Closing the equity gap with micromobility in Portland

FIGURE 13
2030 TARGET COMMUTE MODE SHARE FOR PORTLAND

- Additional Telecommuting: 2.5%
- Drive Alone: 30%
- Bike: 25%
- Transit (including park-and-ride): 25%
- Carpool: 10%
- Walk: 7.5%

Eric Hesse, Supervising Planner
Portland Bureau of Transportation
Context: Portland’s geography of (in)equity

PBOT's Equity Matrix

To inform our work, guide our investments and work to achieve the Citywide Racial Equity Goals and Strategies, PBOT has created a simplified version of an Equity Matrix, or equity ranking index, that can be used to help rank many of our internal lists that relate to projects, programs and even procedures.

PBOT has standardized an Equity Matrix based on national best practices, so that moving forward we can have more consistency in how we use an equity matrix, and what the equity matrix measures.

National best practice and the City’s Office of Equity and Human Rights say to use only three demographic variables in an equity matrix: Race, Income, and Limited English Proficiency (LEP). LEP was not included in the calculation of the matrix due to a relatively high level of uncertainty and error in the underlying data. Instead, Census Tracts with higher than citywide average populations with LEP are outlined on the map.

Racial categories and the percentage of the population that identifies as Hispanic/Latino were estimated separately by the US Census Bureau. The numbers in the racial population categories may not add up to the total number of people of color used to calculate the Racial Equity Score.

Data source for all demographic variables: 2012-2016 American Community Survey 5-year estimates

PBOT Equity Matrix Score (Race + Income)

- 10
- 9
- 7

Limited English Proficiency
Greater than Citywide Average (>3.8%)
Context: Infrastructure reflects inequity as well
Context: Portland's development is one contributor.
Context: More recent history is exacerbating inequity

Percent Change in Populations of Color (2000-2010)
How Portland residents got to work

Sources: Census 2000, American Community Survey 2010, 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>drove alone</th>
<th>carpooled</th>
<th>transit</th>
<th>walked</th>
<th>biked</th>
<th>worked at home</th>
<th>other</th>
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</thead>
<tbody>
<tr>
<td>2014</td>
<td>58%</td>
<td>9%</td>
<td>12%</td>
<td>5%</td>
<td>7%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>59%</td>
<td>10%</td>
<td>12%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>64%</td>
<td>12%</td>
<td>12%</td>
<td>6%</td>
<td>2%</td>
<td>4%</td>
<td></td>
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</table>
How is the City trying to overcome barriers to equity

- Equitable Infrastructure Investment
  - TSP Project Prioritization
  - East Portland in Motion/EPASS
  - Growing Transit Communities
  - Columbia Corridor Shuttle Service

- Programming to address emerging technology barriers including:
  - Community-Based Assessment of Smart Transportation Needs (OPAL/FORTH/NITC)
  - Low-income fares/AH Transportation Wallet
  - Equitable Pricing Strategy
  - New Mobility Ambassador Program
  - Black Community Engagement Strategy
Data helps planners & policy makers create sustainable, accessible, equitable, & vibrant cities

In Portland, data are required from:

- Taxis & TNCs
- Shared bikes
- E-Scooters
- Autonomous vehicles (no pilots, however data sharing is required)
Case study: Portland’s 2018 E-Scooter Pilot

July 23, 2018 – November 20, 2018 (120 Days)

Service area: Portland city boundaries (145 sq. mi)

Citywide permitted cap: 2,043 scooters

Total trips: 700,369

Total miles: 801,887.84

Average trips per day: 5,885

Average trip length: 1.15 miles

Average East Portland trip length: 1.6 miles
Answering key questions:
“Was there was equitable access to E-Scooters?”

Snapshot from the compliance dashboard used by PBOT regulators

<table>
<thead>
<tr>
<th>AVG Count Vehicles In East</th>
<th>AVG % of Fleet Deployed</th>
<th>AVG % of Fleet Deployed within PDX</th>
<th>AVG % Vehicles Deployed in East of Fleet Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>101%</td>
<td>100%</td>
<td>14%</td>
</tr>
</tbody>
</table>

100 Vehicle Target

Graph showing the trend of vehicles deployed over time, with a target of 100 vehicles and 14.64% deployment rate.
Understanding travel patterns:
Users prefer to ride on bikeways

See 2018 Findings Report for more info:
E-Scooter Pilot 2.0: Continuing to actively manage to improve performance

Using new “data” to improve performance:

• User Behavior: Geofencing to change riding and parking practices
• Companies: Provide Life Cycle Assessments about products
• Companies: Account for VMT from operations

Aligning incentives with performance:

• Fleet increase of up to 35% for reducing environmental impacts
• Fleet increase of up to 35% for improving equity outcomes