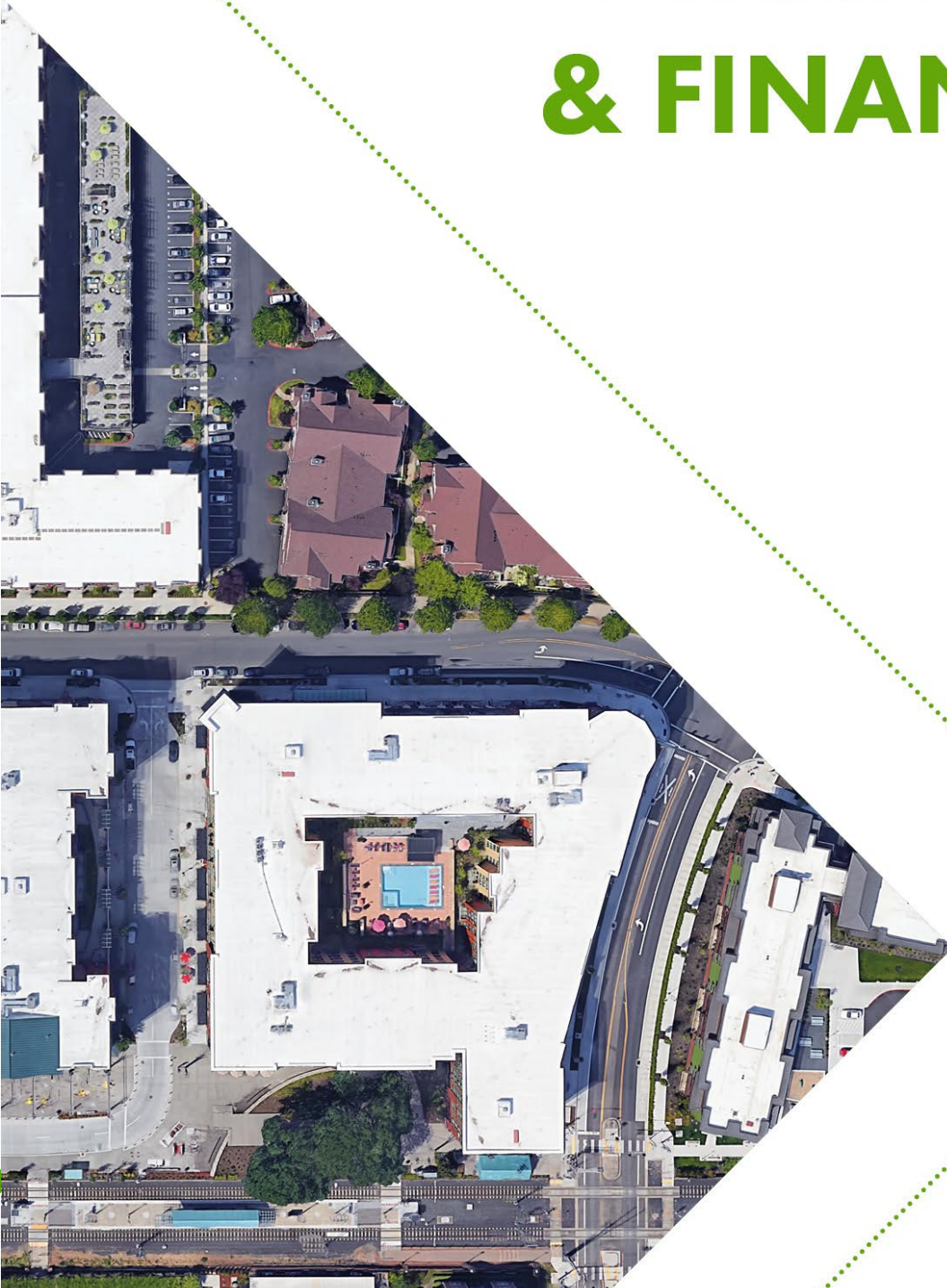


# CHAPTER 6: PROJECT LIST & FINANCING PLAN



## Introduction

Chapter 6 provides the project list and financing plan to implement the system plans outlined in Chapter 5. The TSP project list is the recommended list for the minimum 20-year transportation capital projects. The requirements of a TSP project list and transportation financing program are described in the TPR (OAR 660-012-0040).

In practical application, the list reflects the transportation needs of the community commensurate with full buildout of the current city limits under existing Comprehensive Plan and zoning designations. Whether this takes 20 years or longer, the list is a complete listing of the multi-modal infrastructure projects and estimated costs necessary to fulfill the vision of a completed multi-modal system. The cost estimates and revenue projections undertaken in this TSP are above and beyond previous TSPs, but still include high level assumptions on individual project cost details and carry significant contingency amounts as appropriate for a planning level document.

The financing plan outlines the forecasted revenue to fund the project lists. The transportation financing program includes a discussion of historical and existing transportation funding programs. It identifies projected future funding levels based on the City's current understanding of future land use, policies, and trends. The project list includes a main TSP Road Project List, a supplemental Intersections Improvement List, a Citywide Programs and Projects List, and a list of the City's Cost Obligations for projects in unincorporated Washington County associated with the South Hillsboro area's financing plan.

The main TSP Road Project List and Intersections Improvement List summarize the future capital projects that will help complete the multi-modal transportation system presented in Chapter 5. The TSP Road Project List and Intersection Improvements List include advanced planning-level cost estimates for each project and identify likely funding program(s). This was prepared to estimate the total cost of the future transportation system needed to implement the TSP modal system plans.

In all, the TSP Project List and Intersections Improvement List consist of the following:

- 152 projects on the TSP Road Projects List and 119 projects on the Intersections Improvement List
- 46 road widening projects for safety and capacity by adding through lanes and/or center median and center turn lanes
- 49 new roadway projects for new road segments or road extensions which will be built to current, complete street standards

- 89 projects include widening or road improvements for sidewalks infill and/or bicycle facilities

Together, these projects are expected to include the following new or improved transportation infrastructure:

- 50 lane miles of new roads with complete sidewalk and bike facilities
- 21 lane miles of new through lanes and 15 lane miles of new median or center turn lane
- 72 curb miles of sidewalks and bike facilities infill
- 52 new traffic signals and 47 modifications to existing traffic signals
- 6 new roundabouts
- 45 intersection locations with new turn lanes

## TSP Road Project List

The TSP Road Project List includes roadway projects, bicycle, and pedestrian projects. About two-thirds of the 143 projects were adopted projects carried over from prior versions of the Hillsboro TSP--some of these projects have been updated or adjusted to reflect current needs and incremental improvements completed to date. The remaining one-third of projects are new projects identified in this TSP update process. The project list inclusion, as well as financing plan status, reflect conditions generally as of November 1, 2021.

The TSP Project List is illustrated in **Figure 6-1** and summarized in **Table 6-1**. The key fields in the Project List in **Table 6-1** are as follows:

- **TSP ID** – this field uses the format “xx-xxx” with the first two digits representing the year the project was first adopted into the TSP. The first Hillsboro TSP was adopted in 1999; therefore, the earliest ID numbers begin with “99-xxx”. New projects added in this update are identified as 22-xxx.
- **Project Name, Start, End** – identifies the name and boundaries of the project.
- **Project Description** – describes the basic scope of project.
- **Functional Classification** – Roadway Functional Classification consistent with TSP Functional Classification Plan
- **Associated Intersection Improvements** – Reference to intersection improvement list
- **Project Elements** – summarizes the primary project features (e.g. adding through lanes, turn lanes, bike lane, sidewalk, transit, etc.). Note that most projects cover multiple modes or make upgrade to existing infrastructure.
- **TDT Project List** – lists the Washington County Transportation Development Tax (TDT) list project number; this is intended for calculation of project financing and creditability
- **Cost Estimate - Public Costs thru Contract** – portion of project cost that is anticipated to be funded with public dollars through direct public contracting of construction
- **Cost Estimate - Public Costs thru Credits** – portion of project cost that is anticipated to be funded with public dollars via issuance of TDT and South Hillsboro Transportation System Development Charge (TSDC) credits
- **Cost Estimate - Private** – portion of project cost that is expected to be contributed by private development that is out-of-pocket and not eligible for credit
- **Funding Opportunity**– identifies the likely funding program such as TDT, TSDC, Transportation Utility Fee (TUF), Major Street Transportation Improvement Program (MSTIP), Other, or private development

The TSP Road Project list forms the list of potential projects to build over the next 20 years, or as long as it takes to reach “reasonable buildout” of the City consistent with its currently adopted Comprehensive Plan and Zoning. Various factors may affect how and when a project is built such as project type, cost, and timing. Large scale, higher cost projects on arterials and collectors are often delivered in partnership with other partner jurisdictions through regional programs. Local projects on collectors and local streets, such as sidewalk and bike facility projects, are often implemented with city programs such as the Bicycle Pedestrian Capital Improvement Program (BPCIP). In addition, a number of projects or portions of projects may be delivered in the land use development process, as part of the development conditions of approval.

## Cost Estimates

Advanced planning-level cost estimates were developed for each project on the project list. The cost estimates in the Hillsboro TSP take into account updated local unit costs for private versus public Prevailing Wage construction, specific quantities, and unique elements such as structures and signals. Right-of-way costs were determined by estimating the needed right-of-way using GIS and applying the per square foot cost assumption based on the adjacent land use. Foundational to the project cost summaries presented in this chapter is a highly detailed cost calculation spreadsheet that includes over 60 roadway cross-section templates reflecting City or County jurisdiction, roadway classifications, asphalt or concrete paving, design life pavement section thicknesses, variable widths of features by agency standards, wet/dry weather construction factors, storm water piping and quality facilities, street lighting, street trees, design and construction administration soft costs, right of way costs, overall contingency percentages, and many more factors.

Project cost estimates were identified based on the likely delivery scenario and according to procedures in the Hillsboro Community Development Code (CDC) and Washington County Transportation Development Tax (TDT) regulations. Likely delivery scenarios include whether a project might be publicly delivered, privately delivered, or indirectly publicly funded by the issuance of TDT and TSDC credits. In addition, specific funding programs such as MSTIP, TDT, TUF, etc. are also identified. This approach lays the ground work for matching the project needs with revenue forecast later in this chapter.

The cost estimates are calculated on year 2021 dollars. Future updates to the cost estimates should take into account cost escalation or update the unit cost assumptions and recalculate the estimates. For financially committed projects on published program lists such as Washington County Major Streets Transportation Improvement Program (MSTIP), the latest published project costs figures were used instead of developing new cost estimates.

The total cost estimate for the TSP Project List in **Table 6-1** is \$1,087,816,000. Of this, the share of publicly funded cost is estimated at \$832,952,000 and private development “out-of-pocket” contribution is estimated at \$172,801,000. Public funds in the form of developer funded TDT and TSDC creditable improvements is estimated at \$254,866,000 and public funds collected and used for publicly contracted projects is estimated at \$660,151,000. The cost estimates for each project are summarized in **Table 6-1**. A detailed project list and cost estimates are provided in Appendix I.



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Table 6-1 Road Project List

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
99-000	SE 10th Ave	Walnut	Main	Previously adopted plan project widening from five to seven lanes; ROW cost to include full acquisitions of certain adjacent properties; this is a study corridor for future alternatives on SE 9th/10th Ave	A	N/A		N/A		X		X			\$0	\$0	\$0	\$0					X		Hold
99-001	Century Blvd Extension	Main	Lois	Construct three lane extension of Century from Main to Lois, including new segment to Borwich and realignment from Ariel to Lois. Includes bridge over Rock Creek.	C	N/A		3047							\$17,300	\$0	\$0	\$17,300		X					Near
99-002a	NE Aloclek Dr Complete Street Improvements	Cornelius Pass	Business Park east driveway	Complete missing sidewalks and bike facilities on existing segment from Cornelius Pass Rd to just before curve	C	N/A	10817	3038				X	X		\$2,040	\$0	\$0	\$2,040	X		X				Long
99-002b	NE Aloclek Dr Extension	Business Park east driveway	Walker	Extend Aloclek Dr as three-lane collector; include reconstruction of existing interim curve segment beginning east of business park	C	N/A	10817	3038	X						\$6,070	\$0	\$0	\$6,070	X		X				Long
99-004a	N 1st Ave Improvement	Grant	Hayes	Complete urban upgrade including curb and drainage; improve to buffered bike lanes; turn lanes only where warranted	A	143	10591	1042				X	X		\$1,990	\$0	\$0	\$1,990		X					Long

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
99-004b	N 1st Ave/NW Glencoe Rd Upgrade and Complete Street Improvements	Hayes	Cory	Complete urban upgrade between Hayes and Cory with curbs, sidewalks, and bike lanes; include center turn lane between Hayes and Harewood	A	N/A	10591	1042			X	X	X		\$5,570	\$0	\$0	\$5,570		X					Long
99-004c	NW Glencoe Rd Sidewalk and Bike Lane Gaps	Cory	Evergreen	Complete missing urban sections including curbs, sidewalks, bike lanes on west side	A	N/A	10591	N/A			X	X	X		\$2,460	\$0	\$0	\$2,460		X					Long
99-006	SW 205th Ave Widening - Baseline to Quatama	Baseline	Quatama	Widen road to five lanes with center turn lane and two travel lanes in each direction; include bridge widening across Beaverton Creek; see intersection improvements needs at Baseline & 205th; (cost estimate from latest County TS&L report 2021)	C	233, 305	10592	1019		X		X	X		\$26,810	\$0	\$0	\$26,810		X					Near
99-007	NE Walker Rd Complete Street Improvements	Cornelius Pass	Orchard Park Entrance	Complete three-lane urban upgrade including center turn lane, sidewalks and bike lanes	C	N/A	10823	3039			X	X	X		\$4,560	\$0	\$0	\$4,560	X		X				Long
99-008	NE Airport Rd Complete Street Improvements	Brookwood	Qorvo driveway	Widen to the south to complete center turn lane, sidewalks on south side, and bike lane on both sides	C	150	11145	3034			X	X	X		\$2,070	\$0	\$0	\$2,070	X		X				Long

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
99-011	NE Quatama Rd Complete Street Improvements	69th	205th	Complete three-lane urban cross sections including center turn lane, sidewalks and bike lanes from future NE 69th extension to NE 205th	C	200	10827, 10832	3091			X	X	X		\$2,180	\$1,450	\$540	\$4,170	X		X			X	Long
99-012	NE 69th Ave Extension	69th	Quatama	Extend NE 69th Ave from Main St to corner of NE Qatama St/NE 69th Ave as three-lane collector	C	N/A	10832	3003	X						\$0	\$1,950	\$1,020	\$2,970			X			X	Long
99-013	NE Edgeway Dr Extension	Holly	Walker	Extend three-lane collector	C	N/A	10828	3070	X						\$0	\$5,280	\$2,490	\$7,770			X			X	Long
99-014	NE Century Blvd Over-Crossing at US 26	Bennett	Wagon	Construct three-lane, grade-separated over-crossing across US 26; HDR cost estimate based on three-lane bridge structure; design bridge abutments structure to accommodate future five travel lanes if needed, reconstruct to Wagon Drive as 3L Commercial Collector	C	N/A	10831	3048	X						\$36,880	\$0	\$0	\$36,880		X			X		Long
99-016	NW 185th Ave & NW Walker Rd	Parr/The Crossings Apartments Entrance	Sunset Square/McKinley Elementary Entrance	Widen NW 185th to seven lanes by adding one general travel lane in each direction	A	N/A	11738	3004		X					\$6,650	\$0	\$0	\$6,650		X					Long
99-017	SW Brookwood Ave Complete Street Improvements	Davis	Alexander	Complete three-lane urban cross section without on-street parking; east side with bi-directional bike/ped shared use path; sidewalk only on west side	A	N/A	10820	N/A				X	X		\$590	\$220	\$330	\$1,140			X			X	Near

