



Chicago Metropolitan Agency for Planning

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Chicago, Illinois 60606

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www.cmap.illinois.gov

Regional Coordinating Committee

Annotated Agenda

Wednesday, October 9, 2013

8:00 a.m.

Cook County Conference Room

233 S. Wacker Drive, Suite 800

Chicago, Illinois

- 1.0 Call to Order** 8:00 a.m.
- 2.0 Agenda Changes and Announcements**
- 3.0 Approval of Minutes – June 12, 2013**
ACTION REQUESTED: Approval
- 4.0 Congestion Mitigation and Air Quality (CMAQ) Improvement Program FFY 2014-2018 Proposed Program**
The public comment period on the proposed FFY 2014-2018 CMAQ program has ended. The Transportation Committee has concurred with the staff responses to the comments received and recommends Regional Coordinating Committee and MPO Policy Committee approval of the proposed program. The proposed CMAQ program with an explanatory cover memo is attached. A link to the comments and responses is included in the cover memo.
ACTION REQUESTED: Recommend approval of the FFY 2014-2018 CMAQ Program to the CMAP Board.
- 5.0 Proposed Amendment to GO TO 2040- Illiana Corridor**
On April 10, 2013, CMAP received a formal request from the Illinois Department of Transportation (IDOT) to consider including the proposed Illiana Corridor -- a new tolled expressway project -- as a fiscally constrained major capital project in the GO TO 2040 comprehensive regional plan and also to accelerate its construction. The staff analysis was released for a 32-day public comment period for the proposed amendment that closed on September 3, 2013. The Regional Coordinating Committee will discuss a staff recommendation regarding IDOT's request that GO TO 2040 be amended to include the proposed Illiana Corridor project as a fiscally constrained major capital project. This recommendation will be forwarded to the CMAP Board.

ACTION REQUESTED: At the request of the Illinois Department of Transportation, amend the GO TO 2040 comprehensive regional plan to include the proposed Illiana Corridor as a fiscally constrained major capital project.

STAFF RECOMMENDATION: Do not amend GO TO 2040.

6.0 Semi-annual GO TO 2040/TIP Conformity Analysis & TIP Amendment

The public comment period on the semi-annual GO TO 2040/TIP conformity analysis and TIP amendment ended September 3, 2013. Two comments were received. Responses to these comments were included in the September 20th Transportation Committee packet, and are available there under Semi-Annual GO TO 2040/ TIP Conformity Analysis & TIP Amendment [Public Comment](#). A memo detailing the proposed amendment and the results of the conformity analysis is available.

ACTION REQUESTED: Contingent upon previous action of proposed Plan Amendment.

7.0 GO TO 2040 Financial Plan Update- Scope and Revenue Trends

Staff will present a summary of the major components of the financial plan update process as well as an overview of recent policy changes and actions undertaken by federal, state, and local entities that may affect transportation revenue trends during the planning period.

ACTION REQUESTED: Information

8.0 Other Business

9.0 Public Comment

This is an opportunity for comments from members of the audience. The Chair will recognize non-committee members as appropriate. Non-committee members wishing to address the Committee should so signify by raising their hand in order to be recognized by the Chair. The Chair will have discretion to limit discussion.

10.0 Next Meeting- January 8, 2014

11.0 Adjournment

Committee Members:

___ Elliott Hartstein, chair
___ Frank Beal
___ Pat Carey
___ Roger Claar
___ Sheri Cohen

___ Jack Darin
___ Al Larson
___ Andrew Madigan
___ Allison Milld
___ Ed Paesel

___ Leanne Redden
___ William Rodeghier
___ Rae Rupp Srch



Chicago Metropolitan Agency for Planning

Agenda Item No. 4.0

233 South Wacker Drive
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MEMORANDUM

To: Regional Coordinating Committee

From: CMAP Staff

Date: October 2, 2013

Re: Federal Fiscal Year (FFY) 2014-2018 Congestion Mitigation and Air Quality Improvement (CMAQ) Multi-Year Proposed Program

The CMAQ program provides federal funds to air quality non-attainment areas for transportation projects that mitigate congestion or improve air quality. Northeastern Illinois has been and continues to be an air quality non-attainment area, so the region has received and programmed \$1.7 billion dollars in CMAQ funds since the program began in 1992.

CMAP is completing a call for projects for the CMAQ Program. During this year's cycle, CMAP staff evaluated 121 applications requesting over \$896 million in federal funds. The proposed program commits \$286 million between 2014 and 2018 for 51 projects. There were already projects programmed in those years from prior funding cycles and when combined with this year's cycle the region has a five year program totaling \$582 million in federal funds.

New for this programming cycle, CMAP required that proposals must have substantially completed preliminary (phase I) engineering to be considered for funding. This has resulted in more accurate cost estimates, and will lead to timelier project completion.

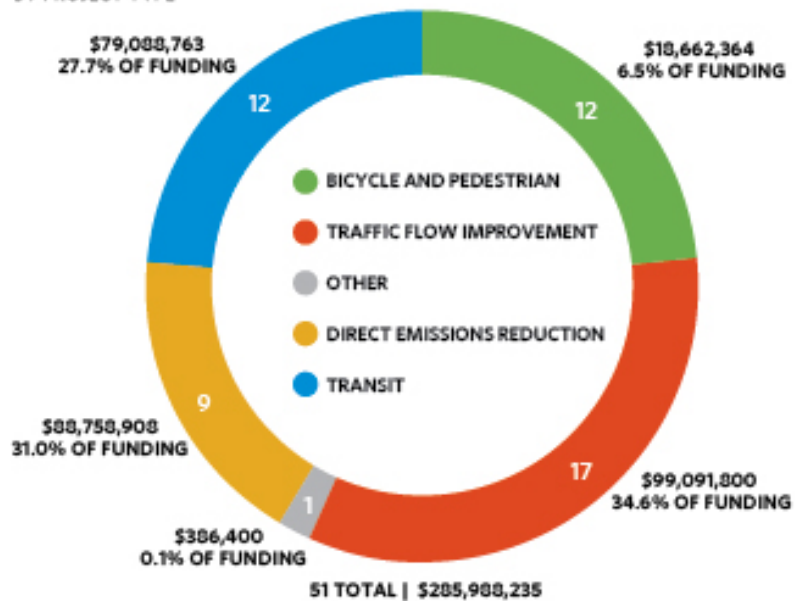
Once again the recommendations of the four Program Focus Groups were used in developing the FFY 2014-2018 proposed program. The focus groups were established in 2011 by the [GO TO 2040 Focused Programming Approach for the CMAQ Program](#). They reviewed project proposals for their ability to help implement action areas from [GO TO 2040](#). The CMAQ Project Selection Committee considered the focus groups' recommendations along with emissions and congestion reduction rankings when developing a list of projects for the proposed program.

The proposed program was released for a public review and comment period from August 2nd to the 26th, 2013. The Transportation Committee has concurred in the staff responses to the public comments (see [Summary of Comments Received and Staff Response](#)) and recommends the attached proposed additions to the FFY 2014-2018 CMAQ Program for your consideration.

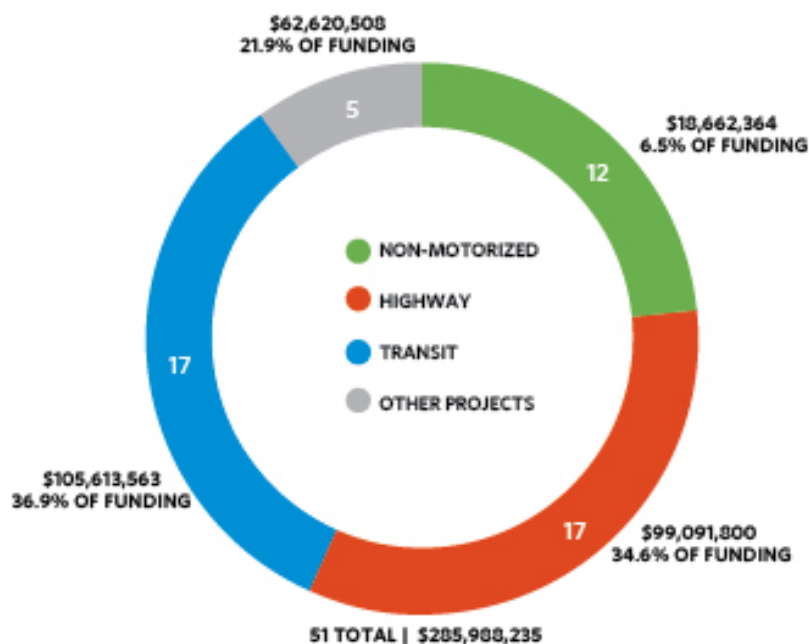
Sponsors of funded projects will attend a mandatory initiation meeting following federal approval of the program. This meeting will explain CMAP's CMAQ program management policies and the process for implementing CMAQ projects, with the aim of ensuring timely project completion.

Summary of CMAQ multi-year program, FY 2014-2018, by number of projects

BY PROJECT TYPE



BY TRANSPORTATION MODE



Source: Chicago Metropolitan Agency for Planning

ACTION REQUESTED: Recommend approval to the CMAP Board and MPO Policy Committee



Chicago Metropolitan Agency for Planning

CMAQ Multi-Year Program for Northeastern Illinois - FY 2014-2018

Proposed Program Recommended by Transportation Committee September 20, 2013

CMAQ ID	Sponsor	Description	GO TO 2040 Program Focus Groups Recommends	\$/Kilogram VOC Eliminated	Daily VOC Eliminated (Kilograms)	Proposed CMAQ Funding
Bicycle Encouragement						
BP01143972	CDOT	Chicago Bike Sharing Program - Expansion and Infill	BPTF	\$10,138	0.34	\$3,000,000
Bicycle Facilities						
BP10144009	Highland Park	Robert McClory Bike Path from Roger Williams Av to Roger Williams Av	BPTF	\$323	0.04	\$87,400
BP07144029	Park Forest	Bicycle Lanes and Way-Finding Signs on Lakewood Blv, Indianwood Blv, Orchard Dr and Blackhawk Dr	BPTF	\$570	0.03	\$108,040
BP04144020	Oak Park	Chicago Av at Lombard Av HAWK Signal	BPTF	\$575	0.03	\$146,000
BP02144001	Evanston	Dodge Av Protected Bike Lane from Church St to Howard St	BPTF	\$931	0.08	\$480,000
BP02143943	Skokie	Main St from Lincoln Av to McCormick Blv	BPTF	\$942	0.06	\$456,000
BP02144040	Skokie	Church St Bike Lane from Linder Av to McCormick Blv	BPTF	\$1,052	0.06	\$472,000
BP01143894	CDOT	Streets for Cycling Chicago - 2016-2017 Series	BPTF	\$1,072	1.94	\$8,000,000
BP02144010	Skokie	Gross Point Rd from Old Orchard Rd to Golf Rd	BPTF	\$2,586	0.03	\$478,000
BP08143961	FPD of DuPage County	West Branch Regional Trail-Winfield Mounds to West DuPage Woods	BPTF	\$3,118	0.09	\$2,050,924
BP06143947	Blue Island	Cal-Sag Trail East-East Blue Island Segment	BPTF	\$3,740	0.09	\$1,521,000
BP06143949	Blue Island	Cal-Sag Trail East-West Blue Island Segment	BPTF	\$3,784	0.10	\$1,863,000
Bottleneck Elimination						
BE03143991	Cook County DOT	Touhy Av and UPRR	RTOC	\$2,132	1.48	\$23,289,000
Commuter Parking						
CP09143969	Aurora	Station Blv Extension to IL 59 Commuter Parking Lot		\$122	1.70	\$1,606,000
Direct Emissions Reduction						
DR13143945	Metra	Purchase Components to Repower F40PH/F40PHM Locomotives	DER	\$38	79.53	\$8,800,000
DR13143938	Metra	Repower F40PHM Locomotives on BNSF Service	DER	\$95	14.47	\$4,000,000
DR13143934	Metra	Install engine/generator set for hotel power	DER	\$220	6.24	\$4,000,000
DR13143925	IEPA	Chicago Area Green Fleet Grant Program	DER	\$296	18.50	\$3,000,000
DR13143957	IEPA	Indiana Harbor Belt Railroad Locomotive Fuel Conversion	DER	\$137	118.68	\$34,258,108
DR07143954	Park Forest	Install CNG Facilities in Park Forest and Homewood; Purchase CNG Refuse Haulers	DER	\$1,969	0.73	\$4,176,000
DR13144027	Pace	Diesel Emission reduction - Regional Pace System	DER	\$5,291	0.07	\$1,612,800
DR01143928	CDOT	Chicago Area Alternative Fuel Deployment Project, Phase 3	DER	\$3,817	27.47	\$20,800,000
TI01143930	CTA	Purchase and Install up to 32 Hybrid Engines on 60' Articulate Buses	DER	\$258,737	0.01	\$8,112,000
Intersection Improvement						
II09143888	Aurora	Eola Rd from 83rd St/Montgomery Rd to 87th St	RTOC	\$1,825	0.64	\$4,080,000
II03143988	Cook County DOT	Elmhurst Rd and Touhy Av/IL 72	RTOC	\$3,105	1.18	\$11,450,000

