



2020 TRANSPORTATION FUNDING MEASURE

Preliminary Staff Recommendation for Corridor Investments and Regionwide Programs

In early 2019 the Task Force identified a number values and outcomes for the measure. These provided a key guide for the staff recommendation. We encourage Task Force members to revisit those values as you consider the package overall. These values include the following. More details can be found at [**oregonmetro.gov/transportation**](https://oregonmetro.gov/transportation).

- Improve safety
- Prioritize investments that support communities of color
- Make it easier to get around
- Support resiliency
- Support clean air, clean water, and healthy ecosystems
- Support economic growth
- Increase access to opportunity for low-income Oregonians
- Leverage regional and local investments

Memo

Date: Friday, October 18, 2019
To: Transportation Funding Task Force Members
From: Margi Bradway, Deputy Director of Planning and Development Department
Anthony Buczek, Project Manager of Project Development for Transportation Measure
Subject: Staff recommended corridor investments

Background: From Tier 1 corridors to potential project opportunities

At a work session on June 4, 2019, the Metro Council directed staff to work with local partners to move forward 13 “Tier 1” travel corridors to identify possible projects for consideration in a transportation investment measure. In its direction, the council considered a number of factors, including community engagement, input from jurisdictional partners and values and outcomes identified by the Transportation Funding Task Force and the Metro Council in early 2019. Projects in these corridors are expected to constitute most of the investment of a potential 2020 transportation funding measure; they will be supplemented by regionwide funding programs that provide benefits and address key community and transportation needs beyond these corridors.

Between June and September 2019, Metro staff collaborated with regional and local agencies and consultant teams to plan, develop and assess potential costs of project opportunities along the 13 corridors identified as Tier 1 by the Metro Council.

Metro staff met with staff from transportation agencies across the region, including cities, counties, TriMet, and the Oregon Department of Transportation, to identify potential project opportunities consistent with the Task Force and Council outcomes, which could be delivered as part of a potential funding measure. Based on projects identified in the 2018 Regional Transportation Plan, local Transportation System Plans, TriMet’s System Plan, and other corridor plans, Metro staff documented a list of project opportunities and project details such as key goals, project elements, and current cost estimates. Metro also considered new opportunities for projects based other information, such as safety reviews and supplementary analysis of potential transit performance.

Local Investment Teams

On each Tier 1 corridor, Metro identified a project or series of projects based on the work discussed above. In some cases, these projects are specific to a location or jurisdiction. In other cases, such as transit projects, the project termini extend the entire corridor or through the majority of the corridor. This interplay between location-specific projects and overlapping projects is illustrated in the individual Draft Project Recommendations. The projects that were identified or developed through this process were presented to Local Investment Teams described below for their feedback and to better understand how those projects might address key community needs.

During July and August 2019, Local Investment Teams in each county considered project opportunities and provided valuable feedback, recommendations, and key priorities or themes to inform the potential project mix to advance within each corridor. These teams were composed of 10 to 12 community members with experience living, working and traveling in each county. Members were asked to apply this personal experience to reviewing and providing feedback on potential projects.

Working with our facilitation consultant, Metro completed reports summarizing all Local Investment Team feedback on the corridor projects and finalized these with input from the teams. These reports were shared with the Task Force, which heard the feedback from Local Investment Team members at its Sept. 18 meeting in Beaverton.

Metro is deeply grateful to the Local Investment Team members for their time and insight.

Developing staff project recommendations

The initial Staff Project Recommendations show current project opportunities identified on the corridor, which defined the overall “corridor need” identified in the technical process. Within each corridor, staff is recommending to advance a project or set of projects for further project development and/or construction.

In recommending projects to advance on each corridor, Metro staff carefully considered and weighed a number of factors:

- Metro Council outcomes for the Transportation Measure
- Task Force outcomes for the Transportation Measure
- Local Investment Team input
- Regional and local plans
- Analysis of transit opportunities on corridor
- Agency staff knowledge of readiness and opportunity
- Metro staff review of consistency with Regional Transportation Plan principles
- Expected scale of potential revenue
- Feasibility of delivering projects within the near future

In summary, projects were recommended for advancement based on their feasibility and ability to implement outcomes and objectives defined within the factors listed above.

How to read these recommendations

Each corridor worksheet provides a brief description of the corridor, identifies the projects reviewed by the Local Investment Team on the corridor, and highlights the projects that staff recommend considering for investment as part of a possible regional funding measure. Project costs and key outcomes are identified. If a project cost is a range, that means that there is still additional need to further develop the project to understand its cost. In some of these cases Metro staff recommend funding the higher cost, in other cases staff recommend funding a portion of the cost. (In order to be included in a final recommendation to Metro Council, project delivery agencies will need to further refine project costs and identify any additional needed funding.)

In some cases, a project is identified as one that brings additional leverage, i.e. identified additional funds from other sources. For more discussion of what that means, please review the cost estimates discussion above.

A table in the upper right corner of each worksheet indicates the values that the Local Investment Team identified as particularly important on that corridor, and a Metro staff evaluation of whether the project meets those values. This evaluation is based on staff’s best analysis as well as Local Investment Team feedback.

Cost estimates

The initial Staff Project Recommendations include an initial cost estimate for each project with a range of potential costs estimated for each. The cost estimates for the project opportunities exist in varying levels of detail and certainty – from well-developed cost estimates based on preliminary designs to rough planning-level estimates. The range of potential costs provided in the initial Staff Project Recommendations are intended to give the Task Force and Metro Council a sense of need and scale on each corridor. The staff recommendations show the range of needs compared to the scale of the recommended investment by a possible funding measure.

The recommendations in corridors also list funding that could be leveraged from other sources. In some cases this is local funding that may already be secured or committed from a city, county, or other transportation agency. In other cases, leveraged funding will be sought from another source, such as the federal government, but is not yet confirmed.

About contingency

Contingency is an amount of money, based on the project cost, that is set aside to account for potential project cost increases as the project is further developed. Project costs can increase due to a variety of issues, including learning about structural challenges (e.g. unstable soil, landslide risks), additional needs (e.g. stormwater management, more significant maintenance issues), project scope changes (e.g. more significant treatments are needed to achieve the result), and other external challenges, such as costs of materials, labor costs and availability, etc.

Uncertainty usually equates to eventual higher project costs. Therefore, staff undertook a review of best practices for assigning a working contingency at this planning level. Based upon the contingency review, staff have used a tiered approach of assigning a working contingency to each project based on its stage of cost estimate development in order to determine an overall program contingency. Projects with very rough estimates were assigned a higher working contingency, while those with more developed and detailed estimates were assigned a lower working contingency. This working contingency is in addition to the individual project-level contingencies that are assumed for each project cost estimate. The overall program contingency is the sum of the individual project-level working contingencies. The overall program contingency seeks to account for factors such as expected variations in actual project costs as they are further developed and escalation to year of expenditure, which has not yet been determined for each project.

Following further Task Force discussion and Metro Council direction on projects, Metro staff will continue to lead formal technical work with the project delivery agencies to refine and improve the certainty of the individual project cost estimates between now and a potential Metro Council referral decision in late spring 2020. This work will also include developing a schedule for the implementation of projects which will set a planned year of expenditure for each project. As this work progresses, it is expected that the program contingency will be reduced in concert with updated cost estimates and increased cost certainty. It is important for realistic budgeting to retain this program contingency in the interim to address the reality that project costs are likely to increase as they are refined.

Overall package cost

The Task Force will discuss revenue mechanisms and overall funding considerations at its December 15 and January 18 meetings. For the purpose of the Task Force project recommendation conversation at this stage, the total amount of the staff recommendation should be considered a ceiling. If Task Force members are interested in adding additional funding or projects, they will need to identify equivalent opportunities to reduce or remove funding for other projects.

Next steps

The Task Force will discuss these recommendations at its Oct. 30 meeting. The Task Force is expected to vote on recommendations to the Metro Council on Nov. 20. The Metro Council will then be asked to provide staff direction on which projects to advance for further development.

Project Delivery Agencies are the agencies who are likely to deliver a project or set of projects. These agencies are often the authority owning the road or other infrastructure, but they could also be an agency with a significant interest or investment in the corridor. Following Metro Council direction on projects to advance, Metro staff will continue to support and coordinate with these agencies on the next phases of project development. Projects are at different stages of project development and some projects will require more resources and focus than others.

The project list advanced by the Metro Council following Task Force review and input will likely change several times prior to the Metro Council's consideration of whether to refer a measure to voters in late spring 2020. This must happen for several reasons. First, all projects will undergo a more rigorous cost assessment process to bring them to a consistent set of cost assumptions. This will produce a revised program cost which will need to be matched to updated revenue projections. All projects will also undergo a risk assessment, to assess and document the level and type of risk associated with each project. Some projects will inherently

have more risk, due to factors such as complex project elements, potential environmental impacts, or unresolved design questions. Risks will also be taken into account when building a timeline for the overall delivery of the transportation funding measure, with some projects needing more time for further development than others.

These factors, along with increased clarity on the likely revenue scale, will inform another decision point at which the Task Force and Metro Council may recommend to add, modify, or remove projects from a measure package. This conversation will happen for the Task Force at meetings in March and April 2020.

Summary

The Staff Project Recommendations reflect known needs on the Tier 1 corridors based on a variety of factors and engagement outlined above. Staff have sought to ensure the recommended projects on each corridor align with Metro Council values, Task Force values and the Local Investment Team feedback. It is now up to the Task Force to consider what it wishes to recommend to the Metro Council for moving forward.

