

Regional Freight System Planning Recommendations

presented to

Chicago Metropolitan Agency for Planning

Freight Committee

presented by

Cambridge Systematics, Inc.

November 16, 2009

Transportation leadership you can trust.

Agenda

- **Project Recap – Erika Witzke**
- **Project Selection Process**
 - Stakeholder Outreach – Audrey Wennink
 - Data Analysis – Monique Urban
 - Transearch Data Update – Monique Urban
- **Preliminary Recommendations Overview**
 - Infrastructure – Erik Cempel
 - Policy – Barb Sloan
- **Breakout Session – All**
- **Next Steps – Erika Witzke**

Project Recap

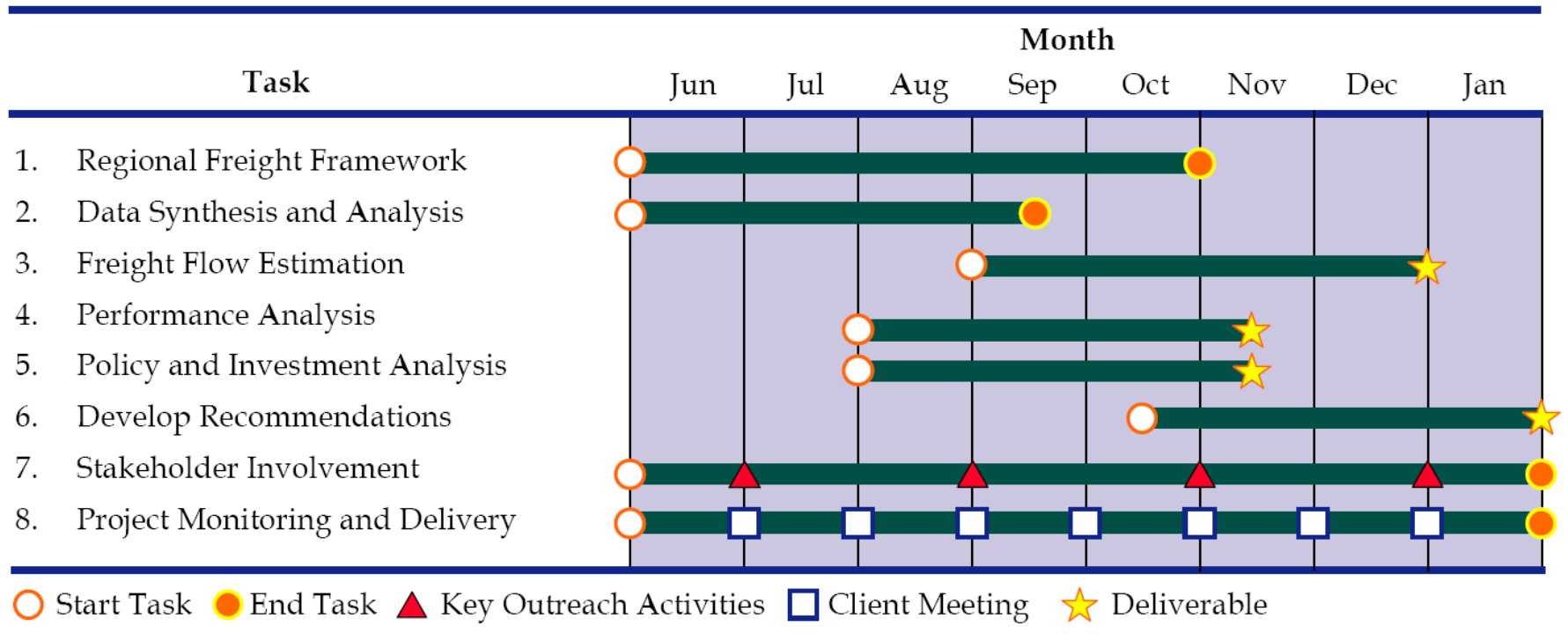
imagine that...



Project Scope

- **Develop detailed recommendations for the freight system**
 - Tie to GO TO 2040 Long Range Plan
 - Physical, operational, and institutional categories of recommendations
- **Determine benefits and dis-benefits of projects**
 - Public- and private-sector, modes, communities, etc.
- **Determine economic impact of recommendations**

Project Schedule



Project Selection Process

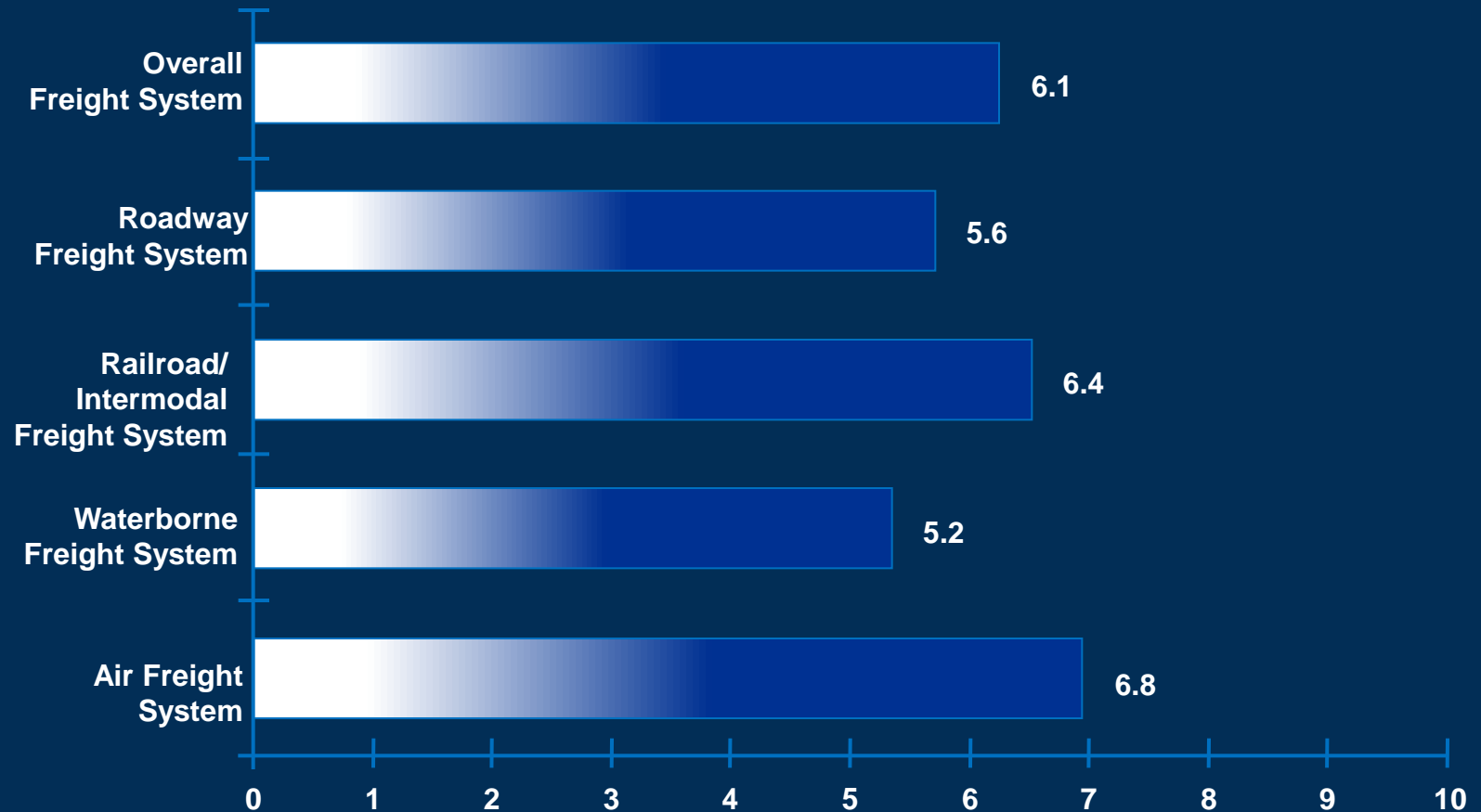
imagine that...



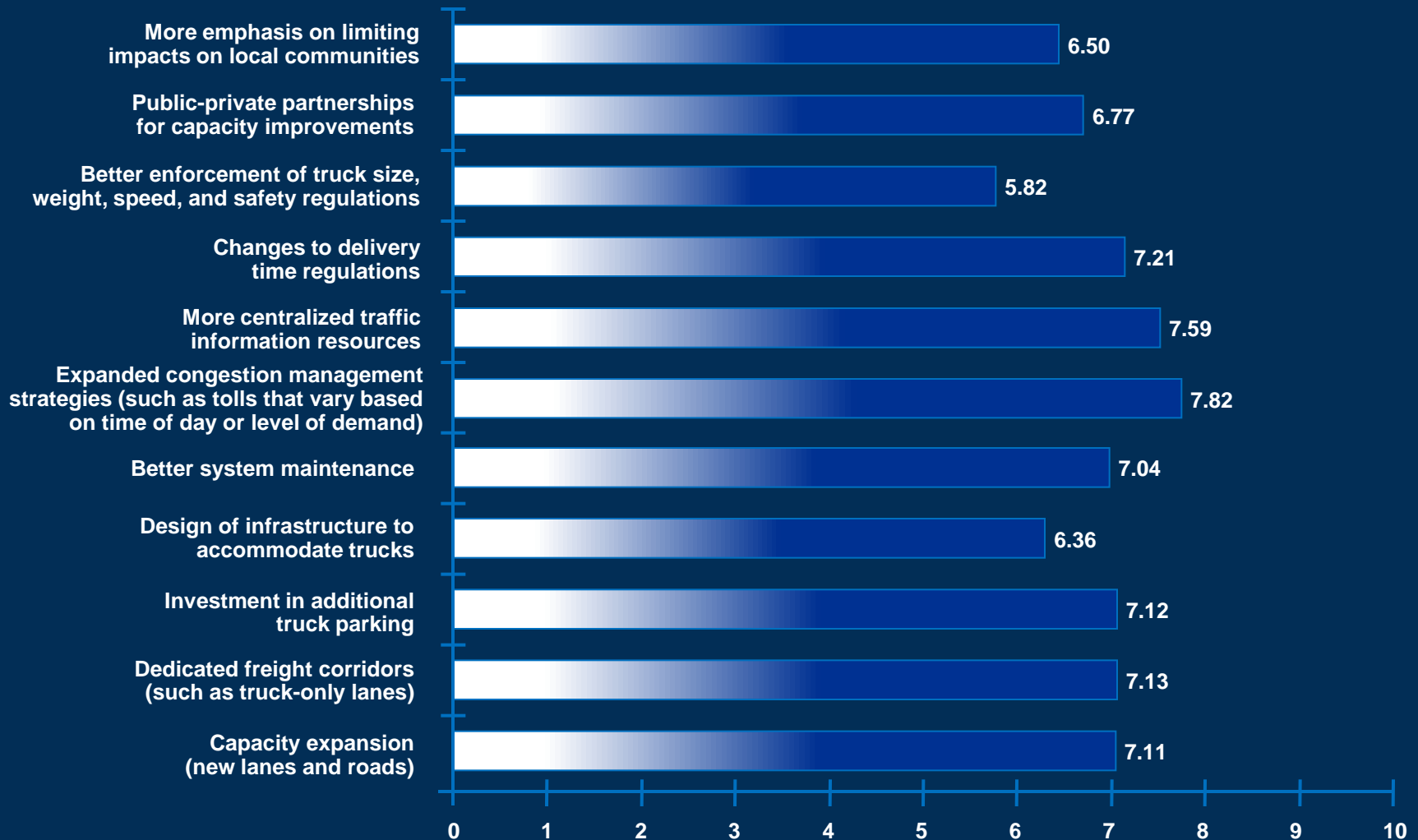
Stakeholder Interviews

- **Convened group and one-on-one meetings and administered online survey, targeting:**
 - **Geographic representation**
 - **Rail/Intermodal**
 - **Trucking**
 - **Water**
 - **Aviation**
 - **Communities**
- **Result: Identified 44 projects**

