The Will County Community Friendly Freight Mobility Plan

Illinois State Freight Advisory Council Presentation

April 23, 2018

Engineering Excellence Award Winner
Acknowledgements

Sponsors

Will County Executive
Will County Department of Transportation
Chicago Metropolitan Agency for Planning
Will County Environmental Stakeholder Organizations

Will County Board
Will County Land Use Department
Will County Freight Advisory Council
Why Did We Do a County Freight Plan?

1. **Learn** what the state of freight movement in the County is today.
2. **Understand** the local and regional importance and impacts of freight movement.
3. **Prepare** for the future needs of this industry in Will County.
4. **Identify** the critical infrastructure projects important to safety, congestion, our communities and the current and future success of the freight industry in the region.
5. **Improve** our chances of receiving federal, state, local and private funding for identified infrastructure projects.
Summary

Plan Background & Stakeholder Involvement
Key Findings
Select Analysis
Recommendations
Key Freight Projects
Plan Implementation
Plan Background
Will County Community Friendly Freight Mobility Plan

**Freight Development Timeline Will County**

- **EARLY 1800s**: Barge traffic blooms as the Illinois and Michigan (I&M) Canal connects the Great Lakes to the Mississippi River and the Gulf of Mexico
- **1860s**: Transcontinental railroad begins linking east and west coast
- **1950s/60s**: Interstate highway system paves the way for the movement of goods via trucks
- **2002**: Former Joliet arsenal in Elwood is transformed into a 2,950 acre intermodal facility
- **2008**: CenterPoint opens Global IV, a 3,600 acre intermodal facility in Joliet adjacent to Union Pacific (UP) rail line
- **2010**: Elgin, Joliet & Eastern Railway (EJ&E) purchased by Canadian National (CN) providing a relief from rail congestion in the Chicago region
- **2014**: Amazon opens three major warehouses & fulfillment centers in Joliet and Romeoville; fourth is under construction in Monee
- **2015/16**: CSX proposes a new intermodal freight facility in Crete

**Freight Plan Genesis**

**Will County Board Adopted Plan 9/21/2017**

- **2015**: FAC Created at CED
- **February 2016**: Applied for Smart Growth Grant
- **April 2016**: Kick off Scoping
- **June 2016**: Will County Funds Plan
- **November 2016**: Study Kick Off with FAC
Public and Stakeholder Engagement
Key Findings

What Did We Learn About Freight Movement in the County Today?
The Importance of Freight in Will County
What do Freight Flows in Will County Look Like?

### Freight Movement in Will County by Mode, 2015

<table>
<thead>
<tr>
<th>Mode</th>
<th>Truck</th>
<th>Rail</th>
<th>Water</th>
<th>Pipeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonnage (in millions)</td>
<td>152</td>
<td>160</td>
<td>6.6</td>
<td>59.1</td>
</tr>
<tr>
<td>Value (in billions)</td>
<td>$282</td>
<td>$321</td>
<td>$3.30</td>
<td>$15.9</td>
</tr>
<tr>
<td>Units (in millions)</td>
<td>11.3</td>
<td>4.6</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Value/ton</td>
<td>$1,852</td>
<td>$2,008</td>
<td>$506</td>
<td>$270</td>
</tr>
</tbody>
</table>

### Freight Movement by Direction, 2015

- **Tons**
  - Outbound: 63%
  - Inbound: 25%
  - Intra-County: 2%
  - Through: 10%

- **Value**
  - Outbound: 72%
  - Inbound: 15%
  - Intra-County: 3%
  - Through: 10%

63% of Will County's freight movement is through movement.

Source: Transsearch® and IMPLAN Data

Freight continues to grow with new developments like Amazon adding 6,000 jobs in early 2017.
How Important is the Freight Workforce to Will County’s Economy?

- More than 33% expected job growth by 2026.
- 138% employment growth in Will County.
- 40% of TDL wages in Will County pay over $15/hr.
- Commute flows in trade, transportation, and utilities workers in Will County.

Will County TDL workers have varying commute patterns. Over 38,000 come from outside Will County, highlighting the need for better mobility options.
Key Findings of the Freight Mobility Plan

1. Freight is critical to the economic success of Will County.

2. Will County freight movement is critical to the Northeastern Illinois Region, State and Nation.

3. Traditional planning approaches cannot handle the pace of freight development experienced in Will County.

4. Freight volume growth may affect safety and worsen existing bottlenecks and operational issues.
Key Findings of the Freight Mobility Plan

5. Continued growth without better planning and new transportation investments will impact Will County’s economic competitiveness and quality of life.

6. Lack of funding and institutional issues make it difficult to invest in needed freight projects.

7. Will County needs additional regional, state, and national funding support.
Select Analysis
Regional Freight Movements
Will County Community Friendly Freight Mobility Plan

Freight Assets and Clusters

The freight plan will ensure that Will County has an efficient and robust transportation system for the years to come. — Jim Morris, Will County Board Speaker
Elwood/Joliet Freight Cluster
# Elwood/Joliet Freight Cluster

## Land Area
- **Total Land:** 13,569 Acres
- **Industrial Designated:** 10,117 Acres
- **Occupied Industrial:** 4,152 Acres
- **Future Industrial (Net Buildable):** 5,257 Acres

## Existing Industrial
- **Total Buildings:** 38
- **Total Building Area:** 22,879,953 ft$^2$
- **Average Building Area:** 602,094 ft$^2$
- **Building Density:** 5,511 ft$^2$/Acre
- **2017 % RBA Buildout:** 21%

