Regional Transportation Plan

Guidance for Responding to the Regional Transportation Plan Prioritization Measures

Introduction

The purpose of this document is to give project sponsors guidance that will assist them in providing the most accurate answers to the Regional Transportation Plan Prioritization Measures. These questions are required of all new projects, projects requesting to be moved from the Unprogrammed portion of the plan to the Constrained plan, and/or revisions to existing projects.

Specifically, this document provides clarification of the intent behind questions, gives more thorough definitions of certain terms and concepts, and includes links to a web map providing data layers for greater geographic context. Project sponsors are required to provide answers to all relevant questions on the application.

Each of the nine Regional Transportation Plan prioritization measures is provided in this document, along with their purpose statement, clarifications on the intent of each measure and additional definitions as necessary. As mentioned, a web map is available to provide geographic context for relevant questions. Once the map is open, you may choose among various data layers related to the measures. Sponsors may zoom in to the geographic area in which the project is located to view the data specific to that location.

The prioritization score will be calculated upon submittal of the project application; the scores per question are provided here as reference only.

Air Quality

This measure addresses air quality impacts to health, the environment, and climate, as well as potential shifts towards cleaner fuels.

Purpose: reduce air quality related impacts to people and the environment. How well does the project reduce air pollutants including greenhouse gas emissions and criteria pollutants[1]? How well does the project avoid impacts to sensitive populations? For the following questions, the reduction comparison is relative to a project no-build scenario.			
A1a	Choose one	5	The project will reduce vehicle miles of travel and eliminate vehicle trips by providing an alternative to single occupancy vehicles.
A1b		3	The project will reduce vehicle miles of travel, but does not eliminate vehicle trips—e.g. shortening auto trips through the use of a park and ride facility or creating a more direct route.
A2a	Choose one	2	The project will improve traffic flow on a freight related facility, and will reduce idling by trucks (e.g., through signal coordination or by removing a bottleneck).
A2b		1	The project will improve traffic flow (e.g., through signal coordination or by removing a bottleneck).
A3	1		The project will avoid or mitigate emissions within ¼ mile of sensitive land uses (daycare facilities, schools, and retirement homes).
Purpose: Increase use of clean technologies. How well does the project use alternative energy, cleaner fuels, or less energy?			
A4	2		The project explicitly relies on a proven alternative energy technology[2].
10 points maximum score			

[1] Criteria air pollutants refer to the six pollutants (Carbon Monoxide, Lead, Nitrogen Oxides, Ozone, Particulate Matter, and Sulfur Dioxide) for which the Environmental Protection Agency has established National Ambient Air Quality Standards under the Clean Air Act.

[2] Proven alternative energy technology refers to an approach or technology that has already been demonstrated to reduce reliance on traditional fuels. For example, electric vehicle charging stations could fit under this category.

Clarification of Questions

Questions A1a and A1b: What's the difference?

Question A1a is intended to capture projects that both reduce vehicle miles traveled and eliminate vehicle trips. This could be accomplished by shifting travel modes from a single occupancy vehicle to a bicycle/pedestrian, transit or other shared ride mode. Question A1b, on the other hand, is intended to capture projects that have the potential to reduce vehicle miles traveled without also eliminating vehicle trips. This could be accomplished by shortening the length of vehicle trips, for example, by providing access to transit for a portion of a trip through the use of a park and ride facility or by providing a more direct route for vehicles than currently exists.

Projects should score either in Question AQ1a or AQ1b, but not both.

Question A1a Example

An example of a project with the potential to both reduce vehicle miles traveled and eliminate vehicle trips would be a new high capacity transit service or nonmotorized facility along a corridor, encouraging a shift from single occupancy vehicles usage to transit. To answer "yes" to this question, the project must be expected to eliminate some amount of vehicle trips, which in turn also reduces vehicle miles traveled.

Question A1b Example

An example of a project which is not expected to eliminate vehicle trips but is expected to reduce vehicle miles traveled would be a new Park and Ride facility that allows travelers that had previously been driving to their destination to instead access transit for some portion of their trip, thereby reducing the total amount of vehicles miles traveled. Another example could be a new facility that shortens the overall route between two points, thereby reducing the miles required to reach the destination.

