Street to OR 211	Low	\$10,000
B29	Industrial Way	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from Toliver Road to the southern roadway terminus	Low	\$5,000
B30	Industrial Way	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from the northern roadway terminus to OR 211	Low	\$5,000
B31	Stowers Road	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from OR 211 to 7 th Street	Low	\$15,000
B32	E 7 th Street	Shared lane	Install shared lane pavement markings (sharrows) and signs on both sides of the roadway from Stowers Road to Mathias Road	Low	\$5,000

	Location	Туре	Project	Priority	Cost Estimate ¹	
Local St	Local Streets					
B33	Heintz Street	Bicycle Boulevard/ Share lane	Install bicycle boulevard treatments, including shared lane pavement markings (sharrows) and signs on both sides of the roadway from Leroy Avenue to N Molalla Avenue	Medium	\$25,000	
Intersec	ctions					
B34	OR 213/Meadow Drive ¹	Enhanced Crossing	Install an enhanced bicycle crossing at the OR 213/Meadow Drive Intersection ²	High	\$20,000	
B35	OR 213/Toliver Road ¹	Enhanced crossing	Install an enhanced bicycle crossing at the OR 213/Toliver Road intersection ²	High	\$20,000	
B36	OR 213/ OR 211 ¹	Enhanced crossing	Install skip striping along OR 213 and OR 211 through the intersection ²	High	\$20,000	
B37	OR 211/Ona Way ¹	Enhanced Crossing	Install skip striping along OR 211 and consider other enhanced crossing treatments if/when signalized ²	High	\$20,000	
B38	OR 211/Leroy Avenue ¹	Enhanced crossing	Install skip striping along OR 211 and consider other enhanced crossing treatments if/when signalized ²	High	\$20,000	
B39	OR 211/Ridings Avenue ¹	Enhanced crossing	Install skip striping along OR 211 and consider other enhanced crossing treatments if/when signalized ²	Medium	\$20,000	
B40	N Molalla Avenue/ Toliver Road	Enhanced Crossing	Install an enhanced bicycle crossing at the N Molalla Avenue/Toliver Road intersection – coordinate with project B41 ²	Medium	\$15,000	
B41	N Molalla Avenue/ Shirley Street	Enhanced Crossing	Install an enhanced bicycle crossing at the N Molalla Avenue/Shirley Street intersection – coordinate with project B40 ²	Medium	\$15,000	
B42	N Molalla Avenue/ Heintz Street	Enhanced Crossing	Install an enhanced bicycle crossing at the N Molalla Avenue/Heintz Street intersection ²	Medium	\$15,000	
B43	S Molalla Avenue/ 5 th Street	Enhanced Crossing	Install an enhanced bicycle crossing at the S Molalla Avenue/5 th Street intersection ²	Medium	\$15,000	
	<u></u>		TOTAL Hig	gh Priority Costs	\$115,000	
TOTAL Medium Priority Costs					\$120,000	
	TOTAL Low Priority Costs \$1					
TOTAL Program Costs (22 vears)					\$430.000	

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.

The types of enhanced crossing treatments are to be determined.
 Project cost included in Motor Vehicle Plan.



KITTELSON & ASSOCIATES Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl Data Source: Metro Data Resource Center, City of Molalla

TRANSIT PLAN

Public transit can provide important connections to destinations for people that do not drive or bike and can provide an additional option for all transportation system users for certain trips. Public transit complements walking, bicycling, or driving trips: users can walk to and from transit stops and their homes, shopping or work places, people can drive to park-and-ride locations to access a bus, or people can bring their bikes on transit vehicles and bicycle from a transit stop to their final destination.

Providing transit service in smaller cities is generally led by a local or regional transit agency and is dependent on having the land uses and densities that can support service. The city can plan for transit-supportive land use patterns and support future transit viability by designing and building streets that will comfortably accommodate transit stops and include the right-of-way that could allow for transit stops to be located as close as possible to important destinations. At a minimum, a transit stop should be well-signed and have a comfortable space to wait. Benches and shelter from the weather can improve user comfort and secure bicycle parking near bus stops allows people the option to leave their bicycle at one trip-end instead of bringing it on the bus.

The City of Molalla can help improve local transit service by providing safe and convenient walking and bicycling connections between key roadways, neighborhoods, and local destinations; by providing amenities, such as shelters and benches at transit stops; by encouraging an appropriate mix and density of uses that support public transit, and; by providing and planning for park-and-ride locations. Table 8 summarizes the transit plan projects identified for Molalla the Molalla TSP. Figure 4 illustrates the location of the transit plan projects.

Project Number	Location	Agency Responsible	Description	Priority	Cost Estimate
T1	City-wide	City/SCTD	Coordinate with SCTD to increase the frequency of morning and evening peak hour service on the Canby and CCC Buses	Medium	\$0 ¹
Т2	City-wide	City/SCTD	Coordinate with SCTD to increase the hours of service on the Canby Bus	Medium	\$0 ¹
Т3	City-wide	City/SCTD	Coordinate with SCTD to reconfigure the Molalla City Bus to increase service coverage in the northeast and southeast parts of the city and increase the efficiency of the route	Medium	\$0 ¹
T4	OR 213/Meadow Drive (northbound)	City/SCTD	Relocate existing sign to south side of the intersection to increase the visibility of the stop	Medium	\$5,000
T5	OR 213/Toliver Road	City/SCTD	Install bus stops at the far side of the northbound and southbound approaches to the intersection	Medium	\$10,000
Т6	OR 211/OR 213 (eastbound)	City/SCTD	Install a shelter within the public right of way or obtain an easement from the adjacent property owner	Medium	\$50,000
Τ7	OR 211/Leroy Avenue (eastbound)	City/SCTD	Install a bus stop sign on the east side of the intersection to increase the visibility of the stop	Medium	\$5,000

Table 8: Transit Plan Projects

Т8	OR 211/Kennel Avenue (eastbound)	City/SCTD	Install a bus stop sign on the east side of the intersection to increase the visibility of the stop	Medium	\$5,000
Т9	Meadow Drive/Meadowlawn Place/Toliver Road	City/SCTD	Identify the location for designated transit stops between OR 213 and Kennel Avenue	Medium	\$35,000
T10 ²	City Wide	City/SCTD	Identify the location for a new park-and- ride	Medium	\$50,000
	TOTAL Medium Priority Costs \$160,000				
TOTAL Program Costs (22 years) \$160,00				\$160,000	

Project to be funded by others.
 Project not shown on map.



