



MEMORANDUM

To: CMAP Transportation Committee
From: CMAP staff
Date: September 13, 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, including meetings where CMAP’s Transportation Committee will be presented with updates.

Revenue and expenditure forecasting

CMAP 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 CMAP Board and MPO Policy Committee will vote on the approval of the GO TO 2040 update, including the financial plan.

Revenue Trends

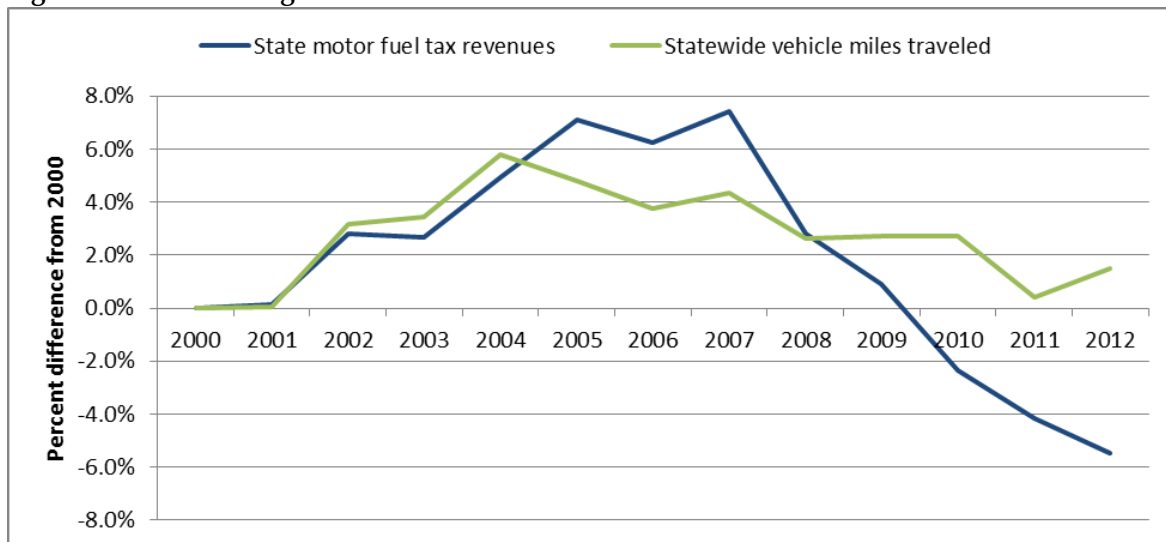
As part of the financial plan update process, recent policy changes and implementations undertaken by federal, state, and local entities will be analyzed. At the federal level, new vehicle fuel economy standards were issued in 2012 that have the potential to affect motor fuel tax (MFT) revenues. In addition, 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

