



## MEMORANDUM

**To:** CMAP Board and Committees

**From:** CMAP staff

**Date:** September 22, 2017

**Re:** ON TO 2050 Financial Plan for Transportation Forecast Update

---

---

As required by law, CMAP must prepare a financial plan, including the anticipated expenditures and revenue sources necessary to carry out the operation, maintenance, and expansion of the region's surface transportation system over the ON TO 2050 planning period (2019-50). Specifically, federal regulations require that "for purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways" and "public transportation" (CFR § 450.322 (f) (10)).

During committee presentations in spring 2017, CMAP staff presented draft forecasts for core revenues and expenditures necessary to operate, administer, and maintain the transportation system, as well as recommendations for reasonably expected revenues. CMAP staff continued to refine the forecast further, primarily revising assumptions that had the effect of lowering the operations expenditure forecast for both transit and local roadways.

This memo provides an update to the ON TO 2050 forecasts for core revenues and expenditures to operate and administer the current system and maintain its current state of repair. The memo also includes the recommendations and forecasts for the proposed five reasonably expected revenues presented in April 2017.

### **Forecast summary**

The forecast indicates that revenues from existing sources will not be sufficient to operate and maintain the transportation system over the planning period, let alone enhance or expand the system. Adding reasonably expected revenues to the forecast will make a total of \$516.7 billion available over the planning period (2019-50), of which 94 percent is necessary to maintain, operate, and administer the system in its current condition. This leaves 6 percent, or \$30.9 billion to allocate toward reaching a state of good repair, enhancing, or expanding the system.

As required by federal regulations, revenues and expenditures were forecast in year of expenditure dollars rather than real or constant dollars, meaning that inflationary increases are included in the forecasts. The following table summarizes the updated forecast over the 32-year ON TO 2050 planning period (2019-2050).

**Summary of draft financial plan forecast, 2019-50, in billions (year of expenditure)**

Federal revenues	\$61.9
State revenues	\$166.8
Local revenues	\$233.0
<b>Subtotal core revenues</b>	<b>\$461.7</b>
Increase state MFT and replace with VMT	\$30.0
Expand the sales tax base to additional services	\$11.0
Federal cost of freight services fee	\$7.0
Regional revenue source	\$5.0
Local parking pricing expansion	\$2.0
<b>Subtotal reasonably expected revenues</b>	<b>\$55.0</b>
<b>Total revenues</b>	<b>\$516.7</b>
Roadway operating/administering expenditures	\$114.9
Transit operating/administering expenditures	\$162.9
Roadway capital maintenance	\$126.8
Transit capital maintenance	\$81.1
<b>Total operating and maintenance expenditures</b>	<b>\$485.8</b>
<b>Amount available for other allocation categories</b>	<b>\$30.9</b>

CMAP staff estimates that the expenditures for operating and maintaining the transportation system to its current state of repair will exceed the core revenues forecasted to be available over the planning horizon 2019 to 2050 by \$24 billion. Moreover, the expected funding will not allow for additional improvements, enhancements, or expansions to the system. To keep the region’s transportation system in the condition it is in today, as well as fiscally constrain a limited number of enhancements and expansions within the long-range planning context, the region will need to prioritize the advancement of new and innovative revenue sources as major policy priorities in ON TO 2050.

**Core revenues**

The core revenue forecast totals \$461.7 billion over the 32-year planning period. Forecasts of core revenues include funding sources the region currently receives for transportation purposes and do not include any new sources. The forecasts assume that northeastern Illinois will continue to receive revenues from federal, state, and local sources for constructing, operating, administering, and maintaining the current roadway and transit system. This includes periodic transit fare and toll rate increases, which will be necessary to ensure sufficient revenues to pay for these systems over the 32-year planning period. In addition, this assumes that three state capital programs will be enacted during the planning period, which will ensure the region’s ability to make capital investments in the transportation system. Until there is more clarity on its implementation, CMAP does not believe the provisions contained in the [recent “lockbox” amendment](#) to the state constitution regarding transportation funds ([Article IX, Section 11](#)) to have an effect on the forecast.