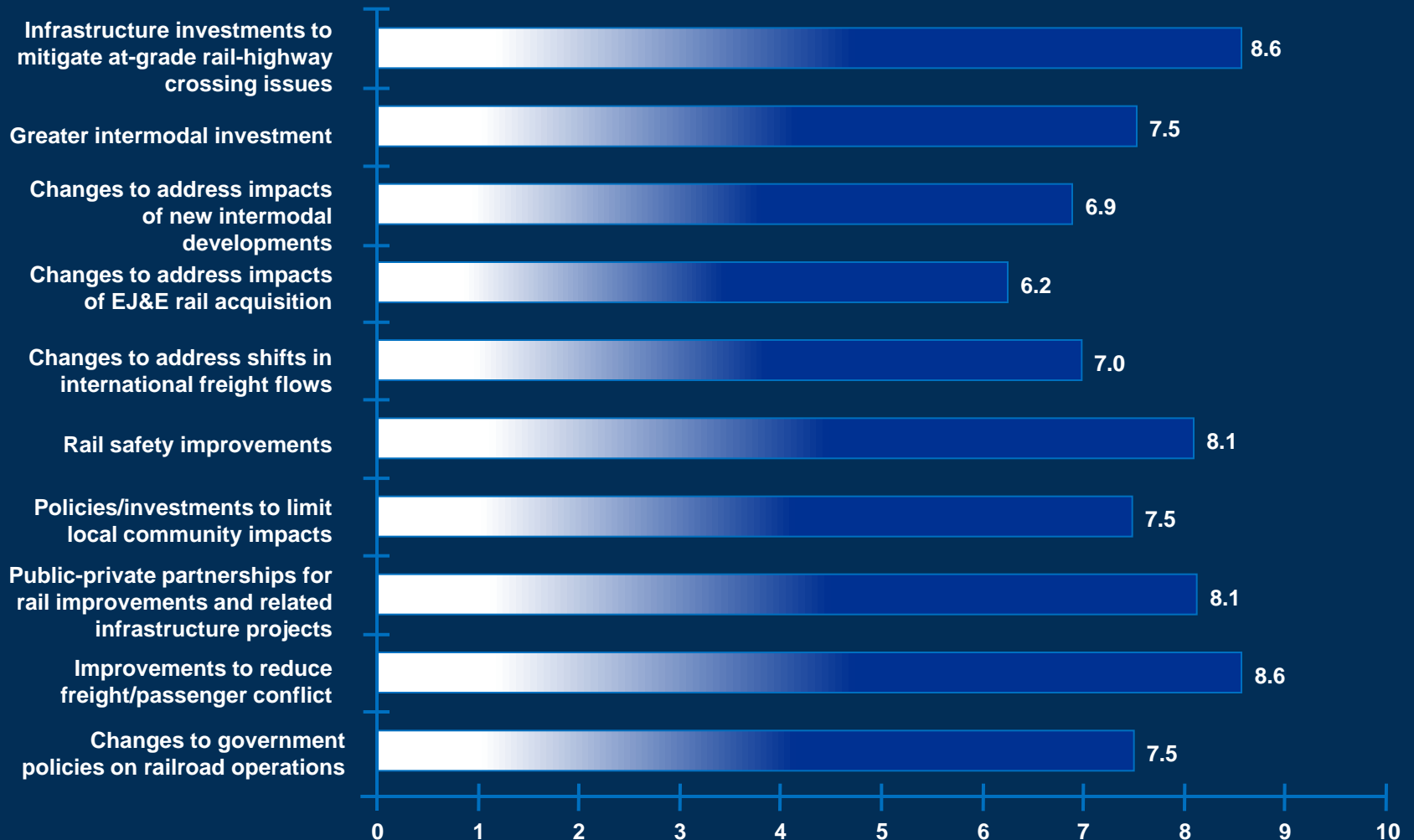
Regional Freight System Adequacy



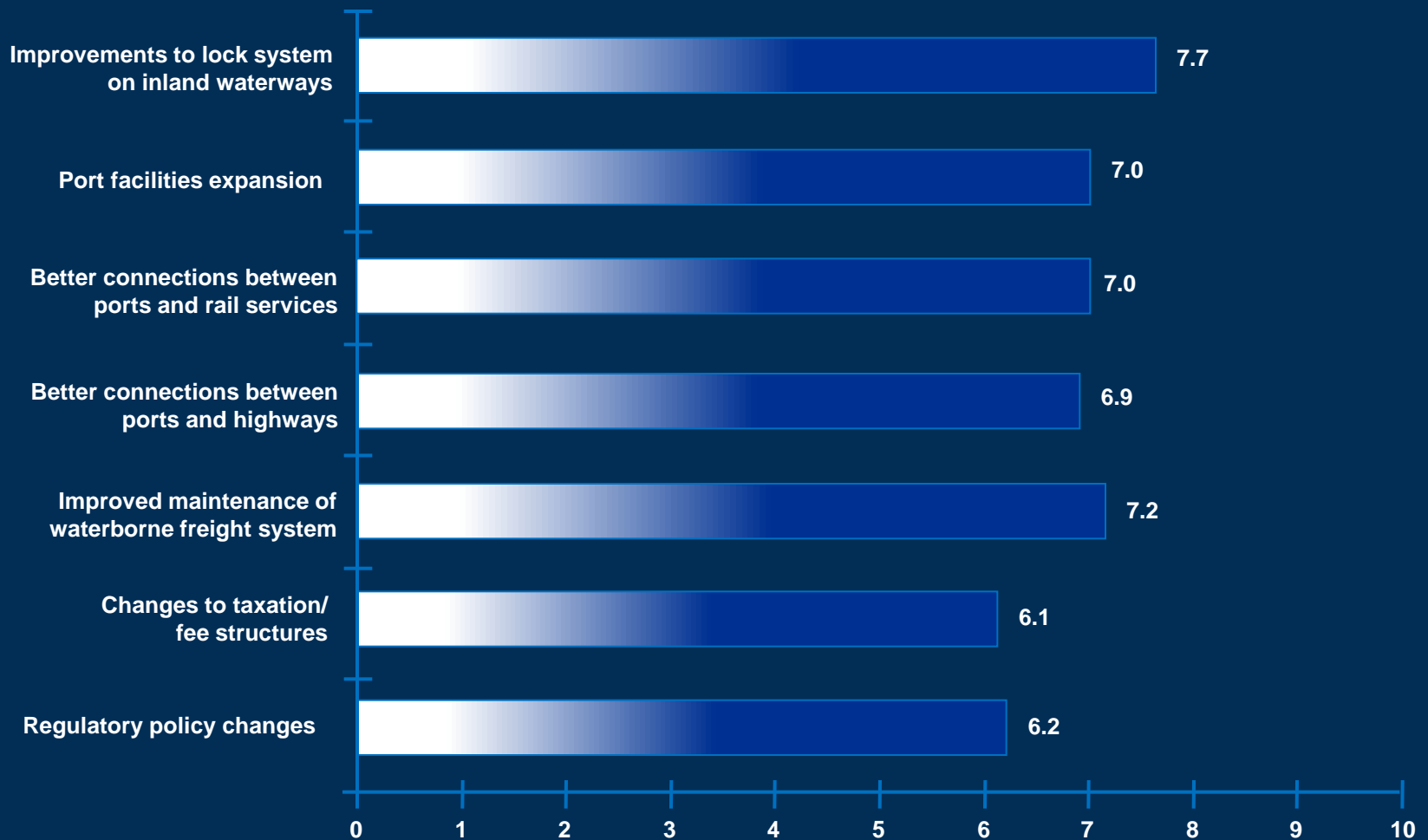
Importance of Potential Trucking Improvements



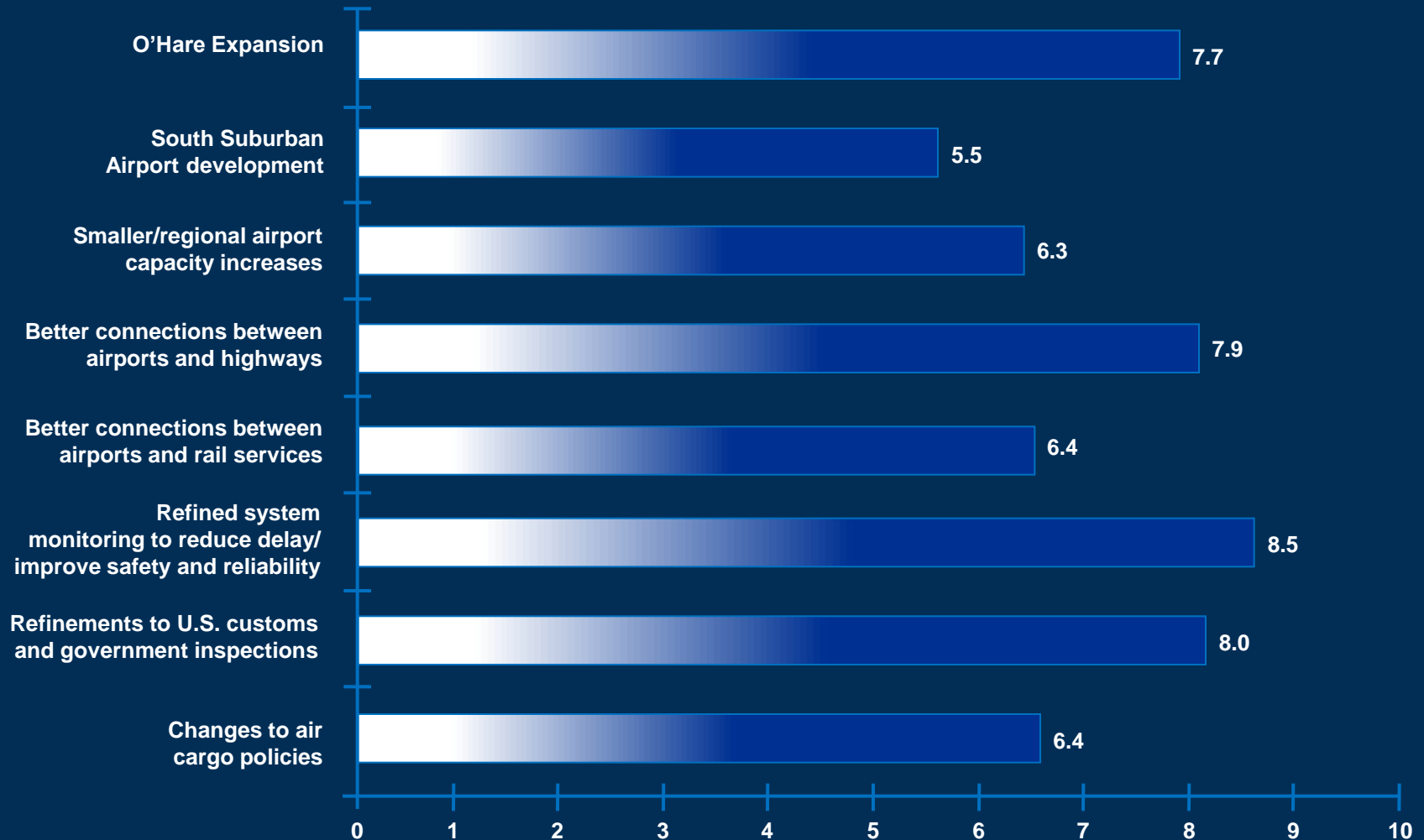
Importance of Potential Rail/Intermodal Improvements



