

Memorandum on Illinois Sources of Transportation Funding

This memorandum provides an overview of the current sources of transportation funding in Illinois organized by mode, including highways, transit, air, rail, and marine. Key agencies that receive and use transportation funding are identified, including the Illinois Department of Transportation (IDOT), transit agencies, public airports, public port districts, and local public agencies. Each section of the memo includes a summary of significant revenue sources by mode. The most important revenue sources for transportation in Illinois are federal reimbursements, which support more than half of IDOT's current program, state motor fuel taxes (MFT), and motor vehicle registration (MVR) fees. The memo concludes with key trends likely to impact these key revenue sources over time.

Appendix A to this memo includes a summary of the revenue impact estimates through 2050 for two of the key trends: the increased adoption of electric vehicles (EVs) and improvements in vehicle fuel economy.

Highway Funding

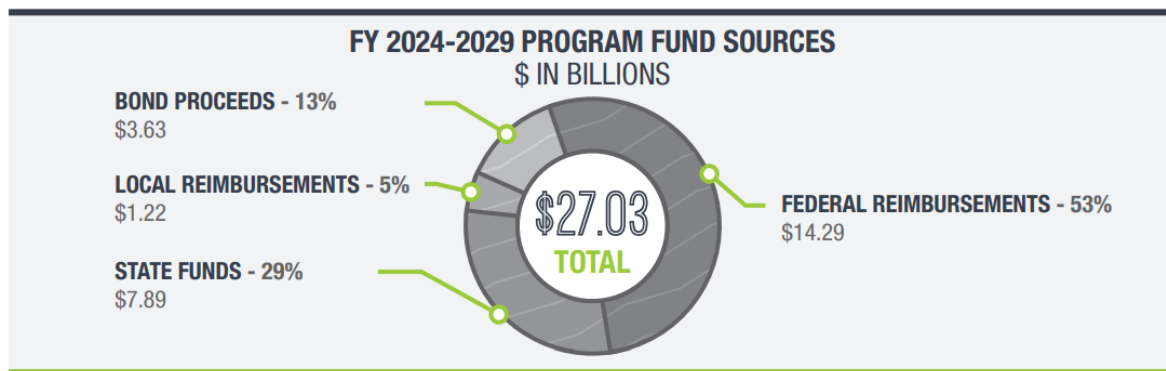
Responsibility for construction, preservation, maintenance, and operations of roads and bridges (collectively highways) in Illinois is shared between the state (IDOT) and local governments (counties, municipalities, and townships). IDOT has the largest program because it manages an extensive network of high-volume facilities and primarily relies on federal and state funding sources.

- Federal sources are provided by the U.S. Department of Transportation (U.S. DOT) modal agencies, primarily the Federal Highway Administration (FHWA), through multiyear transportation authorizations by Congress. These federal funding sources include both formula funding, apportioned to the state as part of the transportation reauthorization legislation, and competitive funding sources awarded to IDOT by U.S. DOT.
- State sources include state MVR fees, MFT, sales taxes on fuels, and bond proceeds. State capital programs (currently Rebuild Illinois) establish tax rates for these sources and authorize bond issuances. Local public agencies, including counties, municipalities, and townships, primarily rely on the state MFT, which is allotted to them by formulas set in state law.
- Local revenue sources include local MFT, property taxes, sales taxes, parking fees, vehicle stickers, and others.

In addition to the above sources of funding, the state issues bonds, which provides capital for infrastructure investments. However, bond proceeds are not revenue sources; they are loans that must be repaid from revenue sources over time.

As shown in **Figure 1** below, IDOT has programmed \$27.03 billion in highway improvements as part of the FY 2024-2029 Proposed Highway Improvement Program. This program is supported by federal reimbursements (53 percent of the total program), state funds (29 percent), bond proceeds (13 percent), and local reimbursements (5 percent).

