

PBOT

PORTLAND BUREAU OF TRANSPORTATION

1120 SW Fifth Ave., Suite 800 Portland, OR 97204 503-823-5185
Fax 503-823-7576 TTY 503-823-6868 www.portlandoregon.gov/transportation

Chloe Eudaly Commissioner **Chris Warner** Director

Memorandum

To: Planning and Sustainability Commission
From: Bob Kellett, Project Lead
RE: TSP Update Materials
Date: November 7, 2019

At the Planning and Sustainability Commission's October 8th briefing for the TSP Update [Proposed Draft](#), commissioners requested additional information. I have attached the following:

- The methodology used for evaluating the proposed new projects for the Major Projects list;
- The evaluation scores for the proposed new projects for the Major Projects list;
- The TSP's existing parking policies. This is for reference only. There are no proposed changes to the parking policies as part of this update. Additional information about how PBOT regulates parking can be found at the bureau's website: <https://www.portlandoregon.gov/transportation/34782>.

Please let me know if there are any questions or if additional information is needed.



The Portland Bureau of Transportation fully complies with Title VI of the Civil Rights Act of 1964, the ADA Title II, and related statutes and regulations in all programs and activities. For accommodations, complaints and information, call (503) 823-5185, City TTY (503) 823-6868, or use Oregon Relay Service: 711.

TSP Project Evaluation

The TSP Project Evaluation Report details the steps taken to evaluate projects proposed for inclusion on the TSP Major Projects List as part of the 2019 TSP Update. Staff reviewed and evaluated projects that were recommended for inclusion in the TSP from plans adopted by City Council since the adoption of the TSP Major Projects List in 2016. The projects were recommended in the following plans: The Enhanced Transit Corridors Plan, The Growing Transit Communities Plan, and Regional Transportation Plan. Additionally, one project that was identified in East Portland in Motion, but inadvertently left off the Major Projects List in 2016, was evaluated.

To evaluate the projects, staff followed a similar methodology that was used during the development of the TSP Major Projects List in 2014-16. This methodology includes evaluation criteria that are based on seven outcomes that were identified in 2014-2015 with input from community members and groups. The seven outcomes are consistent with state, regional, and city rules and plans. The seven outcomes are:

1. Improve access to daily needs, such as jobs, schools, grocery stores, health care
2. Reduce/eliminate transportation fatalities and injuries
3. Improve health by increasing walking and bicycling
4. Increase economic benefits, such as access to family wage jobs and freight access
5. Ensure disadvantaged communities benefit as much or more than non-disadvantaged communities
6. Reduce global warming pollution from transportation
7. Prioritize the most cost-effective projects.

The nine evaluation criteria below reflect the seven outcomes.

Evaluation Criteria

1. *Safety Scoring*

Preliminary scoring of projects for the safety criterion was performed through an iterative selection process. For projects with a substantial safety benefit, the project features were selected based on their proximity to streets designated as High Crash Corridors (Score: 3), arterial streets with 3 or more lanes and a posted speed of 30mph or greater (Score: 2), and 2 lane arterials (Score: 1). All other projects received an initial score of 0.

Data: Vision Zero High Crash Network (06/06/2019)

2. *Neighborhood Access Scoring*

Projects were assigned score based on their proximity to BPS designated centers and corridors that are part of the preferred growth scenario and are targeted areas for growth and change. Centers are compact, mixed-use areas of high-density housing, employment, and retail that are

pedestrian-oriented and well served by public transportation and roads. Centers are defined as the central city, regional centers, and town centers. Corridors are busy and visible streets, offering links to transit services, neighborhood stores and shops, and a mix of housing and employment options. Projects within centers or along corridors were given a score of 3. Projects serving multi-dwelling and central residential zoning identified in the Comprehensive Plan were given a score of 1 – 2 according to the presence and proximity of higher density housing zones.

Data: Centers and Corridors (02/19/2019), and Comprehensive plan designations (04/24/2019)

(For information on Centers & Corridors, see:

<https://www.portlandoregon.gov/bps/article/497442>)

(For information on BPS zoning categories, see: <http://www.portlandoregon.gov/bps/36238>)

3. *Economic Benefit: Opportunity Access Scoring*

Projects were assigned score based on their proximity to BPS designated centers and corridors. Projects within centers or along corridors were given a score of 3. Projects serving existing mixed use, commercial, employment, and industrial designations identified in the 2040 Comprehensive Plan were given a score of 1 – 2 according to the presence and proximity to above specified zoning designations.

