

ULI Chicago

Infrastructure Initiative

Regional Infrastructure in Northeastern Illinois

Infrastructure's Role in Maintaining Greater Chicago's Competitive Edge

The Chicago metropolitan area of today inherited infrastructure systems that position the region as a globally competitive economic engine. Aging infrastructure, increasing congestion, and projected population increases, however, strain the region's infrastructure and create growing demand for scarce public resources and capital improvement dollars. ULI Chicago's Infrastructure Game Changers process identified and evaluated plans for nine regionally significant infrastructure projects and their associated land use effects to increase connectivity, foster equitable growth, and retain the region's competitive edge.

As the Chicago region grows, its infrastructure must continue to provide a solid foundation for economic prosperity while enhancing the region's quality of life.

The Chicago Metropolitan Area

In addition to the seven counties of northeastern Illinois, the Chicago metropolitan area reaches north into Wisconsin and east into Indiana. Flanked by Lake Michigan on the east and lying on a flat plain, the region has certain unique characteristics that have long attracted streams of residents and economic activity. People were first drawn by the connectivity that the area offered between the Mississippi River and Lake Michigan via local waterways. With the advent of rail, development spread from the lakefront at the mouth of the Chicago River to the new rail corridors. This fingerlike development pattern became more dispersed after World War II, as automobile transportation began to direct land use decisions and dominate infrastructure investment.

The Greater Chicago region has used its central location in North America to position itself as the economic crossroads

of the United States. Boasting a gross regional product of over \$371 billion in 2008, the third largest in the nation, the region is recognized as a global economic center and a national transportation hub. Large volumes of passengers and goods are transported to, from, and within the region on a daily basis over its roads, railways, waterways, and airspace. Approximately one-quarter of the nation's rail freight originates, passes through, or terminates in Chicago, and O'Hare International Airport is the world's fourth-busiest airport. The region also continues to benefit from its proximity to Lake Michigan, one of the largest reservoirs of freshwater in the world. Four of every five Chicago-area residents receive their drinking water from the lake. The region has remained competitive despite the recent recession, ranking sixth in the world for its economic influence in *Foreign Policy's* Global Cities Index 2010.

Northeastern Illinois has grown to an estimated 8.6 million people in 2010 and is expected to add another 2.4 million

residents by 2040. This population increase is comparable to incorporating the population of the Denver metropolitan area into the Greater Chicago region. As the Chicago region grows, its infrastructure must continue to provide a solid foundation for economic prosperity while enhancing the region's quality of life.

Maintaining Chicago's Competitive Edge

With so many people and with such large volumes of goods passing through the region, the Chicago area's infrastructure is some of the nation's most extensive. The region has the second-largest rapid-transit network in the nation and the fourth-busiest highway network. Extensive water delivery systems pump Lake Michigan's water throughout the region.

As complete as this infrastructure network may seem, it is also among the most aged and insufficient networks in the nation. In 2008, the Pew Center on the States gave Illinois a grade of "C-" for infrastructure, among the lowest grades in the nation. The American Society of Civil Engineers concurred, giving Illinois a "D+" grade for infrastructure in 2009. Between the resources required for restoring and

building infrastructure and the projected regional growth lies a staggering funding gap. The Chicago Metropolitan Agency for Planning (CMAP), charged with regional planning for the seven counties of northeastern Illinois, estimates that maintenance and operations of just the *current* transportation system at a "safe and adequate" level will cost \$332.7 billion over the next 30 years—that sum is 95 percent of the \$385 billion projected revenue for the same period.

