

CITY OF HOOD RIVER

PLANNING DEPARTMENT

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То:	City of Hood River Planning Commission
From:	Kevin Liburdy, Senior Planner
Date:	March 9, 2021
Subject:	Transportation System Plan Amendment (File No. 2020-25) – Funding

Purpose: The Planning Commission should review staff recommendations for the *financially constrained plan* in the amended Transportation System Plan (TSP) based on the Commission's knowledge of community values and priorities. The Commission's comments and recommendations on the overall approach should be forwarded to the City Council.

Background: Prior to finalizing the TSP amendments, the City must determine whether funding for projects will be based upon existing revenue sources including Transportation SDCs, or if it is likely that additional revenue will be generated to fund a broader list of projects. The City Council will determine if additional revenue will be sought and, if so, the method and the amount of funding that is reasonably likely to support projects in the TSP.

The proposed TSP amendments are narrow in scope, limited mostly to transportation system improvements on the west side of the city based on recommendations from the Westside Area Concept Plan Report and from the Planning Commission that were forwarded to Council in 2019. New projects are proposed for the motor vehicle, pedestrian and bicycle systems including off-street paths and trails. Staff coordinated with project consultant, DKS Associates, in preparation of cost estimates for new projects and updated cost estimates for existing projects in the TSP.

Projects in the TSP are listed in Table 1 Sidewalks, Table 2 Crossing Improvements, Table 3 Off-Street Facilities, Table 5 Bicycle Improvements, and Table 13, Motor Vehicle. These project lists (Attachment A) make up the *"preferred plan."*

The TSP also must identify a subset of projects that aligns with anticipated funding, known as the *"financially constrained plan."* The projects identified Westside planning process were added to the financially constrained plan in the draft TSP document. However, there is a significant gap (>\$90M) between the cost of the projects on this draft list and existing revenue sources.

Unless is it reasonably likely that additional funding will be made available for transportation projects, the financially constrained plan must be revised to include a much more limited set of projects. Staff recommendations for projects to be included in the financially constrained plan without additional funding are identified in Attachments B and C.

The TSP outlines potential funding sources for projects including State and County contributions, State and Federal appropriations, developer exactions, Urban Renewal Districts, Local Improvement Districts (LIDs), street utility fee, General Fund revenue, special assessments, employment taxes and grants. Another method of funding these projects is by increasing Transportation SDCs. Hood River's Transportation SDC currently is \$2,059 for a single-family dwelling. Staff prepared a list of Transportation SDCs from over 20 other cities in Oregon for reference (see Attachment D). And, previously the City asked ECONorthwest about the relationship between SDCs and housing prices: https://cityofhoodriver.gov/wp-content/uploads/2018/11/Housing-Market-Economics-FAQ-Final.pdf (see pp. 8-9).

Staff recommendations for a broader list of projects to include in the financially constrained plan are identified in Attachments E and F. A Transportation SDC of approximately \$4,900 for single-family dwellings and an equivalent increase for other uses would provide sufficient funding (based on Hood River's existing Transportation SDC methodology).

If the City Council supports a financially constrained plan with a broader list of projects through increasing Transportation SDCs, staff will evaluate an SDC increase and the SDC methodology consistent with the Council's affordable housing goals as a part of the System Development Charge Study that is included in the City's 2021 Work Plan.

Next Steps: The Planning Commission's second hearing on the TSP amendments will be held on March 15, 2021. The Commission will forward recommendations to the City Council, and the Council's first hearing on the matter is scheduled April 12, 2021.

Attachments: <u>A – "Preferred Plan" project descriptions and Figures</u>

B – Map of recommended "financially constrained" projects **without** additional funding C - List of recommended "financially constrained" projects **without** additional funding D - SDC examples in Oregon

E - Map of recommended "financially constrained" projects with additional funding

F - List of recommended "financially constrained" projects with additional funding



bicycle improvement concepts are included in the pedestrian system plan, but affect both modes.

Project ID	Name/Location	Cost Estimate* (High)	Cost Estimate* (Low)	Note
SW1	Rand Road	<u>\$1,630,000</u> \$1,<u>179</u>010,000	<u>\$745,000</u> \$ <u>537</u> 460,000	Low estimate assumes sidewalks on east side of street only.
SW2	20th Street	<u>\$680,000</u> \$4 <u>9</u> 20,000	<u>\$255,000</u> \$1<u>81</u>55,000	Low estimate assumes sidewalks or west side of street only.
SW3	Cascade Avenue/HCRH- Westcliff Drive to Mt. Adams Avenue	<u>\$205,000</u> \$1 <u>46</u> 25,000	<u>\$205,000</u> \$1 <u>46</u> 25,000	Estimate includes 6' sidewalk on the north side of the roadway.
SW4	Sherman Avenue	<u>\$1,735,000</u> \$1,<u>25</u>075,000	<u>\$680,000</u> \$4 <u>9</u> 20,000	Low estimate assumes sidewalks or north side of street only.
SW5	State Street	<u>\$455,000</u> \$ <u>327</u> 280,000	<u>\$230,000</u> \$14 <u>63</u> 0,000	Low estimate includes sidewalk on south side of street (sidewalk already exists on north side).
SW6	OR 35 (north of US 30)	<u>\$-</u> \$0	<u>\$-</u> \$0	This project is included as part of project MV16.
SW7	Serpentine Road/Eugene Street	<u>\$440,000</u> \$ <u>315</u> 270,000	_ <u>\$440,000</u> \$ <u>315</u> 270,000	Community input indicated that sidewalks on only one side of this street would be sufficient.
SW8	May Street	<u>\$1,510,000</u> \$1,245<u>4</u>,000	<u>\$570,000</u> \$ <u>549</u> 470,000	Low estimate assumes sidewalks or south side of street only.
SW9	22nd Street	<u>\$1,035,000</u> <u>\$7</u> 64 <u>7</u> 0,000	<u>\$510,000</u> \$3 <u>68</u> 15,000	Low estimate assumes sidewalks or west side of street only.
SW10	18th Street	<u>\$930,000</u> \$ <u>65751,000</u>	<u>\$390,000</u> \$2 <u>8</u> 40,000	Low estimate assumes sidewalks or east side of street only.
SW11	Belmont Avenue	<u>\$820,000</u> \$5<u>9</u>05,000	<u>\$400,000</u> \$2<u>86</u>45,000	Low estimate assumes sidewalks or north side of street only.
SW12	Frankton Road	<u>\$2,995,000</u> \$ <u>2,166</u> 1,855,000	<u>\$505,000</u> \$3 <u>62</u> 10,000	Low estimate assumes sidewalks or one side of street from May Street south to city limits (Post Canyon Road).
SW13	Country Club Road	<u>\$1,140,000</u> \$ <u>823</u> 705,000	<u>\$1,140,000</u> \$ <u>823</u> 705,000	Sidewalk proposed for south side of the street only.
SW14	Cascade Avenue/HCRH (between Mt. Adams Avenue and Rand Road)	<u>\$365,000</u> \$2<u>63</u>25,000	<u>\$150,000</u> \$<u>1905</u>,000	Widen sidewalks to 6' on both sides of the road, as adjacent development occurs.

Table 1: Priority Sidewalk Infill Corridors – Preferred Plan

Project ID	Name/Location	Cost Estimate* (High)	Cost Estimate* (Low)	Note
SW15	13th Street/OR281	<u>\$165,000</u> \$1 <u>17</u> 00,000	<u>\$165,000</u> \$1 <u>17</u> 00,000	This project is to complete a sidewalk gap present on the east side of the street only.
SW16	12 th -Street/OR-281	\$6 <u>70,000</u>	\$ <u>760,000</u>	This project is to complete a sidewalk gap present on the east side of the street only.
SW17	OR 35 (near I-84)	<u>\$100,000</u> \$ <u>7</u> 60,000	<u>\$100,000</u> \$ <u>7</u> 60,000	This project is to complete a sidewalk gap present on the east side of the street only.
SW18	Cascade Avenue (15 th to 20 th)	<u>\$650,000</u> \$400 <u>67</u> ,000	<u>\$650,000</u>	This project is to complete a sidewalk gap on the north side of Cascade Avenue. Project will likely require construction of retaining walls. As an optional alignment that may save cost, sidewalk could be constructed on the south side of Cascade Avenue from Oak Street to 15 th Street, with new crossings installed to use the concrete island at Cascade/Oak as a pedestrian refuge.
<u>SW19</u>	Post Canyon Drive (Franktown Road to West UGB)	<u>\$655,000</u>	<u>\$655,000\$-</u>	Construct 5-foot sidewalks on north side of the street only.
Total Cost		\$ <u>119,51</u> 50 <u>15,51</u> 0,000, 000	\$ <u>67,585790,000</u> 4, 1	<u>B1625,000</u>

* Cost estimates for sidewalk infill assume 6' curb--tight sidewalk with curb, gutter and drainage, and include project administration, mobilization, engineering/design and contingency. In areas where drainage improvements already exist, costs may be significantly lower. Cost estimates include planter strips only for projects along streets where adopted City standard cross sections indicate planter strips are required. Cost estimates are planning-level and do not include topographical/other site-specific issues that may increase overall cost. High estimates assume completion of sidewalks on both sides of the street; low estimates assume completion of sidewalk on one side of the street or other design as noted. For low estimates, the side of the street with the most existing sidewalks was used.

