Safety Interventions for Houseless Pedestrians

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SAFETY INTERVENTIONS FOR HOUSELESS PEDESTRIANS

Presented by:
Street Perspective

Street Perspective is made up of
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MURP Focus Area: Public Health, Special Analysis

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MURP Focus Area: Transportation

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Role: Writing Lead, Technical Editing Lead
MURP Focus Area: Transportation

Sean Doyle
Role: Engagement Lead, PM Support
MURP Focus Area: Transportation
Introduction - Project Overview

**What**
- A request to examine how to mitigate the risk of traffic-related harm to people experiencing houselessness

**How**
- Conducting qualitative and quantitative analysis of traffic safety threats faced by houseless pedestrians
- Developing a toolkit of actions to address those threats

**Why**
- More people living on the street facing traffic safety threats since the COVID 19 pandemic started
Introduction - Project Background

63 people killed in traffic crashes in Portland in 2021

60% of fatalities occurred on the High Crash Network (HCN)

Out of all fatal crashes in 2021
  ● 27 were pedestrians
  ● 19 were reported as people experiencing houselessness
Introduction - Equity Approach

- Safe streets for all Portlanders, in all areas of the city, to move by all modes
- "Houseless" and/or "unhoused" rather than "homeless"
- The scope of our project is not to analyze and address the houselessness issue, but to understand how they apply to traffic safety and how they affect this population sector
Introduction - Research questions

**Problem:** 70% of pedestrian deaths in 2021 were people experiencing houselessness

**Research questions:** how do we mitigate the risk of traffic-related harm to people experiencing houselessness?

how does the houselessness issue apply to traffic safety and how it affects people living in this situation?
Existing Conditions

**The conflict zone** is where a reported campsite, a pedestrian crash, and the High Crash Network (HCN) are within 250 feet of each other.

1. Campsites and crashes near HCN
   a. 292 out of 1,040 campsites
   b. 182 out of 285 crashes

2. Campsites in the Conflict Zone
   a. 20 campsites

3. Crashes in Conflict Zones
   a. 25 crashes due to motorist failing to yield, causing 27 injuries
   b. Lack of attention, speeding, and carelessness commonly cited causes

Week 3
February 2022
Reported Camp Sites

2019 Pedestrian Crashes within 250 feet

Conflict Zone within 250 feet

High Crash Network within 250 feet
Site Selections Based On Conflict Zones

10 reported campsites and 13 pedestrian crashes in Conflict Zones at 3 locations

1. Burnside Location
   ○ W Burnside St near SW 2nd Ave and SW 3rd Ave

2. Hollywood Location
   ○ The area of NE Broadway, NE César E. Chávez Blvd, NE Halsey St, and NE Sandy Blvd

3. Hazelwood Location
   ○ NE 122nd Ave at NE Glisan St

<table>
<thead>
<tr>
<th>Corridor Name</th>
<th>Campsites*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE/SE Sandy Blvd</td>
<td>39</td>
</tr>
<tr>
<td>SE Cesar E Chavez Blvd</td>
<td>30</td>
</tr>
<tr>
<td>E/W Burnside St</td>
<td>29</td>
</tr>
<tr>
<td>NE Halsey St</td>
<td>25</td>
</tr>
<tr>
<td>NE/SE 122nd Ave</td>
<td>14</td>
</tr>
<tr>
<td>NE Glisan St</td>
<td>14</td>
</tr>
<tr>
<td>SW/N/NE Broadway</td>
<td>7</td>
</tr>
<tr>
<td>SW 4th Ave</td>
<td>6</td>
</tr>
</tbody>
</table>
Burnside to Hollywood

Four reported campsites near four pedestrian crashes in Conflict Zones at the Burnside location

Additional campsites in Conflict Zones between Burnside and Hollywood locations along Broadway

Greater density of services at Burnside, with MAX connections to Hollywood

Previously proposed Safe Rest Villages (SRVs) on PBOT lands along the Willamette

Particular PBOT lands scattered downtown, and along Burnside and the Willamette
Hollywood

Four reported campsites near four pedestrian crashes in Conflict Zones at the Hollywood Location
Hazelwood

Two reported campsites near five pedestrian crashes in a Conflict Zone at the Hazelwood Location

Previously proposed PBOT SRV west of campsites at NE 82nd Ave & NE Halsey St
Methodology Key