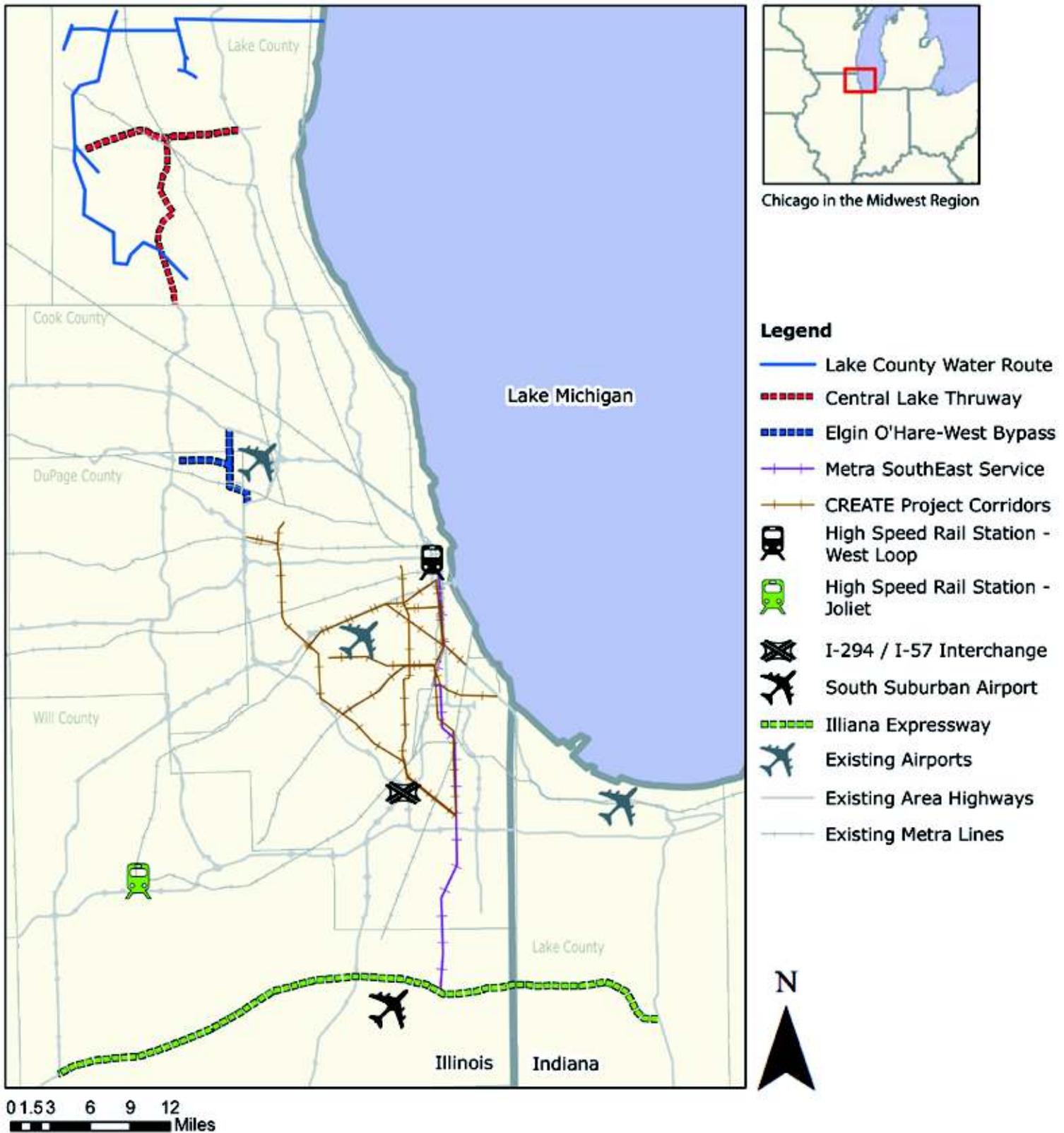
In addition to aging infrastructure, the level of congestion in the regional transportation network threatens the economic competitiveness and viability of the metropolitan area. The Texas Transportation Institute ranked Chicago as the third-most-congested urban area in the country in terms of hours of travel delay, costing the regional economy over \$4.2 billion annually.

