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MEMORANDUM

To: **MPO Policy Committee**

Date: **March 4, 2010**

From: **Don Kopec, Deputy Director of 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. Since there is insufficient funding available to pursue all potentially beneficial projects, project prioritization is necessary. This memo describes how the level of fiscal constraint was determined; presents the initial staff proposal for projects to be included within the constrained amount; and describes the schedule and next steps in developing a final list of fiscally constrained projects.

Project prioritization

Projects were prioritized based on their support for the Preferred Regional Scenario, the results of the individual evaluations, and information from other project analyses. As discussed in the March 3 financial plan memo, the priorities of *GO TO 2040* are to maintain the existing system and make systematic improvements. The bulk of the region's transportation investment will be to maintain, improve, and modernize our infrastructure; pursuing new major capital projects, while important, is a lower priority than these other activities.

The highest priority major capital projects are those on the *fiscally constrained* list, on page 4 of this memo; these make up approximately one-quarter of the cost of all proposed projects. Several themes can be seen in the prioritization of fiscally constrained projects. First, there are few "new" projects or extensions. The majority of the constrained projects involve improvements to existing facilities. Second, there are a number of "managed lanes" projects. These are envisioned to incorporate advanced tolling strategies such as congestion pricing, transit alternatives like Bus Rapid Transit (BRT), or special accommodations for truck travel. Third, there is considerable public investment in transit. These priorities are consistent with the direction of the Preferred Regional Scenario, which calls for investment in the existing system, use of innovative transportation finance methods, support for freight, and a focus on improving the public transit system.

Determination of fiscal constraint
A detailed transportation financial plan is being prepared as part of *GO TO 2040*, and will be discussed with the Planning Coordinating Committee in March as a separate item. The conclusions of this work are that approximately $10.5 billion (in year of expenditure dollars, or YOE$) in funding from existing or reasonably expected sources is likely to be available for major capital projects between now and 2040. This is an increase from the amount of $8 billion estimated at the January meeting of the Planning Coordinating Committee. This increase is due to changes in assumptions about the level of investment needed to maintain the system at a safe and adequate level. While the increase from $8 billion to $10.5 billion is significant, it remains a small percentage of the region's overall $385 billion in transportation expenditures.

Before addressing project categorizations, please note three important points regarding fiscal constraint.

- First, the constrained costs of new capital projects include not only the cost of construction, but the cost of operating and maintaining them from construction until 2040. For highways, annual operations and maintenance costs were assumed to be 1% of the initial cost of construction of the new facility. For transit, this same amount was assumed for annual maintenance, but operations were handled separately. Annual transit operation costs were sometimes estimated by the implementer, in which case these costs were used; in cases where this was not given, an estimate of 1% of the initial construction cost was used. In all cases, half of the transit operating cost was assumed to be covered through farebox recovery and was not "charged" to the fiscal constraint.

  To use an example, a transit project that cost $1 billion to construct in 2020 would then need to be maintained and operated until 2040. Maintenance costs were assumed to start at $10 million per year, with this figure rising with inflation (so, annual maintenance costs in 2030 would be $13.4 million instead). Operations costs would also start at $10 million per year, but half of this would be covered through fares, so only $5 million annually (rising in future years with inflation) would be considered as part of the project cost. In this hypothetical example, the $1 billion transit project constructed in 2020 would cost an additional $400 million to maintain and operate until 2040.

- Second, project revenues have not been counted as part of this $10.5 billion figure. Generally, revenues from projects would be gathered through tolling, or through the use of private funds. (Revenues from farebox recovery have already been subtracted from project cost, as described above.) The $10.5 billion estimate includes only public contributions. In other words, if a project could be constructed using revenue gathered entirely from tolls, it would require no public funding and would not count against the $10.5 billion constraint. Potential revenues will be addressed project by project.

- Third, many capital projects include reconstruction of existing facilities, as well as new capacity. For example, a highway add-lanes project typically also includes the reconstruction or resurfacing of the existing facility. Often, the reconstruction or resurfacing would have needed to happen regardless of whether the add-lanes project had been pursued. Within the financial classifications used in the transportation financial plan, this would already be counted as a necessary expense to maintain a safe and adequate system. It is important to note that the $10.5 billion figure **does not** include these reconstruction costs, meaning that it is **not** double-counting these expenses.

  To create an estimate of the proportion of project costs that would likely be used for reconstruction, staff reviewed major capital projects constructed during the past twenty years, from 1990 to 2009. It was estimated based on this review that approximately 50% of the total cost of these projects was devoted to the addition of new capacity, and 50% involved reconstruction. These means that to reach a capital cost of $10.5 billion, approximately $21 billion in total project cost should actually be identified.

