



## MEMORANDUM

**To:** Transportation Committee

**From:** CMAP Staff

**Date:** January 11, 2013

**Re:** Proposed Amendment to GO TO 2040

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The Illinois Department of Transportation (IDOT) has requested that CMAP amend GO TO 2040 to include the proposed [Circle Interchange improvements](#) as a fiscally constrained major capital project. The project is described in more detail in the attached project write-up. While the Circle Interchange improvement includes major reconstruction elements, it also adds highway capacity, and must be included in GO TO 2040 as a major capital project to move forward under federal law. Consistent with how other major capital projects were analyzed prior to GO TO 2040's approval, CMAP is currently evaluating this project against a set of various performance criteria, including consistency with GO TO 2040 adopted policies. CMAP will present the results of this evaluation and a staff recommendation to the CMAP Board and MPO Policy Committee in March of 2013, and at that point those committees will make a decision about whether or not to amend the region's plan to add this project.

In addition, a technical change to the Prairie Parkway description in GO TO 2040 is requested. This change is in response to the region's decision to use the Prairie Parkway earmark funds to improve IL 47 from Caton Farm Road to I-80. With this decision, the earmark funds are no longer available for the bridge over the Fox River.

We will be seeking public comment on the proposed capital plan amendments. The Transportation Committee is asked to release the language below for a 30-day public comment period from January 18, 2013 to Monday, February 18, 2013.

The proposed language recommended for incorporation in the plan for the Circle Interchange and the recommended change to the language for the Prairie Parkway is the following:

### **Circle Interchange**

The Circle Interchange project – I-90/94 at I-290/Congress Parkway in downtown Chicago – will rehabilitate, improve safety and mobility, and address operational and facility deficiencies of the mainline and interchanges. IDOT proposes making several improvements to this interchange, which has not had a major rehabilitation since its initial design in the late 1950s.

IDOT proposes adding one lane each to two ramps – Northbound I-90/94 to westbound I-290 and eastbound I-290 to northbound I-90/94. IDOT will also seek to add one to two lanes to both the northbound and the southbound mainline I-90/94.

### **Prairie Parkway**

This project would create a new expressway between I-88 and I-80 in Kane and Kendall Counties. Phase I engineering for this project has been completed, and federal earmarks to cover a portion of project costs have been received, but funding is insufficient to construct the entire project. However, one element of this project, involving a bridge over the Fox River in Yorkville to connect US 34 and IL 71, has independent utility ~~and can be completed with the earmarks received~~. This project element may be pursued at any time. For the remainder of the project, corridor preservation activities should be continued in order to preserve a transportation corridor in this area for future use.

In addition to changing the language in the plan document, a conformity analysis is required to ensure that the plan meets the requirements of the Clean Air Act. This analysis was conducted as part of the [TIP Amendment](#) that is being requested for release for public comment on January 18, 2013 with consideration by the CMAP Board and MPO Policy Committee in March.