MOTOR VEHICLE PLAN

The street system within Molalla is well established in some areas; however, there are several areas where the existing roadways could be improved and others areas were new roadways could be constructed to increase the efficiency of the transportation system as well as improve access and circulation for all travel modes. There are also several intersections with operational issues under the existing and projected future traffic conditions. Therefore, the Motor Vehicle Plan includes projects to increase the efficiency of the transportation system through changes in the functional classification of roadways, development of roadway standards and standard cross sections, improvements to the street system connectivity, and improvements to the capacity of several roadways and several key intersections.

Functional Classification

The proposed changes to the functional classification of roadways within Molalla were determined based on a review of the existing Molalla TSP and other regional plans as well as direction provided by City staff. Several of the changes have been proposed to better align the classification with the intended and future use of the roadways. These changes primarily lower the roadway's classification from arterial to collector; however, there is one change from a local street to a major collector. This is intended to improve northsouth connectivity, north of Toliver Road. Figure 5 and Table 9 summarize the proposed changes in functional classification.

Street	Segment	Existing Classification	Future Classification
Molalla Forest Road	OR 211 to Mathias Road	Arterial	Major Collector
Mathias Road	OR 211 to south city limits	Arterial	Major Collector
Meadow Drive	OR 213 to Meadow Lawn Drive	Major Collector	Neighborhood Street
OR 211 (Main Street)	Molalla Forest Road to Mathias Road	Major Collector	Arterial
Mary Drive	Toliver Road to north city limits	Local Street	Major Collector
Lowe Road	Molalla Forest Road to roadway terminus	Local Street ¹	Major Collector

Table 9: Proposed Changes in Functional Classification

1. This segment of Lowe Road was recently transferred from Clackamas County to the City.

The proposed changes in functional classification shown in Figure 5 and Table 9 will impact the design and function of the roadways as well as the types of treatments that can be considered to manage traffic. The proposed changes in functional classification will be evaluated further by the project team and approved by the City prior to inclusion in the TSP update. The City should coordinate with State and County staff to ensure future updates to the functional classification plans account for the changes reflected in the Molalla TSP update.



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Roadway Cross Section Standards

Roadway cross section standards were developed for the Molalla TSP update based on the characteristics of the existing roadways within the city. The design of a roadway can (and will) vary from street to street and segment to segment due to adjacent land uses and demand. The roadway cross sections are intended to define a system that allows standardization of key characteristics to provide consistency, but also to provide criteria for application that provides some flexibility while meeting the design standards. Table 10 outlines the roadway cross section standards for city streets. Exhibits 1 through 6 illustrate the cross section standards for each functional classification. The cross sections will be evaluated further by the project team and approved by the City prior to inclusion in the TSP update.

Unless prohibited by significant topographic or environmental constraint, newly constructed streets shall meet the maximum standards indicated in the cross sections. When widening an existing street, the City may use lesser standards than the maximum to accommodate physical and existing development constraints where determined to be appropriate by the Public Works Director. Examples of constrained street cross sections are shown for arterial and collector streets. These constrained cases may be applied where future daily volumes do not require center left-turn pockets or raised medians. In some locations "green streets" (those that utilize vegetation or pervious material to manage drainage) may be appropriate due to design limitations or adjacent land use. Green street elements (as described in the notes for the cross section exhibits) may be used where appropriate and as determined by the Public Works Director.

Street Element	Characteristic	Width/Options
	Arterial	60-68 feet
	Arterial (Downtown District)	60 feet
Pight of way	Major Collector	60 feet
Kight-ol-way	Major Collector (Molalla Forest Road)	60 feet
	Minor Collector/Neighborhood Route	50 feet
	Local Street	50 feet
	Arterial	10-12 feet
	Arterial (Downtown District)	11-12 feet
Vehicle Lane Widths (Tursical widths)	Major Collector	10-11 feet
venicie tane widths (Typical widths)	Major Collector (Molalla Forest Road)	12 feet
	Minor Collector/Neighborhood Route	11 feet
	Local Street	10 feet
	Arterial	7 feet where applicable
	Arterial (Downtown District)	8 feet
On Street Parking	Major Collector	7 feet where applicable
On-Street Parking	Major Collector (Molalla Forest Road)	None
	Minor Collector/Neighborhood Route	7 feet
	Local Street	8 feet
	Arterial	6 feet
Bike Lanes	Arterial (Downtown District)	Shared
	Major Collector	6 feet

Table 10: Roadway Cross Section Standards

Street Element	Characteristic	Width/Options
	Major Collector (Molalla Forest Road)	12 feet shared path
	Minor Collector/Neighborhood Route	Shared
	Local Street	Shared
	Arterial	6 feet, 8-10 feet in commercial areas
	Arterial (Downtown District)	10-12 feet
Sidowalka	Major Collector	6 feet
Sidewalks	Major Collector (Molalla Forest Road)	12 feet shared path
	Minor Collector/Neighborhood Route	6 feet
	Local Street	6 feet
	Arterial	Optional 5-6 feet where applicable
	Arterial (Downtown District)	5-6 feet
Landssona Strins	Major Collector	None
Lanuscape strips	Major Collector (Molalla Forest Road)	12 ½ feet
	Minor Collector/Neighborhood Route	None
	Local Street	None
	Arterial	12-14 feet
	Arterial (Downtown District)	12-14 feet
Madian /Turn Lana	Major Collector	12 feet
	Major Collector (Molalla Forest Road)	14 feet
	Minor Collector/Neighborhood Route	12-feet
	Local Street	None
	Arterial	Not Appropriate
	Arterial (Downtown District)	Not Appropriate
	Major Collector	Not Appropriate
Neighborhood Traffic Management (NTM)	Major Collector (Molalla Forest Road)	Not Appropriate
	Minor Collector/Neighborhood Route	At the discretion of the Public Works Director
	Local Street	At the discretion of the Public Works Director
	Arterial	Appropriate
	Arterial (Downtown District)	Appropriate
Turneit/Furicht	Major Collector	Local service only
i ransit/Freight	Major Collector (Molalla Forest Road)	Appropriate
	Minor Collector/Neighborhood Route	Local service only
	Local Street	Local service only