Questions A2a and A2b: How do projects improve traffic flow, and what is meant by a "freight-related facility?"

A project may improve traffic flow, and thereby reduce emissions, through the reduction of idling vehicles. This can be accomplished by providing signal coordination or other ITS improvements, and also through physical infrastructure improvements to remove a bottleneck, such as HOV lanes, channelization, provision of facilities to separate bicycles from the vehicle lanes, etc. Providing these improvements on a facility with freight traffic may result in a further reduction of emissions through the improved travel movement (and reduction of idling) of diesel trucks.

The web map includes a geographic layer of designated T1 and T2 freight routes (T1 freight routes carry more than 10 million tons of freight per year while T2 freight routes carry between 4 million and 10 million tons per year).

Projects should score either in Question A2a or A2b, but not both.

Question A3: What is meant by avoiding sensitive land uses?

The intent of this question was to identify projects that are in the vicinity of areas with populations of people who are most prone to respiratory issues that may be aggravated by air pollution. These could include daycare facilities, schools, hospitals, senior centers, and retirement homes.

PSRC does not have GIS coverage of retirement homes or daycare facilities, but coverage of K-12 schools is available in the web map to help sponsors answer this question. The question is designed for sponsors to be able to answer yes if either they are not located within ¼ mile of these sensitive populations, or if they are located within such an area but they include elements to mitigate potential air emissions. Examples of mitigation could be the use of alternative technologies such as hybrid electric vehicles, whether the project will improve the flow of traffic and reduce idling within the area, or if the project includes other design elements that would mitigate existing or future emissions within the area.

Question A4: What is a proven alternative energy technology?

Alternative energy technologies generally encompass the use of an energy source other than gasoline or diesel fuel. Examples of specific transportation projects that may improve air quality from alternative technologies include electric vehicle charging stations, new transit alignments and service using electric or other alternative technologies, or other projects expressly relying on technologies or fuels other than gasoline and diesel (e.g., compressed natural gas, electric or hybrid electric, biodiesel, etc.).

Freight

This measure addresses the extent to which projects provide benefits to freight users of the transportation system (travel time and reliability) as well as a reduction in conflicts with other modes of travel, improve access to freight-related areas, and improve key freight-related facilities.

Purpose: System performance benefits for freight. How well does the project provide benefits to freight-related system users by improving travel time, reliability, and efficiency for freight haulers (all freight modes), and how well does the project reduce conflicts?			
F1	3		The project improves a facility identified as a freight bottleneck through a federal, state, regional or local program or adopted plan.
F2	1		The project reduces conflict between freight modes (truck and rail)—e.g. grade separation or bridge openings.
F3	1		The project reduces conflict with freight and one or more passenger modes—e.g. through a separation of modes such as a pedestrian overpass or separated parallel bicycle facility.
Purpose: Access to freight-related areas. How well does the project support planned development in Manufacturing and Industrial Centers (MICs) and other freight-related areas?			
F4a	Choose one	2	The project improves access within, or to, more than one MIC (or between a MIC and a Regional Growth Center).
F4b		1	The project improves access within or to one MIC
F5	1		The project improves access to an area identified as a freight generator.[3]
Purpose: Improves key freight facility. How well does the project serve designated *Freight and Goods Transportation System*[4] routes?			
F6	2		The project is on a designated T-1 or T-2 route.
10 points maximum score			

Clarification of Questions

Question F1: What is meant by "other adopted agency plan?"

Projects may be located on a corridor that is identified in a local planning document as a known freight-related congestion issue.

Questions F4a and F4b: What do we mean by "improved access to a center?"

A project may be assumed to improve access to, within, or between centers if it touches, passes through, or is completely contained within a center. Information on designated regional growth and manufacturing/industrial centers may be found at https://www.psrc.org/centers.

Question F5: What is meant by "improved access to a freight generator?"