As with GO TO 2040, revenue sources will be aggregated prior to the process of allocation to expenditure categories. This approach is suited to a long-range planning process focused on determining regional investment priorities, rather than budgeting for a program. In addition, the approach fits with CMAP recommendations emphasizing the need to use state motor fuel tax (MFT) revenue for all transportation modes and congestion pricing revenues to support enhanced transit service or arterial improvements in priced corridors.

### **Expenditures to operate and administer the existing system**

This category includes the cost of administering, operating, and servicing debt for the region's roadway and transit system. This assumes no operational enhancements, but the continued operation of the existing system. This includes employee costs, rent, utilities, non-capital repairs, fuel, debt service, as well as other costs needed to administer daily operations of the transportation system.

Forecasts for the operation and administration of IDOT District 1, Illinois Tollway, county transportation departments, the RTA, and transit service boards were estimated from historical expenditures. Municipal and township operating and administration forecasts were derived from U.S. Census of Governments data on highway operating expenses from 2012, the most recent year available.

### **Expenditures to maintain the system**

The forecast includes the cost of capital maintenance on the region's roadway and transit system based on maintaining current conditions. The most recent data available indicate that 76.5 percent of National Highway System roadways are of acceptable ride quality, 9.3 percent of bridges are structurally deficient, and 68.4 percent of transit assets are in a state of good repair. The expenditure forecast is based on the investment needed to keep these conditions constant and not increase the backlog of facilities in fair or poor condition. ON TO 2050 may include targets for pavement, bridge, and transit asset condition that may represent an improvement over current conditions, as well as allocations in the fiscal constraint to meet these targets, to the extent that doing so is identified as a regional priority and feasible within funding constraints.

Staff used the Highway Economic Requirements System-State (HERS-ST) model to forecast pavement condition and expenditures on National Highway System roadways. Similarly, the RTA's Capital Optimization Support Tool (COST) was used to forecast transit asset condition and investment needs. CMAP used an in-house model based on National Bridge Inventory data to forecast bridge maintenance needs. Staff forecasted maintenance on other roadway assets, such as local roads, based on assumptions of the typical cycles with which roadway maintenance projects are performed today. These capital assets make up a large portion of the forecast, in part because local roadways make up the majority of the region's roadway network. These expenditure forecasts include capital maintenance expenditures completed in tandem with Regionally Significant Projects. This forecast does not include any costs that would address a need for increased capacity on the transportation system.

Note that continuing current levels of investment will lead to worsening asset condition; maintaining current condition actually represents a significant increase in investment over current regional investment practices. For instance, with only current levels of funding available for transit maintenance, the system would significantly deteriorate, with just 41.9 percent of assets in a state of good repair at the end of the planning period.

Maintenance costs were inflated for year-of-expenditure using a 2.5 percent rate, a reduction from the 3 percent annual increases assumed in GO TO 2040. By most measures, cost increases have been lower in recent years. Over the past 32 years, the average annual percent change in the U.S. Consumer Price Index was 2.6 percent, down from nearly 3 percent in the 26 years prior to the GO TO 2040 2014 update. FHWA’s National Highway Construction Cost Index has been essentially flat since 2009, while Engineering News Record’s national construction cost index has experienced average annual increases of just 2.7 percent of the past several years.

### Reasonably expected revenues

Federal guidance permits the inclusion of these types of revenues, called “reasonably expected revenues,” to be included in the financial plan: “All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.” Recent experience both within the region and across the country suggests that all five revenue sources could be reasonably expected to be implemented over the planning horizon. Given the substantial deficit between core revenues and expenditures, these policies must be implemented to ensure the future viability of the region’s transportation system. The following table summarizes a total of \$55 billion in proposed reasonably expected revenues for the ON TO 2050 Financial Plan for Transportation.

#### Summary of reasonably expected revenues for ON TO 2050

Reasonably expected revenue	Amount	Notes
Increase state MFT and replace with vehicle miles traveled fee	\$30 billion	Replace MFT with 2 cents/mile VMT, after initial 10 cent MFT rate increase
Expanding the sales tax base	\$11 billion	Increase existing sales tax base by 15%, resulting in more RTA sales tax revenue
Federal cost of freight service fee	\$7 billion	8% (½ of NEIL's share of national truck and rail freight) of total revenues.
Regional revenue source	\$5 billion	Transportation user fee, such as \$15 fee on all vehicles registered in the region
Expansion of priced parking	\$2 billion	200,000 additional priced spaces by 2050
<b>Total</b>	<b>\$55 billion</b>	

Certain new funding sources, like congestion pricing, tolling, public private partnerships, and value capture, are specific to particular projects. Therefore, in the financial plan, they will be used to offset the cost of specific Regionally Significant Projects, rather than being included as reasonably expected revenue.