Data (Input) → Processing Tool → Tool Parameter → Data (Output)
Campsites and Crashes within 250 feet of HCN

- **Week 3 February 2022 Reported Campsites**
- **2019 Pedestrian Crashes**

Select by Location → Within 250 feet → High Crash Network (HCN)

- **Campsites within 250ft of HCN**
- **Crashes within 250ft of HCN**

*Existing Conditions*
Campsites in the Conflict Zone

- Campsites within 250ft of HCN
- Select by Location
- Within 250 feet
- Crashes within 250ft of HCN
- Campsites in the Conflict Zone
City-Owned Parcels in Portland

1. **Public Owned Parcels**
2. **Select by Attribute**
3. **PUBLIC.Owner='City of Portland'**
4. **AND**
5. **SITECITY = 'PORTLAND'**
6. **City-Owned Parcels in Portland**
City Lands Quarter Mile from Campsites near HCN

City-Owned Parcels in Portland ➔ Select by Location ➔ Within .25 miles ➔ Campsites within 250ft of HCN ➔ City Parcels near of Campsites near HCN
Set of Lands Quarter Mile from Campsites near HCN

City Parcels near Campsites near HCN → Select by Attribute → PRPCD_DESC = 'PARK' OR PRPCD_DESC = 'GARAGE PARKING STRUCTURE' OR PRPCD_DESC = 'VACANT LAND' OR PRPCD_DESC = 'IMPROVED LAND AS VACANT' OR PRPCD_DESC = 'MISC RECREATION' OR PRPCD_DESC = 'PARKING LOT' → Specific City Parcels near Campsites near HCN
Lands 20,000 sq. ft or larger & specific lands 700 or 750 sq. ft or larger

Specific City Parcels near Campsites near HCN

Select by Attribute

SHAPE_AREA >= 700

Specific City Parcels 700 sq. ft or larger near Campsites near HCN

PBOT Properties

Select by Attribute

SHAPE_AREA >= 20000

PBOT Properties greater than or equal to 20,000 sq. ft.

Specified PBOT Properties greater than or equal to 750 sq. ft.

Spatial Join

Target: PBOT Properties

AND

Join: Publicly Owned Parcels

AND

Join Field: RNO

Specify PBOT Properties

PRPCD_DESC = 'PARKING LOT'

OR

PRPCD_DESC = 'IMPROVED LAND AS VACANT'

AND

Select by Attribute

SHAPE_AREA >= 750
Data Sources

- **Homelessness & Urban Camping Impact Reduction Program One Point of Contact Campsite Reporting System**
  - ArcGIS Online Campsite Reporting Data
    - February 14–20, 2022 Report

- **PBOT ArcGIS Division**
  - Pedestrian Crashes 2010-2019
    - Pedestrian Crashes 2019
  - PBOT-Claimed Lands 2022

- **Inventory of City-Owned Parcels Potentially for Safe Rest Villages Proposed Summer 2021**
  - Previously Proposed PBOT Lands

- **PortlandMaps Open Data**
  - High Crash Network
  - Publicly Owned Lands 2019
  - Public Restrooms-(Parks)
  - Grocery Stores

- **TriMet Developer Resources Geospatial Data**
  - Transportation Stops
    - MAX
    - Bus
    - Streetcar
Site Analysis

Corridor Name

Campsites

NE/SE Sandy Blvd 39 High Density

SE Cesar E Chavez Blvd 30 Medium

E/W Burnside St 29 High Density

NE Halsey St 25

NE/SE 122nd Ave 14 High Density

NE Glisan St 14

SW/N/NE Broadway 7

SW 4th Ave 6

Site Analysis
## Site Analysis

### Neighborhood
**Old Town / Downtown**

### Land Uses
- CX: Central Commercial
- OS: Open Space

### Main Streets
- **W BURNSIDE ST**
  - Road owner: PBOT
  - Street classification: Major Arterial
  - Speed limit: 25-30 mph
  - Road width: 84 ft
  - Median Strip: Yes
- **NW 2ND AVE**
  - Road owner: PBOT
  - Street classification: Collector
  - Speed limit: 20 mph
  - Road width: 44 ft
  - Median Strip: No