  Staff recognizes that this calculation is confusing. A simpler approach would be to set the fiscal constraint for major capital projects at $21 billion and ignore the "double-counting" issue. This would lead to the same outcome in terms of the number of projects that could be accommodated within the fiscal constraint. But it also would overstate the level of funding that is actually devoted to new elements of the transportation system, and it would send the wrong message in terms of the priorities of *GO TO 2040*. The initial constrained project list includes projects that have $21 billion in total costs, but these projects do more than add new capacity to the system; they also reconstruct and modernize the infrastructure we already have.

Project categorization

In the tables 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*. As a later step, further prioritization and classification of these projects is expected.
- Also, several projects were proposed by individuals or organizations during the *GO TO 2040* plan or during past regional plans but were not fully evaluated. These projects are listed in an appendix attached to this memo.

By federal regulations, major capital projects may not have a federal action, such as receiving design approval, unless they are included in the *fiscally constrained* project list. Implementers

may initiate preliminary engineering, feasibility studies, or other preliminary work regardless of how projects are treated within *GO TO 2040*.

Regional planning is a continuous process which responds to changing circumstances, and priorities change over time. The long-range plan is updated at least every four years, and this provides an opportunity to reassign projects to different categories in response to changes in funding situations or priorities. Even outside of the required update cycle, the plan can be modified at any point by the MPO Policy Committee and CMAP Board. However, changes between plan updates should not be made casually; they should be reserved for rare circumstances that could not be foreseen. CMAP believes that the project categories should truly reflect the region's priorities.

The initial staff proposal for the categorization of projects is presented on the following pages. The first chart shows that the total public sector cost for new capital for the constrained projects is approximately $10.5 billion. Please note that a line item of $100 million is included for the continued study and prioritization of projects that are currently not on the constrained list. Some of these projects appear to have considerable potential, but are at an early stage in the project development process; this funding is meant to advance the planning and study of these projects to better understand their benefits.

Initial proposal for *fiscally constrained* projects:

Project	Year	Construction cost, 2009$b	Full cost, YOE$b	Revenue (toll) assumptions	**Public sector cost, YOE$b**
New facilities and extensions					
Central Lake County Corridor: IL 53 North and IL 120 Limited Access	2025	2.00	3.41	75%	**0.85**
Elgin O'Hare Expressway Improvements (includes Western O'Hare Bypass, EOE East Extension, and EOE Add Lanes)	2020	3.60	5.49	75%	**1.37**
I-294/I-57 Interchange Addition	2020	0.58	0.88	20%	**0.71**
Red Line Extension (South)	2015	1.05	1.88	0%	**1.88**
West Loop Transportation Center	2020	2.50	4.15	0%	**4.15**
Expansions and improvements					
I-190 Access Improvements	2020	0.36	0.54	0%	**0.54**
I-290 Managed Lanes	2020	1.50	2.29	25%	**1.72**
I-55 Managed Lanes	2025	1.60	2.72	25%	**2.04**
I-80 Add Lanes (US 30 to US 45)	2015	0.10	0.14	0%	**0.14**
I-88 Add Lanes	2020	0.02	0.03	75%	**0.01**
I-90 Managed Lanes	2020	1.80	2.74	75%	**0.69**
I-94 Add Lanes North	2015	0.10	0.14	75%	**0.03**
North Red Line Improvements	2020	2.26	3.45	0%	**3.45**
Rock Island Improvements	2020	0.47	0.71	0%	**0.71**
Southwest Service Improvements	2020	0.19	0.31	0%	**0.31**
UP North Improvements	2020	0.40	0.66	0%	**0.66**
UP Northwest Improvements/Extension	2017	0.44	0.69	0%	**0.69**
UP West Improvements	2017	0.56	0.89	0%	**0.89**
Other					
Continued study and prioritization					**0.10**
Total public sector cost					**20.8**
Total public sector cost for new capital elements*					**10.5**

*This figure is calculated by applying the standard that 50% of the cost of an average project actually involves reconstruction, which has already been counted in the "safe and adequate" or "state of good repair" cost categories. Therefore, while the total project costs of constrained projects are $20.8 billion, only $10.4 billion of this is actually estimated to be for new capital elements. Added to this is the $100 million in project development costs described above.

