



MEMORANDUM

To: Transportation Committee
Date: April 16, 2010
From: Don Kopec, Deputy Director, Planning and Programming
Re: Major Transportation Capital Projects – Status Update

The *GO TO 2040* plan will include a fiscally constrained list of major capital projects, as required by federal regulations. An initial staff proposal was discussed with the Transportation Committee in March, and has also been presented to various stakeholders. This memo describes common themes that resulted from these discussions. It also includes an analysis of the benefits of the fiscally constrained projects, as well as further discussion of the treatment of projects on the “unconstrained” list.

Results of stakeholder discussions

Over the past month, staff has presented the initial proposal for fiscally constrained major capital projects to the Councils of Mayors, CMAP’s working committees, non-profit and civic organizations, and others. The purpose of these presentations was to identify and address any concerns that stakeholder groups had with the major capital project proposal. (This was not a formal public comment period, which will be held over the summer.)

Concerns were raised about a few of the project categorizations. These, and CMAP’s response to them, are below. This is not a full list of comments received, but highlights those concerns that emerged repeatedly.

- A number of groups, including multiple stakeholders from Will County, expressed concern that the Illiana Expressway was not included as a fiscally constrained project. They pointed out that the project is supported by state-level elected officials in both Indiana and Illinois and is supported by local officials and the business community as well. CMAP’s rationale for not including this project on the fiscally constrained list is two- fold.
 - First, while the project’s assumptions include tolling of some sort, initial revenue projections show that tolls significantly higher than those charged on the rest of the tollway system would be necessary to cover construction and maintenance costs. Additional analysis of financing options needs to take place. CMAP also

supports state legislation that would allow the use of public-private partnerships for this and other projects.

- Second, the segment of the project between I-55 and I-57 has not been studied, and a wide variety of alignments and interchange points with I-55 are possible. The cost of the project, as well as its benefits, are dependent on the option chosen. CMAP supports conducting a feasibility study or initiating Phase I engineering for the project in order to narrow the project scope to a few feasible alternatives, and recommends that these activities begin as a high priority. To indicate more clearly CMAP's support for this, funding for Phase I engineering of the Illiana has been included within the fiscally constrained project list.
- Stakeholders in southern Cook County expressed concerns that the Southeast Service is categorized as a fiscally unconstrained project. This project has been undergoing Alternatives Analysis by Metra, and the selection of a Locally Preferred Alternative may be occurring in the near future. CMAP recognizes that this is a beneficial project, and recommends an aggressive approach to identify innovative financing options that can support it.
- The proposed add-lanes project on I-290 remains a significant concern for the Village of Oak Park. While concerns about the community impacts of expanding the highway are certainly valid, congestion on I-290 is extreme, and transportation improvements in this corridor are needed. The fiscally constrained project list contains a "managed lane" project on I-290 which could involve tolling, vehicle restrictions, and special accommodations for transit. IDOT's study of this corridor should include a multi-modal managed lane as an alternative, and the project should be designed in a way that does not preclude further transit expansion in this corridor. CMAP also recommends careful attention to minimizing any negative project impacts on the adjacent communities. Also, further study of a number of transit projects identified in this area during the Cook-DuPage corridor study (including Inner Circumferential Rail Service, the Mid-City Transitway, the Blue Line West Extension, and the DuPage "J" Line) is recommended.
- The Central Lake County corridor (involving the northern extension of IL 53 and improvements to IL 120) raised concern among a number of environmental and civic groups. The project does have potential negative impacts on the natural environment and on immediately adjacent communities. It also has significant positive impacts, and a number of stakeholder groups expressed support for the project. CMAP recommends that IDOT work closely with Lake County and affected communities to use an aggressive Context Sensitive Solutions (CSS) approach for the planning and design of this facility, and that environmental protection and preservation of nearby community character should be high priorities. A group of environmental stakeholders, organized through CMAP's Environmental and Natural Resources committee and Chicago Wilderness, has begun to identify mitigation actions that should accompany this project.

Other comments were received in favor of other projects that are on the fiscally unconstrained list but that have high degrees of local support. Treatment of each of these is described later in this memo.

Combined project analysis

The projects on the fiscally constrained list were evaluated together using the same measures that were calculated for the individual project evaluations, and are reported in the table below. Some measures that are unique to specific facilities (i.e. facility condition) are not reported. All projects were evaluated within the context of the Preferred Regional Scenario. The table below includes columns that show reference figures; the changes caused by the strategies in the Preferred Regional Scenario; and the additional changes (beyond those in the Preferred Regional Scenario) caused by the constrained major capital projects.