### **Increase state MFT and replace with a vehicle miles traveled fee**

As vehicle travel levels off and fuel economy rises, the state MFT can no longer keep pace with growth in construction costs, let alone the transportation system's larger investment needs. A near-term increase in the state MFT rate supports GO TO 2040 recommendations and will help to offset the decline in purchasing power, and appears reasonable, given experience elsewhere in the country. Many states have enacted transportation revenue enhancements in recent years, with most of those new revenues coming from motor fuel tax increases. According to [Transportation for America](#), 24 states have done so since 2012.

However, over the long term, the state MFT should be replaced with a revenue source that provides sufficient, stable, and growing revenue. The [Transportation System Funding Concepts](#) strategy paper suggests that ON TO 2050 recommend a vehicle miles traveled (VMT) fee as the long-term alternative to the state MFT.

Levied on a per-mile rather than per-gallon basis, VMT fees act as a direct user fee and also offer opportunities to integrate with other types of facility-level pricing. Eventually, VMT fees could be leveraged to implement a system where different rates could be applied to travel on different types of facilities, at different times of day, and for different classes of vehicles. This revenue source would benefit from a national solution that allows VMT fees to be collected from out-of-state drivers; a national approach would also streamline implementation. In addition, the state should take the opportunity presented by the implementation of a new revenue source to integrate measures to lower the burden on lower-income drivers.

Given recent efforts across the United States to study or begin implementation, it is reasonable to assume that one could be implemented in Illinois by 2025. For example, Oregon has initiated a vehicle miles traveled fee, although the program is currently limited to 5,000 participants. Other states are in varying stages of testing or piloting VMT fees, including [Delaware](#) (in partnership with neighboring states), [Hawaii](#), [Minnesota](#), [Washington](#), and [California](#). Additionally, several states are studying alternatives to the MFT, including VMT fees, and the federal government [provided](#) funding in 2016 to test innovative approaches to transportation funding. Just recently, FHWA announced a second round of funding for the grant program. Last year, two bills ([SB3267](#) and [SB3279](#)) were introduced in the Illinois General Assembly to establish state VMT fees. CMAP studied VMT fees in the May 2015 issue brief, [Possible Alternatives to the Illinois Motor Fuel Tax](#).

### **Expanded sales tax base**

As part of its tax policy recommendations, GO TO 2040 recommends expanding the sales tax base to include additional services. If current rates remained the same, this expansion would generate more revenue for state and local governments, including the RTA, potentially providing more funding for operating costs and freeing up other revenues to use for transportation capital costs. Currently, the RTA imposes a sales tax of 0.75 percent in the collar counties and 1.0 percent in Cook County (1.25 percent for qualifying food, drugs, and medical appliances). In addition, the RTA receives Cook County's 0.25 percent portion of the state sales tax on general merchandise. These funds support transit operations in the RTA service area, as well as transportation and public safety purposes in the collar counties.

There has been recent state legislative interest in implementing GO TO 2040's recommendation of expanding the sales tax base. There have been two bills proposed this legislative session. [Senate Bill 9, Amendment 3](#) would add several services to the Use Tax Act. The structure proposed in this specific bill would mean that the RTA sales tax would not be affected, but the RTA would eventually receive 10 percent of the local share of the statewide revenues in state disbursements.

### **Cost of freight service fee**

Freight investment is an emerging transportation policy issue at all levels of government. At the federal level, a sales tax on the cost of shipping freight could raise considerable revenues with a very low rate. Such a "cost of freight service fee" has a user-fee nexus to the freight system, and could be mode-neutral (that is, not collected disproportionately from shippers using truck, rail, air, or water to move goods). A similar approach is currently used for air-freight shipments to help support the nation's aviation capital program, which are [taxed](#) at the rate of 6.25 percent of the amount paid for the air-cargo service. Administration could be difficult – for example, properly accounting for shipments made by private fleets – and new rules and practices would need to be established to accurately and efficiently collect the fee.