Figure 2: Pedestrian System Plan

The following crossing improvements are conceptual. Improvement feasibility and design would be determined through an engineering study required by the City (local roads) or ODOT (state highways) prior to installation of improvements.

Project ID	Name/Location	Description	Cost Estimate*
CR1	**Westcliff Drive & Cascade Avenue-HCRH	 When signal is constructed as proposed, stripe crosswalks with protected crossing phase for pedestrians, and also provide crossings. 	n/a
CR2	Wasco Avenue & 20th Street/ Jaymar Road	 Stripe crosswalks on all legs of intersection and add advance warning signage. 	<u>\$10,000</u>
CR3	**2nd Avenue (I- 84 Eastbound)	 Improve sight distance by reconstructing the southeast corner and realigning the east crosswalk to bring it closer to 2nd Street. Add advance stop bar on the northbound approach to protect pedestrian and bicyclists crossing the south leg of the intersection. 	<u>\$175,000</u> \$1 <u>23</u> 05,000
CR4	6th Street & State Street	 Consider adding curb extension on State Street westbound on the NE corner of the intersection with a curb cut to help cyclists make a left turn using the crosswalk. 	\$1 <u>8</u> 5,000
CR5	Hood River Bicycle & Pedestrian Bridge	 Pave approaches to bridge ramps on either side of bridge. 	\$1 <u>8</u> 5,000
CR6	**OR 281-13th Street & Sherman Avenue	Consider striped crosswalks on north and/or south legs of intersection across 13th Street and add advance warning signage.	<u>\$10,000 \$65,000</u>
CR7	**OR 281-13th Street & Montello Avenue	Add advance warning signage to existing crosswalk.	<u>\$10,000 \$65,000</u>
CR8	12th Street (North Leg) & May Street	 Consider adding curb extensions on the east leg of the intersection to reduce pedestrian crossing distance. 	<u>\$60,000</u> \$ <u>41</u> 35,000

Table 2: Point/Crossing	Improvement Projects – Preferi	red Plan
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Project ID Name/Location		Description	Cost Estimate*
		 Consider interim improvement: Install a refuge island for pedestrians to help cross the right turn slip lane from westbound May Street onto 13th Street northbound. 	
	**OR 281-13th	 Consider interim improvement: Revise striping of crosswalk between new refuge island and northeast corner at an angle perpendicular to the slip lane and add advance warning signage to increase visibility. 	\$ <u>906455</u> ,000
CR9	Street & May Street	 Interim improvement: Stripe new crosswalk on east leg of intersection between southeast corner and new refuge island. 	(\$ <u>4305</u> 9,000 if RRFB is not included)
		 Interim improvement: Install pedestrian-activated rectangular rapid-flash beacons (RRFB) on east leg of intersection. 	
		Ultimate Improvement: Consider signalizing intersection (not included in cost estimate).	
CR10	**OR 281-12th Street & Belmont Avenue	 Stripe crosswalks on north and/or south legs of intersection across 12th Street and add advance warning signage. 	<u>\$10,000 \$65,00</u>
		 Interim Improvement: Stripe crosswalks on north and/or south legs of intersection across 13th Street and add advance warning signage. 	
CR11	**OR 281-13th Street & Belmont Avenue	 Interim Improvement: Consider installing a curb extension on one side of 13th Street to reduce crossing distances (pending reconfiguration of 13th Street). 	<u>\$25,000</u> \$15<u>8</u>,000
		 Ultimate Improvement: Traffic signal to be added to reduce motor vehicle delay will also improve pedestrian crossings. 	
CR12	17th Street & May Street	Extend curb on west to reduce turn radius and pedestrian crossing distance on 17 th -Street (southbound approach will be stopped with motor vehicle improvements, and stop sign will be removed from May Street).	
CR13	Rocky Road & May Street	Stripe crosswalks on east and/or west legs of intersection across May Street and add advance warning signage to assist crossing for future Westside Community Trail.	<u>\$10,000 \$56,00</u>
		 Consider adding stop signs to Belmont Drive to make this intersection an all-way stop (future north-south extension of Mt. Adams Avenue will not have stop signs when street is extended). 	
CR14	Fairview Drive &	Stripe crosswalks on all legs of the intersection.	<u>\$75,000</u>
	Belmont Drive	 Reconfigure intersection geometry to reduce the radius of the curve on Belmont Drive, to lower vehicle speeds. 	\$45<u>3</u>,000
		 Consider installing curb extensions or refuge islands to reduce crossing distances. 	

Project ID	Name/Location	Description	Cost Estimate*
CR15	**OR 281-13th Street & State Street-HCRH	Consider striping crosswalks on east side of intersection across State Street.	<u>\$10,000</u>
		Add pedestrian countdown signal to help Indian Creek Trail users cross 12th Street safely.	
CR16	**OR 281-12th Street & Pacific	 Install directional signage to encourage trail users to use the signalized intersection when crossing between segments of the Indian Creek Trail. 	<u>\$10,000 \$65,000</u>
	Avenue	 Consider widening the sidewalk at the northeast and northwest corners to increase queuing capacity for bicyclists and pedestrians waiting to cross 12th Street (acquire right of way if necessary). 	
CR17	**5th Street & Oak Street- HCRH	Consider adding curb extension if SHPO approval can be obtained on east leg of intersection at existing crosswalk to reduce crossing distance and improve visibility.	_ <u>\$25,000</u> \$15 <u>8,000</u>
CR18	OR 281-13 th Street & Oak Street-HCRH	 Install advanced stop bar and advance warning signage for the eastbound right turn lane on the west leg of the intersection to encourage motor vehicles to yield to users. 	<u>\$10,000 \$65,000</u>
CR19	2nd Street & State Street	Stripe crosswalks on east side of intersection across State Street and add advance warning signage.	<u>\$10,000 \$65,000</u>
CR20	(Future) Westside Community Trail & Belmont Drive	 Add advance stop bars before crosswalk. Consider relocating crossing or closing school parking lot driveway in order to reduce complication of turning movements at the crossing. Complete project CR 14 (described previously) to improve nearby intersection at Fairview Drive and Belmont Drive, with the goal of reducing the speed of 	<u>\$10,000 \$65,000</u>
		motorists approaching the crossing eastbound on Belmont Drive.	
CR21	**Cascade Avenue-HCRH (midblock between Mt. Adams Avenue and Rand Road)	 Consider installing rectangular rapid flash beacons to improve motorist compliance if necessary after an 	
CR22	**Cascade Avenue near- HCRH (midblock between Rand Road and 20th Street)	 Consider installing midblock crosswalk with median refuge island and advance warning signage. Consider installing rectangular rapid flash beacons to improve motorist compliance if necessary after an observation period. 	<u>\$45,000</u> \$2 <u>9</u> 5,000
<u>CR23</u>	Sherman Road & Rand Road	 Consider installing enhanced pedestrian/bicycle crossing treatments, which may include push-button actuated beacons and warning signage, to improve safety and mitigate sight distance limitations. Install enhanced pedestrian crossing to improve safety 	<u>\$80,000</u>

Project ID	Name/Location	Description	Cost Estimate*
		Total Cost	\$44 <u>720<mark>524</mark></u> ,000

* All cost estimates include project administration, mobilization, engineering/design and contingency costs. Cost estimates are planning-level and do not include topographical/other site-specific issues that may increase overall cost.

**The establishment of marked crosswalks at unsignalized approaches or mid-block crossings, or modification of existing approaches/crossings of state highways will require the completion of an engineering study and approval by the State Traffic Engineer and ODOT.

In addition to point and intersection improvements, facilities such as paths and trails can create both efficient commuter routes and recreational opportunities for bicycling and walking. Proposed off-street facilities are listed in Table 3 below and can be viewed on both Figure 2: Pedestrian Network₂ and Figure 4: Bicycle Network. <u>The alignments of proposed off-street</u> facilities seen in Figures 2: Pedestrian Network and Figure 4: Bicycle Network are conceptual. The City will work with developers to finalize the location and alignment of all identified trail and path projects. A typical cross section for path design is proposed in Figure 3a and a typical cross section for a high--speed and high--volume path is proposed in Figure 3b. Generally, these trails are located to minimize the overall length of trail parallel to street segments or relying on sidewalks. In locations where this is unavoidable, however, the proposed trail will be constructed as a multi-use path with parallel protected bike lanes.

Project ID	Name/Location	Cost Estimate*	Note
P1	Westcliff Drive Pedestrian Path	A future refinement plan will produce an alternative cross- section for Westcliff Drive	Westcliff provides an east west pedestrian connection through Hood River connecting to the HCRH trail. The path along the north side of Westcliff Drive is intended to serve pedestrians only, with bicycles sharing the roadway with motor vehicles. See Figure 6E.
<u>P1.1</u>	<u>Historic Columbia River Highway</u> <u>Trail</u>	<u>\$2,405,000</u> \$1,724,000	Construct an asphalt patha sidewalk (6 feet wide) along the north side of Westcliff Drive from the west UGB east to Exit 62. The sidewalk is intended to serve pedestrians only, with bicycles sharing the roadway with motor vehicles. A future refinement plan may be completed to produce an alternative cross section for Westcliff Dr. west of Exit 62.