**ACTION REQUESTED:** Release of the proposed plan amendment for public comment

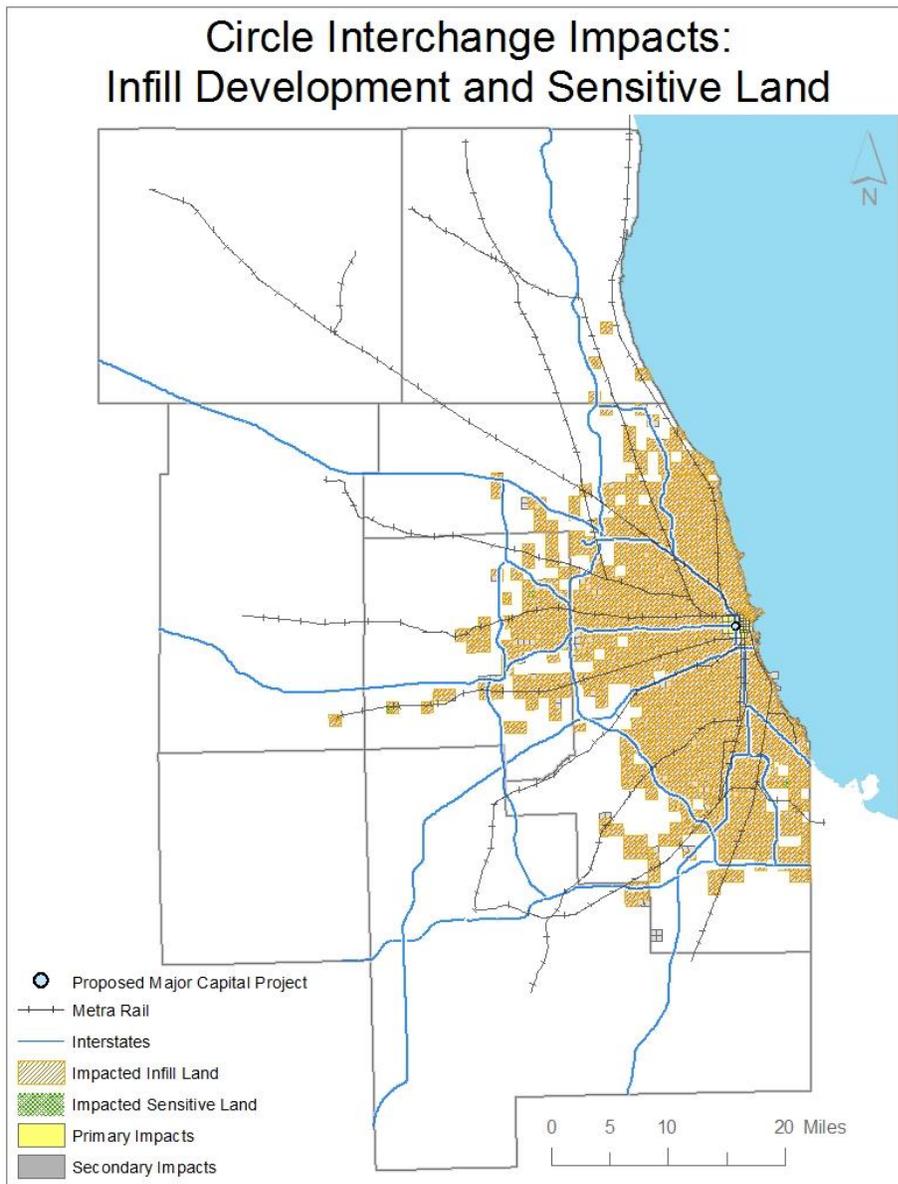
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# Circle Interchange (I-90/94 at I-290/Congress Parkway)

## Project Description

The Circle Interchange – I-90/94 at I-290/Congress Parkway in downtown Chicago – serves as a hub for local, regional, and national freight traffic, connecting the Dan Ryan to the south, the Kennedy Expressway to the north, the Eisenhower Expressway to the west and the Congress Parkway to the east. The purpose of the project is to rehabilitate, improve safety and mobility, and address operational and facility deficiencies of the mainline and interchanges.

## Project Map



*This map shows the proposed capital project and the subzones surrounding it that are likely to experience increased development pressure, and where the project will increase trip numbers. Sensitive land is environmentally sensitive land that is not otherwise protected by federal, state, county, or local government.*

## Project Details and Evaluation Outcomes

The Circle interchange currently performs poorly in terms of Level of Service (LOS), annual hours of delay, congested hours of travel and travel time index. To facilitate improved freight movement and to reduce travel delay and improve reliability, IDOT proposes making several improvements to this interchange, which has not had a major rehabilitation since its initial design in the late 1950s. IDOT proposes adding one lane each to two ramps – Northbound I-90/94 to westbound I-290 and eastbound I-290 to northbound I-90/94. IDOT will also seek to add one to two lanes to both the northbound and the southbound mainline I-90/94.

