

APPENDIX G:

Existing Needs Analysis Memo



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MEMORANDUM

To: PedPDX Technical Advisory Committee
Michelle Marx, City of Portland Bureau of Transportation
Lidwien Rahman, Oregon Department of Transportation

From: Jean Crowther, Alta Planning and Design

Date: May 15, 2018

Re: PedPDX Existing Needs Analyses Memo (DRAFT Deliverable 3B)

Existing Needs Analyses Framework

This memo summarizes a selection of completed plans, and planning processes underway, and how each relates to the PedPDX planning process. This review builds from the memoranda Alta already completed for the Policy Framework, and the Program Review. It serves as a complement to the spatial data (GIS shapefiles) of previously identified pedestrian needs and previously proposed projects. The project team reviewed the following existing planning documents because they include pedestrian network needs analyses and prioritizations, and may inform the Ped PDX network needs analysis:

City Plans

- 2016 TSP Project and Program Lists
- PBOT Neighborhood planning efforts:
 - Tryon Stephens Headwaters Neighborhood Street Plan
 - Division-Midway Neighborhood Plan
- Safe Routes to School Project Plan (in development)
- Enhanced Transit Corridors Plan
- Growing Transit Communities Plan
- Southwest in Motion (in development)
- Southwest Trails Plan
- CC2035 Plan and the related MMA pedestrian needs assessment
- Central City in Motion multimodal safety project (in development)

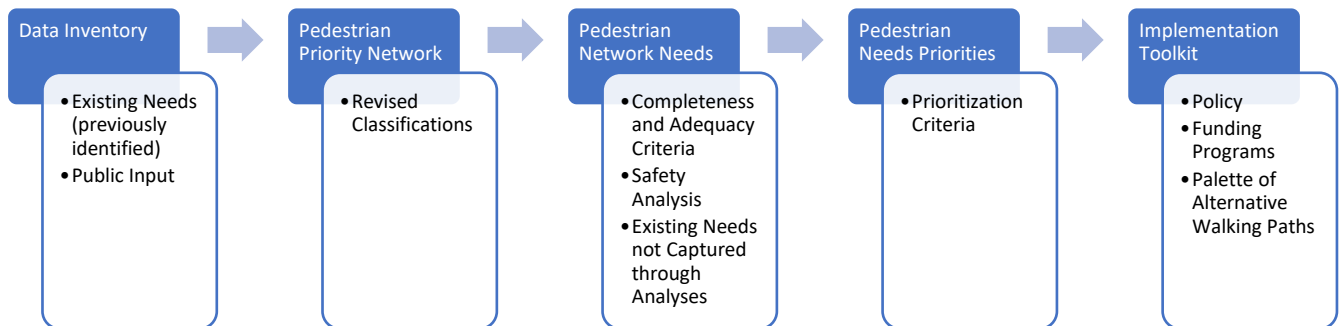
Regional and State Plans

- ODOT Region 1 Active Transportation Needs Assessment
- Regional Transportation Plan (RTP) Project Lists (update in development)
- Regional Active Transportation Plan
- TriMet Pedestrian Network Analysis

Summary

PedPDX will establish the vision, goals, and workplan for improving the pedestrian environment in Portland. As part of establishing that workplan, PBOT is using a linear, systematic approach to identifying pedestrian infrastructure needs and prioritizing them across the city. A large number of pedestrian needs are already identified within the City of Portland through prior (or currently underway) planning efforts. In some cases, plans identify needs by documenting a gap or deficiency in the pedestrian infrastructure, such as a lack of a signalized crossing, or by documenting larger trends in the pedestrian experience, such as a high crash corridor. In other cases, plans identify projects, which are fundable solutions to a pedestrian need at a specific location, such as streetscape improvements. However, the level of specificity provided in each plan with regard to project design, extents, and location vary substantially. Additionally, the terms “need” and “project” are often applied interchangeably, or without consistency across planning documents.