Figure 1. Fund Sources for the FY 2024-2029 Proposed Highway Improvement Program



Source: IDOT, FY 2024-2029 Proposed Highway Improvement Program

Federal funds are awarded on a reimbursement basis, with IDOT seeking reimbursement from U.S. DOT. State sources primarily come from MVR and MFT. Sales taxes from motor fuel sales and interest income constitute small contributions to the total. Bond proceeds are authorized by the General Assembly as part of the current state capital program, Rebuild Illinois, and debt service is paid from state revenue sources. Local reimbursements are typically collected from local agency revenue sources after IDOT pays for vendors' work.

Federal sources of highway funding

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) into law. Commonly known as the "Bipartisan Infrastructure Law," IIJA authorizes \$1.2 trillion over five years for transportation and other infrastructure, of which U.S. DOT receives approximately \$567.5 billion, including \$351 billion for highway programs. IIJA provides approximately a 50 percent increase in highway program funding above the previous transportation authorization legislation, the Fixing America's Surface Transportation (FAST) Act, which was enacted in 2015¹. IIJA substantially increased funding for existing formula and competitive programs, and established four new formula programs that impact state highway agencies like IDOT (Bridge Formula

¹ Congressional Research Service, Infrastructure Investment and Jobs Act (IIJA) Would Provide a 50% Increase in Highway Funding and Boost Major Freight Projects. <https://crsreports.congress.gov/product/pdf/IN/IN11758/2>

Program, PROTECT, Carbon Reduction Program, and National Electric Vehicle Infrastructure Program), along with dozens of new discretionary programs.

IDOT is expected to receive over \$11.3 billion in federal formula surface transportation funding over the five-year period covered by IJA, representing a 20 percent increase in federal formula transportation funding over the FAST Act. The majority of this funding, \$9.8 billion, is distributed through nine primary federal formula funding programs (**Table 1**). The remainder of federal formula funding comes from three programs within the Highway Infrastructure Program (HIP): the Bridge Replacement, Preservation, Protection, and Construction Program (\$1.4 billion); National Electric Vehicle Infrastructure Program (\$149 million); and ferry boat program² (\$6.7 million).

In federal FY (FFY) 2022, Illinois was apportioned \$1.9 billion in primary federal formula funding, which represents a 21 percent increase over FFY 2021 levels of \$1.56 billion. Formula funding is expected to increase by 2 percent annually through FFY 2026.

Table 1. Estimated IJA (FFY 2022 to FFY 2026) Primary Formula Apportionment for Illinois by Program (in millions)³

Program	FFY 2022	FFY 2023	FFY 2024	FFY 2025	FFY 2026	IJA Total
National Highway Performance Program (NHPP)	\$999.5	\$1,019.5	\$1,040	\$1,060.6	\$1,081.9	\$5,201.5
Surface Transportation Block Grant (STBG)	\$486.2	\$496	\$505.9	\$516	\$526.3	\$2,530.5
Highway Safety Improvement Program (HSIP)	\$102.0	\$104.3	\$106.6	\$109	\$111.4	\$533.3
Congestion Mitigation & Air Quality Improvement (CMAQ)	\$119.9	\$122.4	\$124.8	\$127.3	\$129.8	\$624.3
Metropolitan Transportation Planning	\$22.5	\$23	\$23.4	\$23.9	\$24.4	\$117.1
National Highway Freight Program (NHFP)	\$49.3	\$50.3	\$51.3	\$52.3	\$53.4	\$256.6
Carbon Reduction Program	\$43.4	\$44.2	\$45.1	\$46	\$46.9	\$225.6
PROTECT Formula Program	\$49.3	\$50.3	\$51.3	\$52.3	\$53.4	\$256.6
Apportioned Total	\$1,883.5	\$1,921	\$1,959.6	\$1,999	\$2,038.8	\$9,802

Source: FHWA apportionment data

IJA stipulates that many of the primary programs be sub-allocated to local governments according to criteria specific to each program. Of the \$9.8 billion in primary Federal formula funding Illinois expects from FFY 2022 to 2026, approximately \$2.9 billion is sub-allocated for local programs administered by local agencies. Table 2 details amounts sub-allocated by program.