Exhibit 1: Arterial Cross Sections



Arterial with Center Turn Lane (60-foot ROW, 46-foot Paved Width)



Arterial with On-Street Parking (60-foot ROW, 46-foot Paved Width)



Arterial with Buffered Bike Lanes and Center Turn Lane (68-foot ROW, 52-foot Paved Width)



Arterial with Buffered Bike Lanes (60-foot ROW, 38-foot Paved Width)

Table 11: Arterial Cross Section Standards

Standards	Arterial
Vehicle Lanes	10-12 feet ²
On-Street Parking	7 feet
Bike Lanes	6 feet
Sidewalks	6 feet, 8-10 feet in commercial areas
Landscape Strips	Optional 5-6 feet ¹
Median/Center Turn Lane	12-14 feet ²
Neighborhood Traffic Management	Not Appropriate

Note: The Public Works Director may require green street variations of each cross section. These variations may include installing rain gardens or swales, using pervious material for the sidewalks, and in some cases providing a sidewalk on only one side of the street.

1. Developer may provide landscape strips w/ dedication of additional right-of-way and maintenance agreement by developer.

2. On ODOT facilities, the minimum lane width is 12 feet and the minimum median/center turn lane width is 14 feet.

3. The 12-18" space reserved for utility easement along ODOT facilities can be paved or landscaped based on adjacent use.



Arterial with On-Street Parking (60-foot ROW, 40-foot Paved Width)



Arterial with Center Turn Lane – Intersection Treatment (60-foot ROW, 36-foot Paved Width)

Table 12: Arterial (Downtown	District) Cross	Section	Standards

Standards	Arterial
Vehicle Lanes	11-12 feet
On-Street Parking	8 feet ¹
Bike Lanes	Shared
Sidewalks	10-12 feet
Landscape Strips	5-6 feet ²
Median/Center Turn Lane	12-14 feet
Neighborhood Traffic Management	Not Appropriate

Note: The Public Works Director may require green street variations of each cross section. These variations may include installing rain gardens or swales, using pervious material for the sidewalks, and in some cases providing a sidewalk on only one side of the street.

1. On-street parking may be reduced or removed at the discretion of the Public Work Director.

2. Landscape strips will be located within the 10-12 foot sidewalks and consist of street furniture and tree wells.

Exhibit 3: Major Collector Cross Section Toliver Road – OR 213 to N Molalla Avenue Shirley Street – Park Avenue to OR 211 11' Drive lane 6% 6% 6' 6 6% 6½ Drive lane Sidewalk Bike lane Bike lar

Major Collector (60-foot ROW, 34-foot Paved Width)



Major Collector with On-Street Parking (60-foot ROW, 46-foot Paved Width)



Major Collector – Intersection Treatment (60-foot ROW, 46-foot Paved Width)

Table 13: Major Collector Cross Section Standards

Standards	Arterial
Vehicle Lanes	10-11 feet
On-Street Parking	7 feet
Bike Lanes	6 feet
Sidewalks	6 feet
Landscape Strips	None
Median/Center Turn Lane	12 feet
Neighborhood Traffic Management	Not Appropriate

Note: The Public Works Director may require green street variations of each cross section. These variations may include installing rain gardens or swales, using pervious material for the sidewalks, and in some cases providing a sidewalk on only one side of the street.

Exhibit 4: Major Collector (Molalla Forest Road) Cross Section



Major Collector with Shared-use Path (60-foot ROW, 34-foot Paved Width)

Table 14: Major Collector (Molalla Forest Road) Cross Section Standards

Standards	Arterial
Vehicle Lanes	11 feet
On-Street Parking	None
Bike Lanes	None
Sidewalks	12 feet shared path
Landscape Strips	12 ½ feet
Median/Center Turn Lane	12 feet
Neighborhood Traffic Management	Not Appropriate

Exhibit 5: Minor Collector/Neighborhood Route Cross Section



Minor Collector/Neighborhood Route (50-foot ROW, 36-foot Paved Width)



Minor Collector/Neighborhood Route with Center Turn Lane – Intersection Treatment (50-foot ROW, 34-foot Paved Width)

Table 15: Minor Collector/Neighborhood Route Cross Section Standards

Standards	Arterial
Vehicle Lanes	11 feet
On-Street Parking	7 feet
Bike Lanes	Shared
Sidewalks	6 feet
Landscape Strips	None
Median/Center Turn Lane	12 feet
Neighborhood Traffic Management	At discretion of the Public Works Director

Note: The Public Works Director may require green street variations of each cross section. These variations may include installing rain gardens or swales, using pervious material for the sidewalks, and in some cases providing a sidewalk on only one side of the street.

Exhibit 6: Local Street Cross Section



Local Street (50-foot ROW, 34-foot Paved Width)

Table 16: Local Street Cross Section Standards

Standards	Arterial
Vehicle Lanes	10 feet
On-Street Parking	8 feet
Bike Lanes	Shared
Sidewalks	6 feet
Landscape Strips	None
Median/Center Turn Lane	None
Neighborhood Traffic Management	At discretion of the Public Works Director

Note: The Public Works Director may require green street variations of each cross section. These variations may include installing rain gardens or swales, using pervious material for the sidewalks, and in some cases providing a sidewalk on only one side of the street.

Street System Connectivity

As indicated above, there are several areas within Molalla where the existing roadways could be improved and others were new roadways could be constructed to increase the efficiency of the transportation system as well as improve access and circulation for all travel modes.

Figure 6 illustrates the location of the local street connections identified for the Molalla TSP update. Table 17 summarizes the connections and identifies their priority based on the project evaluation criteria. Costs are not provided for these projects as they are anticipated to be constructed by future development. Any local street connectivity projects that are desired to be city-initiated projects should be identified as a high priority and included in the cost-constrained plan.

