Linking the Unemployed to Jobs:
Opportunities for integrated transit and workforce development

Yingling Fan
yingling@umn.edu
Job vacancies in Minnesota rise to highest level since 2001

State's labor market continues to tighten, but most of the openings are in low-wage jobs.

By Adam Belz (http://www.startribune.com/adam-belz/158965945/) Star Tribune | MARCH 31, 2015 — 11:45PM

The Twin Cities area now has one job vacancy for every unemployed worker, new state data show, and Minnesota has only slightly fewer openings than unemployed people.

The number of vacancies in the state rose to 88,900 at the end of 2014, a 47 percent increase from a year earlier and the highest level since the summer of 2001, according to figures released Tuesday by the Minnesota Department of Employment and Economic Development.
Key sectors for job placement

Percentage Distribution of Employment by Industry

- Health Care and Social Assistance
- Manufacturing
- Retail Trade
- Educational Services
- Accommodation and Food Services
- Professional, Scientific, and Technical Services
- Finance and Insurance
- Administrative and Support and Waste Management
- Management of Companies and Enterprises
- Wholesale Trade
- Construction
- Other Services (except Public Administration)
- Transportation and Warehousing
- Real Estate and Rental and Leasing
- Information
- Arts, Entertainment, and Recreation
- Utilities
- Agriculture, Forestry, Fishing and Hunting
- Mining, Quarrying, and Oil and Gas Extraction

MSP Metro-QWI2012Q2
Minnesota-SUSB2012
Nation-SUSB2012
Job Turnover Rates of the 7 Sectors

Turnover Rate By Industry Sector

- Accommodation and Food Services
- Retail Trade
- Health Care and Social Assistance
- Finance and Insurance
- Professional, Scientific, Technical Services
- Educational Services
- Manufacturing
High Turnover, Demand Met

Low Turnover, Small Unmet Demand

Low Turnover & Large Unmet Demand
Job Vacancies by Education Requirement

- No Education
- High School/GED
- Vocational Training
- Associates Degree
- Bachelors Degree
- Advanced Degree

| Year  | Q2  | Q4  | Q2  | Q4  | Q2  | Q4  | Q2  | Q4  | Q2  | Q4  | Q2  | Q4  | Q2  | Q4  | Q2  | Q4  | Q2  | Q4  | Q2  | Q4  |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2001  | 39% | 40% | 30% | 33% | 36% | 39% | 37% | 37% | 35% | 27% | 32% | 32% | 29% | 29% | 40% | 29% | 28% | 31% | 29% | 34% |
| 2002  | 32% | 28% | 26% | 24% | 23% | 21% | 21% | 16% | 15% | 22% | 14% | 15% | 19% | 16% | 21% | 16% | 15% | 19% | 21% | 19% |
| 2003  | 30% | 33% | 36% | 39% | 37% | 37% | 35% | 27% | 32% | 32% | 29% | 29% | 40% | 29% | 28% | 31% | 29% | 33% | 31% | 29% |
| 2004  | 32% | 28% | 26% | 24% | 23% | 21% | 21% | 16% | 15% | 22% | 14% | 15% | 19% | 16% | 21% | 16% | 15% | 19% | 21% | 19% |
| 2005  | 30% | 33% | 36% | 39% | 37% | 37% | 35% | 27% | 32% | 32% | 29% | 29% | 40% | 29% | 28% | 31% | 29% | 33% | 31% | 29% |
| 2006  | 32% | 28% | 26% | 24% | 23% | 21% | 21% | 16% | 15% | 22% | 14% | 15% | 19% | 16% | 21% | 16% | 15% | 19% | 21% | 19% |
| 2007  | 30% | 33% | 36% | 39% | 37% | 37% | 35% | 27% | 32% | 32% | 29% | 29% | 40% | 29% | 28% | 31% | 29% | 33% | 31% | 29% |
| 2008  | 32% | 28% | 26% | 24% | 23% | 21% | 21% | 16% | 15% | 22% | 14% | 15% | 19% | 16% | 21% | 16% | 15% | 19% | 21% | 19% |
| 2009  | 30% | 33% | 36% | 39% | 37% | 37% | 35% | 27% | 32% | 32% | 29% | 29% | 40% | 29% | 28% | 31% | 29% | 33% | 31% | 29% |
| 2010  | 32% | 28% | 26% | 24% | 23% | 21% | 21% | 16% | 15% | 22% | 14% | 15% | 19% | 16% | 21% | 16% | 15% | 19% | 21% | 19% |
| 2011  | 30% | 33% | 36% | 39% | 37% | 37% | 35% | 27% | 32% | 32% | 29% | 29% | 40% | 29% | 28% | 31% | 29% | 33% | 31% | 29% |
| 2012  | 32% | 28% | 26% | 24% | 23% | 21% | 21% | 16% | 15% | 22% | 14% | 15% | 19% | 16% | 21% | 16% | 15% | 19% | 21% | 19% |
| 2013  | 30% | 33% | 36% | 39% | 37% | 37% | 35% | 27% | 32% | 32% | 29% | 29% | 40% | 29% | 28% | 31% | 29% | 33% | 31% | 29% |
Low Education Requirement