Preliminary identified impacts

Staff have conducted a preliminary assessment of how well the recommended projects advance the above outcomes through rough metrics related to transit mobility, climate, equity, safety, and system impacts. Additional and more labor and time intensive metrics, such as systemwide ridership and traffic performance data, will be produced later in the process and provided to Task Force members for future decisionmaking.

The measures shown below were produced using a combination of travel demand model analysis to preliminarily evaluate effects of proposed transit infrastructure improvements, analysis of crash data, and assessment of project goals relative to their estimated costs. All measures are very preliminary estimates and are likely to shift after further project development. However, in the interest of giving Task Force members some understanding of what investments will mean on the ground, we are providing these initial estimates earlier in the process. Note that these measures are for corridor investments only; they do not include potential outcomes of regionwide programs expected to be included in the possible funding measure to make investments beyond the identified corridors.

Estimated Potential Investment Benefits: Overall Corridor Package

	TRANSIT		CLIMATE	EQUITY	SAFETY			
	Transit investment	Est. reduction in hours of passenger delay	Investment in greenhouse gas reduction**	Investment in equity focus areas	Estimated safety investment	Estimated safety investment in equity focus areas	% of Metro Region fatal crashes addressed	% of Metro Region serious crashes addressed
Amount	\$1.92B*	975 hours per day or more	\$1.92B*	\$2.33B	\$1.06B	\$1.02B	21%	20%
% of Package	62%		62%	75%	34%	33%		

* Includes contingency

** Transit projects are a Tier 1 Climate Smart Strategy, and are included in this estimate. Projects that improve biking and walking are likely to have a small impact in reducing greenhouse gas emissions, but we are not able to calculate that at this time.

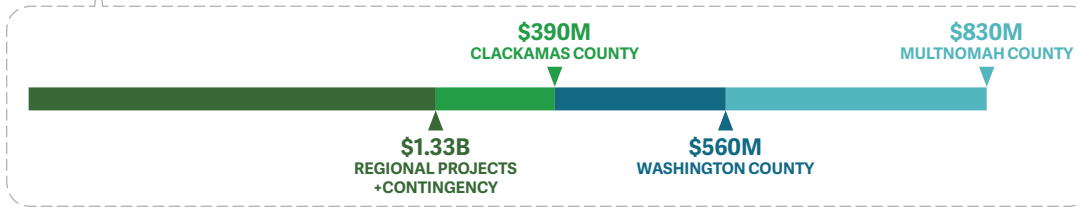
Estimated Potential Investment Benefits: By Corridor

	TRANSIT				CLIMATE	EQUITY	SAFETY			
	Recommends transit project?	Est. max travel time reduction	Est. daily passenger hours saved	Est. daily boardings	Est. funding addressing GHG emissions	% of corridor in equity focus area	Estimated safety investment	Fatalities 2007-17	Severe Injuries 2007-17	% of regional severe crashes
TV Highway	✓	15%	143	+400	\$260M	85%	\$270M	29	175	3.8%
185th	✓	9%	63	+50	\$100M	90%	\$20M	5	40	0.8%
82nd	✓	15%-35%	150-350 or more	+700-4,300	\$110M	74%	\$190M	19	177	3.6%
Burnside	✓	13%	530	+900	\$50M	71%	\$30M	16	125	2.6%
Powell	Plan: new HCT service			+27,700	\$20M	84%	\$0M	22	137	2.9%
122nd	✓	10%	40	+100	\$20M	88%	\$70M	9	66	1.4%
McLoughlin	✓	15%	49	+300	\$110M	59%	\$60M	20	113	2.5%
C2C/181st					\$0M	37%	\$70M	7	61	1.3%
Sunrise					\$0M	34%	\$10M	5	43	0.9%
Central City	Plan: improved LRT			+36,600	\$150M	97%	\$170M	11	90	1.9%
162nd					\$0M	92%	\$70M	3	31	0.6%
SW Corridor	Adds new LRT service			+39,100	\$975M	32%	\$50M	8	34	0.8%
Albina					\$0M	100%	\$40M	6	32	0.7%

Corridor Scenario Investment Summary

Staff recommendation is based on feedback from Local Investment Teams and other public engagement, the Regional Transportation Funding Task Force and Metro Council values and outcomes, and the feasibility of delivering projects to the public within a reasonable time frame.

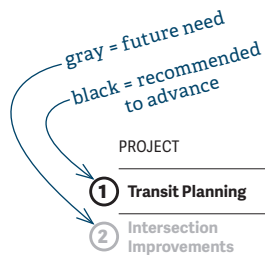
PROPOSED CORRIDOR FUNDING + **POTENTIAL LEVERAGED FUNDS** = **TOTAL CORRIDOR INVESTMENT**
\$3.11B + **\$2.13B** = **\$5.24B**



CORRIDOR	PROPOSED REGIONAL MEASURE FUNDING	LEVERAGED FUNDS	IDENTIFIED CORRIDOR NEED
Southwest Corridor	\$975M	\$1.4B	\$2.4B
McLoughlin	\$200M		\$280M
Clackamas to Columbia/181st	\$50M / \$80M		\$280M
Sunrise	\$70M		\$560M
Tualatin Valley Highway	\$350M	\$50M	\$600M
185th Ave	\$200M	\$20M	\$270M
82nd Ave	\$35M / \$70M / \$265M	\$160M	\$820M
Burnside	\$80M / \$150M	\$450M	\$890M
Central City	\$170M / \$50M	\$50M	\$390M
122nd Ave	\$90M		\$160M
162nd Ave	\$70M	\$10M	\$170M
Albina Vision	\$55M		\$75M
Powell	\$30M		\$40M

DELIVERY AGENCIES

ODOT Oregon Department of Transportation	PP Port of Portland
M Metro	G City of Gresham
TM TriMet	MW City of Milwaukie
PBOT Portland Bureau of Transportation	GL City of Gladstone
WC Washington County	OC Oregon City
CC Clackamas County	



LOCAL INVESTMENT TEAM KEY THEMES

PROJECT	SAFETY	TRANSIT	ECONOMIC	EQUITY	RESILIENCY
1 Transit Planning	○	●	●	○	
2 Intersection Improvements			○		

● = addresses theme ○ = partially addresses theme

SW Corridor

Southwest Corridor Light Rail will address congestion in the I-5 corridor and expand the MAX system to growing communities in SW Portland, Tigard and Tualatin, serving more people with fast, affordable high-capacity transit. It will increase access to living wage jobs in Tigard and Tualatin and connect to educational opportunities at PCC Sylvania, OHSU and PSU.

The project includes bicycle and pedestrian network improvements, like protected bike lanes and better sidewalks on Barbur Boulevard. Bus service improvements will complement light rail, including a two-mile shared trackway near Downtown Portland where buses can drive on the tracks to avoid traffic delays. The project will improve safety in a corridor where **42** serious injuries and fatalities occurred between 2007-2017. **32%** of this corridor is in an equity focus area.

The project is paralleled by the **Southwest Corridor Equitable Development Strategy (SWEDS)**, a collaboration of public and private partners working to generate equitable economic opportunity, and preserve and expand affordable housing along the light rail route.



[SEE PROJECT MAP NEXT PAGE]

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20061



SW Corridor

SW Corridor MAX Portland to Tigard to Bridgeport Village (11 miles)

Construct light rail line to improve transit in key regional corridor, including stations and multimodal roadway features.

\$975M

[leverages **\$1.4B** federal/other funds]

TM

- Light rail route
- Station
- P Station with park and ride

Marquam Hill connector

Build a new connection between Barbur and Marquam Hill to improve access to medical services, jobs and educational opportunities.

Shared trackway for buses

Allow buses from Hillsdale, Multnomah Village and Beaverton to avoid traffic delays by driving on 2 miles of paved trackway.

Barbur bridges

Rebuild the 85-year-old Newbury and Vermont trestle bridges on Barbur to current seismic standards with sidewalks and bike facilities.

PCC-Sylvania access

Improve 53rd Avenue to allow people to safely walk and bike between light rail and the Portland Community College Sylvania Campus.

Walking and biking improvements

Build continuous high quality sidewalks, bike facilities and crossings on Barbur between I-405 and the Barbur Transit Center.

Tigard Triangle street improvements

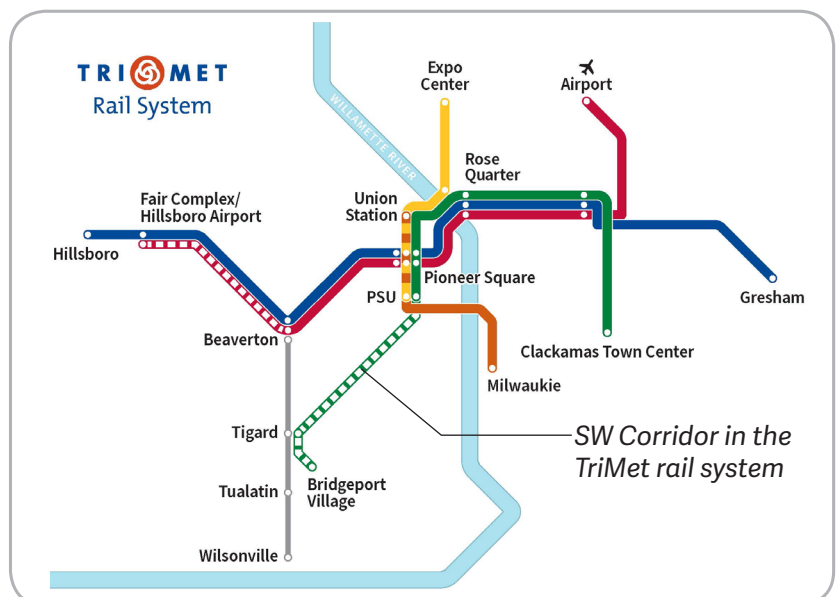
Rebuild and add portions of 70th and Elmhurst to improve access and support anticipated development.