The pedestrian needs identified through existing plans represent an important basis for the PedPDX planning process. As shown in the graphic below, PBOT incorporates all previously identified needs as inputs to PedPDX’s initial data inventory. For the purposes of the PedPDX planning process, this first step included data of both needs as well as projects, because projects that include a pedestrian component respond to an identified need on the pedestrian network.



What follows from that is an opportunity to determine how these prior (and currently underway) efforts compare against a newly formed PedPDX standard of what constitutes pedestrian needs from a citywide perspective. This is expected to be an iterative process to best match the highest priority needs already identified with an approach that can identify the highest priority needs not yet documented.

Through this multi-step process, PBOT filters the needs inventory first through a Pedestrian Priority Network comprised of the critical streets and corridors for pedestrians. The Pedestrian Priority

Network is based on pedestrian street classifications (which includes considerations for school routes, neighborhood greenways, and similar designations). PBOT then applies the PedPDX Completeness and Adequacy Criteria to the Pedestrian Priority Network. This step translates needs consistently across the City. Previously identified needs that were included in the data inventory and are located on the Pedestrian Priority Network but were not identified as needs through the Needs Analysis will be added to the final set of citywide Network Needs.

Based on this process, PBOT will not include a previously identified (or currently being developed) pedestrian need and project if it does not fall within the Pedestrian Priority Network. PBOT will ensure that all existing and newly identified needs along that network are included in the PedPDX final set of needs. This memo identifies the potential impacts of this and considers strategies for addressing it.

The following sections summarize the type of needs and projects identified in plans previously developed or currently underway and the relationship of each dataset to the PedPDX process.

Broadly, the review of plans revealed the following:

- City, regional, and state plans have taken a variety of approaches to defining pedestrians needs and pedestrian projects.
- Plans offer varying levels of specificity of pedestrian needs and recommended implementation strategies.
- The reviewed plans have similar goals of increasing connectivity, safety, and access to important destinations, including transit stops.
- Many of the plans also recognize that a “one size fits all” approach of constructing sidewalks (with curb and gutter) on both sides of every street may not be appropriate or feasible for pedestrian infrastructure implementation.
- Providing a range of facility types that meet the needs and context of a particular location, from less expensive curbless pathways to more expensive fully landscaped sidewalks, will allow for more facilities to be built throughout the city.
- PBOT will need to consider needs and projects identified in City plans as distinct from regional or state plans.

Review of City Plans

Pedestrian needs and projects that are included in plans developed, and in some cases, adopted by Portland City Council and that can be spatially mapped (i.e. provide sufficient specificity of location) will be filtered through the PedPDX process of needs assessment and prioritization. The PedPDX project team will track the outcomes of the prioritization process against the datasets of previously-identified needs and projects. Next steps will include one of the following courses of action:

- 1) recalibrate the prioritization methodology to align with broader City priorities;
- 2) identify projects that are outside of PedPDX priorities and may be considered for implementation through alternate funding programs or an alternate timeline; or
- 3) amend a previously-adopted plan to reflect the outcomes of PedPDX.

Among City-adopted plans, it is important to note that all previously identified needs and projects have merit, as justified within the plan. The role of PedPDX is to serve as a citywide lens and to prioritize needs to align with TSP policies and applicable City funding and implementation programs.

2016 Transportation System Plan (TSP) Projects

The City of Portland's TSP is a 20-year plan that guides transportation investments in Portland. It houses key goals and policies for the City's transportation system, and provides a list of major transportation projects.

Capital infrastructure projects with costs estimated at over \$500,000 are listed individually as Major Projects in the TSP. These Major Projects are identified from individual planning processes such as modal plans (such as PedPDX) or local area plans (such as the East Portland Action Plan). Pedestrian-related projects in the TSP may include broad multimodal "complete streets" corridor improvements that include pedestrian elements in their descriptions and cost estimates, or they may be specific large-scale projects with a pedestrian emphasis such as pedestrian district improvements, large sidewalk or trail projects, or bicycle/ pedestrian bridges. All TSP projects are prioritized into two timelines for implementation (either a one to ten-year or 11-20 year implementation).