Access to freight generators is intended to capture the last-mile related to freight activities. Access may also be able to capture important freight facility connections, currently not designated as T-1 or T-2.

A web map layer is provided with locations represented as Traffic Analysis Zones (TAZ) in the regional travel demand model where freight generators are located. If a project is contained within or touches the TAZ then the project may be assumed to improve access to the freight generator.

Jobs

This measure addresses the extent to which projects support existing and new businesses and job creation.

Purpose: Access to areas of high job concentration. How well does the project support job retention or expansion by improving access?			
J1a	Choose one	3	The area served by this project has an employment density[5] of 18 jobs per acre, and is planned (has unused zoned capacity) to accommodate a density of 32 jobs per acre. (Areas that currently exceed the higher threshold would receive points here as well).
J1b		1	The area served by this project has an employment density of 18 jobs per acre.
J2	2		The area served by this project has an employment density of 15 jobs per acre for jobs related to cluster employment.[6]
J3	2		The area served by this project has an employment density of 15 jobs per acre for family-wage related employment.
Purpose: Access to economic foundations. How well does the project provide access to job-related training or educational opportunities (vocational schools, community colleges, universities)?			
J4	3		In area with, or supports access to institutions identified as economic foundations.
10 points maximum score			

[5] Employment densities are used to define geographic boundaries rather than rely on artificial designations—e.g. large census tracts. The employment density thresholds are based on county specific family wage jobs salaries, concentration of clusters, and planning guidance on employment densities from the countywide and multicounty planning policies.

[6] Industry clusters are those identified in the PSRC's Regional Economic Strategy and VISION 2050.

Clarification of Questions

How are employment densities determined?

The employment density thresholds are based on county specific family wage jobs salaries, concentration of clusters, and planning guidance on employment densities from the countywide and multicounty planning policies.

Question J1a and J1b: What data would be used to answer this question?

Employment data is available in the web map. “Area served” may be determined by whether the project intersects with the employment density locations of 18 jobs per acre and/or whether the “area served” by the project is planned (i.e. has unused zoned capacity) to accommodate a density of 32 jobs per acre.

Question J2: What data would be used to answer this question?

Employment data and industry cluster data from the Regional Economic Strategy and VISION 2050 is available in the web map. “Area served” may be determined by whether the project intersects with the employment density of 15 jobs per acre for jobs related to cluster employment. For more information on the Regional Economic Strategy, click here: https://www.psrc.org/our-work/regional-economic-strategy.

Question J3: What data would be used to answer this question?

Employment data and an estimation of family wages by each county is available in the web map. “Area served” may be determined by whether the project intersects with the employment density of 15 jobs per acre for family wage-related employment.

Question J4: What is an economic foundation, and what does “supports access” mean?

An economic foundation refers to job-related training or educational institutions, including vocational schools, community colleges, and universities.

Multimodal

This measure addresses the extent to which projects provide alternatives to driving alone. The measure also addresses the extent to which projects incentivize or facilitate an individual's use of those alternatives.

Purpose: Improve alternatives to driving alone. How well does the project improve mobility through alternatives to driving alone?		
M1	2	The project improves opportunities for transit, special needs transportation services, or vanpool use (may include intermediary facilities such as Park and Rides).
M2	2	The project adds incentives or removes barriers for individuals to use fixed-route transit, special needs transportation services, or vanpools.
M3	1	The project improves opportunities for bicycle and pedestrian travel.
M4	1	The project implements a portion of the regional bicycle network and is included in a local plan.
M5	2	The project adds incentives or removes barriers for individuals to use non-motorized travel modes.
M6	1	The project includes additional tools or strategies to reduce the proportion of drive-alone trips.
Purpose: Improve connections between transit and non-motorized modes. How well does the project improve connections between modes of travel, especially for bicyclists and pedestrians accessing transit?		
M7	1	The project improves bicycle and pedestrian access within ¼ mile of a high-capacity transit stop.
10 points maximum score		

Clarification of Questions

Question M2: What does "adds incentives or removes barriers" mean?