A cost of freight service fee would likely be implemented in the context of a long-term transportation reauthorization bill, which would define how revenues could be disbursed in the federal transportation program, or potentially as part of a larger federal tax reform bill. Drawing on the example of the freight program in the current authorization law, the Fixing America's Surface Transportation Act (FAST Act), it is possible that revenues raised from a cost of freight service fee would be split between a formula program and a competitive program. CMAP's [federal agenda](#) supports performance-based approaches to federal programs, as well as an engaged role for metropolitan planning organizations in planning and project selection. This proposal assumes implementation of a cost of freight service fee after the FAST Act expires in 2020, as part of the next surface transportation bill.

Cost of freight service fees have recently received attention among national policy circles. The 2009 [National Surface Transportation Infrastructure Financing Commission](#) considered the waybill tax -- essentially a version of the cost of freight fee -- as a potential revenue source, assuming a 0.01 percent rate. AASHTO's 2014 [transportation revenue matrix](#) similarly included versions of a freight waybill tax of 0.5 percent applied to gross freight revenues. In 2014 and 2015, bills were introduced in the House of Representative to establish new freight funding programs based on a waybill tax fee. For example, the 2014 [proposal](#) for the "Economy in Motion Act" would establish an \$8 billion freight fund based on a 1 percent tax on trucking and rail shipments to be paid by the shipper. Most recently, the Eno Center for Transportation's 2016 [Delivering the Goods](#) report recommends a "cost of freight shipment" fee to support a national freight discretionary grant program over the long term. Eno recommends a rate of 0.3 percent applied to all modes, exempting international portions and aviation portions of trips. It also recommends applying the fee to internal private fleets.

### **Regional revenue source**

CMAP's [Regional Tax Policy Task Force](#) recommended that the region pursue regional revenue sources for regional transportation needs. Other than the RTA sales tax, which provides

funding for transit operations, metropolitan Chicago does not have a regionwide, dedicated source of funding to provide for capital transportation investments. The region faces significant transportation infrastructure needs, while revenues overall are increasing slower than expenses. Changes at the federal and state levels alone are unlikely to sufficiently address the region's transportation infrastructure needs. Moreover, many of the transportation system needs in northeastern Illinois are unique. For example, the investments needed in the region to move the transit system to a state of good repair, decrease freight delay, and reduce roadway congestion are significantly greater than investments required in other parts of the state.

Other regions have imposed other types of regional taxes and fees to raise funding for transportation improvements and expansions. For example, sales tax measures were implemented in the Los Angeles and Denver regions, while Las Vegas has both a sales tax and a motor fuel tax to fund transportation improvements.

One potential regional source, a regional vehicle registration fee, could raise significant revenues at relatively low rates, and could build off existing collection mechanisms. The state collects a [vehicle registration fee](#) and [more than half](#) of the region's municipalities do as well. Regional vehicle registration fees have been implemented to support and improve transit in the Seattle region, as well as in North Carolina's Research Triangle region.

### **Expansion of priced parking**

While some parking spaces – both on-street and off-street – are priced, particularly in denser parts of the region, the majority of parking spaces in the region are unpriced. A growing body of research illustrates how free parking obscures the true cost of driving and thereby discourages transit, bike, or walking trips. Pricing more publicly-owned parking spaces on streets and in municipally-owned lots and garages could provide revenue for local transportation improvements and reduce the number of trips by car, helping to reduce emissions, alleviate congestion, and allow land to be transitioned to revenue-generating uses.

Given the vast number of parking spaces in the region, relatively low parking rates applied to relatively few parking spaces could raise significant revenues for municipalities to expend on local transportation needs. In some areas, parking rates could be variable, with higher prices charged at times and locations of peak demand or for certain type of vehicles, like delivery trucks in business districts, allowing for more efficient use of available parking spaces.