Downtown Tigard

Improve access across Hall Boulevard to connect people to the Tigard Transit Center and WES.

Terminus station

Build parking garage and bus hub at Bridgeport terminus station.



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McLoughlin Blvd

McLoughlin Boulevard connects communities in Clackamas and Multnomah counties to jobs, housing, and transit. The corridor serves as an alternative to I-205 and other routes between Portland and Clackamas County, and has been identified by TriMet as a key corridor to increase ridership. Locally, it is a main street for various communities, and provides local access and circulation. There were **133** serious injuries and fatalities on this corridor between 2007-2017. **59%** of this corridor is in an equity focus area.

PROJECT Recommended / Future Need	LOCAL INVESTMENT TEAM KEY THEMES			
	SAFETY	ACCESS/ TRANSIT	ECONOMIC	EQUITY
① Enhanced Transit	○	●		○
② Safety	●	●		○
③ Kellogg Creek Dam			●	
④ I-205 Ramp Improvements			○	
⑤ Trolley Trail Planning				○
⑥ Reedway Bike Overcrossing			○	
⑦ Willamette Falls Bike/ Ped Plan			●	
⑧ Park Ave Park & Ride Expansion		●		
⑨ Portland Ave Streetscape	○			
⑩ Corridor Planning	●	○	●	

SCENARIO
INVESTMENT

\$200M

\$280M CORRIDOR NEED

[SEE PROJECTS MAP NEXT PAGE]

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20061

McLoughlin Blvd

8 Park Ave Park & Ride Expansion

Add two levels to existing park & ride facility at current Orange Line terminus.

\$16-19M

TM

1 Enhanced Transit Milwaukee to Oregon City (6.5 miles)

Bus enhancements for Lines 33 and 99 (operations, station enhancements, targeted bus lanes, signal priority) to improve speed and reliability, station access and rider experience.

\$85-102M

TM

ODOT

2 Safety Milwaukee to Oregon City (6.5 miles)

Add/improve sidewalks, crossings and lighting to reduce severe injury and fatal crashes.

\$40-60M

ODOT

10 Corridor Planning Milwaukee to Oregon City (6.5 miles)

Design for longer term transportation improvements including transit.

\$5M

M

not on map

6 Reedway Bike Overcrossing

Create bike/ped bridge over McLoughlin to cross railroad barrier.

(\$12-30M)

PROT

MILWAUKIE

3 Kellogg Creek Dam

Remove Kellogg dam, drain lake, replace bridge, add multi-use underpass to address major fish passage barrier and add pedestrian and bike facilities.

(\$10-30M)

MW

ODOT

9 Portland Ave Streetscape Abernethy to Arlington (.5 miles)

Redesign Gladstone main street to improve walking, biking, and downtown revitalization.

(\$5-9M)

GL

5 Trolley Trail Planning

Design to extend Trolley Trail over Clackamas River to create a more direct trail connection between Gladstone and Oregon City.

\$1M

CC

4 I-205 Ramp Improvements

Add dual left turn lanes to McLoughlin at both I-205 ramps to ease congestion, and add bike/ped facilities.

\$7-9M

ODOT

7 Willamette Falls Bike/Ped Plan 10th to Railroad Ave (.4 miles)

Design to extend boulevard treatments along McLoughlin, including river side multi-use path, medians, and sidewalks to improve safety for people walking and biking.

\$1-2M

OC

2020 TRANSPORTATION FUNDING MEASURE

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20061

C2C/181st Ave

C2C (Clackamas to Columbia) /181st Avenue is a major North-South connection between rapidly developing Happy Valley and the Columbia Corridor through Western Gresham. It connects I-84 and US 26 (Powell) and is a North-South alternative to I-205. This corridor also connects employment with low-income areas, affordable housing, schools, parks and other neighborhood amenities. There were **68** serious injuries and fatalities on this corridor between 2007-2017. **37%** of this corridor is in an equity focus area.

LOCAL INVESTMENT TEAM KEY THEMES

PROJECT Recommended / Future Need	SAFETY	ACCESS/ EASE	ECONOMIC	HEALTHY	EQUITY
① Enhanced Transit	●	●	○	●	○
② Safety	●	○	○	●	○
③ Roundabout	●	●			○
④ Widen 190th/Highland		●	○		
⑤ New Connector Road		●	●		
⑥ 172nd Expansion		●	●		
⑦ 190th/Highland Bridge Replacement	○	●	○	○	

SCENARIO
INVESTMENT

\$130M

\$280M CORRIDOR NEED

⑦ 190th/Highland Bridge Replacement

Over Johnson Creek and Springwater Corridor Trail

Four-lane bridge replacement with sidewalks and bike facilities, seismic upgrade.

\$9-12M

G

③ Roundabout 172nd/Foster

Convert intersection to roundabout to improve safety and ease traffic congestion.

\$5-6M

MC

⑥ 172nd Expansion N of Hemrick Rd to Sunnyside (1.2 miles)

Widen 172nd to 4-5 lanes with bike/ped facilities to develop continuous corridor.

(\$35-54M)

CC

① Enhanced Transit Sandy to Powell (4 miles)

Bus enhancements for Line 87 (operations, station enhancements, targeted bus lanes, signal priority) to improve speed and reliability, station access and amenities.

(\$15-20M)

G

② Safety Sandy to Powell (4 miles)

Add/improve sidewalks, crossings, lighting to roadway to reduce severe injury and fatal crashes.

\$41-62M

G

④ 190th/Highland Expansion Powell to county line (2 miles)

Widen 190th to 4-5 lanes with medians, sidewalks, and bike/ped facilities to develop continuous 4 lane corridor.

(\$35-54M)

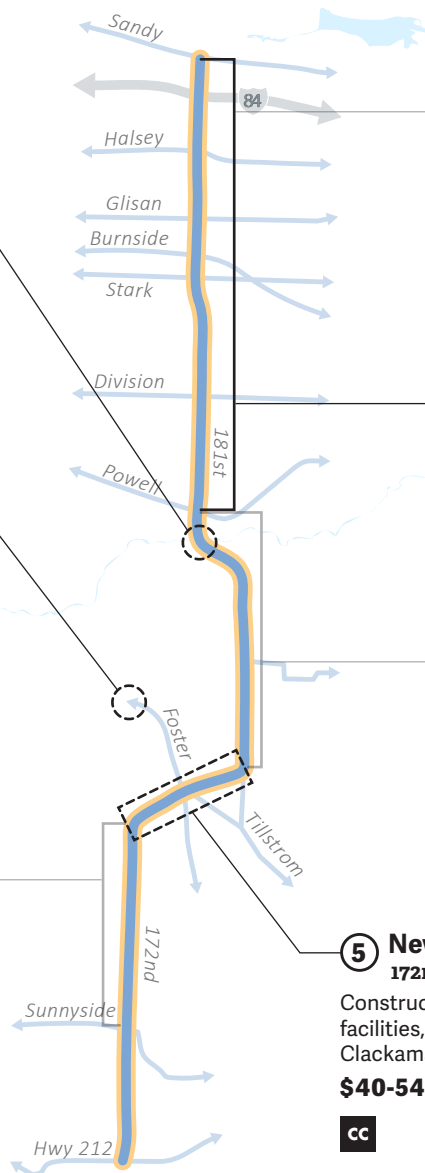
G

⑤ New Connector Road 172nd to 190th (1.25 miles)

Construct new roadway with sidewalks, bike facilities, and roundabouts to create a continuous Clackamas to Columbia corridor.

\$40-54M

CC



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Sunrise Corridor

Highway 212 and the Sunrise Corridor connect future residential and employment areas to existing job centers near I-205. The potential future connection is intended to provide access to jobs and affordable housing in Clackamas County and serve as an alternative connection from the future Clackamas-to-Columbia corridor to I-205. The corridor supports freight movement to US 26, provides connections to recreation areas, and is an important bicycle connector. There were **48** serious injuries and fatalities on this corridor between 2007-2017. **32%** of this corridor is in an equity focus area.

