Brooklyn Park Shared-Use Mobility
Public Data

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The project on which this presentation is based was completed in collaboration with the City of Brooklyn Park as part of the 2016–2017 Resilient Communities Project (RCP) partnership. RCP is a program at the University of Minnesota’s Center for Urban and Regional Affairs (CURA) that connects University faculty and students with Minnesota communities to address strategic projects that advance local resilience and sustainability.

The contents of this report represent the views of the authors, and do not reflect those of RCP, CURA, the Regents of the University of Minnesota, or the City of Brooklyn Park.
Total Bus Stops: **596**
Total Park and Rides: **6**
Existing Facilities: 48 mi
Planned Facilities: 32 mi
Transit Pattern Change from 2013 - 2015

Table:

<table>
<thead>
<tr>
<th>Year</th>
<th>number of boarding and alighting services and stops</th>
<th>Average daily boarding frequency</th>
<th>Average daily lighting frequency</th>
<th>Urban local</th>
<th>Suburban local</th>
<th>Route type</th>
<th>Direction of service</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Express</td>
<td>North</td>
<td></td>
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<tr>
<td>2013</td>
<td>1142</td>
<td>4.6</td>
<td>4.7</td>
<td>0?</td>
<td>695</td>
<td>447</td>
<td>573</td>
<td>569</td>
</tr>
<tr>
<td>2014</td>
<td>1023</td>
<td>5.3</td>
<td>0?</td>
<td>0?</td>
<td>587</td>
<td>436</td>
<td>503</td>
<td>514</td>
</tr>
<tr>
<td>2015</td>
<td>1030</td>
<td>4.9</td>
<td>4.9</td>
<td>0?</td>
<td>599</td>
<td>431</td>
<td>503</td>
<td>521</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Weekday</td>
<td>Saturday</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>859</td>
<td>155</td>
<td>128</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>744</td>
<td>153</td>
<td>126</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>743</td>
<td>157</td>
<td>130</td>
</tr>
</tbody>
</table>
Boardings & Alightings Frequency in 2015

Average daily boarding frequency:

0: Zero

0-10: Very Low

10-50: Low

50-100: High

>100: Very High
Boardings & Alightings Frequency in 2015

Average daily alighting frequency:

0: Zero
0-10: Very Low
10-50: Low
50-100: High
>100: Very High
Boardings & Alightings Frequency in 2015

Average daily commute frequency:

- 0: Zero
- 0-10: Very Low
- 10-50: Low
- 50-100: High
- >100: Very High
## Boardings & Alightings Frequency in 2015

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Boarding</th>
<th>Alighting</th>
<th>Commute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>4.92</td>
<td>4.88</td>
<td>9.80</td>
</tr>
<tr>
<td>Median</td>
<td>0.50</td>
<td>0.53</td>
<td>1.54</td>
</tr>
<tr>
<td>SD</td>
<td>32.50</td>
<td>31.84</td>
<td>41.39</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>671.93</td>
<td>675.83</td>
<td>682.10</td>
</tr>
<tr>
<td># of zeroes</td>
<td>235</td>
<td>230</td>
<td>84</td>
</tr>
</tbody>
</table>
Projected New Stations

Colors of the half-mile buffer:

Light → dark

Level of consistency between potential supply and demand:

Less consistent → more consistent
Credit Card Access

The Federal Reserve reports that lower-income people are less likely to have a credit card.
Credit Card Access

41% of families with less than $40,000 in annual income do not have a credit card.
Smartphone Access

The Pew Research Center found that people with lower levels of income are less likely to own a smartphone.

26.5% of Brooklyn Park households have an annual income under $35,000.
Smartphone Access

50% of families with less than $30,000 in annual income do not have a smartphone

Median Income
- Less than $30,000
- $30,000-49,999
- $50,000-74999
- Greater than $75000

Planned Blue Line Extension

Data Source: 2014 American Community Survey
Smartphone Access

The Pew Research Center found that older adults are less likely to own smartphones.

8.6% of Brooklyn Park’s population is over age 65.
73% of adults aged 65+ do not have a smartphone.
Smartphone Access

The Pew Research Center found that non-Hispanic Whites are less likely to own a smartphone than non-Hispanic Blacks and Hispanics.

But Blacks and Hispanics are more likely to have canceled service due to the financial burden of ownership.
39% of non-Hispanic Whites do not have a smartphone
Smartphone Access

The Pew Research Center found that people with lower levels of educational attainment are less likely to own a smartphone.

Nearly 17,500 Brooklyn Park residents over age 25 likely do not own a smartphone based on educational attainment.
Uber Usage

According to the Pew Research Center, 15% of American adults have used ride-hailing apps. 33% have never heard of them.

Those who have used ride-hailing apps are more likely to be:

- **Younger** (28% of 18-29 vs. 4% of 65+)
- **College Grads** (29% of college grads vs. 6% of high school grads or less)
- **Wealthier** (26% of $75,000+ income vs. 10% of $30,000 or less income)
- **Urban** (21% of urban vs. 15% suburban vs. 3% rural)

White, Black, and Hispanic people use ride-hailing apps at similar rates.
28% of those aged 18-29 have used ride-hailing apps
Ride-Hailing Service in Brooklyn Park
## Wait Time - Future Blue Line Extension Stations

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Time (PM)</th>
<th>Average Wait</th>
<th>Max Wait</th>
<th>Min Wait</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadway &amp; Oak Grove</td>
<td>4:37 - 4:47</td>
<td>16.6</td>
<td>28</td>
<td>9</td>
</tr>
<tr>
<td>Broadway &amp; 93rd</td>
<td>4:55 - 5:05</td>
<td>11.8</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Broadway &amp; Brooklyn</td>
<td>4:34 - 4:44</td>
<td>15.7</td>
<td>27</td>
<td>6</td>
</tr>
</tbody>
</table>
Fare Estimation
Fare Breakdown

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>uberX</strong></td>
<td></td>
<td><strong>THE LOW-COST UBER</strong></td>
<td></td>
</tr>
<tr>
<td>Base Fare</td>
<td>$0.45</td>
<td>Booking Fee</td>
<td>$1.55</td>
</tr>
<tr>
<td>+ Per Minute</td>
<td>$0.15</td>
<td>Minimum Fare</td>
<td>$6.05</td>
</tr>
<tr>
<td>+ Per Mile</td>
<td>$1.00</td>
<td>Cancellation Fee</td>
<td>$5.00</td>
</tr>
</tbody>
</table>

**SIGN UP TO RIDE**

Your fare will be the price presented before the trip or based on the rates above and other applicable surcharges and adjustments.
Uber Surge Pricing

- Surge Pricing
- Supply and Demand
- Problems and Issues
Brooklyn Park Shared-Use Mobility
Public Data Analysis

It also provides a more space- and cost-efficient alternative to conventional park and rides. In conjunction with groups examining existing models of shared-use mobility and a group working on public engagement, our group will be examining existing public data to make recommendations on where shared-use mobility solutions are most needed, and where they might be most viable.

50% of families with less than $30,000 in annual income do not have a smartphone.

Demographics
Final Report Preview

https://sdho.org/bp
Key Findings

- Limited bikeway coverage currently, dispersed vehicular grid.
- Much of existing transit is limited to express, peak-hour service.
- Ride-hailing apps cover much of city, but wait time and cost may be significant.
- Demographically, not everyone in Brooklyn Park is likely to have equal access to ride-hailing.
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