Incentives include, but are not limited to, transit subsidies and other commuter benefits, non-SOV mode priority, and HOV priority. Removing barriers includes, but is not limited to, elements such as traveler training, traveler information and way-finding, provision of bicycle parking, bicycle/pedestrian and other commuter facilities, or other Transportation Demand Management approaches for individuals to use fixed-route transit, special needs transportation, or vanpools.

Question M4: What is the "regional bicycle network"?

Regional bicycle connections are defined as those that connect to adopted regional growth centers, regional manufacturing industrial centers, regional transit locations, and military bases.

Question M5: What does "adds incentives or removes barriers for individuals to use nonmotorized travel modes" mean?

Incentives include elements such as adding bicycle and pedestrian facilities (e.g. an arterial widening project that includes new sidewalks and/or bicycle lanes) and otherwise facilitating the use of bicycle and pedestrian travel (e.g. providing bicycle parking at a park and ride facility). Removing barriers refers to (but is not limited to) projects that complete missing links (e.g. a bicycle/pedestrian project that connects together an existing trail).

Question M6: What are "additional tools or strategies"?

Additional tools or strategies include, but are not limited to, car-sharing, carpooling, and telecommuting.

Puget Sound Land and Water

This measure broadly addresses land and water related environmental issues, including stormwater, hydrological function, critical areas and habitats, and the construction practices and materials in projects.

Purpose: Protect critical areas. How well does the project minimize critical area and habitat loss, alteration and fragmentation in designated lands?			
W1a	Choose one	4	The project improves critical areas or habitat on designated lands.
W1b		3	The project does not affect critical areas or habitat on designated lands.
W1c		2	If the project affects critical areas, it helps to restore the critical areas or habitats
W1d		1	If the project affects critical areas, it effectively mitigates impacts to designated critical areas and habitats
Purpose: Protect resource lands. How well does the project minimize impact to designated forest and agricultural lands?			
W2	2		The project does not impact designated agricultural lands
W3	2		The project does not impact designated forest lands
Purpose: Improve water quality. How well does the project improve water quality by improving hydrological functions and/or reducing stormwater runoff?			
W4a	Choose One	2	The project uses practices for improving hydrological functions that go beyond established stormwater standards, or the project improves stormwater runoff.
W4b		1	The project is designed to reduce stormwater runoff.
10 points maximum score			

Clarification of Questions

Questions W1a, W1b, W1c, and W1d: What is meant by designated lands in critical areas, what is meant by "improves," and what is the difference between "restores" and "mitigates?"

Designated lands include those areas designated for protection through zoning or another mechanism by a government agency. The designated lands include: critical areas under the Growth Management Act, Threatened and Endangered species habitat under federal designation, priority habitat and species (PHS) habitat areas through the state's department of Fish and Wildlife, and Biodiversity Habitats on Department of Defense lands.

The National Research Council (NRC) defined restoration as the "return of an ecosystem to a close approximation of its condition prior to disturbance." For a project to receive points related to restoring critical areas or habitats, they would need to return these areas or habitats to a close approximation of its condition prior to the project being built. "Effectively mitigates" refers to projects that provide mitigation to these areas, but do not return it to a close approximation of its condition prior to disturbance.

In question W1a, "improves" means that where projects will not have an impact on designated lands, there is still an effort to restore or enhance existing designated lands that are degraded.

Questions W2 and W3: Where are the region's agricultural and forest lands?

The web map provides data layers for agricultural and forest lands in the region, which should better assist project sponsors when answering this question.

Questions W4a and W4b: How do the Department of Ecology's stormwater requirements affect this question?

The state Department of Ecology issued stormwater requirements that affect King, Pierce, and Snohomish Counties, indicating that projects in these areas must "go beyond established stormwater standards" and that therefore projects in these areas will improve stormwater runoff. Sponsors may refer to Ecology's website for more information at: http://www.ecy.wa.gov/programs/wq/stormwater/municipal/index.html

Safety & System Security

This measure addresses the extent to which projects provide for safer travel, a likely reduction in fatalities or serious injury, and improved system security.

