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Webinar Series for Comprehensive Plan Updates

Regional Industrial Land Inventory

Presented by Todd Graham and Corrin Wendell
February 23, 2017
Today’s Topic

• Economic competitiveness context
• Industrial land inventory: Where and how much
• Industrial land inventory: Use the data!
• Regional analysis
• Need for industrial land strategy and preservation
• Tools and tactics for industrial preservation
• Case studies
Manufacturing’s importance to MSP economy

- Total metro economic output: $418 Bn (2015)
- Manufacturing and related are 1/3 of that output

Manufacturing, Wholesale, Transport & Warehousing output
All other industries output

Source: REMI.com
Manufacturing’s importance to MSP economy

- Total metro economic output: $418 Bn (2015)
- Manufacturing and related are 1/3 of that output
- Most manufactured output exported
  - “Exports” here includes both international and domestic

Source: REMI.com
Background: Why are we interested?

- Metropolitan Council created to coordinate the orderly development of the region
  - With attention to infrastructure, systems and dynamics that transcend local jurisdictions
- *Thrive MSP 2040* recognizes economic competitiveness and prosperity as regional concerns
  - Supply and continued viability of industrial sites
  - Transportation networks serving freight needs
**Thrive MSP 2040 discussion of industrial land**

- “Industrial land provides locations for export industries and good-paying jobs; the Council discourages redevelopment [to other uses] in strategically important locations along rivers and railroads in the region…”
“Industrial land provides locations for export industries and good-paying jobs; the Council discourages redevelopment [to other uses] in strategically important locations along rivers and railroads in the region...”

Local government plans should consider how industrial activities and adjacent uses can coexist.
Thrive MSP 2040 discussion of industrial land

“The Council will…

• Use its authority and provide technical assistance to protect and preserve compatible land uses around resources such as airports, railroads, and industrial land.
Thrive MSP 2040 discussion of industrial land

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• Use its authority and provide technical assistance to protect and preserve compatible land uses around resources such as airports, railroads, and industrial land.

• Conduct a metrowide inventory and analysis of industrial land to assess the supply of and demand for industrial land with freight access.
Thrive MSP 2040 discussion of industrial land

“The Council will…

• Use its authority and **provide technical assistance** to protect and preserve compatible land uses around resources such as airports, railroads, and industrial land.

• **Conduct a metrowide inventory** and analysis of industrial land to assess the supply of and demand for industrial land with freight access.

• **Encourage the expansion of industrial land and supportive infrastructure as needed** to fulfill demand for industrial land with freight access.”
Industrial land inventory: What’s in it?

Pulled together 10 separate spatial data sets

1. Regional parcels dataset, from counties
   • Provides spatial location, tax classifications, assessed values of land and buildings on parcel
   • Also used to calculate local average land value per acre

2. Metro Urban Service Area

3. Observed land use, from Met Council

4. Planned land use, from comprehensive plans

5. Brownfields, from MPCA’s *What’s In My Neighborhood* database
Industrial land layers

INDUSTRIAL

- 2010
- PLANNED
- County Boundaries
Industrial land layers

INDUSTRIAL
- 2010
- PLANNED
- County Boundaries
Industrial land layers

- Intermodal facilities
- Freight highway corridors
- Railroads

INDUSTRIAL

- 2010
- PLANNED
- County Boundaries
6. Adjacency to rail lines
7. Freight highway corridors proximity (½ mi buffer)
8. Intermodal freight facilities proximity (1 mi buffer)
9. Workforce in the local area (5 mi radius), from Census’s Local Employment Dynamics database
10. Industrial real estate listings data, from Xceligent and MNCAR
   • Provides real estate type, building size, clear height, count of loading docks/bays
2010 land use in Plymouth, MN
2010 land use in Plymouth, MN
Apply filter: Land along railways
Apply filter: Land along railways + warehouse buildings present
Identify and select a site, explore attributes

Intermodal facilities
Freight highway corridors
Railroads

INDFLAG
- Current Industrial
- Planned
- Vacant

City and Township Boundaries
0 0.250.5 1 1.5 2 Miles
Summarize the data: Plymouth totals

<table>
<thead>
<tr>
<th>Parcels</th>
<th>Acres</th>
<th>Realtor records</th>
</tr>
</thead>
<tbody>
<tr>
<td>371</td>
<td>1,951.8</td>
<td>258</td>
</tr>
</tbody>
</table>
Online Industrial Atlas available summer 2017

- Explorable thru an interactive webmap
  - Links from Local Planning Handbook
- GIS shapefile will also be available for download
How’s this useful to planners?

