Can Light Rail Transit Improve Job Access for Low-Wage Workers?

Yingling Fan
yingling@umn.edu
Spatial Mismatch
Lead to low levels of job access among low-wage workers
Before-and-After Comparison

- **Accessibility definition**
  - total # of low-wage jobs reachable within 30-min of transit travel

- **Study area:** transit-served areas
Area Type

• Station areas

• Connection areas
  – direct bus-LRT connection;
  – LRT reachable within 30 mins;
Before-after changes in low-wage job accessibility across different areas (%)
Morning Peak Hour 7am-8am
Before-and-After Commuter Flow Analysis

Estimate changes in the home-to-work BG flow volume
## Total & Average Impact (Low-Wage Only)

<table>
<thead>
<tr>
<th>Area Categories</th>
<th>WORKERS</th>
<th>Move-Ins</th>
<th>JOBS</th>
<th>Move-Ins</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total workers</td>
<td>Average (Per BG Pair)</td>
<td>Total jobs</td>
<td>Average (Per BG Pair)</td>
</tr>
<tr>
<td>Downtown Hiawatha</td>
<td>103</td>
<td>0.123</td>
<td>2258</td>
<td>0.543</td>
</tr>
<tr>
<td>North Hiawatha</td>
<td>593</td>
<td><strong>0.202</strong></td>
<td>-300</td>
<td>-0.070</td>
</tr>
<tr>
<td>South Hiawatha</td>
<td>124</td>
<td>0.047</td>
<td>-134</td>
<td>-0.061</td>
</tr>
<tr>
<td>Suburban Hiawatha</td>
<td>4</td>
<td>0.019</td>
<td>347</td>
<td><strong>0.154</strong></td>
</tr>
<tr>
<td>Connected Areas (blue areas)</td>
<td>14134</td>
<td>0.108</td>
<td>12788</td>
<td>0.103</td>
</tr>
</tbody>
</table>
Policy Implications
Positive evidence on the role of LRT in promoting social equity

1. The Hiawatha impact is regional in scale.

2. To transit planners:
   - Transit system integration/coordination is essential to the improvement of accessibility.

3. Low-wage workers and employers are able to take advantage of the LRT, at least in the context of the Hiawatha line.

4. To land use planners:
   - Balancing jobs and housing: NOT necessarily on the same site (i.e., balance at the corridor level NOT the station level)
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