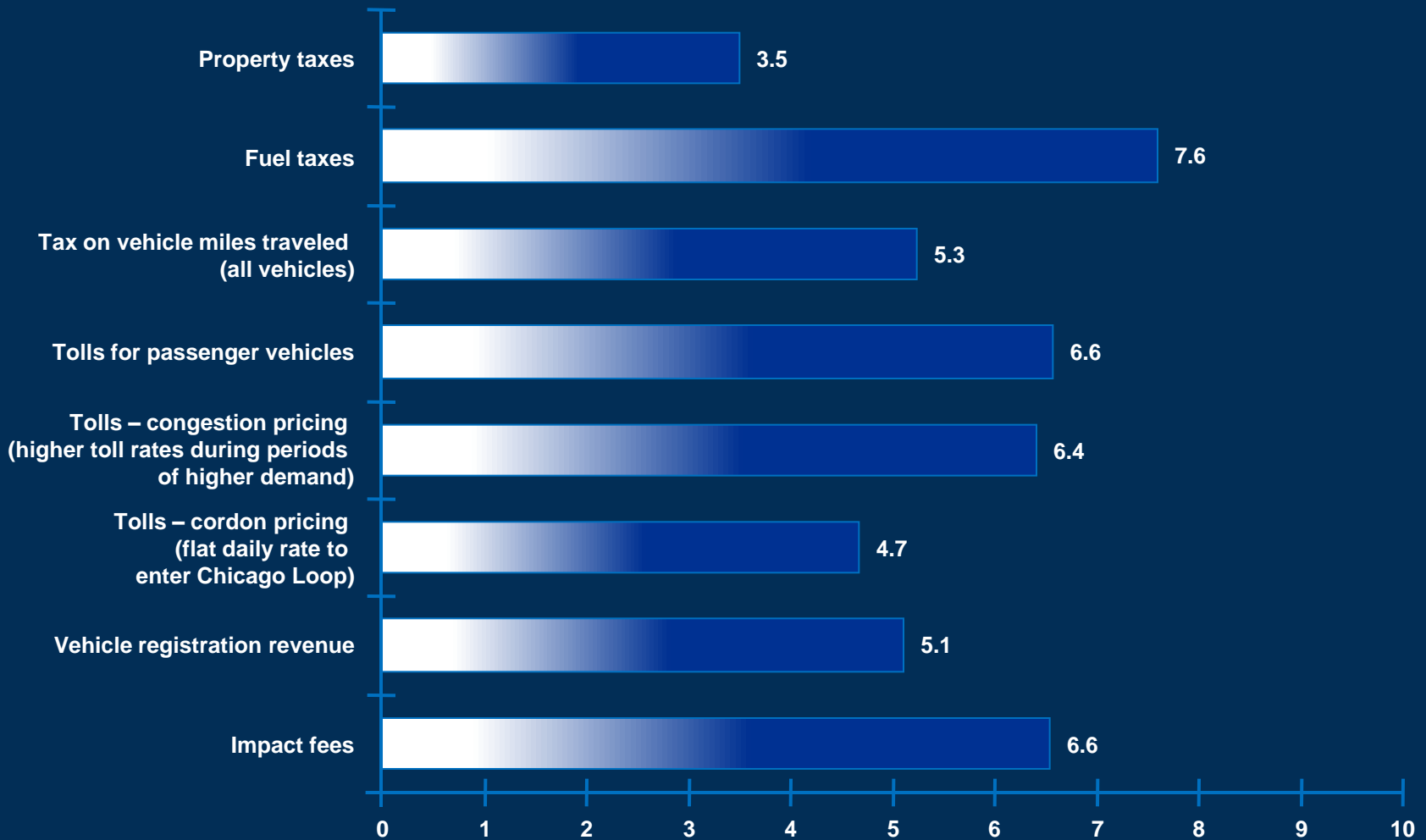
Importance of Potential Water Freight Improvements



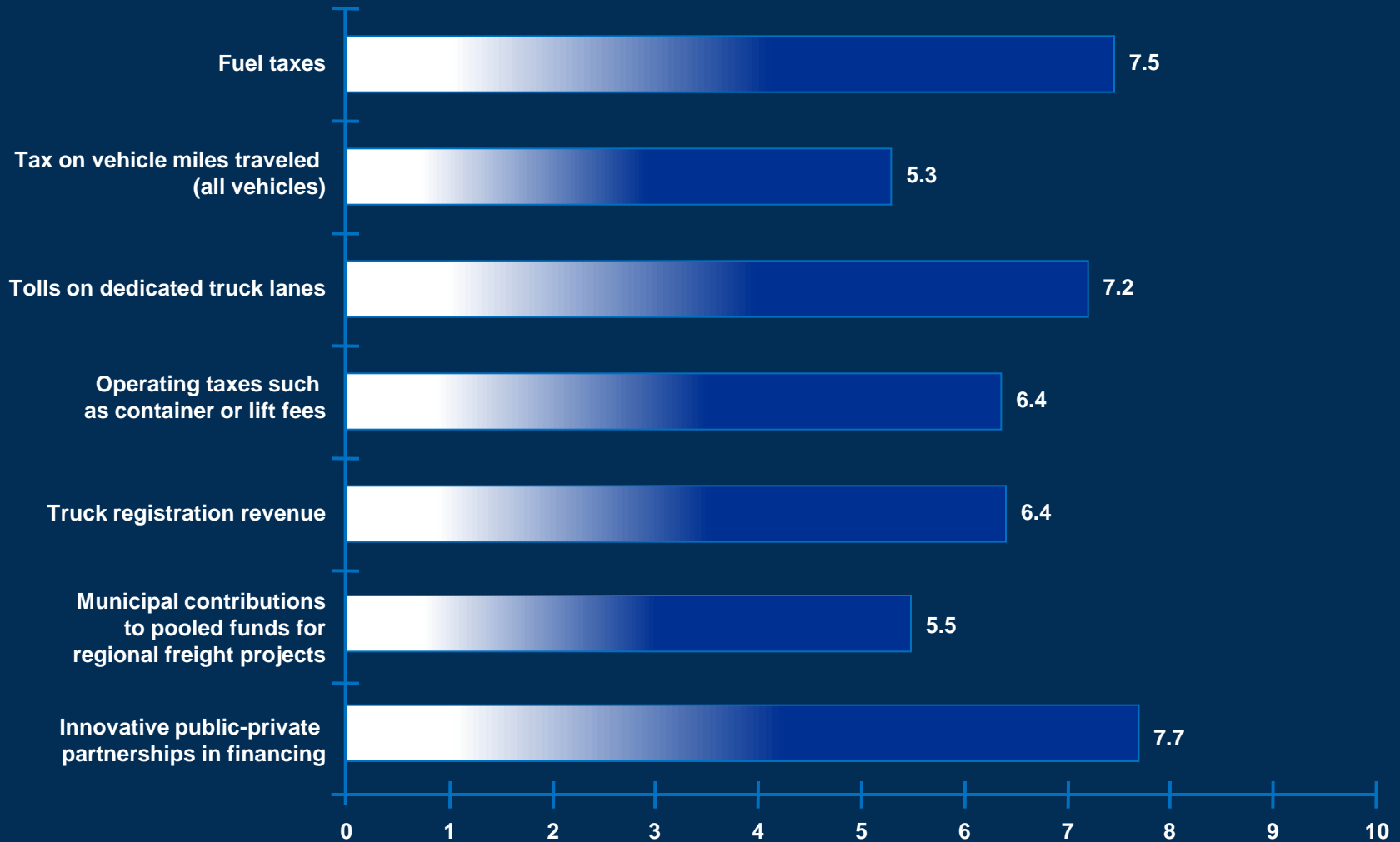
Importance of Potential Air Cargo Improvements