There is growing interest in innovative parking strategies. The City of Chicago launched a [Downtown Loading Zone Reform](#) pilot program in 2017. It is anticipated that \$13 million to \$18 million would be generated annually if this program were implemented citywide. Similar programs have been implemented in other cities, such as [New York](#) and [Washington D.C.](#) CMAP has published a [toolkit](#) to assist municipalities in developing parking strategies and has completed [Local Technical Assistance](#) projects related to local parking issues. Based on recommendations in the LTA studies, the Village of Hinsdale upgraded payment technologies in one parking lot to credit card machines and increased hourly rates, and new on-street parking meters were installed in two Chicago neighborhoods to encourage parking turnover. To fully implement this revenue source, CMAP should continue to emphasize LTA assistance for these types of projects.

## **Next steps**

The next step in the development of the financial plan is to prioritize how to invest the \$30.9 billion by allocating planned expenditures into different categories. These categories, as [presented in January 2017](#), including achieving performance targets, other strategic enhancements, and regionally significant projects.

## Forecast methodology

This section will discuss the specific methodologies used for projecting revenues for ON TO 2050 over the 2019-2050 planning period.

### Core revenues

#### Locally-programmed federal revenue

Draft forecast: \$12.2 billion	Draft assumptions for ON TO 2050
Portion of annual federal apportionment that is sub-allocated to the Chicago region for programming. This includes the federal fund sources of CMAQ, Transportation Alternatives Program-Local, Surface Transportation Program-Local, and Surface Transportation Program-Counties.	Revenues were assumed to grow 2.25% annually. This is based on the assumption that federal funds will come to the region at a rate commensurate with growth in the economy. Congressional Budget Office projects that non-farm business sector Gross Domestic Product will grow 2.25% annually between 2019 and 2026.

#### Other federal transit revenue

Draft forecast: \$26.2 billion	Draft assumptions for ON TO 2050
Projection includes New Starts, bus and bus facilities, State of Good Repair, and Urban Formula programs, as well as other federal transit grants.	Revenues through 2021 are based on the FFY2017-21 State/Regional Resources Table. After 2021, revenues are forecast to grow at a rate of 2.25% annually. This is based on the assumption that federal funds will come to the region at a rate commensurate with growth in the economy. Congressional Budget Office projects that non-farm business sector Gross Domestic Product will grow 2.25% annually between 2019 and 2026.

#### State-programmed federal highway revenue

Draft forecast: \$23.5 billion	Draft assumptions for ON TO 2050
Portion of annual federal apportionment that is allocated to the State of Illinois for programming. This includes the federal fund sources of National Highway Performance Program, Surface Transportation Program-Urban, Highway Safety Improvement Program, Transportation Alternatives Program, and Recreational Trails.	Revenues were assumed to grow 2.25% annually. This is based on the assumption that federal funds will come to the region at a rate commensurate with growth in the economy. Congressional Budget Office projects that non-farm business sector Gross Domestic Product will grow 2.25% annually between 2019 and 2026. Forty-five percent of the statewide total annual apportionment was assumed to go to northeastern Illinois.

#### State Public Transportation Fund

Draft forecast: \$22.2 billion	Draft assumptions for ON TO 2050
State funds equal to 30 percent of RTA sales tax and real estate transfer tax revenues.	Revenues from this matching fund equals 30% of forecasted Regional Transportation Authority (RTA) sales tax and real estate transfer tax estimates.

**State Motor Fuel Tax**

Draft forecast: \$6.8 billion	Draft assumptions for ON TO 2050
<p>Portion of state motor fuel tax retained by IDOT for the Road Fund and State Construction Account. The current rate is 19 cents per gallon (21.5 cents per gallon of diesel).</p>	<p>Using a methodology to account for increasing vehicle fuel economy, revenues generally decreased throughout the planning period. CMAP forecasted annual vehicle miles traveled (AVMT) and average miles per gallon (MPG) to estimate revenue. To forecast AVMT, CMAP used actual statewide AVMT data for passenger vehicles (1996 – 2015) and for all other vehicles (2009-2015) to calculate linear trendlines for AVMT. Average annual percent change in AVMT between 2019 and 2050 was 0.3% for passenger vehicles and 0.9% for other vehicles.</p> <p>For MPG estimates for passenger vehicles over the planning horizon, CMAP created estimates based on National Highway Traffic Safety Administration (NHTSA) rules for Corporate Average Fuel Economy (CAFE) standards, estimated standards for 1978 through 2025 model years for cars and light trucks, and information about vehicle fleet from the Federal Highway Administration’s) 2009 National Household Travel Survey. For non-passenger vehicles, MPG was assumed to improve with NHTSA fuel efficiency standards for medium- and heavy-duty vehicles.</p> <p>After accounting for various statutory deductions, the region is assumed to receive 45% of these revenues for the purposes of funding state road construction and maintenance projects.</p>