High Education Requirement

Low Turnover & Unmet Demand, Yet High Education Requirements
Spatial Mismatch

Unemployed

Job vacancies
CHOICE, PLACE AND OPPORTUNITY: AN EQUITY ASSESSMENT OF THE TWIN CITIES REGION

EXECUTIVE SUMMARY

March 2014

ACP-50 from 1990, 2000, to 2007-2011
A thriving region threatened by racial and ethnic disparities

- High-school degree: 96.3% (White, non-Latino) vs. 78.3% (Persons of color)
- Employment: 79.4% (White, non-Latino) vs. 64.8% (Persons of color)
- Living above poverty: 93.6% (White, non-Latino) vs. 74.3% (Persons of color)
- Per capita income: $37,943 (White, non-Latino) vs. $18,078 (Persons of color)
- Homeownership rate: 75.8% (White, non-Latino) vs. 37.0% (Persons of color)
Increasing share of people of color in the region

African American male unemployment in North Minneapolis is 52%

North Minneapolis unemployment is 22.3%

Twin Cities regional unemployment is 3.8%
Impact of Transit Corridors
Significant overlap between ACP-50s and unemployment concentration.
Unemployed and Job Vacancies

Significant disconnect between job vacancies and the unemployed.
Planned transit corridors, especially the Blue and Green Line Extensions, appear to make important connections.
Current vs. Future Accessibility

Limited region-wide effect
Accessibility Changes

Limited region-wide effect

Large local benefits

Legend
Change in job vacancies accessible within 45 mins of transit travel

- 0
- <= 250
- <= 1,000
- <= 2,000
- > 2,000

Scale
0 5 10 15 20 25 Miles
Table 6-3: Weighted Average Accessibility by Case

<table>
<thead>
<tr>
<th>Case</th>
<th>Current System</th>
<th>Proposed Future</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brooklyn Park</td>
<td>1,365</td>
<td>1,677</td>
<td>23%</td>
</tr>
<tr>
<td>Gateway Corridor</td>
<td>1,270</td>
<td>1,489</td>
<td>17%</td>
</tr>
<tr>
<td>Golden Triangle</td>
<td>616</td>
<td>625</td>
<td>1%</td>
</tr>
<tr>
<td>Mall of America</td>
<td>2,930</td>
<td>3,364</td>
<td>15%</td>
</tr>
<tr>
<td>North Minneapolis</td>
<td>5,609</td>
<td>6,617</td>
<td>18%</td>
</tr>
<tr>
<td>Phillips</td>
<td>9,810</td>
<td>10,800</td>
<td>10%</td>
</tr>
<tr>
<td>Shakopee</td>
<td>78</td>
<td>78</td>
<td>0%</td>
</tr>
</tbody>
</table>
Localized Opportunities
Job Vacancies by Sector

Manufacturing

Transportation and Warehousing

Educational Services

Health Care and Social Assistance

Professional, Scientific, Technical Services

Finance and Insurance

Management of Companies and Enterprises
Top Industries with Job vacancies by City

Legend
- AreasOfConcentratedPoverty
- Industry
  - All Other Sectors
  - 31 Manufacturing
  - 48 Transportation and Warehousing
  - 52 Finance and Insurance
  - 54 Professional, Scientific, and Technical Services
  - 55 Management of Companies and Enterprises
  - 61 Educational Services
  - 62 Health Care and Social Assistance
Top Industries with Job vacancies by Neighborhood
Area Advantages

- North Metro
  - Manufacturing

- St Paul:
  - Transportation & Warehousing
  - Healthcare & Social Assistance

- U of M surrounding areas
  - Educational Services

- Minneapolis
  - Healthcare & Social Assistance
  - Finance & Insurance
  - Professional, Technical, & Scientific Services
  - Management of companies and enterprises

Residential segregation and geographic disparities are part of the problem that had lead to spatial mismatch.