Relationship to PedPDX:

The TSP includes an adopted Major Projects list that is part of the PedPDX data inventory. Of the 427 Major Projects listed in the TSP, 241 include pedestrian elements. These 241 projects will be included in the PedPDX needs inventory in all cases where the improvement can be assigned to a location. In the case of projects that are non-specific (e.g. Goose Hollow bicycle and pedestrian improvements), the project team will compare the PedPDX draft Network Needs to these locations. PedPDX findings may add specificity to those more generalized project scopes. Ultimately, the process of identifying and prioritizing pedestrian needs in PedPDX is an opportunity to determine how well those TSP *projects* that include a pedestrian component align with identified *needs* of pedestrians. Where those do not align, PBOT will need to address inconsistencies through amendment to the TSP. The TSP explicitly defers to PedPDX to address pedestrian network needs, priorities, classifications, and policies. The prioritized needs of PedPDX provide the basis for an updated list of pedestrian projects to include in the TSP Update. Although PedPDX does not influence the TSP's project prioritization, PedPDX's prioritization criteria may influence the City's approach to implementing pedestrian-related projects within the TSP-determined timelines.

PBOT Neighborhood Plans

PBOT's Neighborhood Plans are neighborhood-scale plans that address the unique needs and desires of a particular place. These plans provide relevant guidance in relation to communities that are currently underserved by pedestrian infrastructure investments:

Tryon-Stephens Headwaters Neighborhood Street Plan (2015)

The *Tryon-Stephens Headwaters Neighborhood Street Plan* is a strategy for enhancing neighborhood access to local destinations by looking comprehensively at street and drainage issues. The plan acknowledges that a "one size fits all" approach is not always feasible or context-sensitive for neighborhoods, where full sidewalk build outs are expensive and

inflexible. The plan recommendations are not included in the City's TSP Major Projects list. Rather than provide discrete projects, the plan provides a series of potential cross sections to be implemented, depending on a variety of criteria such as street typology and natural features, coupled with a range of network considerations, including priority pedestrian routes.

Division-Midway Neighborhood Street Plan (2014)

The *Division-Midway Neighborhood Street Plan* identifies and prioritizes local street and pathway connections to improve transportation connectivity in the project area. These connections are intended to address existing deficiencies, including pedestrian infrastructure. The plan prioritizes local street and pathway connections that increase safety, connectivity, and access to transit. The plan identifies projects both in the existing right of way, as well as future connections across private property. Of the plan's proposed improvements, large projects are included in the TSP (such as the 4M Greenway, a proposed neighborhood greenway), but most are too small in scale to be included in the TSP.

Relationship to PedPDX:

For both of these plans, the project team will analyze identified needs that fall within the PedPDX Pedestrian Priority Network. Needs outside of that network will not be included in the PedPDX dataset of needs, however they will remain as programmable pedestrian needs through funding sources outside of the Pedestrian Network Completion program. PBOT also responded to the needs identified in these plans by developing a palette of alternative walking paths to serve as context-appropriate design solutions included in the PedPDX document.

Safe Routes to School (SRTS) Project Plan

PBOT is currently developing its Safe Routes to School (SRTS) program through a multi-faceted process of community engagement and planning analysis. The process is determining preferred walking and biking routes to school and identifying discrete infrastructure projects to improve each route. PBOT will construct the prioritized list of safety improvements using Fixing Our Streets, a voter-approved local funding source offering an anticipated \$8 million for improving school routes.

