

PBOT

PORTLAND BUREAU OF TRANSPORTATION

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To: Traffic Systems & Operations Staff

CC: Steve Townsen, Jody Yates, Art Pearce, Dave Benson, Catherine Ciarlo, Dana Dickman, Clay Veka, Tara Wasiak, Chris Warner

From: Wendy Cawley, P.E., City Traffic Engineer

Subject: Setting safe speed limits on Portland streets

PBOT has adopted a [Safe System approach](#) through Vision Zero to eliminate traffic deaths and serious injuries in the City of Portland. **Safe speeds** are a major component of a safe system approach, along with safe roads, safe vehicles, and safe behaviors. [PBOT's 2019 Vision Zero Plan Update](#) outlines a strategy to reduce speeds Citywide, including objectives for **setting safe speed limits** and **redesigning dangerous streets to encourage safe speeds**. PBOT's Strategic Plan also calls for developing a strategy for setting speed limits and designing infrastructure for safe speeds.

This memo establishes Portland Bureau of Transportation (PBOT) guidelines for setting safe speed limits on Portland's streets. These safe speeds are based on traffic engineering studies, best practices and [new methodology](#) approved by the Oregon Department of Transportation.¹

New state framework supports a Safe System approach

The 85th percentile speed has historically been used by ODOT to set posted speeds, with PBOT often petitioning to set posted speeds lower than the 85th percentile speed to address safety. New guidance suggests that posting speeds near the 50th percentile speed is more appropriate for urban areas. ODOT's new speed zone setting methodology now considers 50th percentile speeds, roadway classification and adjacent development when setting speed limits in urban areas.

Safe Speeds Save Lives

The human body can only tolerate so much physical impact. As people travel faster, the risk of death or serious injury rises dramatically. A pedestrian struck by a person driving 40 mph is eight times more likely to die than a pedestrian struck at 20 mph.

Most posted speed limits in Portland should be 20 to 25 miles per hour. Speed limits above 35 miles per hour should be rare and should only be considered where there are separated facilities for pedestrians and bicyclists. The table below outlines recommended speed limit ranges for various roadways and land

¹ These guidelines reference statewide speed limit setting processes established by [ORS 811.111](#), [ORS 810.180](#), and implemented via [OAR 734-020-0015](#).

uses, as defined by [OAR 734-020-0015](#). Appendix A provides examples of the land use contexts in the City of Portland as defined by OAR 734-020-0015.

Federal Functional Street Classification ²	Land Use Context			
	Urban Core / Central Business District	Urban Mix	Suburban Commercial & Residential	Suburban Fringe
Arterial	20-25	25-30	30-35	35-45
Collector	20-25	25-30	25-35	30-40
Local	20-25	20-25	25-35	25-35

In addition to speed limits that align with the street classification and adjacent land use, Oregon Revised Statutes allow for the posted speeds based on the following definitions:

- **15 MPH Narrow Residential Streets** – Streets that meet ORS 801.368 where **pavement** is not wider than 18 feet. Pavement markings that create an 18 foot or narrower travel way do not constitute a “narrow residential street”.
- **20 MPH Residential Districts & Greenways** – ORS 810.180 allows for most local residential streets to be posted 5 MPH below the statutory 25 MPH speed limit. Not all local streets are posted with speed limit signage; PBOT focuses speed signing on local streets that are school routes, neighborhood greenways, or are through routes.
- **20 MPH Business Districts** – Streets that meet the ORS 801.170 for definition of business districts.

Implementation

Traffic Operations staff will continue to coordinate speed zone reductions to ensure the process and recommendations are in line with OAR (Oregon Administrative Rules) related to speed zoning.

