PBOT
PORTLAND BUREAU OF TRANSPORTATION
1120 SW Fifth Ave, Suite 1331, Portland OR 97204
Main: 503-823-5185 TTY: 503-823-6868 Fax: 503-823-7576
Chloe Eudaly Commissioner **Chris Warner** Director

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NW Pedestrian Lighting Study Project Scope

Introduction

The NW Parking District Stakeholder Advisory Committee (SAC) has prioritized the improvement of pedestrian lighting and visibility within Northwest. This study will help PBOT to fulfill its strategic goals of smart asset management, safe streets in adherence with Vision Zero, and will help shape a livable Northwest.

Adequate street lighting creates an environment that helps people feel confident, comfortable, and safe walking in the evening/nighttime. Lighting can be used in an artistic way to create attractive design that will enhance interest in walking. Carefully planned lighting promotes visibility for drivers, and the Oregon Department of Transportation reports adding lighting at intersections can reduce crashes by as much as 42% percent (ODOT reduction factor appendix, pg. 70; PBOT Blog)

Northwest in Motion (NWIM) explains that streets and intersections in NW tend to use cobra head lights to illuminate the street, rather than the sidewalk. Further, the dense tree canopy lends itself to darkness. Inadequate street lighting is a concern that comes up, particularly for People of Color (POC) and Black Portlanders. Key concerns during outreach are to improve visibility at bicycle and pedestrian crossings, concerns about traffic circle visibility on 25th Ave, desire for increased visibility by parking removal. Pedestrians tend to cross at all different intersections, but the current parking setback approach to lighting only includes controlled intersections. This will also include areas that are uncontrolled and consider cyclists who roll through stop signs. Pedestrian setbacks are typically 20 feet.

PEDPDX recommends improving visibility of pedestrians at crossings. The strategy includes implementing vision clearance guidelines at uncontrolled crossings in conjunctions with PBOT projects and development review; identifying key intersections for retroactive vision clearance improvements by Safe Routes to School, Neighborhood Greenways, Vision Zero, and Pedestrian Network Completion programs; and evaluating the need for vision clearance guidelines at controlled crossing and on local streets.

Methodology

Using guidance from NWIM and PEDPDX, this Action Plan will inventory the lighting of all intersections and midblocks within identified focus areas throughout Northwest.

Once the inventory is complete, implementation of improved lighting and visibility will be prioritized. The prioritization will follow guidance from PED PDX and NWIM:

- PBOT Equity Matrix Score
- Major City Walkways
- City Walkways
- Neighborhood Greenways
- Safe Routes to School identified routes
- High Crash Intersections and Corridors

Public and Stakeholder Input

This Action Plan will include a stakeholder input through a Technical Advisory Committee (TAC). The TAC will include three members from the SAC and a representative from both the NWDA and NWBA. Further, this Action Plan will be guided by PBOT planners and engineers.

Thorough public engagement around lighting and visibility was conducted during NWIM and PEDPDX and it was concluded by both that lighting and visibility are high priorities. Due to the technical nature of the Action Plan, public engagement will not be included. Public engagement will occur during implementation for elements that may be unique to this Action Plan and not previously discussed during NWIM and PEDPDX.

PBOT Planning and Engineering Guidance

PBOT Lighting Standards

In 2017, PBOT started using a "recommended procedure" to define lighting levels. This creates a series of weighted values that considers the various roadway parameters that may be present, as well as roadway classifications. There are additional guidelines for pedestrian zones. When looking at pedestrian lighting PBOT considers sidewalks, marked crosswalks, multi-use paths, woonerf or "living street" (shared primarily by bicyclists and pedestrians, but also includes low-speed motor vehicles) to help determine light levels.

Further, PBOT uses the Equity Matrix, as mentioned above, to guide where investments in lighting are made and looks at race, income, affordable housing, crashes (Vision Zero), and limited English proficiency on a map to give an overall score. Upgrades are also prioritized by deadliest streets.