**State motor vehicle registration fees and other state fees**

Draft forecast: \$27.1 billion	Draft assumptions for ON TO 2050
<p>Annual vehicle registration fees, certificate of title fees, overweight fines, permit fees, and operator’s license fees collected by the State that are deposited into the Road Fund and State Construction Account.</p>	<p>Motor vehicle registration fee revenues to the Road Fund and State Construction Account, were assumed to grow at a rate of approximately 1.3 percent annually. Other types of fees in this category were forecast to grow approximately 1.8 percent annually. The region is assumed to receive 45 percent of these revenues for the purposes of funding state road construction and maintenance projects. Fee rate increases were not assumed here, as they would likely be accounted for in future state capital programs.</p>

**Tollway revenue**

Draft forecast: \$84.8 billion	Draft assumptions for ON TO 2050
Toll revenues forecasted to be collected on the 286-mile system, as well as other operating revenues. The current toll rate structure went into effect in 2012. Following 2017, the commercial rate will be adjusted annually for inflation.	Toll revenue projections were derived from estimates prepared for the Illinois Tollway by CDM Smith in May 2016. The projection assumed that the annual adjustment in commercial toll rates beginning in 2017 would be 2 percent annually. CMAP also included an assumption of two passenger toll rate adjustments throughout the planning period.  Other operational revenues, such as concessions and miscellaneous income, were forecast to grow at a compound rate of 2.0% annually.

**State capital program**

Draft forecast: \$24.6 billion	Draft assumptions for ON TO 2050
State capital programs are typically funded with a variety of revenue increases, including fee increases on sources like vehicle registration and certificate of title.	It is assumed that the state will enact a capital program three times during the planning period, in ten year intervals. Funding levels were assumed to grow 2.5% annually, with Illinois Jobs Now! as a base.

**Other state transit**

Draft forecast: \$1.4 billion	Draft assumptions for ON TO 2050
The State has provided \$8.5 million annually to support Pace Americans with Disabilities Act (ADA) Paratransit service since 2010. The State also provides reduced fare reimbursements to the service boards.	Both reduced fare reimbursements and ADA support are forecast to remain flat for the duration of the planning period.

**RTA sales tax**

Draft forecast: \$70.5 billion	Draft assumptions for ON TO 2050
The RTA sales tax is equivalent to 1.25% of sales in Cook County and 0.75% of sales in DuPage, Kane, Lake, McHenry, and Will counties. The RTA receives 2/3 of the collar county revenues.	Forecast was provided by the RTA. RTA sales tax revenues are assumed to grow 3% annually throughout the planning period.

**Collar County Transportation Empowerment Program**

Draft forecast: \$7.9 billion	Draft assumptions for ON TO 2050
1/3 of collar county revenues generated from the RTA sales tax are returned to DuPage, Kane, Lake, McHenry, and Will counties to be used for roads, transit, and public safety.	Growth in revenues generated for the collar counties are based on projected population growth combined with inflationary assumptions. During the planning period, annual growth averages 3.0%.

**Local allotment of state MFT**

Draft forecast: \$8.8 billion	Draft assumptions for ON TO 2050
Counties, townships, and municipalities receive a disbursement of state MFT	State MFT revenue was forecasted using the methods explained above.

revenue. Cook County receives a 16.74% share. The remaining county share is based on motor vehicle registration fees received, township share is based on share of mileage of township roads, and municipal share is based on population.	
---	--