Purpose: Reduce the number of incidents. How well does the project support safer travel by all modes (How well does it alleviate an existing problem)?			
S1a	Choose One	8	The project improves safety on a facility with existing fatality incidents, related to geometric issues (not behavioral causes such as drunk driving or text messaging), as identified through Target Zero.
S1b		6	The project improves safety on a facility with existing injury incidents related to geometric issues
S1c		4	The project improves safety on a facility with existing property damage incidents related to geometric issues.
Purpose: Improve system security. How well does the project improve security? (Specific focus on facilities identified in the Puget Sound Transportation Recovery Annex[7]).			
S2	2		The project improves the security of facilities identified in the Puget Sound Transportation Recovery Annex.
10 points maximum score			

[7] https://mil.wa.gov/asset/5ba42131717a5 (note, updated to 2014)

Clarification of Questions

***Questions* S1a and S1b**

Collision data is available from WSDOT at https://www.wsdot.wa.gov/mapsdata/crash/crashdata.htm. The questions focus on facilities with geometric (i.e. design-related) issues. A project sponsor may consider if their project removes a conflict from one of these facilities (such as a parallel separated pathway).

***Question* S1c**

PSRC does not have a comprehensive data set for property damage collisions. Project sponsors can answer this question if they know of specific collision history that is attributable to geometric issues.

***Question* S2**

Data is available from the Puget Sound Transportation Recovery Annex, which provides recommended guidelines for coordinating multi-jurisdictional regional transportation system recovery in the Puget Sound region after a catastrophic event. Information about the Puget Sound Transportation Recovery Annex can be found here: https://mil.wa.gov/asset/5ba42131717a5.

Social Equity & Access to Opportunity

This measure addresses the extent to which projects improve mobility and/or reduce negative impact to minority, low income, elderly, youth, people with disabilities, and non-vehicle owning populations, and whether they support access to opportunities.

Purpose: Improve environmental health. How well does the project avoid creating new, mitigate existing, or eliminate previous negative impacts for the following populations: minority, low-income, elderly, youth, people with disabilities, and households without vehicles.			
O1	2		The project avoids creating new negative environmental health impacts or physical barriers for these populations[8]
O2a	Choose one	4	The project improves environmental health for three or more of these populations
O2b		3	The project improves environmental health for two of these populations
O2c		2	The project improves environmental health for one of these populations
Purpose: Improve access to opportunity. How well does the project improve access to areas of opportunity?			
O3a	Choose one	4	The project improves access[9] to an area with a low ranking for opportunity and connects it with an area with a high ranking for opportunity (as defined by PSRC's opportunity mapping[10]).
O3b		2	The project improves access to an area with a low ranking for opportunity (as defined by PSRC's opportunity mapping).
O3c		1	The project improves access to an area with a high ranking for opportunity (as defined by PSRC's opportunity mapping).
10 points maximum score			

Related Definitions:

Environmental Justice: In the Regional Transportation Plan, Title VI and Environmental Justice are defined as ensuring that all residents of the region would benefit from improved mobility and adverse impacts would not be disproportionately borne by low-income, minority and vulnerable populations.

Special Needs: People with special transportation needs are defined in RCW 47.06B as people "including their personal attendants, who because of physical or mental disability, income status, or age are unable to transport themselves or purchase transportation."

[8] For each population, an area (defined by census tracts or block groups depending on data availability) would be considered to have a concentration of that population if the area has a concentration of one standard deviation above the mean within its respective county.

[9] Improving access refers to projects that are within or connect to the specified area. A project can connect to an area by either 1) terminating or traveling through that area, or 2) being on a facility that ultimately terminates in or travels through that area.

[10] For a full discussion of the Regional Opportunity Maps, please see: https://www.psrc.org/opportunity-mapping.

Clarification of Questions

Questions O1, O2a, O2b, and O2c: What is meant by "environmental health"?

In general, an improvement to environmental health corresponds to an improvement in human health. Therefore, the intent of these questions is to identify projects providing opportunities for increased physical activity, encouraging healthy community design such as complete streets, improving air quality, etc.