Industrial Land Inventory provides site attributes to:

• Assess industrial suitability
• Prioritize the most viable future industrial sites
• Identify where industrial preservation should be prioritized
• Identify challenges
What factors matter for new industrial development

• Analysis: Logit regression of observed industrial construction
What factors matter for new industrial development

- Analysis: Logit regression of observed industrial construction
- Probability of new development on an average parcel: <1% per decade
- Odds vary greatly with location!
What factors matter: Results

• Raw land or no existing buildings
What factors matter: Results

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- Inside MUSA improves odds
What factors matter: Results

- Raw land or no existing buildings
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- Proximity to freight corridor improves odds
What factors matter: Results

• Raw land or no existing buildings
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• Proximity to freight corridor improves odds
• Large acreage improves odds
What factors matter: Results

- Raw land or no existing buildings
- Inside MUSA improves odds
- Proximity to freight corridor improves odds
- Large acreage improves odds
- All these factors are additive
  - Example: 40 acres greenfield site, inside MUSA, near a freight corridor: 10% per decade probability of new industrial construction
Inventory findings: How much industrial land?

- **Current industrial land**: 51,106 acres
  - 331 million square feet of space associated with this land, per Xceligent
Inventory findings: How much industrial land?

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- **Vacant (or minimally developed) industrial supply**: another 19,504 acres
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- **Vacant (or minimally developed) industrial supply**: another 19,504 acres
- **Planned for future (2030) industrial**: another 32,385 acres
Inventory findings: How much industrial land?

- **Current industrial land**: 51,106 acres
  - 331 million square feet of space associated with this land, per Xceligent
- **Vacant (or minimally developed) industrial supply**: another 19,504 acres
- **Planned for future (2030) industrial**: another 32,385 acres
- Enough undeveloped and planned land to double our industrial activity!
Is the industrial land supply suited to site selectors’ wants?

<table>
<thead>
<tr>
<th>Category</th>
<th>Current Industrial</th>
<th>Vacant Industrial</th>
<th>Planned Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Industrial</td>
<td>19,504</td>
<td>32,385</td>
<td></td>
</tr>
<tr>
<td>In MUSA</td>
<td>13,842</td>
<td>23,846</td>
<td></td>
</tr>
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</table>
Is the industrial land supply suited to site selectors’ wants?

- **Total Industrial**: 19,504 (Current Industrial) + 32,385 (Vacant Industrial) + 19,504 (Planned Industrial)
- **In MUSA**: 13,842 (Current Industrial) + 23,846 (Vacant Industrial) + 13,842 (Planned Industrial)
- **MUSA + Freight Corridor**: 13,111 (Current Industrial) + 20,857 (Vacant Industrial) + 13,111 (Planned Industrial)
Is the industrial land supply suited to site selectors’ wants?

- **Total Industrial**: 19,504 (Vacant) + 32,385 (Planned)
- **In MUSA**: 13,842 (Vacant) + 23,846 (Planned)
- **MUSA + Freight Corridor**: 13,111 (Vacant) + 20,857 (Planned)
- **MUSA + Freight + Large Parcel**: 8,269 (Vacant) + 15,001 (Planned)

Legend:
- Current Industrial
- Vacant Industrial
- Planned Industrial

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Metropolitan Council
Comparing industrial supply with demand

Manufacturing and related industries are growing – but future growth is limited
Comparing industrial supply with demand

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- **Jobs growth** in these industries: +6%, 2015 to 2025
Comparing industrial supply with demand

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- **Jobs growth** in these industries: +6%, 2015 to 2025
- Considering **industrial building activity**: +7%
  floorspace growth, 2015 to 2030
Comparing industrial supply with demand

Manufacturing and related industries are growing – but future growth is limited

• **Jobs growth** in these industries: +6%, 2015 to 2025
• Considering **industrial building activity**: +7% floorspace growth, 2015 to 2030
• Considering **output growth** combined with factors above: high-end is +12% land use growth, 2015 to 2030
Comparing industrial supply with demand

Manufacturing and related industries are growing – but future growth is limited

• Jobs growth in these industries: +6%, 2015 to 2025
• Considering industrial building activity: +7% floorspace growth, 2015 to 2030
• Considering output growth combined with factors above: high-end is +12% land use growth, 2015 to 2030
• Forecast range: Net growth of 3,000 to 6,000 acres in active industrial use, 2015 to 2030
Comparing industrial supply with demand

- MUSA + Freight Corridor
  - Vacant Industrial: 13,111
  - Planned Industrial: 20,857

- MUSA + Freight Corridor + Affordable Land
  - Vacant Industrial: 12,014
  - Planned Industrial: 19,564