PROJECT

Recommended / Future Need

LOCAL INVESTMENT TEAM KEY THEMES

SAFETY

EASE

HEALTHY

EQUITY

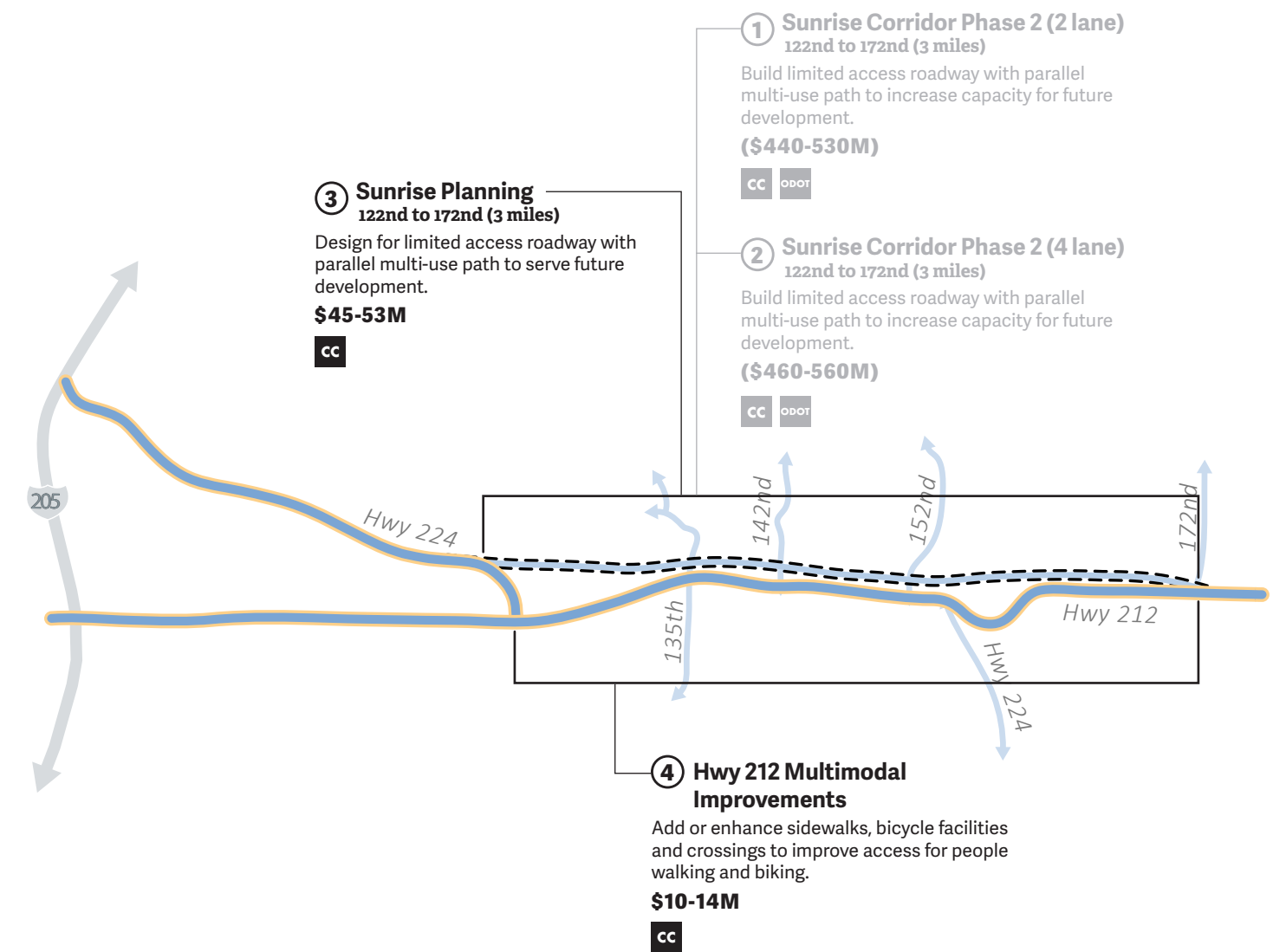
ECONOMIC

1	Sunrise Corridor Phase 2 (2 lane)					
2	Sunrise Corridor Phase 2 (4-lane)					
3	Sunrise Planning					
4	Highway 212 Multimodal					

SCENARIO INVESTMENT

\$70M

\$560M CORRIDOR NEED



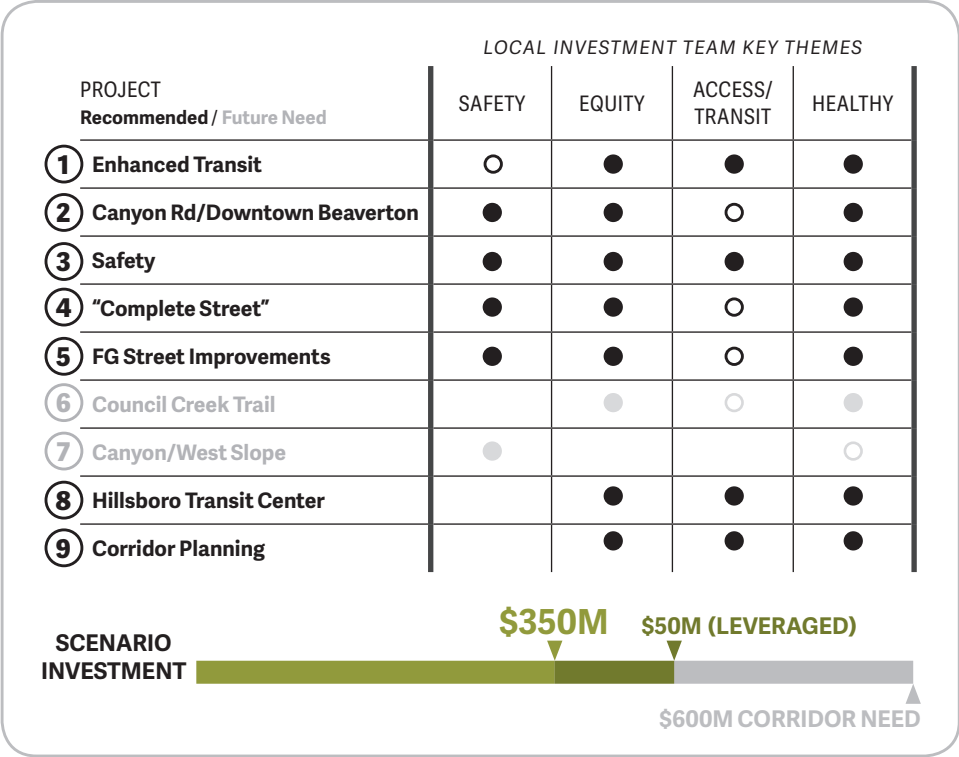
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20061

TV Highway

Tualatin Valley (TV) Highway connects multiple community centers, including Forest Grove, Cornelius, Hillsboro, Aloha, Beaverton and Portland. The corridor serves many communities of color, limited English proficiency speakers and lower income communities, and supports one of the highest ridership bus lines in the region. The corridor also supports significant freight movement. It has multiple regional trail crossings and serves several Urban Growth Boundary expansion areas. There were **204** serious injuries and fatalities on this corridor between 2007-2017. **85%** of this corridor is in an equity focus area.



[SEE PROJECTS MAP NEXT PAGE]

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20061



TV Highway

1 Enhanced Transit Forest Grove to Beaverton Transit Center (16 miles)

Bus enhancements for Line 57 (operations, station enhancements, targeted bus lanes, signal priority) to improve speed and reliability, station access and amenities throughout the corridor.

\$53M [could leverage federal funds]

WC TM

6 Council Creek Trail Hillsboro to Forest Grove (5.5 miles)

Regional trail connecting Hillsboro, Cornelius and Forest Grove.

(\$25-37M)

WC

8 Hillsboro Transit Center

Convert transit center and adjacent streets to 2-way to allow buses to circulate more directly (traffic reconfiguration, signal replacements, platform modifications).

\$10-12M

WC H TM

7 Canyon/West Slope 117th to Camelot (2.9 miles)

Add/improve walking and biking facilities including crossings.

(\$15-24M)

WC ODOT

4 "Complete Street" Main St (Hillsboro) to Maple St (Forest Grove) (4.3 miles)

Add/improve pedestrian facilities (sidewalks, crosswalks, lighting, transit improvements), bicycle facilities, safety features, stormwater facilities.

\$40-48M

WC ODOT

5 Forest Grove Street Improvements B Street to Highway 47 (2.7 miles)

Improve pedestrian facilities (sidewalks, crosswalks, lighting, transit improvements), bicycle facilities, safety features, stormwater facilities.

\$5-7M

WC

3 Safety Hocken (Beaverton) to Maple (Hillsboro) (8.1 miles)

Improve sidewalks, crossings, lighting and bicycle facilities to reduce severe injury and fatal crashes.

\$154-185M

WC ODOT TM

2 Canyon Rd/Downtown Beaverton Hocken to 117th (.9 miles)

Update street with medians, crosswalks, sidewalk improvements and railroad "quiet zone" to support land uses and improve safety.