Table 3: Off-Street Bicycle & Pedestrian Facility Projects – Preferred Plan

Project ID	Name/Location	Cost Estimate*	Note
<u>P1.</u> 2	Westcliff Dr. Pedestrian Path	<u>\$3,555,000</u> <u>\$2,151,000</u>	<u>Construct a path-sidewalk (6 feet wide)</u> <u>along Westcliff Drive from Exit 62 east to</u> <u>Westside Community Trail (via Wasco</u> <u>Street) The sidewalk is intended to serve</u> <u>pedestrians only, with bicycles sharing the</u> <u>roadway with motor vehiclesA future</u> <u>refinement plan may be completed to</u> <u>produce an alternative cross section for</u> <u>Westcliff Dr. east of Exit 62.</u>
P2	Waterfront Path	<u>\$1,820,000</u> \$1,<u>314</u>125,000	Proposed path connecting Westcliff Drive to the existing paths along the Columbia River.
P3	Waterfront Path Access from US 30	<u>\$375,000</u> \$2 <u>69</u> 30,000	Proposed alternative access to the Waterfront Path from east of downtown.
P4	Westside Community Trail	Off-street segments of pProject already funded by Hood River Valley Parks & Recreation: on- street segment along Rocky Road will cost \$1,220,000	Extend Westside Community Trail east to connect with the existing trail at 20th Street. This previously proposed path being pursued by Hood River Valley Parks & Recreation would create a key link in Hood River's bicycle and pedestrian networks.
P5	Hood River Middle School Path	_ <u>\$45,000</u> \$2 <u>9</u> 5,000	This previously proposed connection through the Hood River Middle School campus being pursued by the Hood River County School District through the school's Safe Routes to Schools program would create a key link in Hood River's bicycle and pedestrian networks.
P6	Indian Creek Trail Access from Union Street	<u>\$10,000</u> \$ <u>6</u> 5,000	Soft surface trail improvements to formalize access to the Indian Creek Trail from Union Street.
<u>₽7</u> ₽7	Cascade Avenue between Mt Adams Avenue and Westcliff Drive	\$255,000	Project removed during to be consistent with the Westside Area Concept Plan Report December 2017 amendment.Proposed 10' path along the south side of Cascade Avenue between Mt Adams Avenue and Westcliff Drive. See SW3 for sidewalk on north side of the roadway.
P8	Indian Creek Trail, Segment 2	Pending future easement, project will be funded by Hood River Valley Parks & Recreation	This previously proposed segment of the Indian Creek Trail being pursued by Hood River Valley Parks & Recreation would create a key link in Hood River's bicycle and pedestrian networks.

Project ID	Name/Location	Cost Estimate*	Note
P9	Indian Creek Trail Access from Sherman Avenue	<u>\$585,000</u> \$ <u>42</u> 360 ,000	Improvements to connection between 2 nd Street & State Street and the northern end of the Indian Creek Trail. Cost estimate assumes construction of a sidewalk on one side of the street along this route.
P10	Port of Hood River Path	\$ <u>309</u> 265,000	The Port of Hood River is actively pursuing construction of this new path that would improve the connection between the Hood River Bicycle & Pedestrian Bridge and the existing Waterfront Path.
P11	Post Canyon Path	<u>\$1,070,000</u> \$ 771 660,000	A road extension of Belmont Avenue to Post Canyon Drive is proposed. Sidewalk and bike lane would be included as part of that construction. However, this project is an interim improvement to construct a <u>10-</u> <u>foot wide</u> east-west path between Belmon Avenue and Frankton Road, aligned with Post Canyon Drive_ <u>_</u> . The segment between <u>Frankton Road and 30th Streetcould be</u> <u>constructed as an interim improvement or</u> <u>as a complimentary one is a priority interim</u> <u>improvement</u> . The alignment of this path should remain within the urban growth boundary and should avoid the National Scenic Area.
P12	Indian Creek Trail (segment parallel to 12 th -Street/OR 281)	\$215<u>1</u>,000	Proposed path along an existing segment of the Indian Creek Trail to improve access across Indian Creek east of 12 th -Street/OR 281.
<u>P13</u>	Historic Columbia River Highway Trail, south side of Cascade Avenue	<u>\$1,640,000\$1,18</u> <u>5,000</u>	Construct an asphalt or concrete path (120 feet wide) on the south side of Cascade Avenue between Westcliff Drive and Mt. Adams Avenue.
<u>P14</u>	30 th -Street North Extension	<u>\$75,000</u> \$359,000	Construct 6-foot bike lanes and 5- foot sidewalks between 30th Street to Mt. Adams Avenue/Wine Country Avenue
<u>P154</u>	Westside Community Trail extension to Cascade Avenue	<u>\$65,000</u> \$67,000	Extend the Westside Community Trail (about 4 feet wide) north between between Sherman AvenueWine Country Avenue Extension and Cascade Avenue. This trail will connect to a new north-south neighborhood connector between Sherman Avenue and the Wine Country Avenue extension with the specific alignment to be determined. Alignment options include Max's Place or over the existing stormwate utilities to the east.
<u>P165</u>	Upper Terrace Neighborhood Trail	<u>\$1,425,000</u> <u>\$1,322,000</u>	Construct Upper Terrace Neighborhood Trail (about 6 feet wide) between May StreetPost Canyon Drive and Fairview Drive.

Project ID	Name/Location	Cost Estimate*	Note
<u>P176</u>	Post Canyon Drive Bike Lanes and Sidewalks	\$778,000	Construct 6-foot bike lanes and 5- foot sidewalks between Frankton Road and West UGB Boundary
<u>P187</u>	West Community Trail extension west to Frankton Road	<u>\$110,000</u> \$103,000	Extend the Westside Community Trail (about 4 feet wideminimum 5-foot-wide sidewalk) west to align with Carr Drive between Rocky Readterminus of project P4 and Frankton Road.
<u>P198</u>	Trail from Sherman Avenue to Frankton Road	<u>\$50,000</u> <u>\$112,000</u>	Construct a trail (about 4 feet wide) from intersection of Sherman Avenue- and Westside DriveAlignment D to Frankton Readwest to Ridgeline Ttrail (trails merge, then P20 connects to Frankton Road).
<u>P2019</u>	Henderson Creek Trail	<u>\$3,910,000</u> <u>\$620,000</u>	Construct a-trailn asphalt or concrete path (about 6 about 6 feet wide) from May StreetFairview Drivethe south UGB/Belmont AvenuePost Canyon Drive extension (MV7) to Cascade Avenue in a buffer along adjacent to-Henderson Creek, including where the creek may have been is piped.
<u>P240</u>	Ridgeline Trail north of Sherman Ave	<u>\$2,245,000</u> \$776,000	Construct a trail (about 6 feet wide) from Sherman AveRand Road to Frankton Road.
	Total Cost	\$ <u>120,5302213,1</u> 40 <u>82723207</u> ,000	

* All cost estimates include project administration, mobilization, engineering/design and contingency costs. Cost estimates are planning-level and do not include topographical/other site-specific issues that may increase overall cost.