² For federal purposes, ferries are considered part of the highway system. Congress has included ferry-related improvements as eligible expenditures from the Highway Trust Fund since 1960. IDOT operates two ferries over the Illinois River, at Kampsville and Brussels. IDOT also has an agreement with the Kentucky Transportation Cabinet to provide ferry service over the Ohio River at Cave-in-Rock (IDOT, available online: <https://idot.illinois.gov/travel-information/passenger-services/ferry-services.html>).

³ For additional definitions of federal programs refer to the Congressional Research Service Report on Federal Highway Programs: <https://crsreports.congress.gov/product/pdf/r/r47022>

Table 2: Estimated IJA (FFY 2022 to FFY 2026) Primary Formula Sub-Allocation by Program (in millions)

Program	FFY 22/SFY 23	FFY 23/SFY 24	FFY 24/SFY25	FFY 25/SFY26*	FFY 26/SFY27*	Total
Local Surface Transportation Block Grant - Rural Areas	\$71.6	\$75.0	\$76.4	\$77.7	\$79.0	\$379.6
Local Surface Transportation Block Grant - Urban Areas	\$247.1	\$259.0	\$263.7	\$268.1	\$272.6	\$1,310.5
Local Bridge Formula Program	\$56.2	\$58.9	\$60.0	\$61.0	\$62.1	\$298.2
Local Highway Safety Improvement Program	\$23.7	\$30.6	\$31.4	\$32.0	\$32.7	\$150.5
Local Congestion Mitigation & Air Quality Improvement (CMAQ)	\$105.8	\$114.8	\$114.7	\$109.7	\$120.2	\$565.3
TMA Transportation Alternatives Program	\$20.2	\$20.6	\$21.023*	\$21.4	\$21.9	\$84.1
Local Rail-Highway Safety Program	\$6.8	\$6.8	\$6.7	\$6.8	\$6.8	\$33.9
TMA Carbon Reduction Program	N/A	N/A	21.372*	\$21.8	\$22.2	\$44.0
Apportioned Total	\$531.4	\$565.8	\$552.9	\$598.6	\$617.5	\$2,866.2

*estimates

Source: IDOT

In addition, FHWA administers an Emergency Relief Program that makes up to \$100 million available annually per year nationwide. Illinois received \$2.3 million in FFY 2023 for flooding events.

Of the \$351 billion in highway authorizations in IJA, \$304 billion is provided by the Highway Trust Fund (HTF) and the remaining \$47 billion from general fund transfers. The HTF provides contract authority, which does not require annual appropriations by Congress, while the general fund transfers do require annual appropriations. The HTF is primarily funded by federal motor fuel taxes of 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel (approximately 85-90 percent of the total), with the remainder coming from taxes on heavy truck tires, truck and trailer sales, and the heavy vehicle use tax.⁴

⁴ General fund transfers to augment fuel tax revenues are a recent noteworthy development indicating the revenue contributing to the HTF is not matching federal apportionments.

State sources of highway funding

State Motor Vehicle Registration (MVR) Fees

The MVR fee is the single largest source of revenue for IDOT’s Highway program, raising just over \$2 billion in FY 2022. The MVR is administered as a flat fee and is not indexed to inflation. The General Assembly has periodically increased MVR rates to support new capital investment and debt repayment.

The most recent capital program, Rebuild Illinois, increased MVR rates for passenger vehicles by approximately 50 percent in 2019. Annual passenger vehicle registration fees now total \$151. The Rebuild Illinois legislation also removed the discounted registration fee for EVs and replaced it with a \$100 annual surcharge on top of the \$151 registration fee. In addition, the state collects annual registration fees for other vehicle types to support transportation investments.⁵ For example, vehicles with C-truck license plates have a \$218 registration fee, motorcycles have \$41 registration fee, and recreational trailers have registration fees ranging from \$18 to \$102, depending on weight. Additional fees are collected for personalized or vanity registrations for passenger vehicles and motorcycles,

Between FY 2017 and FY 2020, revenues from state MVR fees ranged between \$1.4 billion and \$1.6 billion annually. After MVR rates were increased by the Rebuild Illinois legislation, MVR revenue increased 36 percent, to almost \$2.2 billion in FY 2021. Revenue from MVR fees is projected to remain stable at just over \$2B through FY 2032 (**Figure 1**), given that population growth and vehicle ownership rates are expected to be stable in Illinois over time.