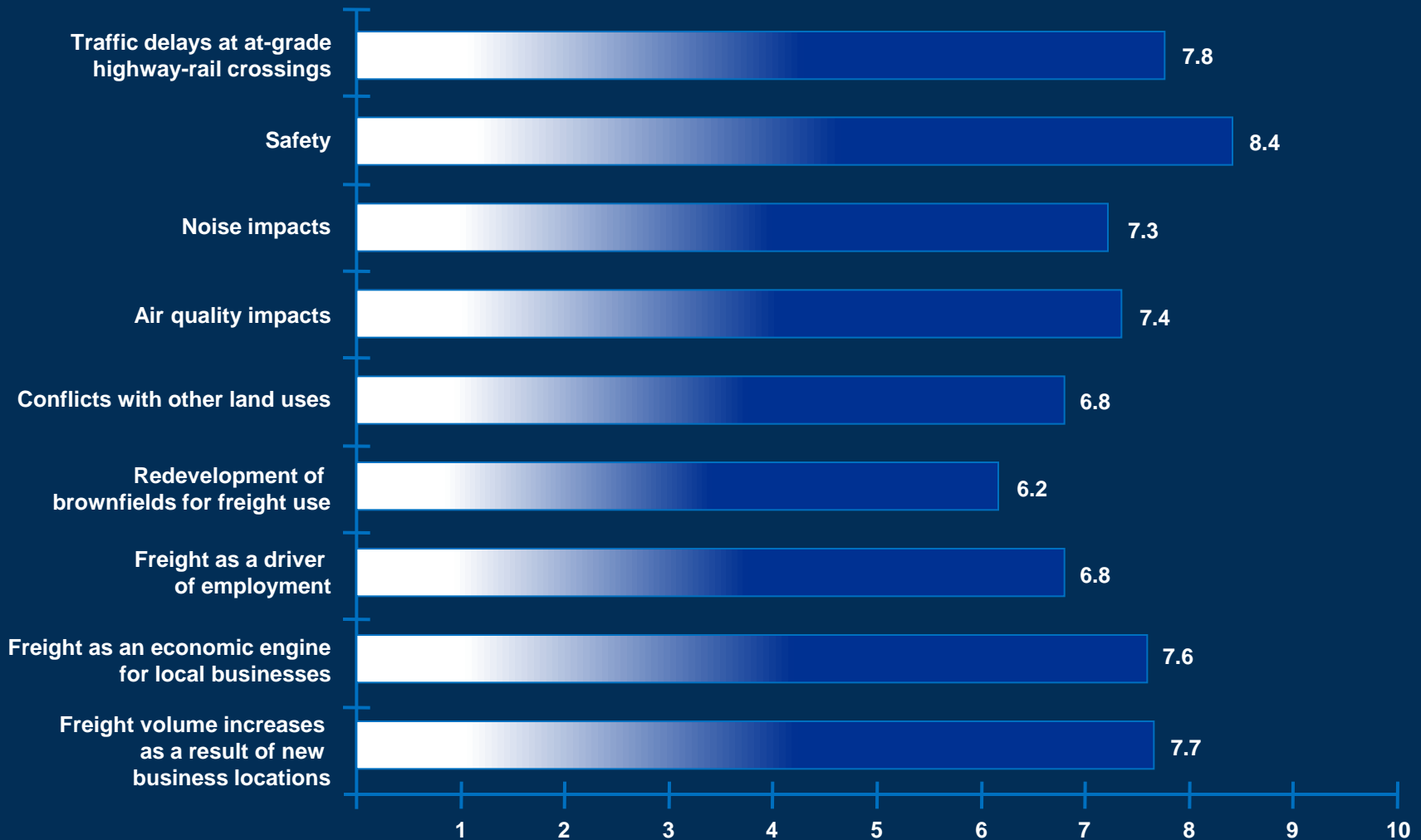
Highway Funding Options



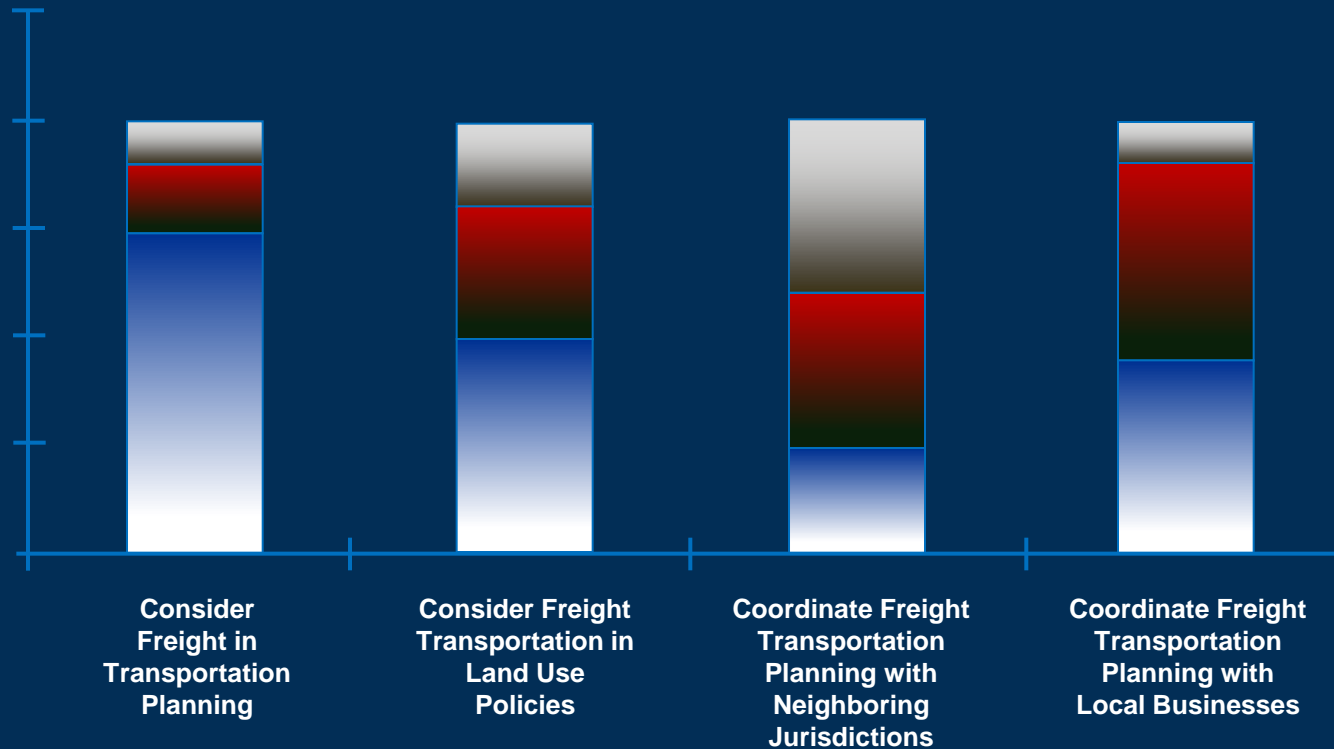
Freight Funding Options






Community Freight Considerations



Community Freight Planning

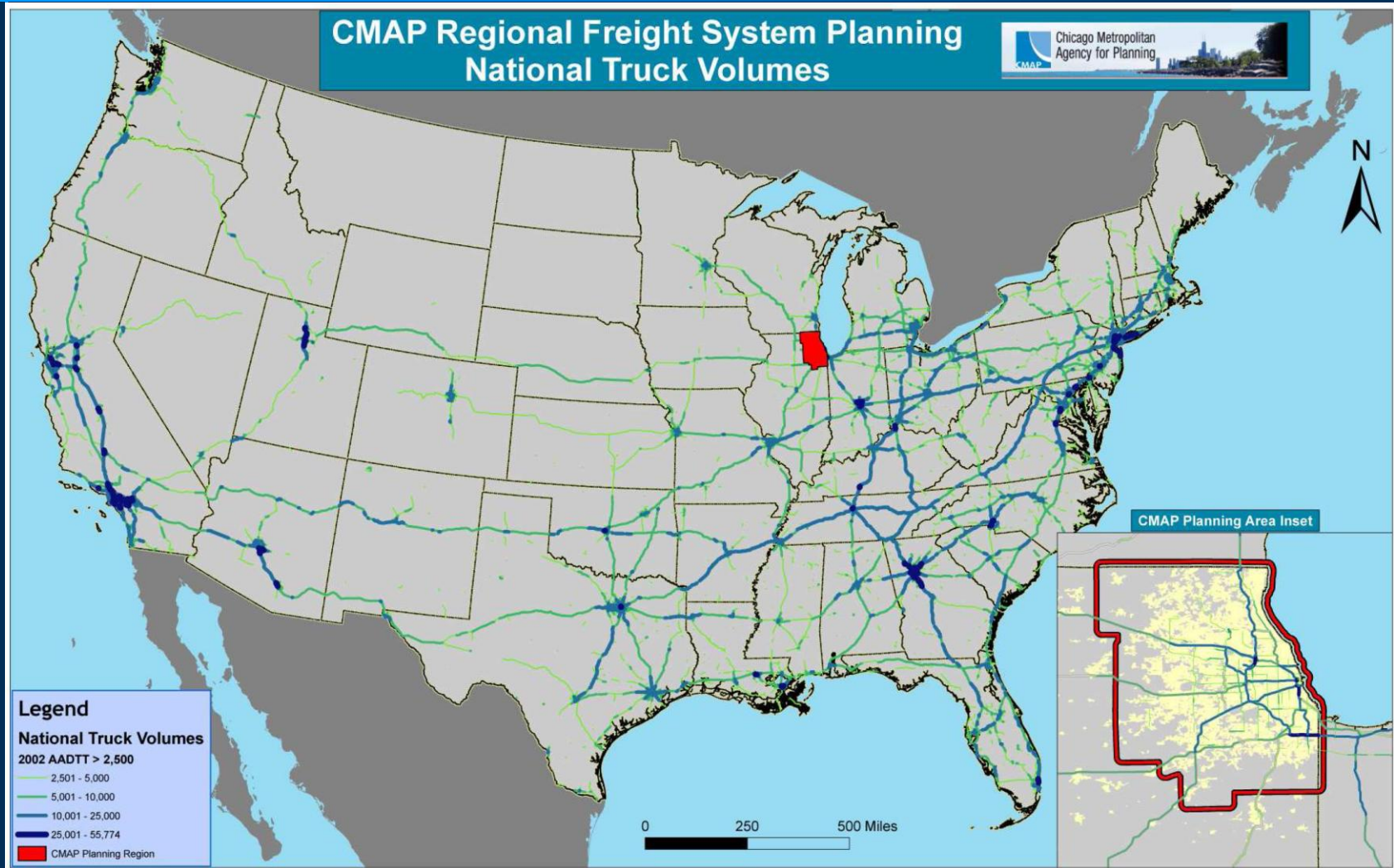


-  Our community does this now
-  Our community intends to do this
-  Our community does not do this

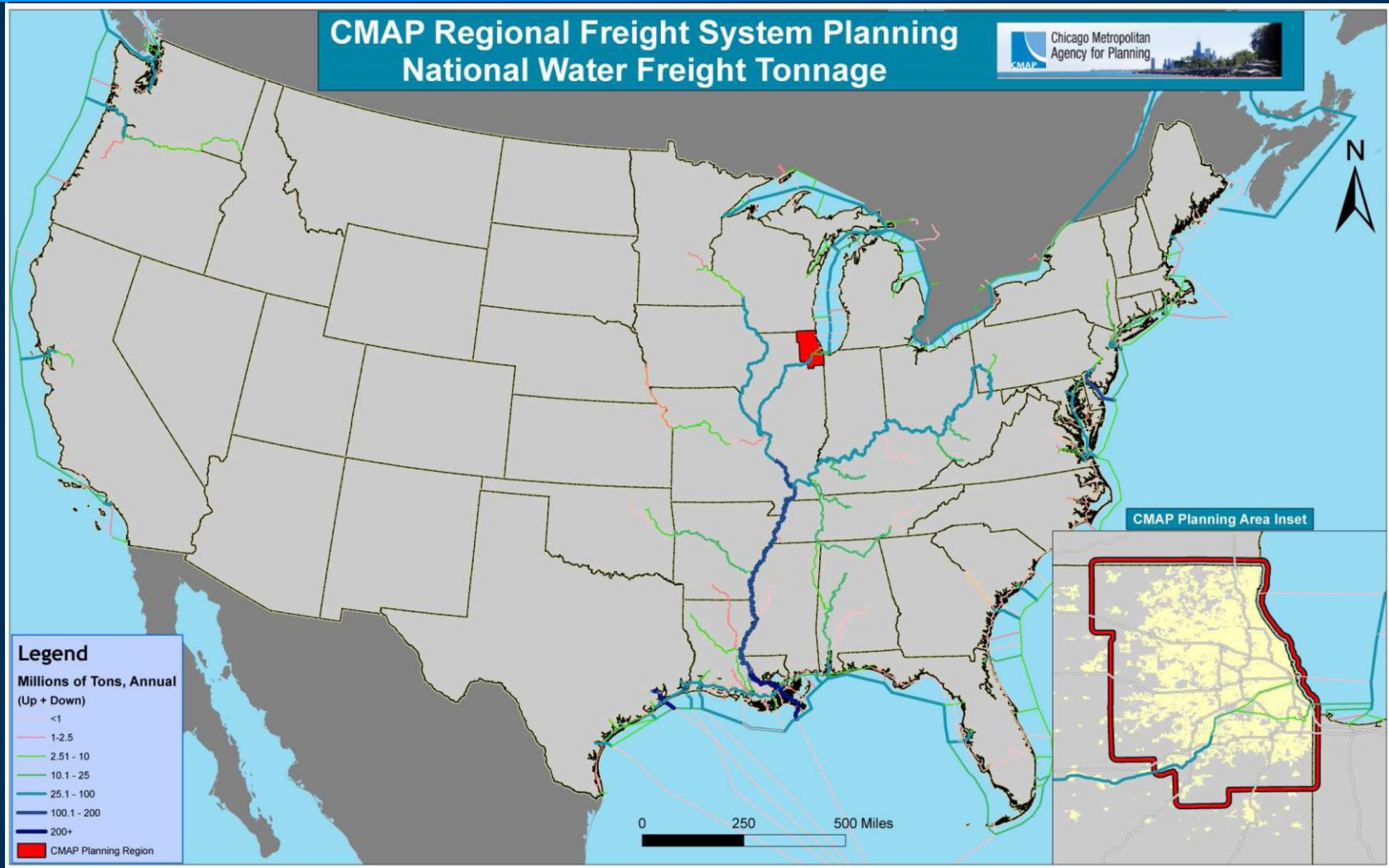
Data Analysis

- **Add Rail Capacity Projects: Identified by High Rail Density**
- **Improve At-Grade Crossing Projects:**
 - High Casualty Rate Prediction;
 - High Daily Truck Volumes; and
 - High Train Counts.
- **Improve Water Facilities: Examine Lock Delays**
- **Various Freight-Focused Roadway Improvements:**
 - Congestion (Travel Time Index);
 - High Daily Truck Volumes; and
 - Proximity to a Truck Route/Facility.
- **Result: Identified 100+ infrastructure projects**