**Other local revenues**

Draft forecast: \$81.5 billion	Draft assumptions for ON TO 2050
These are local revenues, such as property tax revenue, sales tax revenue, local motor fuel taxes and impact fees used for transportation, excluding the RTA sales tax, state funds, and federal funds. Local governments with jurisdiction over transportation include counties, townships, and municipalities.	Revenues were calculated for municipalities and townships using 2012 U.S. Census of Governments data, which includes all local governments in the region. County revenues were obtained from recent county budget documents. Revenues were adjusted to the current year using the change in the Consumer Price Index and population growth. To forecast to 2050, growth rates for CMAP population forecasts were added to an annual 2.5% inflationary adjustment. Average annual growth regionwide was 3.1%. County MFTs for DuPage, Kane, and McHenry were forecast separately using the same methodology for the state MFT, although baseline fuel economy was derived separately for each county and AVMT growth was calculated using growth rates in AVMT for each county for each air quality conformity analysis year.

**Chicago Real Estate Transfer Tax (RETT) (portion for CTA)**

Draft forecast: \$3.4 billion	Draft assumptions for ON TO 2050
The \$1.50 per \$500 of value of the City of Chicago's RETT transferred to the CTA.	Revenues were forecast to grow at an average annual rate of 2.1% annually.

**Transit passenger fares**

Draft forecast: \$53.0 billion	Draft assumptions for ON TO 2050
This includes passenger fares for the CTA, Metra, Pace, and Pace ADA.	Forecast was provided by the RTA. Revenues were forecast to grow at an average rate of 2.9% annually. This assumes average annual ridership growth of 1.1% and the remaining growth is assumed to come from periodic fare increases.

**Other transit operating revenue**

Draft forecast: \$7.8 billion	Draft assumptions for ON TO 2050
This included other revenues for the RTA, CTA, Metra, Pace, and Pace ADA such as advertising revenue, investment income, and Medicaid reimbursements.	These revenues are assumed grow at a rate of 2.7% annually, based on assumed rates of growth in system revenue and ridership.

# Expenditures for administering, operating, and capital maintenance

## Roadway operations expenditures

Draft forecast: \$114.9 billion	Draft assumptions for ON TO 2050
Includes highway operations and administrative costs for IDOT District 1, Illinois Tollway, counties, townships, and municipalities. Also includes Tollway debt service and state debt service for Series A bonds.	<p>Illinois Tollway and IDOT District 1 operating and administrative expenditures were forecasted using a linear trendline based on the most recent 15 years of available data. During the planning period, annual growth averaged 2.0% for IDOT District 1 and 2.2% for the Illinois Tollway. Tollway interest payments were forecast on a linear trendline using 2011-2015 data, and growth averaged 2.9% annually during the planning period. Series A bond payments were forecast to grow 2.0% annually during the planning period, and it was assumed that 45% of these costs were attributable to the region.</p> <p>Municipal and township highway operations and administrative expenditures were estimated from the local highway operations expenditures reported to the 2012 Census of Governments, and adjusted to the current year based on inflation and population growth. County expenditures were obtained from 2017 county budget documents. County, township, and municipal expenditures were assumed to grow at an average rate of 2.4 percent annually during the planning period due to growth in inflation.</p>

## Transit operations expenditures

Draft forecast: \$162.9 billion	Draft assumptions for ON TO 2050
Includes operating, administration, and debt service costs for the RTA, CTA, Metra, Pace, and Pace ADA.	Operating and administrative expenditures were forecast to grow an average of 2.7 percent annually during the planning period. The interest portion of debt service payments were forecast for to grow an average of 2.4% annually during the planning period.

## Roadway capital expenditures

Draft forecast:	Draft assumptions for ON TO 2050
Capital maintenance costs for the interstate system, state highways, Illinois Tollway highways, and local roads.	Capital maintenance expenditures for NHS roadways were estimated using the HERS-ST model, an optimization model that identifies projects based on deficiencies in the roadway network and selects the projects with the highest benefit given different constraints and objectives defined by the user. The model forecasts pavement condition using the current condition of roadways as well as factors such as truck volume. If the