Figure 3a: Path Typical Cross Section

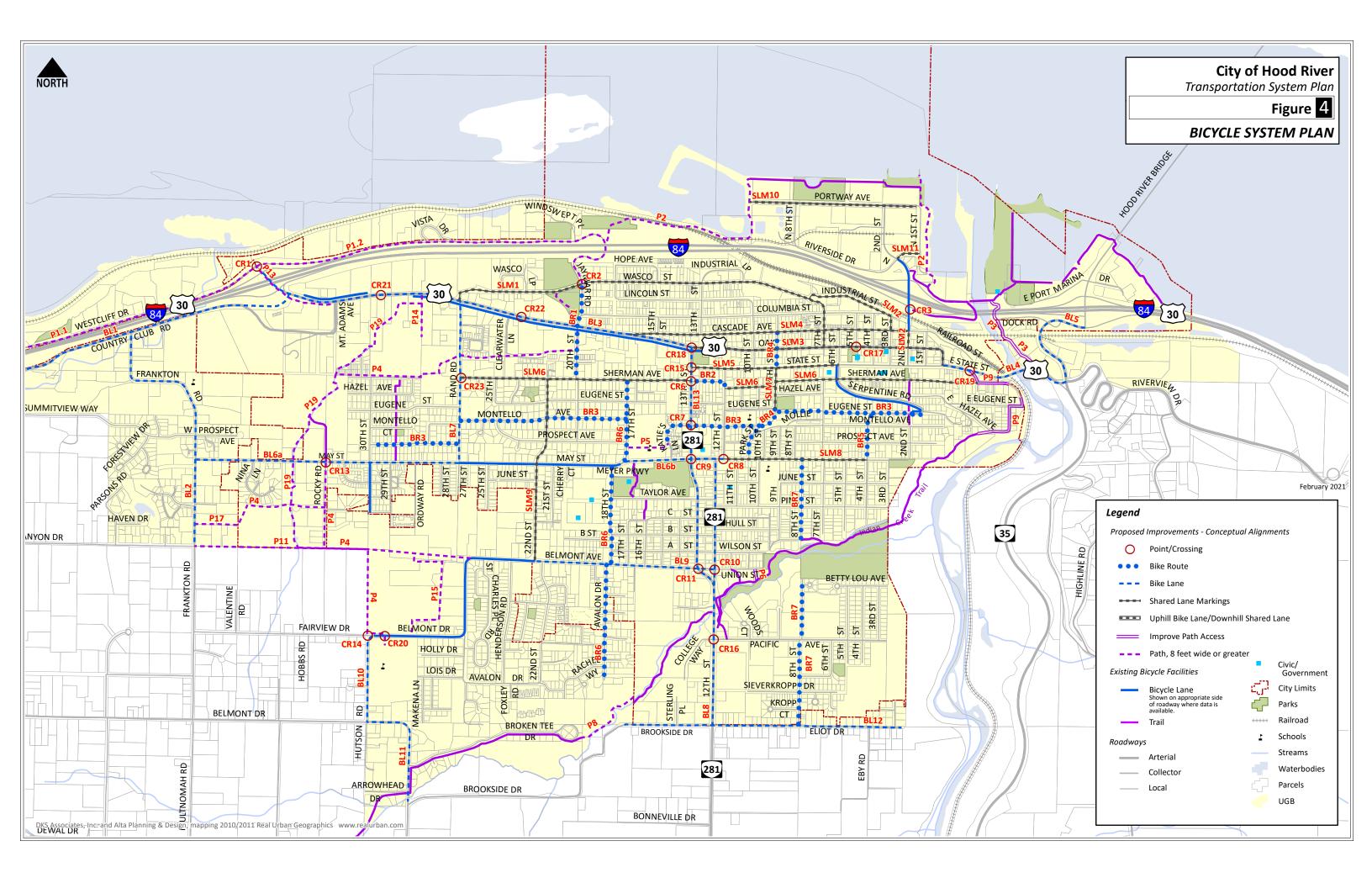
projects already listed, Table 4 provides optional programs in support of bicycle and pedestrian needs for future consideration.

Name	Description	Cost Estimate
ADA/Curb Ramp Upgrade Program	Upgrade curb ramps and eliminate gaps in ADA access along prioritized pedestrian routes near key destinations.	Example: \$20,000/year. Fixed or percentage amount annually for capital improvements.
"Smart Trips" Individualized Marketing Program	Develop an outreach program targeted at residents in neighborhoods receiving new bicycle and pedestrian infrastructure to encourage them to walk and bike more often. Distribute walking and bicycling maps; partner with local businesses for coupon incentives; organize group walks and rides to local recreational and commercial destinations. Administer before/after travel survey to evaluate effectiveness.	Example: \$20,000. (Variable by size; assume ~\$10/person in program area).
Bicycle/Pedestrian Connections to Transit	Coordinate infrastructure upgrades near transit stops and park and rides to improve access and amenities targeted at increasing ridership.	Example: \$20,000/year. Fixed or percentage amount annually for capital improvements.
Safe Routes to Schools Curriculum	Leverage ODOT Safe Routes Program with local investment to bring Safe Routes curriculum to all area K-8 schools.	Example: \$20,000/year. Fixed or percentage amount annually for capital improvements.
Bicycle Wayfinding Signage	Implement a bicycle wayfinding signage program to assist new bicyclists in choosing comfortable routes, and to help visiting bicyclists navigate through the city.	Example: \$100,000. Assumes one sign every 800 feet each direction along the ~ 20 mile20-mile proposed bicycle network, including 30% for design/engineering.
Bicycle Parking Program	Implement bicycle rack design and placement standards; review development applications for compliance; coordinate with sidewalk installation by developments or in city projects.	Example: \$5,000/year. Can be funded through fees for developments requesting related design variances.

Table 4: Optional Citywide and Bicycle and Pedestrian Programs

Bicycle System Plan

The Bicycle System Plan identifies improvements to the bicycle network in the City of Hood River for the next twenty years. Bicycles often use the same facilities as pedestrians, so to avoid overlap this section focuses primarily on bicycle-specific facilities. After review of the existing facilities and with input from City staff, stakeholder groups, and Hood River residents, projects were proposed to improve the efficiency and access for bicyclists within Hood River. The summary of the existing bicycle system and deficiencies, which served as the basis for proposed projects, can be found in the Existing Conditions Memorandum included in the appendix.



Recommended Bicycle Projects

Improvements to the bicycle network include completion of bike lanes (requiring a six-footd shoulder) by restriping streets where space is available and through roadway expansion on streets in outer Hood River where shoulders are narrow or do not exist. Several streets in and near downtown are proposed to be treated with shared lane markings (also known as "sharrows", example shown at right [103]) and signs where space is not available to add bike lanes. In many Hood River neighborhoods, streets are proposed for bike boulevardsbike routes: comfortable, low traffic streets where bicycles share the road with vehicles. Bike boulevardsBike routes can be treated with wayfinding signage and pavement markings in order to emphasize-to drivers that they should expect to



[<u>10</u>³] Example of a sharrow pavement marking

<u>encounter bicyclists</u>. Additional analysis will be necessary to identify specific treatments on each <u>bike boulevardbike route</u> corridor.

Preferred Plan Bicycle projects can be viewed in Figure 4: Bicycle Network, and are listed in Table 5 below. Construction of new roadways identified in the Motor Vehicle System Plan are not included in Table 5, but will include construction of bicycle facilities appropriate to the street classification of the new roadway.

Many other bicycle improvement projects also benefit pedestrian transportation, such as intersection and crossing improvements, connectivity improvements, and paths. These shared pedestrian and bicycle improvement concepts were previously described in the Pedestrian System Plan section.

Project ID	Name/Location	Facility Type	Cost Estimate*	Note
BL1	Country Club Road	Bike Lanes	<u>\$580,000</u> \$ <u>41</u> 365,00 0	Roadway expansion
BL2	Frankton Road	Bike Lanes	<u>\$540,000</u> \$3<u>88</u>40,00 0	Roadway expansion
BL3	Cascade Avenue-Oak Street-HCRH	Bike Lanes	<u>\$220,000</u> \$135<u>8</u>,000	Intermittent bike lanes exist; assumes restriping along half of corridor length