CMAQ ID	Sponsor	Description	GO TO 2040 Program Focus Groups Recommends	\$/Kilogram VOC Eliminated	Daily VOC Eliminated (Kilograms)	Proposed CMAQ Funding
II11143929	McHenry County DOT	Randall Rd at Algonquin Rd Intersection Improvement and Signal Interconnect	RTOC	\$4,007	1.21	\$10,583,000
II08143884	Burr Ridge	Madison St at 79th St	RTOC	\$4,046	0.13	\$1,964,500
II09144032	Kane County DOT	Longmeadow Pkwy at Randall Rd	RTOC	\$4,247	0.05	\$767,600
II03143900	IDOT	IL 58/Golf Rd at Wolf Rd/State St/Broadway St (Cumberland Circle)	RTOC	\$4,463	0.18	\$2,880,000
II08143970	DuPage County DOT	Elgin-O'Hare/Thorndale Av and I-290 Interchange	RTOC	\$4,591	5.81	\$34,000,000
II10143922	IDOT	IL 120 at Hainesville Rd	RTOC	\$27,488	0.004	\$384,000
Other						
OT09144036	Kane County DOT	CAD Integration to Various PSAPs in Kane County	RTOC	\$772	0.41	\$386,400
Signal Interconnect						
SI08143992	Naperville	Washington St Corridor Centralized Traffic Management System; Washington St from Warrenville Rd to Royce Rd	RTOC	\$181	1.18	\$127,000
SI08143989	Naperville	Washington St from Warrenville Rd to Royce Rd Adaptive Signal Control	RTOC	\$245	1.18	\$102,000
SI09144037	Kane County DOT	Randall Rd Adaptive Signal Control from Huntley Rd to Big Timber Rd	RTOC	\$316	0.71	\$830,700
SI10143942	Lake County DOT	Cedar Lake Rd from Rollins Rd to Hart Rd	RTOC	\$1,120	0.19	\$800,000
SI10143985	Lake County DOT	IL 137/Sheridan Rd from IL 173/21st St to Grand Av	RTOC	\$1,398	0.57	\$2,955,000
SI10143982	Lake County DOT	IL 83 from IL 173 to Millstone Dr	RTOC	\$1,848	0.40	\$1,498,000
SI10143979	Lake County DOT	IL 120/Belvidere Rd from IL 134/Main St to US 45	RTOC	\$1,883	0.26	\$1,837,000
SI10143981	Lake County DOT	IL 43/Waukegan Rd from Casimir Pulaski Dr to Norman Dr South	RTOC	\$5,703	0.07	\$1,544,000
Transit Facility Improvement						
TI13144028	Pace	Pedestrian Infrastructure Improvements along Pace Bus Routes 350, 352, 364, 572, 529, 381, 395, 877, 888	TFG	\$1,138	1.03	\$2,400,000
TI04143927	Maywood	Maywood Train Station Facility		\$2,729	0.08	\$1,222,000
TI09144035	Kane County DOT	Randall Rd Transit Infrastructure Improvements	TFG	\$2,834	0.05	\$1,335,300
TI01143897	CDOT	Union Station Transportation Center	TFG	\$3,422	0.68	\$15,788,000
TI01143899	CDOT	Washington/Wabash Station on Loop Elevated to replace Randolph/Wabash and Madison/Wabash	TFG	\$6,809	0.80	\$39,273,000
TI13143933	RTA	Regionwide Transit Access Improvements	BPTF, TFG	\$7,514	0.03	\$1,928,510
TI01143892	CDOT	State/Lake Reconstruction - CTA Loop Elevated	TFG	\$8,418	0.68	\$4,000,000
Transit Service and Equipment						
TI13143924	Pace	Regional Rideshare Program		\$355	5.89	\$800,000
TI13143911	Pace	Regional Bus on Shoulders, I-55 from Kedzie to Lake Shore Dr	TFG	\$377	1.22	\$935,920
TI10143935	Lake County DOT	Lake Cook/Braeside Shuttle Bug Service	TFG	\$557	0.93	\$212,000
TI13143921	Pace	Milwaukee Av Arterial Rapid Transit Project	TFG	\$15,129	1.59	\$9,588,033
CMAQ Proposed Program Totals:			51 total projects		298.91	\$285,988,235

GO TO 2040 Program Focus Groups

RTOC = Regional Transportation Operations Coalition

DER = Direct Emissions Reduction Focus Group

TFG = Transit Focus Group

BPTF = Bicycle and Pedestrian Task Force



MEMORANDUM

To: Regional Coordinating Committee

From: CMAP Staff

Date: October 2, 2013

Re: Recommendation on Proposed Illiana Corridor

On April 10, 2013, CMAP received a formal request from the Illinois Department of Transportation (IDOT) to consider including the proposed Illiana Corridor -- a new tolled expressway -- as a fiscally constrained major capital project in the GO TO 2040 comprehensive regional plan and also to accelerate its construction. According to federal regulations, the IDOT Tier 2 Environmental Impact Statement (EIS) can only be completed if this proposed new highway facility is first approved as a GO TO 2040 major capital project.

In late July, CMAP staff released its [analysis](#) of the proposed facility, describing the project's status and evaluating it within the context of GO TO 2040 socioeconomic forecasts. That document also includes numerous links to IDOT and CMAP technical documentation. The Transportation Committee released it for public comment from August 2 to September 3. For the CMAP Board's September 11 meeting, public comments were summarized in a staff [memo](#), which includes categorized links to the comments themselves. Of the 965 public comments, 169 supported the proposed amendment and 796 opposed it. Those numbers do not include two petitions submitted in opposition, with more than 3,700 total signatures.

The CMAP Board and MPO Policy Committee will consider this amendment to the region's plan at their meetings on, respectively, October 9 and 17. CMAP's Transportation Committee (October 4) and the Regional Coordinating Committee (October 9) will also consider this plan amendment at their upcoming meetings. Because the Regional Coordinating Committee membership includes the co-chairs of CMAP's six working committees, CMAP staff has previously presented its analysis at the working committee meetings since July, which IDOT staff also attended to field questions.

GO TO 2040 Context

This document assesses whether the proposed Illiana Corridor is compatible with our region's policy-based goals as established in its GO TO 2040 comprehensive plan. Just under three years ago, the plan was approved unanimously by the CMAP Board and MPO Policy Committee after

extensive technical analysis, public outreach, and close deliberation between these and other committees, partners, and stakeholders.

The first of three recommendations in GO TO 2040's chapter on Regional Mobility is to "Invest Strategically in Transportation." This section of the plan guides the process to which our region has committed itself when considering proposed major transportation capital investments. It emphasizes maintenance and modernization of our existing system, performance-based funding, changes to public policy, and innovative strategies (including financing, pricing, and travel demand management) to improve mobility and increase transportation resources for metropolitan Chicago. The plan states that achieving a "world-class transportation system" requires improving, modernizing, and increasing service on existing assets, rather than building expensive new projects that may be difficult to finance, operate, and maintain over the long term.

GO TO 2040's Livable Communities chapter is also predicated on reinvestment in existing assets. It describes the problems created by several decades' development trends, most notably the outward expansion that has consumed vast amounts of land and requires considerable investments in water, wastewater, and transportation infrastructure. The Livable Communities chapter promotes development in existing communities that already have the infrastructure to support it.

Summary of the CMAP Staff Recommendation

The Illiana Corridor proposal is broadly incompatible with the overall goals and recommendations of GO TO 2040. Staff recommends that it not be added to the plan at this time.

While the GO TO 2040 plan acknowledges that some new transportation capacity is needed in northeastern Illinois, it strongly emphasizes that major capital projects require careful prioritization due to our region's widespread congestion problems, unsustainable historical growth patterns, and fiscal hardships plaguing the State of Illinois. Through the GO TO 2040 process, the region established a realistic set of high-priority transportation investments based on clear strategies for improving mobility, accessibility, and overall economic prosperity across the region. Inclusion of the Illiana Corridor on GO TO 2040's list of fiscally constrained projects would be inconsistent with the region's commitment to its own clearly established priorities.

For two reasons, the Illiana Corridor was not included as a priority project when GO TO 2040 was adopted. First, the plan noted that Illiana financing was uncertain. Second, the benefits and costs could not be estimated because IDOT had not chosen an alignment for the project's location prior to CMAP's adoption of the comprehensive regional plan.

Both these concerns are still quite real and must be addressed when considering whether the Illiana Corridor is now to be added as a GO TO 2040 priority project. Yet public information about the project's funding has not improved substantially since GO TO 2040's adoption, so its financing remains uncertain. And although a project alignment has now been selected, its

location in a rural area far from existing development would severely limit the facility's benefits.

This document emphasizes four specific issues that should be of particular concern to the CMAP Board and MPO Policy Committee as they consider whether to approve the proposed amendment as consistent with the GO TO 2040 plan:

- 1) **Financial Risk.** The proposed facility's estimated cost and potential financing structure expose the State of Illinois to extensive financial risk. The information provided to justify the project's financial viability has been incomplete and largely anecdotal.
- 2) **Contradictory Growth Assumptions.** To estimate performance of the facility, IDOT has used growth projections that are not consistent with GO TO 2040 forecasts, which are based on the need to direct investment toward existing communities. The IDOT forecasts essentially show what is likely to result if GO TO 2040 is not implemented, with negative impacts on livability, mobility, and natural resources.
- 3) **Unsubstantiated Economic Development Potential.** The proposed facility's ability to spur or support economic growth remains unclear because existing nearby development is minimal. The selected corridor alignment is not located near the existing residential and commercial centers to the north that are necessary for sustained job creation and economic development.
- 4) **Limited Benefits to Regional Mobility.** The proposed Illiana Corridor achieves negligible impacts on regional transportation performance, making it a lower priority than the planned GO TO 2040 investments that do address the region's congestion challenges.

The balance of this document will detail each of these four issues in turn.

Financial Risk

The proposed Illiana's estimated cost and potential financing structure expose the State of Illinois to considerable financial risk. In brief, the cost currently estimated by IDOT falls short of other comparable projects built recently both regionally and nationwide. Additionally, the information provided to justify the project's financial viability has been incomplete and largely anecdotal, with insufficient details available to reasonably include the project on the GO TO 2040 list of fiscally constrained projects. CMAP's planning-level analysis of the proposed facility's potential traffic volumes and hypothetical financing scenarios indicates the likely need for a significant public contribution -- from \$440 million to potentially over \$1 billion, depending on overall project cost and revenues -- to make the Illiana Corridor financially feasible for a public-private partnership (P3).

GO TO 2040 and Public-Private Partnerships

CMAP supports the appropriate use of P3s. GO TO 2040 recommended that broad authority be given to IDOT and the Tollway to enter into these agreements, but the plan also stated that these arrangements must be handled with a high degree of transparency and care. Among various P3 strategies, each has its pros and cons, and some can be extremely complicated and costly to enact. While the Illiana Corridor may benefit from the cost-saving aspects of P3s, the risk of projected traffic not materializing is significant. P3 bids will incorporate this risk by requiring public funds to fill revenue shortfalls.

National experience regarding P3s has been mixed. Toll road P3s predicated on growth in rural and exurban areas face particular difficulty in meeting traffic and revenue expectations. A number of new, exurban toll facilities in the U.S. have not generated the projected demand and therefore cannot meet debt service payments. Some of this struggle is related to the nation's slow recovery from the economic recession, but older projects have also experienced revenue difficulties that predate the recession.¹

Most fundamentally, there is no "free money." Private loans must be repaid, and private partners will require a reasonable rate of return for their investors.² To achieve these objectives, private partners will require a project of this type to generate a reasonable cash flow through tolling or public subsidy. Traffic levels must be projected conservatively many years into the future, and the financial underpinning of a project is based on these projections.

Project Cost

In the [July 2013 staff analysis](#) of the Illiana Corridor that was released for public comment, staff observed that the estimated cost of the proposed facility was low compared to other regional and national projects. This observation still stands. IDOT has published an estimated project cost of **\$1.25 billion**, of which the Illinois share would be **\$950 million**.³ According to the Tier 1 Record of Decision, the estimate includes costs for construction, utility relocations, right of way,⁴ mitigation, and engineering.⁵

IDOT has also recently provided revised cost estimates for three of the seven original interchanges and added two potential interchanges. Analysis of the alternatives recommended to be carried forward indicates a total cost increase of approximately \$70 million for these

¹ See related articles for the [San Joaquin Hills Toll Road](#), the [Dulles Greenway](#), the [Camino Colombia](#), and the [Southern Connector](#). Also, CMAP published a [policy update on toll road P3s](#) in March 2012.

² Analysis of other Toll P3 projects indicates that private toll operators expect to earn internal rates of return (IRR) as high as 11 to 12 percent before sharing profits with public entities. IRR is a private toll operator's expected return on their initial equity investment over the life of a project.

³ IDOT's presentation to the CMAP Transportation Committee on June 7, 2013, shows these cost estimates in terms of "year of expenditure" for the facility.

⁴ Land acquisition is currently included in the northeastern Illinois [FY 13-16 Transportation Improvement Program \(TIP\)](#) at \$10 million. A TIP change for an additional \$70 million in land acquisition has been submitted and will be considered for approval in October 2013.

⁵ Tier 1 Final Environmental Impact Statement, p. 4-18 (http://www.illianacorridor.org/pdfs/feis/section_04.pdf).

elements alone.⁶ Refinements to the Tier 1 design have also increased the local road crossings kept open from 19 to 26. Finally, the refined environmental impact analyses identified additional floodplain, wetland, park, residence, and farm impacts above those initially estimated in Tier 1. All of these items will add to the project cost.

CMAAP's analysis showed that Illiana's per-lane mile cost in 2020 dollars would be \$8.1 million, compared to the recently constructed I-355 extension (\$18.9 million), the planned IL 53/IL 120 extension in Lake County (\$25.3 million), and other similar national projects (from \$12.9 million to \$37.1 million.) IDOT also provided CMAAP with costs for two recent facilities in Illinois and Indiana. The Illinois facility is a recently let 6.5-mile section of the US 67 Corridor, and the Indiana example is the 26-mile "Section 3" of I-69 in Greene and Daviess counties. CMAAP has reviewed both these projects, and neither provides a strong comparison to the Illiana. The referenced section of US 67 is only partially limited access, with one interchange and several at-grade intersections.⁷ Section 3 of I-69 in Indiana contains just 1.5 interchanges in 26 miles.⁸

Potential Private Financing Methods

IDOT and the Indiana Department of Transportation (INDOT) have begun to pursue a P3 for construction, operation, and maintenance of the Illiana Corridor. In public forums, IDOT officials have stated that two potential P3 models are under consideration. The first would be a more traditional full-concession model in which a private partner would design, construct, operate, and maintain the facility and be repaid through toll revenues. The second is an "availability payment" model, in which the public sector would pay a private concessionaire an agreed-upon sum (usually this is done via an annual outlay) over the period of a contract as compensation for design, construction, operations, and maintenance work.

Given the low projected traffic and the inherently higher risk associated with exurban toll facilities, P3 bidders will likely propose an availability payment model that puts taxpayers at risk to pay revenue shortfalls. Because the local road network is minimally congested, CMAAP analysis indicates that tolls would divert approximately 40 percent of potential users from the facility. The presence of minimally congested alternative routes introduces significant risk into the tolling scenario and potentially increases risk to the public sector. In a P3 process, the methods and assumptions for estimating facility traffic, revenues, and costs must be transparent and conservative in order to best protect the public interest, particularly in an availability payment scenario.

Beyond these broad outlines of the desired P3 structures, CMAAP has had access to little of the information necessary to fully analyze the facility's potential cost, financing plan, and resulting public costs. In its [August 2013 Illiana Fact Sheet](#), IDOT states that the Illiana "will generate sufficient toll revenue over the period to 2053 to repay the initial cost of the project AND the

⁶ CMAAP analysis of [Appendix G](#) of the Tier 1 EIS and Appendix C of the Tier 2 [Alternatives to be Carried Forward Technical Memorandum](#).

⁷ CMAAP review of the US 67 [letting](#) and [engineering plans](#).

⁸ More information on the I-69 project is available on the [project website](#), as is a map of [Section 3](#).

operation and maintenance costs of the facility for the term of the agreement.”⁹ IDOT has indicated that further information on the proposed P3 structure, tolling analyses, revised project cost estimates, operations and maintenance cost estimates, and financing analyses completed to date are not available at this time due to the confidentiality required for the P3 solicitation process. IDOT has noted that financial information will be provided to CMAP as it becomes publicly available.

Financial Analysis

In lieu of information from IDOT regarding the public cost of the Illiana under a P3 financing scenario, staff analyzed the potential revenue gap if the Illiana Corridor were built, financed, and operated by a private firm. What follows is a planning-level (not an investment-grade) analysis intended to provide more information and context to the discussion regarding potential public costs of the facility. CMAP staff analysis indicates a potential project gap (or required public subsidy) of between \$440 million and \$1.1 billion over the life of the facility across a range of private funding scenarios.