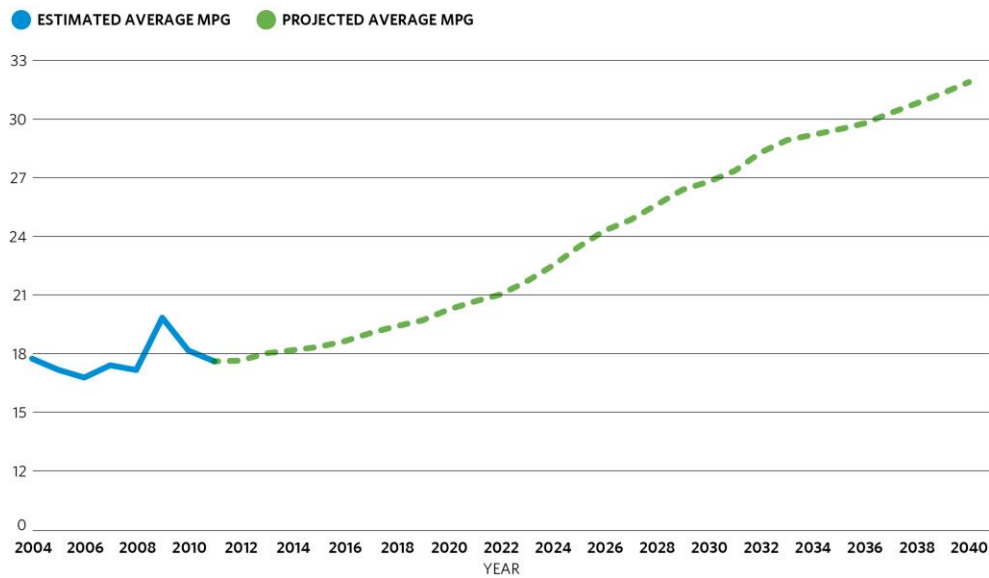


Source: CMAP analysis of Illinois Department of Transportation data

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>

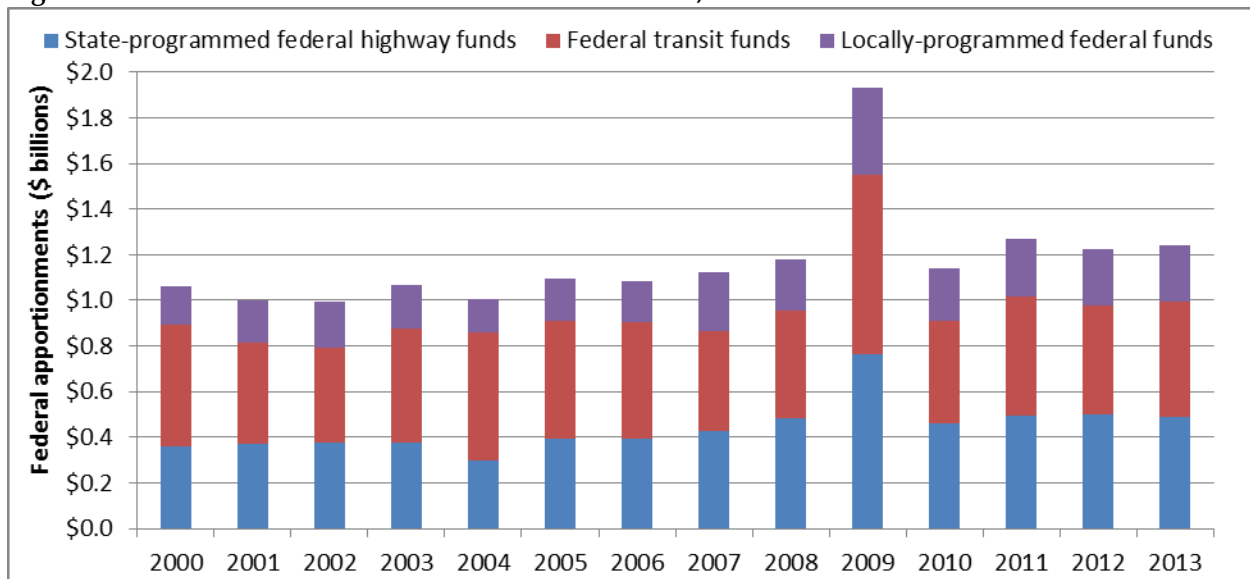
previous SAFETEA-LU programs combined, but devolves some project selection authority to metropolitan regions such as CMAP.