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
99-018	NE Jacobson Rd Complete Street Improvements	Helvetia	Century	Complete three-lane cross section with center turn lane, sidewalks, and bike facilities; restrict intersection at Helvetia Rd to right-in, right-out in conjunction with construction of north-south collector to Schaaf; see future intersection configuration at Century & Jacobson	C	138	11150	N/A			X	X	X		\$3,660	\$1,520	\$2,620	\$7,800			X			X	Long
99-019	TV Hwy (OR 8) Access Management, Safety, and Transit Improvements	Maple	Cornelius Pass	Safety and transit improvements including lighting, enhanced crossings, bus stop shelters, signal priority, bus pull-outs and queue-jumps; westbound business access and transit lane where feasible; north side driveway consolidation over time as secondary access and connections are established	A	N/A	10846	N/A						X	\$3,500	\$0	\$0	\$3,500					X		Long
99-101	NW Connell Ave Complete Street Improvements	Darnielle	Cory/9th	Construct sidewalks and bike facilities	C	N/A		N/A				X	X		\$8,550	\$0	\$0	\$8,550	X		X				Long

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	Timeframe (Near/Long Term)
99-102	NE Arrington Rd Complete Street Improvements	Jackson School	Cornell	Construct sidewalks; stripe bike lanes within existing pavement	C	N/A		N/A				X	X		\$3,380	\$0	\$0	\$3,380	X		X				Long
99-103	NE Delsey Rd Sidewalks	Grant	Arrington	Construct sidewalks	NR	N/A		N/A					X		\$1,480	\$0	\$0	\$1,480	X						Long
99-104	SE 24th Ave Sidewalks - Bush to Alder	Bush	Alder	Construct sidewalks	L	N/A		N/A					X		\$820	\$0	\$0	\$820	X						Long
99-105	SE Minter Bridge Rd Complete Street Improvements	River	Morgan Rd (UGB)	Improve west side to complete two-lane urban standards	A	320	11282	3090				X	X		\$6,870	\$0	\$0	\$6,870	X		X				Long
99-106	SE Rood Bridge Rd Complete Street Improvements	River	Pipers (UGB)	Improve to two-lane urban standards with sidewalks and bike facilities	C	N/A	11161	N/A				X	X		\$9,290	\$0	\$0	\$9,290	X		X				Long
99-107	SE Witch Hazel Rd Complete Street Improvements	River	Brookwood	Improve to two-lane urban collector standards with sidewalks and bike facilities	C	N/A	11160	N/A				X	X		\$8,350	\$0	\$0	\$8,350	X		X				Long

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
99-108a	NE Sunrise Ln Full Complete Street Improvements - Jackson School to 17th	Jackson School	17th	Widen and improve road to urban standards with sidewalks and bike facilities	C	N/A	11163	N/A				X	X		\$11,180	\$0	\$0	\$11,180	X		X				Long
99-108b	NE Sunrise Ln Sidewalk Gaps - 21st to 25th	21st	25th	Construct missing south side sidewalks	C	N/A	11163	N/A					X		\$600	\$0	\$0	\$600	X		X				Long
99-109	TV Hwy (OR 8) Sidewalk Gap at Rock Creek	32nd	40th	Complete sidewalks and construct walkway across Rock Creek Bridge	A	N/A		N/A					X		\$9,800	\$0	\$0	\$9,800					X		Long
99-110a	NW 13th Ave Sidewalks	Jackson	Garibaldi	Addition of sidewalks.	NR	N/A		N/A					X		\$760	\$0	\$0	\$760	X			X			Long
99-110b	NW Garibaldi St Sidewalks	13th	Ebberts	Improve to urban standards with sidewalks	C	N/A		N/A					X		\$8,500	\$0	\$0	\$8,500	X		X				Long
99-112	NE John Olsen Ave/SW 205th Ave Complete Street Improvements	Stucki extension	Wilkins	Improve east side to complete sidewalk and bike facilities; inclusion of missing short segment of center lane incidental to pricing	C	N/A	11138	3009			X	X	X		\$0	\$750	\$830	\$1,580			X			X	Long

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
99-201	NE 25th Ave Complete Street Improvements	Fire Station/Jones Farm north driveway	Beacon Ct	Improve to three-lane urban arterial standards	A	N/A	11166	N/A				X	X		\$1,260	\$1,580	\$1,120	\$3,960	X		X		X		Near
04-001	Downtown Core Conversion	N/A	N/A	Convert various downtown streets from one-way to two-way; candidate streets include Main, Lincoln, 2nd, 3rd, 4th, and 5th	L, NR, C	N/A	N/A	N/A						X	\$3,560	\$0	\$0	\$3,560					X		Near
04-002	US 26 Widening - Brookwood to Cornelius Pass	Brookwood	Cornelius Pass	Widen Sunset Hwy from four to six lanes by adding one general travel lane in each direction	Freeway	N/A	11393	N/A		X					\$42,000	\$0	\$0	\$42,000					X		Long
04-003	SE Johnson St Upgrade and Complete Streets	Century	Cornelius Pass	Improve road to urban standards, including adding center turn lane and construct sidewalks and bike facilities; signalize Century & Johnson intersection when warranted.	L, C	N/A	10830	N/A			X	X	X		\$12,630	\$0	\$0	\$12,630	X		X				Long
04-004	NE Century Blvd Urban Gaps - Main to Alder	Main	Alder	Complete missing urban sections including sidewalks, bike facilities, and center turn lane where appropriate	C	N/A	10819	3022			X	X	X		\$2,620	\$0	\$0	\$2,620			X				Near
04-005	NE Evergreen Rd Widening	Glencoe	15th	Widen roadway from three to five lanes to match Evergreen cross section east of NE 15th; sidewalks on UGB side (south) only	A	100, 101, 102	10836	3071 (South JSR to 15th)		X					\$15,610	\$0	\$0	\$15,610		X					Long
04-101	NE 17th Ave Upgrade and	Barberry	Sunrise	Improve to urban standards with curb and sidewalk.	NR	N/A	11164	N/A				X	X		\$2,450	\$0	\$0	\$2,450	X		X				Near

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
	Complete Streets																								
04-102	NE 18th Ave Sidewalks	Lincoln	Grant	Construct sidewalks	NR	N/A		N/A					X		\$1,400	\$0	\$0	\$1,400	X						Near
04-103	SE 24th Ave Complete Streets and Bridge Upgrade - Maple to Main	Maple	Main	Improve road to urban standards including upgrade to bridge over Turner Creek; construct sidewalks and bike facilities	C	N/A	11162	N/A				X	X		\$11,460	\$0	\$0	\$11,460	X		X				Near
04-105	SE Drake St Complete Streets - Imlay to 67th	Imlay	67th	Improve remaining unimproved sections to urban standards; complete sidewalk and bike gaps	C	N/A	11155	N/A				X	X		\$2,390	\$0	\$0	\$2,390	X		X				Long
04-106	SE Imlay Ave Upgrade and Complete Streets	TV Hwy	Lois	Improve to urban standards with sidewalks and bike facilities	C	N/A	11157	N/A				X	X		\$12,090	\$0	\$0	\$12,090	X		X				Long
04-109	SE Davis Rd Upgrade and Complete Streets	Brookwood	Century	Improve to three-lane, urban standards with sidewalks and bike facilities.	C	N/A	10838	N/A				X	X		\$0	\$1,330	\$3,440	\$4,770			X			X	Near
04-111	NW Dennis Ave Upgrade and Sidewalks	Main	Jackson	Reconstruct road to current standard with curb and sidewalks, widen road as needed to complete.	L	N/A		N/A					X		\$1,360	\$0	\$0	\$1,360	X			X			Long

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
04-112	NW Forest St Upgrade and Sidewalks	Freeman	Connell	Reconstruct road to current standard with curb and sidewalks, widen road as needed to complete.	L	N/A		N/A					X		\$1,550	\$0	\$0	\$1,550	X			X			Long
04-115	W Main St Upgrade and Complete Streets	Oak	Ebberts	Improve road to urban standards with sidewalks and bike lanes; include necessary improvements at railroad crossing	C	N/A		N/A					X		\$8,410	\$0	\$0	\$8,410	X		X				Near
04-116	SE Bentley St Upgrade and Complete Streets	32nd	Brookwood	Improve road to urban standards with sidewalks and bike lanes; see additional turn lane needs at intersection of Brookwood & Bentley; signalize when warranted	C	348	11151	N/A				X	X		\$10,050	\$0	\$0	\$10,050	X		X				Long
04-117a	NE Brogden St Upgrade and Complete Streets	28th	43rd	Improve road to urban standards; construct sidewalks and bike lanes; see related Brogden Street extension project	C	N/A	11141	N/A				X	X		\$12,950	\$0	\$0	\$12,950	X		X				Long
04-117b	NE Brogden St Extension	43rd	Brookwood	Extend collector road from 43rd Ave to Brookwood; construct traffic signal at Brookwood in conjunction with road extension; see related Brogden improvement project west of 43rd	C	153	11141	N/A	X						\$880	\$0	\$0	\$880	X		X				Long
04-118	NW Ebberts Ave Upgrade and Sidewalks	Jackson	Garibaldi	Reconstruct road with curb and sidewalks	L	N/A		N/A					X		\$1,370	\$0	\$0	\$1,370	X			X			Long
04-119	SE Spruce St Sidewalks	21st	28th	Construct sidewalks	L	N/A		N/A					X		\$1,420	\$0	\$0	\$1,420	X						Long

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
04-201a	NE 15th Ave Upgrade and Complete Streets - Sunrise to Griffin Oaks	Sunrise	Griffin Oaks	Improve road to urban standards; construct sidewalks and bike facilities	C	N/A	11165	N/A				X	X		\$3,770	\$0	\$0	\$3,770	X		X				Long
04-201b	NE 15th Ave Bike Lanes and Urban Gap - Griffin Oaks to Evergreen	Griffin Oaks	Evergreen	Stripe bike lanes--Widen intersection approaches to accommodate bike lanes and turn lanes; upgrade unimproved section on east side to urban standards	C	N/A	11165	N/A				X	X		\$1,000	\$0	\$0	\$1,000	X		X				Long
04-203	SE Century Blvd Turn Lane and Bike Lanes - Wonder Way to Alexander	Wonder Way	Alexander	Stripe continuous center turn lane and widen for on-street bike facilities	C	N/A	10839	3051				X			\$1,840	\$0	\$0	\$1,840	X		X				Near
04-208	SE River Rd Bike Lanes	TV Hwy	Rock Creek Bridge	Construct bike facilities; see turn lane needs at River & Rood Bridge intersection	A	350		N/A				X			\$18,810	\$0	\$0	\$18,810		X					Long
12-001	NE Walker Rd Extension and Realignment	Overlook	Amberglen	Construct three-lane extension of Walker from Overlook to Amberglen Pkwy realignment with bike facilities and sidewalks; see AmberGlen "Crossroads" LPA	C	237	11275	3040	X						\$0	\$4,140	\$1,960	\$6,100			X			X	Near

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	Timeframe (Near/Long Term)
12-002	NE 194th Ave/NE Amberglen Pkwy Extension and Realignment	Von Neumann	Cornell	Construct three-lane realignment of Amberglen Pkwy with sidewalks and bike facilities; see AmberGlen "Crossroads" LPA	C	N/A	11277	3005	X						\$0	\$5,350	\$2,530	\$7,880			X			X	Near
12-003	NE Amberglen Pkwy Extension	Stucki Extension	Wilkins	Construct three-lane extension with bike facilities and sidewalk	C	235	10825	3007	X						\$0	\$1,530	\$1,090	\$2,620			X			X	Long
12-004	NE Stucki Ave Extension and Realignment	205th	Walker	Construct three-lane extension with new intersections at Gibbs, Wilkins extension, Amberglen extension, and 205th; see AmberGlen "Crossroads" LPA	C	236, 239, 240	11276	3098, 3100	X						\$5,620	\$12,690	\$3,390	\$21,700			X			X	Long
12-005	NE Gibbs Dr Extension	Compton Dr	Walker	Construct new three-lane extension from NE Stucki Ave Extension to intersection of NE 101st Ave & Walker	C	242	11363	N/A	X						\$0	\$1,940	\$4,760	\$6,700			X			X	Near
12-006	NE Walker Rd Widening and Extension	Amberglen	185th	Reconstruct road from two to five lanes and extend as part of AmberGlen "Crossroads" improvements (see LPA); reserve seven-lane right-of-way from Stucki extension to 185th as alternative to and dependent on feasibility of "Wilkins extension" to 185th. Realign five lane Stucki Ave from Walker to Cornell.	A	214, 215	10569	3040, 1076	X						\$22,850	\$0	\$0	\$22,850		X					Long
12-007	NE Wilkins St Extension	Amberglen	Stucki Extension	Construct three-lane extension with new intersections at Amberglen Pkwy and Stucki extension	C	235, 239	10829	3103	X						\$0	\$2,710	\$1,500	\$4,210			X			X	Long

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
12-009	NE Holly St Sidewalks	Edgeway	185th	Construct north side sidewalks	C	N/A		N/A					X		\$0	\$80	\$90	\$170			X			X	Near
12-101	NE Starr Blvd Complete Streets	Evergreen	Meek	Complete three-lane improvements to interim two-lane road with center turn lane, sidewalks, and bike facilities; see intersection improvement needs at Evergreen and Huffman	C	108, 131	10822, 11364	3027			X	X	X		\$0	\$10,780	\$4,420	\$15,200			X			X	Near
12-102	NE 30th Ave Extension	Evergreen	Meek	Construct three-lane road; see intersection improvement needs at Evergreen and Huffman	C	107, 130	11388	3031	X						\$0	\$16,310	\$7,420	\$23,730			X			X	Near
12-103	NE Huffman St Starr Widening - Brookwood to Starr		Brookwood	Widen from two to five lanes; preserve seven-lane right-of-way	A	117, 131	10821	3079		X	X	X	X		\$0	\$7,460	\$2,220	\$9,680			X			X	Near
12-104	NE Huffman St 30th Extension - Starr to 30th		Starr	Improve to three-lane road with bike facilities and sidewalks (assume two-lane interim road in place); new intersection with NE 30th Ave; preserve five-lane right-of-way	A	130	10821	3079	X						\$6,060	\$4,810	\$940	\$11,810			X			X	Near
12-107	NE Imbrie Dr Widening	Evergreen	Cornelius Pass	Widen on south side for one additional eastbound through lane--final geometry to consist of two eastbound through lanes, one westbound through lane, and one center turn lane; no bike lanes to be added. Coordinate with second left-turn lane at Evergreen & Imbrie intersection.	C	112	11389	3080		X					\$4,890	\$0	\$0	\$4,890			X				Near