Similar to IDOT’s stated methodology, CMAP staff first determined what toll rates would maximize annual revenue on the facility based on how drivers value travel time savings.¹⁰ Both CMAP and IDOT analyses converged on approximately 20,000 to 25,000 vehicles per day under an optimized tolled scenario. An optimized scenario is the toll rate that maximizes revenue without diverting so many users from the facility that projected annual revenues fall. The CMAP optimized toll rate in 2018 is \$0.16 per mile for autos and \$0.36 per mile for trucks (in 2013 dollars). Toll rates are assumed to increase at an average of 2 percent per year to reflect inflation.

The analysis assumes utilization of a mix of private equity, private loans, and federal tools like private activity bonds (PAB) and TIFIA loans, both of which lower the cost of borrowing. It also accounts for initial construction costs, financing costs, and private sector return requirements. It assumes normal operations and maintenance costs, a range of typical interest rates, a mix of debt and equity similar to other recently-completed P3 toll projects, and a range of project costs and annual toll revenues.¹¹

⁹ See <http://www.illianacorridor.org/pdfs/illianakeyissuesfactsheet.pdf>.

¹⁰ For more on IDOT methodology, see page 18 of Tier 2 [Alternatives to be Carried Forward Technical Memorandum](#).

¹¹ The estimated Illinois portion of project costs was \$1.4 billion, \$1.1 billion, and \$950 million for the pessimistic, moderate, and optimistic scenarios. Tolling proceeds ranged from 80 percent to 120 percent of the forecasted optimized toll rates and revenues. Interest rates reflected average rates and spreads on similar toll PABs, current and three-year high TIFIA rates, and market interest rates. The optimistic scenario received the highest proportion of PAB and TIFIA funds, the moderate received 32 percent, and the pessimistic received 20 percent. Private equity ranged from 20 percent to 25 percent of project costs. Operations, maintenance, and capital improvement costs and schedules reflected those provided by IDOT for the update of the GO TO 2040 fiscal constraint and information specific to the Illiana in Tier 1 and Tier 2 documents.

Table 1. Project funding gap assuming private funding scenarios, 2018 dollars

	<i>Pessimistic Scenario</i>	<i>Moderate Scenario</i>	<i>Optimistic Scenario</i>
35-Year P3	-\$1,100 M	-\$710 M	-\$440 M

Source: Chicago Metropolitan Agency for Planning analysis. The estimated Illinois portion of project costs was \$1.4 billion, \$1.1 billion, and \$950 million for the pessimistic, moderate, and optimistic scenarios.

This analysis indicates that, over a 35-year timespan, the Illiana Corridor is unable to repay its initial debt, pay for annual operations and maintenance, finance required periodic capital maintenance expenditures, and meet private-sector return on investment requirements without public subsidy. The analysis above contemplates an up-front public contribution via a bond or grant, but this subsidy could also be made in the form of an annual availability payment. While optimistic scenarios include higher-than anticipated toll revenues, on-target construction and maintenance costs, and higher proportions of low-cost debt, some amount of public subsidy could still be required.

To date, IDOT has not publicly released any of the specific information about costs, revenues, or the specific structure of any potential agreements to enable a finer grained analysis of how the Illiana Corridor will be financed or how the nature of the proposed P3 would protect the public interest. CMAP's high-level analysis indicates the potential for significant public costs, which must be better understood before the project can be added to the fiscally constrained list of major capital projects. To date, insufficient information has been made available to indicate whether projections are reasonable and to what extent public subsidy will be required.

Contradictory Growth Assumptions

The growth projections underlying IDOT expectations of the facility's future performance represent a wholesale departure from GO TO 2040's policy of directing investment toward existing communities and thus establish an entirely new and different planning policy from what the CMAP Board and MPO Policy Committee approved in GO TO 2040. The GO TO 2040 forecasts were developed to ensure that transportation projects support specific regional goals. To the contrary, IDOT's forecasts essentially show what is likely to happen if GO TO 2040 is not implemented. CMAP's staff [analysis](#) from July summarizes differences between the two forecasts.¹²

GO TO 2040 focuses most infrastructure investment in and near existing communities, while recommending that growth in undeveloped areas be carefully targeted. In so doing, the plan directs resources toward solving the problems we have now -- such as linking people and jobs

¹² See [CMAP's Forecast Principles](#), which provide direction for forecast developers, users, and policy makers in using and interpreting the GO TO 2040 preferred scenario data.

while reducing congestion -- and avoiding the new problems created by outward metropolitan expansion. Over the long run, this approach lessens the need to expand infrastructure at the edge of the region, protects natural resources, and limits fiscal impacts to local governments. Because of this focused investment, existing communities become more attractive places to live and work. National and regional research shows that compact development patterns can significantly reduce the cost of local roads and other infrastructure, with the cost savings accruing to local governments and developers.¹³

CMAP's forecasts are a direct outcome of implementing the policies recommended in GO TO 2040. By contrast, IDOT's forecasts are an extrapolation of past suburban growth patterns, without recognition of current constraints posed by changing demographic preferences with regard to housing and commute choices, increasing fuel prices, and decreasing growth trends for vehicle miles traveled (VMT). The differences between the forecasts are significant, with more than twice as much of the region's population growth occurring outside existing communities under the IDOT forecasts.

Table 2. Build and no-build population forecasts by county

<i>County</i>	<i>Base, 2010</i>	<i>CMAP No-Build, 2040</i>	<i>CMAP Build, 2040</i>	<i>IDOT No-Build, 2040</i>	<i>IDOT Build, 2040</i>
Cook	5,148,673	6,239,232	6,240,455	5,774,388	5,770,755
DuPage	910,884	1,160,418	1,160,484	1,022,251	1,021,742
Kane	511,885	804,325	804,472	953,533	949,746
Kendall	114,574	207,802	207,812	262,442	261,379
Lake	698,616	971,048	971,084	941,616	940,042
McHenry	307,454	527,773	527,841	692,208	690,522
Will	671,260	1,217,973	1,223,571	1,366,659	1,371,468
Total	8,363,344	11,128,570	11,135,719	11,013,097	11,005,653

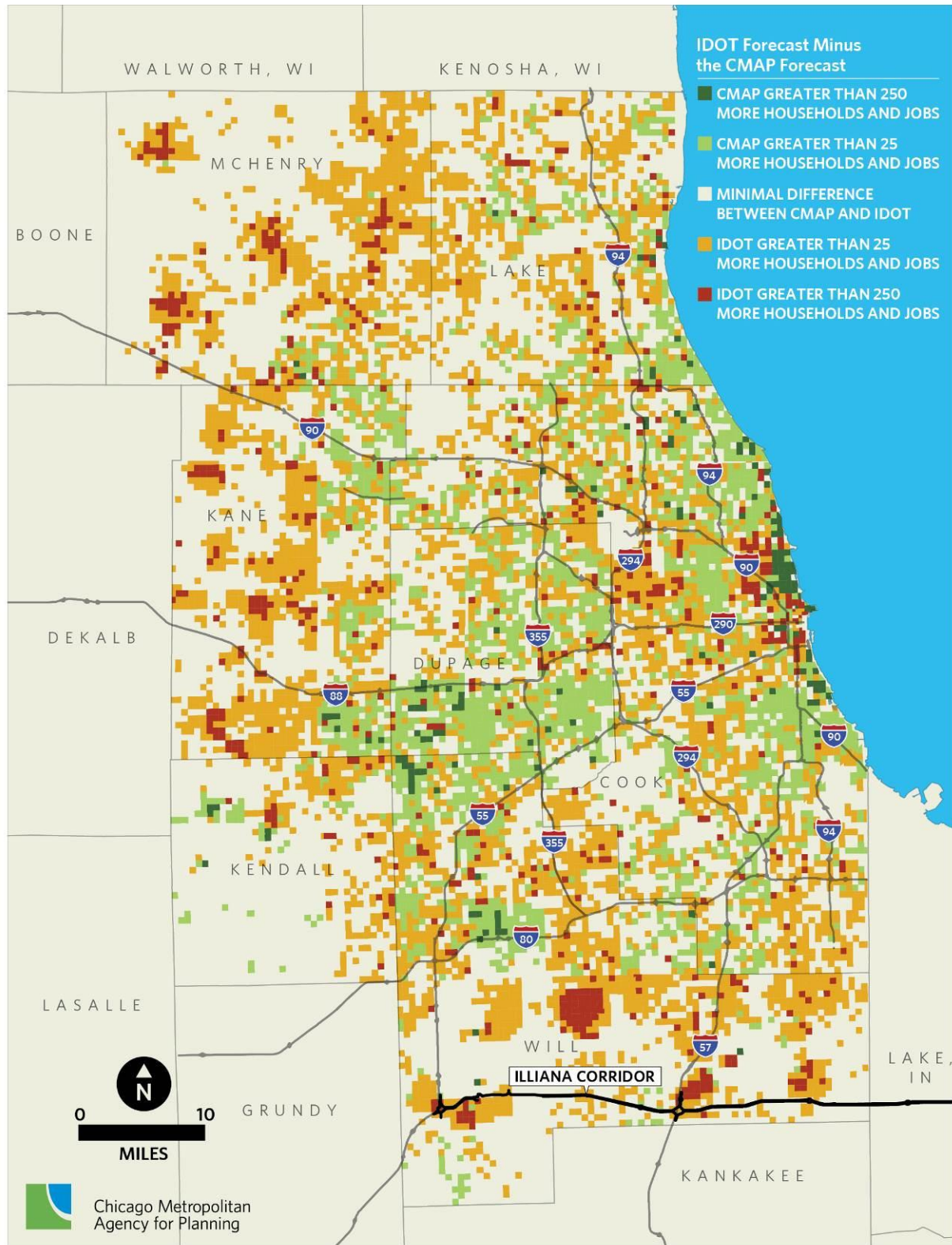
Source: Chicago Metropolitan Agency for Planning analysis.

To be clear, Table 2 shows that GO TO 2040 envisions considerable growth in Will County as a whole. In fact, it is projected to grow more on a percentage basis than any other county in the CMAP region between now and 2040. The difference is that in GO TO 2040 more of this growth occurs in and near existing communities in Will County rather than the rural southern part. As shown in the following map, less than a quarter of the population growth in Will County is projected to occur in the southern portion under GO TO 2040, whereas IDOT's forecasts have

¹³ For examples, see Mark Muro and Robert Puentes, "Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns," Brookings Institute Center on Urban and Metropolitan Policy, 2004.; Burchell et al., "Costs of Sprawl — Revisited," Transportation Research Board (National Academy Press, 1998) or Burchell et al., "Costs of Sprawl 2000," TCRP Report 39.

about half the growth occurring there. The Illiana is planned to serve a travel market that will be much smaller if the region is committed to the implementation of GO TO 2040.

Comparison of CMAP and IDOT Illiana build forecasts of households and jobs, 2040



Source: Chicago Metropolitan Agency for Planning analysis.

Focused investment in existing communities improves regional transportation system performance while also decreasing the environmental impact of regional growth. Table 3 summarizes the indicators already discussed in the [staff analysis](#). Overall automobile travel, as measured by VMT and vehicle hours traveled, would be lower with the development GO TO 2040 envisions than with the pattern of growth assumed by IDOT. The percentage of that travel under congested conditions would be lower as well, including truck traffic.

CMAQ's analysis also suggests that the more compact GO TO 2040 growth pattern would have less effect on natural resources in the study area when compared to the IDOT forecasts' pattern. Under the IDOT forecasts, 70 percent more impervious surface would be added in the Illiana study area, and significantly affected watersheds would total nine more than in GO TO 2040. Similarly, potential impact on important regional natural resources identified by Chicago Wilderness in its Green Infrastructure Vision is almost double under the IDOT forecasts. Greenhouse gas emissions from the transportation sector and water use in the study area are also significantly higher than in GO TO 2040.

Table 3. Changes in regional indicators identified in GO TO 2040

Indicator	<i>CMAQ 2010 Base</i>	<i>CMAQ No-Build</i>	<i>IDOT No-Build</i>
Vehicle Miles Traveled (in thousands)	153,355	211,401	226,017
% Congested	5%	9%	14%
Vehicle Hours Traveled (in thousands)	4,528	6,632	7,252
% Congested	10%	20%	27%
Heavy Truck Vehicle Miles Traveled (in thousands)	24,040	37,547	40,284
% Congested	9%	12%	19%
Heavy Truck Vehicle Hours Traveled (in thousands)	222	425	440
% Congested	16%	29%	36%
Total Impervious Acres in Illiana Study Area	15,832	39,613	67,729
Number of Watersheds >10% Impervious	9	14	23
Households in Green Infrastructure Vision Area in Illiana Study Area	4,924	5,767	11,108
Water Use in Illiana Study Area (millions of gallons/day)	10.7	22.2	42
Annual CO₂ Emissions from Transportation Sector (million metric tons / year)	33.2	33.9	37.4

On these indicators, the impacts are mostly due to assumed regional growth in the no-build scenario, not to the Illiana, which is why only the no-build scenario is shown in Table 3. However, the expressway itself would also have environmental impacts. The Tier 1 EIS surveys these impacts at a high level, while the Tier 2 EIS will examine them in more detail.

The numerous impacts described by environmental groups in the public comment period are concerning. The proximity of the Midewin National Tallgrass Prairie creates the potential for

injury to wildlife and degradation of a unique landscape. Noise and traffic impacts are possible at the nearby Abraham Lincoln National Cemetery, and the conflicts between funerals and trucks on IL 53 are already an ongoing issue. Beyond this, environmental groups have noted the potential for impacts to several high-quality water resources, including the Kankakee River, Forked Creek, and others. A large proportion of the public comments CMAP received in opposition to amending GO TO 2040 to include the Illiana cited the potential for environmental damage.

To summarize, the Illiana does not support reinvestment within existing communities, and its traffic forecasts are predicated on growth patterns that contradict the GO TO 2040 forecasts. The proposed alignment for the Illiana is located 10 miles south of the urbanized area in a currently rural portion of Will County. IDOT forecasts significant development and congestion in southern Will County in 2040, but these forecasts represent a planning policy inconsistent with what the CMAP Board and MPO Policy Committee approved in GO TO 2040. If the region is committed to implementing GO TO 2040, then travel needs will be very different from what IDOT forecasts because the location and type of growth will be different. The Illiana is being planned for a future out of step with GO TO 2040.

Unsubstantiated Economic Development Potential

The proposed facility's potential to spur or support economic growth in this part of the region remains unclear given the minimal amount of adjacent development and the considerable distance between the selected corridor and the household and job centers to the north. The proposed Illiana alignment is located about 10 miles south of the bulk of the region's supporting businesses, labor pool, and transit networks that serve commuters. While GO TO 2040 anticipates considerable future employment growth in Will County, this growth is likely to be more intensive in the north rather than near this proposed corridor. The proposed Illiana Corridor would be a misplaced investment and a missed opportunity to catalyze and nurture the broad range of economic activities that are so vital to the region's future prosperity.