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

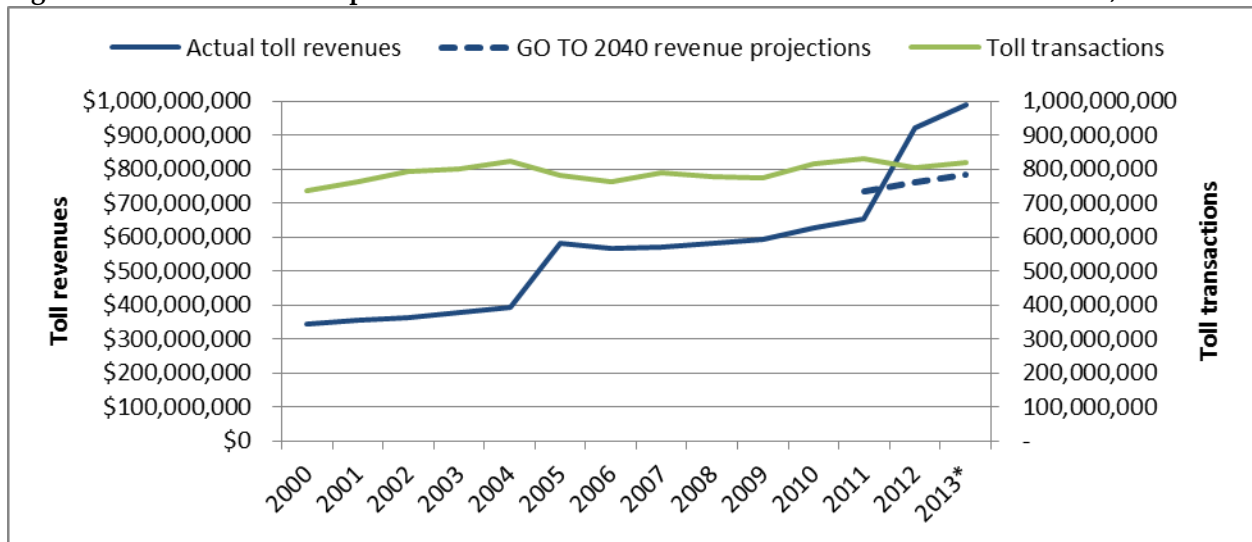
Tollway Revenue

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



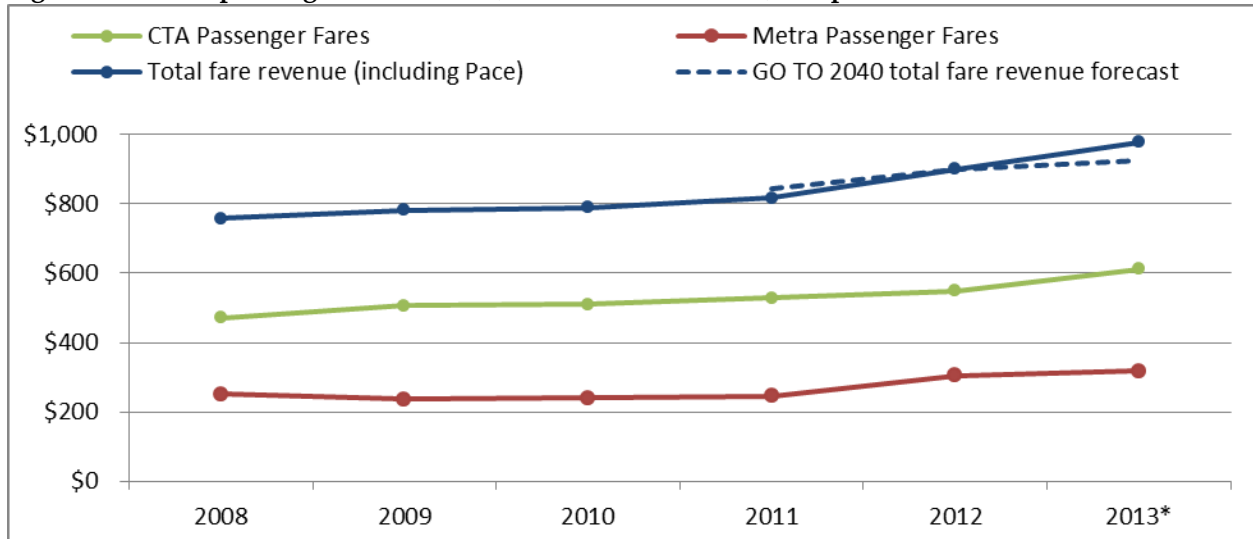
*Projected

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.