Data: Centers and Corridors (02/19/2019), and Comprehensive plan designations (04/24/2019)

(For information on Centers & Corridors, see:

<https://www.portlandoregon.gov/bps/article/497442>)

(For information on BPS zoning categories, see: <http://www.portlandoregon.gov/bps/36238>)

4. *Economic Benefit: Revitalization Scoring*

Projects were manually scored for Revitalization based on the degree to which the project could be expected to increase economic value in areas where the City of Portland has chosen to prioritize future housing or employment growth. Projects were assigned score based on their proximity to BPS designated centers and corridors; projects within centers or along corridors were given a score of 3. Other projects proximate to centers and corridors were given a score between 0 – 2 depending on the significance of the improvements and distance from centers and corridors. Buildable land inventory (BLI) data and designations were used to identify likely redevelopment scenarios and highlight prospective clusters sites that are significantly underutilizing their development capacity. Scores ranging from 0 – 2 were assigned based on project presence and proximity to centers and corridors, and BLI development capacity.

Data: Centers and Corridors (02/19/2019), and BLI Development Capacity (01/07/2019)

5. *Health Scoring*

Preliminary scoring of projects for the health criterion made use of analysis conducted by PBOT to rank projects based on network deficiencies that might pose barriers to active transportation choices that support healthy levels of physical activity. Projects intersecting with PedPDX

Prioritized Crossing Gaps and Deficiencies were given a score of 3. Projects proximate to prioritized gaps and deficiencies were scored between 1 – 2. A score of 0 was assigned to projects with no bike/ped or enhanced safety component.

Data: PedPDX Prioritized Crossing Gaps and Deficiencies (10/01/2018)

(For more information on PedPDX Prioritized Crossing Gaps and Deficiencies, see:

<http://pdx.maps.arcgis.com/apps/MapSeries/index.html?appid=f0b9f95b3fc44cff946bd58707e99bb2>)

6. *Equity Scoring*

Preliminary scoring of projects for the equity criterion was completed using demographic data compiled by BPS to support the 2018 Vulnerability Analysis. Projects were scored based on BPS Total Vulnerability Risk Factors, a composite risk score for census tracts in Portland that have higher-than-citywide average populations vulnerable to changing economic conditions. Vulnerable populations include renters, communities of color, low educational attainment, and low median family income. Raw equity scores were classified into 4 quantiles, assigning scores of 0 to 3 (0 to the lowest mean scores; 3 for the highest mean scores).

Data: BPS Total Vulnerability Risk Factors (03/13/2018)

(For more information on BPS' Vulnerability Risk Analysis, see

<https://www.portlandoregon.gov/bps/62635>)

7. *Climate Scoring*

Projects were manually scored for Climate based on points for several qualitative project elements, though the maximum possible score was still 3. A project was able to receive:

- 1 point if arterial project improves vehicle flow without inducing additional automobile trips.
- 1 point for ped/bike/transit projects.
- 1 point for substantial frequent service transit access and operational improvements.
- 1 point for projects that add or substantially improve bicycle facilities along major arterials.
 - -1 point for projects likely to substantially increase VMT.

Data: All streets (06/10/2019), TSP project list and details

8. *Cost Effectiveness Scoring*

Projects were scored for cost effectiveness in the following process:

- Created 10 categories of project cost in increments of \$2 million.
- Assigned scores of 1 through 10 corresponding to cost category (\$0 - \$2 million assigned a score of 1; \$20 million + assigned a score of 10).
- Divided the sum of the scores of the 7 previous criteria by the cost score to derive a raw cost effectiveness score.

9. *Community Support or Opposition Scoring* – Projects have undergone previous planning processes and received support for inclusion into the Regional Transportation Plan. With consideration for the past processes, each project was assigned a score of 2.

Project Scoring

In the development of the TSP Major Projects list in 2014-16, projects were scored on the criteria. Based on that scoring, projects were then divided into a constrained list of projects that could be reasonably expected to be built given the revenue forecasts in the TSP's Finance Chapter and an unconstrained list of projects that fall outside of projected revenues. Projects with a score of 14 or above were included on the constrained list. Projects with a score of less than 14 were included on the unconstrained list.