Future Employment

Regardless of where they occur, infrastructure projects are typically associated with short-term job creation, and IDOT predicts the Illiana Corridor will support 9,000 construction jobs.¹⁴ But beyond short-term employment, this project does not have the potential to spur or support the significant long-term economic development that results from congestion mitigation and access to new markets.

Will County has grown significantly over the last several decades. GO TO 2040 assumes a continuation of this trend with employment increasing nearly 140 percent and population increasing more than 80 percent between 2010 and 2040. As stated above, CMAP's projections show growth in the county's population centers far to the north of the facility rather than adjacent to the corridor. In terms of the proposed facility's direct impact on long-term jobs,

¹⁴ See IDOT Illiana Corridor proposed amendment at <http://cmap.is/1b6DkTx>.

CMAP estimates a modest net regional employment gain of 3,800 in northeastern Illinois for the year 2040, compared to a no-build forecast. Due to the location of the Illiana Corridor, approximately three-quarters of this gain would accrue to Will County. On the other hand, IDOT estimates a net job loss to the region of nearly 9,000 jobs, though it assumes a net job gain outside the region, in Kankakee and Grundy counties and northwestern Indiana.¹⁵

Regional Freight and Logistics Activity

Freight is a critical industry in metropolitan Chicago. The overall regional freight cluster (which includes customer and support industries) comprises 4 percent of the region's private sector employment, and over a quarter of all the region's jobs are in industries directly tied to freight.¹⁶ The CMAP [freight cluster drill-down report](#), released in June 2012, summarizes a number of challenges and opportunities faced by the cluster across the areas of infrastructure, innovation, and workforce. That report recommends targeted investments in infrastructure, workforce, and economic development to bolster this regional competitive advantage.

The growing intermodal base in Will County represents a relatively small component of this large and thriving regional industry cluster. The most recent available data show that metropolitan Chicago had an estimated 6.8 million intermodal lifts in 2011. The two intermodal facilities in Will County (BNSF's Logistics Park in Elwood and UP's Joliet Intermodal) contributed 1.2 million lifts, or 17.7 percent of all lifts in metropolitan Chicago.¹⁷ In other words, 82 percent of all lifts occurred outside of Will County, so while Will County is an important node, it is not the dominant portion of the freight system.¹⁸

The following map depicts freight cluster employment by zip code in the CMAP region. While northern and western Will County have a moderate concentration of freight employment, freight employment and facilities remain most concentrated in other areas of the region, particularly central Cook, south Cook, and the O'Hare area, including northeastern DuPage County.

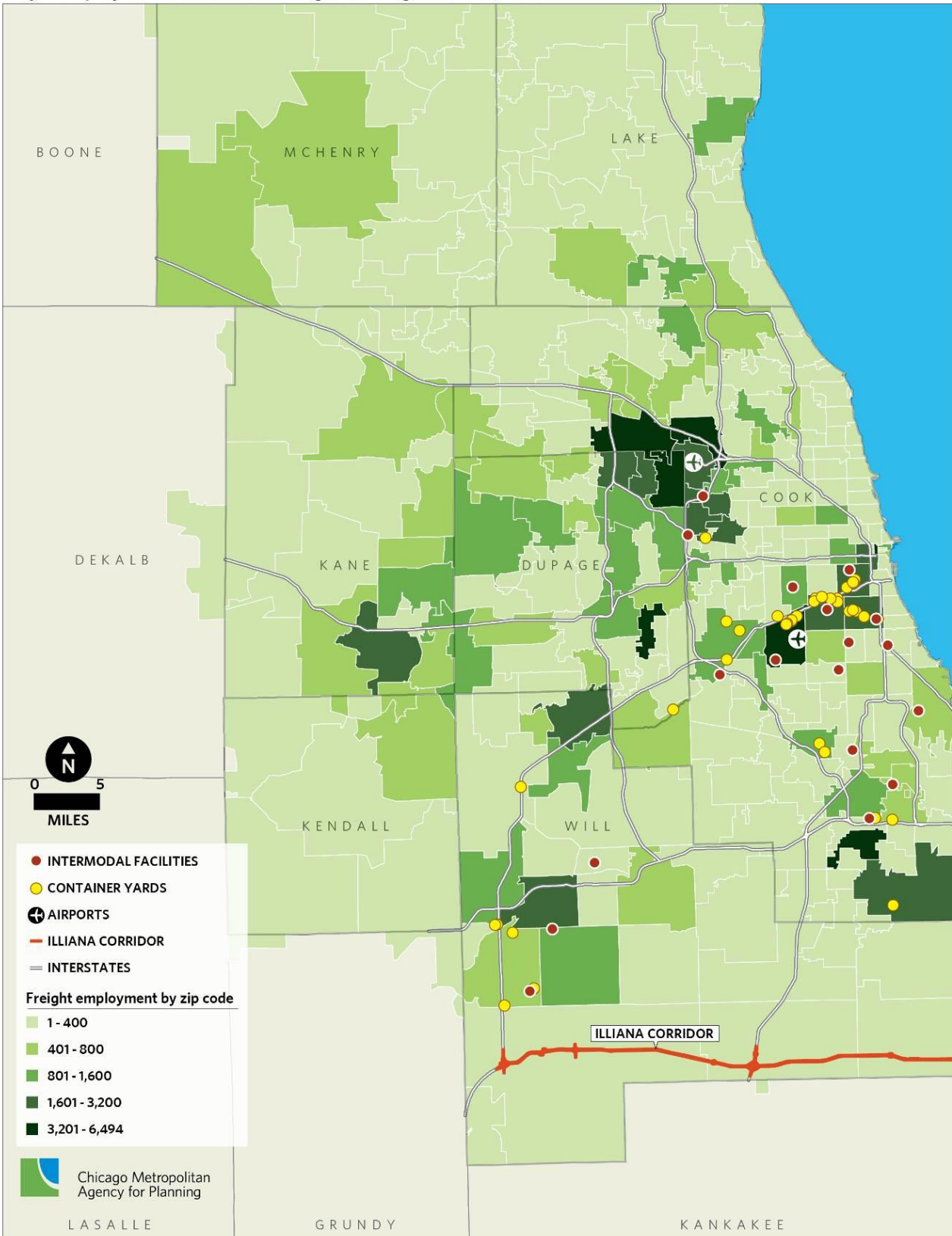
¹⁵ See the July 2013 [staff analysis](#) of the Illiana Corridor.

¹⁶ CMAP analysis of Economic Modeling Specialists, Inc. (EMSI) data.

¹⁷ The CN Joliet Intermodal, located north of Interstate 80, opened in 2013. CMAP does not have access to recent data about intermodal lifts from this facility.

¹⁸ Chicago Intermodal Facility Lift Counts and Regional TEU Estimate, Revised October 2012. Source: CMAP, Railroad Companies, Surface Transportation Board.

Major employment centers of the regional freight cluster, 2013



Source: Chicago Metropolitan Agency for Planning analysis.

As shown in the following map, much of the county's freight and logistics facilities -- including the existing Elwood Intermodal facility and the proposed Crete Intermodal facility -- are located more than five miles from the proposed Illiana Corridor. The location of the planned Ridgeport Logistics Park, while potentially benefiting from the Illiana, has already been chosen as directly adjacent to I-55. Intermodal facilities in the region are located an average 2.4 miles from expressway entrances, and both of the recently developed Joliet intermodal facilities benefit from existing access to I-80 and I-55.¹⁹ Overall, most existing and proposed intermodal facilities in Will County are located closer to existing expressway interchanges than they would be to the Illiana.

Proposed Illiana Corridor with existing and planned intermodal facilities



Source: Chicago Metropolitan Agency for Planning analysis.

¹⁹ CMAP staff used Intermodal Terminal Association of Chicago data on intermodal facility locations, the CMAP travel model network, and ESRI network analyst to calculate the distance on the road network from each active and planned intermodal facility to the closest expressway entrance.

Gross Regional Product

A new expressway is typically associated with higher economic output, driven in large part by the long-term gains in efficiency due to shorter travel times and better market access. Based on analysis using economic impact software, CMAP estimates the Illiana would increase gross regional product (GRP) by \$425 million in 2040, compared to a no-build scenario.²⁰ This number is largely driven by one main factor, improvements to market access, a common impact from the construction of brand new expressways. As the Regional Mobility section of this analysis will demonstrate, CMAP's analysis shows that the Illiana Corridor will have no significant impact on regional travel performance. For additional perspective, CMAP also ran these numbers for the two major new expressway projects already included in GO TO 2040: the Central Lake County Corridor (IL 53/IL 120) and the Elgin O'Hare Western Access project.²¹ The analysis indicates that the Illiana provides a smaller GRP impact (\$425 million) compared to these projects (\$1.2 billion and \$600 million respectively.)

Table 4. Impact on gross regional product (GRP) by Illiana Corridor, Elgin O'Hare Western Access, and Central Lake County Corridor, 2040

Facility	Additional GRP, 2040
Illiana Expressway	\$425 M
Elgin O'Hare Western Access	\$600 M
Central Lake County Corridor (IL 53/IL 120)	\$1,200 M

Limited Benefits to Regional Mobility

The proposed Illiana Corridor achieves negligible impacts on regional transportation performance, making it a lower priority than the planned GO TO 2040 investments that do address the region's congestion challenges. GO TO 2040's recommendation to implement performance-based project selection, as well as its emphasis on maintenance and modernization of the existing system, establish a high threshold for the construction of a new expressway. Furthermore, examination of recent congestion and reliability data on other regional expressways reinforces that the existing recommended improvements in GO TO 2040 should remain the region's highest priorities.

²⁰ Please see the July [staff analysis](#) of the Illiana Corridor for further detail.

²¹ During the run up to GO TO 2040, the Elgin O'Hare Western Access was analyzed as three separate projects (improvements to the existing Elgin O'Hare, the Elgin O'Hare east extension, and the western bypass/access). This analysis forecasts GRP for the entirety of the Elgin O'Hare Western Access, rather than its discrete subcomponents.

The Importance of Setting Regional Transportation Priorities

GO TO 2040 states that "the region needs to get more serious about setting priorities for how existing transportation resources are spent."²² To do so, the plan recommends that state and regional decision makers should use performance-driven criteria when making investment decisions. One year ago, the CMAP Board and MPO Policy Committee reaffirmed this policy direction through their [unanimous approval of a staff recommendation](#) to advance performance-based funding for transportation projects in Illinois. To date, there has been no movement toward the region's request that the State form a technical advisory group for implementing performance-based funding.

GO TO 2040 recommends a focus on maintaining the existing system first, and using most of the region's limited remaining resources to modernize the system. The plan also identifies a short list of major capital investments to expand the capacity of regionally significant transportation facilities, although GO TO 2040 emphasizes that these projects should be a lower priority than other activities. These major projects comprise only a small portion (less than 3 percent, totaling \$10.5 billion) of the plan's overall "fiscal constraint," which was developed by estimating available transportation revenues and expenditures over the next 30 years. Because the region has only limited dollars to spend on transportation, GO TO 2040 requires a commitment to the paramount importance of prioritizing the projects with the greatest benefits.

To ensure better system continuity, the only two GO TO 2040 major capital projects that are new expressways -- the Central Lake County Corridor (IL 53/IL 120 extension) and Elgin O'Hare Western Access -- are extensions of the existing system. The plan also recommends the implementation of managed lanes and/or multimodal corridors as innovative solutions for improving mobility on I-55, I-90, and I-290, the most heavily traveled expressways in the region. To move forward on this objective, CMAP staff recently initiated a [congestion pricing campaign](#) to educate the region about the benefits of providing new choices for motorists.

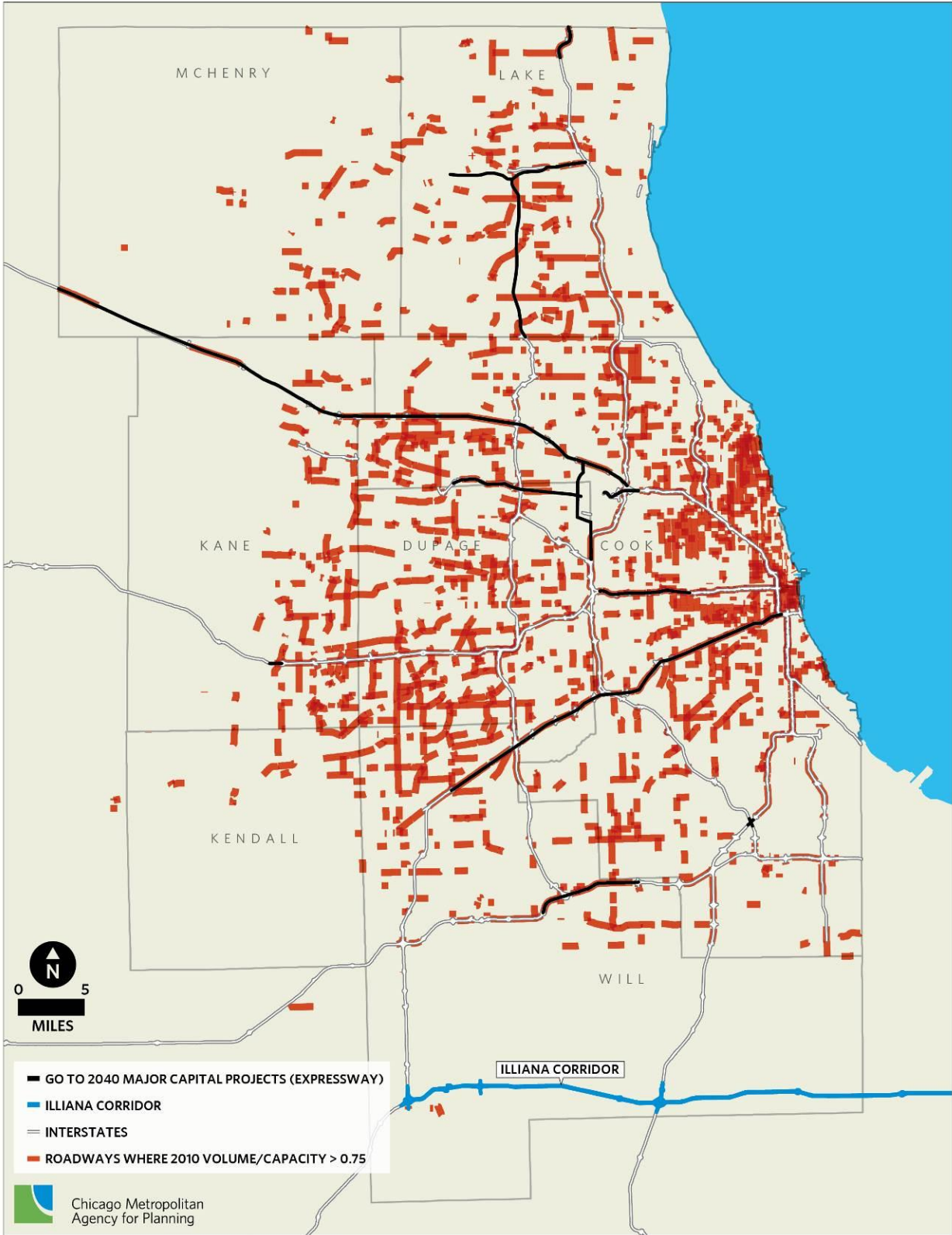
Negligible Benefits to Regional Congestion Challenges

Highway expansion projects are most appropriate where there is pervasive existing congestion, as occurs in developed parts of the region. The Illiana Tier 1 EIS states that the project's purpose and need is to "alleviate local system congestion and improve local system mobility."²³ As the following map makes evident, however, the Illiana is not being proposed in an area that suffers from heavy congestion. The red areas show where traffic volume is estimated to be at least 75 percent of capacity; major congested areas are well to the north of the corridor. The Illiana would not relieve significant existing congestion in Illinois. By contrast, drivers in central Lake County and the area west of O'Hare see heavy traffic, and both would experience relief from new highway projects proposed in GO TO 2040 (the Central Lake County Corridor and the Elgin O'Hare Western Access projects, respectively).