- MUSA + Port or Rail Adjacent
  - Vacant Industrial: 6,351
  - Planned Industrial: 5,144

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Comparing industrial supply with demand

MUSA + Freight Corridor

MUSA + Freight Corridor + Affordable Land

MUSA + Port or Rail Adjacent

vs Forecasted Demand

0 10,000 20,000 30,000 40,000

Vacant Industrial

Planned Industrial

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Metropolitan Council
Comparing industrial supply with demand

- Long-run, MSP has enough industrial land
  - Specialty submarket with limited supply: railroad-adjacent and river port-adjacent
Comparing industrial supply with demand

- Long-run, MSP has enough industrial land
  - Specialty submarket with limited supply: railroad-adjacent and river port-adjacent
- Short-run challenges make MSP industrial land supply seem smaller
  - The right location, the right characteristics
  - Can a large enough parcel be found?
  - Are land owners willing to sell?
## Takeaways

<table>
<thead>
<tr>
<th>Issues</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is more industrial land needed? Should land be re-guided to industrial?</td>
<td>Generally no… Consider if site is adjacent to river port or rail</td>
</tr>
<tr>
<td>Should land be re-guided from industrial to other uses?</td>
<td>It depends: Consider neighborhood characteristics in planning decisions</td>
</tr>
<tr>
<td>What risks come from oversupplying industrial land?</td>
<td>Too much supply is possible, leading some land to sit idle</td>
</tr>
<tr>
<td>How to retain existing local industrial base?</td>
<td>Work to preserve viability!</td>
</tr>
</tbody>
</table>
Preserving Industrial Land

Benefits to Preserving

Steps to Ensure Preservation

Tools: Ways to Preserve

City Examples
Preserving Industrial Land

Benefits to Preserving

• Increases economic health, growth, & viability
Preserving Industrial Land

Benefits to Preserving

• Cost Effective
Preserving Industrial Land

Benefits to Preserving

- Workforce/Business Retention & Expansion – Job Creation
Preserving Industrial Land

Benefits to Preserving

• Urban Industrial Revitalization
Preserving Industrial Land

Benefits to Preserving

• Reduce forced relocation & land use conflicts
Preserving Industrial Land

Steps to Ensuring Preservation

• Create Land Inventory Database
Preserving Industrial Land

Steps to Ensuring Preservation

- Create Land Inventory Database
- Identify Preservation Sites
Preserving Industrial Land

Steps to Ensuring Preservation

- Create Land Inventory Database
- Identify Preservation Sites
- Zoning Code as Economic Development Tool
Preserving Industrial Land

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Preserving Industrial Land

Steps to Ensuring Preservation

- Create Land Inventory Database
- Identify Preservation Sites
- Zoning Code as Economic Development Tool
- Comprehensive Planning
- Coordinate Land-Use Planning and Economic Development
Preserving Industrial Land

Tools: Ways to Preserve
Preserving Industrial Land

Tools: Ways to Preserve

• Zoning Classifications
Preserving Industrial Land

Tools: Ways to Preserve

• Zoning Classifications
• Rezoning of Land
Preserving Industrial Land

Tools: Ways to Preserve

- Zoning Classifications
- Rezoning of Land
- Zoning – Land Use Designations
  - Planned Industrial Development (PID)
  - Planned Manufacturing District (PMD)
  - Mixed-Use District
  - Industrial Employment District
  - Creative Economy District
Preserving Industrial Land: Example Cities

- **City of Rosemount, Minnesota**
  - Comprehensive Plan Implementation

- **City of Milwaukee, Wisconsin**
  - Industrial Land Corridor Protection

- **City of Chicago, Illinois**
  - Zoning – Planned Manufacturing District

- **City of New York, New York**
  - Zoning Code Update – 100 years later
City of Rosemount

Preserving Industrial Land

2005 Land Use Map
2030 Future Land Use Map

Comprehensive Plan Implementation
City of Milwaukee

Preserving Industrial Land

Source: City of Milwaukee
City of Chicago

Preserving Industrial Land

Source: City of Chicago
Preserving Industrial Land

City of New York

Zoning Code Update

Source: New York Public Library

Source: City of New York

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Questions?

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Upcoming Events

**Webinar: School Districts - More Than Just An Affected Jurisdiction**
Presented by Tara Beard
Thursday, March 9, 2017

**Workshop: Affordable Housing - Tools and Financing Mechanisms**
Presented by Jonathan Stanley
Thursday, April 13, 2017

**Webinar: Population Estimates**
Presented by Matt Schroeder
Thursday, April 20, 2017

*Look for the 2017 PlanIt Schedule of Events on the website*