Evaluation measure	Specific calculation	Reference	Impacts of preferred scenario (change from baseline)	Impacts of projects (change from preferred scenario)
Long-term economic development	Jobs in region**	5,920,000	+ 57,400	+ 17,200
	Total income in region	\$413,000,000,000	+\$2,910,000,000	+\$912,000,000
	Gross Regional Product	\$627,000,000,000	+\$4,230,000,000	+\$1,330,000,000
Congestion	Hours of congestion systemwide	2,800,000	- 660,000	- 176,000
Work trip commute time	Average travel time in minutes, auto	32.1	- 1.79	- 0.47
	Average travel time in minutes, transit	55.0	- 7.99	- 1.19
Mode share	Total trips, auto	26,500,000	- 972,000	+ 6,050
	Total trips, transit	2,500,000	+ 972,000	+ 1,720
Jobs-housing access	Average number of jobs accessible within 45 minutes by auto	757,000	+ 142,000	+ 37,200
	Average number of jobs accessible within 75 minutes by transit	1,075,000	+ 370,000	+ 37,400
Air quality	Daily emissions of VOC, tons	58.7	- 3.52	- 0.28
	Daily emissions of NOX, tons	48.0	- 2.06	+ 0.37
	Annual emissions of direct PM, tons	975	- 42.3	+ 8.2
	Annual emissions of NOX, tons	19,100	- 840	+ 190
Energy use	Annual emissions of CO2 equivalents, million metric tons (MMT)	39.8	- 2.61	+ 0.37
Natural resource preservation	Number of impacted subzones in unprotected natural areas	n/a	n/a	228
	...as % of total impacted subzones	n/a	n/a	7%
Infill and reinvestment	Number of impacted subzones within municipal boundaries	n/a	n/a	2,785
	...as % of total impacted subzones	n/a	n/a	87%

** This measure of jobs is calculated using the TREDIS software, which uses a slightly different definition of jobs than elsewhere in *GO TO 2040*, so is not consistent with jobs figures reported elsewhere.

As it shows, the combined impact of the projects on the region's transportation system is generally positive. In combination, they result in economic growth, reduced congestion, shorter commutes, and improved job accessibility. Both auto and transit trips increase, and transit's mode share grows slightly. The fiscally constrained projects support *GO TO 2040*'s focus on reinvestment in existing communities (defined here as growth in households or jobs within or near to existing municipal boundaries), and have limited impact on sensitive natural areas. On the other hand, the projects do have negative impacts on most air quality outcomes. This occurs

mostly because the region is expected to be larger (in terms of households and jobs) than it would have been without the projects, and also because the projects improve mobility within the region and hence lead to additional travel. The negative impacts on air quality are minor, and are more than compensated for by the positive impacts of the strategies within the Preferred Regional Scenario. They are also well within expected air quality conformity limits.

Also, the “environmental justice” impacts of the constrained project list were calculated. This was done by calculating the jobs-housing access measure for only those areas that were defined as “environmental justice” areas – those with a concentration of low-income or minority residents. The purpose of this calculation is to ensure that the benefits of the region’s transportation investments are shared fairly among socioeconomic groups. As the figures below show, job accessibility is improved, particularly in terms of transit.

Evaluation measure	Specific calculation	Reference	Impacts of preferred scenario (change from baseline)	Impacts of projects (change from preferred scenario)
Jobs-housing access from “environmental justice” areas	Average number of jobs accessible within 45 minutes by auto	977,000	+ 212,000	+ 24,700
	Average number of jobs accessible within 75 minutes by transit	1,620,00	+ 431,000	+ 54,100

Project categorization

Below, projects are broken into two categories:

- Projects that are *fiscally constrained*, meaning that their costs can be covered within the region’s expected transportation revenue and that the project has been included in the demonstration that air quality standards will be met (it is conformed). This is the highest priority category of major capital projects.
- Projects that are *fiscally unconstrained*. These projects are further categorized into those recommended for accelerated project development and those that may have potential as future corridors.

As noted at past meetings, by federal regulations, major capital projects may not have a federal action, such as receiving design approval (or for transit projects, beginning preliminary engineering after a Locally Preferred Alternative has been selected), unless they are included in the *fiscally constrained* project list. Implementers may initiate feasibility studies or other preliminary work regardless of how projects are treated within *GO TO 2040*. The long-range plan is updated at least every four years, and this provides an opportunity to reassign projects to different categories. Even outside of this update cycle, the plan can be modified at any point by the MPO Policy Committee and CMAP Board, but these changes should be made only in response to rare or unforeseen circumstances, rather than treated casually.