## Forecast Industrial
- **New RBA Growth to 2026:** 26,490,000 ft$^2$
- **2026 % RBA Buildout:** 48%

## Infrastructure
- **Intermodal Connectors:** 8.5 Miles
- **Interstate/Tollway:** 0.0 Miles
- **Rail:** 121.8 Mile
- **Interchange (Count):** No (0)
- **Average Distance to Interchange:** 3.2 Miles
- **Intermodal within Cluster (Count):** Yes (2)

## Employment (LEHD 2014)
- **Total Employment:** 2,290
- **Transportation/Trade/Utilities:** 1,429
- **Goods Producing:** 307
- **All Other Services:** 554
- **Employment Density:** 0.17
  
  (Employees/Total Cluster Acres)
Crash Hot Spots
Structurally Deficient Bridges
Key Freight Projects
Key Freight Projects

- 25 out of 91 projects evaluated classified as top tier of critical projects
- Critical for improving freight movement and quality of life
- Many are of national, state, and regional significance and ripe for federal and state investment

Projects evaluated using:

1. Preservation Enhancement
2. Safety
3. Mobility
4. Economic Competitiveness
5. Community Sensitivity
Key Freight Projects
Investments to Improve the National Freight Network

• I-80 Add Lanes, Bridge Reconstruction, Interchanges Reconstruction
• I-55 and I-80 Interchange Reconstruction
• I-55 Add Lanes, Bridge Reconstruction, Interchanges Reconstruction
• I-55 and Weber Road Interchange Reconstruction
Recommendations
What programs or policies can Will County adopt to improve freight mobility and the quality of life?

1. Implement Investment Priorities identified in the Plan.
2. Improve coordination of overweight/oversize permitting between Jurisdictions.
3. Expand data collection and modeling, with focus on freight clusters and corridors.
4. Expand East-West highway connectivity to reduce traffic on local roads.
5. Increase air cargo capacity by continuing to support the South Suburban Airport
What programs or policies can Will County adopt to improve freight mobility and the quality of life?

6. Develop freight workforce initiatives through partnerships with employers.

7. Increase workforce mobility to job centers using transit hubs and increased bus service.

8. Develop and communicate a transparent freight network using designated truck routes.

9. Coordinate transportation and land use planning throughout the County.
## Community Recommendations

<table>
<thead>
<tr>
<th>Community Issue</th>
<th>Measures to Address</th>
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</thead>
<tbody>
<tr>
<td>Safety</td>
<td>- Prioritize projects that address higher truck crash locations</td>
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<tr>
<td></td>
<td>- Address critical at-grade rail crossings with safety concerns</td>
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<tr>
<td></td>
<td>- Designate truck routes to reduce conflicts in residential areas</td>
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<tr>
<td>Trucks on Local Roads</td>
<td>- Partner with local communities, including townships, to designate truck routes</td>
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<tr>
<td></td>
<td>to reduce conflicts in residential areas</td>
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<td></td>
<td>- Better communicate designated routes to truckers</td>
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<td>Congestion</td>
<td>- Prioritize projects that address high congestion locations</td>
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<tr>
<td></td>
<td>- Ensure new freight related developments address traffic growth and circulation</td>
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<td></td>
<td>through traffic plans and private sector cost sharing for improvements needed</td>
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<tr>
<td>Noise (also an environmental issue)</td>
<td>- Implement land use and zoning/site plan standards that include requirements</td>
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<tr>
<td></td>
<td>for buffer areas and noise standards</td>
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<tr>
<td></td>
<td>- Further investigate potential quiet zones for rail</td>
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<tr>
<td>Emergency Access</td>
<td>- Prioritize grade separations on roads with emergency facilities</td>
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<tr>
<td>Encroachment on Agricultural Land</td>
<td>- Create a County land use plan that creates strategies to focus new freight</td>
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<tr>
<td></td>
<td>development in freight clusters. The County land use plan could also identify</td>
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<tr>
<td></td>
<td>zones to protect agricultural areas that may be locally defined</td>
</tr>
<tr>
<td>Light Pollution and Aesthetics (also an environmental issue)</td>
<td>- Implement land use and zoning/site plan standards that include requirements for buffer areas and lighting standards, and aesthetic considerations, particularly for new freight related development</td>
</tr>
</tbody>
</table>
### Environmental Recommendations

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Measures to Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>- Partner with industry to minimize air quality impacts from freight</td>
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<tr>
<td></td>
<td>- Partner on strong anti-idling regulations and technology</td>
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<td></td>
<td>- Plan for buffer zones around new/expanding freight developments</td>
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<tr>
<td>Water Quality</td>
<td>- Employ best management practices for avoidance and minimization of impacts to wetlands and for stormwater management</td>
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<tr>
<td></td>
<td>- Consider water quality impacts in truck route selection and implement stormwater best management practices in roadway design</td>
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<tr>
<td>Hazardous Materials Transportation</td>
<td>- Regularly review and update route designations with partners</td>
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<tr>
<td></td>
<td>- Ensure emergency management plans are reviewed and updated</td>
</tr>
<tr>
<td>Encroachment on Sensitive Areas</td>
<td>- Develop a county land use plan and strategy</td>
</tr>
<tr>
<td></td>
<td>- Focus new freight development in existing identified freight clusters</td>
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<tr>
<td></td>
<td>- Review truck routing to minimize impacts to adjacent environmentally sensitive areas</td>
</tr>
</tbody>
</table>
Plan Implementation
8 Action Categories – 50+ Action Items

1. Will County Advocacy
   - Municipalities/Townships
   - Springfield/Washington DC
   - CMAP
   - Trade Associations

2. Infrastructure Project Funding
   TIGER/BUILD/INFRA>IDOT Competitive Freight

3. Create a Transparent Integrated County-wide Truck Route Network

4. Develop a common oversize/overweight permit application and one-stop online process (Oxcart)

5. TDL Workforce Initiative
www.willcountyfreight.org
Thank-You!