NWIM

NWIM aims to make the district safer for walking, biking, and taking public transit. Tier I projects are considered the highest priorities for funding and implementation:

- Neighborhood greenways on NW Marshall & NW 24th will be retrofitted. New neighborhood greenways will be designed on NW Pettygrove/Overton, and NW Savier.
- Transit Improvement will focus on addressing the worst delay issues along bus lines and reducing conflicts with other modes, but also include some targeted access to transit improvements and stop improvements on NW 21st, NW 18th/19th, and W Burnside.

- Corridor Safety is mainly focused on providing safe crossings of busy streets at regular intervals, but also includes improvements such as traffic calming, signal upgrades, pavement reconstruction, and bike lane enhancements on NW Everett/Glisan, NW 23rd, NW 25th/Westover, NW Vaughn.

NWIM reports that one way to address lighting issue is to put in pedestrian-scale light poles (14 feet). PBOT's standard practice is to evaluate light at all new or upgraded pedestrian crossings and add pedestrian light-scale poles at those crossings. Therefore, as NWIM projects are completed, more of these light poles will be installed. The NW Pedestrian Lighting Study is to address areas that are NOT on NWIM's project list.

> *"An additional proactive evaluation of lighting levels at existing intersections and crossings should be conducted to develop an inventory of lighting needs. There is also a need to identify and allocate ongoing funding for infill lighting to address the lighting evaluation findings, prioritizing first the designated main streets, neighborhood greenways, and Safe Routes to School in the area."*

Further, NWIM recommends more tree maintenance and incorporating pedestrian lighting into frontage improvements constructed by new developments, as appropriate.

PEDPDX

PedPDX, adopted in 2019 as an update to the 1998 Pedestrian Master plan, recommends identifying key intersections for retroactive vision clearance implemented by programs such as Safe Routes to School, neighborhood greenways, Vision Zero, and Pedestrian Network Completion Programs. NWIM builds on this work, recommending application of vision clearance on all new and existing neighborhood greenways, all PedPDX classified as Major City Walkways and City Walkways, all identified Safe Routes to School.

PedPDX defines Pedestrian Priority Network as streets and paths that provide important pedestrian connections to transit and key destinations, showing where pedestrian infrastructure needs to exist. Each street is given a pedestrian classification that reflects the level of demand for pedestrian movement and is a result of what Portlanders say is most important to them. This is also overlaid by public equity and safety needs. Highest to lowest demand is as follows:

- **Pedestrian district:** Designated Centers, as defined by Portland's 2035 Comprehensive Plan, where high levels of pedestrian activity exist or are expected in the future.
- **Major City walkways**: High number of transit and land use destinations with a high number of pedestrians. Includes Civic and Neighborhood Corridors and Main Streets, streets along the planned and existing Frequent Transit Network, core downtown streets, and off-street trails in high demand corridors.
- **City walkways:** Moderate pedestrian demand. Major traffic streets, collector streets, and streets with transit service that are not designated as major city walkways, and off-street trails in moderate demand corridors.
- **Neighborhood walkways:** Typically, on local residential streets, and are generally comprised of designated Safe Routes to School travel routes, neighborhood greenways, and priority walking routes on local traffic streets identified in area plans. Neighborhood walkways also include designated paths within the public right-of way and neighborhood trail.

Timeline

Phase 1

September-December 2020

- Key actions/milestones
    - Project task force kick off meeting and clarify role and expectations.
    - Understand existing lighting standards and city code.
    - Research other cities and determine if there is anything that can be used.
    - Assign PBOT lighting engineer to project, begin inventory and evaluation.
- *Task Force meetings in September and December*

Phase 2

January-April 2021

- Key actions/milestones
    - Review existing conditions and engineering findings
    - Develop prioritization criteria
    - Decide on lighting standards adoption with NWDA?
- *Task Force meetings in February and April*

Phase 3

April-May 2021

- Key actions/milestones
    - Draft budget
    - Draft list of priority locations/streets/intersections to address
    - Conduct any additional outreach

Phase 4

June 2021

- Decide on project list
- Begin implementation