For this update, projects were also scored on the criteria. All the proposed projects received a score of 14 or above (see attached spreadsheet). Because the revenue assumptions from the finance chapter have not changed, the projects are proposed to be added to the financially unconstrained projects list. They will be evaluated for inclusion on the financially constrained list as part of a future TSP update when the finance chapter is updated, and the planning horizon is expanded past 2035.

Project Name	Project Location	Project Description	Estimated Cost (\$2014)	Notes	Safety	Neighborhood Access	Economic Benefit: Opportunity Access	Economic Benefit: Revitalization	Health	Equity	Climate	Cost Effectiveness	Community Support or Opposition	Total
ETC: Inner North Portland Enhanced Transit Corridor	Portland Central City - N Lombard	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times on Vancouver, Williams, Mississippi, and Albina.	\$ 5,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11833).	3	2	2	3	1	2	2	5	2	22
ETC: SE Hawthorne/50th Ave Enhanced Transit Corridor	Portland Central City - SE Powell Blvd	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times.	\$ 5,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11834).	3	2	2	3	2	1	3	5.3333	2	23.3
ETC: Cesar Chavez Blvd Enhanced Transit Corridor	Cesar Chavez Blvd (NE Sandy Blvd - SE Powell Blvd)	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times.	\$ 5,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11835).	3	2	2	3	1	1	3	5	2	22
ETC: N/NE Lombard St. Enhanced Transit Corridor	Lombard St (St Johns Town Center - NE MLK Jr Blvd)	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times.	\$ 5,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11836).	3	3	3	3	1	2	3	6	2	26
Jade & Montavilla Connected Centers Project, Phase 1	Jade District & Montavilla Neighborhoods	Construct multi-modal improvements on key pedestrian and bicycle routes within and connecting to the Jade District and Montavilla Neighborhood Centers	\$ 7,194,000	New project adopted in 2018 Regional Transportation Plan (Project 11855)	3	3	3	3	2	3	3	5	2	27
Portland Central City Portals Transit Enhancements	Portland Central City	Construct transit priority treatments to reduce transit delay and improve transit reliability and travel times.	\$ 5,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11761).	0	3	3	3	0	2	2	4.3333	2	19.3
Portland Streetcar Operational Improvements	Portland Central City	Design and construct improvements along NE Grand Avenue and/or other shared Streetcar/Bus corridors to add transit capacity. Construct Lloyd District turnback(s).	\$ 5,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11783).	0	3	3	3	0	2	2	4.3333	2	19.3
ETC: 82nd Ave Enhanced Transit Corridor	82nd Ave (NE Killingsworth St - SE Clatsop St)	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times. Project will coordinate with ODOT to identify locations and design treatments	\$ 5,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11863).	3	3	3	3	3	3	3	7	2	30
ETC: SE Powell Blvd Enhanced Transit Corridor	Powell, SE (SE Milwaukie Ave - I-205)	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times. Project will coordinate with ODOT to identify locations and design treatments.	\$ 5,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11867).	3	3	3	3	2	3	3	6.6667	2	28.7