²² GO TO 2040, p.259.

²³ [Illiana Corridor Project Tier One EIS and Record of Decision](#), p. 1-8.

Current afternoon peak congestion in northeastern Illinois, 2010



Source: Chicago Metropolitan Agency for Planning analysis.

Besides serving a local travel market, a major stated purpose of the Illiana is to provide a bypass for congested facilities in the study area. IDOT and INDOT's documentation states that "the transportation benefit of the Illiana Corridor is based on improving mobility by serving the longer distance trips that previously used the Study Area arterial network and congested east-west facilities, such as the I-80 corridor."²⁴

However, the Illiana would not serve this function well. It would be located approximately 12 to 19 miles south of I-80, the road it is intended to bypass.²⁵ CMAP's analysis of regional congestion impacts indicate that, while I-80 may see some minor improvements from the addition of an untolled Illiana (as considered in the EIS), the benefits will be limited. The imposition of a toll on the Illiana is estimated to divert as much as 40 percent of the potential traffic from the facility, further limiting its potential to perform as a true bypass.²⁶ Furthermore, it should be pointed out that although I-80 experiences congested conditions and reliability issues, these problems are considerably less severe than on some of other major regional expressways recommended for improvements in GO TO 2040, including I-290 and I-55 as shown in Table 5. Other projects should have priority over a bypass of I-80.

Table 5. Average travel speed on major facilities

Facility	Road Segment	Length	Average Speed during Peaks	
			Typical Day	Bad Day
I-290	Canal Street to Wolf Road	14 miles	31 MPH	20 MPH
I-55	Lake Shore Drive to I-294	18 miles	39 MPH	25 MPH
I-80	I-294 to US 45	10 miles	51 MPH	42 MPH

Source: Chicago Metropolitan Agency for Planning. The above data from 2011 are calculated from regional intelligent transportation systems (ITS) sensor data that monitor travel conditions on the region's major expressways during the morning and afternoon peaks. Each facility enjoys free flow speeds of about 60 mph. "Bad days" show average speeds at the 95th percentile. Data for Kingery Expressway portion of I-80/I-94 are not available because of sensor issues.

²⁴ Alternatives to be Carried Forward, Technical Memorandum, Illiana Corridor Tier Two Environmental Impact Statement, p.83.

²⁵ Distances from the Illiana Expressway to I-80 are as follows: I-57 (19 miles), I-55 (12 miles), I-65 (17 miles), State line (18 miles).

²⁶ On p. 82 of the Tier Two Alternatives to be Carried Forward document, IDOT and INDOT base 2040 bi-directional average daily traffic numbers on a tolled Illiana facility carrying an assumed 40 percent of the traffic, or 60 percent less, than the traffic of a non-tolled Illiana facility.

Conclusion

IDOT's proposal is to add the Illiana Corridor -- a new tolled expressway project -- as a GO TO 2040 major capital project and also to accelerate its construction. Our region receives limited resources for transportation, and the probability that a public subsidy would be required in the early years of a P3 deal means this aggressive schedule would likely prioritize implementation of Illiana at the expense of the existing projects in the comprehensive regional plan. Given the Illiana's limited impact on regional transportation performance, CMAP staff does not believe this project merits designation as a regional priority.

As demonstrated in this document and accompanying analysis, the facility poses a considerable financial risk because its currently estimated cost falls short of other comparable recent projects both regionally and nationwide. Because available public financial information is incomplete and largely anecdotal, its viability remains uncertain. For this reason, it was not included in the original GO TO 2040 list of fiscally constrained projects, and because that financial uncertainty remains, the Illiana Corridor should not be added as an amendment to the plan.

This document also shows how the project is based on growth assumptions that contradict GO TO 2040 policies that direct investment toward existing communities. To approve the Illiana Corridor project would be a detour around regional planning policy that the CMAP Board and MPO Policy Committee approved in GO TO 2040.

The facility's long-term economic benefits are unsubstantiated. Existing nearby development is minimal, and the selected corridor is far from current residential and commercial centers to the north that are necessary for sustained job creation and economic development.

And finally, the Illiana Corridor proposal has negligible mobility benefits. In contrast with the major capital projects -- primarily extensions of existing facilities -- that were identified as high-priority investments to address regional congestion challenges when GO TO 2040 was adopted just under three years ago, the priority of pursuing the Illiana project should remain low.

At its core, GO TO 2040 emphasizes the importance of basing investment decisions on performance-driven criteria. This was reaffirmed one year ago when the CMAP Board and MPO Policy Committee unanimously approved a staff recommendation to advance performance-based funding for transportation projects in Illinois. Rather than step away from that conviction, our region must renew its commitment to prioritizing projects on the basis of their regional benefits. This fundamental policy is essential to implementing GO TO 2040 and therefore to achieving sustainable prosperity and quality of life for decades to come.

ACTION REQUESTED: At the request of the Illinois Department of Transportation, amend the GO TO 2040 comprehensive regional plan to include the proposed Illiana Corridor as a fiscally constrained major capital project.

STAFF RECOMMENDATION: Do not amend GO TO 2040.



Illinois Department of Transportation

Division of Highways / Region 1 / District 1
201 West Center Court / Schaumburg, Illinois / 60196-1096
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ILLIANA CORRIDOR FISCAL CONSTRAINT DEMONSTRATION FOR INCLUSION IN THE FISCALLY CONSTRAINED CMAP GO TO 2040 COMPREHENSIVE REGIONAL PLAN

September 27, 2013

I. Introduction

The purpose of this document is to demonstrate how the Illiana Corridor Project meets the fiscal constraint requirements for amending the project into the fiscally constrained Chicago Metropolitan Agency for Planning (CMAP) GO TO 2040 Comprehensive Regional Plan. This is intended to fulfill IDOT's commitment to provide additional financial information that became available since the April 8, 2013 request for the inclusion of the Illiana Corridor Project as a fiscally constrained major capital project in the GO TO 2040 Plan.

The Illiana Corridor Project has been a great success thus far, representing a bi-state partnership between the Illinois Department of Transportation (IDOT) and the Indiana Department of Transportation (INDOT), as well as two Federal Highway Administration (FHWA) division offices, all of the bi-state region's environmental regulatory agencies, and numerous stakeholders across the 900-square mile study area. The planning work for the Illiana Corridor Project encompasses an unprecedented level of stakeholder participation, technical expertise, and agency oversight. As part of this coordination effort, INDOT has also issued a formal request to the Northwestern Indiana Regional Planning Commission (NIRPC) to include the Illiana Corridor as a fiscally constrained major capital project in the 2040 Comprehensive Regional Plan. INDOT will submit a document similar to this one to NIRPC to demonstrate that the Illiana Corridor meets fiscal constraint requirements.

The implementation of the Illiana Corridor Project will rely upon a public-private partnership (P3) which will allow access to private equity capital to finance the project. This will be particularly helpful since the Illiana Corridor will indirectly rely on a toll-based revenue stream, State contributions, and alternative delivery funding to support the full amount of the upfront capital investment. The P3 will accelerate the delivery of the Illiana Corridor by securing much of the upfront capital necessary to construct the project all at once, rather than in stages. The P3 will mean the difference between delivering the Illiana Corridor and having no project at all. The Illiana Corridor will also utilize a combination of conventional (federal, state and local) funding resources in addition to the innovative financing techniques included in the P3.

Following a brief background section and a summary of anticipated project costs, this document provides a synopsis of the potential sources of funding that the State of Illinois expects could be utilized in some combination to meet the currently anticipated funding needs for the Illiana Corridor. At this time, these potential funding sources and financing mechanisms are projected to be available in the amounts and at the times needed to complete construction of and operate and maintain the Project.

It should be emphasized that this document does not represent a formal financial plan for the Illiana Corridor Project. As the project's financial structure is still being analyzed and developed, it does not include the full range of potential funding and financing strategies that could be considered as part of the development of the project. In addition, a P3 procurement process has been initiated by IDOT in conjunction with INDOT. As such, detailed financial information needs to remain confidential in order to not jeopardize the P3 procurement process and to ensure competition and innovation among the potential bidders. The information provided in this document is intended to demonstrate that the Illiana Corridor meets the fiscal constraint requirements for the long range transportation plan, which includes the project cost estimate and the funding resources that can reasonably be expected for the project.

II. Background

The Illiana Corridor Project is a proposed 47-mile long east-west limited access highway between I-55 in Illinois and I-65 in Indiana located in Will County, Illinois and Lake County, Indiana. On June 9, 2010, the Governors of Illinois and Indiana signed a Memorandum of Understanding (MOU) for a mutual commitment to the project by both states. In April 2011, IDOT and INDOT initiated the Illiana Corridor Study as a tiered environmental impact statement (EIS). Approval of the single document Illiana Corridor Tier One Final EIS and Record of Decision (ROD) was received in January 2013. The preparation of the Tier Two EIS is currently underway, with approval of the Tier Two Final EIS/ROD expected in March 2014.

With the completion of the Tier One EIS and receipt of a ROD, sufficient justification is now available to include the project on the fiscally constrained project list in the CMAP GO TO 2040 Plan. The Illiana's preferred corridor and cost estimates have been developed. To proceed with identification of potential private funding sources, it is now necessary to include the Illiana Corridor in the GO TO 2040 Plan as a fiscally constrained major capital project so that IDOT can receive a Tier Two ROD, thereby allowing IDOT to continue the P3 procurement process by releasing the Request for Qualifications (RFQ), and ultimately the Request for Proposals (RFP).

Risk is a key component in pricing of a concessionaire's P3 bid. In order to minimize the potential risks and overall uncertainty regarding the project's approval, the Illiana project is required to be included in the long-range transportation plan to allow for the issuance of a federal ROD and to maintain the momentum of the P3 process. IDOT and INDOT are planning to release the RFQ this fall. In order for the States to reasonably release the RFQ and attract as many potential concessionaire teams as possible, it is essential that risk and uncertainty be

minimized. One of the benefits of the P3 process is the expediency in project delivery and the resulting cost savings that can occur from a shorter implementation timeframe. Further, adherence to the current Tier Two Record of Decision schedule and anticipated RFQs and RFPs from a greater array of bidders may ultimately result in lower project costs as current interest rates are expected to increase over time for various financing options, including TIFIA loans, should interest rates continue their current upward trend.

For these reasons, IDOT, in a letter from the Secretary dated April 8, 2013 requested amending the CMAP long range transportation plan to include the Illiana Corridor at the October 2013 meeting of the MPO Policy Committee, which is the designated metropolitan planning organization (MPO) for the northeast Illinois region.

III. Project Costs

A summary of the currently available project cost estimates for the Illiana Corridor are provided below.

A. Project Development and Construction Costs

As part of the Illiana Corridor Project, IDOT and INDOT have developed a cost estimate based on quantity takeoff using concept plans and unit prices developed from recent bid prices in Illinois and Indiana. The cost estimate is periodically updated as the overall scope and project-specific design elements are better defined during Tier Two. As part of the ongoing Context Sensitive Solutions (CSS) process being utilized for the Illiana Corridor project, two additional interchanges (Wilton Center Road and IL-50) were added to the project, as well as 17 additional cross-road connections that were not assumed during Tier One. In addition, IDOT has expanded the scope of the Tier Two EIS to include the I-55 at Lorenzo Road Interchange Project to ensure that FHWA Logical Termini requirements are met, given its close proximity to the I-55/IL-129 Interchange where the Illiana Corridor connects with I-55.

In August of 2013, the FHWA conducted a major independent project cost review of the Illiana Corridor Project cost estimate. Their cost review included all aspects of the cost including construction, land acquisition, utility relocations, and engineering/construction oversight. The FHWA cost estimate also included past expenditures for the Phase 1 study that were not included in IDOT's Illiana Corridor Project cost estimate. Based on the latest Tier Two cost estimate, FHWA, IDOT, and INDOT anticipate the total cost to be approximately \$1.5 billion. Since this includes about \$60 million in previously programmed costs associated with the preliminary engineering and environmental studies (Phase 1), as well as about \$140 million in costs previously programmed for the I-55 at Lorenzo Road and IL-129 improvements project, the programming requirement for the Illiana Corridor Project is \$1.3 billion. The Illinois contribution to the project is expected to be approximately \$1 billion. This would include the construction cost, land acquisition, utility relocations, and engineering/construction oversight costs for the project.

Illiana Cost Estimate (YOE \$ millions)	
Preliminary Engineering and Environmental Studies*	\$60
I-55 at Lorenzo Road and IL-129 Project*	\$140
Illiana Tier Two Cost Estimate	\$1,300
Total Project Cost Estimate	\$1,500

*Currently included in the IDOT Multi-Year Program

Therefore, the IDOT cost estimate of approximately \$1 billion for Illinois' share of the Illiana Corridor has been substantiated through refined engineering and confirmed through an independent FHWA project cost review.

It should be noted that the current Tier Two cost estimate presented above will be continuously refined and is subject to change. This cost estimate does not include any potential cost savings that could result from innovative design and construction techniques and life cycle cost efficiencies that may be employed by a P3 concessionaire.

B. Operations and Maintenance Costs

In addition to the development and construction costs summarized above, the project must account for reasonably anticipated operations and maintenance costs. These costs include routine facility operations and maintenance costs, major maintenance requirements, and toll operations costs. These cost items were incorporated into IDOT and INDOT's financial study, and the results showed that operations and maintenance costs would be covered by reasonably available resources.

IV. Funding and Financing Approach

In accordance with the Moving Ahead for Progress in the 21st Century (MAP-21) FHWA guidance on public private partnerships as it relates to fiscal constraints, revenue forecasts that support a Statewide Transportation Improvement Program (STIP), metropolitan transportation plan, or a metropolitan Transportation Improvement Program (TIP) may take into account new funding sources and levels of funding not currently in place, but which are "reasonably expected to be available." The MAP-21 FHWA guidance further indicates that both public and private sources of funding are to be reflected in the financial information and financial plans that support the STIP, metropolitan transportation plan, and TIP. This includes P3s, and like any other transportation project, the funding sources associated with financing a particular P3 project, such as the Illiana Corridor, generally are to be "reasonably expected to be available."