Project Number	Location	Description	Priority
SC1	3 rd Street	Extend 3 rd Street from Metzler Street to Hart Avenue	Low
SC2	4 th Street	Extend 4 th Street from Metzler Street to Hart Avenue	Low
SC3	8 th Street	Connect 8 th Street to 8 th Street	Low
SC4	Cole Avenue	Extend Cole Avenue from roadway terminus to 5 th Street	Low
SC5	Doug Fir Lane	Extend Doug Fir Lane from roadway terminus to north	Low
SC6	Eric Drive	Extend Eric Drive from roadway terminus to north	Low
SC7	Faurie Street	Extend Faurie Street from roadway terminus to Miller Street	Low
SC8	Lynn Lane	Extend Lynn Lane from roadway terminus to Hezzie Lane	Low
SC9	Patrol Street	Extend Patrol Street from roadway terminus to OR 211	Low
SC10	Rachel Lane	Extend Rachel Lane from roadway terminus to north	Low

Table 17: Street Connectivity by Priority

Roadway Capacity

The roadway capacity projects developed for the Molalla TSP update are summarized in Table 18 and shown in Figure 7. These projects are intended to address existing and projected future transportation system needs for motor vehicles as well as all other modes of transportation that depend on the roadway system for travel, such as pedestrians, bicyclists, transit users, and freight.

Table 18: Motor Vehicle Plan Projects

Project Number	Location	Description	Priority	Cost Estimate
M1	OR 2131	Widen OR 213 from the north city limits to OR 211 to provide a continuous 3-lane cross section	Medium	\$8,825,000
M2	OR 2131	Widen OR 213 from OR 211 to the south city limits to provide a continuous 3-lane cross section	Low	\$4,335,000
M3	OR 2111	Widen OR 211 from the west city limits to OR 213 to provide a continuous 3-lane cross section	Low	\$1,365,000
M4	OR 211 ¹	Widen OR 211 from OR 213 to Shaver Avenue to provide a continuous 3-lane cross section	Medium	\$14,505,000
M5	N Molalla Avenue	Widen N Molalla Avenue from Toliver Road to Shirley Street to provide a continuous 3-lane cross section	Low	\$175,000

M6	Leroy Avenue	Widen Leroy Avenue from Toliver Road to OR 211 to provide a continuous 2-lane cross section per City standards	Low	\$580,000
M7	Mathias Road	Widen Mathias Road from OR 211 to the south city limits to provide a continuous 3-lane cross section	Low	\$1,065,000
M8	Shirley Street	Widen Shirley Street from N Molalla Avenue OR 211 to provide a continuous 2-lane cross section per City standards	Low	\$1,345,000
M9	5 th Street	Construct 5 th Street from Lowe Road terminus to Shaver Avenue	Low	\$2,845,000
M10	5 th Street	Construct 5 th Street from Mathias Road to Feyrer Park Road	Low	\$1,675,000
M11	Commercial Way	Construct Commercial Way from the roadway terminus to Lowe Road	Low	\$365,000
M12	Leroy Avenue	Construct Leroy Avenue from OR 211 to Lowe Road	Low	\$1,170,000
M13	Lowe Road	Reconstruct and widen Lowe Road from OR 213 to Molalla Forest Road to City standards	Low	\$4,170,000
M14	Lowe Road	Reconstruct and widen Lowe Road from Molalla Forest Road to roadway terminus	Low	\$3,265,000
M15	Molalla Forest Road	Reconstruct and widen Molalla Forest Road as a concrete street from OR 211 to Mathias Road to provide a continuous 3-lane cross section	Medium	\$10,740,000
Intersectio	ns			
M16	OR 213/Meadow Road ¹	Reconfigure the intersection to provide a center two-way left-turn lane along OR 213 – coordinate with Project M1	Medium	\$0
M17-1	OR 213/Toliver Road ¹	Widen OR 213 to provide a separate left-turn lane at the northbound and southbound approaches and install a traffic signal with protected or protected-permitted phasing when warranted – Coordinate with Project M1, the signal should be designed to accommodate potential for separate left-turn lanes along Toliver Road ²	High	\$1,000,000
M17-2	OR 213/Toliver Road ¹	Widen Toliver Road to provide separate left-turn lanes at the eastbound and westbound approaches and modify the traffic signal to provide permitted phasing ²	Low	\$850,000
M18	OR 213/OR 2111	Install a separate right-turn lane at the southbound approach if/when adjacent property redevelops ²	Low	\$150,000
M19	OR 211/Ona Way ¹	Widen OR 211 to provide a westbound left-turn lane and install a traffic signal when warranted – Coordinate with Project M4 ²	Low	\$1,000,000
M20	OR 211/Leroy Avenue ¹	Widen OR 211 to provide an eastbound left-turn lane and install a traffic signal when warranted – Coordinate with Project M4 ²	Low	\$1,000,000
M21	OR 211/Ridings Avenue ¹	Widen OR 211 to provide an eastbound left-turn lane – Coordinate with Project M4	Low	\$0
M22-1	OR 211/Molalla Avenue ¹	Install a traffic signal with permitted phasing at all approaches when warranted, the signal should be designed to accommodate the potential for additional separate left- turn lanes at the eastbound and westbound approaches ²	High	\$750,000
M22-2	OR 211/Molalla Avenue ¹	Install separate left-turn lanes at the eastbound and westbound approaches and modify the signal phasing to provide protected or protected-permitted phasing ²	Low	\$150,000
M23	OR 211/Mathias Road ¹	Install a roundabout when warranted ²	Low	\$2,500,000
M24	N Molalla Avenue/ Toliver Road	Widen N Molalla Avenue to provide a center two-way left- turn lane along N Molalla Avenue and install an eastbound right-turn lane when warranted – coordinate with Project M5	Low	\$150,000
M25	N Molalla Avenue/ Shirley Street	Widen N Molalla Avenue to provide a center two-way left- turn lane along N Molalla Avenue and install a westbound right-turn lane when warranted – coordinate with Project M5	Low	\$150,000
M26	N Molalla Avenue/ Heintz Street	Widen N Molalla Avenue to provide a center two-way left- turn lane along N Molalla Avenue and reconfigure the intersection as an all-way stop	High	\$40,000

M27	S Molalla Avenue/ E 5 th Street	Widen S Molalla Avenue to provide a center two-way left- turn lane along S Molalla Avenue and reconfigure the intersection as an all-way stop	High	\$40,000
M28	S Molalla Avenue/ Molalla Forest Road	Install a roundabout when warranted	Low	\$2,500,000
M29	Feyrer Park Road/ Mathias Road	Install a roundabout when warranted	Low	\$2,500,000
		TOTAL High	Priority Costs	\$1,830,000
		TOTAL Medium	Priority Costs	\$34,070,000
	\$33,305,000			
	\$69,205,000			

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.