Project Name	Project Location	Project Description	Estimated Cost (\$2014)	Notes	Safety	Neighborhood Access	Economic Benefit: Opportunity Access	Economic Benefit: Revitalization	Health	Equity	Climate	Cost Effectiveness	Community Support or Opposition	Total
ETC: 122nd Ave Enhanced Transit Corridor	122nd Ave (Lents Town Center - Pakrose Summer Transit Center)	Construct safety and access to transit improvements and transit priority treatments to reduce transit delay and improve transit reliability and travel times.	\$ 20,000,000	New project recommended in Enhanced Transit Corridors Plan and adopted in 2018 Regional Transportation Plan (Project 11868).	3	3	3	3	3	3	3	2.1	2	25.1
NE Airport Way Safety and Access to Transit	Airport Way, NE (I-205 - City Limits)	Construct priority pedestrian and bicycle access to transit improvements in the Airport Way corridor, as identified in the Growing Transit Communities Plan.	\$ 3,000,000	New project recommended in Growing Transit Communities Plan and adopted in 2018 Regional Transportation Plan (Project 11811)	3	0	3	0	1	3	3	6.5	2	21.5
NE 158th Ave Corridor Improvements	158th Ave, NE (Sandy - Airport Way)	Widen roadway and fill gaps in center turn lane, bicycle facilities, curbs, and sidewalks to improve safety and access to transit.	\$ 3,000,000	New project recommended in Growing Transit Communities Plan and adopted in 2018 Regional Transportation Plan (Project 11852)	3	0	2	0	1	3	3	6	2	20
E Burnside Safety and Access to Transit	E. Burnside (81st - 102nd)	Construct priority pedestrian and bicycle access to transit improvements in the E. Burnside corridor as identified in the Growing Transit Communities Plan.	\$ 3,000,000	New project recommended in Growing Transit Communities Plan and adopted in 2018 Regional Transportation Plan (Project 11858)	3	3	3	3	1	3	2	9	2	29
NE 105th/Holman Corridor Improvements	Holman/105th, NE (Killingsworth - Airport Way); Killingsworth St, NE (102nd - 105th)	Improve roadway and add pedestrian and bicycle facilities to enhance multimodal safety and access along 105th and Holman. Construct a roadway connection on NE Killingsworth from 102nd to 105th to improve connectivity for all modes.	\$ 10,000,000	New project recommended in Growing Transit Communities Plan. Adopted in RTP (Project 11812)	3	0	3	1	2	3	3	3	2	20
Cross-Levee Trail	Sandy Ave - Marine Dr, NE	Construct a multi-use path with crossing improvements at Sandy, Airport Way, and Marine Dr.	\$ 3,000,000	New project recommended in Growing Transit Communities Plan. Adopted in RTP (Project 11813)	3	0	2	1	2	3	2	6.5	2	21.5
SE 162nd Ave Safety and Access Project/SE 162nd Avenue Corridor Improvements	162nd Ave, SE (Stark-Powell)	Construct safety and access to transit improvements from Stark to Powell to support bus service, including enhanced bike lanes and crossings.	\$ 5,000,000	New project adopted in 2018 Regional Transportation Plan (Project 12085)	3	2	2	2	3	3	3	6	2	26
SE 92nd Ave Safety Improvements	92nd Ave, SE (Stark-City Limits)	Design and implement bicycle facilities between Holgate and Woodstock. Fill sidewalk gaps between Stark and Clatsop. Upgrade or add crosswalks, ADA ramps, and curb extensions or island in the 2- and 3-lane section	\$ 2,000,000	New project adopted in 2018 Regional Transportation Plan (Project 10271)	3	3	2	3	2	3	2	18	2	38
Division-Midway Connected Centers Project Phase 2	Division-Midway Town Center	Construct priority pedestrian and bicycle network improvements and local street network connections within and connecting to Division Midway Town Center and nearby neighborhood centers.	\$ 20,000,000	New project adopted in 2018 Regional Transportation Plan (Project 11824)	3	3	3	2	3	3	3	2	2	24
82nd Ave MAX Station Area Improvements	82nd Ave MAX Station Area	Construct priority pedestrian and bicycle access to transit improvements in the 82nd Ave MAX Station Area as identified in the Growing Transit Communities Plan.	\$ 3,000,000	New project recommended in Growing Transit Communities Plan. Split off from existing project 80033. Adopted in Regional Transportation Plan (Project 11857)	3	3	3	3	2	3	3	10	2	32
Cascade Station Trail	Glass Plant Rd., NE (Cascade Station - Alderwood/105th)	Construct a multi-use path connecting Cascade Station to Alderwood via Glass Plant Rd and add eastbound bike lane to Alderwood underneath I-205.	\$ 2,000,000	New project recommended in Growing Transit Communities Plan and adopted in 2018 Regional Transportation Plan (Project 11837)	3	0	3	1	2	3	2	14	2	30
NE Marx Street Improvements	Marx St, NE (105th - 112th)	Construct sidewalks and street improvements on Marx St to improve access to jobs and transit.	\$ 4,400,000	New project recommended in Growing Transit Communities Plan	0	0	1	0	1	3	3	4	2	14