Relationship to PedPDX:

The draft SRTS Project Plan identifies 1,229 projects in 19 different categories along designated routes to school, and prioritizes them into three tiers. SRTS projects offer more detail regarding proposed improvements than do other City-adopted plans. The project team will incorporate these projects into the PedPDX inventory of needs and projects. The project team will prioritize all SRTS projects that fall within the Priority Pedestrian Network of PedPDX. PBOT will need to cross-check the outcomes of the SRTS Project Plan prioritization, and the resulting three tiers, with the outcomes of the PedPDX prioritization process. One outcome is not meant to supplant the other, but cross-referencing the two can inform implementation and funding strategies. This will require close coordination with the SRTS program to determine how to distinguish between projects prioritized for the Fixing Our Streets project versus those considered for funding through the Network Completion Program or TSP Major Projects.

Enhanced Transit Corridors Plan

PBOT and TriMet's *Enhanced Transit Corridors Plan* (to be adopted Spring 2018) will identify where transit priority, streamlining, and access treatments could be most beneficial on the planned TriMet frequent service network within the City of Portland. The primary product of the plan is a capital and operational toolbox of strategies and infrastructure treatments that can support increases in transit ridership and improve the experience for current riders.

Three lines that are part of TriMet's High Frequency Network were chosen for further study within the Enhanced Transit Corridors Plan: Lines 72, 12, and 6. The plan's toolbox of solutions is applied to each corridor as a test case of its application. Lines 73 and 20, as well as a study area within the Central City, are identified as warranting further study through other planning efforts. These focus corridors were chosen through a selection process that scored bus lines based on:

- **Transit Reliability/Delay** – Where buses are delayed by traffic congestion and it takes longer to travel during the most congested periods of the day compared to free flow conditions. Calculation: 90th to 10th Percentile Bus Operating Speed Variance.
- **Transit Speeds** – Where buses are slower throughout the day, compared to the posted speed. Calculation: Average Bus Operating Speed to Posted Speed Limit.
- **Transit Dwell Time** – Where buses are stopped at bus stops longer. Calculation: Transit Dwell Time (with the door open) to overall Transit Run Time.
- **Current Transit Trips** – Where transit ridership is greater than average based on the Average Existing Weekday Transit Trips.
- **Equity** – Where there are concentrations above the citywide average of the following populations:
 - People of Color
 - Low Income Households
 - Limited English Proficiency Households
- **Forecasted Future Population and Job Growth between 2010 and 2035** – Where forecasted increase in population and jobs suggests more transit demand in the future, based on the preferred Growth Scenario for the Portland 2035 Comprehensive Plan.

Relationship to PedPDX:

Pedestrian access to transit will likely be a criterion within the PedPDX prioritization framework. When complete, the *Enhanced Transit Corridors Plan* will provide a rationale for prioritizing certain transit corridors as part of either the Pedestrian Priority Network, or as higher weighted elements within the PedPDX prioritization framework.

Growing Transit Communities (GTC) Plan

The *Growing Transit Communities Plan* (2017) is an effort to identify and prioritize the most beneficial improvements that would make getting to transit stops and using transit a safer and more convenient option along sections of bus lines 87 (Airport Way/181st), 77 (Broadway/Halsey), and 20

(Burnside/Stark). These three bus corridors were selected after an analysis of all bus lines in Portland using the following criteria:

- Residential Density
- Opportunity: Jobs and Education
- Equity
- Access
- Mixed-use Land Patterns

The plan identifies corridor safety, crossings, pedestrian connections, sidewalks, signals, paving, and trail projects at locations where transit, along with walking and bicycling for short trips, could be the best mode for travel. Along the three planning corridors, the plan also identifies needs, including a lack of safe and conveniently spaced crossings (one corridor has crossings spaced more than a quarter mile apart), sidewalk gaps on connecting side streets, and poor bus stop quality. Projects were prioritized using a pedestrian network analysis tool developed for the project, and also the NCHRP ActiveTrans Priority Tool.

Relationship to PedPDX:

PBOT will incorporate all of the recommended projects in the GTC Plan that include a pedestrian component into the PedPDX needs inventory. Those that fall within the PedPDX Pedestrian Priority Network will be prioritized. Given the process undertaken to select the three bus corridors highlighted in the GTC Plan, PedPDX may choose to incorporate lines 87, 77, and 20 as part of either the Pedestrian Priority Network. Additionally, given that pedestrian access to transit will likely emerge as a criterion within the PedPDX prioritization framework, PedPDX may choose to include those bus lines as higher weighted elements within the PedPDX prioritization framework.