Table 5: Bicycle Improvement Projects – Preferred Plan

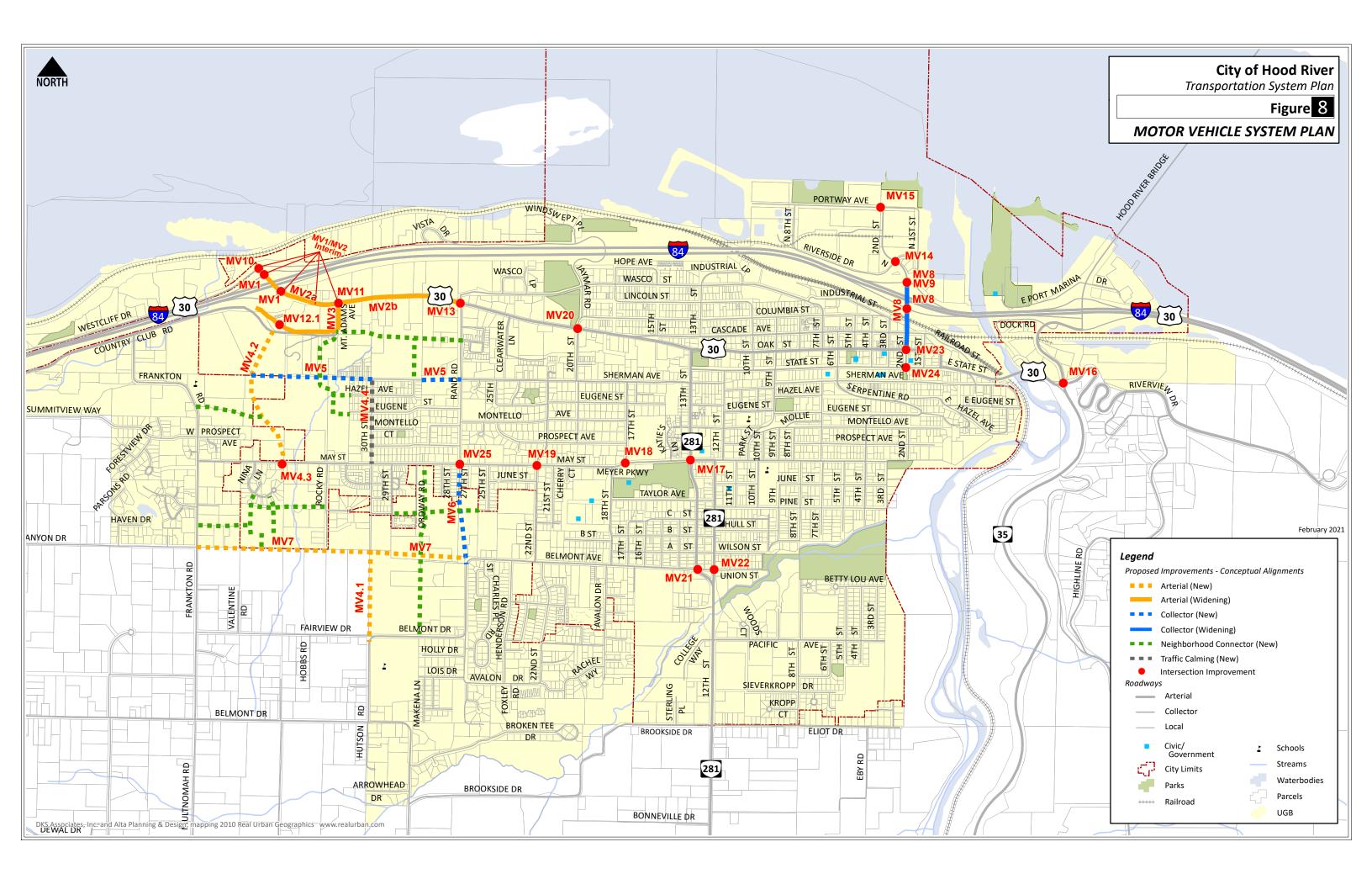
Project ID	Name/Location	Facility Type	Cost Estimate*	Note
BL4	State Street	Bike Lanes	<u>\$130,000</u> \$ <u>93</u> 80,000	Restriping
BL5	OR 35/Hood River Bridge	Bike Lanes	<u>\$110,000</u> \$<u>7</u>65,000	Restriping
BL6 <u>a</u>	May Street <u>(Frankton Rd</u> to Rand Rd)	Bike Lanes	_ <u>\$715,000</u> \$ <u>516</u> 890,0 00	Roadway expansion: <u>on-</u> <u>street parking to be allowed</u> <u>on one side of the street</u> <u>only or prohibited on both</u> <u>sides</u>
BL6b	May Street (Rand Rd 17th Street to12th St)	Bike Lanes	<u>\$140,000</u> <u>\$499,000</u>	Roadway expansion
BL7	Rand Road	Bike Lanes	<u>\$335,000</u> \$2<u>4</u>10,000	Roadway expansion
BL8	12th Street/13th Street/HCRH	Bike Lanes	<u>\$400,000</u> \$2<u>86</u>45,00 0	Restriping
BL9	Belmont Avenue	Bike Lanes	<u>\$180,000</u> \$1 <u>28</u> 10,00 0	Restriping
BL10	Belmont Drive/ Hudson Road	Bike Lanes	<u>\$190,000</u> \$1 <u>34</u> 15,00 0	Roadway expansion
BL11	Indian Creek Road	Bike Lanes	<u>\$255,000</u> \$1 <u>81</u> 55,00 0	Roadway expansion
BL12	Brookside Drive/Eliot Drive	Bike Lanes	<u>\$585,000</u> \$ <u>42</u> 360,00 0	Roadway expansion
BL13	13th Street	Bike Lanes	<u>\$115,000</u> \$ <u>82</u> 70,000	Restriping.
BLSLM1	Serpentine Road/6th Street/Eugene Street	Uphill Bike Lane/ Downhill Shared Lane Markings	\$4 <u>70,000</u>	Restriping
SLM1	Wasco Street/7th Street	Shared Lane Markings	<u>\$60,000</u> \$ <u>41</u> 35,000	
SLM2	Industrial Street/3rd Street/2nd Street	Shared Lane Markings	<u>\$20,000</u> \$1<u>2</u>0,000	
SLM3	Oak Street/Front Street	Shared Lane Markings	<u>\$35,000</u> \$2<u>3</u>0,000	

Project ID	Name/Location	Facility Type	Cost Estimate*	Note
SLM4	Cascade Avenue	Shared Lane Markings	<u>\$35,000</u> \$2<u>3</u>0,000	
SLM5	State Street	Shared Lane Markings	<u>\$20,000</u> \$2<u>3</u>0,000	
SLM6	Sherman Avenue	Shared Lane Markings	<u>\$65,000</u> \$4 <u>7</u> 0,000	
SLM7	9 th Street/Park Street	Shared Lane Markings	<u>\$10,000</u> <u>\$65,000</u>	
SLM8	May Street	Shared Lane Markings	<u>\$20,000</u> \$10<u>2</u>,000	
SLM9	22 nd Street	Shared Lane Markings	<u>\$25,000</u> \$1 <u>8</u> 5,000	
SLM10	Portway Avenue	Shared Lane Markings	<u>\$25,000</u> \$1 <u>8</u> 5,000	
SLM11	Riverside Drive	Shared Lane Markings	<u>\$10,000</u> \$ <u>65,000</u>	Shared lane markings and wayfinding signs between N 2 nd Street and P10.
BLVD1BR1	20th Street/Jaymar Road	Bike BoulevardBike Route	<u>\$45,000</u> \$25<u>9</u>,000	
BLVD2BR2	Sherman Avenue	Bike RouteBike Boulevard	<u>\$20,000</u> \$1 <u>2</u> 0,000	
BLVD3BR3	Montello Avenue/Eugene Street	<u>Bike Route</u> Bike Boulevard	<u>\$235,000</u> \$1 <u>34</u> 15,00 0	
BLVD4BR4	9th Street	Bike RouteBike Boulevard	<u>\$45,000</u> \$2<u>9</u>5,000	
BLVD5BR5	4th Street	Bike RouteBike Boulevard	<u>\$25,000</u> \$15<u>8</u>,000	
BLVD6 <u>BR6</u>	18th Street/17th Street/Avalon Way/Avalon Drive	Bike RouteBike Boulevard	<u>\$130,000</u> \$ <u>93</u> 80,000	
BLVD7BR7	8th Street	Bike RouteBike Boulevard	<u>\$100,000</u> \$6<u>7</u>0,000	
	Total Cost		\$ 3,5,4204, <u>278</u> 705,00 0	

Project ID	Name/Location	Facility Type	Cost Estimate*	Note
* All each action	ata a in al vala, music at a desiniate	otion mobilization engine	a mina an / al a a i ana a a	ad contineness conto. Cont

* All cost estimates include project administration, mobilization, engineering/design and contingency costs. Cost estimates are planning-level and do not include topographical/other site-specific issues that may increase overall cost. Bike lane cost estimates include striping removal, restriping, pavement markings, and signs. When applicable, roadway expansion assumes 6' shoulder in each direction. Shared lane marking cost estimates include pavement markings and signs. Bike boulevardBike Route cost estimates include pavement markings, signs, traffic control modifications (ex. turning stop signs) and example traffic calming treatments.

Figure 4: Bicycle System Plan



Motor Vehicle System Projects

The motor vehicle system projects presented in Table 13 address different types of capacity improvements, including projects within the interchange areas, overall system circulation projects, downtown-specific circulation projects, and individual targeted intersection improvements. This set of projects represents the motor vehicle component of the "Preferred Plan", which consists of all transportation improvements identified to meet future needs through the year 2031. -<u>The 2021 Amendment includes additional actions to support growth in west Hood River through the year 2040, consistent with the land use assumptions in the Westside Area Concept Plan. Therefore, this amended TSP includes projects and performance results based on a planning horizon year of 2031 for some areas and on a planning horizon year of 2040 for others (e.g., see Table 14).</u>

The Financially Constrained Plan (presented in Chapter 4) is a subset of this plan that aligns with anticipated funding. Descriptions of the Preferred Plan projects are provided in Table 13 and the locations of the different projects can be seen in Figure 8. <u>The alignments of new roadway</u> projects in Figure 8 are conceptual, and the City will work with developers to finalize the locations and alignments of all new roadways.

Project ID	Location	Description	Planning Level Cost
MV1*	I-84 Exit 62 Interchange	 <u>I-84 Westbound Ramps/Terminal</u> <u>Construct traffic signal</u> Construct northbound left turn lane (full length of bridge) Construct second southbound through lane Construct westbound left turn lane Construct shared westbound through/left turn lane Construct westbound right turn lane Construct westbound right turn lane <u>Construct traffic signal or roundabout</u> Construct northbound right turn lane (drop lane from Cascade Ave., reevaluate the need for this if a roundabout is chosen as the preferred alternative) Construct southbound left turn lane <u>Construct southbound left turn lane (drop lane from Cascade Ave., reevaluate the need for this if a roundabout is chosen as the preferred alternative)</u> Construct southbound left turn lane (reevaluate the need for this if a roundabout brough lane <u>Construct southbound left turn lane (reevaluate the need for this if a roundabout is chosen as the preferred alternative)</u> <u>Construct southbound left turn lane (reevaluate the need for this if a roundabout is chosen as the preferred alternative)</u> <u>Construct southbound left turn lane (reevaluate the need for this if a roundabout is chosen as the preferred alternative)</u> 	\$ 20,900<u>348,3905,000</u>,000