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunit						
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	Timeframe (Near/Long Term)
12-109	NW Meek Rd Upgrade and Complete Streets - UGB (Storey Creek) to Starr	Storey Creek (UGB)	Starr	Reconstruct as three-lane collector; see intersection adjustment at NE Starr; preserve five-lane right-of-way for future growth	C	N/A	11387	3089			X	X	X		\$0	\$16,090	\$7,900	\$23,990			X			X	Near
12-113	NW Helvetia Rd Upgrade and Complete Streets	Schaaf	West Union	Widen road to three-lane arterial standard; stripe center turn lane at Schaff and Pubols for southbound left turn lane; complete east side sidewalks to Jacobson; sidewalk on UGB side (east) only; preserve five-lane right-of-way for future growth	A	N/A	11149	N/A			X	X	X		\$5,610	\$3,300	\$2,020	\$10,930			X			X	Long
12-114	NW West Union Rd Upgrade and Complete Streets - Helvetia to Century	Helvetia	Century	Widen road to three-lane arterial standard; sidewalk on UGB side (south) only; preserve five-lane right-of-way for future growth	A	124, 140	11341	N/A			X	X	X		\$10,660	\$6,280	\$3,830	\$20,770			X			X	Long
13-001	SE Cornelius Pass Rd Extension - Kinnamon to Vermont	Kinnamon	Vermont	Construct five-lane road extension with new intersections at Kinnamon, McInnis, Butternut Creek, Deline, and Vermont; bridge at Butternut Creek (bridge is part of MSTIP Bonding program)	A	330, 359, 360, 361, 329	11920	3055	X						\$0	\$11,270	\$7,830	\$19,100		X	X			X	Near

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
13-002	SE Cornelius Pass Rd Extension - Vermont to Rosedale	Vermont	Rosedale	Construct five-lane road extension with new intersections at Murphy and Rosedale; box culvert at south tributary of Butternut Creek	A	362, 328	11921	3055	X						\$0	\$9,730	\$3,650	\$13,380			X			X	Long
13-003	SE Century Blvd - SE 65th to Kinnaman roundabout	SE 65th	Kinnaman (roundabout)	Construct 3 lane extension of Century Blvd	C	326		3052	X						\$0	\$1,560	\$890	\$2,450			X			X	Near
13-004a	SE Century Blvd Upgrade - Kinnaman roundabout to Reserve Golf Course entrance	Kinnaman (roundabout)	Reserve Golf Course Entrance	Widen road to three-lane collector standard; project cost does not include roundabout at Kinnaman--see intersection improvement list for roundabout cost; 1,530' from Kinnaman to golf course entrance within UGB on both sides.	C	N/A	11394	3020			X	X	X		\$5,220	\$11,980	\$2,120	\$19,320			X			X	Near
13-004b	SE Century Blvd Upgrade - Reserve Golf Course entrance to Rosedale	Reserve Golf Course Driveway	Rosedale	Widen road to three-lane collector standard including bridge over Butternut Creek and box culvert at tributary south of Rosa; sidewalk on UGB side (east) only	C	325, 356, 324	11394	3020			X	X	X		\$14,050	\$10,250	\$2,570	\$26,870			X			X	Long
13-005	SE Murphy Rd	Century	209th	Construct new three-lane road with new intersections at Century, Cornelius Pass, and 209th Ave	C	N/A	11384	3102	X						\$0	\$9,310	\$4,700	\$14,010			X			X	Long
13-006	SE Reed Dr	Kinnaman	McInnis	Construct bike facilities on two-lane South Hillsboro Neighborhood Route	NR	N/A		N/A	X						\$0	\$420	\$0	\$420			X				Near

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
13-007a	SE Crescent Dr	209th	Cornelius Pass	Construct bike facilities on two-lane South Hillsboro Neighborhood Route; assume all asphalt (residential) due to exclusive residential Newland Phase 2	NR	0		N/A	X						\$0	\$1,250	\$0	\$1,250			X				Near
13-007b	SE 83rd Ave	SE Crescent Dr	McInnis	Construct bike facilities on two-lane South Hillsboro Neighborhood Route; assume all asphalt (residential) due to exclusive residential Newland Phase 2	NR	357		N/A	X						\$0	\$1,430	\$0	\$1,430			X				Near
13-008a	SE Kinnaman Rd Extension	Century	Reed	Construct three-lane road extension through South Hillsboro including intersections at Cornelius Pass Rd, 209th Ave, and two intersecting neighborhood routes	C	330, 363, 364	11272	3085	X						\$0	\$800	\$1,400	\$2,200			X			X	Near
13-008b	SE Kinnaman Rd Extension	Reed	Cornelius Pass	Complete construction of three-lane road extension through South Hillsboro including intersections at Cornelius Pass Rd, 209th Ave, and two intersecting neighborhood routes (South side of road already constructed.)	C	330, 363, 364	11272	3085	X						\$0	\$970	\$1,330	\$2,300			X			X	Near
13-008c	SE Kinnaman Rd Extension	Cornelius Pass	209th	Construct three-lane road extension through South Hillsboro including intersections at Cornelius Pass Rd, 209th Ave, and two intersecting neighborhood routes	C	330, 363, 364	11272	3085	X						\$0	\$1,640	\$2,840	\$4,480			X			X	Near

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
13-009	SE 209th Ave Widening and Complete Streets - Blanton to Kinnaman.	Blanton	Kinnaman	Widen roadway from two to five lanes; addition of bike facilities (cycle track west side and buffered bike lane east side) and sidewalks, street lighting, landscaping, bus stop upgrades, drainage, and new signals at Blanton and Kinnaman; funded through MSTIP 3e.	A	315, 335, 336	10553	1020		X	X	X	X		\$3,720	\$0	\$660	\$4,380		X				X	Near
13-010	SE 67th Ave West Side Improvements	Blanton	Century	1/2 Street construction to 200' south of Blanton and 275' south of Genrosa to Provence and construction of 3 lane realignment from Provence to Century	C	N/A		3018							\$0	\$1,210	\$1,380	\$2,590			X			X	Near
13-011	SE Century Blvd & TV Hwy Intersection Improvement	Alexander	Johnson	Widen Century Blvd to five lanes by adding second northbound and southbound through lanes across intersection at TV Hwy; project includes sidewalks and bike facilities, improved drainage, street lighting, and upgrade to rail crossing, traffic signals, and bus stops; funded through MSTIP Bonding	C	311	11137	3049		X	X	X			\$14,600	\$0	\$0	\$14,600		X					Near
13-012a	SW Rosedale Rd UGB Edge Upgrade	Century	East of Cornelius Pass where UGB changes from one side to both sides of Rosedale	Widen and improve road to three-lane collector standard; box culvert at Rosedale Creek west crossing; sidewalk on UGB side (north) only; westbound cycle track, eastbound (UGB edge) buffered bike lane	C	N/A	11911	3096			X	X	X		\$3,830	\$2,610	\$920	\$7,360			X			X	Long

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	Timeframe (Near/Long Term)
13-012b	SW Rosedale Rd Upgrade	East of Cornelius Pass where UGB changes from one side to both sides of Rosedale	209th	Widen and improve road to three-lane collector standard; box culvert at Rosedale Creek east crossings; sidewalk on both sides within UGB; cycle track both directions	C	N/A	11911	3096			X	X	X		\$0	\$4,720	\$3,150	\$7,870			X			X	Long
13-013	SE 209th Ave Widening and Complete Streets - Kinnaman to Vermont	Kinnaman	Vermont	Widen and improve road from two/three to five lanes with sidewalks and bike facilities (cycle track west side and buffered bike lane east side); include bridge widening across Butternut Creek; intersection improvements include new roundabout at McInnis and new signals Deline and Vermont	A	352, 354, 334	11752	1020		X	X	X	X		\$14,840	\$2,980	\$430	\$18,250		X	X			X	Near
13-014	SE 209th Ave Widening and Complete Streets - Vermont to Farmington	Vermont	Farmington	Widen and improve road from three to five lanes with sidewalks and bike facilities (cycle track west side and buffered bike lane east side); improve culvert at Rosedale Creek; improve intersections including new signal at Murphy and modified signal at Rosedale	A	355, 333, 332	11753	1020		X	X	X	X		\$9,670	\$2,520	\$440	\$12,630		X	X			X	Long
13-015	McInnis Ln	Century	209th	Construct bike facilities on new neighborhood route according to South Hillsboro standards	NR	N/A		N/A	X						\$0	\$2,480	\$0	\$2,480			X				Near
14-002	NE 47th Ave Complete Streets	Ihly	Hidden Creek	Improve road and construct sidewalks and bike facilities; improve bridge or culvert at Dawson Creek to address flooding issue	C	N/A	11908	3110				X	X		\$8,910	\$0	\$0	\$8,910	X		X				Long

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
16-001	SW Farmington Rd Complete Streets	209th	700 ft west of 209th intersection (UGB)	Widen and improve road to complete north side sidewalk and bike facilities (cycle track north side, buffered bike lane south side); complete approximately 350' of missing center turn lane and taper to match two lane	A	N/A		N/A		X	X	X	X		\$680	\$270	\$330	\$1,280			X			X	Long
16-002	Butternut Creek Pkwy	Century	SE 78th	Construct bike facilities on new neighborhood route according to South Hillsboro standards	NR	N/A		N/A	X						\$0	\$1,680	\$0	\$1,680			X				Near
16-003	Deline St	Butternut Creek Pkwy	209th	Construct bike facilities on new neighborhood route according to South Hillsboro standards	NR	N/A		N/A	X						\$0	\$1,560	\$0	\$1,560			X				Near
16-004	Vermont St	Cornelius Pass	SE 81st	Construct bike facilities on new neighborhood route according to South Hillsboro standards	NR	N/A		N/A	X						\$0	\$1,030	\$0	\$1,030			X				Near
16-005	NE Brookwood Pkwy Widening	Ihly	Cornell	Widen from three to five lanes by adding one general travel lane in each direction; project includes widening bridge over light rail; rebuild bike facilities as cycle track	A	113	11140	N/A		X		X	X		\$19,030	\$0	\$0	\$19,030		X					Long
16-006	NE 25th Ave Improvements	Cornell	Griffin Oaks	Widen to add concrete center turn lane and improve sidewalks and bike facilities; start at northern limits of County MSTIP-3d project at Cornell intersection and end where current three-lane section begins south of Griffin Oaks; concrete street for city arterial	A	N/A	11905	N/A			X	X	X		\$10,620	\$0	\$0	\$10,620			X				Long

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	Timeframe (Near/Long Term)
16-101	NE Huffman St Extension - NE 30th to NW 273rd	NE 30th	NW 273rd	Construct three-lane road; preserve five-lane right-of-way	A	N/A	11890	3079	X						\$7,060	\$5,610	\$1,070	\$13,740			X		X	X	Near
16-103	NE Schaaf Rd Improvement	Helvetia	New North-South Collector	Reconstruct gravel road to three-lane collector	C	N/A	11147	3106 - ROW Only	X						\$2,650	\$5,790	\$1,760	\$10,200			X			X	Near
22-001	NE Jackson School Rd Improvements	Evergreen	Waible Creek (UGB)	<p>Widen and improve road to three-lane arterial standard; sidewalk on UGB side (east) only; cycle track on east side and buffered bike lane on west side; additional refinement for future intersection with Huffman extension and NE 25th Ave extension</p> <p>Jackson School Road transitions south of the bridge over Waible Creek from two-lanes to a three-lane cross-section. The southbound through lane on Jackson School Rd would turn into the right-turn lane at the Evergreen Rd intersection. Maintain shared southbound left/through lane and north-south split phase at this intersection</p>	A	102, 161, 162	11907	3113			X	X	X		\$0	\$3,080	\$5,607	\$8,687		X				X	Near

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
22-003	NE 25th Ave Realignment	NE Beacon Ct	Evergreen	Construct three-lane realignment away from airport Runway Protection Zone (RPZ); see HIO Master Plan; additional refinement needed for the two intersections of NE 25th and NE 15th Ave on Evergreen; includes cost estimate of traffic signal, Project 104 (from Jackson East Estimates)	A	103, 104	11906	3115						X	\$7,895	\$0	\$0	\$7,895			X		X	X	Near
22-004	NE 30th Ave Improvement	Springer	Evergreen	Improve road to three-lane collector standard with sidewalks and bike facilities; see HIO Master Plan	C	N/A		N/A			X	X	X		\$0	\$1,060	\$2,010	\$3,070			X			X	Near
22-005a	NE Springer St Improvement	30th	End of existing segment	Improve existing segment to three-lane collector standard with sidewalks and bike facilities; see HIO Master Plan	C	N/A		N/A	X						\$0	\$830	\$1,530	\$2,360			X		X	X	Near
22-005b	NE Springer St Extension	End of existing segment	Brookwood	Extend three-lane road to signalized intersection at Brookwood Library; see HIO Master Plan	C	0		N/A	X						\$0	\$3,920	\$7,500	\$11,420			X		X	X	Long
22-006	NE Cornell Rd Realignment	East of 34th	West of Brookwood	Realign Cornell Rd to avoid airport Runway Protection Zone (RPZ); see HIO Master Plan	A	N/A		N/A						X	\$7,750	\$0	\$0	\$7,750					X		Near
22-007	NE Cornell Rd Safety and Access Management	Main	17th	Long-term access management and safety improvements (e.g. center median barrier); future intersection improvements to be determined possibly to allow U-turn or roundabout accommodations at Lincoln and at Arrington or Grant	A	149, 147, 154		3065						X	\$2,320	\$0	\$0	\$2,320			X				Long

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	Timeframe (Near/Long Term)
22-008	NW West Union Rd Widening and Improvements - Century to Cornelius Pass	Century	Cornelius Pass	Widen and improve roadway to five-lane arterial standard; sidewalk on UGB side (south) only; cycle track on south side and buffered bike lane on north side	A	212	11341	N/A		X	X	X	X		\$7,350	\$4,260	\$2,640	\$14,250		X	X			X	Long
22-009	NE Ronler Dr Extension	Cornelius Pass	SunTech Corp Park	Construct three-lane extension; connect with NE 79th Ave and extend to SunTech Corporate Park drive aisle	C	204	11280	N/A	X						\$0	\$1,570	\$3,040	\$4,610			X			X	Long
22-010	NE Wilkins St Extension Alternative - 185th to Gibbs	Gibbs	185th (at Parr)	Construct new two-lane road; last 1,100 feet approaching 185th Ave to be three lane (center turn lane); see intersection improvement at 185th for additional intersection turn lane needs; this project serves as alternative to seven-lane right-of-way protection and future widening of Walker Rd between Amberglen Pkwy and 185th	C	220	10829	3103*	X						\$21,740	\$0	\$0	\$21,740		X					Long
22-012	SE Brookwood Ave	Davis	South UGB	Upgrade to three-lane arterial; eastern half-street with TDT/Development 50/50	A	345		N/A			X	X	X		\$5,940	\$0	\$0	\$5,940			X				Near
22-017	NE Cornell & NE Brookwood Intersection and NE 48th Ave Intersection	Brookwood	48th	At Brookwood & Cornell: add second southbound through lane and extend receiving lane to Veterans Dr intersection, add second eastbound and westbound left-turn lanes, add northbound right-turn lane; at Cornell & 48th: add westbound right-turn lane starting at Elam Young west to 48th	A	113, 114, 116	11170	3045			X				\$11,170	\$0	\$0	\$11,170		X	X				Near