Southwest in Motion

Southwest In Motion (to be adopted Summer/Fall 2018) is a strategy for active transportation investments in Southwest Portland. The final plan will identify a realistic 5-year active transportation action plan that provides basic walking and bicycling connectivity as well as access to transit improvements.

The plan will identify a short-term project list, with a focus on project readiness, to more effectively implement pedestrian and bicycle improvements in SW Portland.

Relationship to PedPDX:

Once a short-term project list has been created, PedPDX will identify which of the proposed projects lie within the Priority Pedestrian Network, evaluate how the projects perform against the Completeness and Adequacy Criteria, and perform a citywide prioritization that includes the projects identified in Southwest in Motion.

Southwest Urban Trails Plan

The intent of the Southwest Urban Trails Plan, adopted in 2000, is to increase pedestrian access throughout Southwest Portland for recreation and transportation. The plan identifies an urban trail network linking pedestrians to schools, parks, transit, shopping, and recreation, as well as to regional trail systems and adjacent cities. The plans goals are to:

- Identify a primary trail network
- Identify design, construction, and right of way issues
- Develop recommendations for funding and construction
- Involve the community

Proposed improvements in the plan aim to increase pedestrian connections, promote pedestrian safety, and enhance the walking experience. Improvements include volunteer-built pathways and trails, sidewalks, crossing improvements, and stairs and bridges.

The plan priorities sidewalks along roadways with limited sight visibility due to topography and roadway geometry. Crosswalk improvements were proposed where crossing the road is difficult due to high traffic volumes, poor sight visibility, or high traffic speeds.

Relationship to PedPDX:

This plan provides guidance on sidewalks and trail connections, including a detailed project list. PedPDX will identify which of the planned trail segments identified in the Southwest Urban Trails Plan are on the Pedestrian Priority Network, evaluate how the projects perform against the Completeness and Adequacy Criteria, and perform a citywide prioritization that includes the projects identified by the plan.

CC2035 Plan and MMA Pedestrian Needs Assessment

The Central City 2035 Plan (CC2035) replaces the 1988 Central City Plan as the primary guiding policy document for the Central City, with goals, policies and tools designed to make Portland's urban core more vibrant, innovative, sustainable, and resilient. The CC2035 Plan includes policies and objectives to be amended into the TSP. One of the plan's performance targets is for at least 80% of commute trips to and from the district to be made by non-single occupancy vehicles (SOV) by 2035. The CC2035 plan also includes documentation for designating Portland's Central City as a Multimodal Mixed-Use Area (MMA), which provides the City of Portland with flexibility by lifting the Transportation Planning Rule (TPR) requirement for considering automobile congestion standards during the City's review of certain land use actions. Portland City Council did not adopt the MMA Pedestrian Needs Assessment portion of the CC2035 Plan.

Relationship to PedPDX:

The pedestrian needs identified in the CC2035 Plan assessment are included in the TSP as projects. PBOT will incorporate these projects into the PedPDX needs inventory. For those projects that fall within the Pedestrian Priority Network, PBOT will apply the Completeness and Adequacy Criteria, using the PedPDX prioritization framework.

Central City in Motion (CCIM) Multimodal Safety Project

Central City in Motion is Portland's plan for making strategic transportation investments in the Central City. The project will produce a final prioritized list and implementation plan by November 2018. The

plan aims to increase multimodal investments ahead of the population increase expected in the area by 2035.