Table 13: Motor Vehicle System Projects – Preferred Plan

Project ID	Location	Description	Planning Level Cost
<u>MV1/MV2</u> Interim	<u>I-84 Exit 62</u> Interchange	 I-84 Westbound Ramp/Terminal - <u>Construct traffic signal</u> I-84 Westbound Ramp/Terminal - Install queue detection devices on the off-ramp and ability to pre-empt signal timing to allow the off-ramp queues to be cleared during times when queue lengths become excessive I-84 Eastbound Ramp/Terminal - Construct an eastbound shared through/left turn lane to create an exclusive lane for the heavier right turn movement Cascade Avenue - Construct second eastbound lane from the I-84 eastbound ramp terminal to Mt. Adams Avenue (would tie into the existing eastbound right turn lane at Mt. Adams Avenue) Westcliff Drive/Cascade Avenue - Install a stop sign on the eastbound approach - Remove the stop sign for the northbound right turn lane 	<u>\$ 5,6,915000,000</u>
MV2 <u>a</u> *	Cascade Ave (HCRH): I-84 Exit 62 Interchange to Rand-Rd.<u>Mt.</u> Adams Ave.	 Construct second eastbound lane from I-84 eastbound ramp terminal to Mt. Adams Ave. (ends as right turn lane) Construct second westbound lane from Mt. Adams Ave. to I-84 eastbound ramp terminal (ends as right turn lane)*** Widen Cascade Ave. between Mt. Adams Ave. and Rand Rd. to include one travel lane in each direction and a center turn lane (Roundabout (preferred if feasible) or tTraffic signal on Cascade Ave. at Mt. Adams Ave. listed as separate project – MV11) 	\$ <u>2,700,000<u>1,810306,000</u></u>
<u>MV2b*</u>	Cascade Ave (HCRH): Mt. Adams Ave to Rand Rd.	Widen Cascade Ave. between Mt. Adams Ave. and Rand Rd. to include one travel lane in each direction and a center turn lane	<u>\$91,25506,000</u>

Project ID	Location	Description	Planning Level Cost
MV3≛	Cascade Ave at Mt. Adams Ave.: Cascade Ave. to Wine Country Ave.eCountry Club Rd. Realignment/ Mt.	 Realign Country Club Road to intersect with Mt. Adams Ave., disconnecting the existing intersection on Cascade Ave. with Country Club Rd. to motor vehicle traffic Construct Mt. Adams Ave. from Cascade Ave. to realigned Country Club Rd. 	\$ 3,700,000<u>3,170844</u>,000
	Adams Ave.	 <u>Cascade Ave. at Mt. Adams Ave.</u> <u>Widen to east of Mt. Adams Avenue</u> <u>between Cascade Ave. And Wine Country</u> <u>Ave. to c</u>Construct <u>atwo_second</u> northbound left turn lanes <u>en inside, full</u> <u>length to Country Club RdWine Country</u> <u>Ave. on outside(reevaluate the need for</u> <u>this if a roundabout is chosen as the</u> <u>preferred alternative</u>) <u>Construct northbound right turn lane</u> Install yield control for eastbound right turn lane (constructed as part of MV2) <u>(Roundabout (preferred if feasible) or tFraffic</u> signal on Cascade Ave. at Mt. Adams Ave. listed as separate project – MV11) 	
		Mt. Adams Ave. at Wine County Ave. as south and east approaches are constructed Club Rd. • Construct a roundabout When Mt. Adams Ave. is extended to the south (MV4), construct northbound left turn lane	
		When Mt. Adams Ave. is extended to the south (MV4), c <u>C</u> onstruct <u>stop controlled</u> northbound shared through/right turn lane_with the <u>northbound left-turn prohibited</u> Construct channelized southbound right turn <u>only</u> -lane under yield control (drop lane from Mt. Adams Ave.)(no southbound through or left turns allowed)	
		Construct southbound through lane Construct southbound left turn lane serving property access on east approach Construct eastbound left turn lane Construct eastbound shared left/through/right turn lane	
		Construct <u>stop controlled</u> east approach for property access, including a westbound_left turn lane, and a shared westbound through/right turn lane_only -(Traffic signal on Mt. Adams Ave. at Country Club Rd. listed as separate projectW12)	

Project ID	Location	Description	Planning Level Cost
MV4 <u>.1</u>	Mt. Adams Ave.30 th Street: Country Club Rd.May Street to Fairview Dr.	 Construct 30th Street as a 3-lane minor arterial from the current stub south of May StreetTalon Avenue to Fairview Dr. along the south/west edge of the urban growth boundary (UGB). Construct Mt. Adams Ave. as a 3-lane minor arterial from Country Club Rd. to Fairview Dr. along the existing 30th St. alignment and the south/west edge of the urban growth boundary (UGB). This project would be an extension of the Mt. Adams Ave. segment constructed under MV3. The alignment of this roadway should remain within the urban growth boundary and should avoid the National Scenic Area. Improvements within the National Scenic Area may be subject to review for consistency with National Scenic Area provisions. New roadways constructed adjacent to the urban growth boundary may be modified by the City Engineer to include only 3/4- street improvements (e.g., no curb and sidewalk adjacent to the urban growth boundary). Construct a traffic signal at the intersection of Mt. Adams Avenue/ May Street, two- way stop-control at Mt. Adams Avenue/Fairview Drive, and a roundabout or traffic signal at Hutson Road/ Belmont Drive. 	<u>\$7,6,740429,000</u> \$11,940,000
<u>MV4.2</u>	Alignment <u>DWestside Drive</u> (Wine Country <u>Avenue to May</u> <u>Street</u>)	<u>Construct Alignment DWestside Drive as a</u> <u>2 to 3-lane minor arterial from Country</u> <u>Club Road</u> Wine Country Avenue to May <u>Street.</u>	\$ 13,602 18,805,000
<u>MV4.3</u>	May Street/Alignment D Westside Drive	<u>Construct a traffic signalroundabout</u> (preferred if feasible) or traffic signal	<u>\$2,000,000 (roundabout)</u> <u>\$350,0001,000,000 (traffic</u> signal)

<u>MV 4.4</u>	<u>30th St.: May St. to</u> <u>Sherman Ave.</u>	Install traffic calming measures to mitigate cut-through traffic after neighborhood connections are completed to the north. Specific locations and methods will be determined by the City Engineer but could include chicanes, chokers, or curb extensions with input from the Fire Chief.	<u>\$40,000</u>
MV5	Sherman Ave.: Rand Rd. to Mt. Adams Ave.Alignment <u>DWestside Drive</u>	 Extend Sherman Ave. from Rand Rd. to <u>Mt. Adams Ave.<u>Alignment</u></u> <u>DWestside Drive</u> (middle segment of this extension exists) 	<u>\$10,8057,814,000</u> \$2,145,000

MV6	Rand Rd.: May St. to Belmont Ave.	• Extend Rand Rd./27th St. from the current stub south of May St. to Belmont Ave.	<u>\$4,1102,972,000</u> \$3,220,000
MV7	Belmont Ave.: Rand Rd. to Frankton Rd.	 Extend Belmont Ave. to Frankton Rd., opposite Post Canyon Dr. The alignment of Belmont Ave. would fall within the southern UGB and avoid the National Scenic Area. Improvements within the National Scenic Area may be subject to review for consistency with National Scenic Area provisions. New roadways constructed adjacent to the urban growth boundary may be modified by the City Engineer to include only 3/4-street improvements (e.g., no curb and sidewalk adjacent to the urban growth boundary). 	\$ 8,605,000<u>13,5609,808,000</u>
MV8**	I-84 Exit 63 Interchange	 <u>I-84 Westbound Ramps/Terminal</u> Widen westbound off-ramp approach to include a right turn lane, shared through/left lane, and a left turn lane <u>I-84 Eastbound Ramps/Terminal</u> Lengthen the I-84 Exit 63 off-ramp Modify the eastbound approach to include a shared through/left turn lane and right turn lane <u>2nd Street</u> Widen the 2nd St. overcrossings of I-84 and the Union Pacific Railroad to add a second southbound through lane. Widening is recommended to occur on the east side to fit available right of way and provide an opportunity to correct the existing sight distance problem for pedestrians on the southeast corner of the 2nd St./I-84 eastbound intersection. Remove parking on 2nd St. between Cascade Ave. and Oak St. and restripe the roadway to provide a second southbound through lane, dropping as a right turn lane at Oak 	\$ 8,600<u>113,8850,043</u>, 000

MV9**	I-84 Exit 63 westbound off- ramp queue management	 Install queue detection devices on the I-84 Exit 63 westbound off-ramp, communications with ODOT's Traffic Management Operations Center, and surveillance cameras for viewing the off-ramp. This will allow for operators to post warning messages on the variable message sign on I-84 westbound entering Hood River when deemed warranted by conditions on the Exit 63 westbound off-ramp. (<i>This project is intended to be an interim improvement if recurring congestion and unsafe ramp queues become a problem</i> 	\$ <u>237569</u> 30,000
		before the improvements from project MV8 can be funded and constructed.)	
MV10*	Cascade Ave. (HCRH) / Westcliff Dr.	 Construct traffic signal or roundabout (type of traffic control should be coordinated with MV1) Construct eastbound right turn lane (reevaluate the need for this if a roundabout is chosen as the preferred alternative) 	\$2,000,000 (roundabout) \$ <u>1,535109950</u> ,000 <u>(traffic signal)</u>
MV11*	Mt. Adams Ave./ Cascade Ave.(HCRH)	 Construct traffic signalroundabout (preferred if feasible)**** or traffic signal (Assumes compleimentary road improvements constructed as part of <u>MV1/MV2 Interim, MV2b and MV3</u>;MV2 and MV3) 	\$5,500,000 (roundabout) \$ <u>1,000,000399</u> 50,000 (traffic signal)
₩V12*	Mt. Adams Ave./Country Club Rd.	 Construct traffic signal (Assumes complimentary road improvements constructed as part of MV3 and MV4) 	\$ 350,000
<u>MV12.1</u>	Wine Country Avenue/Alignment D Westside Drive	 Construct a traffic signalroundabout (preferred if feasible) or traffic signal Construct a westbound left-turn lane (reevaluate the need for this if a roundabout is chosen as the preferred alternative) 	\$3,000,000 (roundabout) \$1,160,000 498,000 (traffic signal)
MV13*	Rand Rd./ Cascade Ave. (HCRH)	 Construct traffic signal Modify northbound approach to include a left turn lane and a shared through/right turn lane Modify southbound approach to include a left turn lane and a shared through/right turn lane Construct eastbound right turn lane 	\$ <u>3,200</u> 1, <u>750</u> 000,000_(traffic signal)