Suburban Infrastructure of Regional Significance

This report presents a portfolio of infrastructure projects from the northern, southern, and western areas of the Greater Chicago region, totaling at least \$15.42 billion in regional infrastructure investment. Project summaries,

Project Summaries	
CREATE (Chicago Region Environmental and Transportation Efficiency)	Package of 71 rail improvements to relieve freight-rail congestion with additional benefits to passenger rail
High-Speed-Rail Stations, West Loop and Joliet	Proposed intermodal passenger stations in Chicago's West Loop and Joliet that would accommodate high-speed rail service linking major midwestern cities
Elgin O'Hare West Bypass	Extension of the Elgin O'Hare Expressway that will link to a proposed O'Hare western bypass highway
Lake County Water	Proposed 57 miles of pipe to connect 12 Lake County suburbs to Lake Michigan water
Central Lake Thruway	A nine-mile, four-lane "modern boulevard" bypass on Illinois Route 120, connecting to an extension of Illinois Route 53 north
Metra SouthEast Service	Proposed 33-mile commuter-rail line from LaSalle Street Station to Balmoral Park
I-294/I-57 Interchange	Construction of an interchange where I-294 and I-57 cross without connection
South Suburban Airport	Proposed south suburban airport to complement existing regional airport system
Illiana Expressway	Proposed expressway connecting Illinois's I-57 to Indiana's I-65, to be integrated to existing and proposed intermodal facilities in Will County, Illinois

Infrastructure Projects in Northeastern Illinois



Created by Daniel Miodonski and Jason Saavedra for the Urban Land Institute on September 30, 2010. Projects are still undergoing planning phases and may be subject to change in location and scope. Project locations are approximate. Project icons obtained from Wikimedia Commons. Sources: U.S. Census, City of Chicago, National Weather Service, Indiana Department of Transportation

including land use, assessments of the evaluation criteria, and recommendations for next steps, are available in the project case studies.

With respect to the many infrastructure projects that provide more localized revitalization and development efforts, this study chose to focus on intermodal transportation systems and resource allocation projects of regional significance. These projects have the potential for regional, subregional, and interjurisdictional impact and support the entire region's economic and development future.

In addition to selecting projects with the potential for regional impact, the committee chose to focus largely on projects located outside Chicago's core, in areas that experienced the fastest and most transformative growth in the past decades. Because these suburban locations will continue to absorb a significant portion of the region's expected growth, appropriate infrastructure investment will support the impending 2.4 million people as well as the regional development preference for strategic infill and land use.

structure *investment* and the chance to use infrastructure as a catalyst to support desired land use outcomes.

Coordination with land use occurs on three levels: regional, local, and development site. On the regional level, coordination considers access to jobs, movement of goods, housing, education, and services. On the local level, coordination looks at creating a good fit between the infrastructure project and existing and future land uses nearby. For specific sites, coordination typically takes on issues related to urban design.

Strategic infrastructure projects create opportunities for new development and economic growth. Coordinating with land use is a way to maximize the benefits—and the returns—of infrastructure projects.

ULI Chicago's Infrastructure Game Changers

As part ULI Chicago's study of infrastructure, ULI Chicago developed and tested the Infrastructure Game Changers analysis process. The Infrastructure Game Changers process is a national model for identifying significant infrastructure projects and their associated land use aspects, including catalytic development projects.

Designed to be led by a group situated outside of both government and the direct providers of infrastructure, the process includes

- A holistic approach to how infrastructure fits into a region's long-term sustainability and economic health;
- The incorporation of the private, nonprofit, and public sector perspectives into infrastructure decision making; and
- An emphasis on implementation, through both its focus on planned infrastructure projects and the inclusion of finance and political support in the evaluation criteria.

Analysis Process

Step 1: Select a region, subregion, or district.

Step 2: Scan *planned* infrastructure projects for the selected area. (This step may also include the identification of *existing* infrastructure resources that are underused or that present opportunities.)

Step 3: Evaluate projects according to a variety of criteria. ULI Chicago's Infrastructure Committee chose the following criteria: economic competitive-



Connecting Infrastructure Investment and Land Use Objectives

In the *GO TO 2040* regional plan, CMAP sets targets for infill development as a way to create additional opportunities for compact, mixed-use, walkable development in the Chicago region. Compact development also provides environmental benefits such as protecting open space and promoting energy efficiency. Unless it intentionally aligns regionally significant infrastructure projects to these development preferences, the Chicago region will miss an opportunity to shift from infrastructure *spending* to infra-



ness, opportunity, environmental sustainability, support, and funding and financial feasibility (see definitions below).