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
22-018	NE Veterans Dr Extension	Brookwood	Belknap	Construct three-lane extension east of Brookwood to connect to Elam Young Pkwy via Belknap Ct; require bridge over Dawson Creek; improve Belknap Ct to two-lane collector standard and remove on street parking to accommodate bike lanes	C	N/A		N/A	X						\$14,500	\$0	\$0	\$14,500		X					Long
22-021	US 26 at NE 185th Eastbound On-Ramp Widening	185th	US 26 Eastbound	Widen on-ramp to two full lanes and allow shared right-turn from outside northbound through lane on 185th	Freeway Ramp	223		N/A			X				\$0	\$2,260	\$230	\$2,490			X				Long
22-022	NE 185th Ave Northbound Auxiliary Lane - Evergreen to US 26	Evergreen	US 26 Eastbound Ramp	Extend northbound on-ramp auxiliary lane from current taper to Evergreen	A	223		3109*			X				\$0	\$720	\$80	\$800			X				Long
22-024	E Main St Eastbound Auxiliary Lane	26th	32nd	Widen to construct eastbound auxiliary lane; signal modification at intersection at NE 28th Ave; possible restriction of NE 30th Ave southbound to right-in, right-out if Main St widening eliminates center turn lane at 30th	A	N/A		N/A		X					\$2,020	\$0	\$0	\$2,020			X				Long
22-028	SE Alexander St Bike/Ped Improvements	Brookwood	160' east of SE Silver Oak (west edge of Roseway Industrial Park)	Construct about 850' of north side sidewalks and bike facilities	C	N/A	11159	N/A				X	X		\$1,270	\$0	\$0	\$1,270	X		X				Long

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	Timeframe (Near/Long Term)
22-029	SE Walnut St Sidewalks	Armco	1st	Construct missing sidewalks	C	N/A		N/A					X		\$790	\$0	\$0	\$790	X		X				Long
22-030	NE Elam Young Pkway Bike/Ped Improvements	Cornell (West)	Cornell (East)	Construct sidewalks on inside loop; need widening at intersections to accommodate bike lanes; stripe bike lanes as part of pavement management program south of light rail tracks; future cycle track	C	N/A		N/A				X	X		\$3,010	\$0	\$0	\$3,010	X		X				Long
22-031	SE Borwick St Sidewalks	Century	Main	Widen road to construct missing curbs and sidewalks.	C	N/A		N/A					X		\$1,830	\$0	\$0	\$1,830	X		X				Long
22-032a	NE Alder Sidewalks - Orenco Townsite	Century	68th	Construct sidewalks on both sides of NE Alder according to the Orenco Townsite Sidewalk Plan in 12.62.300 of Hillsboro Community Development Code	NR	N/A		N/A					X		\$790	\$0	\$0	\$790	X		X				Long
22-032b	NE 69th Sidewalks - Orenco Townsite	Dogwood	Rock Creek Bridge	Construct sidewalk on west side only according to the Orenco Townsite Sidewalk Plan in 12.62.300 of Hillsboro Community Development Code	C	N/A		N/A					X		\$450	\$0	\$0	\$450	X		X				Long
22-032c	NE Dogwood Sidewalks - Orenco Townsite	Century	69th	Construct missing sidewalks on both sides of NE Dogwood according to the Orenco Townsite Sidewalk Plan in 12.62.300 of Hillsboro Community Development Code	C	N/A		N/A					X		\$670	\$0	\$0	\$670	X		X				Long
22-033	NE 25th Ave Northbound Gap	28th	Hillsboro Market Center driveway	Complete missing northbound lane, sidewalk, and bike lanes	A	N/A		3002		X					\$1,370	\$0	\$0	\$1,370			X				Near

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
22-034	NE Cherry Dr Sidewalks	67th	72nd	Construct missing north side sidewalks	C	N/A		N/A					X		\$530	\$100	\$130	\$760	X		X			X	Long
22-035	SE 24th Ave Sidewalks	River	TV Hwy	Construct missing east side sidewalks	C	N/A		N/A					X		\$430	\$0	\$0	\$430	X		X				Long
22-036	SE Morgan Rd Upgrade and Sidewalks	300' east of Galaxy	Singing Woods	Improve north side to urban standard (south side outside UGB)	C	N/A		N/A					X		\$2,120	\$0	\$0	\$2,120	X		X				Long
22-037	NW Jackson St Upgrade and Sidewalks	NW 13th	Freeman	Reconstruct road with curbs and sidewalks	NR	N/A		N/A					X		\$1,910	\$0	\$0	\$1,910	X			X			Long
22-038	NE 21st Ave Sidewalk Gaps	Cornell	Sunrise	Complete missing sidewalks	C	N/A		N/A					X		\$250	\$0	\$0	\$250	X						Near
22-039	NE 32nd Ave Sidewalk Gaps	Main	Brogden	Complete missing sidewalks	NR	N/A		N/A					X		\$400	\$0	\$0	\$400	X						Long
22-040	NE 43rd Ave Sidewalk Gaps	Main	Brogden	Complete missing sidewalks	NR	N/A		N/A					X		\$570	\$0	\$0	\$570	X						Long
22-041	SE 30th Ave Sidewalks	TV Hwy	32nd	Construct missing west side sidewalks	NR	N/A		N/A					X		\$350	\$0	\$0	\$350	X						Long
22-042	SW Dennis Ave Improvements	UP Railroad ROW (north side)	Walnut	Improve road to urban standards	C	N/A		N/A				X	X		\$1,980	\$0	\$0	\$1,980	X		X				Long

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
22-043	SW Dennis Ave Emergency Access Extension	Wood	UP Railroad ROW (north side)	Construct Dennis Ave extension and railroad crossing to serve as emergency secondary access for Wood St	C	N/A		N/A						X	\$3,000	\$0	\$0	\$3,000			X				Long
22-045	NE 21st Ave/NE Hillaire Dr Sidewalks	Grant	Cornell	Construct sidewalks	L	N/A		N/A					X		\$2,200	\$0	\$0	\$2,200	X						Long
22-049	NE Wagon Dr Complete Street Improvements	Century	Cornelius Pass	Construct new westbound (north side) cycle track and reconstruct sidewalk for entire length; construct new eastbound (south side) cycle track and sidewalk from Century to Croeni and from Five Oaks to Cornelius Pass	C	N/A		N/A				X	X		\$8,890	\$0	\$0	\$8,890	X		X				Long
22-050	SE Drake Rd Sidewalk Gap	280' west of Imlay	Imlay	Complete missing urban sections	C	N/A	11156	N/A					X		\$830	\$0	\$0	\$830	X		X				Long
22-053	SW Rosedale Rd Safety Improvements - River to Century	River	Century	Augment shoulders to improve two-lane safety	C	N/A		3094						X	\$3,330	\$0	\$0	\$3,330			X				Long
22-054	NE Wilkins St South Sidewalks	205th	Amberglen	Complete south side sidewalks along Goal 5 natural resources	C	N/A		N/A					X		\$0	\$120	\$140	\$260			X			X	Long
22-055	SE Patterson St Sidewalk Gap	Rock Creek	Imlay	Complete remaining south side 400' urban street gap	NR	N/A		N/A					X		\$400	\$0	\$0	\$400	X			X			Long

TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						Timeframe (Near/Long Term)
									New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	
22-056a	SW Baseline (OR 8) St Sidewalk Gaps	SW 17th	Dennis	Complete missing north side sidewalks and curbs; south side gaps included in ODOT 2021-2024 STIP (project 21608)	A	N/A		N/A					X		\$1,080	\$0	\$0	\$1,080					X		Long
22-056b	SW Oak St (OR 8) Sidewalk Gaps	SW 17th	Dennis	Complete missing sidewalks and curb	A	N/A		N/A					X		\$1,230	\$0	\$0	\$1,230					X		Long
22-057	S 1st Ave (OR 219) Complete Street Improvements	Railroad	Wood St/Jackson Bottom Entrance	Construct sidewalks and bike facilities	A	151		N/A				X	X		\$4,510	\$0	\$0	\$4,510					X		Long
22-058	Neighborhood Route	229th	Murphy	Construct bike facilities on new neighborhood route according to South Hillsboro standards	NR	N/A		N/A	X						\$0	\$2,120	\$0	\$2,120			X				Near
22-061	NE Huffman St Extension - NW 273rd to Jackson School Road	NW 273rd	Jackson School Rd	Construct three-lane Arterial; preserve five-lane right-of-way; cost estimate represents roundabout at Jackson School Rd	A	161	11890	3079	X						\$0	\$5,870	\$16,054	\$21,923			X			X	Near
22-062	NE 25th Ave Extension	Evergreen	Jackson School Rd	Construct three-lane Arterial; also see 25th Ave realignment project (22-003)	A	104, 162	11906	3115	X						\$0	\$2,937	\$8,147	\$11,083			X		X	X	Near
22-063	NE Sewell Ave	Evergreen	Meek Rd	Construct two-lane Commercial and Industrial Collector; alignment north of Waible Creek to be determined	C	163		3114	X						\$0	\$4,114	\$18,738	\$22,852			X			X	Near

									Project Elements						Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities						
TSP ID	Project Name	Start	End	Project Description	Functional Classification	Associated Intersection	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	New Road	Through Lane	Turn Lane/ Median	Bicycle	Pedestrian	Other	Public Contracted Cost	Public Cost thru Credits	Private Development Cost	Total Project Cost	TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private	Timeframe (Near/Long Term)
22-064	NE Evergreen Rd	NE 15th	NE 25th	Construct side-by-side lefts; cost estimate includes cost of signal modification at NE 15th Ave	A	103		3071						X	\$1,916	\$0	\$472	\$2,388			X			X	Near
22-071	SE Brookwood Ave Extension	250' south of Davis Rd	River Rd	Construct three-lane Residential Collector; cycletrack on both sides except for a buffered bike lane along the segment between SE Pheasant Ave and SE Hazeltine Ave; include bridge over Gordon Creek; include east side half street from Davis to Oakhurst	C	382, 383		3119	X						\$0	\$13,325	\$7,615	\$20,940			X			X	Near
22-072	SE Pheasant St	River Rd	Brookwood Extension	Construct cycletrack on Neighborhood Route	NR	381			X						\$0	\$1,376	\$0	\$1,376			X			X	Near
22-073	SE Hazeltine Ave	Brookwood Extension	WHVS Southern Boundary	Construct two-lane Residential Collector	C	383		3132	X						\$0	\$867	\$2,742	\$3,609			X			X	Near
22-074	SE River Rd	WHVS Northern Boundary	WHVS Southern Boundary	Widen and improve road to three-lane arterial standard; sidewalk within UGB only (entire eastern frontage and partial west side); cycle track on east side and buffered bike lane on west side; include 18'-wide open bottom arch culvert at Gordon Creek; see Intersection Improvement List for intersection control types	A	381,382		3131			X	X	X		\$0	\$5,717	\$2,196	\$7,913			X			X	Near
TOTAL															\$66,150	\$254,870	\$172,800	\$1,087,810							

## Intersection Improvements List

The Intersection Improvements List supplements the TSP Road Project List by identifying locations where additional improvements are anticipated to be needed at intersections. These improvements may include additional turn lanes, new roundabouts, new traffic signals, modification to existing signals, and traffic signal modifications. Most intersection improvements are expected to be constructed as part of larger capital road projects. Standalone improvements or traffic signal projects will be constructed when warranted based on traffic volumes, and safety and capacity needs.

Intersection Improvement List locations are illustrated in **Figure 6-2** and summarized in **Table 6-2**. The key fields in the Intersection Improvement List in **Table 6-2** are as follows:

- **TSP ID** – this field uses the format “xxx”. Unlike the TSP Project List, this is a simple identification number and does not imply project adoption year.
- **N/S Street and E/W Street** – identify intersection location
- **Project Description** – describes the basic scope of project.
- **Related Road Improvements** – cross reference the road project that the intersection improvement is considered an “add on” to.
- **TDT Project List** – lists the Washington County TDT list project number; this is intended for project financing and creditability calculation purposes
- **Project Elements** – identifies the primary project feature—whether there are turn lanes, new traffic signal, modification of existing signal, or new roundabout
- **Cost Estimate - Public Costs Contracted Cost** – portion of project cost that is anticipated to be funded with public dollars through direct public contracting for construction
- **Cost Estimate - Public Costs thru Credits** – portion of project cost that is anticipated to be funded with public dollars via issuance of TDT or South Hillsboro TSDC credit
- **Cost Estimate - Private** – portion of project cost that is expected to be contributed by private development that is out-of-pocket and not eligible for credit
- **Funding Opportunity** – identifies the likely funding program such as TDT, TSDC, MSTIP, Other, or private development

The total cost estimate for Intersection Improvements List costs in **Table 6-2** is \$136,324,000. Of this, the share of publicly funded cost is estimated at \$127,679,000 and private development “out-of-pocket” contribution is estimated at \$8,623,000. Public funds in the form of developer funded TDT and TSDC creditable improvements is estimated at \$49,389,000 and public funds collected and used for publicly contracted projects is estimated at \$78,290,000. The cost

estimates for each project are summarized in **Table 6-2**. A detailed project list and cost estimates are provided in Appendix I.