Fiscally constrained

New projects or extensions:

- *Central Lake County Corridor: IL 53 North and IL 120 Limited Access.* This project will extend IL 53 from its current terminus at Lake-Cook Road to central Lake County. The proposal includes a dual terminus with I-94 to the east and IL 120 at Wilson Road to the west. The proposal is intended to provide improved accessibility for central Lake County. Toll revenues are expected to cover a large portion of the project cost.
- *Elgin O'Hare Expressway Improvements (includes Western O'Hare Bypass, EOE East Extension, and EOE Add Lanes).* This project will improve access to areas west of O'Hare Airport and also to a proposed West O'Hare Terminal. This project consists of several elements: (1) a western expressway bypass of O'Hare Airport; (2) an extension of the Elgin O'Hare Expressway from I-290/IL 53 to the Western O'Hare bypass and West O'Hare Terminal; and (3) adding one lane in each direction on the existing Elgin O'Hare expressway. Toll revenues are expected to cover a large portion of the project cost.
- *I-294/I-57 Interchange Addition.* This project calls for full interchange along I-294 at I-57 for improved accessibility to and from the south suburbs and also for improved north-south regional travel.
- *Red Line Extension (South).* This project extends the Red Line to a new terminal at 130th Street and the Bishop Ford Freeway, using the Union Pacific railroad corridor.
- *West Loop Transportation Center.* The West Loop Transportation Center is a proposed transportation terminal located under Clinton Street between the Eisenhower Expressway and Lake Street in Chicago. The terminal structure for the West Loop Transportation Center is envisioned to improve transfers between inter-city rail, commuter rail, rapid transit and bus services. The proposal also includes increased capacity for Chicago Union Station which serves several commuter and intercity passenger rail services.

Expansions and improvements:

- *I-190 Access Improvements.* This project consists primarily of redesigning and reconfiguring arterial access to I-190 and O'Hare International Airport.
- *I-290 Managed Lanes.* Two (one each direction) additional managed lanes are proposed from Mannheim Road east to Austin Avenue. "Managed lanes" are distinct from general purpose travel lanes in that they can be tolled, have transit components, or be restricted to certain types of vehicles.
- *I-55 Managed Lanes.* Two (one each direction) additional managed lanes are proposed from Weber Road east to I-90/94. "Managed lanes" are distinct from general purpose travel lanes in that they can be tolled, have transit components, or be restricted to certain types of vehicles.
- *I-80 Add Lanes (US 30 to US 45).* Two (one each direction) lanes are proposed from US 30 east to US 45 to serve traffic utilizing I-355 north and east-west cross-county traffic.
- *I-88 Add Lanes.* Two (one each direction) lanes are proposed from IL 56 east to Orchard Road.
- *I-90 Managed Lanes.* Proposal is to provide two managed lanes (one each direction) on I-90 from I-294 to the Elgin Toll Plaza west to I-39 near Rockford. Access to the facility will

also be improved by interchange reconstructions and additions. “Managed lanes” are distinct from general purpose travel lanes in that they can be tolled, have transit components, or be restricted to certain types of vehicles.

- *I-94 Add Lanes North.* Two additional lanes (one each direction) are proposed for I-94 in far northern Lake County from IL 173 to the Wisconsin Border. This project will maintain connectivity from the recently expanded and improved I-94 in Illinois to soon-to-be commenced expanded and improved I-94 corridor in southeast Wisconsin.
- *North Red Line Improvements.* This project includes improvements to the Red Line between the Addison and Howard stations. Along this segment, the Red Line operates within the same right of way as the Purple Line express service, which would also be affected by this project.
- *Rock Island Improvements.* Proposal is to upgrade infrastructure and service levels between LaSalle Street Station in downtown Chicago and Joliet Union Station.
- *Southwest Service Improvements.* Proposal is to upgrade infrastructure and service levels between Manhattan (southern Will County) and downtown Chicago. Service will also be rerouted to terminate at LaSalle Street station.
- *UP North Improvements.* Proposal recommends improving the operating capacity of the line between Ogilvie Transportation Center and Kenosha.
- *UP Northwest Improvements/Extension.* Two improvements are proposed on the UP-Northwest: infrastructure upgrades and a 1.6 mile extension to Johnsburg from McHenry. A new train storage yard and two additional stations in McHenry County are also proposed.
- *UP West Improvements.* This project includes improvements along this rail line from Elburn to Ogilvie Transportation Center that will enable it to better serve as an alternative to the BNSF line and also to operate more effectively in coordination with freight rail movements.