They also point to the particular importance of spatially targeted and localized strategies for eliminating disparities.
Occupations in Demand: Sweet spots for workforce development?
Top Occupations by Industry (2011-2014)

Manufacturing
- Industrial Engineers
- Helpers--Production Workers
- Mechanical Engineers
- Computer-Controlled Machine Operators
- Machinists

Transportation and Warehousing
- Heavy and Tractor-Trailer Truck Drivers
- Bus Drivers, School or Special Client
- Laborers and Freight and Material Movers
- Counter and Rental Clerks
- Bus Drivers, Transit and Intercity

Educational Services
- Teacher Assistants
- Elementary School Teachers
- Coaches and Scouts
- Secondary School Teachers
- Teachers and Instructors, All Other

Health Care and Social Assistance
- Registered Nurses
- Home Health Aides
- Nursing Assistants
- Personal Care Aides
- Licensed Practical and Vocational Nurses

Professional, Scientific, and Technical Services
- Sales Representatives
- Database Administrators
- Marketing Managers
- Electrical Engineers
- Financial Managers

Finance and Insurance
- Customer Service Representatives
- Personal Financial Advisors
- Insurance Sales Agents
- Tellers
- Computer Systems Analysts

Management of Companies and Enterprises
- Computer Systems Analysts
- Management Analysts
- Marketing Managers
- Accountants and Auditors
- Market Research Analysts/ Specialists
The Job Vacancy Word Cloud
Cases – Transit – Improvements
# Case Selection

<table>
<thead>
<tr>
<th>Spatial/skills mismatch</th>
<th>Transit Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ample jobs, limited affordable housing nearby</td>
<td>Poor</td>
</tr>
<tr>
<td></td>
<td>Shakopee</td>
</tr>
<tr>
<td>Ample affordable housing, limited suitable jobs nearby</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Interviews

- Semi-structured
- Questions tailored to subjects

<table>
<thead>
<tr>
<th>Positions</th>
<th>Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Development Professionals</td>
<td>Local/State Government</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Workforce &amp; Economic Development Professionals</td>
<td>Transit Agency</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Transit Planners</td>
<td>Private/Non-Profit Sector</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>
# Top Coding Intersections – Brooklyn Park

<table>
<thead>
<tr>
<th>Transit Planning</th>
<th>First Mile-Last Mile, Coordination w/ Workforce Development, Healthcare Job Accessibility, Manufacturing Job Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Development</td>
<td>Soft Skills, Benefits of Transit, Spatial Mismatch, Healthcare (Occupation), Manufacturing (Occupation)</td>
</tr>
</tbody>
</table>
### Top Coding Intersections – North Minneapolis

<table>
<thead>
<tr>
<th>Transit Planning</th>
<th>Coordination w/ Workforce Development, Healthcare Job Accessibility, Mechanic Job Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Development</td>
<td>Spatial Mismatch, Commute Length, Soft Skills, Coordination w/ Transit Planning, Healthcare (Occupation)</td>
</tr>
<tr>
<td>Top Coding Intersections – Gateway Corridor</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Transit Planning</strong></td>
<td></td>
</tr>
<tr>
<td>Need Transit, First Mile-Last Mile, Affordable Housing, Labor Supply, Spatial Mismatch</td>
<td></td>
</tr>
<tr>
<td><strong>Workforce Development</strong></td>
<td></td>
</tr>
<tr>
<td>Transit Benefits (Park and Ride), Spatial Mismatch, Manufacturing Employment</td>
<td></td>
</tr>
<tr>
<td>Top Coding Intersections – Golden Triangle</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Transit Planning</strong></td>
<td></td>
</tr>
<tr>
<td>First Mile-Last Mile, Coordination w/ Workforce Development, Coordination w/ Economic Development</td>
<td></td>
</tr>
<tr>
<td><strong>Workforce Development</strong></td>
<td></td>
</tr>
<tr>
<td>Non-Transportation Barriers, Back Office Employment, Wages, Transit Difficulties, Work Schedules</td>
<td></td>
</tr>
</tbody>
</table>
Case Study Findings

• **Stronger coordination desired, needed**
  • Especially needed to connect urban workers, suburban jobs
  • Can’t just hand out bus cards
    • Non-transportation barriers
    • Work schedules
    • Soft skills
    • Job training programs targeting specific sectors and occupations

• **First mile-last mile**
  • Key problem
  • Key place to benefit from coordination
Take Away Messages

Transitways important for localized accessibility

  *Esp. rapid, regional service*
  *Areas of intense disadvantage benefit*
  *Need locally-tailored workforce development*

Room to coordinate **much** more

  *Inter-agency*
  *Public-private-non profit*

Corridors an opportunity—”Leverage points”
The best prospects would be efforts that target specific communities and focus on sweet spot jobs that are transit accessible.

Look at the entire pipeline: Job seekers’ skills and interests, available training, jobs reachable by transit, and interested employers.

Reach out to employers who might partner, such as suburban companies struggling to hire and keep staff.

Provide frequent, rapid, regional services as the transit backbone, plus small-vehicle local services near worksites.

Pursue transit-oriented economic development to direct long-term job growth to transit-friendly areas.

Understand the existing skills assets in disadvantaged areas: geo-spatial data on skills and community strengths.