Project Name	Project Location	Project Description	Estimated Cost (\$2014)	Notes	Safety	Neighborhood Access	Economic Benefit: Opportunity Access	Economic Benefit: Revitalization	Health	Equity	Climate	Cost Effectiveness	Community Support or Opposition	Total
NE 132nd Ped/Bike Overcrossing	132nd Ave, NE (I-84 overcrossing)	Construct a pedestrian/bicycle overcrossing of I-84 and railroad tracks	\$ 8,000,000	New project recommended in East Portland in Motion Plan	0	1	1	2	3	3	1	2	2	15

concurrence and execution of an agreement between ODOT and the City of Portland. The agreement should emphasize potential safety and operational impacts. (COMPREHENSIVE PLAN Policy 9.51)

Transportation Demand Management (TDM) Policies

Outreach: Create and maintain TDM outreach programs that work with Transportation Management Associations (TMA), residents, employers, and employees that increase the modal share of walking, bicycling, and shared vehicle trips while reducing private vehicle ownership, parking demand, and drive-alone trips, especially during peak periods. (COMPREHENSIVE PLAN Policy 9.52)

New development: Create and maintain TDM regulations and services that prevent and reduce traffic and parking impacts from new development and redevelopment. Encourage coordinated area-wide delivery of TDM programs. Monitor and improve the performance of private-sector TDM programs. (COMPREHENSIVE PLAN Policy 9.53)

Projects and programs: Integrate TDM information into transportation project and program development and implementation to increase use of new multimodal transportation projects and services. (COMPREHENSIVE PLAN Policy 9.54)

Parking Management Policies

Parking management: Reduce parking demand and manage supply to improve pedestrian, bicycle and transit mode share, neighborhood livability, safety, business district vitality, vehicle miles traveled (VMT) reduction, and air quality. Implement strategies that reduce demand for new parking and private vehicle ownership, and that help maintain optimal parking occupancy and availability. (COMPREHENSIVE PLAN Policy 9.55)

Curb Zone: Recognize that the Curb Zone is a public space, a physical and spatial asset that has value and cost. Evaluate whether, when, and where parking is the highest and best use of this public space in support of broad City policy goals and local land use context. Establish thresholds to utilize parking management and pricing tools in areas with high parking demand to ensure adequate on-street parking supply during peak periods. (COMPREHENSIVE PLAN Policy 9.56)

On-street parking: Manage parking and loading demand, supply, and operations in the public right of way to achieve mode share objectives, and to encourage safety, economic vitality, and

livability. Use transportation demand management and pricing of parking in areas with high parking demand. (COMPREHENSIVE PLAN Policy 9.57)

Off-street parking: Limit the development of new parking spaces to achieve land use, transportation, and environmental goals, especially in locations with frequent transit service. Regulate off-street parking to achieve mode share objectives, promote compact and walkable urban form, encourage lower rates of car ownership, and promote the vitality of commercial and employment areas. Use transportation demand management and pricing of parking in areas with high parking demand. Strive to provide adequate but not excessive off-street parking where needed, consistent with the preceding practices. (COMPREHENSIVE PLAN Policy 9.58)

Share space and resources: Encourage the shared use of parking and vehicles to maximize the efficient use of limited urban space. (COMPREHENSIVE PLAN Policy 9.59)

Cost and price: Recognize the high public and private cost of parking by encouraging prices that reflect the cost of providing parking and balance demand and supply. Discourage employee and resident parking subsidies. (COMPREHENSIVE PLAN Policy 9.60)

Bicycle parking: Promote the development of new bicycle parking facilities including dedicated bike parking in the public right-of-way. Provide sufficient bicycle parking at high-capacity transit stations to enhance bicycle connection opportunities. Require provision of adequate off-street bicycle parking for new development and redevelopment. Encourage the provision of parking for different types of bicycles. In establishing the standards for long-term bicycle parking, consider the needs of persons with different levels of ability. (COMPREHENSIVE PLAN Policy 9.61)

Finance, Programs, and Coordination Policies

Coordination: Coordinate with state and federal agencies, local and regional governments, special districts, other City bureaus, and providers of transportation services when planning for, developing, and funding transportation facilities and services. (COMPREHENSIVE PLAN Policy 9.62)

New development impacts: Prevent, reduce, and mitigate the impacts of new development and redevelopment on the transportation system. Utilize strategies including transportation and parking demand management, transportation system analysis, and system and local impact mitigation improvements and fees. (COMPREHENSIVE PLAN Policy 9.63)