Where will we get the workers?
83 percent of respondents said securing workers was a challenge

“Truck drivers in short supply”

“We can’t find good welders”

“What are the nurses?”
October payroll jobs up in 38 states, down in 12
Disclaimer

The views expressed here are the presenter's and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.

minneapolislisfed.org
Web: minneapolisfed.org
Twitter: @TobyCMadden
Blog: fedgazette Roundup
Figure 4: Minnesota’s average annual labor force growth rate, historical and projected, 1960-2045

Source: U.S. Census Bureau, decennial census, and MN State Demographic Center.
Note: Refers to a compounded annual growth rate.
Figure 6: Labor force participation rates by various characteristics, Minnesota, 2012

- Bachelor's degree or higher: 89%
- Some college or associate's degree: 85%
- High school graduate/GED: 79%
- Less than high school graduate: 65%
- With a reported disability: 49%
- With income below federal poverty level: 58%

Source: U.S. Census Bureau, 2012 American Community Survey estimates.
Notes: Rates for educational attainment refer to the population age 25-64. Rates for those with a disability or in poverty refer to the population age 20-64.
Options:

- Productivity and Tech
- Work more years
- Immigration
Figure 1: Minnesota’s projected net migration and natural change, 2012-2065

Source: MN State Demographic Center.
Figure 12: Net migrants necessary to maintain a .5% labor force growth rate in Minnesota, 2011-2045

<table>
<thead>
<tr>
<th>Year</th>
<th>Net migrants in official projection</th>
<th>Additional net migrants</th>
<th>Total migrants needed to maintain .5% labor force growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2015</td>
<td>21,700</td>
<td>13,800</td>
<td>35,500</td>
</tr>
<tr>
<td>2016-2020</td>
<td>33,400</td>
<td>49,700</td>
<td>83,100</td>
</tr>
<tr>
<td>2021-2025</td>
<td>42,900</td>
<td>108,200</td>
<td>151,100</td>
</tr>
<tr>
<td>2026-2030</td>
<td>51,000</td>
<td>163,200</td>
<td>214,200</td>
</tr>
<tr>
<td>2031-2035</td>
<td>55,800</td>
<td>205,600</td>
<td>261,400</td>
</tr>
<tr>
<td>2036-2040</td>
<td>58,700</td>
<td>232,000</td>
<td>290,700</td>
</tr>
<tr>
<td>2041-2045</td>
<td>58,500</td>
<td>267,900</td>
<td>326,400</td>
</tr>
</tbody>
</table>

Source: MN State Demographic Center projections.
Table 1: Foreign-born workers (16+) in Minnesota’s labor force by birthplace, 2007-2011

<table>
<thead>
<tr>
<th>Birthplace</th>
<th>Approximate number in the labor force</th>
<th>Approximate share of foreign-born labor force</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>241,100</td>
<td>100%</td>
</tr>
<tr>
<td>Mexico</td>
<td>46,900</td>
<td>19%</td>
</tr>
<tr>
<td>Hmong (born in Laos or Thailand)</td>
<td>21,600</td>
<td>9%</td>
</tr>
<tr>
<td>India</td>
<td>15,200</td>
<td>6%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>11,700</td>
<td>5%</td>
</tr>
<tr>
<td>Somalia</td>
<td>11,300</td>
<td>5%</td>
</tr>
<tr>
<td>Liberia</td>
<td>9,200</td>
<td>4%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>9,000</td>
<td>4%</td>
</tr>
<tr>
<td>Korea</td>
<td>7,900</td>
<td>3%</td>
</tr>
<tr>
<td>Canada</td>
<td>7,000</td>
<td>3%</td>
</tr>
<tr>
<td>China</td>
<td>5,600</td>
<td>2%</td>
</tr>
<tr>
<td>Philippines</td>
<td>5,000</td>
<td>2%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>4,400</td>
<td>2%</td>
</tr>
<tr>
<td>El Salvador</td>
<td>4,100</td>
<td>2%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>3,700</td>
<td>2%</td>
</tr>
<tr>
<td>Kenya</td>
<td>3,500</td>
<td>1%</td>
</tr>
<tr>
<td>Germany</td>
<td>3,200</td>
<td>1%</td>
</tr>
<tr>
<td>All other countries or unspecified</td>
<td>71,800</td>
<td>30%</td>
</tr>
</tbody>
</table>

Source: IPUMS version of the U.S. Census Bureau, 2007-2011 American Community Survey.
Notes: Hmong individuals were identified using language. Sampling error exists for these estimates, but is not shown. Contact the MN State Demographic Center for more information regarding error.
Key Take Aways:

- Labor will be tight
- Technological change
- Accept immigration
Long Live the weak Expansion
Real World GDP
(2014 $ in trillions)

Source: World Bank, World Development Indicators
World GDP
% increase on a year earlier

2010, 11, 12, 13, 14, 15
GDP, 2014 forecast
% increase on a year earlier

China: 8%
Britain: 4%
United States: 2%
Germany: 1%
Japan: 0%
France: 0%
Brazil: 0%