\$20-27M

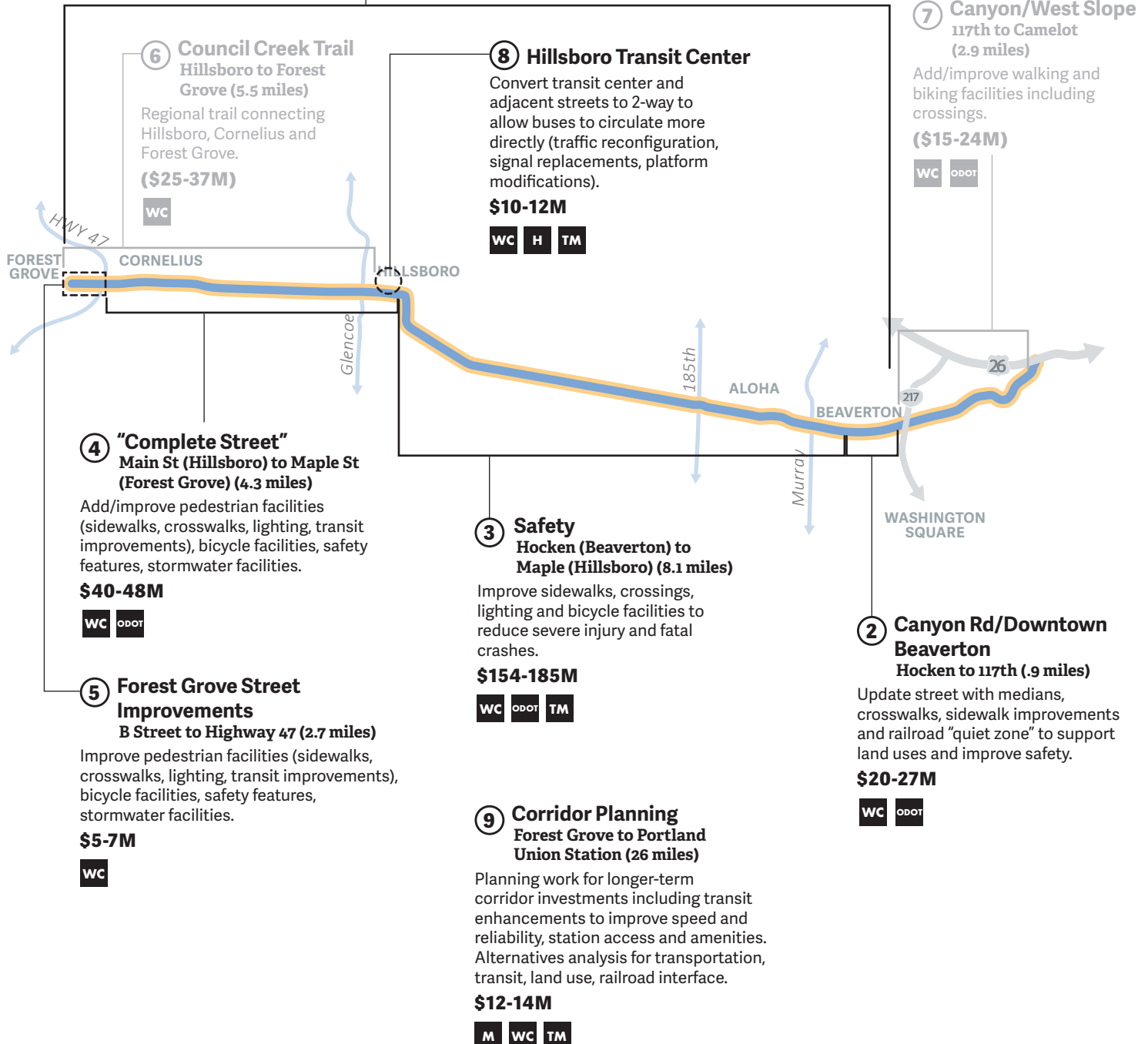
WC ODOT

9 Corridor Planning Forest Grove to Portland Union Station (26 miles)

Planning work for longer-term corridor investments including transit enhancements to improve speed and reliability, station access and amenities. Alternatives analysis for transportation, transit, land use, railroad interface.

\$12-14M

M WC TM



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185th Ave

SW 185th Avenue carries up to 65,000 vehicles and over 3,900 people on transit a day. It serves a concentration of communities of color, lower-income communities and provides access to education centers and medical clinics. It has high transit ridership potential, a high safety need, and a concentration (90% of corridor) of equity focus areas. There were 45 serious injuries and fatalities on this corridor between 2007-2017.

LOCAL INVESTMENT TEAM KEY THEMES

PROJECT Recommended / Future Need	TRANSIT	ACCESS/ EASE	EQUITY	SAFETY	LEVERAGE
① Enhanced Transit	●	●	●	○	●
② MAX Overcrossing	○	●			
③ Mid-block Crossings	○		●	●	●
④ Intersection Improvements	○		○	●	●
⑤ "Complete Street"		○	●	●	

SCENARIO INVESTMENT

\$200M **\$20M (LEVERAGED)**

\$270M CORRIDOR NEED

① Enhanced Transit Rock Creek Blvd to Farmington (entire corridor, 5 miles)

Bus enhancements for Line 52 (operations, station enhancements, targeted bus lanes, signal priority) to improve speed and reliability, station access and rider experience throughout corridor.

\$50-60M

WC TM

② MAX Overcrossing 185th/Baseline

Build bridge for MAX Blue Line over 185th to reduce traffic, and bus and train delays.

\$70-87M

TM

④ Intersection Improvements Alexander to Blanton (.25 miles)

Fix intersections to improve safety and efficiency for all users (intersection alignment at Blanton, crossing signal at Alexander).

\$10-14M

WC

③ Mid-block Crossings Cascade to West Union (4 miles)

Add actuated pedestrian crossings at four locations to improve access for people walking.

\$8-11M

WC

⑤ "Complete Street" Kinnaman to Farmington (.7 miles)

Widen to 3 lanes, add curbs, sidewalks, crossings, lighting, bike facilities, stormwater facilities.

\$24-32M

WC



2020 TRANSPORTATION FUNDING MEASURE

Staff recommendation is based on feedback from Local Investment Teams and other public engagement, the Task Force and Metro Council values and outcomes, and the feasibility of delivering projects to the public within a reasonable time frame.

82nd Ave

82nd Avenue connects Clackamas Town Center, the Jade District, Montavilla and Roseway neighborhoods, and the Portland International Airport. It is an alternative route to I-205 and serves one of the most diverse populations in the region. 82nd Avenue also has the highest bus line ridership in the region and provides access to the Blue, Red, and Green MAX lines. It serves as a main street for various communities, provides local access and circulation, and is a Civic Corridor within the City of Portland. There were **196** serious injuries and fatalities on this corridor between 2007-2017. **74%** of this corridor is in an equity focus area.

LOCAL INVESTMENT TEAM KEY THEMES

PROJECT Recommended / Future Need	SAFETY	EQUITY	ACCESS/ EASE	TRANSIT
① Enhanced Transit/BRT	○	●	●	●
② Airport Way				
③ Safety (Portland)	●	●	●	
④ Alderwood-Killingsworth Path Planning	●	●	●	●
⑤ Max Station Access Planning	○	●	●	●
⑥ Safety (Clackamas)	●	●	●	
⑦ State of Good Repair				

SCENARIO INVESTMENT	\$370M	\$160M (LEVERAGED)	\$820M CORRIDOR NEED
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④ Alderwood-Killingsworth Path Planning

(1 mile)

Design multi-use path to address complete lack of safe walking/biking facility.

\$5-.6M

PP ODOT

③ Safety (Portland) Killingsworth to Clatsop (7 miles)

Add/improve sidewalks, crossings, lighting to reduce severe injury and fatal crashes.

\$120-144M

PBOT ODOT

⑦ State of Good Repair Killingsworth to Clatsop (7 miles)

Address maintenance issues (rebuild street and signals, address ADA needs) to facilitate jurisdictional transfer from ODOT to PBOT.

\$30M [additional investments needed]

ODOT PBOT

⑥ Safety (Clackamas) Clatsop to Sunnybrook (2 miles)

Add/improve sidewalks, crossings, lighting to reduce severe injury and fatal crashes.

\$30-45M

ODOT

② Airport Way Intersection with 82nd Ave

Partial grade separation to reduce auto congestion and accommodate airport growth.

\$35M [leverages Port of Portland funds]

PP

⑤ MAX Station Access Planning 82nd Ave Station

Design to improve station access to the west side of 82nd to reduce the need for dangerous pedestrian crossings.

\$0.5M

TM

① Enhanced Transit/ Bus Rapid Transit Killingsworth to Clackamas Transit Center (9 miles)

Bus enhancements for Line 72 (operations, station enhancements, targeted bus lanes, signal priority) to improve speed and reliability, station access and amenities.

\$113M [could leverage federal funds]

TM M

2020 TRANSPORTATION FUNDING MEASURE

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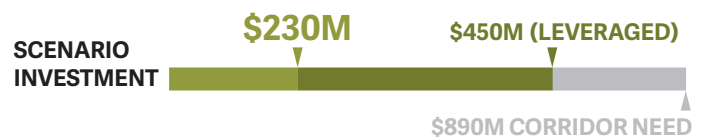
20061

Burnside

Burnside Street connects Washington County (where it's known as Barnes Rd) and East Multnomah County through downtown Portland. It is a designated "emergency lifeline" route and aids emergency vehicles during disaster recovery efforts. It is a critical Willamette River crossing for all users and a Main Street for numerous commercial centers. It also provides connections to MAX and Gresham Transit facilities. There were **141** serious injuries and fatalities on this corridor between 2007-2017. **71%** of this corridor is in an equity focus area.

LOCAL INVESTMENT TEAM KEY THEMES

PROJECT Recommended / Future Need	SAFETY	EQUITY	ACCESS/ EASE
① Enhanced Transit	○	●	●
② EQRB Bridge	●		
③ Safety (Portland)	●	○	○
④ Safety (Gresham)	●	●	○
⑤ Transit Center Planning	○	●	○
⑥ W 95th Ave Trail	●		○
⑦ "Complete streets"	○		○



⑥ W 95th Ave Trail Morrison to Sunset Transit Center

Multimodal trail along W 95th.
(\$10-13M)

WC

⑦ "Complete Streets" 89th to Portland city limit

Widen to 3-5 lanes and build to urban standard (curbs, sidewalks, lighting, bike and stormwater facilities).

(\$32-54M)

WC

② Earthquake Ready Burnside Bridge W 3rd to MLK

Replacement or seismic upgrade of Burnside Bridge to improve safety and lifeline route.

\$150M [leverages state/county/federal funds]

MC

③ Safety (Portland) E 12th to Gresham city limit (8 miles)

Add sidewalks, crossings, lighting to reduce severe injury and fatal crashes.