The project is focusing pedestrian-related infrastructure investments on pedestrian safety at crossings and intersections. The project's draft planning principles and criteria for identifying projects to improve the pedestrian network in the Central City include:

- Coordinate with other plans: Coordinate with and build upon the City's TSP project list, MMA Inventory, Vision Zero analysis, and PedPDX Crossing Gap Analysis
- Address missing crossings: Focus project funds on improving locations that do not meet the City's draft minimum crossing standards:
 - At least every 530 feet on Central City Transit / Pedestrian Streets, Civic Main Streets, and Neighborhood Main Streets
 - At least every greater than 800 feet on City Walkways
- Address deficient crossings: Improve pedestrian crossings with features that improve pedestrian safety, e.g., decreasing crossing distance.
- Fill critical gaps: Identify other critical access improvement needs (transit access, etc.)
- Multi-modal: Along the priority bikeway corridors, identify where the bikeway project would also make substantial improvements to the pedestrian network

Relationship to PedPDX:

CCIM will identify and prioritize crossing and ADA improvements within the Central City. The project list and prioritization criteria are currently in development. These projects will be prioritized for near-term implementation (within five years) and funding. Projects not included in the near-term implementation package will be placed on a list of long-term investments. A Once the proposed improvements are available, the PedPDX project team will identify which of these crossing projects lie within the Priority Pedestrian Network, evaluate how the projects perform against the Completeness and Adequacy Criteria, and perform a citywide prioritization. Because the PedPDX plan and CCIM are happening concurrently, closer coordination may be required, especially as it relates to: 1) the CCIM determination of near-term and long-term implementation as compared to PedPDX prioritization outcomes; and 2) the CCIM funding recommendations as compared to PedPDX funding recommendations.

Regional and State Plan Review

Pedestrian needs and projects that are included in plans developed by TriMet, Metro, or the state, rather than the City, are relevant to PedPDX but may not be incorporated in the same manner. The relationship of each assessment of needs in relation to PedPDX is summarized below.

ODOT Region 1 Active Transportation Needs Assessment

The Oregon Department of Transportation (ODOT) has developed the Active Transportation Needs Inventory (ATNI) to better understand pedestrian and bicycle travel needs on the existing system of ODOT facilities. ODOT facilities within the City of Portland include 82nd Avenue and Powell Blvd, which are two of the most dangerous roads for pedestrians in Portland.

The inventory report recommends prioritizing improvements on highway segments with characteristics associated with increased pedestrian or bicycle crash risk, regardless of previous crash history, to proactively and systemically improve safety. Characteristics include traffic volumes, number of motor vehicle travel lanes, posted speed limit, driveway density, locations of traffic signals, and location of pedestrian activated flashers/beacons.

The report also prioritizes improvements on highway segments that serve areas with high numbers of transportation disadvantaged residents and environmental justice communities, and aims to improve pedestrian and bicycle facilities in areas that have been traditionally underserved.

Additionally, the report prioritizes sidewalk infill that fills a gap or connects to the surrounding active transportation network, in order provide increased access to destinations, address barriers, and support increased levels of walking.

Relationship to PedPDX:

The ODOT Region 1 Active Transportation Needs Assessment provides an inventory of all pedestrian facilities on ODOT facilities in Portland using standards specific to ODOT; it does not reflect current City policy. Segments along ODOT facilities are classified as a gap (no facility), substandard (does not meet ODOT minimum standards), or meets standard (meets ODOT minimum standard). The project team will incorporate this dataset into the needs inventory. The project team will evaluate all ODOT facilities within the Pedestrian Priority Network based on the PedPDX Completeness and Adequacy Criteria. The PedPDX analysis will likely identify pedestrian needs beyond the “gap” and “substandard” classifications of the ODOT assessment. PBOT will prioritize needs through the citywide PedPDX prioritization framework. The PedPDX process will provide ODOT Region 1 with more robust documentation of infrastructure needs along its facilities, as well as inform future project scoping for gap and substandard segments.

RTP Project Lists

The 2014 *Regional Transportation Plan* (RTP) is currently being updated as a 2018 Plan. This plan coordinates city, county, regional and state priority transportation projects and, once completed, will create a transportation priority list for the period for 2018-2040. The plan identifies current and future transportation needs, investments required to meet those needs and what funds the region expects to have available through 2040 to implement those investments.