### Transit
- A: MAX Stop
- B: Bus Stop

### Missing Infrastructure
- 1. Sidewalks
- 2. Crosswalks
- 3. Traffic lights
- 4. Bike Path

### Campsites
- Tents
- RVs - Campers

### Potential Conflict Areas
- 1. Lack of crossing
- 2. Intensive camping adjacent to street

---

**Date/Time of Visit:** April 1, 2023. Evening.
Lack of marked crosswalk on east side of W Burnside St & NW 2nd Ave

Driver turning right onto Second Ave from W Burnside while pedestrians are still crossing street
Site Analysis

Lack of mid-street crossing on NE Halsey St

NE Halsey St sidewalk looking towards NE Cesar E. Chavez Blvd

Pedestrian waiting to cross NE Sandy Blvd at unmarked crosswalk

I-84 off-ramp onto NE Halsey St

Lack of mid-street crossing on NE Halsey St
High Crash Intersection signage does not appear effective in reducing speeding along this corridor.

Corridor is full of automobile-centric land uses as seen looking north on NE 122nd Ave.
Promising Practices

- Safe Streets
- Infrastructure
- Motel Vouchers, Safe Rest Villages, and Sanctioned Campsites
- RV/Car Camping
Promising Practices

Safe Streets

Key Points:

- Cities have shown they have the capacity and resources to quickly adapt to new crises.

- These adaptations need to prioritize vulnerable communities and underserved areas.

- Building off of existing programs such as Neighborhood Greenways and the Safe Streets Initiative, PBOT could apply similar measures to the HCN and houseless communities.

- Streets with essential places and access to basic needs should be prioritized.
Promising Practices

Infrastructure

Key Points:

- Speed reduction and traffic-calming measures,
- Enhanced street lighting and visibility of pedestrians
- Removal of obstacles to visibility
- Pedestrian warning signs for drivers, and the addition of crosswalks
- ADA compliance
- Signal prioritization
- Cautionary paint and infrastructure demarcation for pedestrians
Promising Practices

RV/Car Camping

Key Points:

- Cars/RVs provide a higher level of safety and security than tent camping.

- Providing places for cars/RVs would likely minimize the number of vehicles the City of Portland would have to tow and impound reducing City expenditures.

- For Safe Parking Programs, the composite model holds the greatest promise in both meeting immediate needs while providing unhoused people the services they need.

- The success of rehousing through safe parking parking models depends on accessibility to social services support.
Engagement

With organizations that directly engage with people experiencing houselessness & subject matter experts.

With people experiencing houselessness, informed by our partner interviews.

Developed key takeaways to inform recommendations.

Sharing preliminary recommendations with partners and requesting feedback.

Partners:
- Cultivate Initiatives
- Ground Score
- Hygiene4All
- Rahab’s Sisters
- Sisters of the Road
- Street Trust

Trigger Warning:
The next two slides will contain some heavy content, including discussion of harassment, that could cause distress for some viewers.
The city’s practice of clearing areas where people are camping—or “sweeping”—and other harassment triggers a cascade of negative effects and push people to camp in more dangerous locations.

1. "Sweeps kill. They just do."

2. Houseless encampments are better understood as houseless communities and should be treated as such.

"Treat the camp as real community because essentially you’re moving a neighborhood."

With sweeps and neighbor violence increasing, the only places for our guests to go that they can be guaranteed some level of consistency with their housing is the places that put them at risk...where there aren’t housed neighbors there to mess with them.

3. "There is a shared perception that people experiencing houselessness are targeted with traffic violence."

Engagement
There is no "typical" person experiencing houselessness.

"Just because we fell on some bad luck...that doesn't make us any less human."

Nearly every person interviewed said they or someone they knew had experienced a crash or close call with a vehicle.

The practice of sweeping is a constant threat and can jeopardize any and all efforts people have made to get into housing or otherwise off the streets, including job loss.

"I've been displaced and displaced and displaced [by sweeps]."