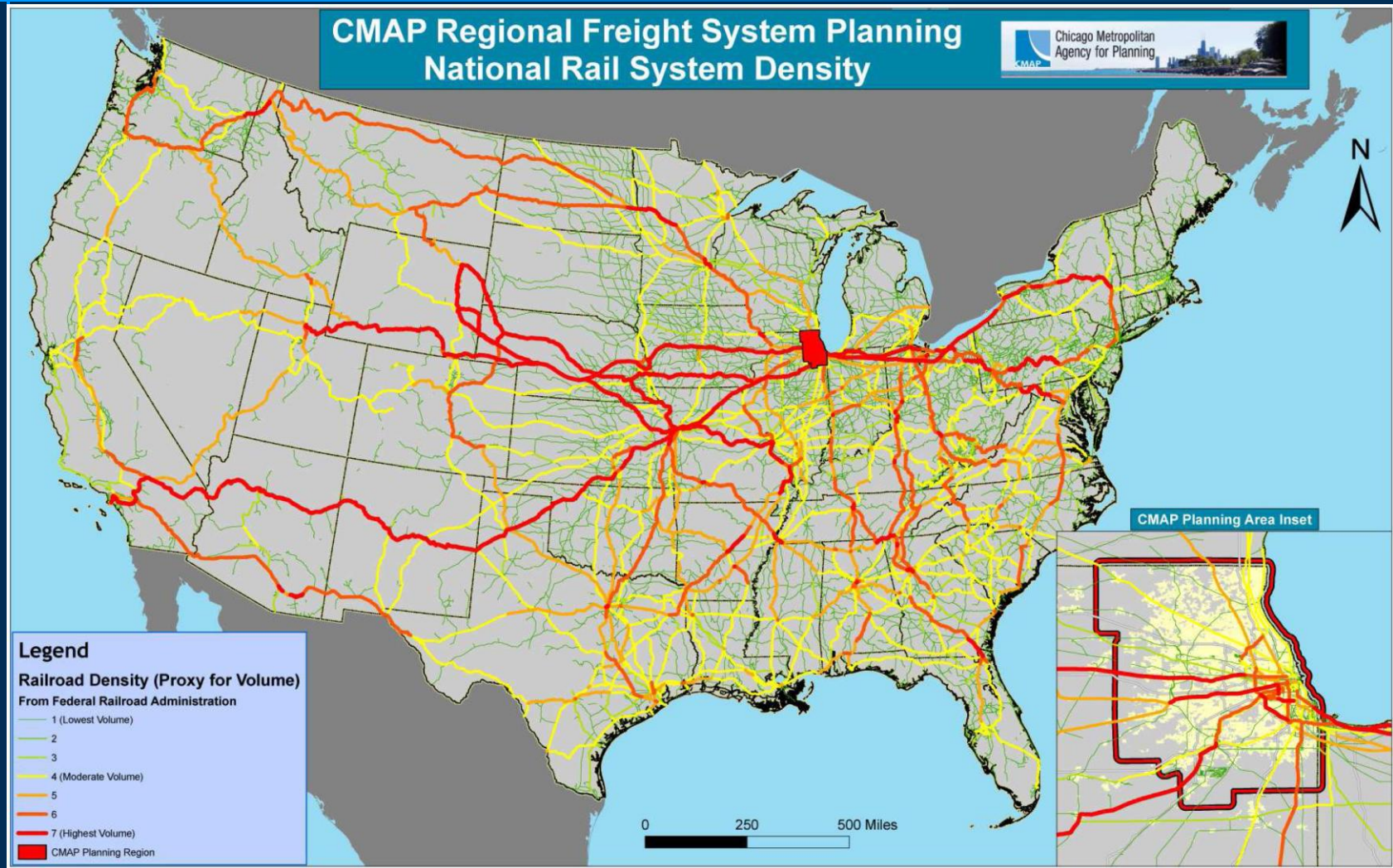
Data Analysis Examples – Truck Volumes



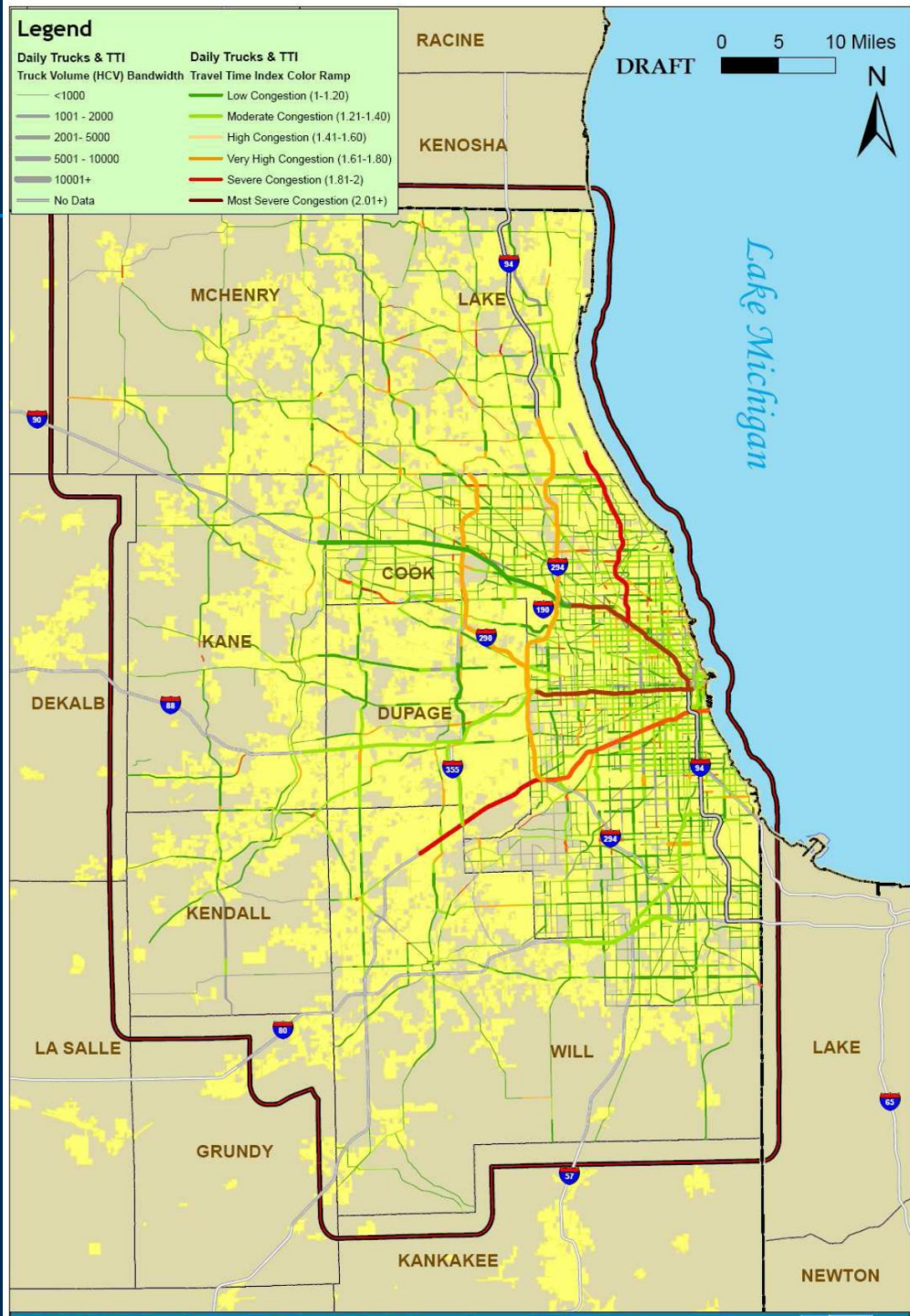
Data Analysis Examples – Water Volumes



Data Analysis Examples – Rail Volumes



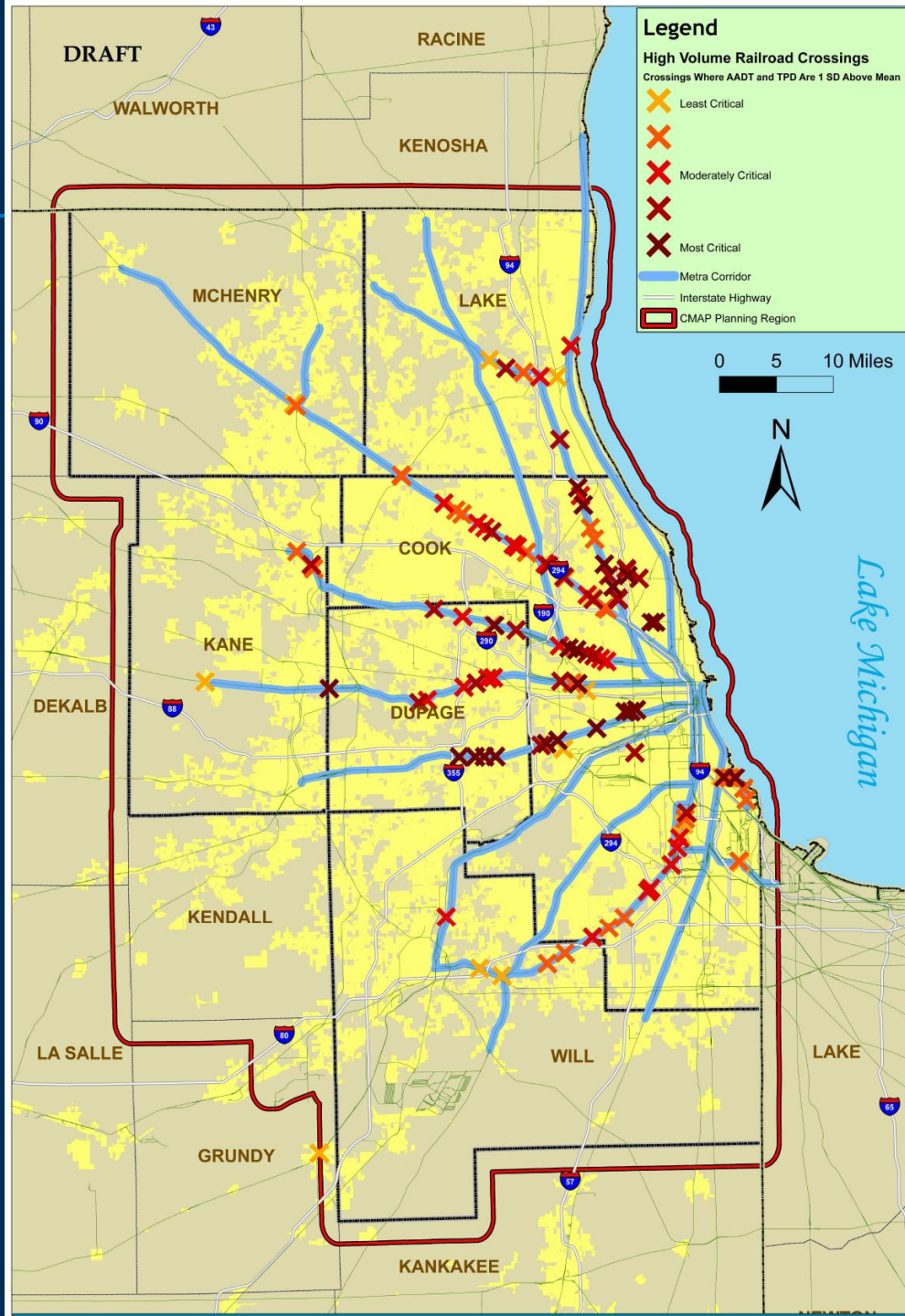
Data Analysis Examples – Travel Time Index