2. Future evaluation may be required to determine the appropriate form of traffic control at this location.



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KITTELSON & ASSOCIATES Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl Data Source: Metro Data Resource Center, City of Molalla

Attachment A Project Evaluation

PROJECT EVALUATION CRITERIA

The project evaluation criteria were used to evaluate projects included in the planned transportation system and identify priorities for the financially constrained transportation system. The projects were identified as high, medium, and low priority based on how well they address the goals for the transportation system. The evaluation criteria use a qualitative rating method of positive, neutral, and negative as described below.

- Positive: The project supports the intent of or has a positive impact on the related goal and objective. (+1)
- Neutral: The goal and objective does not apply to the project or the project has no impact on the goal and objective. (0)
- Negative: The project does not support the intent of or has a negative impact on the goal and objective. (-1)

Table A-1 presents the goals and objectives and related evaluation criteria that were used to evaluate the projects for the Molalla TSP update.

Objective	Evaluation Criteria	Evaluation Score
Goal 1: Mobility		
	Project could reduce reliance on single occupancy vehicle	+1
A. Reduce reliance on single occupancy vehicles	Project would not impact reliance on single occupancy vehicles	0
	Project could increase reliance on single occupancy vehicle	-1
	Project could reduce reliance on state facilities	+1
B. Reduce reliance on state facilities for making local trips	Project would not impact reliance on state facilities	0
	Project could increase reliance on state facilities	-1
	Project will provide adequate intersection and/or street capacity	+1
C. Provide for adequate intersection and street capacity	Project will have no impact on intersection and/or street capacity	0
Sheet cupacity	Project will reduce intersection and/or street capacity below acceptable levels	-1
Goal 2: Connectivity and Accessibility		
	Project will improve an existing connection	+1
A. Improve existing connections	Project will not improve an existing connection	0
	Project will impede an existing connection	-1
	Project will create a new connection	+1
B. Create new connections	Project will not create a new connection	0
	Project will impede the creation of a new connection	-1
	Project will improve options for transportation disadvantaged	+1
C. Provide for the needs of the transportation disadvantaged	Project will have no impact on transportation disadvantaged	0
	Project will reduce options for transportation disadvantaged	-1
C. Ensure that the transportation systems	Project will improve effectiveness of local and regional freight movement	+1
include adequate facilities to address truck and rail freight mobility needs for the local and regional movement of	Project will have no impact on effectiveness of local and regional freight movement	0
goods and services.	Project will reduce effectiveness of local and regional freight movement	-1
Goal 3: Safety	•	

Table A-1: Evaluation Criteria

	Project will address existing or potential future safety issue	+1
A. Address existing and potential future safety issues	Project will have no impact on an existing or potential future safety issue	0
	Project will worsen existing or potential future safety issue	-1
	Project could reduce potential for future conflicts	+1
B. Reduce potential for future crashes	Project would have no impact on the potential for future conflicts	0
	Project could increase the potential for future conflicts	-1
Goal 4: Health		
	Project will contribute to a comprehensive pedestrian and bicycle system	+1
A. Develop a comprehensive system of nedestrian and bicycle routes	Project will not contribute to a comprehensive pedestrian and bicycle system	0
	Project will impede a comprehensive pedestrian and bicycle system	-1
	Project could encourage the use of active modes of transportation	+1
B. Encourage the use of active modes of transportation	Project would not encourage the use of active modes of transportation	0
	Project could discourage the use of active modes of transportation	-1
	Project could encourage the use of public transportation	+1
C. Encourage the use of public transportation facilities and services	Project would not encourage the use of public transportation	0
transportation facilities and services	Project could discourage the use of public transportation	-1
Goal 5: Strategic Investment		
	Project will preserve and protect the function of locally and regionally significant corridors	+1
A. Preserve and protect the function of locally and regionally significant corridors	Project will not impact the function of locally and regionally significant corridors	0
	Project will have a negative impact on the function of locally and regionally significant corridors	-1
B Preserve and maintain the evisting	Project will preserve and maintain the existing transportation system	+1
transportation system assets to extend	Project will not impact the existing transportation system	0
their useful life	Project will have a negative impact on the existing transportation system	-1
C Ensure adequacy of existing funding	Project can be funded through existing funding sources	+1
sources to serve projected improvement	Project can be funded through known funding sources	0
needs	Project cannot be funded through existing or known funding sources	-1
	Project is eligible for new and/or innovative funding	+1
D. Identify new and innovative funding	Project may not be eligible for new and/or innovative funding	0
sources for transportation improvements	Project is not eligible for new and/or innovative funding	-1
Goal 6: Coordination and Integration		
	Project will support community and local area land use and development goals	+1
A. Design transportation facilities and connections to support adjacent land	Project has no direct relationship to community and local area land use and development goals	0
uses and developments	Project is inconsistent with community and local area land use and development goals	-1
	Project will enhance the quality of potentially affected natural resources	+1
B. Minimize and/or mitigate the effects	Project will not impact the quality of potentially affected natural resources	0
on natural resources and systems	Project will have a negative impact on the quality of potentially affected natural resources	-1
	Project is supportive of County and/or State transportation goals and policies	+1
C. Consider County and State goals and policies in design and implementation of	Project has no direct relationship to County and/or State transportation goals and policies	0
the TSP and associated projects	Project is inconsistent with County and/or State transportation goals and policies	-1
D. Engage community members and organizations in the development and	Project is consistent with or addresses community opinions expresses during project planning and design process	+1

design of transportation facilities identified in the TSP	Project is unrelated to community opinions expresses during project planning and design process	0
	Project is inconsistent with community opinions expresses during project planning and design process	-1