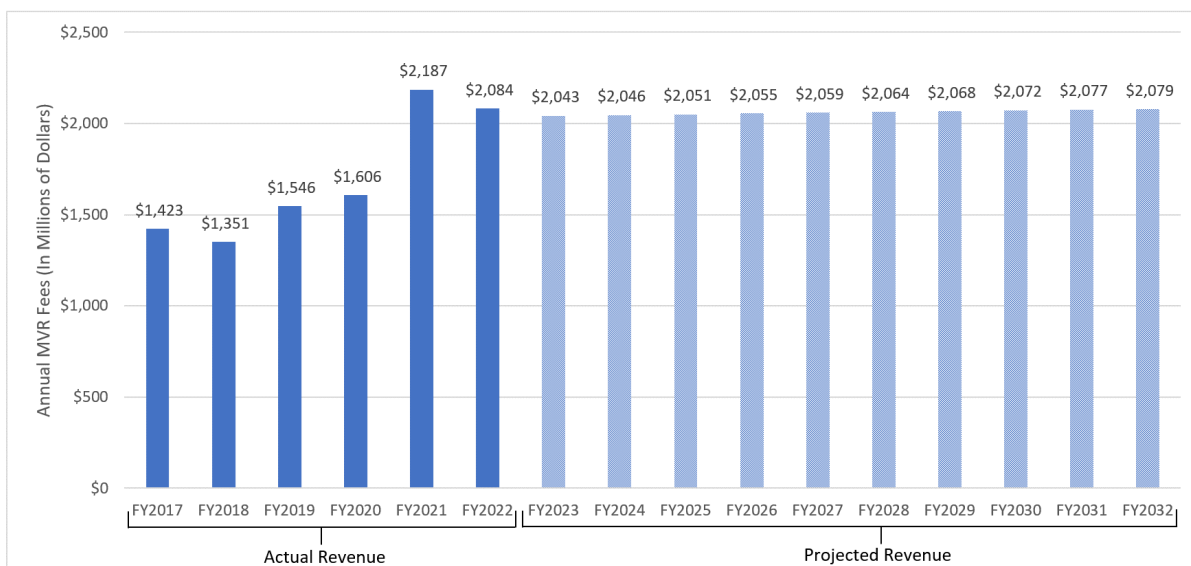


Figure 1: Total Motor Vehicle Registration Fee Revenue, Actual and Projected (FY 2017 to FY 2032)

⁵ Illinois Secretary of State, Fees, Vehicle Services. <https://www.ilsos.gov/departments/vehicles/basicfees.html>.

Source: Analysis of IDOT data

State Motor Fuel Tax (MFT)

The state MFT is the second largest state source of revenue used by IDOT, providing over \$1.1 billion in revenues in FY 2022. The state MFT has two components. The first is a \$0.19 per gallon base rate and the second is a \$0.19 per gallon rate subject to indexing annually based on changes in the Consumer Price Index for All Urban Consumers. Diesel fuel is also subject to an additional \$0.075 per gallon “diesel differential tax.” For FY2024, the total combined rates are \$0.454 per gallon of gasoline and \$0.529 per gallon of diesel. For comparison, the rate of gasoline tax in neighboring states ranges from a low of \$0.245 per gallon in Missouri to \$0.34 per gallon in Indiana, while the rate of diesel tax ranges from a low of \$0.245 per gallon in Missouri to \$0.57 per gallon in Indiana.

State MFT revenue increased steadily through the early 2000s as broad socioeconomic growth resulted in an increase in total vehicle travel and fuel consumption. As growth in vehicle travel slowed and fuel economy improved, state MFT revenue stabilized through the 2010s. Rebuild Illinois essentially doubled the base MFT rate and indexed the increased MFT to inflation, which doubled revenues from \$522 million in FY 2019 to just over \$1 billion in FY 2020 (Figure 2). Total MFT revenues are projected to increase annually in the near-term due to inflation. However, over a longer time horizon out to 2050, MFT revenue are expected to decrease due the increasing market share of EVs and improved fuel economy of light-duty vehicles broadly.