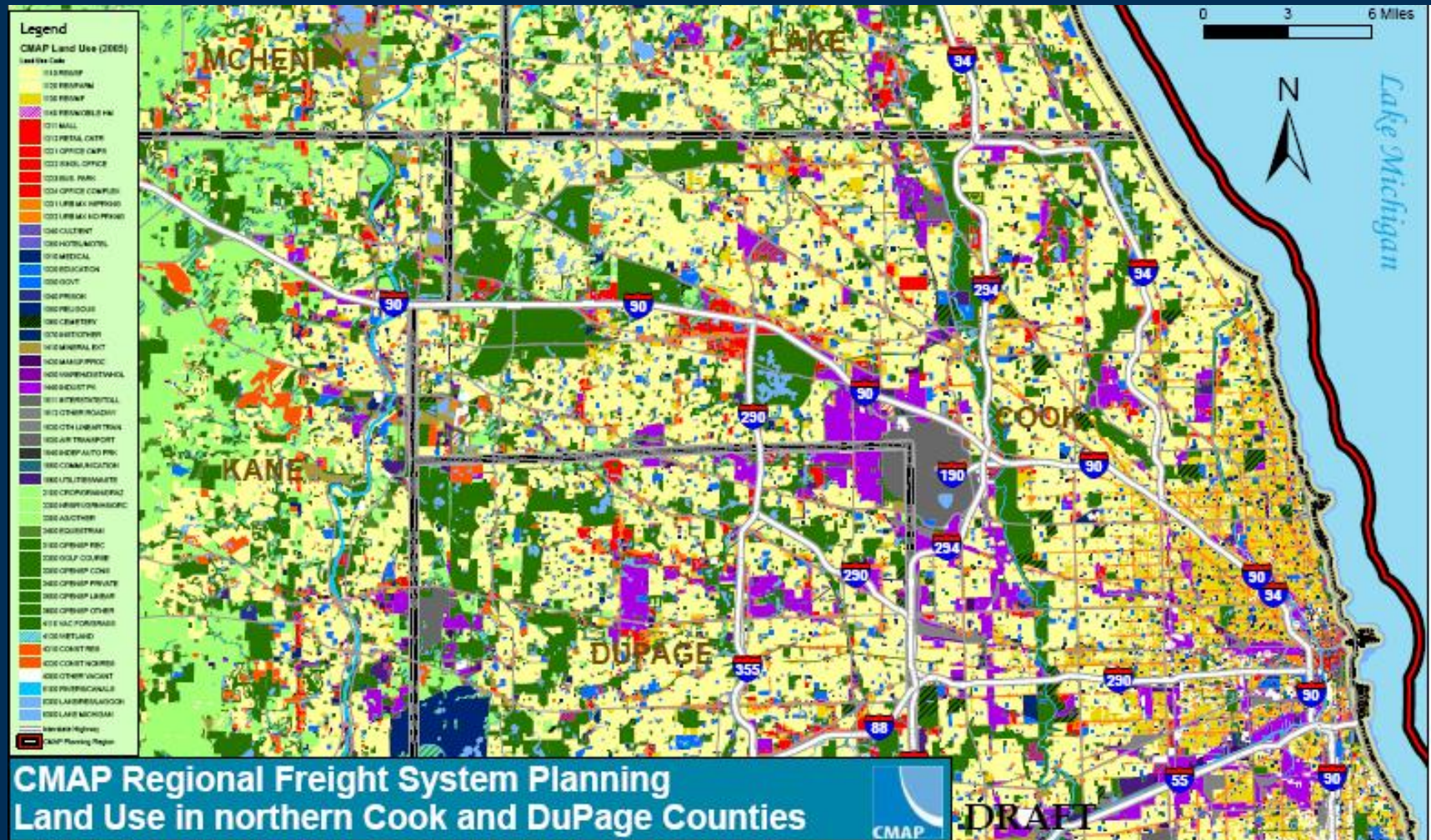
Data Analysis Examples – Water / Lock Delays



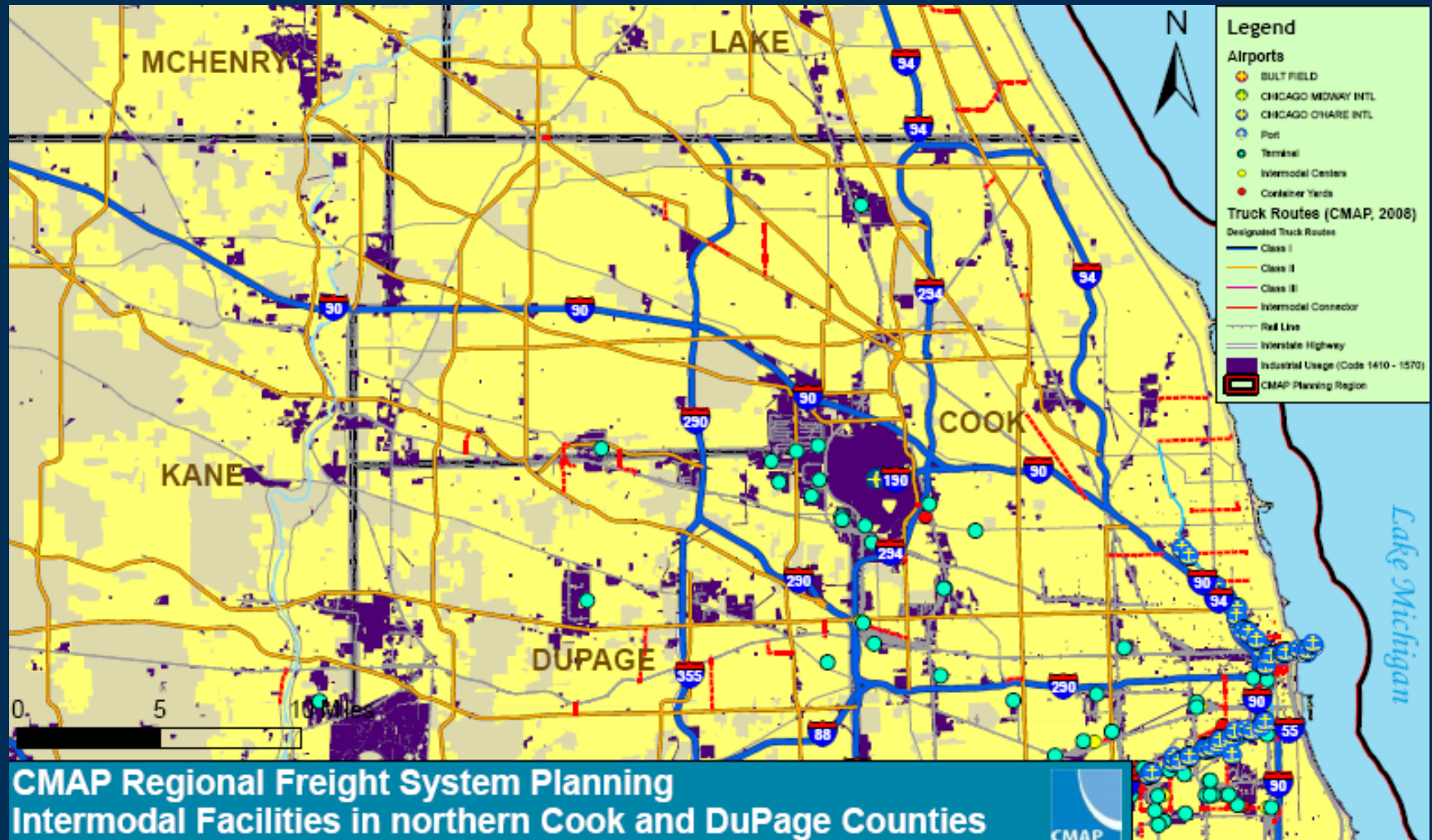
Data Analysis Examples – Rail Crossings with High Volumes



Data Analysis Examples – Land Use



Data Analysis Examples – Intermodal Facilities and Industrial Land Use



CMAP Regional Freight System Planning
Intermodal Facilities in northern Cook and DuPage Counties