\$10-15M

PBOT

④ Safety (Gresham) Gresham city limit to Powell (5 miles)

Add sidewalks, crossings, lighting to reduce severe injury and fatal crashes.

\$10-15M

G

⑤ Transit Center Planning Sunset and Gresham Transit Centers

Design multimodal access improvements (e.g., sidewalks, crossings, bike facilities, plaza).

\$1M

TM WC G

① Enhanced Transit Sunset Transit Center to NE Kane (entire corridor, 19 miles)

Bus enhancements for Line 20 (operations, station enhancements, targeted bus lanes, signal priority) to improve speed and reliability, station access and amenities throughout the corridor.

\$50M

PBOT TM WC

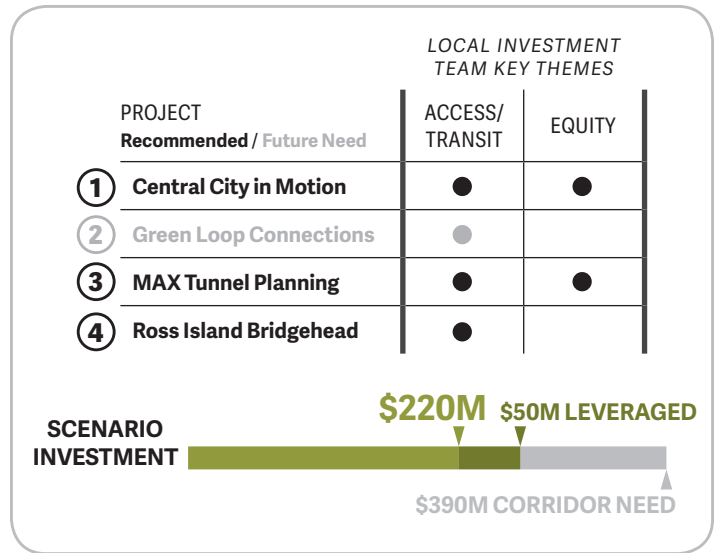
2020 TRANSPORTATION FUNDING MEASURE

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20061

Central City

The Central City is the center of the Metro region and a key engine of the state's economy. It has the largest concentration of jobs and affordable housing in the state and is expected to receive over 30% of the city's projected future growth. The corridor also has a multi-modal transportation network with a wide variety of demands on the streets- walking, biking, MAX, streetcar, buses, scooters, freight delivery vehicles, cars and more. All MAX lines and 75% of the region's frequent bus lines serve and pass through the Central City. There were **101** serious injuries and fatalities on this corridor between 2007-2017. **97%** of this corridor is in an equity focus area.



① Central City in Motion Across Central City

Treatments to improve walking, biking and transit to make it easier and safer to take transit, walk and bike in the Central City.

\$80-96M

PBOT TM

④ Ross Island Bridgehead Harrison to Barbur/Naito (1 mile)

Reconstruct streets at west end of Ross Island Bridge to improve access and reduce neighborhood barriers.

\$50-75M

PBOT

③ MAX Tunnel Planning Goose Hollow to Lloyd Center (3 miles)

Plan and design downtown tunnel to improve speed and reliability of MAX service, and address the region's most significant transit bottleneck.

\$50M

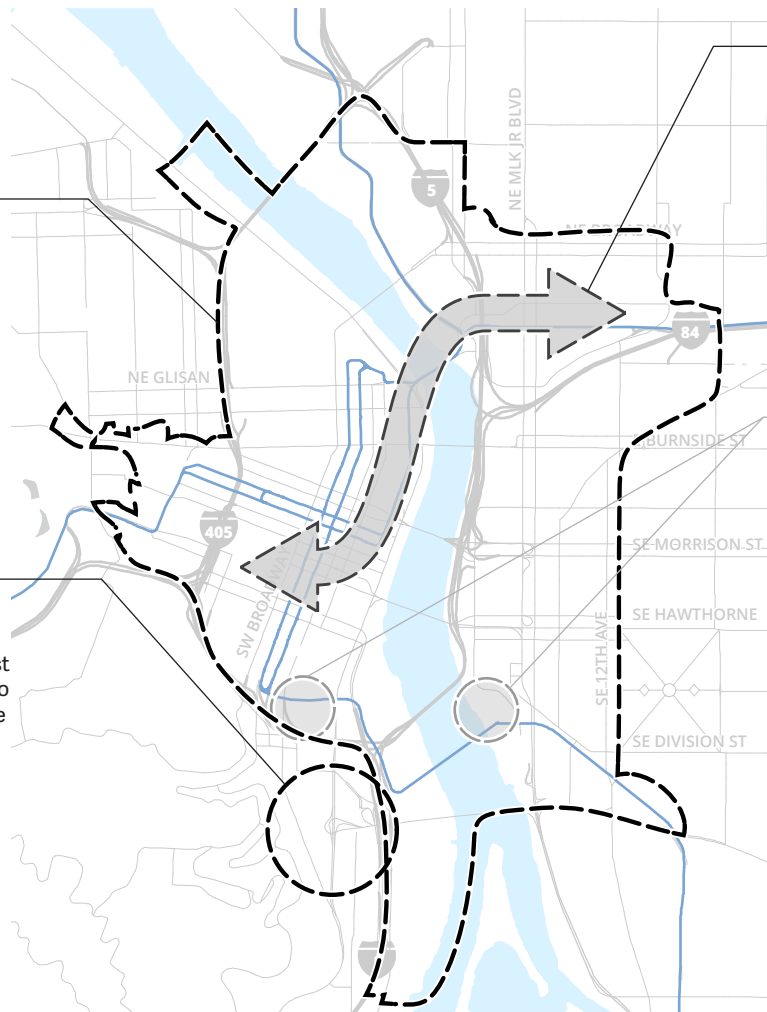
M TM

② Green Loop Key Connections SE and SW quadrants

Create bike/ped connections across key barriers for future Green Loop.

(\$10-40M)

PBOT

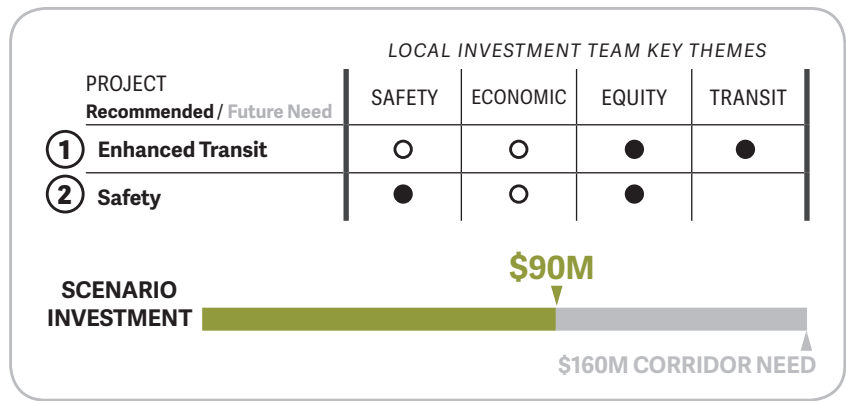


2020 TRANSPORTATION FUNDING MEASURE

Staff recommendation is based on feedback from Local Investment Teams and other public engagement, the Task Force and Metro Council values and outcomes, and the feasibility of delivering projects to the public within a reasonable time frame.

122nd Avenue

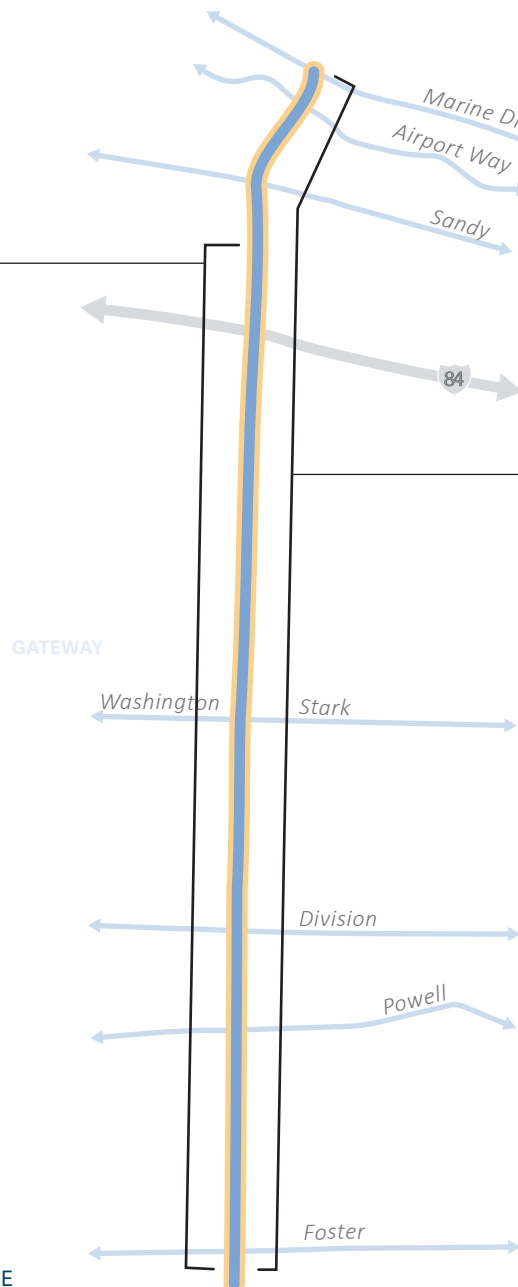
122nd Avenue connects Foster Road to Marine Drive. The corridor serves TriMet Line 73 and connects to various East-West transit lines, including the MAX Blue line. It is identified as a Civic Corridor by the City of Portland from NE Sandy to Foster, and provides access to trails, including the Marine Drive trail, I-84 trail, and Springwater Corridor. There were **75** serious injuries and fatalities on this corridor between 2007-2017. **88%** of this corridor is in an equity focus area.