Most people felt targeted by police, private security, and housed residents/drivers because of their housing status.
<table>
<thead>
<tr>
<th>Policies &amp; Programs</th>
<th>Infrastructure</th>
<th>Providing Shelter</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Stop sweeping.</td>
<td>● Improve street lighting, especially at crosswalks and intersections.</td>
<td>● Provide more housing—including transitional housing, single room occupancy units, and rent-to-own options.</td>
</tr>
<tr>
<td>● Expand access to porta potties, handwashing, garbage dumpsters, showers, sanitation services, laundry, sewage pumping for RVs, power, Wi-Fi, and other services near where people are sheltering.</td>
<td>● Install more pedestrian safety islands.</td>
<td>● Build tiny homes.</td>
</tr>
<tr>
<td>● Provide reflective vests, clothing, and/or bands of reflective tape for tents.</td>
<td>● Daylight intersections—remove visual barriers, especially parking.</td>
<td>● Convert existing vacant structures into housing.</td>
</tr>
<tr>
<td>● Meet people where they’re at to provide services.</td>
<td>● Use temporary cement barriers or buffers to protect houseless communities, but with the community’s consent.</td>
<td>● Provide safe/sanctioned campsites.</td>
</tr>
<tr>
<td>● Increase funding to community-based organizations.</td>
<td>● Provide safety cones to mark the perimeter of houseless communities.</td>
<td>● Provide safe/sanctioned parking sites.</td>
</tr>
<tr>
<td>● Increase the cost of parking and implement congestion pricing to reduce driving.</td>
<td>● Remove boulders and other hostile infrastructure installed to displace people experiencing houselessness.</td>
<td>● Seize the golf courses and repurpose them for sanctioned camping; repurpose parts of city parks for camping.</td>
</tr>
<tr>
<td>● Increase accountability for how the police and private security make contact with unhoused individuals.</td>
<td>● Close the High Crash Network to vehicle traffic.</td>
<td></td>
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<tr>
<td></td>
<td>● Reduce speed limits on the High Crash Network to 20 mph.</td>
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<td></td>
<td>● Time traffic lights for 20 mph or the legal limit (“green wave”).</td>
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<td></td>
<td>● Install speed cameras &amp; apply equitable, income-based penalties (day fines).</td>
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<td></td>
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<tr>
<td>People Experiencing Houselessness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Stop sweeping.</td>
<td>● Improve crosswalks with working pedestrian push buttons and repaint faded crosswalks.</td>
<td></td>
</tr>
<tr>
<td>● Better access to necessities like showers, places to charge phones.</td>
<td>● Install more rectangular rapid-flashing beacons (RRFBs) at crosswalks.</td>
<td></td>
</tr>
<tr>
<td>● Reflective wearables, but not bright colors that could attract unwanted attention.</td>
<td>● Widen sidewalks.</td>
<td></td>
</tr>
<tr>
<td>● More access to transit (especially to tickets) &amp; longer service hours.</td>
<td>● Install warning signs for drivers to “slow down for pedestrians experiencing houselessness” in areas with houseless communities.</td>
<td></td>
</tr>
<tr>
<td>● Delivery of groceries and/or medical supplies.</td>
<td>● Install more lighting and better lighting at night.</td>
<td></td>
</tr>
<tr>
<td>● Stricter regulations for driver’s licenses &amp; more driver education.</td>
<td>● Add additional pedestrian safety features to parking garages and other parking structures.</td>
<td></td>
</tr>
<tr>
<td>● Engagement from the City (but not the police) about what people experiencing houselessness need.</td>
<td>● Improve wayfinding for drivers.</td>
<td></td>
</tr>
<tr>
<td>● Better coordination between TriMet, ODOT, and PBOT.</td>
<td>● Repair roads and potholes.</td>
<td></td>
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<tr>
<td>● Make targeted violence against unhoused people a hate crime.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Recommendation Toolkit

<table>
<thead>
<tr>
<th>A. Shelter &amp; Necessities</th>
<th>Details</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1. Ban/Stop Sweeping</strong></td>
<td>Sweeping displaces people and puts them at greater risk</td>
<td>Policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City of Portland</td>
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<tr>
<td></td>
<td></td>
<td>Long-term</td>
</tr>
<tr>
<td><strong>A2. PBOT Service Hubs</strong></td>
<td>Houseless pedestrians need access to necessities</td>
<td>Infrastructure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PBOT &amp; City</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long-term</td>
</tr>
<tr>
<td><strong>A3. Sanctioned Car Camping in</strong></td>
<td>PBOT should allow overnight RV and car camping in</td>
<td>Program</td>
</tr>
<tr>
<td><strong>SmartPark Structures</strong></td>
<td>structures it manages</td>
<td>PBOT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium-term</td>
</tr>
<tr>
<td><strong>A4. Reduce Towing of RVS</strong></td>
<td>PBOT should review and clarify its towing procedures</td>
<td>Policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PBOT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium-term</td>
</tr>
<tr>
<td><strong>A5. Sanctuary Streets &amp; Neighborhood</strong></td>
<td>Create program to allow repurposing of public</td>
<td>Program</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>right-of-way for service providers</td>
<td>PBOT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium-term</td>
</tr>
<tr>
<td><strong>A6. Sanctioned Camping</strong></td>
<td>Combined with ending sweeping, allow camping on certain</td>
<td>Program</td>
</tr>
<tr>
<td></td>
<td>public lands</td>
<td>City of Portland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long-term</td>
</tr>
</tbody>
</table>
## Recommendation Toolkit