	•		
MV14**	2 nd St./ Riverside Dr.	 In the future, the 2nd Street/ Riverside Drive intersection may no longer comply with mobility standards and restrictions on turning movements may be required. One identified solution involves the removal of stop signs on 2nd Street approaches and restriction of turning movements to allow only right-in and right-out turn movements. While this solution was found to provide acceptable operations, it could significantly reduce the accessibility of some properties and result in undesirable diversion of traffic through other areas of the Waterfront. Changes to the 2nd/Riverside intersection should be expected in the future. However, such changes shall occur only when necessary and left turn movement restrictions shall occur only if no other solution is found to be acceptable. Any solution to mitigating the 2nd Street/ Riverside Drive intersection must be compatible with the long-term ability to safely and efficiently accommodate traffic movements through the I-84 Exit 63 interchange. All property owners in the Waterfront area shall be noticed at the time improvements at the 2nd Street/ Riverside Drive intersection are being considered and shall be allowed the opportunity to participate in the process of developing and selecting appropriate improvements. 	\$35056240,000
MV15**	2 nd St./ Portway Ave.	 All-way stop control (as needed based on implementation of turn restrictions at 2nd St./ Riverside Dr.) 	\$ <u>3104</u> ,000

MV16**	OR 35/ State St.	Construct traffic signal or roundabout	\$4,000,000 (roundabout)
		Construct northbound left turn lane	\$ 1,2,210<u>285</u>100 ,000 <u>(traffic signal</u>
		 Construct northbound shared through/right turn lane 	
		Construct southbound left turn lane	
		Construct southbound through lane	
		Construct southbound right turn lane	
		Construct westbound left turn lane	
		 Construct westbound shared through/right turn lane 	
		 Construct eastbound left turn lane 	
		 Construct eastbound through lane 	
		 Construct eastbound right turn lane separated from intersection (as existing) 	
		<u>Reevaluate the need for turn lanes if</u> a roundabout is chosen as the preferred alternative	
MV17	May St./ 13 th St.	Construct traffic signal or roundabout	\$4,000,000 (roundabout)
	(OR 281)	Construct eastbound right turn lane (reevaluate the need for this if a roundabout is chosen as the preferred alternative)	\$ <u>9071,68575</u> ,000 <u>(traffic signal)</u>
MV18	May St./17 th St.	 Reconfigure the stop sign placement so that all southbound movements on 18th St. must stop, while May St. would not be required to stop 	\$ <u>104</u> 3,000
MV19	May St./ 22 nd St.	 Convert the intersection to two-way stop control by removing the stop signs on the May St. approaches 	\$ <u>104</u> 3,000
MV20	Cascade Ave. (HCRH) / 20 th St.	Construct a traffic signal or roundabout	\$4,000,000 (roundabout) \$1,000,000 (traffic signal)350,000
MV21	Belmont Ave./ 13 th St. (OR 281)	Construct a traffic signal or roundabout	\$5,000,000 (roundabout) \$1,000,000 (traffic signal)350,000
MV22	Belmont Ave./ 12 th St (OR 281)	 Add signs limiting the westbound approach to right out movements only 	\$ <u>106</u> 5,000
MV23**	2 nd St./ Oak St.(HCRH)	Construct traffic signal	<u>\$1,000,000 (traffic signal)</u> \$350,00
MV24	2 nd St./State St.	Construct traffic signal or roundabout	<u>\$2,000,000 (roundabout)</u> <u>\$1,000,000 (traffic signal)</u> \$350,00
<u>MV25</u>	Rand Road/27th Street/May Street	<u>Construct a traffic signal or mini</u> <u>roundabout</u>	\$350,00055,000 (mini roundabout \$1,000,000 (traffic signal)
<u>MV26</u>	Exit 62 IAMP Refinement Plan	Refine the Exit 62 Interchange Area Management Plan to be consistent with the Westside Area Concept Plan.	<u>\$21500,000</u>
<u>₩V-27</u>	May St.: Rand Rd. to Frankton Rd.	 <u>Restripe May Street to include one</u> travel lane in each direction and bike lanes. 	

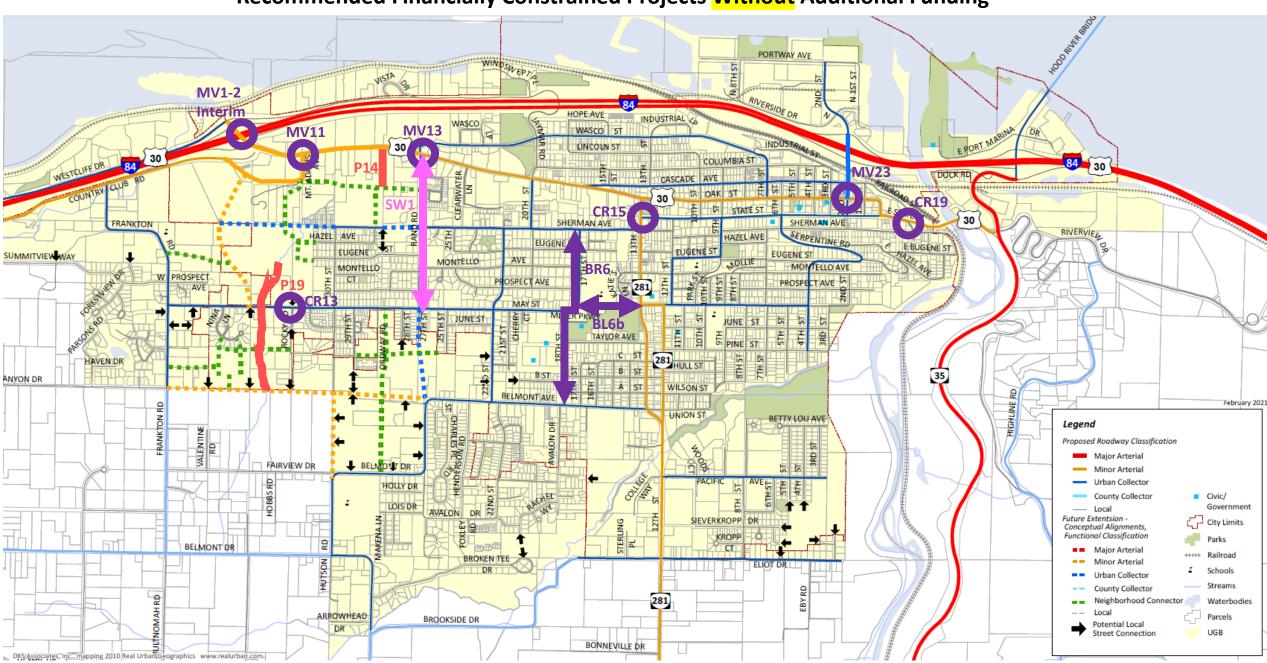
Total Cost	\$ 68,289,000<u>154,815</u>03,310 ,000****	
* Included in Hood River I-84 Exit 62 Interchange Area Management Plan		
** Included in Hood River I-84 Exit 63 & Exit 64 Interchange Area Managemen	it Plan	

***Traffic projections have shown that a second 12-foot wide westbound travel lane will ultimately be required. Prior to construction of the outer westbound travel lane, the City of Hood River and ODOT will demonstrate the need for the lane based on updated traffic projections and will present the findings to the Historic Columbia River Highway Advisory Committee.