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Table 6-2 Intersection Project List

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
100	Glencoe	Evergreen	Stripe second westbound-to-southbound left-turn lane as part of Evergreen five-lane widening; add second southbound receiving lane on Glencoe; add northbound right-turn lane	04-005	N/A	X		X			\$1,400	\$0	\$0	\$1,400	X			
101	Jackson School (west)	Evergreen	Second eastbound and westbound through lanes as part of Evergreen five-lane widening (04-005); replace signal; no new turn lanes	04-005	3071			X			\$470	\$0	\$0	\$470	X			
102	Jackson School (East)	Evergreen	Second eastbound and westbound through lanes as part of Evergreen five-lane widening (04-005); replace signal; keep westbound right turn lane	04-005	3071			X			\$470	\$0	\$0	\$470	X			
103	15th	Evergreen	Intersection modification as part of NE 25th Ave realignment and extension; additional analysis refinement needed together with 25th Ave intersection cost estimate included in Evergreen project 22-064	22-003, 04-005, 22-064	N/A	X		X			\$0	\$0	\$0	\$0		X	X	X
104	25th	Evergreen	New intersection as part of 25th Ave realignment and extension; additional analysis and refinement needed together with 15th Ave intersection; add eastbound left and convert northbound inside right-turn lane to a through lane; cost estimate included in 25th Ave realignment project 22-003	22-003, 22-062	N/A	X	X				\$0	\$0	\$0	\$0		X	X	X
107	30th	Evergreen	Install traffic signal; construct exclusive right-turn in eastbound, westbound, and southbound approaches; protect right-of-way for second southbound left-turn lane	12-102	3033	X	X				\$0	\$1,100	\$90	\$1,190		X		X
107a	30th	Evergreen	Install traffic signal	12-012	3033	X	X				\$0	\$410	\$40	\$450		X		X
107b	30th	Evergreen	Construct channelized right-turn in eastbound, westbound, and southbound, approaches with 100 feet of storage; protected right-of-way for second southbound left-turn lane (from Jackson East estimates)	12-012	3033	X	X				\$0	\$767	\$160	\$927		X		X
108	Starr	Evergreen	Install traffic signal	12-101	3029		X				\$0	\$410	\$40	\$450		X		X

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
109	Brookwood	Evergreen	Add northbound right-turn lane	N/A	N/A	X		X			\$0	\$270	\$120	\$390		X		X
111	Century	Evergreen	Second eastbound left and second corresponding receiving lane, second westbound left and second corresponding receiving lane	N/A	3072	X		X			\$0	\$2,330	\$190	\$2,520		X		X
112	Imbrie	Evergreen	Add second eastbound left-turn lane and a westbound right-turn lane; construct in conjunction with Imbrie widening project	12-107	3073	X		X			\$2,630	\$0	\$0	\$2,630		X		
113	Brookwood	Veterans	Construct southbound left turn lane. As part of Veterans Dr extension project (19-018), east leg (westbound approach) to have one left-turn and one shared through-right lane, and construct southbound left-turn lane; as part of Cornell & Brookwood intersection project (19-017) , extend second southbound through lane from Brookwood & Cornell intersection past Veterans intersection, and maintain dedicated southbound right-turn lane	16-005, 22-017, 22-018	N/A	X		X			\$720	\$0	\$0	\$720	X			
117	Brookwood	Huffman	Second eastbound through lane as part of Huffman widening projet (12-103); construct second eastbound receiving lane and second eastbound left-turn lane; activate (re-stripe) second westbound through lane, second northbound and southbound left-turn lanes	12-103	3111	X		X			\$0	\$1,680	\$140	\$1,820		X		X
118	IP/Acumed	Huffman	Construct new public street stub at drive aisle of IP/Acumed; includes second EB receiving lane, parking lot reconstruction	N/A	3111		X				\$3,540	\$0	\$0	\$3,540		X		X
119	Brookwood	US 26 EB ramps	Construct second northbound right-turn lane onto eastbound on-ramp	N/A	TBD	X		X			\$0	\$2,290	\$160	\$2,460		X		X
120	Brookwood	US 26 WB ramps	Modify signal control, lane configuration, signage and advance warnings; improve Brookwood west side bicycle and pedestrian facilities safety and operations across ramp	N/A	TBD	X		X			\$0	\$1,123	\$262	\$1,386		X		
124	Helvetia	West Union	Reconstruct intersection as roundabout	12-114	N/A				X		\$1,510	\$0	\$0	\$1,510		X		

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
125	25th	Cornell	Construct second southbound left-turn lane, convert northbound right to second northbound through, construct second northbound receiving lane; extend bike lanes on west leg for 300'; MSTIP-3d committed project	N/A	3030	X		X			\$5,900	\$0	\$0	\$5,900	X			
130	30th	Huffman	New intersection; construct traffic signal	12-102, 12-104, 16-101	3032		X				\$0	\$1,115	\$260	\$1,376		X		X
131	Starr	Huffman	Construct traffic signal; left-turn lanes in all four approaches and separate westbound right-turn lane; improvement in conjunction with construction of Huffman and Starr	12-101, 12-103	3028		X				\$0	\$410	\$40	\$450		X		X
136	Starr	Meek	Remove Stop sign from northbound Starr; add Stop signs for eastbound and westbound Meek; add Meek Rd eastbound "Right Turn Permitted Without Stopping" sign; modify radius on southwest corner	12-101	3027					X	\$0	\$170	\$20	\$190		X		X
138	Century	Jacobson	Construct traffic signal; construct northbound and eastbound right-turn lanes	N/A	3083	X	X				\$0	\$590	\$50	\$640		X		X
139	Croeni	Jacobson	Construct traffic signal when warranted	N/A	3084		X				\$0	\$410	\$40	\$450		X		X
140	Century	West Union	Add eastbound and westbound left-turn lanes as part of West Union widening; construct traffic signal when warranted	12-114	N/A	X	X				\$0	\$640	\$280	\$920		X		X
142	1st	Baseline	Convert northbound approach from two through lanes to one left-turn and one through; signal modification	N/A	N/A			X			\$120	\$0	\$0	\$120			X	
143	1st	Grant	Construct traffic signal; stripe westbound left-turn lane	N/A	3000		X				\$470	\$0	\$0	\$470		X		
146	28th	Grant	Remove on-street parking and stripe eastbound left-turn lane; add signal head	N/A	TBD			X			\$50	\$0	\$0	\$50		X		

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
147	Cornell	Grant	Remove on-street parking and stripe eastbound and westbound left-turn lanes; construct Cornell northbound U-Turn lane as part of Cornell Rd access management	22-007	3077	X		X			\$1,000	\$0	\$0	\$1,000		X		
148	10th	Baseline	Stripe second westbound through lane, eliminate on street parking	N/A	N/A			X			\$0	\$30	\$10	\$50		X		X
149	Cornell	Lincoln	Construct future signal; need additional refinement study	22-007	N/A		X				\$470	\$0	\$0	\$470		X		
150	Brookwood	Airport	Construct traffic signal	99-008	3034		X				\$470	\$0	\$0	\$470		X		
151	OR 219	Wood	Construct traffic signal when warranted	22-057	N/A		X				\$470	\$0	\$0	\$470		X		
152	Brookwood	Dawson Creek	Reconstruct to provide pedestrian access and crossing at intersection	N/A	N/A					X	\$0	\$80	\$40	\$110		X		
153	Brookwood	Brogden	Construct traffic signal in conjunction with future extension of Brogden St	04-117	N/A		X				\$470	\$0	\$0	\$470		X		
154	21st	Cornell	Construct traffic signal and simultaneously restrict 17th Ave to right-in/right-out only; need additional refinement study	N/A	N/A		X				\$470	\$0	\$0	\$470		X	X	
155	17th	Cornell	Restrict 17th Ave to right-in/right-out with construction of traffic signal at 21st Ave	N/A	N/A					X	\$100	\$0	\$0	\$100		X	X	
160	Crescent Trail	Brookwood	Construct grades seperated overcrossing structure for trail	N/A	410					X	\$3,500	\$0	\$0	\$3,500			X	
161	Jackson School (east)	Huffman	Install traffic signal or roundabout. In either configuration, include a northbound approach right-turn lane on Jackson School Rd with 100-feet of storage; westbound through lane on Huffman St becomes a right-turn lane at intersection; cost of roundabout (higher of the two) included in Huffman project 22-061	22-001, 22-061	3116	X	X		X							X		X

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
162	Jackson School (east)	NE 25th	Install traffic signal shared left/through/right in northbound and southbound approaches.	22-001, 22-062	3117		X									X		X
163	Sewell	Huffman	New intersection with traffic signal; shared left/through/right in northbound and southbound approaches.	22-061, 22-063	TBD		X				\$0	\$1,123	\$262	\$1,385		X		X
164	Sewell	Evergreen	Install traffic signal	22-063	3114		X				\$0	\$310	\$140	\$450		X		X
200	Cornelius Pass	Quatama	Eastbound and westbound left-turn lanes as part of Quatama widening project; traffic signal modification	99-011	3091			X			\$120	\$0	\$0	\$120		X		X
203	Cornelius Pass	Cornell	Construct westbound right-turn lane and second southbound left-turn lane	N/A	N/A	X		X			\$0	\$1,540	\$680	\$2,220		X		X
204	Cornelius Pass	Ronler	Construct southbound left-turn lane in conjunction with Ronler Dr extension; new westbound approach to consists of one left-turn and one through lane	22-009	N/A	X		X			\$0	\$290	\$130	\$420		X		X
205	Cornelius Pass	Evergreen	Construct second westbound left-turn lane	N/A	N/A	X		X			\$0	\$670	\$290	\$960		X		X
209	Cornelius Pass	Wagon	Construct second eastbound right-turn lane; coordinate intersection improvement with future Power Line Trail and Electric Railway Trail siting and crossing location	N/A	N/A	X		X			\$0	\$280	\$120	\$410		X		X
212	Cornelius Pass	West Union	Construct second eastbound left-turn lane; activate second NB through lane by constructing second NB receiving lane	22-008	N/A	X		X			\$0	\$1,160	\$500	\$1,670		X		X
213	John Olsen	Walker	Construct eastbound right-turn lane	N/A	N/A	X		X			\$0	\$140	\$160	\$300		X		X

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
214	Stucki	Walker	New signalized intersection of Walker Rd extension and Stucki Ave extension; proposed geometry as follows: eastbound one left, two throughs, one right; westbound one left, two throughs, one right; northbound one left, two throughs; southbound two lefts, one through, one right; part of AmberGlen Crossroads project	12-004, 12-006	N/A	X	X				\$2,880	\$0	\$0	\$2,880	X			
215	185th	Walker	Construct second eastbound, westbound, southbound, and northbound left-turn lanes; third northbound and southbound through lanes as part of 185th Ave widening project; westbound right-turn lane; coordinate with Walker Rd and 185th Ave widening projects	99-016, 12-006	3004	X		X			\$9,560	\$0	\$0	\$9,560	X			
217	John Olsen	Cornell	Construct eastbound right-turn lane	N/A	N/A	X		X			\$0	\$440	\$200	\$640		X		X
220	185th	Parr	Future Wilkins extension from Gibbs to 185th Ave to be constructed as two-lane collector; add center turn lane for last 1,100 feet approaching 185th Ave; construct 250 foot of storage for second eastbound left-turn lane at intersection and convert right-turn to shared through-right	22-010	3103*	X		X			\$470	\$0	\$0	\$470		X		
221	185th	Cornell	Construct eastbound right-turn lane; convert southbound right-turn lane to third southbound through lane and extend third southbound receiving lane to Bronson Creek	N/A	3068	X		X			\$0	\$1,150	\$110	\$1,260		X		X
222	185th	Evergreen	Construct second eastbound and westbound through lanes (begin westbound at Town Center Dr); restripe for second northbound left-turn lane; part of future 185th interchange refinement study and Sunset Hwy/northern arterial study	N/A	N/A	X		X			\$0	\$1,250	\$550	\$1,790		X		X
224	185th	US 26 WB	Previous AmberGlen analysis recommended third northbound through lane and exclusive southbound right with storage lane; defer to future interchange refinement study for further analysis; no cost estimate associated with this intersection	N/A	N/A			X			\$0	\$0	\$0	\$0			X	
225	185th	Bronson	Previous AmberGlen analysis recommended widening of westbound approach to include two left-turn lanes and one shared through-right lane; defer to future interchange refinement study for further analysis; no cost estimate associated with this intersection	N/A	N/A					X	\$0	\$0	\$0	\$0			X	

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
233	205th	Quatama	Restripe second northbound and southbound through lanes as part of 205th Ave widening	99-006	N/A			X			\$100	\$0	\$0	\$100	X			
234	John Olsen	Wilkins	Add eastbound left-turn lane	N/A	N/A	X		X			\$750	\$0	\$0	\$750		X		X
235	Amberglen	Wilkins	Future intersection to be signalized and lane configuration to consist of one left-turn and one shared through-right in all four approaches; no additional turn lanes; improvement in conjunction with extensions of Amberglen Pkwy and Wilkins	12-003, 12-007	3008		X				\$0	\$410	\$40	\$450		X		X
236	Amberglen	Stucki	Install traffic signal	12-004	3006		X				\$0	\$410	\$40	\$450		X		X
237	Amberglen	Walker	New intersection part of AmberGlen Crossroads; install traffic signal; see AmberGlen Crossroads LPA for lane configuration	12-002	3041		X				\$0	\$410	\$40	\$450		X		X
238	Overlook	Cornell	Install traffic signal	N/A	3067		X				\$470	\$0	\$0	\$470		X		X
239	Stucki	Wilkins	New signalized intersection; lane configuration to be determined during design phase	12-004	3099		X				\$0	\$410	\$40	\$450		X		X
240	205th	Stucki	Install traffic signal in conjunction with extension of Stucki Ave	12-004	3101		X				\$0	\$410	\$40	\$450		X		X
241	185th	Holly	Construct southbound right-turn lane; convert eastbound approach to one left-turn and one shared left-right lane	N/A	N/A	X		X			\$0	\$270	\$120	\$400		X		X
242	Gibbs/101st	Walker	Install traffic signal	12-005	N/A		X				\$0	\$310	\$140	\$450		X		X
243	Town Center	Evergreen	Widen to add second westbound through lane between 185th and Town Center Dr; align two eastbound receiving lanes with future two eastbound through lanes from west of 185th	N/A	3108	X		X			\$940	\$0	\$0	\$940		X		X

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
244	Edgeway	Walker	Install traffic signal	99-013, 12-006	N/A		X				\$0	\$310	\$140	\$450		X		
302	Brookwood	Main	Construct northbound right-turn lane and southbound right-turn lane each with 175' storage; extend second westbound and southbound receiving lanes to improve lane utilization ; traffic signal modification	N/A	N/A	X		X			\$1,710	\$0	\$0	\$1,710	X			
303	Century	Main	Century Blvd extension south of Main St to be built without exclusive right-turn lane in any approaches on opening day; construct eastbound, westbound, and southbound exclusive right-turn lanes at later time; no modification to Century Blvd bridge	N/A	N/A	X		X			\$0	\$3,483	\$0	\$3,483		X		X
304	Cornelius Pass	Main	Construct second northbound and southbound left-turn lanes	N/A	N/A	X		X			\$2,720	\$0	\$0	\$2,720		X		
305	206th	Baseline	Construct second eastbound and southbound left-turn lanes, and exclusive westbound and southbound right-turn lanes; improvement as part of 205th widening project	99-006	N/A	X		X			\$3,240	\$0	\$0	\$3,240	X			
306	185th	Baseline	Construct westbound right-turn lane, eastbound-to-northbound double left-turn lanes, second westbound-to-southbound left-turn lane; convert outer eastbound through-right lane to right-turn only and remove eastbound-to-northbound "jug-handle" east of intersection at Stepping Stone	N/A	N/A	X		X			\$6,510	\$0	\$0	\$6,510	X		X	
308	13th/River	TV Hwy	Construct eastbound right-turn lane and second northbound left-turn lane; include railroad crossing modification	N/A	3001	X		X			\$4,290	\$0	\$0	\$4,290		X		X
310	Brookwood	TV Hwy	Construct westbound left-turn lane and modify signal; construct bus pullout on west side	N/A	3118	X		X			\$0	\$3,121	\$691	\$3,812		X		X
312	67th	TV Hwy	Convert southbound left-turn to shared left-right	N/A	N/A			X			\$0	\$80	\$40	\$110		X		
313	Cornelius Pass	TV Hwy	Construct 400' southbound right-turn lane plus taper and modify signal	N/A	TBD	X		X			\$0	\$6,578	\$0	\$6,578		X		

						Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
317	185th	TV Hwy	Construct second left-turn lane on all four approaches, and add eastbound and northbound right-turn lane; monitor for westbound right-turn lane; candidate for long-term future grade separation	N/A	N/A	X		X			\$8,800	\$0	\$800	\$9,600	X			X
318	River	Rosedale	Construct roundabout	N/A	3093				X		\$1,510	\$0	\$0	\$1,510		X		
320	Minter Bridge	River	Construct northbound right-turn lane	99-105	3090	X		X			\$560	\$0	\$0	\$560		X		
322	Brookwood	Witch Hazel	Construct median and prohibit eastbound left-, westbound left-, and southbound left-turns; keep northbound left	N/A	TBD					X	\$0	\$87	\$0	\$87		X		
323	Century	Alexander	Future traffic signal installed as part of TV Hwy & Century Blvd Bonded MSTIP project (13-011); cost of signal already paid for by SoHi development and TDT credits issued; additional future project (not part of Bonded MSTIP project) to widen Alexander for 400' on each side of intersection to add 7' buffered bike lane on both sides	N/A	3050			X			\$1,210	\$0	\$0	\$1,210		X		X
324	Century	Rosedale	Construct eastbound left-turn lane; separate southbound left- and right-turns	13-004b	3095	X					\$490	\$0	\$0	\$490		X		X
326	Century	Kinnaman	Construct roundabout	N/A	3019				X		\$0	\$1,030	\$90	\$1,120		X		X
327	67th	Alexander / Blanton	Include northbound left-turn lane as part of 67th Ave widening, Add Sidewalk on Alexander	13-010	3018	X					\$0	\$250	\$20	\$270		X		X
328	Cornelius Pass	Rosedale	New signalized intersection (previously roundabout in SoHi TSDC list)	13-002	3064		X				\$0	\$410	\$40	\$450		X		X
329	Cornelius Pass	Vermont	New signalized intersection	13-001	3062		X				\$0	\$410	\$40	\$450		X		X

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
330	Cornelius Pass	Kinnaman	New signalized intersection	13-008	3058		X				\$0	\$410	\$40	\$450		X		X
332	209th	Farmington	As part of 209th Ave widening, construct southbound right-turn lane and second southbound left-turn lane, and shadow lane on Grabhorn (south leg) opposite second southbound left; preserve right-of-way for northbound right-turn lane; modify signal	13-014	3076	X		X			\$1,400	\$0	\$0	\$1,400	X			
333	209th	Rosedale	Modify traffic signal; second nothbound and southbound through lanes in conjunction with widening of 209th Ave	13-014	3097			X			\$280	\$0	\$0	\$280	X			
334	209th	Vermont	Install traffic signal	13-013	3015		X				\$0	\$410	\$40	\$450		X		X
335	209th	Kinnaman	Install traffic signal and construct intersection in conjunction with construction of Kinnaman extension; proposed lane configuration to include exclusive left-turn lanes on all four approaches, two through lanes each in northbound and southbound directions, and one through lane each in eastbound and westbound directions. East leg improved through bonded MSTIP project.	13-009	3011		X				\$0	\$410	\$40	\$450		X		X
336	209th	Blanton	Construct intersection in conjunction with Blanton St extension and widening of 209th Ave; proposed lane configuration to include exclusive left-turn lanes on all four approaches, two through lanes each in northbound and southbound directions, and one through lane each in eastbound and westbound directions; eastbound right-turn lane on TSDC project list	13-009	3010	X					\$540	\$0	\$0	\$540		X		
337	209th	Crescent	Contruct southbound right turn lane.	13-009	1020	X					\$540	\$0	\$0	\$540	X			
345	Brookwood	Davis	Install traffic signal; construct southbound left-turn lane and westbound left-turn in conjunction with Brookwood widening and Davis widening projects; future extension of Brookwood to complete improvement in south leg of intersection	Future Brookwood extension (WHVS) & 99-017	N/A		X				\$0	\$471	\$0	\$471		X		

TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
						Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
347	Imlay	TV Hwy	Install traffic signal	N/A	3081		X				\$470	\$0	\$0	\$470		X		
348	Brookwood	Bentley	Install traffic signal; construct eastbound-to-northbound left-turn lane	04-116	3042		X				\$470	\$0	\$0	\$470		X		
349	River	Witch Hazel	Install traffic signal	N/A	3104		X				\$470	\$0	\$0	\$470			X	
350	River	Rood Bridge	Construct eastbound right-turn lane	04-208	3092	X		X			\$1,110	\$0	\$0	\$1,110		X		
351	Century	Johnson	Install traffic signal	N/A	3026		X				\$470	\$0	\$0	\$470		X		
352	209th	McInnis	Construct roundabout	13-013	3012				X		\$1,510	\$0	\$0	\$1,510		X		X
354	209th	Deline	Install traffic signal	13-013	3014		X				\$0	\$410	\$40	\$450		X		X
355	209th	Murphy	Install traffic signal	13-014	3016		X				\$0	\$410	\$40	\$450		X		X
356	Century	Murphy	Install traffic signal	13-004b	3021		X				\$0	\$410	\$40	\$450		X		X
357	83rd	Blanton	Install traffic signal	13-007	3043		X				\$0	\$410	\$40	\$450		X		X
359	Cornelius Pass	McInnis	Install traffic signal	13-001	3059		X				\$0	\$410	\$40	\$450		X		X
360	Cornelius Pass	Butternut Creek	Install traffic signal	13-001	3060		X				\$0	\$410	\$40	\$450		X		X

						Project Elements					Cost Estimate (Includes Design/Const/ROW) 2021 Cost Year, in \$1000s				Potential/Likely Funding Opportunities			
TSP ID	N/S Street	E/W Street	Project Description	Related TSP Road Project	TDT Project List ID (Dec '21)	Turn Lanes	New Signal	Signal Modification	Roundabout	Other	Public Contracted Cost	Public Costs Thru Credits	Private Development Cost	Total Project Cost	MSTIP	TDT/TSDC	Other	Private
361	Cornelius Pass	Deline	Install traffic signal	13-001	3061		X				\$0	\$410	\$40	\$450		X		X
362	Cornelius Pass	Murphy	Install traffic signal	13-002	3063		X				\$0	\$410	\$40	\$450		X		X
363	83rd	Kinnaman	Install traffic signal	13-008	3087		X				\$0	\$410	\$40	\$450		X		X
364	Reed	Kinnaman	Install traffic signal	13-008	3086		X				\$0	\$410	\$40	\$450		X		X
365	Brookwood	Cedar	Install traffic signal	N/A	N/A		X				\$470	\$0	\$0	\$470		X		
366	Blanton	Chinquapin	Install RRFB	N/A	3036					X	\$0	\$0	\$450	\$450				X
367	Cornelius Pass	Reed	Install signalized Z-crossing	N/A	3056					X	\$0	\$140	\$10	\$150		X		X
371	Century	Davis	Install traffic signal	N/A	N/A		X				\$0	\$410	\$40	\$450		X		X
381	River Rd	Pheasant	Construct traffic signal at new intersection	22-072	3122		X				\$0	\$411	\$42	\$453		X		X
382	River Rd	Brookwood	Construct roundabout at new intersection	22-071	3123				X		\$0	\$1,030	\$78	\$1,108		X		X
383	Brookwood	Hazeltine	Construct roundabout at new intersection	22-071, 22-073	3120				X		\$0	\$1,030	\$78	\$1,108		X		X
TOTAL						49	53	48	7	8	\$78,290	\$49,389	\$8,623	\$136,324				

## Citywide Programs and Projects

In addition to the project list and intersection improvements, the Citywide Programs and Projects List identifies projects that are broad in scope and nature and are generally not associated with a specific location. These projects and programs include ADA ramp upgrade program, the Safe Routes to Schools program, transit stop enhancements, design and implementation of a wayfinding program for vehicles, bicycles, and pedestrians, and a fiberoptic communications system for Intelligent Transportation Systems (ITS) implementation.

The list also includes future major transit investments that will require some measure of federal funding and local match. These include envisioned Sunset Highway express bus service with new park-and-rides carrying commuter demand east-west between Forest Grove and downtown Portland, as well as north-south Tualatin Valley express bus service between north Hillsboro's jobs cluster and Wilsonville via the Cornelius Pass Road-Roy Rogers Road- 124th Avenue western edge of the Urban Growth Boundary travel corridor. Also included for major transit investments is an envisioned streetcar circulator extending from the Quatama light rail station north through Amberglen, west through the high-tech jobs cluster, and south to the Orenco Station.

Within the Citywide Programs and Projects are two policy-driven cost items of particular note. Presently, the City's Community Development Code requires private development projects within the city to underground, or pay a fee-in-lieu for, aerial utilities other than high-voltage electrical transmission. The cost of utility undergrounding on only the 89 projects contained within the TSP Project List is estimated at \$73,800,000. This undergrounding policy cost to the community does not include all of the underground required along existing City and County streets that are already constructed to urban multi-modal standards. These costs are estimated at \$300 per curb foot, based upon input from Portland General Electric (PGE).

Also included is the estimated cost to complete sidewalks on all remaining public streets within the City functionally classified as Local Roads. When Hillsboro was first being established, sidewalks were generally built as part of development. The City went through an era between roughly the 1960s into the early 1980s when sidewalks were not required of development. Since that time, virtually all developments are required to construct sidewalks. Based upon the existing conditions presented in Chapter 3, the cost to install all 51 miles of missing sidewalk classified as Local Road is estimated at \$112,460,000. This includes 31 miles of sidewalk where curbs and storm drainage already exist (\$49,104,000), and an additional 20 miles of missing sidewalk where concurrent construction of curb and piped storm drainage improvements are needed (\$63,360,000).

The Citywide Programs and Projects List is summarized in **Table 6-3**.

Table 6-3 Citywide Programs &amp; Projects

					Potential Funding Opportunities					
					TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private
Project Name	Description	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Cost, (2021 Cost Year, in \$1000s)						
Citywide Capital Projects:										
Safety Action Plan Projects	See Hillsboro Safety Action Plan for specific projects	11932		\$6,275	X		X	X	X	
Citywide ADA Ramp Upgrade	ADA upgrades on 1,500 curb ramps throughout the city.			\$9,000	X			X		
South Hillsboro ITS Interconnect	Conduit and vaults for future fiber			\$4,100		X	X		X	
Citywide Wayfinding - Phase 2	Citywide vehicular wayfinding; includes engineering and construction			\$2,500					X	
Citywide Wayfinding - Phase 3	South Hillsboro pedestrian and vehicular wayfinding; includes engineering and construction			\$1,500					X	
Citywide Wayfinding - Phase 4	Citywide bicycle wayfinding; includes planning, engineering and construction			\$1,500					X	
Citywide ITS/Communications Projects	See Hillsboro Communications Plan for specific projects	11931		\$1,500			X			
Utility Undergrounding	Undergrounding of existing utilities for projects on the TSP project list			\$73,800					X	

Project Name	Description	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Cost, (2021 Cost Year, in \$1000s)	TUF PATHWAYS	Potential Funding Opportunities				
						MSTIP	TDT/TSDC	PMP	Other	Private
"Local Road" Sidewalk Infill	Completion of remaining missing sidewalk on streets with functional classification of "Local Road"-- approximately 51 curb miles of sidewalk construction; missing sidewalks on higher classification streets are included individually in Road Project List			\$112,460	X					
South Hillsboro Trail Crossings	Construct 20 RRFB crossings. All cost TSDC creditable			\$600			X			
South Hillsboro Bus Pullouts/Shelter	Construct bus pullouts and shelters at 10 locations		503	\$2,250			X			
Citywide Traffic Signals	Install up to 25 additional traffic signals or signal medications as needed.			\$11,250			X			X
Citywide Transit Stop Enhancements		11381		\$4,830			X			
WHVS Trail Crossings	Construct 6 RRFB crossings at Hazeltine (2), Pheasant (3) and Brookwood (1)			\$225			X			
Citywide Programs:										
Safe Routes to School Programs		11933		\$3,140		X	X	X	X	
High Capacity Transit:										
185th/MAX Light Rail Grade Separation	Grade separation of MAX light rail up and over 185th Ave; include intersection modifications at 185th & Baseline	11045		\$90,915					X	

Project Name	Description	Metro RTP Project ID (2018)	TDT Project List ID (Dec '21)	Project Cost, (2021 Cost Year, in \$1000s)	Potential Funding Opportunities					
					TUF PATHWAYS	MSTIP	TDT/TSDC	PMP	Other	Private
AmberGlen Streetcar, Phase 1	Assumes 50% federal cost share; total local costs shown only	11278	600	\$50,000					X	
AmberGlen Streetcar, Phase 2	Assumes 50% federal cost share; total local costs shown only	11573	600	\$25,000					X	
Sunset Hwy High Capacity Transit	Assumes 50% federal cost share; total local costs shown only	11912	603	\$75,000					X	
Tualatin Valley North/South High Capacity Transit	Assumes 50% federal cost share; total local costs shown only		604	\$75,000					X	
				<b>Total:</b>	<b>\$550,845</b>					

## City Cost Obligations

The City Cost Obligations List represents projects for which the City of Hillsboro is obligated through commitments made through Transportation Planning Rule compliance associated with the South Hillsboro Urban Growth Boundary expansion and the area's Transportation Financing Plan. All of these obligations come were determined to be "triggered" by South Hillsboro development. Specific intersection obligations exist for funding a portion of future capacity improvements on TV Highway at 185th Avenue and 198th Avenue. South Hillsboro was deemed responsible for the need to widen Farmington Road from 3 lanes to 5 lanes between SW 209th Avenue and SW 198th Avenue. These commitments will be fulfilled either through development assessments collected through pro-rata formula, or by City payment to the County at the time when the County makes associated capacity improvements. A number of these obligations were aggregated into a City-County program utilized by South Hillsboro to fund nine collector and arterial capacity improvements which will be designed and constructed by Washington County. Funding for these projects obligate the City of Hillsboro to cover one-third of final project costs, with the County responsible for the remaining two-thirds.

The total amount on the City Cost Obligations List is \$34,786,000.

The City Cost Obligations List is summarized in **Table 6-4**.