Attachment B Project Evaluation Matrix

Projec	ct			Mobility			Connectivity	and Accessibility	r	Safe	ety	He	alth		Strategic	Investment			Coordination and Ir	itergration				
Numbe	er Location	Solutions	Objectiv	e A Objective B	Objective (C Objective A	A Objective B	B Objective C	Objective D	Objective A	Objective B Obj	ective A Obje	ctive B Obje	ctive C Objective A	Objective B	Objective C	Objective D	Objective A	 Objective B Objective B 	jective C Obj	jective D T	lotal 🛛	Cost	Priority
										Pedesatrian Syst	tem													
										Arterials														
P1	OR 213	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 1	0	1	1	1	0	1	1	15 \$	1,025,000	High
P2	OR 213	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	0	1	1	1	0 1	0	1	1	1	0	1	1	13 \$	725,000	Med
P3	OR 211	Sidewalks	1	1	0	0	1	1	0	0	1	1	1	1 1	0	1	1	1	0	1	1	14 \$	625,000	High
P4	OR 211	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 1	0	1	1	1	0	1	1	15 \$	1,420,000	High
P5	OR 211	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 1	0	1	1	1	0	1	1	15 \$	780,000	High
P6	OR 211	Lighting	1	1	0	0	0	1	0	0	0	1	1	0 0	1	1	0	0	0	0	1	8\$	25,000	Low
P7	N Molalla Avenue	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 1	0	0	1	1	0	1	1	14 \$	400,000	High
P8	S Molalla Avenue	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	0 1	0	0	1	1	1	1	1	14 \$	790,000	High
P9	Molalla Avenue	Lighting	1	1	0	0	0	1	0	0	0	1	1	0 0	1	1	0	0	0	0	1	8\$	25,000	Low
										Collectors														
P10	Toliver Road	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	0 1	0	0	1	1	0	1	1	13 \$	480,000	Med
P11	Toliver Road	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 1	0	0	1	1	1	1	1	15 \$	1,435,000	High
P12	Shirley Street	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	0 1	0	0	1	1	1	0	1	13 \$	1,030,000	Med
P13	Ridings Avenue	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	0 0	0	0	1	1	0	0	1	11 \$	660,000	Med
P14	Leroy Avenue	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	0	1	1	1	0 1	0	0	1	1	1	0	1	12 \$	245,000	Med
P15	E 5 th Street	Sidewalks	1	1	0	0	1	1	0	0	1	1	1	0 1	0	0	1	1	1	0	1	12 \$	280,000	Med
P16	Cole Avenue	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 0	0	0	1	1	1	0	1	13 \$	225,000	Med
P17	Mathias Road	Sidewalks	1	1	0	0	1	1	0	1	1	1	1	0 1	0	0	1	1	0	0	1	12 \$	1,165,000	Med
P18	Frances Street	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 0	0	0	1	1	1	0	1	13 \$	295,000	Med
									Ν	leighborhood Str	reets													
P19	Toliver Drive	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	0	1	1	1	0 0	0	0	1	1	0	0	1	10 \$	235,000	Low
P20	Kennel Avenue	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 0	0	0	1	1	1	0	1	13 \$	110,000	Med
P21	E Heintz Street	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	1 1	0	0	1	1	1	0	1	14 \$	320,000	High
P22	Industrial Way	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	0	1	1	1	0 0	0	0	1	1	1	0	1	11 \$	95,000	Med
P23	Industrial Way	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	0	1	1	1	0 0	0	0	1	1	1	0	1	11 \$	145,000	Med
P24	Stowers Road	Sidewalks – Fill in gaps	1	1	0	1	0	1	0	1	1	1	1	0 0	0	0	1	1	1	0	1	12 \$	390,000	Med
P25	E 7 th Street	Sidewalks	1	1	0	0	1	1	0	0	1	1	1	0 0	0	0	1	1	0	0	1	10 \$	280,000	Low
										Intersections	5													
P26	OR 213/Meadow Drive	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	1	1	1	0	1	1	13 \$	45,000	Med
P27	OR 213/Toliver Road	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	1	1	1	0	1	1	13 \$	45,000	Med
P28	OR 211/Hezzie Lane	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	1	1	1	1	1	1	14 \$	45,000	High
P29	OR 211/Molalla Forest Road	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	1	1	1	1	1	1	14 \$	45,000	High
P30	OR 211/Grange Avenue/Berkley Avenue	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	1	1	1	0	1	1	13 \$	45,000	Med
P31	OR 211/N Cole Avenue	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	1	1	1	1	1	1	14 \$	45,000	High
P32	OR 211/Stowers Road	Enhanced crossing	1	1	0	1	0	1	0	0	-1	1	1	1 1	0	1	1	1	0	1	1	12 \$	45,000	Med
P33	OR 211/Metzler Street	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	1	1	1	0	1	1	13 \$	45,000	Med
P34	Toliver Road/Industrial Way	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	0 1	0	0	1	1	1	1	1	12 \$	25,000	Med
P35	Toliver Road/Zimmerman Lane	Enhanced crossing	1	1	0	1	0	1	0	0	-1	1	1	0 1	0	0	1	1	0	1	1	10 \$	25,000	Low
P36	Tolvier Road/Leroy Avenue	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	0	1	1	1	1	1	13 \$	25,000	Med
P37	Toliver Road/Ridings Avenue	Enhanced crossing	1	1	0	1	0	1	0	0	-1	1	1	1 1	0	0	1	1	0	1	1	11 \$	25,000	Med
P38	Toliver Road/Kennel Avenue	Enhanced crossing	1	1	0	1	0	1	0	1	-1	1	1	1 1	0	0	1	1	1	1	1	13 \$	25,000	Med
P39	Leroy Avenue/Heintz Street	Enhanced crossing	1	1	0	1	0	1	0	0	-1	1	1	0 1	0	0	1	1	1	0	1	10 \$	25,000	Low
P40	E 5th Street/May Street	Enhanced crossing	1	1	0	1	0	1	0	0	-1	1	1	1 0	0	0	1	1	1	0	1	10 \$	25,000	Low
P41	E 5th Street/Stowers Road	Enhanced crossing	1	1	0	1	0	1	0	0	-1	1	1	0 0	0	0	1	1	0	0	1	8 \$	25,000	Low
									Of	f-street Improver	ments													
P42	Molalla Forest Road	Shared-use Path	1	1	0	0	1	1	0	0	1	1	1	0 1	1	0	1	1	1	1	1	14 \$	660,000	High
P43	Molalla Forest Road	Shared-use Path	1	1	0	0	1	1	0	0	1	1	1	0 1	1	0	1	1	1	1	1	14 \$	2,270,000	High
P44	Molalla Western Railway Spur	Shared-use Path	1	1	0	0	1	1	0	0	1	1	1	0 1	1	0	1	1	1	1	1	14 \$	1,800,000	High