Evaluation measure	Specific Indicator	GO TO 2040 without the Circle Interchange Project	Outcome (change from GO TO 2040 without the Circle Interchange)
Long-term economic development	Jobs in region	5,924,000	0
	Total income in region	\$412,724,000,000	\$295,000
	Gross Regional Product	\$626,828,000,000	\$436,000
Congestion	Hours of peak-hour delay (on facility)	3,900	-200
	Hours of congestion systemwide	1,482,000	-1,000
Work Trip Commute Time	Average travel time in minutes, auto	35.06	-0.02
	Average travel time in minutes, transit	45.21	-0.01
Mode Share	Total trips, auto	21,903,000	1,000
	Total trips, transit	1,552,000	-1,000
Jobs-housing access	Average number of jobs accessible within 45 minutes by auto	918,000	2,000
	Average number of jobs accessible within 75 minutes by transit	1,224,000	0
Air Quality	Daily emissions of VOC, tons	45.48	-0.05
	Daily emissions of NOX, tons	76.20	-0.29
	Annual emissions of direct PM, tons	1,767	-77
	Annual emissions of NOX, tons	30,017	-123
Energy use	Annual emissions of CO2 equivalents, metric tons	34,148,000	39,000
Natural resource preservation	Number of impacted subzones in unprotected natural areas (for facility)	n/a	3
	...as % of total impacted subzones	n/a	0.1%
Infill and reinvestment	Number of impacted subzones within municipal boundaries (for facility)	n/a	2,195
	...as % of total impacted subzones	n/a	97%
Peak period utilization	One-Way Traffic Volumes (on facility)	13,200	3,300
	Peak Period One-Way Capacity (on facility)	11,400	3,800
Facility condition	CRS score (on facility)	7.6	9.0

Note: These measures were developed to estimate the impact of major expansion projects in GO TO 2040. The Circle Interchange project has a large reconstruction component, so they are less applicable here.

**Cost:** The project cost is currently estimated at \$410 million. IDOT has provided data showing that lower than expected actual costs for the I-80 Add Lanes (US 30 to US 45) and the I-94 Add Lanes North projects, plus a lowered estimated cost for the I-55 Managed Lanes project free up enough funds to achieve fiscal constraint for the plan.

**Connectivity:** The project addresses a significant bottleneck in the region's highway system. According to the American Transportation Research Institute and Federal Highway Administration, the Circle Interchange is the slowest and most heavily congested highway

freight bottleneck in the nation. More than 300,000 vehicles per day travel through the Circle Interchange.

**Safety and security:** Approximately 1,000 crashes occur within the project study area each year. The crash data show that the predominant crash types are rear end and sideswipe crashes. These are consistent with congested traffic conditions and substandard facility geometrics. The project will address these deficiencies through improvements to merges and weaves, longer distances between decision points, and additional capacity. However, no specific analysis has been conducted to estimate the reduction in crashes as a result of the project.

Interstate 90/94 and Interstate 290 are also part of the National Highway System and the Strategic Highway Network (STRAHNET), which is a network of Interstate and other major routes. The STRAHNET designation is given to roads that provide “defense access, continuity, and emergency capabilities for movements of personnel and equipment in both peace and war.” (DOD Web page at <https://www.tea.army.mil/pubs/res/dod/pmd/STRAHNET.htm>)

**Bicycle and pedestrian accommodation:** The local and arterial streets adjacent to and crossing the project site will likely require reconstruction, particularly their bridges. IDOT is currently developing concept geometry for the replacement structures which will consider the City’s bicycle and pedestrian programs. IDOT met with CDOT on November 14, 2012 to review these issues.

**Consistency with subregional plans:** The project is not currently either a constrained or unconstrained major capital project in GO TO 2040. IDOT staff has stated that design of the facility will be forward-looking and consider strategies adopted in GO TO 2040, such as congestion pricing, as well as major capital projects that are part of the constrained projects in GO TO 2040, such as the I-290 Multi-Modal Corridor and West Loop Transportation Center. Planning (Phase I) and Design (Phase II) phases are funded in the IDOT 2013-2018 Multi-Modal Transportation Improvement Program.

## **Project Status**

Phase I engineering is underway; design approval will be sought in the spring of 2013. The two-year planning and design process will identify the final scope of improvements. Since the Circle Interchange is not currently a constrained project in GO TO 2040, its incorporation into the Plan will be required before design approval can be given. IDOT requested that the project be amended into the Plan in a letter to CMAP on October 16, 2012.