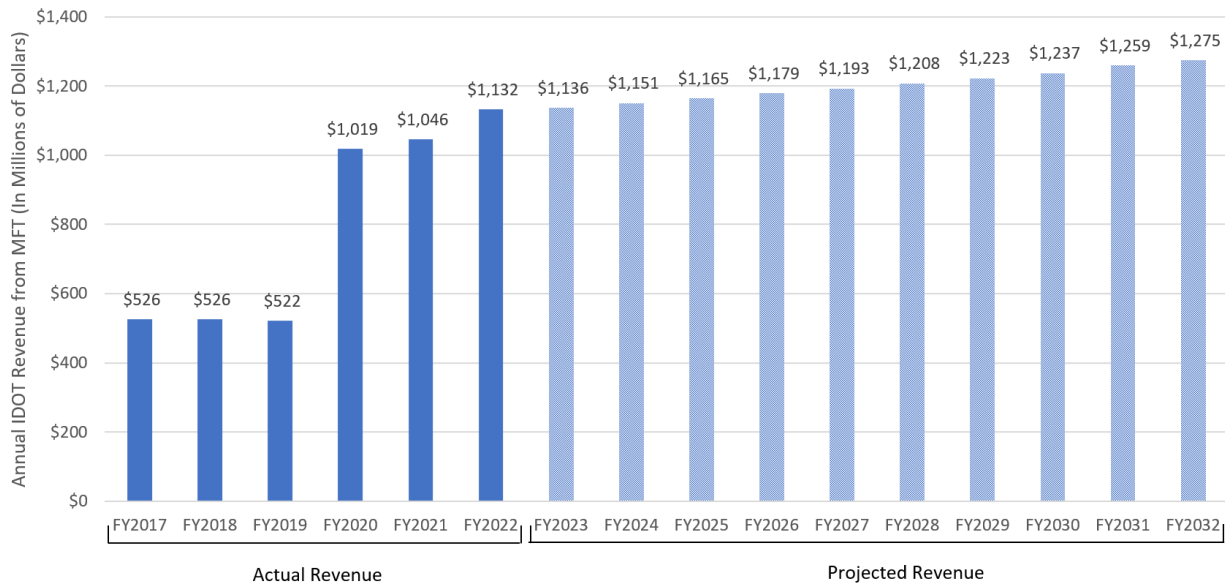


Figure 2: Net Illinois MFT Revenue, Actual and Projected (FY 2017 to FY 2032)

Source: Analysis of IDOT data

Sales tax

Illinois is one of only three states in the nation to assess a state sales tax on motor fuels. These taxes are levied on a cent-per-gallon basis, with calculations of the rate updated every six months based on the price of gasoline.⁶ As of the second half of 2022, the rate was 23 cents per gallon for gasoline. The rate increased to 24 cents per gallon for the first half of 2023, but fell to 20 cents per gallon in the second half of the year. As a globally traded commodity, the price of gasoline can be volatile in the short term, resulting in relatively large changes in revenues.

In FY 2022, fuel sales tax contributed over \$100 million to IDOT.⁷ The Rebuild Illinois program began a 5-year transition of motor fuel sales tax revenues from state general funds to transportation funds. Of the 6.25 percent state sales tax rate on motor fuels, revenues equivalent to 1 percentage point were dedicated to transportation in FY 2022. This share will increase one additional percentage point each year through FY 2026, when it will reach the final share of 5 percentage points, which is equivalent to 80 percent of state sales tax revenues from motor fuel.

Bond proceeds

In recent years, the State of Illinois has enacted a major capital program approximately once per decade (Illinois FIRST in 1999, *Illinois Jobs Now!* in 2009, and Rebuild Illinois in 2019). Debt

⁶ <https://tax.illinois.gov/research/taxrates/prepaysalestax.html>

⁷ Because of relatively high motor fuel prices in mid-2022, prepaid sales tax collections have been higher in state FY 2023, which began in July 2022. In January 2023, year-to-date collections were over \$0.2 billion, and IDOT staff estimates that total revenues for the fiscal year will be \$0.5 billion.

payments for the bonds issued under these capital programs are primarily supported by an increase in MFT and MVR rates, and other smaller fees. Authorized bonds allow for near-term capital spending repaid over time from these revenue sources.