Table 6-4 City Cost Obligations

Project Name	From	To	Description	Cost Estimate (2021 Cost Year, in \$1000s)			Program	TSP ID	TDT List ID (Dec '21)
				Total Cost	County Cost (2/3)	Hillsboro Local Cost (1/3)			
Cornelius Pass Rd	Frances	TV Hwy	Widen to 5 lanes	\$16,073	\$10,715	\$5,358	MSTIP Bonding	99-003	1030
TV Hwy & Cornelius Pass Rd intersection	N/A	N/A	Westbound right-turn lane	\$4,457	\$2,971	\$1,486	MSTIP Bonding	313	3054
TV Hwy & 209th Ave intersection	N/A	N/A	Widen to 5-lane north-south and add EB right turn lane and bus stop; intersection and railroad improvement	\$15,144	\$10,096	\$5,048	MSTIP Bonding	315	1020
209th Ave	TV Hwy	Blanton	Widen to 5 lanes, signal at Blanton	\$4,633	\$3,089	\$1,544	MSTIP Bonding	13-009	1020
Blanton St	198th	209th	Sidewalks, turn lanes as needed	\$6,522	\$4,348	\$2,174	MSTIP Bonding	Wash Co TSP	1103
Kinnaman Rd	198th	209th	Sidewalks, bike lanes, turn lanes	\$3,261	\$2,174	\$1,087	MSTIP Bonding	Wash Co TSP	1053
Kinnaman Rd & 198th Ave intersection	N/A	N/A	Realign and signalize offset intersection	\$4,917	\$3,278	\$1,639	MSTIP Bonding	Wash Co TSP	1054
Century Blvd	Alexander	Johnson	Widen to 5 lanes across TV Hwy and associated improvements	\$13,503	\$9,002	\$4,501	MSTIP Bonding	13-011	3049
Cornelius Pass Rd bridge across Butternut Creek	N/A	N/A	Construct new 5-lane bridge	\$8,050	\$5,367	\$2,683	MSTIP Bonding	Wash Co TSP	3055
Farmington Rd	198th	209th	Delta of cost from 3L to 5L	N/A	N/A	\$1,515	SoHi Financing Plan	Wash Co TSP	1036
198th/TV Hwy			Five lane north-south through intersection: Construct southbound right-turn lane, second westbound left-turn lane, and convert northbound right-turn to shared through-right; widen north leg for second northbound receiving lane	N/A	N/A	\$4,990	SoHi Financing Plan	316	1017
185th/TV Hwy right-turn lane			WB right turn lane	N/A	N/A	\$698	SoHi Financing Plan	317	Not on list
South Hillsboro BPA Towers			Reconstruct 11 BPA Towers	\$2,063	\$0	\$2,063	SoHi Financing Plan	Wash Co TSP	Not on list
Total:						\$34,786			

## Projects Prioritization

The TSP Road Project List includes a field that identifies the approximate timing of the projects. Each project is classified as Near Term or Long Term, with Near Term meaning approximately years 1 – 10 and Long Term years 11 – 20 of the planning horizon. Based on the cost estimates presented in Table 6-1, the total Near Term projects cost is \$462,026,000 and the Long Term projects cost is \$625,790,000 for the total cost of \$1,087,816,000 in the Road Projects List.

Beyond the general assessment of near and long term timing of projects, predicting when projects might occur beyond the immediate future is challenging. Timing for development delivered projects is generally a function of market conditions. Projects of opportunity which leverage non-public funding or grant opportunities may arise and present themselves to leverage public funds to deliver projects that may take longer to deliver. Similarly, the ability to predict the timing of publicly funded and delivered projects is challenging as the urgency of needs change, in part due to changing societal and growth demand pressures.

### BPCIP

The TSP Road Project List identifies funding opportunities for six different categories. Projects classified under the “TUF Pathways” are those likely to be funded by the City’s Transportation Utility Fees (TUF) under the City’s Bicycle and Pedestrian Capital Improvement Program (BPCIP). The BPCIP is a ten-year cycle program set up to manage the selection and prioritization of these projects for implementation. Projects funded in this program are typically sidewalk or bicycle facilities projects. Projects in this program are ranked based on a number of factors that prioritizes the safety and comfort of vulnerable users. In recent years, priority for the ranking of BPCIP projects have been focused on completing the sidewalk and bicycle network near schools and frequent transit stops.

The next ten-year cycle of the BPCIP is expected to begin shortly after the adoption of this TSP. Candidate projects for the next BPCIP cycle may be drawn from the list of projects identified in the Road Project List under “TUF Pathways” funding in Table 6-1. Additional information, including past projects prioritization and selection, regarding the BPCIP can be found on the City’s website.

### MSTIP

Projects in the Road Project List identified under “MSTIP” are those earmarked to be submitted for consideration in Washington County’s Major Street Transportation Improvement Program (MSTIP). MSTIP is a county-wide mechanism for funding transportation projects on regional

roads, primarily arterials, throughout urban portions of Washington County. It is funded through County property taxes and has existed since the mid-1980's.

MSTIP revenues are currently planned to provide a significant share of new construction associated with designated arterial improvements within the City. The current cycle of the program—MSTIP 3e—includes the following projects in the City of Hillsboro:

- Century Boulevard Extension from Main Street to Lois Street
- Cornelius Pass Road from TV Hwy to Frances
- TV Hwy/209th intersection
- 209<sup>th</sup> Avenue from TV Hwy to Blanton
- TV Hwy/Century intersection
- 229th/Butternut Creek intersection

MSTIP-eligible projects are ranked and prioritized at the county level with candidate projects and selection input from jurisdictions across Washington County. Historically, the prioritization and ranking criteria has been focused on safety, congestion relief, regional mobility and supporting growth areas, while also updating and completing streets to current standards with sidewalks and bicycle facilities.

The current MSTIP 3e cycle is estimated to last to 2023. The next MSTIP cycle process is just beginning at the time of this TSP's adoption; it is expected to fund projects starting from 2023 to 2028. Candidate projects for the next MSTIP cycle may be drawn from the list of projects identified in the Road Project List under "MSTIP" funding in Table 6-1. Additional information, including past prioritization and projects selection, regarding the MSTIP can be found on Washington County Land Use & Transportation's website.

## Transportation Revenues Assessment

The TSP financing program is a projection of future transportation funding and revenue. This funding is forecasted based on historical and existing transportation funding programs, and the forecast revenues associated with community growth are based on the adopted land use plans, policies, and development trends. The historical funding trends and revenue assumptions are used to create a revenue projection for the 20-year planning horizon. The future baseline revenue scenario is then compared to the estimated costs of the project list to examine the adequacy of future funding.

### Historical Funding Trends

The following information has largely been drawn from a technical report prepared for the City of Hillsboro by FCS Group which was published in early 2020 and which can be found in Appendix J of the TSP. Historically, the City of Hillsboro has utilized several funding sources for addressing transportation capital and maintenance expenses. Overall local transportation funding has increased from \$12.6 million in FY 2009/10 to \$32.7 million in FY 2018/19. Recent transportation budget estimates, largely before the effects of the Covid-19 pandemic, include \$27.4 million for FY 2019/20, to account for transportation funding provided from the Gain Share program that has been subsequently reallocated to other priorities in the City.

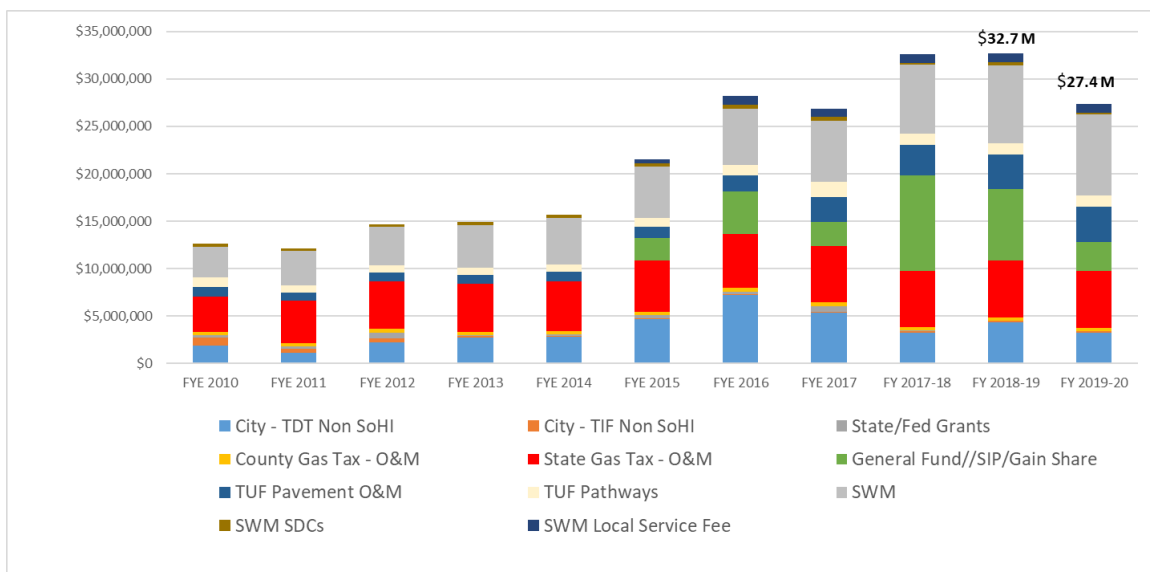
This historical spending only reflects a portion of the value of transportation investments made within the City. The historical revenue estimates shown in **Figure 6-3** and **Table 6-5** do not reflect the value of non-creditable developer contributions for transportation right-of-way or facilities (for which there is no specific accounting standard at present); nor do these estimates reflect the value of Washington County contributions on regional projects that are constructed through the MSTIP Program. These additional revenue sources are discussed in the next section. It should be noted that these historical amounts have included special, one-time funding decisions such as the State of Oregon's Gain Share fund and Strategic Investment Program (SIP) fund.

Two important sources that help build the transportation system in Hillsboro that are not reflected in the historical funding summary are private development contributions and Washington County's MSTIP. Private development contributions occur in the form of frontage improvements, such as completion of "half-street improvements" including missing sidewalks and bike lanes; off-site mitigations, such as improvements at key intersections; or payment of fees in lieu of construction (in addition to required fees such as TDT) that contribute to these improvements. Sidewalk, bicycle facilities, right-of-way, and other improvements are often built over time by development in this manner. Over the past five years, the annual average "out-of-pocket" development contribution (not including the South Hillsboro district) to only the

collector and arterial roadway network that was non-creditable towards a system development charge was roughly estimated at about \$1.4 million per year. The originally adopted funding strategy for South Hillsboro resulted in a leveraging ratio of 67 cents of non-creditable contributions for each \$1.00 in TDT assessments, meaning for every \$1.00 of TDT assessed for transportation infrastructure, an additional 67 cents worth of transportation infrastructure will be constructed by private development.

Washington County MSTIP is a countywide program that funds projects with regional impacts using property taxes. These projects are typically on arterials and select major collector roadways that require motor vehicle capacity to keep pace with demand. Of the cost of these projects, between 25% and 30% of the investment is used to deliver bicycle and pedestrian improvements. These urban level improvements also allow the roadways to be ready to accept transit service vehicles. MSTIP funding requires appropriations decisions by the County Board of Commissioners and are therefore difficult to predict. Currently, MSTIP funding is committed for five planned projects in the City of Hillsboro totaling over \$45 million in estimated costs. In addition, regional projects that are outside of the city limits that have benefits to the city are often funded through MSTIP. The historical transportation funding and budget do not reflect future MSTIP funding.

**Figure 6-3: Hillsboro Historical Transportation Funding Revenues (excluding MSTIP and development contributions)**



**Table 6-5: Hillsboro Historical Transportation Funding Revenues (excluding MSTIP and development contributions)**

	Actual FYE2010	Actual FYE2011	Actual FYE2012	Actual FYE2013	Actual FYE2014	Actual FYE2015	Actual FYE2016	Actual FYE2017	Actual FYE2017-18	Actual FYE2018-19	Budget FY2019-20
City-TDT Non SoHI	\$1,866,351	\$1,141,882	\$2,264,089	\$2,723,679	\$2,817,348	\$4,672,559	\$7,225,150	\$5,327,428	\$3,291,781	\$4,338,084	\$3,275,000
City-TIF Non SoHI	\$914,459	\$388,753	\$359,821	\$150,344	\$67,617	\$70,168	\$77,434	\$82,994	\$118,614	\$158,924	\$125,000
State/Fed Grants	\$186,287	\$307,354	\$664,572	\$137,115	\$167,761	\$346,840	\$286,935	\$615,934	\$68,530	\$14,925	\$0
County Gas Tax- O&M	\$355,924	\$349,961	\$354,845	\$340,581	\$340,871	\$348,602	\$363,632	\$399,842	\$369,691	\$370,400	\$400,000
State Gas Tax-O&M	\$3,732,878	\$4,431,452	\$5,002,491	\$5,025,801	\$5,274,607	\$5,418,174	\$5,702,621	\$5,923,766	\$5,936,902	\$5,983,292	\$5,950,000
General Fund/SIP/ Gain Share	\$0	\$0	\$0	\$0	\$0	\$2,387,500	\$4,500,000	\$2,600,000	\$10,075,000	\$7,500,000	\$3,100,000
TUF Pavement O&M	\$979,167	\$851,915	\$910,830	\$944,121	\$990,349	\$1,132,762	\$1,698,362	\$2,596,051	\$3,216,264	\$3,646,226	\$3,650,000
TUF Pathways	\$1,026,434	\$759,610	\$785,451	\$794,651	\$815,103	\$991,949	\$1,052,832	\$1,566,988	\$1,149,276	\$1,190,556	\$1,175,000
SWM	\$3,250,158	\$3,637,611	\$4,061,770	\$4,464,287	\$4,891,282	\$5,353,974	\$5,948,932	\$6,511,009	\$7,249,995	\$8,219,440	\$8,600,000
SWM SDCs	\$303,840	\$237,891	\$281,518	\$315,367	\$356,718	\$405,174	\$451,411	\$394,589	\$202,249	\$308,885	\$171,000
SWM Local Service Fee	\$0	\$0	\$0	\$0	\$0	\$364,938	\$859,387	\$850,438	\$897,594	\$978,687	\$940,000
<b>Total</b>	<b>\$12,615,498</b>	<b>\$12,106,429</b>	<b>\$14,685,388</b>	<b>\$14,895,946</b>	<b>\$15,721,656</b>	<b>\$21,492,639</b>	<b>\$28,166,695</b>	<b>\$26,869,039</b>	<b>\$32,575,897</b>	<b>\$32,709,419</b>	<b>\$27,386,000</b>

\*Historical revenues from developer contributions are not reflected, since there is no specific accounting standard used at present.

Source: budget history provided to FCS by City on December 1, 2019.

## FUTURE REVENUE SOURCES

The following revenue sources are included in the calculations of future revenue forecast. A brief explanation of these funding sources and assumptions are provided below.

### *Transportation Development Tax*

Most capital funding for local collector and arterial roads in the City has historically been derived from Transportation Development Tax (TDT) revenues. The TDT is a Washington County transportation program that functions like a system development charge or impact fee. It was approved by county voters in 2008, and effectively supplanted the prior Transportation Impact Fee (TIF) program, which was first approved by county voters back in 1990. TDT revenues accounted for \$39 million in capital funding for collectors and arterials within the City over the past 10 years (between FY 2009/10 and FY 2019/20).

The baseline transportation forecast was established by a comparison of the 2015 versus 2040 land use assumptions by Metro Gamma model Traffic Analysis Zone (TAZ), with adjustments made to reflect development constructed with TDT fees paid between 2015 and November 2021. Land use assumptions are comprised of a range of housing types and employment types. The TAZ growth in households and employees is the foundation for travel demand increases which were analyzed to determine multi-modal infrastructure needs.

Household increases were applied to the current Washington County TDT tax rate for the respective housing types (apartments, townhouse/condominiums, single family dwelling units) to establish a forecast housing TDT revenue. Employment growth forecasts required an additional step in which the type of employment factors into employee density to establish an estimated number of thousands of square feet of occupied employment space by use type. Uses range from manufacturing, warehousing, office, commercial, and retail. Resulting square footage amounts were then applied at the current TDT tax rates to establish the forecast TDT employment revenue. Development growth was forecast to occur in generally a linear fashion over 20 years with the annual average 10-year TDT index rate assumed constant over the 20-year period.