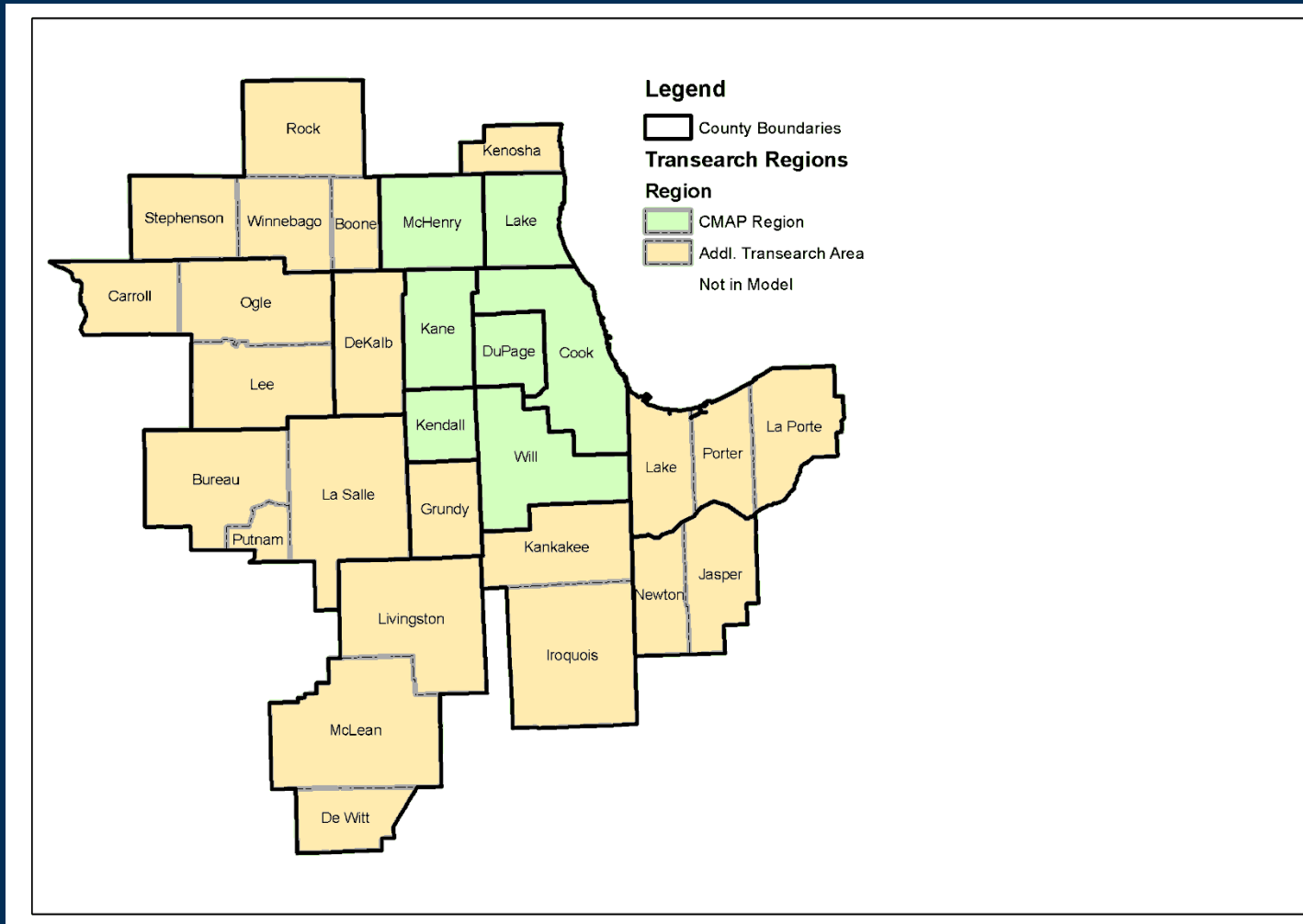


Transearch Data

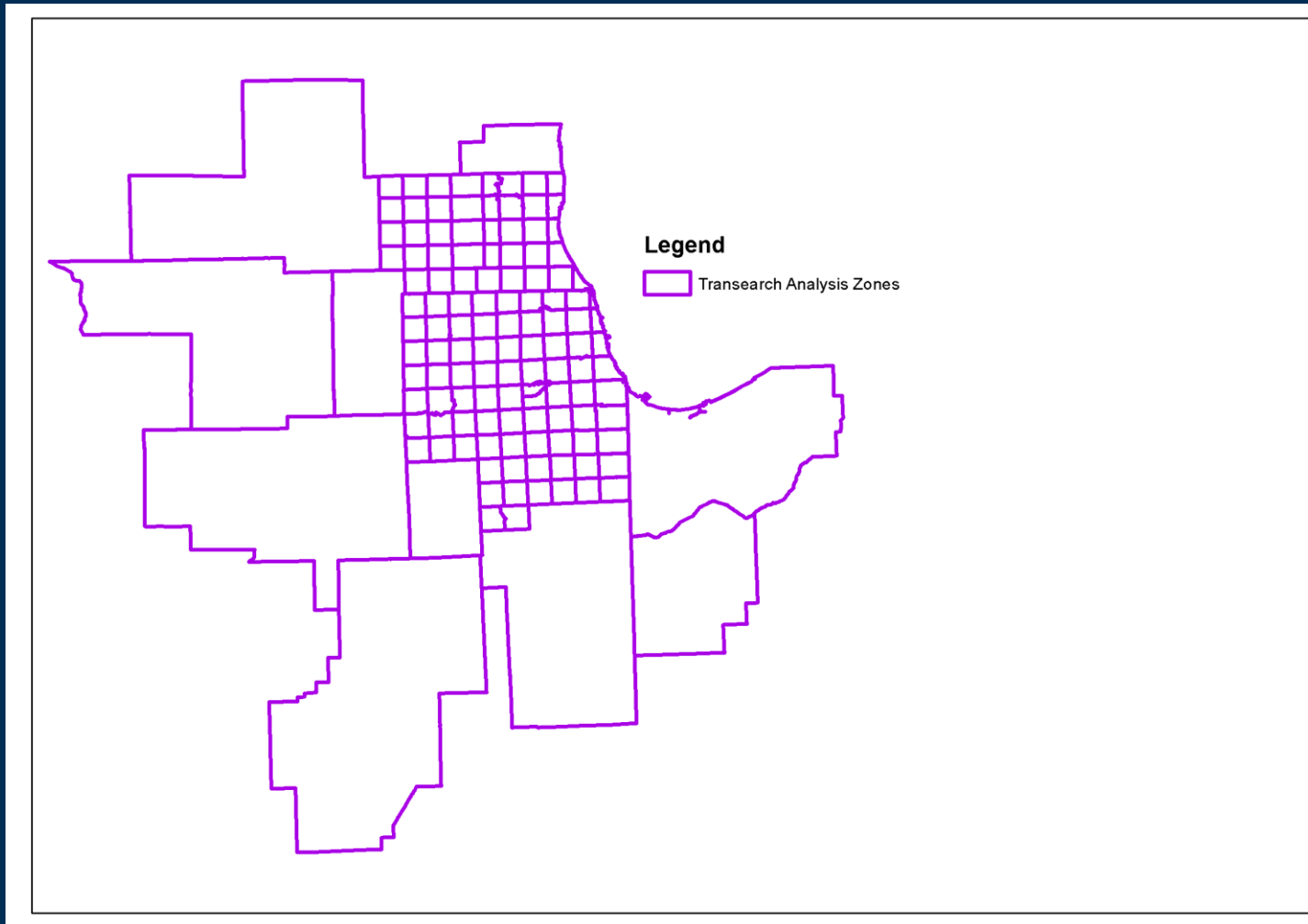
- **Analysis Steps**

- **Disaggregation → Truck Trip Table**
- **Network Development**
- **Assign Truck Trips**
 - Base Year
 - Future Year
- **Examine Growth**
 - Use Growth to Substantiate Recommendations

Transearch Analysis Region



Transearch Analysis Zones



Preliminary Recommendations

imagine that...



Long List of Potential Projects

- **“Universe” from stakeholders, data, RTP, TIP**
- **Bundled complementary projects, competing alternatives**
- **Evaluated according to performance measures**

Evaluate Projects using Performance Measures

- Established to categorize measures – address all areas of importance to all stakeholders
- Tied to AASHTO and FHWA thinking on National Performance Measurement
- Mobility
- Connectivity / Accessibility
- Safety
- Economic Growth
- *System Preservation*
- *Environment / Community*

Establish a methodology that
CMAP can carry forward

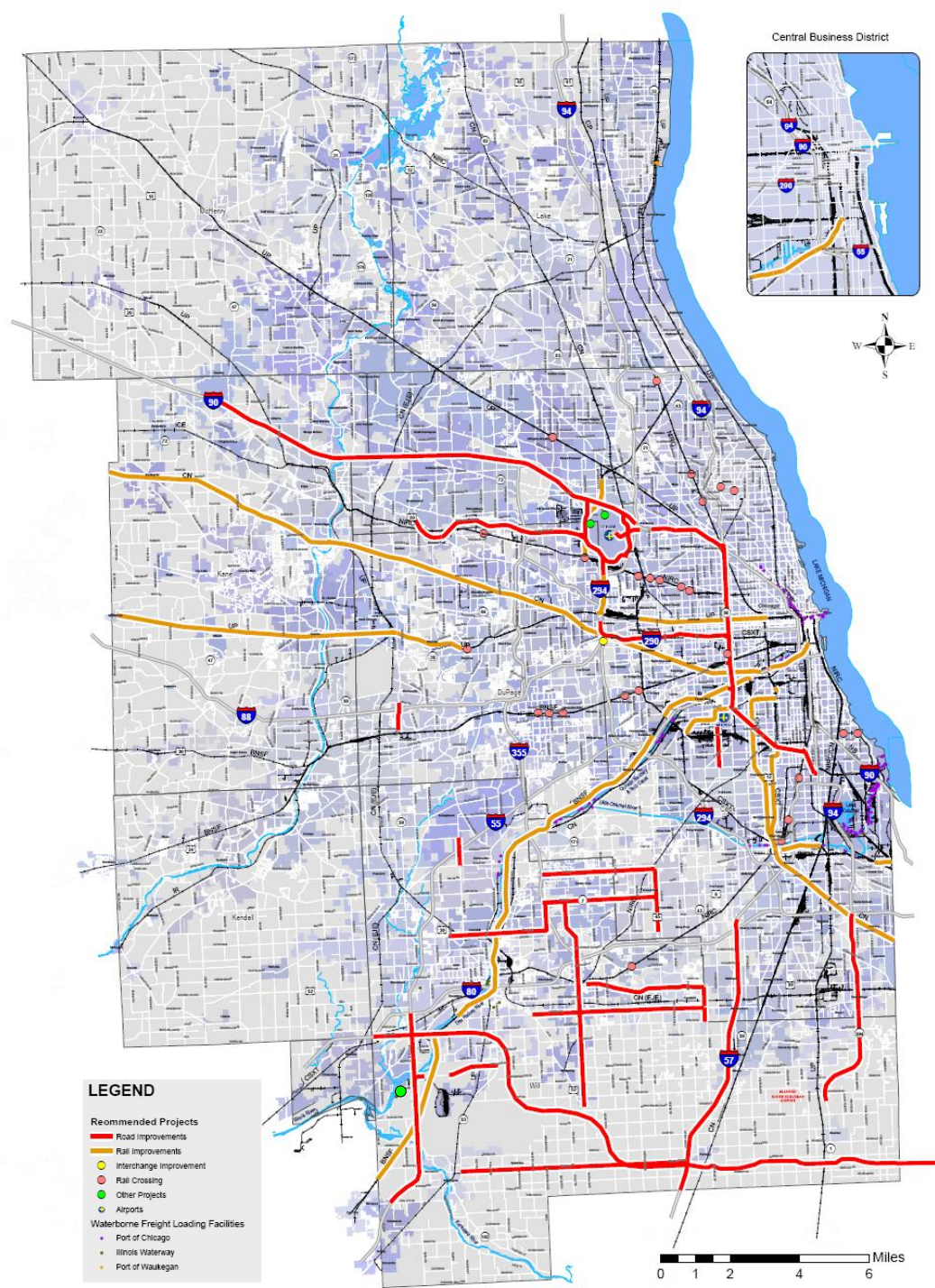
Evaluate Projects using Performance Measures

- Evaluate each project for each measure with available data sources
- Relative “score” for each project for each measure (no score when measure doesn’t apply)
- Average score determined project priority (highway and rail evaluated separately)
- More weight if identified through outreach, or if addresses multiple modes
- Reality check