① Enhanced Transit Skidmore to Foster (5.5 miles)

Bus enhancements for Line 73 (operations, station enhancements, targeted bus lanes, signal priority) to improve speed and reliability, station access and rider experience.

\$15-18M



② Safety Marine Dr to Foster Rd

Add proven safety countermeasures (sidewalks, crossings, lighting) to roadway to reduce severe injury and fatal crashes. May include **I-84 trail connection** (add two-way buffered or curb-protected bikeway to extend I-84 trail toward I-205 path), and **Sandy intersection reconfiguration** (convert highway-style ramps at 122nd/Sandy into an urban intersection with signals and crosswalks to improve access and safety).

\$50-68M



2020 TRANSPORTATION FUNDING MEASURE

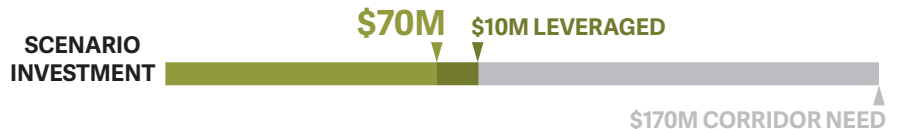
Staff recommendation is based on feedback from Local Investment Teams and other public engagement, the Task Force and Metro Council values and outcomes, and the feasibility of delivering projects to the public within a reasonable time frame.

162nd Ave

162nd Avenue connects NE Sandy Blvd and SE Powell Blvd on the border between Portland and Gresham. This corridor serves historically marginalized communities in the Rockwood neighborhood and provides access to schools, residential neighborhoods and commercial areas. It serves as a North-South bus connection to various East-West transit lines and provides access to Powell Butte trails and I-84 trail. There were **34** serious injuries and fatalities on this corridor between 2007-2017. **92%** of this corridor is in an equity focus area.

LOCAL INVESTMENT TEAM KEY THEMES

PROJECT Recommended / Future Need	SAFETY	TRANSIT	EASE	EQUITY
① Enhanced Transit	○	●		●
② Safety	●	○	○	●
③ "Complete Streets" Gresham	●	○	●	●
④ "Complete Streets" Portland	●	○	●	●
⑤ Railroad Undercrossing	●		●	●



⑤ Railroad Undercrossing

Add bicycle/pedestrian access at existing railroad overcrossing.

\$5-9M



① Enhanced Transit Sandy to Powell (entire corridor, 4 miles)

Bus enhancements for Line 74 (operations, station enhancements, targeted bus lanes, signal priority) to improve speed and reliability, station access and amenities throughout the corridor.

(\$12-16M)



④ "Complete Streets" Portland I-84 to Sandy

Add turn lanes, and add improved/continuous curbs, sidewalks, lighting, bike and stormwater facilities.

\$10-18M



③ "Complete Streets" Gresham Glisan to I-84 (1 mile)

Widen to 3 lanes and add improved/continuous curbs, sidewalks, lighting, bike and stormwater facilities.

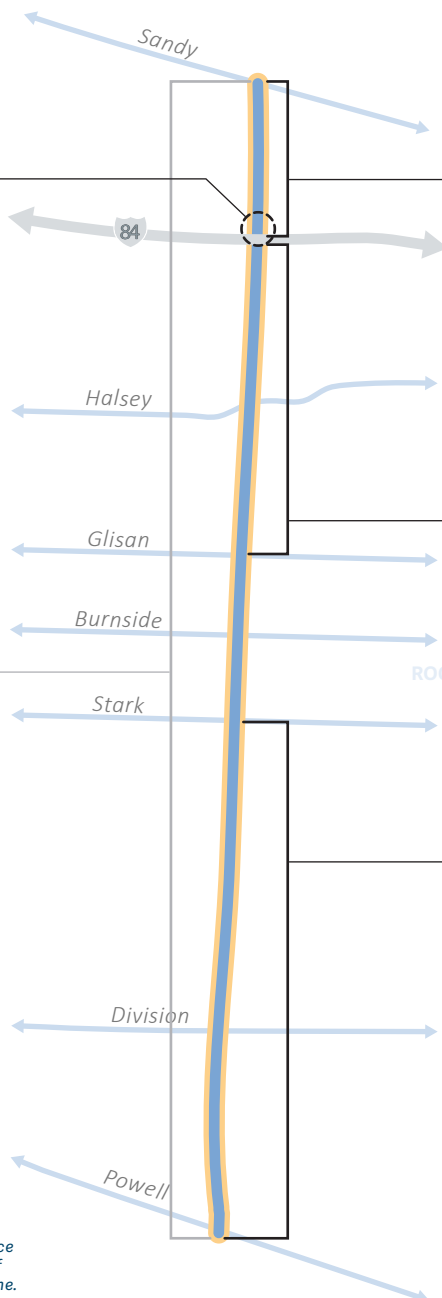
\$30-41M



② Safety Stark to Powell (2 miles)

Add sidewalks, crosswalks, medians and lighting to reduce severe injury and fatal crashes.

\$5-7M



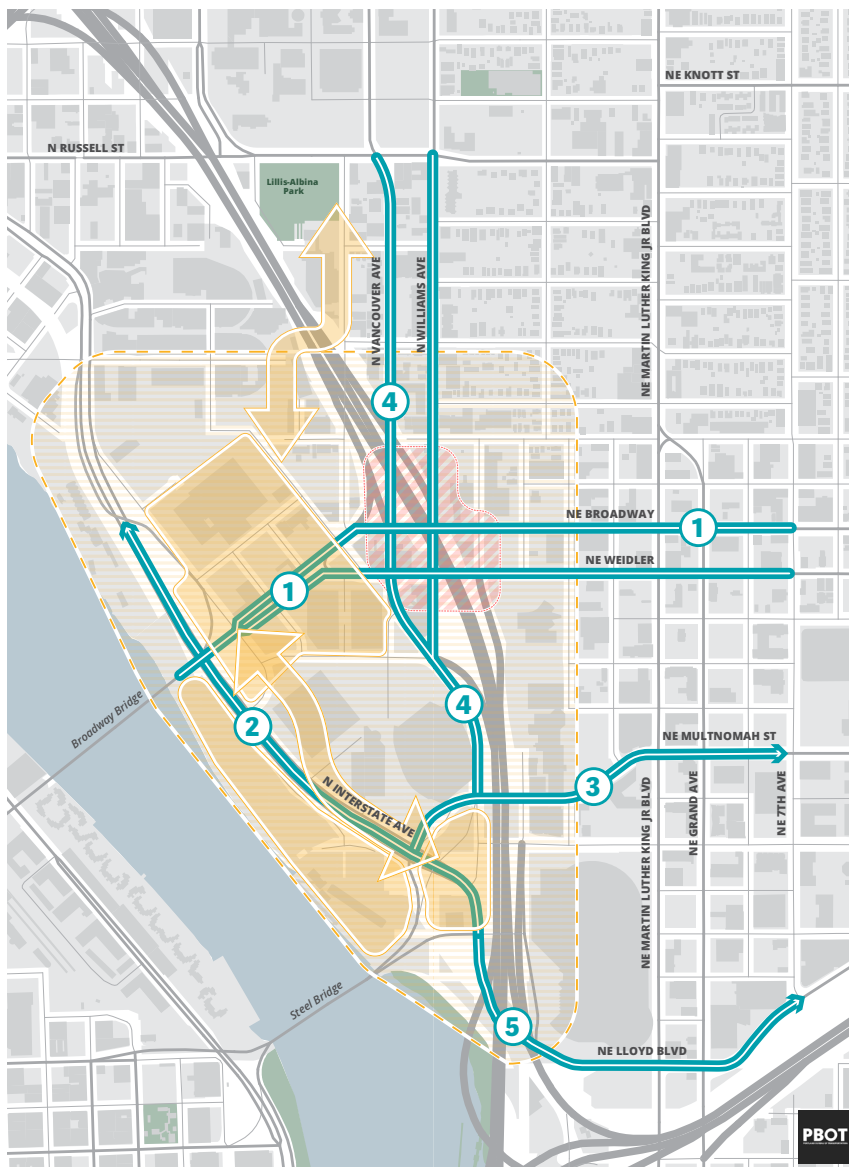
2020 TRANSPORTATION FUNDING MEASURE

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20061

Albina Vision

The Albina Vision concept offers a bold image of a new neighborhood in the historic Lower Albina area of N/NE Portland. The concept includes a reconfigured street grid, large open spaces, and direct access to the Willamette River for all people, especially children. Achieving this long-term vision will require thorough study, extensive public engagement, coordination with existing land-owners, and major public investments. Plans and strategies would synthesize the Portland City Council-adopted Central City 2035 Plan with the Albina Vision concept to establish a groundwork for future investment and expand upon Metro-funded work around public engagement and early design concepts. These projects are intended to provide short-term improvements to the neighborhood as a larger restorative vision is developed. There were **38** serious injuries and fatalities on this corridor between 2007-2017. **100%** of this corridor is in an equity focus area.



1 Broadway/Weidler Streetscape Broadway Bridge to NE 7th (.6 miles)

Develop an Albina “main street” with street lighting, public art, and enhanced transit stations to improve access and safety for all.