In Illinois, there are four bond programs that support transportation capital expenditures. Transportation Bond Series A finances land acquisition, construction, reconstruction, extensions, and improvements for state highways. Series B finances mass transportation and aviation infrastructure, although Series B bond funds are not currently being used to finance aviation. Series D finances work on both state highways and local roadways. Rebuild Illinois created a new mechanism, Series E, to fund multimodal projects. Approximately one-third (\$11 billion) of the total \$33.2 billion in transportation investments from Rebuild Illinois comes from bonds. This includes an additional \$6.5 billion in bonding authority for Series A and \$4.5 billion in bonding authority for the new Series E.

A reliance on bonding to support the state capital program has tradeoffs. While bond proceeds allow IDOT and other public agencies to support a large short-term increase in transportation spending, work tends to revert to baseline levels once the bond proceeds are spent. In addition, to the extent that new bonds rely on MFT or MVR revenues for debt service, capacity for future transportation spending from those sources becomes constrained. Debt payments for highway bonds (Series A and Series D) was \$524 million in FY 2023, with projections of future debt service increasing from \$443 million in FY 2024 to \$718 million in FY 2031. Debt service for multi-modal bonds (Series E) reached \$53 million in FY 2023, with projections to increase to \$325 million in FY 2030. The capital infusion from bond issuance, which represents 13% of the FY 24-29 highway program, will therefore decline while debt payments increase to \$1.04 billion by 2030.

Tolling

The Illinois State Toll Highway Authority (the "Illinois Tollway") maintains nearly 300 centerline miles of expressway, serving much of the Chicago metropolitan area, as well as the Rockford and DeKalb regions and rural areas in northern Illinois. Unlike other agencies, the Tollway is self-funded, primarily from toll revenue, and has the authority to increase its toll rates through action by its Board of Directors. Passenger car toll rates were last increased in 2012. Toll rates range by toll plaza, from a low of \$0.20 to a high of \$1.90 for passenger cars for I-PASS payments, with higher rates for online payments. Commercial vehicle toll rates vary by location, time of day, vehicle size, and, in some cases, payment method. As of January 2024, commercial vehicle toll rates range from a low of \$0.30 to a high of \$18.30. Commercial vehicle toll rates were raised 60 percent between 2015 and 2017, and since 2018 have increased annually with inflation. In 2022, the Tollway's annual revenue was \$1.34 billion, 3.2 percent below pre-pandemic revenues of \$1.38 billion in 2019. Toll revenues support the maintenance and operation of the Tollway system, capital improvements, and debt service payments on revenue bonds used to fund prior system expansion.

Because a substantial share of the expressway network in northern Illinois is self-supporting through tolls, Illinois receives "toll credits", also known as "soft match" (since they are not real

dollars) and formally referred to as transportation development credits (TDCs), from the Federal Highway Administration. Title 23 USC Section 120 (j) allows IDOT to apply toll credits toward the non-federal match for most highway and transit projects, which allows eligible projects to receive up to 100 percent federal funding. IDOT received \$696.2 million in TDCs in September 2004 and an additional \$1.1 billion in TDCs in February 2012. IDOT policy reserved the TDCs received in 2004 for transit projects; new IDOT policy reserves the 2012 TDCs for highway projects and initially limits awards to projects in Districts 1, 2, and 3⁸. Those districts are located in northern Illinois, which is the service area for the Illinois Tollway. IDOT can transfer TDCs to other agencies in the state for purposes of leveraging federal funds without having to put up local or state cash as match.