Step 4: Draft a working list of significant infrastructure projects and associated land use aspects.

Step 5: Test and build support for the working list through outreach to project partners and relevant communities and stakeholders.

Step 6: Document the final list of significant infrastructure projects and their associated land use aspects.

Evaluation Criteria

Economic competitiveness: the extent to which the proposed project enhances the economic competitiveness of the entire Greater Chicago region (the tristate metropolitan area) by increasing the efficiency, productivity, or attractiveness of the entire region. Examples include significantly reducing freight or passenger travel times, expanding freight capacity, removing significant infrastructure barriers to regional development, or developing significant amenities that boost the attractiveness of the region. Projects considered significant for economic competitiveness have the potential to attract capital investment and jobs to, or to stem the loss from, the Greater Chicago region.

Opportunity: the extent to which the project provides economic or quality-of-life opportunities for the communities or neighborhoods most directly affected by the project or for other underserved populations. Opportunity includes improved access to jobs and education.

Environmental sustainability: the extent to which the proposed project improves the quality of the environment, including but not limited to improving environmental quality by reducing carbon emissions, protecting identified natural areas, promoting the more efficient use of water resources, and reducing water or air pollution.

Support: the extent to which the project has support from elected officials, key agencies, major stakeholders, and perhaps even the general public.

Funding and financial feasibility: the extent to which funding sources have been identified to cover project costs and the potential for the project to attract private sector investment in the form of public/private partnerships.

After ULI Chicago targeted the study of infrastructure outside the region's central core, the Suburban Subcommittee was formed. Using the evaluation criteria and focusing the study toward projects with implications for the Greater Chicago region, the Suburban Subcommittee produced a list of 25 potential projects. At a workshop held June 1–2, 2010, ULI members reviewed the proposed projects and selected nine for additional analysis. After careful research, including interviews with stakeholders and the support of two graduate student interns, the Regional Infrastructure in Northeastern Illinois process was deemed ready for final documentation in fall 2010.

Because these suburban locations will continue to absorb a significant portion of the region's expected growth, appropriate infrastructure investment will support the impending 2.4 million people as well as the regional development preference for strategic infill and land use.

Acknowledgments

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contributions from members of the Suburban Subcommittee and are grateful for the assistance of S.B. Friedman and Company. A list of all participants in ULI Chicago's Infrastructure Initiative Committee is available at <http://Chicago.uli.org>.

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About the ULI Chicago Infrastructure Initiative: ULI Chicago's Infrastructure Initiative is a multiyear effort led by ULI Chicago's Infrastructure Committee. Its goals are to

- Address the relationship between infrastructure and land use;
- Improve regional infrastructure decision-making; and
- Develop national models of best practices.

To date, projects include the development of the Infrastructure Game Changers analysis process, its application to the Lakeshore Industrial Heritage Corridor and Regional Infrastructure in Northeastern Illinois, and investigation of infrastructure finance.

About the ULI/Curtis Regional Infrastructure Project: Supported by ULI trustee James J. Curtis, the ULI/Curtis Regional Infrastructure Project is a three-year initiative launched with the goal of better linking infrastructure, land use, and sustainability at the regional level. The Curtis Project

emphasizes developing leadership and models of best practices. Selected by a competitive process and led by ULI's Infrastructure Initiative, participants include the ULI District Councils in Chicago, Seattle, Florida, and Minnesota.

About ULI: The Urban Land Institute is a 501(c)(3) nonprofit research and education organization supported by its members. ULI provides leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. Founded in 1936, ULI has nearly 30,000 members in 95 countries worldwide, representing the entire spectrum of land use and real estate development disciplines working in private enterprise and public service.

For more information on the Regional Infrastructure in Northeastern Illinois project or other ULI Chicago infrastructure programs, please contact Cindy McSherry, ULI Chicago executive director (Cindy.Mcsherry@uli.org or 773-549-4972), or Christine Kolb, ULI Chicago director of community outreach (Christine.Kolb@uli.org or 773-549-2655).

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