Continued study and prioritization of a number of projects is also recommended, and costs for this are included within the fiscal constraint. These projects are listed below as recommended for accelerated project development.

Fiscally unconstrained

In the following sections, fiscally unconstrained projects are broken into two categories:

- Listed first are projects for which further study and project development are recommended, or where innovative financing solutions should be investigated. These projects appear to be potentially beneficial and should continue to be advanced. Among the unconstrained projects, those on the “accelerated development” list are considered higher priority.
- Second, projects which may be appropriate as future corridors are listed. Corridor preservation is recommended for many of these to protect right-of-way for future improvements. Also, the viability of some of these projects would be increased by supportive land use planning in the area, and they should be re-examined if this occurs.

The projects on the “future corridor” list may have future potential but are currently considered lower priorities.

Recommended for accelerated project development:

- *Chicago central area.* Projects that improve circulation in the Chicago Loop and its surroundings should continue to be investigated. These include the Circle Line (particularly the southern portion of this project) and the Central Area Transitway.
- *Cook-DuPage corridor.* Four projects within this corridor should be further developed, ideally as part of the ongoing Cook-DuPage corridor study. Three of these may serve as a critical north-south transit connection in western Cook and eastern DuPage – the Mid-City Transitway, Inner Circumferential Rail Service, and the DuPage “J” Line. These projects should be evaluated and prioritized. Also, the Blue Line West Extension should be further studied.
- *I-80 corridor.* The addition of a managed lane on I-80 should be studied. Particular consideration should be given to truck traffic and the opportunity for this project to support freight.
- *Illiana corridor.* As noted above, the Illiana Expressway should begin a feasibility study from I-55 to I-57 or Phase I engineering for its entire length. Private financing and appropriate levels of tolling should also be investigated further.
- *Metra improvements.* Metra projects which focus on improvements to existing service rather than extensions should also continue to be developed. These include the full service on the Heritage Corridor, Milwaukee District North Improvements, and North Central Service Improvements.
- *Southeast Service corridor.* Innovative financing options for the Southeast Service rail line should be investigated. Also, alternative operational solutions to the need for improved transit service in this corridor – including the Metra Electric Extension – should be considered.
- *STAR Line corridor.* Innovative financing options should be considered in the STAR Line corridor as well. Alternative alignments, including the O’Hare Schaumburg Transit Service project (which travels along the Elgin-O’Hare Expressway rather than I-90) should be investigated. Also, opportunities to initiate transit service as part of the I-90 Managed Lane project should be strongly considered, even if these serve primarily to test the market and build ridership for a larger capital investment later.

Future corridors:

- *IDOT and ISTHA projects.* Corridor preservation activities should occur for these projects to protect right-of-way. Where possible, the need for these projects should be reduced by arterial or operational improvements.
 - Elgin O’Hare Expressway West Extension
 - Elgin O’Hare Expressway Far West Extension
 - I-55 Add Lanes and Reconstruction
 - I-57 Add Lanes
 - I-80 to I-55 Connector
 - IL 394

- McHenry-Lake Corridor
- Prairie Parkway
- *Metra extensions.* These projects may support the Preferred Regional Scenario if significant land use planning is done to promote transit-oriented development in the station area and its surroundings. The categorization of these projects should be reconsidered if aggressive transit supportive land use planning takes place.
 - BNSF Extension
 - Milwaukee District North Extension
 - Milwaukee District West Extension
 - Southwest Service Extension/Full Service
 - Rock Island Extension
- *CDOT and CTA projects.* These are conceptually supportive of the Preferred Regional Scenario, but less costly operational solutions to accomplish them may be possible and should be pursued.
 - Brown Line Extension
 - Express Airport Train Service
 - Orange Line Extension
 - South Lakefront Corridor
 - Yellow Line Enhancements and Extension

Schedule and next steps

Comments from stakeholders will continue to be accepted until the end of April. At that point, staff will prepare recommendations for project categorization. These will be included in the full draft of *GO TO 2040* which is scheduled to be released on June 11.

Initially, it was planned that the Transportation Committee would be asked to vote to recommend endorsement of the project categorization at its May 21 meeting. This has since been reconsidered, to allow an opportunity for broader public comment during the summer before a vote is requested. Instead, the Transportation Committee will be asked to vote to recommend adoption of the full *GO TO 2040* plan – including the categorization of major capital projects – at its September 17 meeting.

ACTION REQUESTED: Discussion.