Source: IMF
The graph shows the Real Gross Domestic Product (3 Decimals) from 2006 to 2014. The shaded area indicates the recession period of 2008. The data is sourced from the U.S. Department of Commerce: Bureau of Economic Analysis. Shaded areas indicate US recessions.
Record Employment

Shaded areas indicate US recessions - 2014 research.stlouisfed.org
Recovery
Expansion

Real Gross Domestic Product, 3 Decimal

(Billions of Chained 2009 Dollars)

Source: U.S. Department of Commerce: Bureau of Economic Analysis
Shaded areas indicate US recessions - 2014 research.stlouisfed.org
U.S. Expansion is sluggish
The dashed black line is the median forecast. The dark blue region represents the 70% probability band. The light blue region represents the 90% probability band.
The states are in expansion:

- 7% West Virginia
- 7% Utah
- 7% Texas
- 7% District of Columbia
- 10% Alaska
- 10% Louisiana
- 14% Oregon
- 30% North Dakota

Percent Change in Real GDP by State, 2013

U.S. = 1.8

- 3.0 to 9.7
- 2.0 to 3.0
- 1.6 to 2.0
- 0.9 to 1.6
- 0.9 to 1.6
- -2.5 to 0.9

U.S. Bureau of Economic Analysis
Business optimism is at a record high


0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Optimism
Pessimism
Employment growth is expected to pick up in several areas.
Business leaders expect increased employment at their companies

*Index number above 50 indicates expansion. Index number below 50 indicates contraction.

*Diffusion index*
Business leaders anticipate moderate wage increases

- Above 5%
- 4% to 5%
- 2% to 3%
- 0% to 1%

Percent of respondents

2014 Outlook
2015 Outlook
Downtowns and Suburbs both Performed Well in the Fourth Quarter and throughout 2014

Change in Sum of Markets Vacancy (bps)
Retail Market Cycle (Fig. 21)

1. **1st stage within phase**
   - Baltimore, MD
   - Boston, MA
   - Columbia, SC
   - Detroit, MI
   - Greenville, SC
   - Minneapolis, MN
   - Nashville, TN
   - New Jersey, Northern
   - Philadelphia, PA
   - San Francisco, CA
   - San Jose, CA
   - Tampa, FL

2. **2nd stage within phase**
   - Austin, TX
   - Houston, TX
   - Miami, FL
   - Portland, OR

3. **3rd stage within phase**
   - Atlanta, GA
   - Greensboro, NC
   - Birmingham, AL
   - Cleveland, OH
   - Columbus, OH
   - Dallas, TX
   - Fort Worth, TX
   - Naples, FL
   - Phoenix, AZ
   - Pittsburgh, PA
   - Sarasota, FL
   - Seattle, WA
   - St. Louis, MO
   - Washington, DC

**Stages of the Retail Market Cycle**
- **Recovery**
  - Decreasing Vacancy Rates
  - Low New Construction
  - Moderate Absorption
  - Low/Moderate Employment Growth
  - Neg/Low Rental Rate Growth

- **Expansion**
  - Decreasing Vacancy Rates
  - Moderate/High New Construction
  - High Absorption
  - Moderate/High Employment Growth
  - Med/High Rental Rate Growth

- **Hypersupply**
  - Increasing Vacancy Rates
  - Moderate/High New Construction
  - Low/Negative Absorption
  - Moderate/Low Employment Growth
  - Med/Low Rental Rate Growth

- **Recession**
  - Increasing Vacancy Rates
  - Moderate/Low New Construction
  - Low Absorption
  - Low/Negative Employment Growth
  - Low/Neg Rental Rate Growth

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Industrial Availability for CBRE EA’s Sum of Markets Declined by 30 bps

Source: CBRE Econometric Advisors, Q4 2014.
Apartment Vacancy Remain Low Nationally

Year-over-year vacancy change, basis points

Vacancy rate, %

Source: CBRE Econometric Advisors, Q4 2014.
Apartment Cycle Chart (Fig. 15)

FEDERAL RESERVE BANK of MINNEAPOLIS

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Risks!
- Fiscal issues
- Europe
- China
- Agriculture
- Unlucky
- Others?
Key Take Aways:

- Expansion to continue
- Watch out for shocks
Questions?
Smoothed U.S. Recession Probabilities (RECPROUSM156N)
Source: Marcelle Chauvet and Jeremy Piger

Shaded areas indicate US recessions.
2013 research.stlouisfed.org
More than 90 days past due
June 2010

[Map of the United States showing the percentage of mortgage holders 90+ days past due, with color codes indicating different percentage ranges.]
More than 90 days past due
August 2014

Delinquent Payment: 90+ PD, Foreclosure, US, 201408*
Business leaders foresee some price increases

- Retail
- Services
- Manufacturing
- DISTRICT
- Construction
- Agriculture

Diffusion index*

*Index number above 50 indicates expansion. Index number below 50 indicates contraction.