As part of capital project development and implementation PBOT staff, working with Traffic Operations, should pursue speed reductions and implement proven speed reduction tools to meet recommended posted speeds. Commonly used speed reduction designs and strategies include but are not limited to:

- Lane reductions and road reorganizations that limit free flow speeds
- Traffic calming treatments, such as speed bumps and turn calming strategies
- Signal timing that supports consistent speeds along a corridor, minimizing top end speeding
- Protected intersections

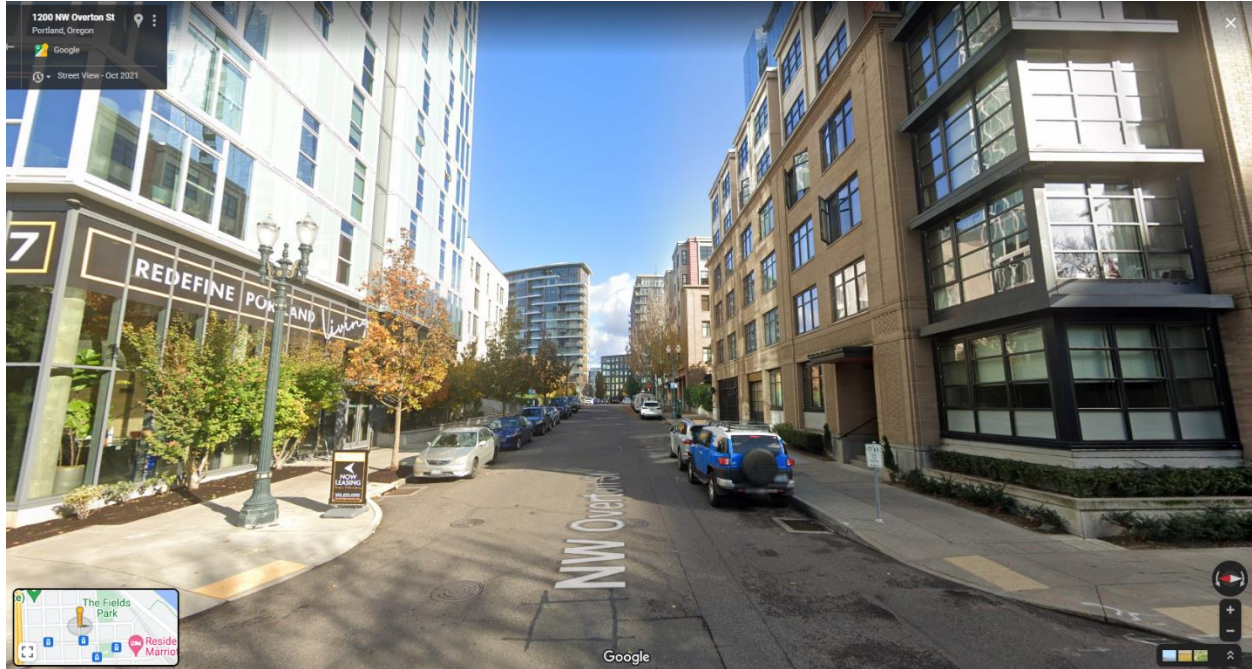
Separate from the capital project process, PBOT staff should continue to proactively update speed limits where opportunities exist to align posted speeds with a Safe System approach. Streets with the following designations should be prioritized for speed reductions:

- **Pedestrian Districts within Business Districts** – Neighborhood and District Collectors within Pedestrian Districts that meet ORS definition of a Business District should be posted at **20 MPH**.
- **Residential Neighborhood Collectors** – Post at **25 MPH** per the ORS definition of residence districts. Streets classified as Federal Arterials must follow the ODOT speed zoning process.

² Federal Functional Classifications can be found on [ODOT's website](#).

Appendix A: Land use context & Portland examples, as defined by ORS 734-020-0015

Urban Core / Central Business District: “Areas with highest density of development, mixed land uses, predominately higher-rise structures, and small setbacks of buildings from the roadway. Sidewalks are wider and on street parking is typical.”



Example: NW Overton Street at 12th Avenue

Urban Mix: “Areas with high-density development, mixed land uses and prominent destinations, potential for some on-street parking and sidewalks, and buildings with varying setbacks from the roadway.”



Example: SE Division Street at 33rd Avenue

Suburban Commercial & Residential: “Areas with medium-density development, mixed land uses within and among structures (including mixed-use town centers, commercial corridors, and residential areas), and varied setbacks.”



Example: NE 122nd Avenue at Multnomah Street

Suburban Fringe: “Areas with low-density development or no development, between the suburban, urban or rural community and the rural area, can be inside or outside of the city limits (can be within the urban growth boundary).”



N Lombard Street at Ramsey Boulevard