Project				Mobility		C	onnectivity and	d Accessibility		Si	afety		Health			Strategic Inv	estment		C	oordination an	d Intergration			
Number	Location	Solutions	Objective A	Objective B	Objective C	Objective A	Objective B	Objective C	Objective D	Objective A	Objective B	Objective A	Objective B	Objective C	Objective A	Objective B	Objective C	Objective D	Objective A	Objective B	Objective C	Objective D	Total	Cost Priority
			-							Bicycle	System												-	
										Arte	erials													
B1	OR 213	Buffered Bike Lane	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	1	15 \$-	High
B2	OR 213	Buffered Bike Lane	1	1	0	0	1	0	0	1	1	1	1	0	1	0	1	1	0	0	1	1	12 \$	155,000 Med
B3	OR 211	Buffered Bike Lane	1	1	0	0	1	0	0	1	1	1	1	0	1	0	1	1	0	0	1	1	12 \$	410,000 Med
B4	OR 211	Buffered Bike Lane	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	1	15 \$	550,000 High
B5	OR 211	Shared-lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	0	1	0	1	1	10 \$	15,000 Low
B6	OR 211	Buffered Bike Lane	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	0	0	1	1	14 \$-	High
B7	N Molalla Avenue	Buffered Bike Lane	1	1	0	0	1	1	0	1	1	1	1	0	1	0	1	1	1	0	0	1	13 \$-	Med
B8	N Molalla Avenue	Shared-lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	0	1	0	0	1	9\$	18,000 Low
B9	S Molalla Avenue	Shared-lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	8\$	11,000 Low
B10	S Molalla Avenue	Buffered Bike Lane	1	1	0	0	1	0	0	1	1	1	1	0	1	0	1	1	0	0	0	1	11 \$-	Med
										Colle	ectors													
B11	Toliver Road	Bike lane	1	1	0	1	0	1	0	1	1	1	1	0	1	0	1	1	1	0	1	1	14 \$-	High
B12	Toliver Road	Bike Lanes	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	1	15 \$-	High
B13	Shirley Street	Bike Lanes	1	1	0	1	1	1	0	1	1	1	1	0	0	0	1	1	1	0	0	1	13 \$	775,000 Med
B14	Leroy Avenue	Bike Lanes	1	1	0	1	1	1	0	1	1	1	1	0	0	0	1	1	1	0	0	1	13 \$	405,000 Med
B15	5 th Street	Bike Lanes	1	1	0	1	1	1	0	1	1	1	1	0	0	0	1	1	1	0	0	1	13 \$-	Med
B16	5 th Street	Bike Lanes	1	1	0	1	1	1	0	1	1	1	1	0	0	0	1	1	1	0	0	1	13 \$-	Med
B17	Future 5 th Street	Bike Lanes	1	1	0	0	1	1	0	1	1	1	1	0	1	0	1	1	1	0	0	1	13 \$-	Med
B18	Ridings Avenue	Shared-lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	0	0	1	9\$	16,000 Low
B19	Cole Avenue	Shared-lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	1	0	0	1	10 \$	18,000 Low
B20	Frances Street	Shared-lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	1	0	0	1	10 \$	17,000 Low
										Neighborh	lood Street													
B21	Meadow Drive	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	8\$	26,000 Low
B22	Village Drive	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	8\$	8,000 Low
B23	Thunderbird Street	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	8\$	10,000 Low
B24	Bronco Avenue	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	8\$	4,000 Low
B25	Toliver Drive	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	8\$	10,000 Low
B26	Kennel Avenue	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	1	0	0	1	10 \$	15,000 Low
B27	Heintz Street	Bicycle Boulevard/Shared Lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	1	1	1	0	0	1	11 \$	17,000 Med
B28	Center Avenue	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	0	0	1	9\$	11,000 Low
B29	Industrial Way	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	1	0	0	1	10 \$	6,000 Low
B30	Industrial Way	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	1	0	0	1	10 \$	7,000 Low
B31	Stowers Road	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	0	0	1	9\$	17,000 Low
B32	E 7 th Street	Shared lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	0	0	1	9\$	135,000 Low
										Local	Street													
B33	Heintz Street	Bicycle Boulevard/Shared Lane	1	1	0	1	0	1	0	0	0	1	1	0	0	1	1	1	1	0	0	1	11 \$	24,000 Med
										Interse	ections													
B34	OR 213/Meadow Drive	Enhanced Crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	0	0	1	1	14 \$	20,000 High
B35	OR 213/Toliver Road	Enhanced crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	1	15 \$	20,000 High
B36	OR 213/OR 211	Enhanced crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	0	0	1	1	14 \$	20,000 High
B37	OR 211/Ona Way	Enhanced Crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	1	15 \$	20,000 High
B38	OR 211/Leroy Avenue	Enhanced crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	1	1	15 \$	20,000 High
B39	N Molalla Avenue/Ridings Avenue	Enhanced crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	0	1	1	0	0	1	13 \$	20,000 Med
B40	N Molalla Avenue/Toliver Road	Enhanced Crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	0	1	1	0	0	1	13 \$	15,000 Med
B41	N Molalla Avenue/Shirley Street	Enhanced Crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	0	1	1	0	0	1	13 \$	15,000 Med
B42	N Molalla Avenue/Heintz Street	Enhanced Crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	0	1	1	0	0	1	13 \$	15,000 Med
B43	S Molalla Avenue/5th Street	Enhanced Crossing	1	1	0	1	1	1	0	1	1	1	1	0	1	0	0	1	0	0	0	1	12 \$	15,000 Med