RTP projects include sidewalk construction, reconstruction, and infill on arterial roads; Multnomah County pedestrian improvements (marked crossing, lighting, and sidewalks); pedestrian connections to transit (bike/pedestrian bridge, sidewalks); pedestrian connectivity projects (bridges over I-5 and Columbia Blvd); and improvements in pedestrian districts.

Relationship to PedPDX:

Metro invited local jurisdictions to submit projects for inclusion in the plan’s update, as a means of assessing needs across the region. The 2018 list of projects that the City of Portland submitted to the RTP process overlap significantly with TSP projects and include 228 projects with a pedestrian element. As with other plans, the project team will incorporate this dataset into the PedPDX needs inventory. PBOT will need to analyze the 2018 RTP project list against the identified Pedestrian Priority Network, as well as determine how the projects perform against PBOT’s Completeness and Adequacy Criteria and Prioritization, and provide suggested amendments to the next RTP process.

Regional Active Transportation Plan

The 2014 *Regional Active Transportation Plan* (ATP) provides a vision, plan and policies for communities in the region to increase transportation options and support economic development, healthy active living and equity.

To create a new regional pedestrian network, Metro first conducted a regional pedestrian network evaluation. The analysis found that areas in the region with the greatest projected increase in total walking trips between 2010 and 2035 include Portland's Central City and SE Portland to Interstate 205. Areas with the greatest projected increase in percentage of walking trips between 2010 and 2035 include East Portland (east of I-205) and North Portland.

The analysis also identified urban arterials as being important corridors in the regional pedestrian network, as well as frequent and almost frequent transit route corridors.

The ATP identifies a set of functional classifications for the regional pedestrian network:

- Pedestrian parkways - the highest functional classification applied to regional pedestrian routes. They mirror the regional transit network and are also key regional destinations themselves;
- Regional pedestrian corridors - the second highest functional classification for regional pedestrian routes.
- Pedestrian parkways and regional pedestrian corridors connect to and through pedestrian districts.

Relationship to PedPDX:

The project team will incorporate RATP projects into the PedPDX needs inventory. Projects within the Pedestrian Priority Network will be analyzed against the PedPDX Completeness and Adequacy Criteria and Prioritization. This will likely be an iterative process to determine where RATP projects align with PedPDX needs and where inconsistencies exist. As the Pedestrian Priority Network is developed, PBOT may consider the Regional Pedestrian Network (RTP Figure 1.22) as a component of that. Inconsistencies with the final prioritized needs of PedPDX will need to be submitted as amendments to the next ATP process.

TriMet Pedestrian Network Analysis

TriMet's Pedestrian Network Analysis, completed in 2012, is a data-driven system for identifying pedestrian infrastructure needs near transit. The analysis includes specific recommendations that cities, counties, and the state can incorporate into planning projects, and potential projects for 10 focus areas in the region. These improvements may include adding or widening sidewalks, adding landscaping or planting street trees, calming traffic and/or adding street lighting.

TriMet scored every transit stop on transit supportiveness and the existing pedestrian environment. From this analysis, TriMet selected 10 focus areas and performed qualitative needs assessments. Three of the focus areas are in the City of Portland: SE Division St & SE 122nd Ave, SE Powell Blvd. & SE 82nd Ave, and Hillsdale. For each focus area, the assessment concludes with five actions to make the area safer, easier, and comfortable to walk.

Relationship to PedPDX:

The needs identified in the TriMet Pedestrian Network Analysis for the City of Portland are limited to three locations. While the needs are not easily integrated into a GIS needs inventory, enough specificity is provided to support cross-referencing PedPDX's draft Network Needs against the project concepts recommended at these three locations. Where needs align, the Pedestrian Network Analysis provides a basis for project development and potential partnership in implementing. Where needs are not aligned, TriMet may consider amending recommendations to support PedPDX priorities that also improve pedestrian access to transit at these locations or others within the City limits.