Local sources of highway funding

Local public agencies in Illinois, including county, municipal, and township agencies, rely on a variety of revenue sources to support their highway programs. State MFT revenue, which is shared between the state and local agencies, represents one key source of revenue. This section provides greater detail on the flow of funds between IDOT and local public agencies, which totals more than \$1 billion annually. Additionally, Rebuild Illinois provides \$1.5 billion in bond proceeds to counties (\$525.1 million), municipalities (\$736.5 million), and township road districts (\$238.4 million). These proceeds were dispersed in six installments between FY 2020 and FY 2023.

In Illinois, state MFT revenues are shared between the state government and local public agencies. The portion of the MFT in effect before the enactment of the Rebuild Illinois program (\$0.19 per gallon) is subject to one set of funding distribution formulas, shown in **Figure 3**. After various transfers to other funds, these MFT revenues are divided between the state (45.6 percent) and local agencies (54.4 percent). The local agency portion is further allotted among large counties (16.74 percent), all other counties (18.27 percent), township and road districts (15.89 percent), and municipalities (49.1 percent). Large counties are defined as those with more than 1 million residents, which currently includes only Cook County. Within the local agency categories, funds are allotted to counties based on vehicle registrations, to municipalities based on population, and to townships and road districts based on mileage.⁹

⁸ IDOT, OPP-02: Highways Transportation Development Credits Policies and Procedures. Effective October 22, 2018.

⁹ 35 ILCS 505/8

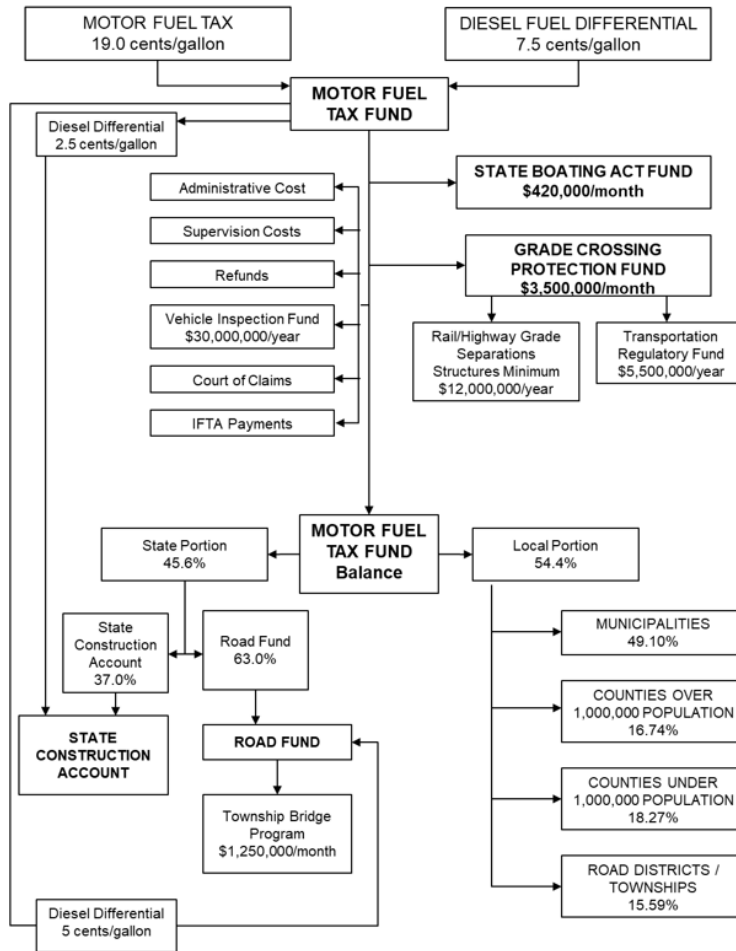


Figure 3: Distribution of Motor Fuel Tax Revenues (Pre-Rebuild Illinois Component)

Source: IDOT

The subsequent increase and indexing of the MFT instituted by Rebuild Illinois (\$0.264/gallon for gasoline as of January 2024) is subject to a separate distribution formula, as shown in **Figure 4**. Those funds are divided between highway (80 percent) and transit (20 percent) agencies. Of the transit funds, 90 percent is dedicated to northeast Illinois agencies through the Regional Transportation Authority and the remainder to downstate agencies. Of the highway funds, 60 percent is allotted to IDOT and 40 percent to local agencies. The local agency funds are allotted among counties, municipalities, and road districts/townships using the same shares as used to distribute the original \$0.19/gallon MFT.