Project				Mobility		C	Connectivity a	nd Accessibility		Safe	ty oli i o		Health			Strategic I	nvestment			Coordination a	nd Intergration				
Numbe	r Location	Solutions	Objective A	Objective B	Objective C	Objective A	Objective B	Objective C C	Dispective D	Objective A	Objective B	Objective A	Objective B	Objective C	Objective A	Objective B	Objective C	Objective D	Objective A	Objective B	Objective C	Objective D	Total	Cost	Priority
							IVI	Stor Venicle Syste	treet System	Connectivity															
SC1	Faurie Street	Extend north to connect with Miller Street	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1\$		Low
SC2	Eric Drive	Extend from roadway terminus to north	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1\$	-	Low
SC3	Rachel Lane	Extend from roadway terminus to north	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1\$	-	Low
									Capa	acity															
M1	OR 213	Widen OR 213 from the north city limits to OR 211 to provide a continuous 3-lane cross section	-1	-1	1	1	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	0	8\$	7,995,000	0 Low
M2	OR 211	Widen OR 211 from OR 213 to Shaver Avenue to provide a continuous 3-lane cross section	-1	-1	1	1	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	0	8\$	13,250,000	0 Low
M3	N Molalla Avenue	Widen N Molalla Avenue from the north city limits to Heintz Street to provide a continuous 3-lane cross section	-1	1	1	1	0	0	1	1	1	0	0	0	1	1	0	0	1	0	0	0	8 ^{\$}	24,000	0 Low
M4	S Molalla Avenue	Widen S Molalla Avenue from 5th Street to the south city limits to provide a continuous 3-lane cross section	-1	1	1	1	0	0	1	1	1	0	0	0	1	1	0	0	1	0	0	0	8 ^{\$}	275,000	0 Low
M5	Molalla Forest Road	Reconstruct and widen Molalla Forest Road from OR 211 to S Molalla Avenue to provide a continuous 3-lane cross section	-1	1	1	1	0	0	1	0	1	0	0	0	1	1	0	1	1	1	0	0	9 Ś	2.905.000	0 Low
M6	Mathias Road	Widen Mathias Road from OR 211 to the south city limits to provide a continuous 3-lane cross section	-1	0	1	1	0	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	6 \$	1 025 000	0 low
M7	5th Street	Construct a new roadway from OR 211 to 5th Street per city standards	-1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	4 \$	3,900,000	0
M8	OR 213/Meadow Road	Reconfigure intersection to provide a center two-way left-turn lane along OR 213 – coordinate with Project M1	-1	-1	1	0	0	0	1	1	1	0	0	0	1	1	1	0	0	0	1	0	÷ 6	-	Low
M9	OR 213/Toliver Road	Widen OR 213 to provide a separate left-turn lane at the northbound and southbound approaches and install a traffic signal when	-1	-1	1	0	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	0	\$	350,000	0
M10-1	OR 213/OR 211	warranted – Coordinate with Project M1 Install a separate right-turn lane at the southbound approach	-1	-1	1	0	0	0	1	1	0	0	0	0	1	1	1	0	1	0	1	0	7 6 \$	150.000	Low 0 Low
M10-2	OR 213/OR 211	Install a separate right-turn lane at the southbound approach and dual left-turn lanes at the easthound, westhound, and southbound	-1	-1	1	0	0	0	1	1	0	0	0	0	1	1	1	0	1	0	1	0	Ś	1 200 000	0
		approaches Widen OR 211 to provide a westhound left-turn lane and install a	-	-	-	Ũ	Ū	Ū	-	-	0	°,	Ū	0	-	-	-	Ū	-	Ū	-	0	6	1,200,000	Low
M11	OR 211/Ona Way	traffic signal when warranted – coordinate with Project M2	-1	-1	1	0	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	0	7\$	350,000	0 Low
M12	OR 211/Leroy Avenue	traffic signal when warranted – coordinate with Project M2	-1	-1	1	0	0	0	1	1	1	0	0	0	1	1	1	0	1	1	1	0	8\$	350,000	0 Low
M13	OR 211/Ridings Avenue	widen OK 211 to provide an eastbound left-turn lane – coordinate with Project M2	-1	-1	1	0	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	0	7\$	-	Low
M14-1	OR 211(Main Street)/Molalla Avenue	Install a traffic signal when warranted with permitted phasing at all approaches	-1	-1	1	0	0	0	1	1	0	0	0	0	1	1	1	0	1	0	1	0	6 ^{\$}	350,000	0 Low
M14-2	OR 211(Main Street)/Molalla Avenue	Implement left-turn restrictions at the northbound and southbound approaches during peak time periods – coordinate with Project M14	-1	-1	1	0	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	0	7 \$	5,000	D Low
M14-3	OR 211(Main Street)/Molalla Avenue	Implement left-turn restrictions at all approaches during peak time periods – Coordinate with Project M14	-1	-1	1	0	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	0	7 \$	5,000	D Low
M15	N Molalla Avenue/Toliver Road	Widen N Molalla Avenue to provide a center two-way left-turn lane along N Molalla Avenue and install an eastbound right-turn lane when warranted – coordinate with Proiect M3	-1	1	1	0	0	0	1	1	1	0	0	0	1	1	0	0	1	0	0	0	\$ 7	150,000	0 Low
M16	N Molalla Avenue/Shirley Street	Widen N Molalla Avenue to provide a center two-way left-turn lane along N Molalla Avenue and install a westbound right-turn lane when warranted	-1	1	1	0	0	0	1	1	1	0	0	0	1	1	0	0	1	1	0	0	8 \$	150,000	0 Low
M17	N Molalla Avenue/Heintz Street	Widen N Molalla Avenue to provide a center two-way left-turn lane along N Molalla Avenue and reconfigure the intersection as an all-way stop when warranted	-1	1	1	0	0	0	1	1	1	0	0	0	1	1	0	0	1	1	0	0	8 \$	5,000	0 Low
M18	S Molalla Avenue/E 5th Street	Widen S Molalla Avenue to provide a center two-way left-turn lane along S Molalla Avenue and reconfigure the intersection as an all-way stop when warranted	-1	1	1	0	0	0	1	1	1	0	0	0	1	1	0	0	1	1	0	0	\$ 8	5,000	0 Low