A P3 project may be "reasonable" if there are clear expressions of support by the Governor and/or other appropriate local/regional decision makers and a strategy exists for securing necessary approvals within the time period for implementing the project. On June 9, 2010, the Governor of Illinois signed legislation authorizing IDOT to "enter into one or more public private agreements with one or more contractors to develop, finance, construct, manage, or operate the Illiana Corridor on behalf of the state." This constitutes clear expressions of support by the

Governor and decision makers and the current Illiana Corridor schedule and NEPA process marks a strategy for securing necessary approvals within the time period for implementing the project. The Illiana Corridor Act (Public Act 096-0913) and the Indiana Senate Enrolled Act No. 382 allow a collaborative planning effort for a new interstate highway between I-55 in Illinois and I-65 in Indiana. Both states can now enter into P3s with one or more private entities to develop, finance, construct, manage, and/or operate the Illiana Corridor.

IDOT and INDOT have initiated a P3 procurement process. On May 29, 2013, a “Request for Information Regarding an Innovative Project Delivery Approach for the Illiana Corridor Project Cooperatively Between the Illinois Department of Transportation and Indiana Department of Transportation” was issued. The purpose of the RFI was to provide an opportunity to receive industry feedback prior to and at the Illiana P3 Industry Forum and associated one-on-one meetings with industry participants on June 24 and 25, 2013. Governors Pat Quinn of Illinois and Mike Pence of Indiana gave the keynote addresses at the Illiana P3 Industry Forum and stressed the importance of this project to both states. A total of 15 potential proposers expressed interest in the project. The current P3 procurement schedule includes the release of a RFQ in fall 2013, the release of a RFP in winter 2013/2014, and commercial close in fall 2014. It should also be noted that the use of P3s is strongly supported in the CMAP GO TO 2040 Plan.

IDOT and INDOT have evaluated a wide range of potential funding and financing strategies for implementing the Illiana Corridor Project. The states anticipate that a P3, in the form of a design-build-finance-operate-maintain (DBFOM) contract will be used, where responsibilities for designing, building, financing, operating, and maintaining are bundled together and transferred to private sector partners. There are a wide variety of DBFOM agreements, especially in the degree to which financial responsibilities and risks are actually transferred to the private sector. All DBFOM projects are partly financed by concessionaire debt, which can be partially or fully backed by new revenue streams generated by the project. Toll revenues from the Illiana Corridor will be used to pay availability payments to the concessionaire. The use of tolls is consistent with the CMAP GO TO 2040 Plan user pays goal. Toll revenues are often supplemented by public sector subsidies in the form of upfront construction payments, right-of-way acquisition, or through payments made to the concessionaire during the operating period based on availability and overall performance of the facility (availability payments).

A. Alternative Funding and Financing Sources

Based on the established project implementation timeframe (open to traffic in 2018), and given the limited availability of public funds within IDOT’s multi-year programs, alternative funding sources will need to be pursued in financing the Illiana Corridor Project. Alternative funding sources may include, but are not necessarily limited to:

- Private financing through a P3, with toll revenues providing one of the sources of funds for IDOT payments to the private partner
- Public-sponsored tolling (via authorities that now exist under both Indiana law and Illinois law)

- Potential development-related private financial participation
- Other dedicated state and local funding sources, such as transportation-related fees or other revenue measures

In addition to these alternative funding sources, the financing approaches to be considered in conjunction with P3s include:

- Federally-supported borrowing such as via the Transportation Infrastructure Finance and Innovation Act ("TIFIA") program
- Private activity bonds ("PABs") as part of a public-private partnership approach
- Equity investment by investors.

These and any other appropriate financing approaches will be considered to meet the cash flow demands of the Illiana Corridor, and the ability to generate cost savings and/or expedited project delivery.

In recognition of these financial conditions, Illinois and Indiana signed a MOU in June 2010 concerning their mutual objective to investigate all options available to finance the Illiana Corridor as a P3. Both states also previously passed enabling legislation to allow for P3 agreements between Illinois and Indiana and one or more private entities to design, build, finance, operate, and maintain the Illiana Corridor. A well-structured P3 agreement can reduce demands on constrained public budgets, help ensure timely project delivery, as well as result in lower life-cycle costs of the project in the long run in case a long-term concession agreement is considered. The inclusion of funding for preliminary engineering in their current respective programs, the MOU, and the P3 legislation demonstrate the intent of the states' to use tolling as a delivery mechanism and to provide some portion of financing for the Illiana Corridor. An additional consideration is the importance of demonstrating financial commitment in order for the MPOs to adopt the Illiana Corridor into their fiscally constrained plans.

Net Project Revenues from Tolling. IDOT and INDOT estimated toll rates for the Illiana Corridor Project based on revenue maximization; the actual toll rates may vary depending on toll policy; commercial delivery approach; and concessionaire's terms, conditions, and proposals. Conservative assumptions for traffic retention of 30% to 60% under a tolled traffic scenario were used. Significant additional analytical effort is underway and will continue to be carried out by the states and appropriate advisors, to develop further both the potential tolling scenarios and associated revenue estimates. Key assumptions, for the limited purpose of this narrow demonstration exercise, include:

- Tolled facilities and timing — The current estimate is based only on a single scenario: tolling the Illiana Corridor once it is open to traffic, anticipated to be in 2018. Other scenarios are currently under consideration as well. The scenario presented is a reasonably available funding approach for the limited purpose of the required fiscal constraint demonstration and is based on currently available information.
- Allocation of operations and maintenance costs — For the purpose of this demonstration, it is assumed that operations and maintenance costs, along with debt service, are included in

the concessionaire's availability payments. These operations and maintenance cost estimates, including both toll fixed operations and routine facility operations and maintenance, are based on an analysis of existing Illinois and Indiana public and private toll road operations and best practice lifecycle cost assumptions.

Availability payments are assumed to include payment for the P3 concessionaire's initial capital costs, financing costs, equity return, operations and maintenance costs, and long-term capital replacement costs for the project throughout the projected P3 concession term. While project toll revenues during the initial period of the Illiana are projected to be less than the annual availability payments, eventually projected toll revenue is forecasted to be greater than the annual availability payments. It is projected that the Illinois portion of total toll revenue will be in the range of \$2.4 billion to \$3.8 billion (year-of-expenditure/outturn/nominal) over the life of the P3 term assumed to be 2018-2053 (based upon high and low value of time sensitivities applied to the base traffic and revenue forecast and Moody's Chicago region CPI forecast). **Over the life of the P3 term, on a year-of-expenditure basis, it is projected that in aggregate, the Illinois net toll revenue will exceed the availability payment costs.**

Additional State and Locally-Generated Revenues. The financing approaches to be considered include using a P3 structure to access the following: (i) federally-supported borrowing such as via the Transportation Infrastructure Finance and Innovation Act ("TIFIA") program, (ii) private activity bonds ("PABs"), and (iii) equity investment. These and any other appropriate financing approaches will be considered in the context of each state's overall transportation programs, the cash flow demands of the Project relative to these programs, and the ability to generate cost savings and/or expedited Project delivery.

Indiana has a successful history of using a range of alternative funding sources and financing techniques for the development of their transportation infrastructure. Indiana maintained the 157-mile Indiana Toll Road connecting the Chicago Skyway with the Ohio Turnpike for 50 years, periodically using the proceeds of toll-revenue bonds for necessary expansion and maintenance projects. In 2006, Indiana completed a successful public private partnership transaction with a private concessionaire involving the Indiana Toll Road. Illinois is poised to equal Indiana's strong record in wielding alternative funding sources and financing techniques to deliver future transportation infrastructure.

B. Conventional State and Federal Sources

Implementation of the Illiana Corridor may also utilize a combination of traditional (federal, state and local intergovernmental grants) and alternative and innovative financing techniques that will be fully evaluated as part of the project financial plan to be developed for the selected alternative. With the stated implementation timeframe for the Illiana project, the Governors of both states have indicated their state's commitment to investigating any and all options to deliver the Illiana Corridor in the most rapid and cost-effective manner possible.

Both Illinois and Indiana have historically used federal-aid resources for project implementation that are matched by state funds. Illinois and Indiana have also secured federal discretionary funding from the Highway Trust Fund and General Appropriations for major transportation projects. Both states will continue to identify and, as appropriate, pursue potential additional federal discretionary funds for the Illiana Corridor. This may include funds made available under future U.S. Department of Transportation's TIGER (Transportation Investment Generating Economic Recovery) discretionary grant programs and additional federal transportation discretionary funds made available through reauthorization of the federal surface transportation program and other Congressional acts. These resources are not anticipated to be sufficient to meet the approximately \$1 billion implementation cost for the Illinois portion of the project.

With the stated implementation timeframe for the Illiana project, the Governors of both states have indicated their state's commitment to investigating any and all options to deliver the Illiana project in the most rapid and cost-effective manner possible. In Illinois, the proposed IDOT multi-year program (Fiscal Year 2014-2019 Multi-Modal Transportation Improvement Program) includes \$9.53 billion in federal, state and local funds that are designated for state and local highway improvements over six years. The funding in the IDOT multi-year program for the Illiana project is limited to \$92.3 million for preliminary engineering, land acquisition, and P3 advisory services. In Indiana, the anticipated INDOT multi-year program, Fiscal Year 2014-2017 Statewide Transportation Improvement Program (STIP), based on the current adoption timeline, includes \$6.77 billion in federal, state, and local funds to be designated for state and local highway improvements over four years. The anticipated funding in the INDOT multi-year program for the Illiana project includes \$44.4 million for preliminary engineering, right-of-way, and construction. Implementation of the INDOT multi-year program, including funding for the Illiana project, requires amendment of the Transportation Improvement Program (TIP) by NIRPC, which is anticipated to occur during October – December 2013, and then subsequent amendment of the STIP by INDOT which would follow during January – March 2014.

On this basis, both states have evaluated their multi-year programs and determined that traditional funding alone is inadequate for project implementation. Therefore, a combination of traditional and innovative funding and financing strategies, including tolling, will be required, with further analysis to be performed as part of the financial plan to be developed for the project. As such, project delivery with only federal, state, and local funding is an unreasonable alternative, and the use of tolling to finance a portion of the project cost is seen as the only viable method of project delivery, with the level of toll revenues depending on a number of factors including traffic volumes and tolling policy.

Based on the current financial analysis and funding assumptions outlined herein, IDOT estimates that anywhere from \$250 million to \$300 million in Illinois state funds will be required to be invested during the construction of the Illiana (assumed to be 2015-2017) for land acquisition, utility relocations, and engineering. The Department may also invest up to \$200 million in milestone payments in 2018 and 2019. Once the project is completed and toll

revenues are being collected, IDOT estimates that during the assumed operating period of 2018-2053 the net toll revenues collected will exceed the total project costs.

V. Summary of Potential Funding Sources and Financing Options

Working together, IDOT and INDOT have prepared the above financial demonstration setting forth a range of funding levels that are "committed," "available," or "reasonably expected to be available" for the Illiana Corridor. Taken together, these funding categories — and reasonable estimates for each — demonstrate (a) that sufficient resources can be reasonably expected to be available to meet the project's estimated funding needs, and in timeframes that are consistent with the currently staged project implementation timeline and key open-to-traffic milestones, and (b) that all long range transportation plan-related fiscal constraint requirements are met.

Sufficient funds are "available" and "committed" to the Illiana Corridor by the two state sponsors to meet the currently anticipated project costs for State Fiscal Years ("SFYs") 2014 and 2015. For Illinois, this commitment is in the form of their multi-year highway program that includes \$70 million for land acquisition for the Illiana Corridor, and about \$60 million allocated toward the planning study, P3 advisors, and surveys. As with most P3 projects, the State will also be advancing the utility relocations and construction oversight contracts. The State is also considering a milestone payment of approximately 10-20% of the project cost.

This document describes the reasonably available funding sources and techniques that could be used in some combination to fully fund the project. For purposes of estimating levels of funding that might reasonably be expected to be available, this demonstration is premised on an assembly of reasonable representative estimates for each potential funding source on a year-of-expenditure basis. Taken together, this analysis demonstrates that the Illiana Corridor could be fully funded through a combination of funding sources.



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MEMORANDUM

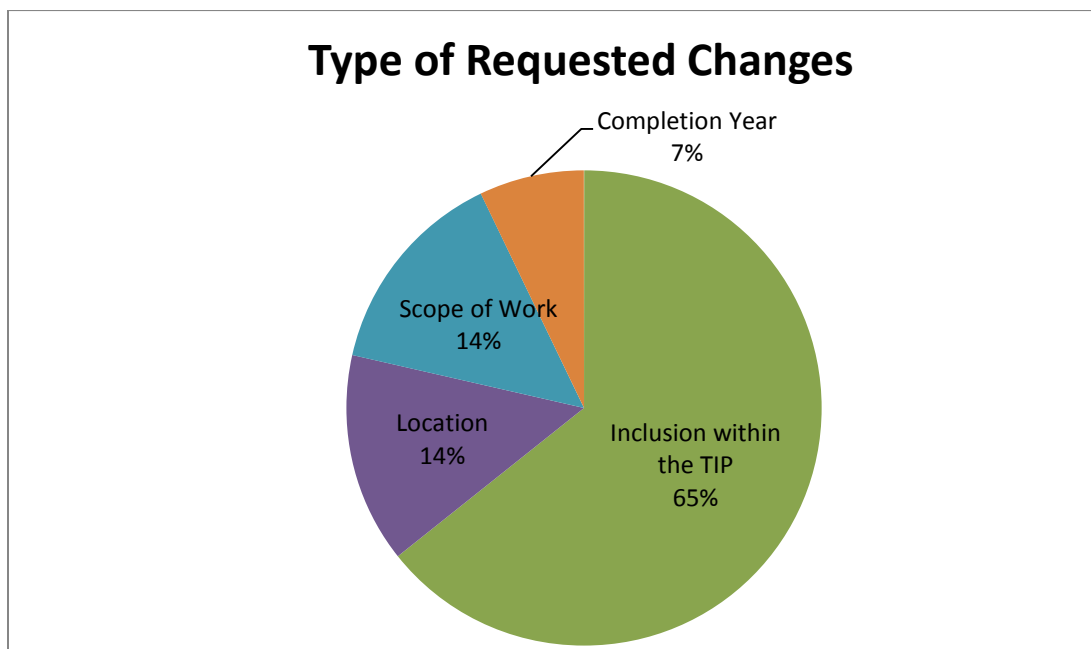
To: Regional Coordinating Committee

From: CMAP Staff

Date: October 2, 2013

Re: Semi-annual GO TO 2040/TIP Conformity Analysis & TIP Amendments

In accordance with the [biannual conformity analysis policy](#), CMAP staff asked programmers to submit changes to projects included in the regional air quality analysis of the Transportation Improvement Program (TIP) and GO TO 2040. Of the numerous changes requested, fourteen (14) projects require air quality conformity analysis. Below is a summary of the types of requested changes.



