The “Last Mile Factor:” Denver’s Dockless Mobility Pilot Program

97th CML Annual Conference – June 20, 2019
Cindy Patton, Strategic Advisor, Denver Public Works
Nicholas Williams, Deputy Chief of Staff, Denver Public Works

Dockless Mobility Pilot Program History & Overview

May 2018
• Unauthorized Launches

June/July 2018
• Program Drafting
• Operational Process
• External/Internal Coordination

August 2018
• Launch one-year pilot
• Up to 5 operator permits to be issued to bike and scooter companies each
• 350 scooters/500 bikes possible to start
• 5 scooter operators
• 1 e-bike operator (current)

Pilot Program Vision
• Test new innovations and their ability to meaningfully meet Citywide mobility goals
• Implement programs that respect safety and infrastructure
• Increase percentage of people who have access to and take public transit
• Provide accurate communication and guidance to users
• Scale responsibly based on performance metrics
• Integrate new services seamlessly with City’s transportation system
• Serve the communities that are most vulnerable and increase their access to smart technology

Ordinance Revision Jan 2019: “Electric Mobility Scooters”
• EMS can be operated in bicycle lane if one is available
• EMS can be operated in roadway if speed limit is 30 mph or less side
• If neither bike lane nor road under 30 mph is available, EMS can be operated on the sidewalk at a speed of 6 mph or less
• Unlawful to operate on 16th Street Mall
• State bill was signed by Governor May 2019

Summary of Pilot Requirements
Per program parameters, operators required to provide reliable API feed based on the Mobility Data Specification, comply with opportunity area requirements, deploy at transit stops.

Pilot Vehicles Currently Permitted & Fleet Size Increases
Scooter: Vendors Permitted in Denver & Current Fleet Size

*Approximately 2,300 dockless scooters permitted today
Data Collection and Analysis – Preliminary Results

Bikes: Vendors Permitted in Denver & Current Fleet Size

- Operator: Jump
  Deployed: Sept 2018
  Fleet: 500

- Operator: Lime
  *No longer deployed

Preliminary Results - API

Scooter Utilization to Date

- Total Number of Rides: 1,337,891
- Total Miles Traveled: 1,905,609
- Average Number of Rides per Day: 4,241
- Average Length of Ride: 1.27 miles

Preliminary Results – Online Survey

What type of dockless vehicle do you utilize most often?

- Dockless Scooter: 47.3%
- Electric Bicycle: 5.2%
- Non-Rider: 47.4%

Preliminary Results – Online Survey

Age of scooter riders and non-riders

<table>
<thead>
<tr>
<th>Age</th>
<th>Scooter Rider</th>
<th>Non-Rider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>30-49</td>
<td>41%</td>
<td>45%</td>
</tr>
<tr>
<td>50 &amp; Older</td>
<td>38%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Gender of scooter riders and non-riders

<table>
<thead>
<tr>
<th>Gender</th>
<th>Scooter Rider</th>
<th>Non-Rider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>69%</td>
<td>47%</td>
</tr>
<tr>
<td>Female</td>
<td>29%</td>
<td>47%</td>
</tr>
</tbody>
</table>
Preliminary Results – Online Survey

Household Income of Respondents

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Less than $50,000</th>
<th>$50,000-$100,000</th>
<th>$100,000-$200,000</th>
<th>$200,000 or more</th>
<th>Prefer not to say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scooter Rider</td>
<td>12%</td>
<td>25%</td>
<td>34%</td>
<td>27%</td>
<td>20%</td>
</tr>
<tr>
<td>Non-Rider</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Preliminary Results – Online Survey

How often do you ride scooters in Denver?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never</th>
<th>Occasionally</th>
<th>1-3 times per week</th>
<th>3-6 times per week</th>
<th>Daily</th>
<th>More than once per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>1%</td>
<td>9%</td>
<td>31%</td>
<td>39%</td>
<td>11%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Preliminary Results – Online Survey

Think about your last scooter ride in Denver. If a scooter had not been available, what is the most likely way you would have traveled instead?

<table>
<thead>
<tr>
<th>Mode</th>
<th>Ridden as a Passenger</th>
<th>Ridden a Personal Bike</th>
<th>Walked</th>
<th>Taxi, Lyft, or Uber</th>
<th>Driven a Motor Vehicle</th>
<th>Taken Transit</th>
<th>Ridden Bike Share</th>
<th>Not Have Taken Trip</th>
<th>Ridden Bike Share</th>
<th>Not Have Taken Trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>2%</td>
<td>5%</td>
<td>46%</td>
<td>20%</td>
<td>11%</td>
<td>7%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Preliminary Results – Online Survey

What are the top trip types for which you ride a scooter?

<table>
<thead>
<tr>
<th>Trip Type</th>
<th>School</th>
<th>Dining Out</th>
<th>Work</th>
<th>Entertainment</th>
<th>Work Meeting</th>
<th>Transit</th>
<th>Shopping or Errands</th>
<th>Fun or Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>10%</td>
<td>33%</td>
<td>21%</td>
<td>7%</td>
<td>11%</td>
<td>9%</td>
<td>7%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Preliminary Results – Online Survey

What is your overall impression of scooters?

<table>
<thead>
<tr>
<th>Impression</th>
<th>Scooter Rider</th>
<th>Non-Rider</th>
<th>Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>96%</td>
<td>3%</td>
<td>56%</td>
</tr>
<tr>
<td>Neutral</td>
<td>1%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Negative</td>
<td>3%</td>
<td>41%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Preliminary Results – On-Street Observations

Where are scooters riding?

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewalk</td>
<td>44%</td>
</tr>
<tr>
<td>Travel Lane</td>
<td>4%</td>
</tr>
<tr>
<td>Bike Lane</td>
<td>52%</td>
</tr>
</tbody>
</table>
Preliminary Results - On-Street Observations

Where are scooters riding?

- 82% Sidewalk
- 18% Travel Lane

Preliminary Results - Observations

Scooter Parking Compliance

- 88% Compliant
- 22% Non-compliant

Non-compliant Parking

- 2% Blocking access
- 3% In the walk zone
- 17% Too close to the curb

Pilot Evaluation and Next Steps

May 2018
- Unauthorized Launches
- Program Drafting
- Operational Process
- External/International Coordination

June/July 2018
- Program Drafting
- Operational Process
- External/International Coordination

August 2018
- Launch one-year pilot
- Up to 5 operator permits to be issued to bike and scooter companies each
- 350 scooters/ 500 bikes possible
- 5 scooter operators
- 2 bike operators

February 2019
- Interim Report

Spring
- Evaluate Pilot
- Make Determination regarding ongoing program

Summer
- Draft updated program guidance
- Outreach
- Evaluate CCD ordinance for updates per CRMS language

Late Summer/Fall 2019
- Launch ongoing program
-Continue data evaluation and potential fleet size increases

Questions?

Cindy Patton
DPW Strategic Advisor
Cynthia.Patton@denvergov.org

Nicholas Williams
DPW Deputy Chief of Staff
Nicholas.Williams@denvergov.org