	<p>current or forecasted conditions meet a deficiency threshold of IRI <math>\geq</math> 170, HERS-ST will identify potential improvements and calculate their benefit-cost ratios. The scenario used assumed that current pavement conditions would be maintained during the planning period. Upcoming IDOT and Illinois Tollway pavement improvement projects were included as user-specified improvements.</p> <p>Capital maintenance expenditures for bridges were developed using a model created by CMAP staff. The CMAP bridge model is based on deterioration curves for Illinois from National Bridge Inventory (NBI) data. The model considers the condition of the deck, substructure, and superstructure and if one or more components of the bridge is in fair or poor condition, it will trigger an improvement to the bridge. The scenario used assumed that current pavement conditions would be maintained during the planning period.</p> <p>Capital maintenance expenditures for non-NHS roadways and traffic signals are based on assumptions for unit costs and maintenance cycles. These assumptions are then applied to the inventory of highway assets in the region.</p> <p>Various state, county, municipal, and township transportation departments provided feedback on modeling assumptions, unit costs, and lifecycle assumptions.</p> <p>Expenditures were inflated 2.5% annually.</p>
--	---

**Transit capital expenditures**

Draft forecast: \$81.4 billion	Draft assumptions for ON TO 2050
Capital maintenance costs for the CTA, Metra, Pace, and Pace ADA.	Results from the RTA's COST model were used to forecast maintenance for a period of 2019-48. The final two years of the planning period were extrapolated. The scenario assumed that the current condition of assets would be maintained across the planning period. Expenditures were inflated 2.5% annually.

## Reasonably expected revenues

### Increase state MFT and replace with VMT fee

Draft forecast: \$30 billion	Draft assumptions for ON TO 2050
Northeastern Illinois would receive increased revenues resulting from an initial state motor fuel tax rate increase, followed by the implementation of a vehicle miles traveled fee to replace the state motor fuel tax.	<p>The state motor fuel tax rate would be increased by 10 cents in approximately 2020, and the rate would be indexed to an inflationary measure. An annual growth rate of 2.5 percent was used for the purposes of this forecast.</p> <p>A vehicle miles traveled fee would be implemented in approximately 2025 at a rate of 2 cents per mile. The rate would be indexed to an inflationary measure, assumed to be 2.5 percent annually for the purposes of this forecast. Funds would flow to northeastern Illinois in the same manner as the state MFT current does.</p>

### Expand the sales tax base to additional services

Draft forecast: \$11 billion	Draft assumptions for ON TO 2050
The sales tax would be expanded to additional services, which would result in additional RTA sales tax revenues, as well as state sales tax disbursements to the RTA.	Additional services would be added to the sales tax base in approximately 2021, resulting in a 15 percent increase in the base. Revenues are assumed to grow at a rate of 3.2 percent annually, which is the average annual growth rate for personal consumption expenditures in Illinois for certain services between 2006-15.

### Federal cost of freight service fee

Draft forecast: \$7 billion	Draft assumptions for ON TO 2050
The federal government would impose a new cost of freight service fee, with a portion of revenues allocated to the region.	The COFS fee would be implemented as part of the next federal transportation bill in 2020. The forecast assumes that \$2 billion would be raised nationwide in the first year, as was estimated in Eno's 2016 <a href="#">Delivering the Goods</a> report. The forecast assumes that the region's share of the federal revenue will be equivalent to half of its share of the nation's truck and rail freight traffic, which totals 16.2 percent. It is assumed that allocations will grow at the same rate as other federal revenue in the forecast (2.25 percent).

### Regional revenue source

Draft forecast: \$5 billion	Draft assumptions for ON TO 2050
A regional revenue source, such as a vehicle registration fee, would be imposed in northeastern Illinois.	As an example, it was assumed that a \$15 regional fee would be imposed on all vehicles registered in the 7-county region beginning in approximately 2021. The rate would be indexed to an inflationary

	measure, assumed to be 2.5 percent annually for the purposes of this forecast.
--	--

**Expansion of priced parking**

Draft forecast: \$2 billion	Draft assumptions for ON TO 2050
Municipalities in the region would increase the number of priced parking spots in the region throughout the planning period.	Pricing of unpriced parking spots will be phased in annually, starting with 550 spaces in the first year. The number of priced spaces would accelerate as the concept gained popularity. Prices would vary by location, and it was assumed that the regional average would total \$4 per day, with rates growing annually with inflation, assumed to be 2.5 percent annually for the purposes of this forecast.

ACTION REQUESTED: Information

###