Question O1 may be answered based on whether or not a project is located within an area of high concentration of affected populations, which is an area that has a concentration of either minority, low income, elderly, youth, people with disabilities, or non-vehicle owning populations of one standard deviation above the mean within its respective county.

Sponsors should answer only one of Questions 2a, 2b, and 2c, depending on both the location of the project relative to the affected populations, and the scope and outcomes of the project upon completion. Data layers for these affected populations are included in the online map.

Questions O3a, O3b, and O3c: What data could be used to answer this question?

Questions O3a, O3b, and O3c may be answered with the assistance of data from PSRC's regional Opportunity mapping. The full report on what areas of opportunity are, including maps of areas of opportunity around the region, can be found at: https://www.psrc.org/opportunity-mapping.

Support for Centers

This measure addresses the extent to which projects support existing and new population and employment in centers. In addition, the measure addresses the extent to which projects support transit oriented development, development of housing in centers, accessibility to/from/within the center, and compatibility with the character of the community in which a project is located.

Purpose: Access to Regional Growth Centers. How well does the project provide increased mobility and accessibility for regional growth center(s)?			
C1a	Choose One	5	Provides increased mobility and accessibility within a regional growth center
C1b		3	Provides increased mobility and accessibility by connecting two or more regional growth centers (or connects to a regional manufacturing industrial center)
C1c		2	Provides increased mobility and accessibility by connecting into one regional growth center
Purpose: Access to transit supportive land use. How well is the project supported by the following land use and planning characteristics?			
C2a	Choose One	2	Existing development densities are transit supportive[11] (have housing densities greater than 15 homes per gross acre)
C2b		1	Existing development densities are transit supportive (have housing densities greater than eight homes per gross acre)
C3	1		Comprehensive plan or subarea plan specifically identifies the area as a location for additional transit supportive growth
C4	1		Project area is designated as a high capacity transit station area (includes light rail, commuter rail, bus rapid transit, intermodal stations, ferry terminal)
C5	1		Zoning in area encourages a mix of uses to provide for housing, jobs, and services
10 points maximum score			

[11]Transit supportive densities are currently identified as 7-8 homes per gross acre for local transit service and 15-20 homes per gross acre for high capacity transit service.

Clarification of Questions and Measure Prepopulation

Questions C1a, C1b, and C1c: What is meant by "improved access to a center?"

A project may be assumed to improve access to, within, or between centers if it touches, passes through, or is completely contained within a center.

Questions C2a, C2b: Where does the development density information come from?

Development densities from existing data sources are available in the web map, based on zoning characteristics in the region and available at the parcel level for the entire PSRC region.

Travel

This measure addresses the extent to which projects reduce congestion and delay, and improve flow.

Purpose: Reduction of existing congestion issues. How well does the project improve existing travel problems? How large is the scale of the travel problem the project addresses?		
T1	4	The corridor where the project is located is identified as an existing bottleneck, chokepoint, or otherwise having a congestion issue through the Congestion Management Process, WSDOT's Highway System Plan, or other adopted agency plan.
T2	2	The project provides a demonstrable travel improvement for an identified problem that occurs during the peak hours of travel (in addition to peak hours the failure may also occur at other times of the day).
Purpose: Reduction of potential future congestion issues. How well does the project improve future travel problems?		
T3	2	The project provides a demonstrable travel improvement on a facility anticipated to have a future congestion issue, identified through an adopted plan.
Purpose: Improvement of system efficiency. How does the project improve throughput?		
T4	2	The project employs Transportation System Management, Intelligent Transportation Systems, Tolling, High Occupancy Vehicle, and/or is supportive of transit.
10 points maximum score		

Clarification of Questions

Question T1: How would this question be answered?

Project sponsors may utilize data from WSDOT regarding identified chokepoints and bottlenecks, or locations identified in local plans as having existing congestion issues may also be applicable.

Question T4: What is meant by "supportive of transit?"

Examples of projects that are "supportive of transit" include those that provide new facilities, included dedicated rights-of-way like Business Access Transit lanes, improved transit and bicycle/pedestrian connections, park and rides, and transit centers.