If the TIP amendments are approved, nine new non-exempt projects will be included in the TIP. These projects are included in the conformity analysis because funding for phases beyond preliminary engineering has been identified in the TIP. These projects are moving closer to

construction. Preliminary engineering is exempt from conformity analysis. The nine new projects are:

- TIP ID [01-13-0015](#) Cermak Green Line Station,
- TIP ID [08-95-0024](#) IL 83 Kingery Highway from 31st to south of I-55 Stevenson Expressway
- TIP ID [10-02-0013](#) US 45 Milwaukee Avenue from IL 60 Townline Road to IL 22,
- TIP ID [11-06-0018](#) IL 47 from Charles Road to US 14,
- TIP ID [11-07-0014](#) IL 47 Eastwood Drive from US 14 to Reed Road,
- TIP ID [12-07-0005](#) Weber Road from 119th Street to 135th Street,
- TIP ID [12-10-0008](#) 143rd Street from State Street / Lemont Road to Bell Road,
- TIP ID [12-12-0033](#) Weber Road from 135th Street to Airport Road / Lockport Road.
- TIP ID [12-02-9024](#) Illiana Corridor Project from I-55 to I-65

Scope changes have been requested for two existing projects. The scope of a project is determined by the [work type](#) included in the project.

- Non-exempt work types may affect air quality and must be tested for conformity. Examples of non-exempt work types are adding lanes to a road, signal timing and extending a rail line.
- Exempt tested work types do not require an air quality conformity analysis, but the region has chosen to include the impacts of the work types in the travel demand model. Exempt tested projects include new commuter parking lots and road lane widening to standard (e.g., 10 feet to 12 feet).
- Exempt work types do not require an air quality conformity analysis. Examples of exempt work types are road resurfacing and bus rehabilitation.

The two projects for which scope changes have been requested are:

- TIP ID [03-96-0021](#) Elgin-O'Hare East Extension, Add Lanes & Western O'Hare Bypass. The sponsor has requested addition of new non-exempt work types including new and expanding interchanges, corridor improvements and intersection improvements. Additionally, a request to extend the limits from Rohlwing Rd. to Gary Rd. was received; this project was previously represented as three separate projects in the TIP.
- TIP ID [07-09-0087](#) Wood Street from Little Calumet River to US 6/159th Street. The sponsor has requested a new work type for adding lanes.

Sponsors requested location changes for two existing TIP projects. These changes require a conformity amendment. Those two projects are:

- TIP ID [03-96-0004](#) I-90 Jane Addams Memorial Tollway from Plaza #9 Elgin to I-294 Tri-State Tollway. The sponsor requested the limits be extended to IL 43/Harlem Avenue.
- TIP ID [10-07-0001](#) IL 60 IL 83 from IL 176 to EJ&E railroad. The sponsor requested the limits be extended to Townline Road.

Completion years indicate when a project is anticipated to be in service to users and determines in which analysis year(s) the project will be included. The analysis years are 2015, 2025, 2030 and 2040. If a change in completion year moves across an analysis year, the project must be

included in a new conformity analysis. Sponsors indicated that several projects have updated completion years, only one of those crossed an analysis year.

The sponsor's requested completion year change moves the following project from the 2030 analysis year to the 2025 analysis year:

- TIP ID [12-10-9001](#) I-55 Managed Lanes from I-355 to I-90 I-94.

GO TO 2040 Major Capital Projects

Four GO TO 2040 Major Capital Projects are included in this report due to significant changes to location, implementation time frame and/or revised scopes. Those projects are:

- TIP ID [12-02-9024](#) Illiana Corridor Project from I-55 to I-65. The sponsor has requested moving funding beyond preliminary engineering into the TIP.
- TIP ID [03-96-0021](#) Elgin-O'Hare East Extension, Add Lanes & Western O'Hare Bypass. The sponsor has requested addition of new non-exempt work types including new and expanded interchanges, corridor improvements and intersection improvements. Additionally, a request to extend the limits from Rohlwing Rd. to Gary Rd. was received.
- TIP ID [03-96-0004](#) I- 90 Jane Addams Memorial Tollway from Plaza #9 Elgin. The sponsor has requested that the project limits be extended to IL 43/Harlem Avenue.
- TIP ID [12-10-9001](#) I-55 Managed Lanes from I-355 to I-90 I-94 the sponsor has requested moving the completion year from 2030 to 2016.

Each TIP ID includes a hyperlink to the TIP database for further project information. Changes are included in the attached report.

TIP projects are also viewable in a map format. The TIP map is available at <http://www.cmap.illinois.gov/tip/tip-map>.

The 2015, 2025, 2030 and 2040 highway and transit networks were coded to include the project changes listed in the "Non-Exempt Projects Requiring Conformity Determination" report. The regional travel demand model was run using the updated networks. The resultant vehicle miles traveled (VMT) by vehicle class, speed and facility type were entered into US Environmental Protection Agency's MOVES model. The model generated on-road emission estimates for each precursor or direct pollutant in each scenario year.

Two emissions tables are presented below, one for use in the conformity determination if the Illiana Corridor Project is amended into GO TO 2040 and one for use in the conformity determination if GO TO 2040 is not amended. The emissions inventories in TABLE 1 include the Illiana Corridor Project; the inventories in TABLE 2 do not. The appropriate table will be used depending on the decision of the CMAP Board and MPO Policy Committee regarding the GO TO 2040 Plan Amendment.

For both ozone precursors, the resulting emissions inventories estimates fell below the applicable maintenance SIP budgets.

As a result of discussions at Tier II Consultation, SIP budgets for annual direct PM_{2.5} and NO_x emissions submitted by the Illinois Environmental Protection Agency to the US Environmental Protection Agency in 2011 will be used for the conformity determination. For both analyses, the annual direct PM_{2.5} and NO_x emissions inventories are below the applicable budgets.

TABLE 1
Illiana Corridor Project Included

Direct PM_{2.5} and NO_x Emissions in Tons per Year for PM_{2.5} Conformity

Year	Fine Particulate Matter		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2015	2,447.01	5,100.00	52,119.69	127,951.00
2025	1,644.16	2,377.00	29,510.58	44,224.00
2030	1,591.23	2,377.00	27,965.94	44,224.00
2040	1,683.35	2,377.00	29,276.86	44,224.00

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

VOC and NO_x Emissions in Tons per Summer Day for Ozone Conformity

Year	Volatile Organic Compounds		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2015	59.19	117.23	137.21	373.52
2025	44.39	48.13	75.27	125.27
2030	44.05	48.13	70.99	125.27
2040	47.08	48.13	74.06	125.27

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

Notes:

Off-model benefits are not included in the total emissions estimates

Results updated 8/15/2013

TABLE 2
Illiana Corridor Project Not Included

Direct PM_{2.5} and NO_x Emissions in Tons per Year for PM_{2.5} Conformity

Year	Fine Particulate Matter		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2015	2,447.01	5,100.00	52,119.69	127,951.00
2025	1,644.96	2,377.00	29,521.04	44,224.00
2030	1,589.46	2,377.00	27,977.57	44,224.00
2040	1,645.61	2,377.00	29,223.99	44,224.00

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

VOC and NO_x Emissions in Tons per Summer Day for Ozone Conformity

Year	Volatile Organic Compounds		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2015	59.19	117.23	137.21	373.52
2025	44.35	48.13	75.21	125.27
2030	43.94	48.13	70.94	125.27
2040	46.86	48.13	73.83	125.27

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

Notes:

Off-model benefits are not included in the total emissions estimates

Results updated 8/15/2013

ACTION REQUESTED: Recommend approval by the CMAP Board and MPO Policy Committee

###



MEMORANDUM

To: Regional Coordinating Committee

From: CMAP staff

Date: October 2, 2013

Re: GO TO 2040 Financial Plan Update Scope and Revenue Trends

Federal regulations require that CMAP update the region's financial plan for transportation every four years. Federal statute requires a financial plan that demonstrates the resources from public and private sources that are reasonably expected to be available to carry out the region's transportation plan. GO TO 2040 includes a financial plan totaling \$385 billion over the 30-year plan period. During the plan update process, CMAP will revise the revenue and expenditure forecasts and develop an overall funding allocation over a 2015 – 2040 planning horizon.

Financial Plan update summary

GO TO 2040 included revenue forecasts totaling \$350.4 billion in core revenues and \$34.6 billion in reasonably expected revenues over the 2011 – 2040 planning period. Core revenue forecasts include current sources of federal, state, and local revenues for the construction, operation, and maintenance of the current roadway and transit system over the planning period. Reasonably expected revenues include new or increased revenue sources that are included based on current judgment of the future political and policy climate. In GO TO 2040, reasonably expected revenues totaled \$34.6 billion, and included a variety of revenue enhancements, such as increasing the state motor fuel tax by eight cents and indexing it to an inflationary measure. The \$385 billion in core and reasonably expected revenues was allocated as follows:

Table 1: GO TO 2040 financial plan for transportation funding allocation

Transit operating expenditures	\$116.7 billion
Highway operating expenditures	\$56.9 billion
Safe and adequate capital maintenance for transit	\$31.6 billion
Safe and adequate capital maintenance for highway	\$127.5 billion
Subtotal expenditures for operations and safe and adequate maintenance	\$332.7 billion
State of good repair and systematic enhancements to the transportation system	\$41.8 billion
Major capital projects	\$10.5 billion
Total expenditures	\$385 billion

The following is a summary of the major components of the financial plan update process.

Revenue and expenditure forecasting

CMAAP staff will develop revenue and expenditure forecasts in conjunction with transportation implementers such as IDOT, the Tollway, the RTA, and various local units. Forecasts will include core and reasonably expected revenues, as well as expenditures for operations and safe and adequate capital maintenance of the transportation system. Draft forecasts will be presented to Transportation Committee for feedback at the November 15, 2013 meeting and final forecasts will be presented at the January 17, 2014 meeting.

Financial plan funding allocation

Draft funding allocations will be presented to the Transportation Committee at the January 17, 2014 meeting for feedback. The final funding allocation will be presented at the March 7, 2014 Transportation Committee meeting. Feedback on the allocation will also be sought from the Regional Coordinating Committee and the MPO Policy Committee.

The entire GO TO 2040 update, including the financial plan, will be released for public comment in June of 2014. In October 2014, the CMAAP Board and MPO Policy Committee will vote on the approval of the GO TO 2040 update, including the financial plan.

Revenue Trends

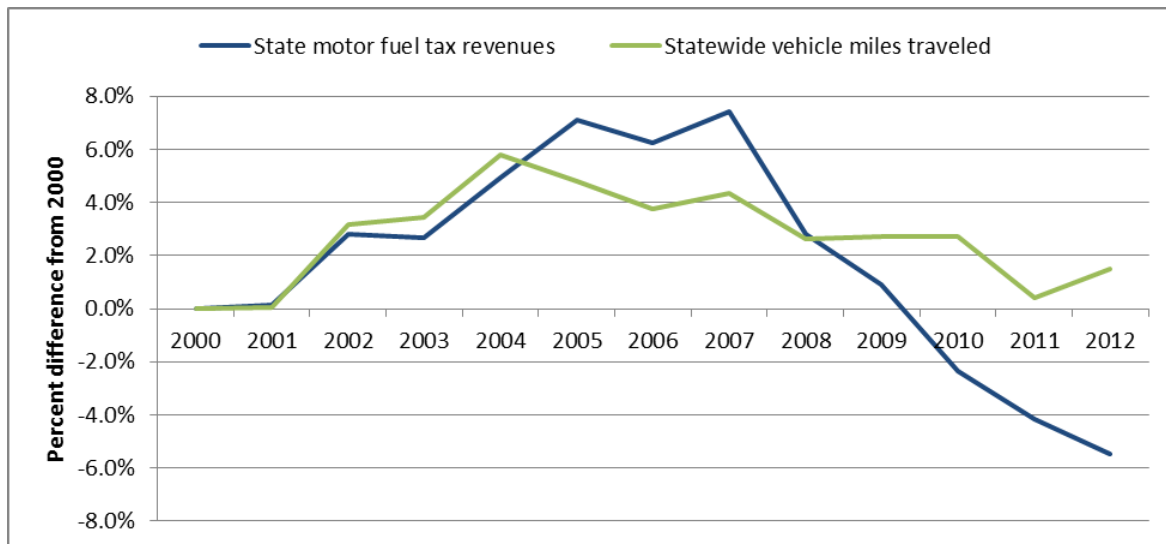
As part of the financial plan update process, recent policy changes and implementations undertaken by federal, state, and local entities will be analyzed. At the federal level, new vehicle fuel economy standards were issued in 2012 that have the potential to affect motor fuel tax (MFT) revenues. In addition, a new federal transportation reauthorization bill was enacted in 2012. Locally, toll rates and transit passenger fares were raised. This section will summarize some of these changes and will illustrate revenue levels.

State Motor Fuel Tax

Based largely on historical receipts over the prior 20 years, the GO TO 2040 forecast estimated that state MFT revenues would grow at an annual rate of 1 to 1.4 percent, which is below the rates of inflation and of expected growth in construction costs. As a near-term solution to this funding problem, GO TO 2040 recommended that the state MFT be increased by eight cents and indexed to an inflationary measure.

However, state MFT revenues have been declining annually since 2007, when revenues reached a high of \$1.4 billion. While this decline is partially a result of a reduction in vehicle miles traveled, the consumption of motor fuel has declined faster than vehicle miles traveled. In fact, vehicle miles traveled and state MFT revenues have followed similar paths in the past, but in recent years, MFT revenues have been declining faster. State MFT revenues were 5.5 percent lower in 2012 than in 2000. At the same time, GO TO 2040 forecasted that MFT revenues to the region would be 19 percent greater in 2012 than in 2000. The following chart compares change in nominal state MFT revenues with change in statewide vehicle miles traveled between 2000 and 2012.