<table>
<thead>
<tr>
<th>B. Ped Priority &amp; Visibility</th>
<th>Details</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1. Incorporate Houselessness into Project Prioritization</td>
<td>PBOT should use campsite data and past crashes (Conflict Zone) to prioritize safety projects</td>
<td>Policy PBOT Near-term</td>
</tr>
<tr>
<td>B2. Expand Vision Clearance (“Daylighting”)</td>
<td>PBOT should implement vision clearance at controlled as well as uncontrolled intersections</td>
<td>Infrastructure PBOT Near-term</td>
</tr>
<tr>
<td>B3. On-Street Barriers &amp; Demarcation</td>
<td>Use safety measures such as Jersey barriers or cones to protect and demarcate houseless communities</td>
<td>Infrastructure PBOT Near-term</td>
</tr>
<tr>
<td>B4. Distribute/Install Reflective Materials</td>
<td>Apply reflective treatments near houseless communities</td>
<td>Infrastructure &amp; Program PBOT Near-term</td>
</tr>
<tr>
<td>B5. Safety Enhancements at Parking Structures</td>
<td>Install a combination of warning systems to PBOT parking structures and require for new development</td>
<td>Policy PBOT &amp; City of Portland Long-term</td>
</tr>
<tr>
<td>B6. Ped Improvements Near Bottle Drop Locations</td>
<td>Install traffic calming and ped safety features at highly frequented locations such as Bottle Drops</td>
<td>Policy PBOT Near-term</td>
</tr>
</tbody>
</table>
## Recommendation Toolkit

<table>
<thead>
<tr>
<th>C. Traffic Enforcement &amp; Legal Protection</th>
<th>Details</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1. Expand the Use of Speed Cameras</td>
<td>Accelerate the installation of speed cameras in Conflict Zones</td>
<td>Infrastructure PBOT Medium-term</td>
</tr>
<tr>
<td>C2. Implement Day-fines</td>
<td>Advocate for change in state policy to create more equitable fines for traffic violations</td>
<td>Policy State Legislature Long-term</td>
</tr>
<tr>
<td>C3. Make Houselessness a Protected Class</td>
<td>Advocate for state law to establish “housing status” as a protected class</td>
<td>Policy State Legislature Long-term</td>
</tr>
</tbody>
</table>
## Recommendation Toolkit

<table>
<thead>
<tr>
<th>D. Improving Information</th>
<th>Details</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1. PBOT Site Evaluation of Pedestrian Crashes</td>
<td>• Follow through with Vision Zero action plan to create multi-agency crash response</td>
<td>Policy PBOT &amp; City of Portland Near-term</td>
</tr>
<tr>
<td>D2. Service Provider Advisory Board</td>
<td>• Establish an advisory board of houseless service providers</td>
<td>Policy PBOT Medium-term</td>
</tr>
</tbody>
</table>
Conclusion and Key Takeaways

This is a relatively new problem
Houselessness has increased dramatically in recent years, yet it has not historically been taken into account when prioritizing traffic safety improvements.

There is no single solution
Sweeping camps near high-crash corridors only exacerbates the problem. Infrastructure alone cannot reduce speeds.

There are many obstacles to traffic safety
People experiencing houselessness face a number of challenges in navigating the streets for shelter and necessities, leading to a disproportionate risk of traffic-related harm.

Traffic safety is intertwined with shelter & necessities
Expanding access to shelter and necessities is crucial to improving the safety and well-being of people experiencing houselessness.
Thank you!