### ***Developer Contributions***

The City of Hillsboro requires development to construct and dedicate public transportation facilities as a condition of development. Examples include improvements around planned communities such as Orenco Station, large business campuses, and major subdivisions. Consistent with the TDT implementing Ordinance, developers are obligated to fund the “local street standard” portion of improvements to Collectors and Arterials. Developers receive TDT credit for constructing “extra capacity” improvements above and beyond the “local street standard”. These are commonly consisting of additional public right of way dedication, a center median lane, and the addition of bike lane facilities. At intersections, these typically take the form of supplemental turn lanes, traffic signals, roundabouts, and other extra capacity elements.

The value of the non-creditable contributions by development has not typically been tracked by either the City of Hillsboro or Washington County and its other cities. This lack of information compelled the detailed TSP project cost estimates discussed above to analyze in detail the individual projects, estimating which would be built by private development, what the “local street standard” costs would be, and what the TDT creditable “extra capacity” costs would be. Over the entire City, the amount of TDT creditable improvements is estimated at \$253.0 million and within South Hillsboro the estimated amount of TSDC creditable improvements remaining to be constructed total an estimated \$13.1 million.

### ***South Hillsboro TSDC and LID programs***

The SoHi Transportation System Development Charge (TSDC) program and the SoHi Local Improvement District (LID) were implemented by the City between 2015-2017. Historical transportation funding revenues from SoHi TSDC and LID programs have been rising as home construction has exceeded 1700 dwelling units as of November 1, 2021. These programs will both generate substantial revenue in future years. New development within SoHi will be

required to pay the TDT and the TSDC to fund eligible transportation projects. Properties that have opted into the LID program will be required to pay into a \$26.8 million LID along with a discounted TSDC (TSDC phase-in discount is currently scheduled to stabilize by year 2023).

The baseline forecast assumes that the SoHi TSDC revenues will be consistent with the adopted SoHi TSDC Methodology Report assumptions, which were adopted by the City in 2015. LID principal is assumed to be paid back to the City over the first 10 years or by FYE 2031.

### ***North Hillsboro Industrial Renewal Area***

The North Hillsboro Industrial Renewal Area (IRA) was created after recognizing the environmental and utility infrastructure needs facing the industrial land within the IRA 1,090-acre boundary. To competitively recruit and meet the needs of industrial users, the Urban Renewal Plan provides a new funding source (tax increment financing) for addressing utilities, transportation access, environmental mitigation and natural amenities such as trails and open space. The plan allows tax increment financing as a viable funding source to address these challenges. The adopted plan is expected to support \$75 million in targeted transportation improvements over the next 25 years. The baseline forecast assumes that approximately \$53 million in transportation funding will be provided through this funding source over the FYE 2020 through FYE 2040 timeframe.

### ***Major Streets Transportation Improvement Program***

The Washington County Major Streets Improvement Program (MSTIP) helps fund transportation projects throughout urban portions of Washington County. MSTIP is a county-wide mechanism for funding transportation projects on regional roads (primarily arterials). It is funded through County property taxes and has existed since the mid-1980's.

MSTIP revenues are planned to provide a significant share of new construction associated with designated arterial improvements within the City, including:

- Century Boulevard Extension from Main Street to Lois Street - \$17.3 million
- Cornelius Pass Road project from TV Hwy to Frances - \$16.1 million
- TV Hwy/209th intersection – \$15.1 million
- 209th – TV Hwy to Blanton - \$4.6 million
- TV Hwy/Century intersection - \$13.5 million
- 229th/Butternut Creek - \$8.05 million

Future MSTIP revenues for arterials within the City are not easy to predict, since they are subject to Washington County appropriations. Hence for analysis purposes, the baseline transportation

funding scenario assumes that the long-term allocation to the City will be the midpoint of the low and high end “fair share” allocation based on population and assessed value growth.

### ***Transportation Utility Fee Programs***

Hillsboro has two types of transportation utility fee (TUF) programs. The Pavement Management Program fee (TUF PMP) is used exclusively for street maintenance. The TUF Pathway Program fee is used for both construction and maintenance of sidewalks and pathways. The baseline forecast conservatively assumes that revenue from the TUF programs will increase by 1.0% annually.

### ***Stormwater Management Programs***

Additional funding used by the City to address surface water on roads includes the Stormwater Management (SWM) system development charge (SDC) program which generated a total of \$3.4 million over the past 10 years. SWM SDCs are one-time charges on new development and this revenue is used for construction of storm sewers and catch basins as well as other types of storm water management improvements.

The City also utilizes a portion of monthly stormwater management utility fee revenues associated with the SWM program and SWM local service fee program for stormwater facility maintenance and some capital facilities.

The baseline forecast conservatively assumes that revenue from the SWM programs will increase by 1.0% annually.

### ***State Shared Tax Revenues***

Transportation O&M costs are primarily funded by State and County fuel taxes and motor vehicle registration fees as pass through revenues to the City.

In 2017, the Oregon legislature passed the “Keep Oregon Moving” House Bill 2017, which raises the fuel tax from 34 cents per gallon (in 2017) to 44 cents by year 2024. The federal tax is 18.4 cents per gallon. Of the nearly \$60 million this increase will raise, 20% goes to Oregon counties, 30% to Oregon cities and 50% to ODOT.

### ***Gas Tax Increase Schedule***

- \$0.04 - Jan. 1, 2018
- \$0.02 – Jan. 1, 2020
- \$0.02 – Jan. 1, 2022
- \$0.02 – Jan. 1, 2024

Annual State-shared tax revenues to the City have been approximately \$5.9 to \$6.0 million for each of the past four years. After full phase in of HB 2017, fuel tax revenues will likely be flat or could decline as vehicles become more fuel efficient.

The baseline growth forecast for state fuel tax revenue is based on figures provided in the October 2019 ODOT County/City Apportionment Forecast Summary for Hillsboro. Fuel tax revenues are assumed to be flat after 2025, after the HB2017 gas tax increases cease. State vehicle registration fee pass-through revenue is assumed to increase at 1.0% annually. Note, this projected growth rate is generally consistent with population growth.

### ***County Shared Tax Revenues***

Washington County fuel tax revenues and vehicle registration fees also provide revenue for the City, which is primarily used for street maintenance. This revenue is expected to generate \$400,000 in FY 2019/20. Historically, the revenue received from the County-shared tax revenues has increased by 1.2% annually over the past 10 years. The baseline transportation revenue forecast assumes that future revenues from this program will increase by 1.0% annually.

### ***State and Federal Grants***

The City has occasionally utilized some of the above-mentioned local funding sources to leverage state or federal grants for transportation projects. Over the past 10 years, annual grant awards have ranged from \$15,000 to nearly \$700,000. It is difficult to predict how much non-local grant funding will be available and even harder to estimate how much the City would receive in the future. Hence, the baseline forecast assumes that the annual amount of state and federal grants will be equivalent to the average annual amount received by the City over the past 10 years (\$411,000 per year).

### ***Hillsboro Gain Share and Strategic Investment Programs***

In past years, the Hillsboro City Council has occasionally allocated General Fund revenue derived from the Gain Share and Strategic Investment Program to transportation capital projects and O&M activities (particularly street lighting). These programs were authorized by the Oregon Legislature and approved by city and county governments, and revenues are derived from fees in lieu of property taxes that are paid by employers that make major capital facility investments. Over the next several years, the City has committed most of the Gain Share and SIP revenues to the HiLight high speed internet access program. The baseline transportation revenue forecast conservatively assumes that no Gain Share and SIP funds will be allocated to future transportation revenues.

## Baseline 2040 Funding Scenario

The future funding forecast uses the household and employment growth assumptions as described in Chapter 4. The baseline 20-year transportation revenue forecast from 2022 to 2042 is approximately \$1.379 billion (in 2021 dollars), with \$548 million (approximately 40%) projected for operations and maintenance and \$830 million (60%) for capital projects. Of the \$830 million projected for capital projects, about \$760 million is targeted for improvements on arterials and collectors, \$65 million on neighborhood routes and local streets, and \$4.9 million for the undergrounding of utilities in South Hillsboro.

This baseline future revenue forecast does not include existing transportation funds balance, but it does incorporate existing TDT and TSDC credits held by developers as of November 1, 2021. MSTIP funds programmed through the completion of the 2018-2023 for the MSTIP-3e program have not been included in the MSTIP revenue forecast. MSTIP revenue forecast has been estimated based upon Hillsboro's population-based share of the Countywide revenue. It is only an estimate and not an assurance as allocation of MSTIP funding is established generally every five years by a vote of the Washington County Board of Commissioners.

The baseline revenue forecast is summarized in **Table 6-6**.

**Table 6-6: Baseline Revenue Forecast: FYE 2022 to FYE 2042**

Funding Source	O&M	Capital (utility undergrounding)	Capital (local/ neighborhood facilities)	Capital (local/ neighborhood facilities)	Total
State and County Gas Tax	\$118,794,956				\$118,794,956
TUF PMP	\$68,577,394				\$68,577,394
TUF Pathways	\$10,979,931			\$20,391,301	\$31,371,232
General Fund Gain Share					\$0
General Fund SIP Funds					\$0
SWM SDCs				\$9,808,887	\$9,808,887
SWM	\$192,275,620				\$192,275,620
SWM Local Service Fee	\$39,008,116		\$19,504,058	\$6,501,353	\$65,013,527
Vehicle Registration Fee	\$118,794,956				\$118,794,956
Transportation Dev Tax (TDT)				\$271,983,152	\$271,983,152
SoHi TDT Credits				(\$16,279,182)	(\$16,279,182)
Rest of City TDT Credits				(\$4,092,453)	(\$4,092,453)
SoHi TSDC		\$4,944,796	\$21,015,385	\$97,659,729	\$123,619,911
SoHi TSDC Credits				(\$11,844,664)	(\$11,844,664)
SoHi LID				\$26,800,000	\$26,800,000
Developer Contributions			\$24,924,000	\$99,696,000	\$124,620,000
North Hillsboro URD				\$53,200,000	\$53,200,000
MSTIP				\$206,057,908	\$206,057,908
<b>TOTAL</b>	<b>\$548,430,973</b>	<b>\$4,944,796</b>	<b>\$65,443,443</b>	<b>\$759,882,031</b>	<b>\$1,378,701,244</b>

## Funding Gap Evaluation

Improvements constructed by private development through a blend of private non-creditable costs plus TDT/TSDC creditable “extra-capacity” improvements tend to offset significantly forecast revenues collected from the TDT and South Hillsboro TSDC revenue sources. The South Hillsboro TSDC has an index rate which reasonably and effectively tracks with local construction cost escalation rates while the Washington County TDT program’s annual escalation rate which is based upon national averages for labor and materials coupled with local real estate value has tended to fall 1% to 3% below local inflation rates. Taken all together, this financing program provides a solid foundation for evaluation of possible alternative funding mechanisms as future implementation steps following adoption of the TSP. A major consideration of any future revenue stream options should be assuring it has the ability to keep pace with local inflationary adjustments to the cost of public works construction. Due to the constantly evolving economic outlook this Funding Gap Evaluation section provides a snapshot at the time of the TSP update in 2022 and is not updated with subsequent amendments.

**Table 6-7** summarizes the estimated costs of all transportation projects and programs recommended through this TSP by improvement type and revenue classification. Revenue classifications include Utility Undergrounding, Local/Neighborhood Route Roadway capital, Arterial/Collector Roadway capital, and Other (High Capacity Transit and freeway widening). Operations and Maintenance were not included in this cost breakdown.

**Table 6-7: Capital Projects Costs by Revenue Classification**

Project Lists	Operations & Maintenance	Capital Costs Funding Classification			
		Utility Undergrounding	Local Roads/ Neighborhood Routes	Collectors/ Arterials	Other (HCT/US26)
Road Project List					
Road Projects (143)	N/A	\$0	\$28,997,923	\$951,630,000	\$42,000,000
Total:	N/A	\$0	\$28,997,923	\$951,630,000	\$42,000,000
Intersection Improvements List					
Intersection Projects (110)	N/A	\$0	\$0	\$131,200,000	\$0
Total:	N/A	\$0	\$0	\$131,200,000	\$0
Citywide Programs & Projects					
Citywide Capital Projects	\$14,500,000	\$73,804,200	\$114,706,500	\$28,562,500	\$0
Citywide Programs			\$2,512,000	\$628,000	
High Capacity Transit					\$225,000,000
Total:	\$14,500,000	\$73,804,200	\$117,218,500	\$29,190,500	\$225,000,000
City Cost Obligations					
City Cost Obligations Projects (12)				\$31,022,982	
Total:	N/A	\$0	\$0	\$31,022,982	\$0
TOTAL	\$14,500,000	\$73,804,200	\$146,216,423	\$1,143,043,482	\$267,000,000

This analysis has not included a study of the City's operations and maintenance (O&M) cost forecasts, so information provided in this TSP should not be deemed complete for O&M purpose. Further analysis is warranted to understand whether additional O&M funding will be required to sustain and improve the quality of maintenance being performed on the City's existing transportation assets.

A review of the transportation system costs and revenues presented above identifies significant funding gaps in all capital infrastructure categories. If the City of Hillsboro seeks to complete all of the above improvements by the TSP planning horizon of 2040 a more refined analysis will be required to better identify and target additional revenue sources. It is important to also consider that the transportation infrastructure needs identified in this study reflect "reasonable buildout" of the entire city under current Comprehensive Plan and Zoning designations. Achieving that level of "reasonable buildout" will very likely require more than 20 years. As such, further development of an implementable financing plan should also consider the appropriate timeframe to be used for funding all of the identified infrastructure.

A significant consideration in such an analysis should be the identification of funding sources that keep pace with the local inflationary costs of transportation infrastructure construction. Program and infrastructure costs reflect existing City policies. As such, an evaluation of the policies that result in the infrastructure costs should also be considered. Should a more exhaustive financing plan be undertaken, the following section identified a range of transportation funding options which may be considered.

Additional analysis would be required to perform a full comparison as the project costs reported above are in FY 2021 dollars while the revenue amounts are calculated including growth and indexing over the 20-year timeframe. Predicting when development delivered projects will occur is challenging as it is a function of market conditions. Similarly, the ability to predict the timing of publicly funded and delivered projects is challenging as the urgency of needs change, in part due to changing societal and growth demand pressures. Projects of opportunity which leverage non-public funding also factor in as opportunities arise and present themselves to leverage public funds and magnify their buying power.

## Potential Funding Options

In addition to the revenue sources that are currently in place, new funding sources that could be explored may include the following:

- Citywide transportation system development charge (TSDC)
- New Local Improvement District (LID) or Reimbursement District

- Transportation Development Tax index adjustment to local index (currently national index)
- Debt financing through loans or bonds
- Local (City) vehicle fuel tax
- Increases in existing local funding sources over and above inflation rates
- City sales tax
- Citywide MSTIP-like property tax
- Passage of a new MSTIP-4 county-wide property tax (six-year increments as original)
- Passage of regional transportation investment measure that will lead to new funding sources
- Congestion pricing (under study for regional freeways including revenue sharing)
- Vehicle Miles Traveled tax

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