\$8-10M

2 Interstate/N. Portland Greenway Steel Bridge to NE Tillamook (.8 miles)

Enhanced crossings and a multi-use path to connect the Rose Quarter Transit Center to employment and housing areas further north.

\$13-16M

3 Multnomah Blvd Streetscape NE Interstate to 7th Ave (.5 miles)

Green street features, lighting and upgraded transit stations to provide safe connections between Lower Albina, Convention Center and Lloyd neighborhoods.

\$5-6M

4 Vancouver/Williams NE Russell to Multnomah (.8 miles)

Street lighting, better transit stops, and improvements to existing bikeway.

\$7-8M

5 Lloyd Blvd Steel Bridge to NE 7th Ave (.5 miles)

Multi-use path to strengthen multimodal connection between Albina, Lloyd and SE Portland.

\$3-4M

6 Albina Urban Design Strategy Areawide

Develop plans and strategies to guide Albina Vision implementation. Key elements include: urban design strategy, Rose Quarter TC, bridgehead and river connections, multimodal connections.

\$12M

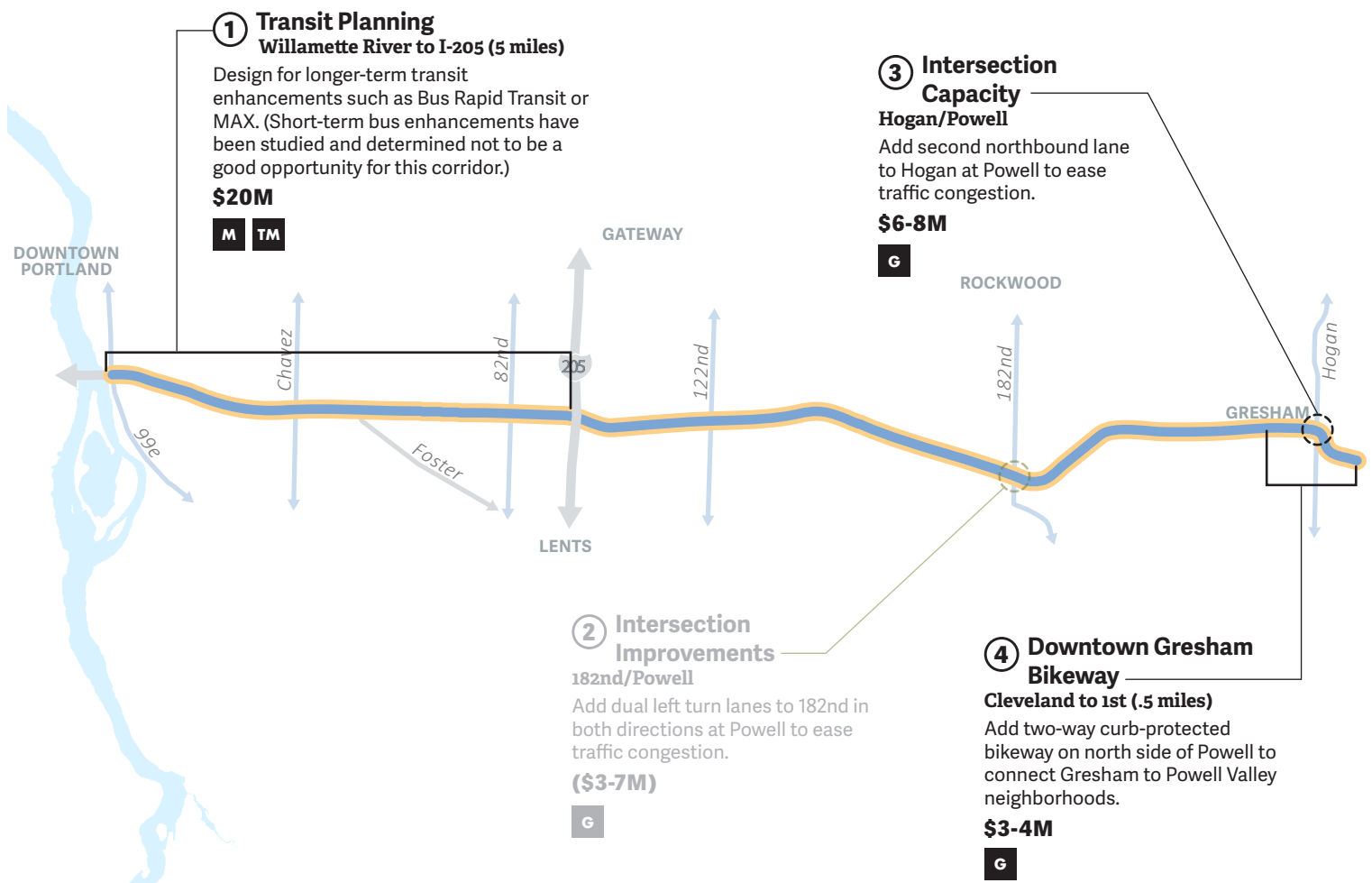
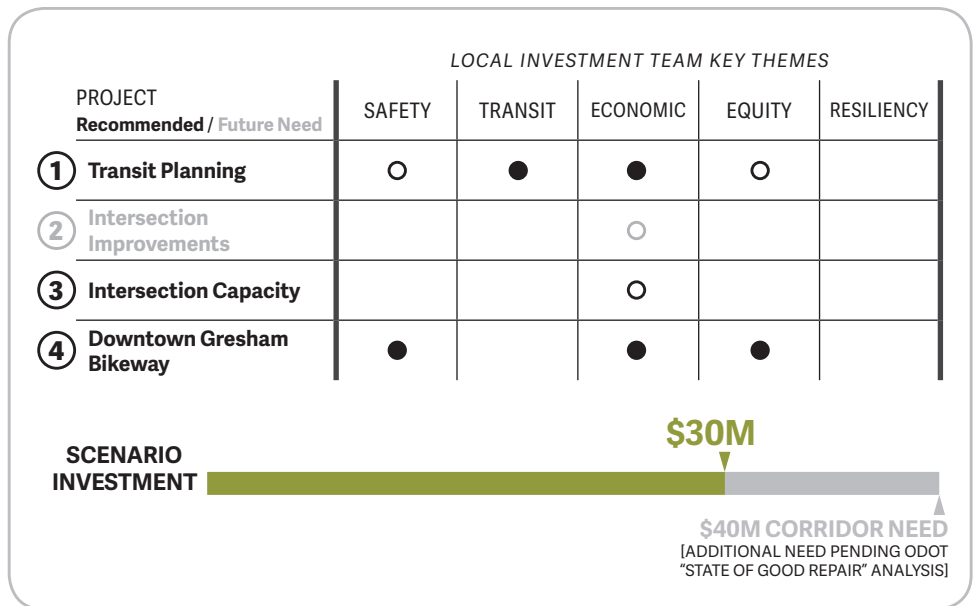
2020 TRANSPORTATION FUNDING MEASURE

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20061

Powell Blvd

Powell Boulevard links Portland's west side to East Multnomah County for all modes, including freight, and connects historically underserved communities. TriMet identifies Powell as a key corridor to increase ridership. This corridor serves as main street for numerous commercial centers. There were **159** serious injuries and fatalities on this corridor between 2007-2017. **84%** of this corridor is in an equity focus area.



2020 TRANSPORTATION FUNDING MEASURE

Staff recommendation is based on feedback from Local Investment Teams and other public engagement, the Task Force and Metro Council values and outcomes, and the feasibility of delivering projects to the public within a reasonable time frame.

Regionwide Program Investment Summary

Preventing displacement in investment corridors

The Metro Council and Transportation Funding Task Force want to make sure that transportation investments support the people that live along the corridor. To that end, they are proposing that 2% of each corridor's funding be set aside to bring individuals and organizations together to identify policy and funding needs to strengthen the community, reduce the risk of displacement, and support existing businesses and residents ahead of possible transportation investments. A portion of these funds will also be available to enact the needs and strategies identified through this equitable development strategy process, and many of the programs discussed below will also likely be beneficial in supporting identified needs.

Benefits beyond corridors: Regionwide programs

The Metro Council has directed that the potential transportation funding measure include regionwide programs to provide benefit and meet community needs beyond specifically identified transportation projects like those in these recommendations.

Based on community engagement and input from the Transportation Funding Task Force, the Metro Council directed staff to proceed with further development of the following potential programs on September 24, 2019.

Proposed program criteria, processes and funding commitments will be further developed through engagement with community and partners in the coming months.

Likely programs

Safe Routes to School

Projects and programs that help students get to school safely, affordably, and efficiently by walking, biking and taking transit.

Safety Hot Spots

Reducing crashes where they happen most through grants to improve safety at key high-crash corridors and intersections throughout the region.

Better Bus

Strategic investments to make transit better by improving capacity and reliability and reducing delays along major bus lines.

Active Transportation Regional Connections

Grants and technical assistance to fill critical gaps in the regional pedestrian and bicycle networks, such as off-street trails, bridges and paths.

Transit Vehicle Electrification

Funding for TriMet and SMART to achieve their goals of phasing out diesel bus fleets.

Main Streets Revitalization

Creating welcoming business districts by investing in sidewalks, crosswalks, bikeways, lighting, street trees and vegetation, seating and art.

Fare Affordability: Students

Free transit passes for lower-income high school students throughout the region.

Protecting and Preserving Multi-Family Housing

Acquire and rehabilitate multifamily housing to protect affordability amid transportation investments.

Future Corridor Planning

Preparing for what's next by funding planning for future transit investments and other major improvements.