Initial proposal for *fiscally unconstrained* projects:

Project	Year	Construction cost, 2009$b	Full cost, YOE$b	Revenue (toll) assumptions	**Public sector cost, YOE$b**
New facilities and extensions					
Blue Line West Extension	2040	2.30	5.58	0%	**5.58**
BNSF Extension	2020	0.08	0.12	0%	**0.12**
Brown Line Extension	2040	3.70	8.98	0%	**8.98**
Central Area Transitway	2020	0.30	0.50	0%	**0.50**
Circle Line (North)	2040	2.00	4.85	0%	**4.85**
Circle Line (South)	2017	1.00	1.79	0%	**1.79**
DuPage "J" Line	2030	1.10	2.16	0%	**2.16**
Elgin O'Hare Expressway West Extension	2030	0.18	0.34	25%	**0.26**
Elgin O'Hare Expressway Far West Extension	2030	0.21	0.40	25%	**0.30**
I-80 to I-55 Connector	2040	0.10	0.24	50%	**0.12**
Illiana Corridor	2030	2.87	5.48	75%	**1.37**
Inner Circumferential Rail Service	2040	1.10	2.67	0%	**2.67**
McHenry-Lake Corridor	2040	1.00	2.43	25%	**1.82**
Metra Electric Extension	2020	0.26	0.43	0%	**0.43**
Mid-City Transitway	2040	1.30	3.16	0%	**3.16**
Milwaukee District North Extension	2020	0.58	0.96	0%	**0.96**
Milwaukee District West Extension	2020	0.78	1.29	0%	**1.29**
O'Hare to Schaumburg Transit Service	2040	1.00	2.43	0%	**2.43**
Orange Line Extension	2015	0.45	0.69	0%	**0.69**
Prairie Parkway	2025	0.90	1.53	25%	**1.15**
Rock Island Extension	2040	0.05	0.12	0%	**0.12**
Southeast Service	2017	0.74	1.17	0%	**1.17**
Southwest Service Extension/Full Service	2040	0.29	0.71	0%	**0.71**
STAR Line	2017	2.76	4.39	0%	**4.39**
Yellow Line Enhancements and Extension	2015	0.23	0.36	0%	**0.36**
Expansions and improvements					
Express Airport Train Service	2020	1.75	2.87	0%	**2.87**
Heritage Corridor	2040	0.18	0.43	0%	**0.43**
I-55 Add Lanes and Reconstruction	2020	0.75	1.14	0%	**1.14**
I-57 Add Lanes	2030	0.80	1.53	0%	**1.53**
I-80 Add/Managed Lanes	2025	2.25	3.83	25%	**2.87**
IL 394	2020	0.54	0.82	0%	**0.82**
Milwaukee District North Improvements	2020	0.08	0.12	0%	**0.12**
North Central Service Improvements	2040	0.30	0.72	0%	**0.72**
South Lakefront Corridor	2020	1.00	1.66	0%	**1.66**
Total public sector cost					**60.70**
Total public sector cost for new capital elements*					**30.35**

* This figure is calculated by applying the standard that 50% of the cost of an average project actually involves reconstruction, which has already been counted in the "safe and adequate" or "state of good repair" cost categories.

Project evaluation results
Individual project evaluation results can be found online at: http://www.cmap.illinois.gov/WorkArea/DownloadAsset.aspx?id=18975 and summarized at: http://www.cmap.illinois.gov/WorkArea/DownloadAsset.aspx?id=18964 . Please note that these are high-level informational results produced using a regional model, and ranking projects based solely on these results is not recommended. Committee members should use caution in comparing projects, as small differences between them are likely not significant. In addition, any recommended project will require additional detailed study prior to implementation. Project-level studies produce different results, appropriate to the level of detailed needed for implementation. The results in this evaluation are intended to provide only a general idea of comparative benefits.

Finally, projects are not implemented in isolation. The interactions between mutually-supportive projects improve system performance beyond the sum of the individual measures. The calculation of evaluation measures for the entire set of constrained projects is underway.

Schedule and next steps
The project categorization described above represents an initial staff proposal concerning the treatment of major capital projects. Discussion of this is expected at the Transportation Committee (March 5) and Planning Coordinating Committee (March 10), and modifications may be made based on these discussions. Following this, comments from stakeholders and the public will be sought during late March and April.

In May, the Planning Coordinating Committee is expected to be requested to recommend the endorsement of the categorization of major capital projects into constrained and unconstrained lists, possibly with further breakdowns among the unconstrained projects. The MPO Policy Committee and CMAP Board are expected to be asked for endorsement at their June meetings. Following this endorsement, a formal air quality conformity analysis and public comment period will be held over the summer, with final adoption of the *GO TO 2040* plan and major capital projects by the MPO Policy Committee and CMAP Board in October.

ACTION REQUESTED: Discussion.

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