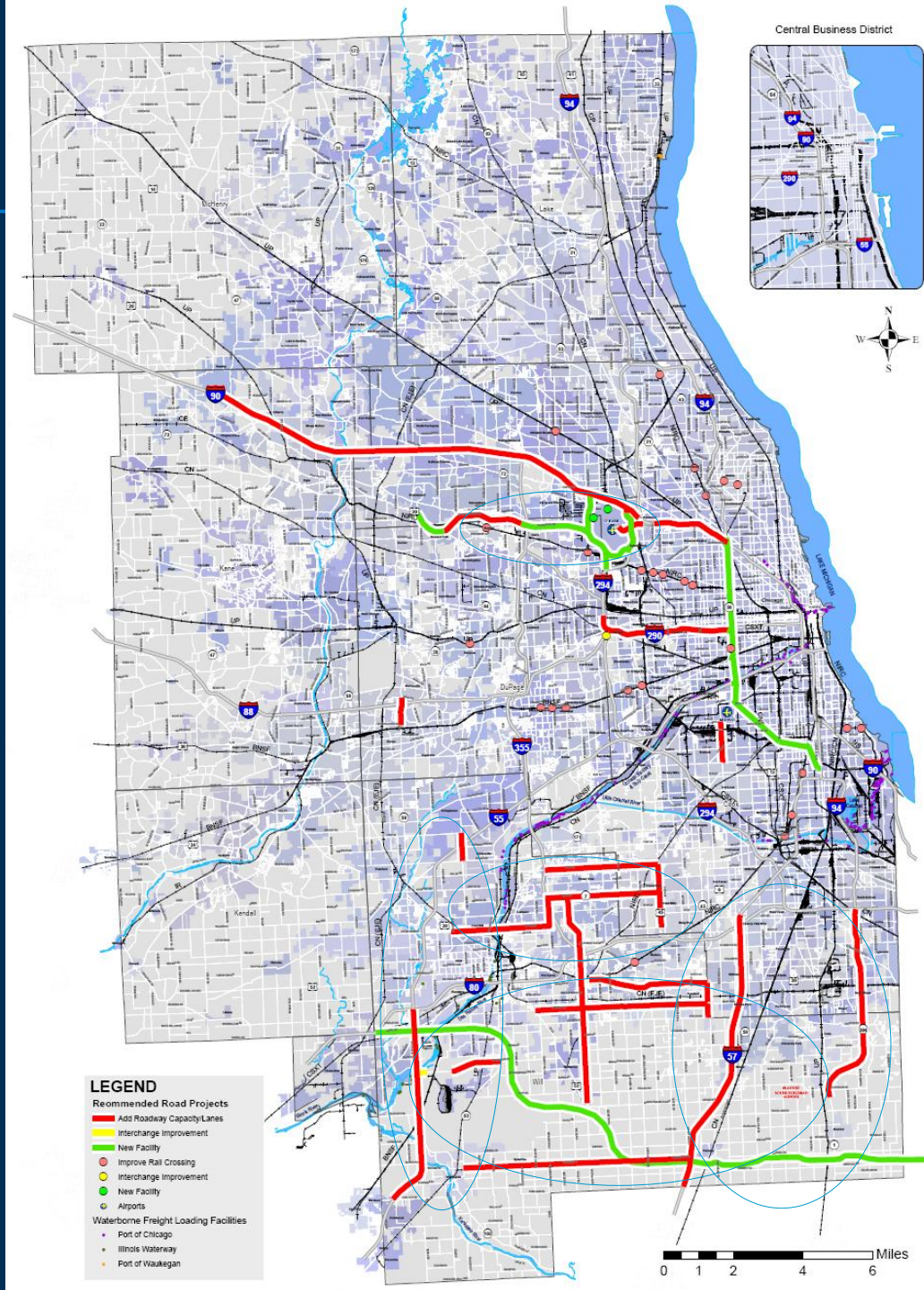
Examples of Recommendations from Infrastructure Analysis

- **Build on what is already being pursued by CREATE**
 - **Grade crossing separations**
 - **Capacity additions**
- **Accommodate growth where it is occurring (e.g. South Suburbs, O'Hare and intermodal connectors)**
- **Added capacity in areas of high freight activity/connecting to intermodal centers (e.g. Illiana Expressway, Mid-city Freightway, I-55)**

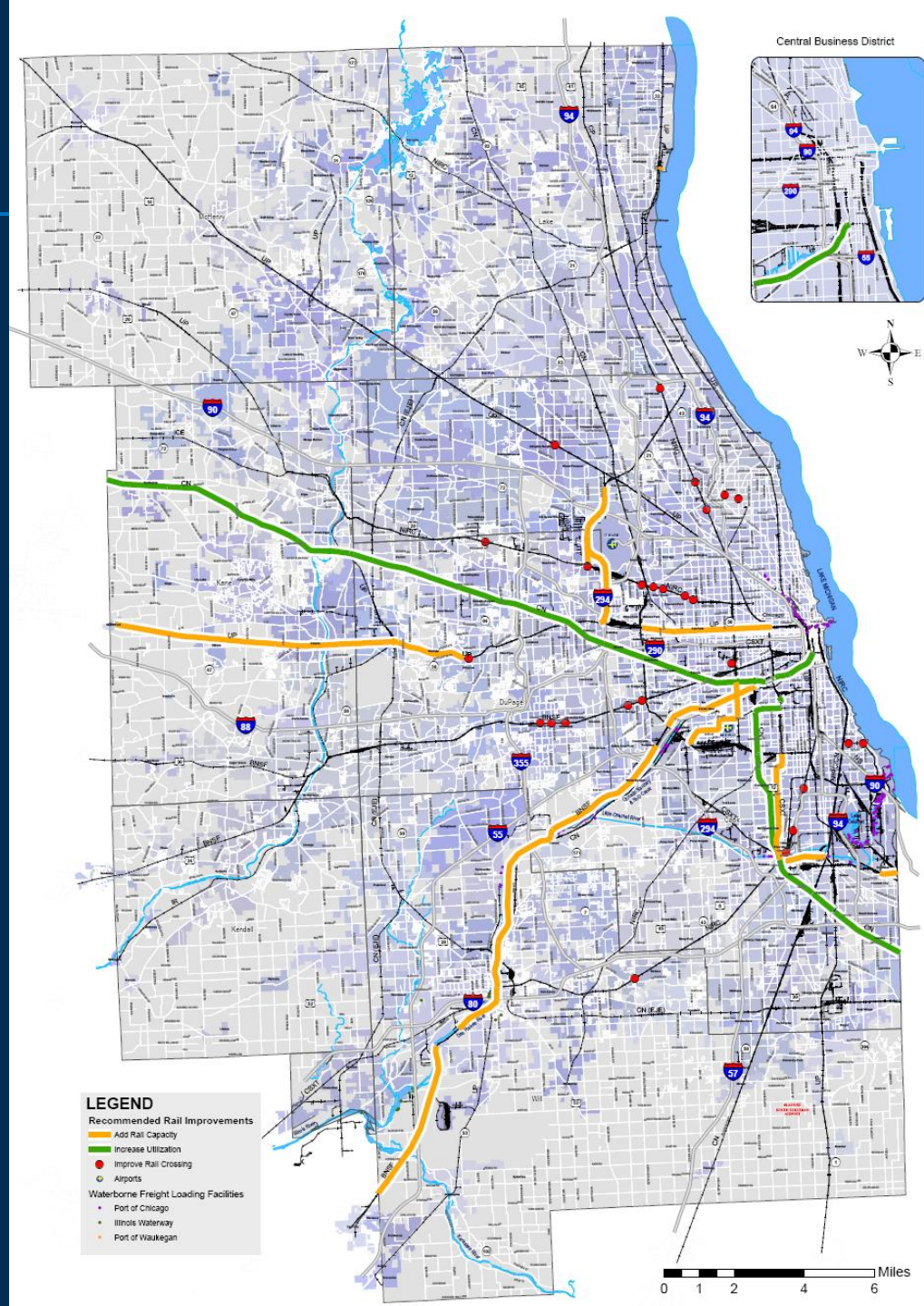
Recommended Infrastructure Projects – All Projects



Recommended Infrastructure Projects - Road



Recommended Infrastructure Projects - Rail



Policy Recommendations

- **Started with 54 Potential Policy Recommendations, bundled by themes, based on data analysis, interviews and best practices:**
 - **Economy**
 - **Industry Logistics Patterns**
 - **Freight Infrastructure**
 - **Commodity / Vehicle Traffic Flows**
 - **Organization and Public Policy**
 - **Environmental and Community Impacts**
- **Developed Performance Measures for evaluating and comparing the Policy Recommendations**
 - **Accessibility**
 - **Economic Development**
 - **Mobility**
 - **Safety**
 - **Environment / Community**
- **Results of this evaluation process yielded a short list of 27 Policy Recommendations**

Examples of Highest Priority Policy Recommendations

- **Identify and promote value added industries and opportunities that could benefit from the region's freight hub status**
- **Establish governance structure, such as a Port Authority, to identify issues, guide investments and advocate on behalf of the region through public outreach and education, promoting the Chicago economy and protecting the public interest**
- **Include freight-related performance measures in project evaluation process to ensure the consideration of freight enhancing projects in the programming process**
- **Establish "CREATE" counterpart for trucking industry which could include policy options such as:**
 - **Develop regional truck route map, including state and local restrictions, clearance issues, parking and rest areas**
 - **Identify potential locations and funding sources for expanded truck parking/rest areas with appropriate amenities to enable compatibility with surrounding land uses**

Policy Recommendations

● Next Steps

- **Prioritize the Policy Recommendations**
 - High, Medium, Low
- **Phase the Policy Recommendations**
 - Short-term: 1-2 years
 - Mid-term: 3-5 years
 - Long-term: > 5 years
- **Assign a Lead Agency to Oversee the Implementation of Each Policy Recommendation**

Breakout Session

imagine that...



Breakout Session

- **Discuss each policy assigned (Groups 1, 2, 3)**
- **Determine timeframe for policy implementation**
 - **Short-term: 1-2 years**
 - **Mid-term: 3-5 years**
 - **Long-term: > 5 years**
- **Discuss the preferred lead agency to oversee policy implementation**
- **Vote! Based on discussion, prioritize each policy**

Next Steps

imagine that...



Next Steps

- **On-going:**
 - **Performance Measurement**
 - **Policy Analysis**
 - **Formalizing Recommendations**
- **Starting Up:**
 - **Travel Demand Modeling**
 - **Economic Analysis**

Freight Committee

Meeting Schedule/Topics

Meeting Date	Topic of Discussion
July 16, 2009	Introduce committee to project with overview of scope, schedule, and outline committee expectations. Present data collection underway.
September 2, 2009	Present update on stakeholder outreach. Discuss freight planning framework themes from Charrette. Discuss work underway on performance measures and policy analysis.
November 16, 2009	Update on Transearch data analysis. Present results-to-date of performance and policy analyses. Short list of project infrastructure and policy recommendations.
December 3, 2009	Provide an overview of the final recommendations for committee comment.

Contacts

- **Project Website**
- **Freight Committee Website**
- **Contact:**
 - Erika Witzke, PE**
 - (312) 665-0236**
 - ewitzke@camsys.com**

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