Figure 1. Percent change in state motor fuel tax revenue and vehicle miles traveled from 2000

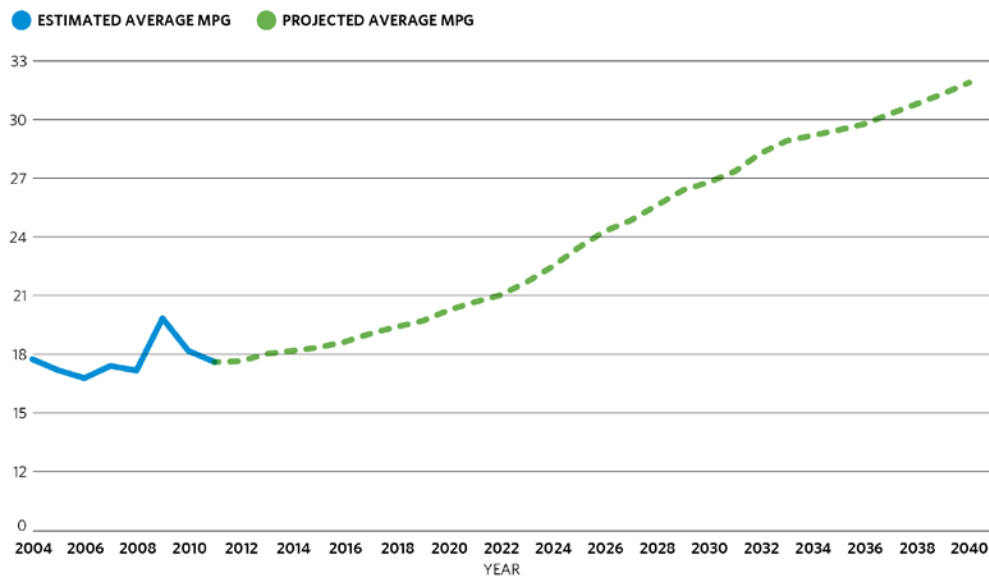


Source: CMAP analysis of Illinois Department of Transportation data

Rising vehicle fuel economy has contributed to this decline, and will likely result in continued decline of motor fuel consumption. In 2012, the National Highway Traffic Safety Administration issued a rule finalizing higher fuel economy standards for passenger vehicles and light duty trucks. Corporate Average Fuel Economy (CAFE) standards in this rule, together with projected U.S. Environmental Protection Agency standards for carbon dioxide emissions, set the stage for a reduction in carbon dioxide emissions equivalent to 54.5 miles per gallon (MPG) for passenger cars by model year 2025.

The chart below illustrates CMAP's current estimates of the change in average MPG between this year and 2040 for light duty vehicles due to the new CAFE standards. To develop these estimates, CMAP staff considered the new MPG equivalent requirements and targets as described in the new NHTSA rule, reduced those fuel economies by 20 percent to better reflect on-road performance, and applied those fuel economies to an estimated mix of passenger cars and light trucks in the vehicle fleet. The vehicle fleet was further disaggregated by age, with appropriate fuel economies assigned to the different age groups for passenger cars and light trucks. Finally, average fuel economies were adjusted to reflect estimates of fuel economy specific to Illinois in 2011. In addition, modest increases in fuel economy for heavy-duty vehicles (e.g., trucks and buses) were also assumed to occur during the time period, although the chart below illustrates just light-duty vehicle MPG.

Average miles per gallon estimates for light duty vehicles in Illinois



Note: Average MPG for 2004-11 was estimated by dividing annual vehicle miles traveled by passenger cars in Illinois by gallons of motor fuel (excluding diesel) sold in Illinois. Average MPG for 2012-40 was projected based on CAFE standards and vehicle fleet data.

Source: CMAP analysis of National Highway Traffic Safety Administration CAFE Fuel Economy Fact Sheets; Illinois Department of Transportation statistics on motor fuel tax revenues and annual vehicle miles traveled <http://www.dot.il.gov/blr/mftbooklet.html> and <http://www.dot.state.il.us/adtravelstats.html>; and U.S. Federal Highway Administration 2009 National Household Travel Survey data on the distribution of vehicles by type and age.

Over the long term, the adjusted CAFE standards may have a serious impact on state motor fuel tax revenues, as well as federal MFT revenues that accrue to the Highway Trust Fund. To illustrate, GO TO 2040 estimates \$24 billion in state MFT revenues at the current tax rate during the planning horizon. This includes funding for state projects as well as disbursements to counties, townships, and municipalities in northeastern Illinois. Preliminary analysis published in a [September 2012 CMAP Policy Update](#)¹ indicated that given the tighter fuel economy standards announced over the past two years, this forecast may decline over 36 percent. This figure assumes no increase in the tax rate and is based on a number of preliminary CMAP assumptions about the changing characteristics of the vehicle fleet resulting from the new fuel standards.

Federal Revenues

Moving Ahead for Progress in the 21st Century Act (MAP-21) was passed in June 2012. MAP-21 reauthorized and financed federal transportation programs through September 2014, and included several changes from the previous federal reauthorization bill, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Policy changes

Under MAP-21, Illinois receives an apportionment for highway funds based on its FY 2012 apportionment, which in turn is based on SAFETEA-LU funding levels. The new law includes a variety of programming changes, including the consolidation of several programs into the new Transportation Alternatives Program. This program was funded at a lower level than the

¹ CMAP, "Rising Fuel Economy Standards and Their Potential Transportation Funding Impacts," September 14, 2012, <http://www.cmap.illinois.gov/policy-updates/-/blogs/rising-fuel-economy-standards-and-their-potential-transportation-funding-impacts>

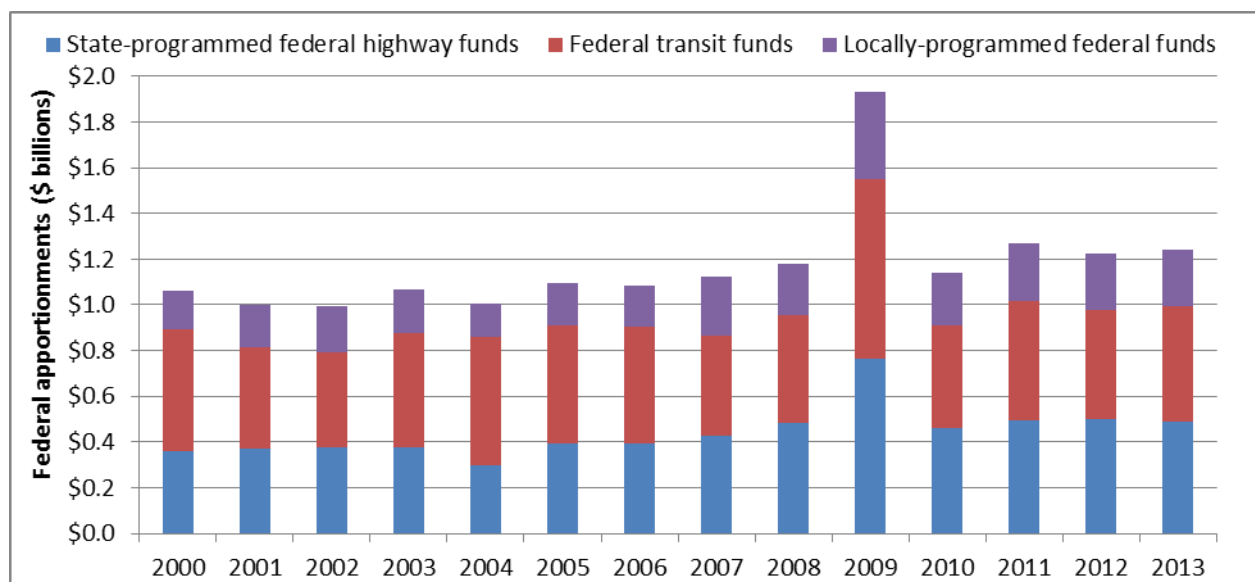
previous SAFETEA-LU programs combined, but devolves some project selection authority to metropolitan regions such as CMAP.

With regard to transit funding, the Bus and Bus Facilities Program is now a formula-based program rather than a discretionary program, the Fixed Guideway Modernization program is focused on funding state of good repair projects, and New Starts funding is expanded to include “core capacity” projects that increase capacity by at least 10 percent. These changes have the potential to benefit northeastern Illinois relative to other areas of the country. However, actual funding levels depend on the overall authorization level for MAP-21.

Funding levels

With the exception of the influx of federal funds in 2009 from the American Recovery and Reinvestment Act of 2009, overall apportionments available to the region have remained between \$1.0 billion and \$1.3 billion since 2000. Future funding levels and stability will depend on the form of the next reauthorization bill, as MAP-21 expires in September 2014. In addition, the solvency of the Highway Trust Fund, which is primarily funded by declining federal gas tax revenue, may affect overall authorizations for transportation funding. The following chart provides a history of apportionments estimated to be available to the region, including federal transit funds, locally-programmed funds, and state-programmed highway funds.

Figure 2: Federal funds available to northeastern Illinois, 2000 – 2013



Note: Locally-programmed funds include the local and county Surface Transportation Programs, the Congestion Mitigation and Air Quality improvement program, and the new Transportation Alternatives Program.

Source: CMAP analysis of FHWA and RTA data

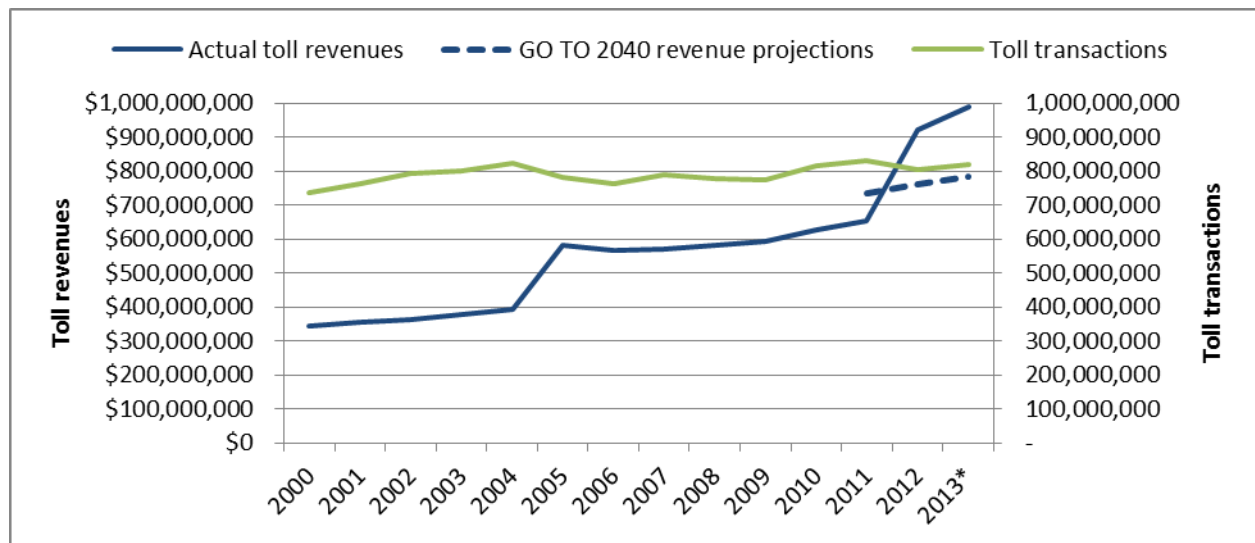
Tollway Revenue

Following the approval of GO TO 2040, the Illinois Tollway Board approved toll rate increases that raise passenger car toll rates by 87.5 percent effective January 1, 2012. Commercial vehicle tolls will gradually increase by 60 percent between 2015 and 2017. After 2017, commercial vehicle tolls will be adjusted annually based on the rate of inflation. While these increases may

have resulted in more drivers using non-tolled routes, the rate increase resulted in a 41.3 percent increase in overall toll revenue between 2011 and 2012. These revenues are higher than those forecasted in GO TO 2040, which had assumed that the toll rate structure in effect from 2005 through 2011 would be retained throughout the planning period.

The following chart compares actual toll revenues to toll transactions and GO TO 2040 revenue forecasts, which are indicated with a dashed line. The Tollway did experience a drop in passenger transactions in 2012 that coincided with the toll rate increase, but the drop was lower than anticipated at 4.3 percent. The Tollway projects that transactions will increase for 2013.

Figure 3: Toll revenues compared with toll transactions and GO TO 2040 revenue forecasts, 2000-2013



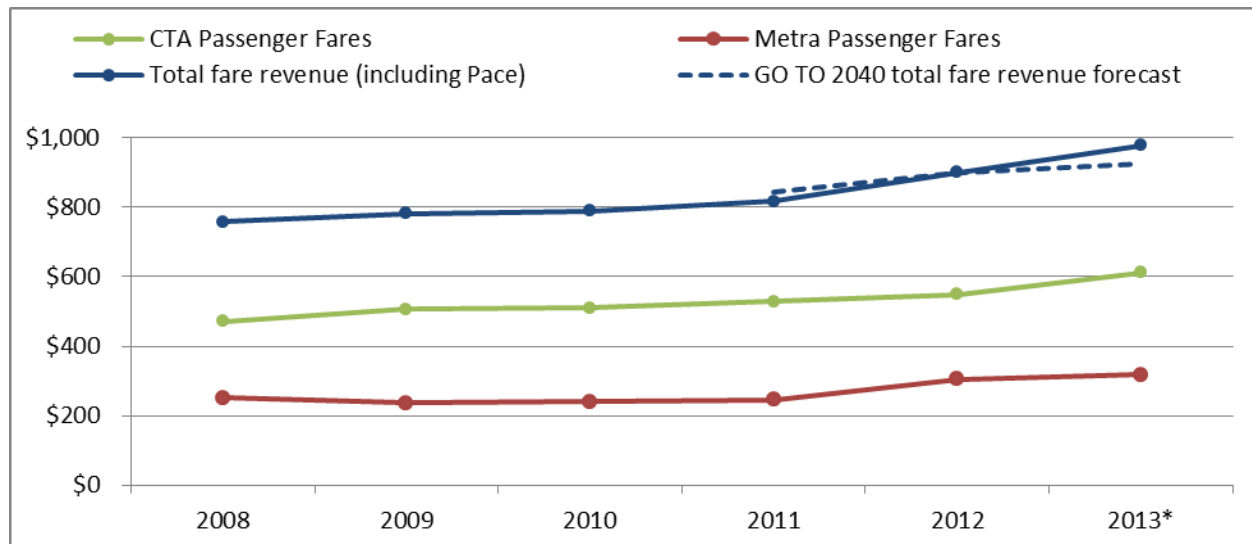
*Projected

Source: CMAP analysis of Illinois Tollway data

Transit Passenger Fares

Since the approval of GO TO 2040 financial plan, both the Chicago Transit Authority (CTA) and Metra have implemented passenger fare increases. Metra's 2012 fare increase resulted in a 25 percent increase in passenger revenue between 2011 and 2012. The CTA approved a fare increase in 2013 on all multi-ride pass types and created a higher base fare for passengers taking the Blue Line from O'Hare. This increase is anticipated to raise overall passenger fare revenue by 11.5 percent for 2013. While GO TO 2040 assumed that fares would be raised throughout the planning period, the fare increases early in the planning period mean that passenger fares are likely to be higher than forecasted in GO TO 2040. The following chart illustrates fare revenue for CTA and Metra, as well as total fare revenue since 2008 across the region's entire system, in comparison to GO TO 2040 revenue forecasts.

Figure 4: Transit passenger fare revenue, 2008 - 2013 estimated, compared to GO TO 2040 forecasts



*Projected

Source: CMAP analysis of Regional Transportation Authority data

Conclusion

Overall, there have been several major changes with regard to some of the major transportation revenues forecast for northeastern Illinois. Some of these changes may result in more revenue for northeastern Illinois between now and 2040, while other changes may mean less revenue. Over the coming weeks, CMAP staff will look at how these changes will affect revenue forecasting trends and methodology.

ACTION REQUESTED: Informational

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