****Total cost assumes that traffic signals are constructed unless a roundabout is identified as the preferred alternative in the project description

TRANSPORTATION SYSTEM PLAN AMENDMENTS - File No. 2020-25 Recommended Financially Constrained Projects Without Additional Funding

ATTACHMENT B



ANYON DR

ATTACHMENT C

Project ID	Cost Estimate (High)	Cost Estimate (Low)	Name/Location	Description Rand Rd. (Collector) sidewalk, low estimate assumes one side
SW1 Sidewalk FC Plan	\$1,630,000 \$1,630,000	\$745,000 \$745,000	Rand Rd.	only
			May St. at Rocky Rd. (or Henderson Creek	
CR13	\$10,000	\$10,000	trail) State St., east side	Crossing
CR15	\$10,000	\$10,000	of 13th St. State St. at E. 2nd	Crossing
CR19 Crossing FC Plan	\$10,000 <i>\$30,000</i>	\$10,000 \$30,000	St.	Crossing
P14	\$65,000	\$65,000	Westside Trail spur	Cascade Ave. to Wine Country Ave. extension.
				Trail. Low estimate: 14-foot- wide ROW only from south UGB to May St., crossing at May St., and tie into existing trail easement on School District property (complete trail connection from south UGB to Sherman Ave., approx.
P19 Path FC Plan	\$5,290,000 \$5,355,000	\$546,000 \$611,000	Henderson Creek	2000 lineal feet).
BR6	\$130,000	\$130,000	17th & 18th St., Sherman Ave. to Belmont Ave.	Bike route
BL6b Bike FC Plan	\$140,000 \$270,000	\$140,000 \$270,000	May St (17th St to 12th St)	Bike lanes (described as "roadway expansion" in preferred project list)

I-84 Westbound
Ramp/Terminal - Construct
traffic signal • I-84 Westbound
Ramp/Terminal - Install queue
detection devices on the off-
ramp and ability to pre-empt
signal timing to allow the off-
ramp queues to be cleared
during times when queue
lengths become excessive • I-
84 Eastbound Ramp/Terminal -
Construct an eastbound shared
through/left turn lane to create
an exclusive lane for the
heavier right turn movement •
Cascade Avenue - Construct
second eastbound lane from
the I-84 eastbound ramp
terminal to Mt. Adams Avenue
(would tie into the existing
eastbound right turn lane at
Mt. Adams Avenue) • Westcliff
Drive/Cascade Avenue - Install
a stop sign on the eastbound
approach - Remove the stop
sign for the northbound right
turn lane

Total FC Plan Total Revenue Funding Gap	\$23,900,000 \$15,665,000 \$8,235,000	\$15,671,000 \$15,665,000 \$6,000		
Motor Vehicle FC Plan	\$16,615,000	\$14,015,000		
MV23	\$1,000,000	\$1,000,000	2nd St./ Oak St.(HCRH)	Traffic signal (URD funding)
MV13	\$3,200,000	\$600,000	Rand Rd./ Cascade Ave. (HCRH)	Traffic signal
MV11	\$5,500,000	\$5,500,000	Mt. Adams Ave./ Cascade Ave.(HCRH)	Roundabout (preferred alternative)
MV1/MV2 Interim	\$6,915,000	\$6,915,000	I-84 Exit 62 Interchange	sign for the northbound right turn lane

ATTACHMENT D

<u>City</u>	2020-2021 Approx. Transportation SDC (typical 2000-SF single-family detached h	ome
Wilsonville	12800	
Lake Oswego	12000	
West Linn	10500	
Sherwood	10313	
Happy Valley	9135	
Cornelius	8706	
Forest Grove	8706	
Bend	8163	
Portland Metro Area average	7750	
Newberg	6400	
Lafayette	5513	
Philomath	5440	
Ashland	4600	
Mollala	4297	
Gresham	3997	
Springfield	3907	
Sandy	3830	
Redmond	3800	
Madras	3659	
Dallas	3231	
Medford	2945	
Talent	2935	
Hood River	2059	
The Dalles	1500	
Average	6356	
Median	5020	

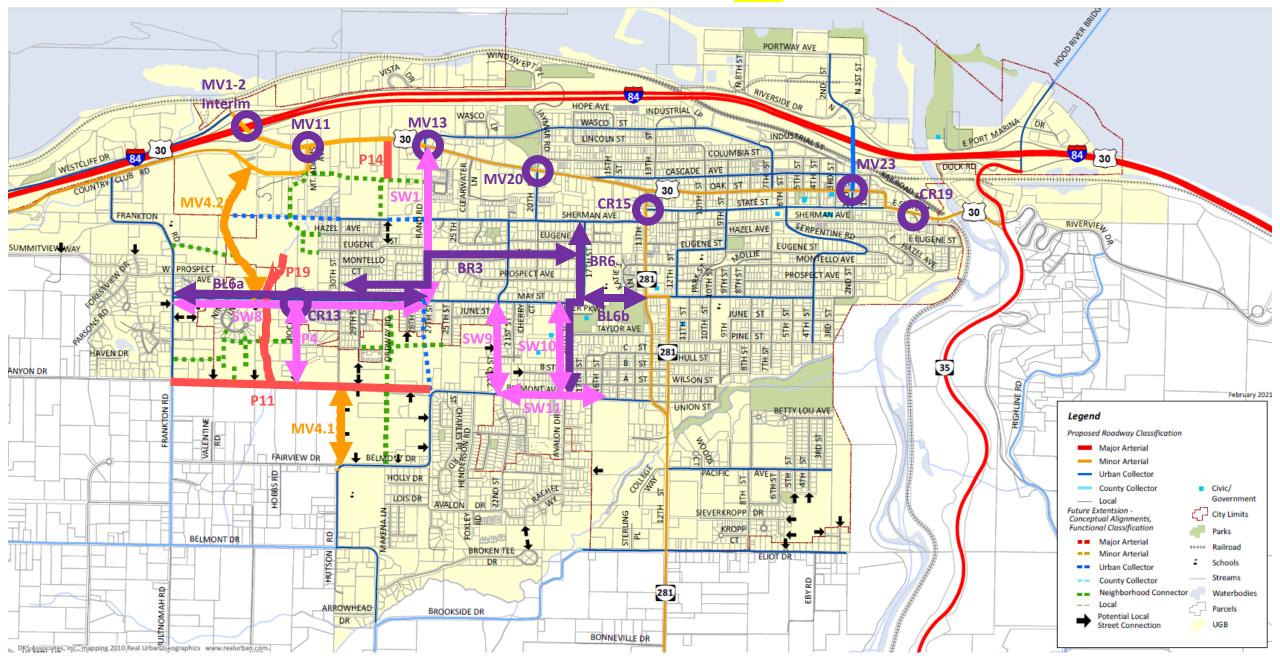
Hood River County

1606

Source: LOC 2020 SDC Survey (https://www.orcities.org/application/files/2615/8170/9849/SDCSurveyReport2-13-20.pdf) and staff research

TRANSPORTATION SYSTEM PLAN AMENDMENTS - File No. 2020-25 Recommended Financially Constrained Projects With Additional Funding





ATTACHMENT F

Project ID	Staff Cost Assumptions	Description	(()
C\\//1	745.000	Rand Rd. (Collector) sidewalk, low estimate assumes one side only	
SW1 SW8		-	
		May St. (Collector) sidewalk, one side only	
SW9		22nd St. (Collector) sidewalk, one side only	
SW10	390,000	18th St. (Collector) sidewalk, one side only	
C11/4.4	400.000	Belmont Ave. (Collector) east of 22nd and 18th, north side	
SW11	400,000	oniy	
Sidewalk FC Plan	2,615,000		4
CR13	\$10.000	Henderson Creek trail crossing at May Street	
CR15		State St. crossing, east side of 13th St	
CR19		State St. crossing, at E. 2nd St.	
Crossing FC Plan	\$30,000		2
-			
		Westside trail segment: sidewalks and bike lanes on	
		Rocky Rd. (UGB to May St.) including 11' of additional	
		ROW. Cost estimate = \$1,365,000. Staff assumption is	
		50% of cost estimate for improvements on east side of	
		street only as well as purchase of ~1110SF ROW along	
P4	682,500	west side immediately south of May St.	,
		Post Canyon interim trail improvement: 10' ROW (see also	
P11	1,070,000	MV7)	
		Westside Trail spur: Cascade Ave. to Wine Country Ave.	
P14	65,000	extension.	
		Henderson Creek trail: 14' ROW and asphalt path, UGB to	
		School District's parcel (approx. 2000 lineal feet) where it	
P19	980,000	ties into existing path and easement	I
Path FC Plan	2,797,500		2
BR3	235,000	Bike route: Montello and Eugene, 17th to 30th	
		Bike route, 17th & 18th St. between Sherman and	
DDC	¢120.000		
BR6		Belmont. Intended to support SRTS funding application	
BL6a		Bike lanes, May St. Frankton to Rand Rd.	
BL6b		Bike Lanes, May St., 12th to 17th	
Bike FC Plan	1,220,000		Ż
MV1/MV2 Interim	6 915 በበበ	I-84 Exit 62 interim improvements (ODOT funding)	,
	0,010,000		
		30th St. from Belmont to Post Canyon. Discounted 55% of	
		cost based on Local Street equivalent. DKS cost estimate	
	2 022 000	is for ROW and improvements along UGB to minor arterial	,
MV4.1	3,033,000	over and above Local Street ROW and improvements	

	Westside Dr. from May St. to Wine Country Ave.: cost estimate discounted 65% to remove Local Street
MV4.2	8,559,000 equivalent.
MV11	5,500,000 Roundabout (preferred alt.): Cascade/Mt. Adams
MV13 MV20	600,000 Traffic signal: Cascade/Rand. Finance Dept. estimate Traffic signal: Cascade & 20th. Engineering Dept. estimate 2,000,000 includes additional ROW
MV23 <i>Motor Vehicle FC Plan</i>	1,000,000 Traffic signal: 2nd & Oak (URD funding) 27,607,000
Total FC Plan	34,269,500
Total Revenue Funding Gap	15,665,000 Added downtown URD funding source \$1M for MV23 18,604,500