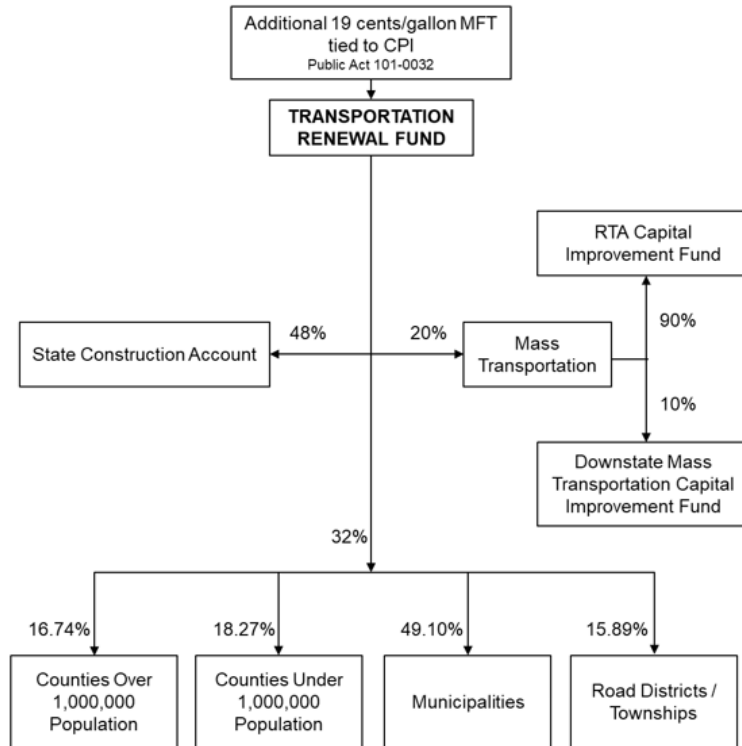


Figure 4: Distribution of Motor Fuel Tax Revenue (Rebuild Illinois Increase and Indexing)
 Source: IDOT

Local agencies may also dedicate some local revenue streams, such as property tax or sales tax revenues, to transportation purposes. Some local agencies also receive revenues from transportation-related sources, such as local option MFT sources, parking fees or taxes, rental car taxes, Transportation Network Company taxes, or locally imposed vehicle sticker fees. Many of these fees may only be implemented by home rule communities or as explicitly allowed by state law¹⁰. In 2016, the Chicago Metropolitan Agency for Planning (CMAP) estimated that 60 communities in northeastern Illinois imposed a local option MFT and 158 imposed vehicle sticker fees¹¹. CMAP’s analysis of northeastern Illinois communities found that local option MFTs ranged from 1 to 7 cents per gallon.

¹⁰ For example, state law had previously allowed only DuPage, Kane, and McHenry counties to impose a local MFT of 4 cents per gallon. Rebuild Illinois allowed these counties to increase their local MFT to 8 cents per gallon, and also allowed Lake and Will counties to implement an 8 cent-per-gallon MFT.

¹¹ CMAP, 2016. Use of Local Transportation User Fees in Northeastern Illinois. Available online: https://www.cmap.illinois.gov/documents/10180/565073/PU-0007_USE_LOCAL_TRANSPORTATION_FEES.pdf/16d3571c-bfd6-a3cc-951f-3f3e0f67c3d7.

Active transportation funding

Active transportation modes, including bicycling and walking, are supported by multiple highway funding programs. These include federal programs, namely the Transportation Alternatives Program (TAP) but also other programs with broad project eligibilities, such as the Surface Transportation Block Grant Program (STBGP) and Congestion Mitigation and Air Quality Improvement (CMAQ) Program. Active transportation is also supported by state and local transportation revenues, either as part of a larger highway project's scope of work or as standalone projects. Federal, state, and local revenues are described previously in this section of the memorandum. IDOT administers the Illinois Transportation Enhancement Program every two years which is primarily focused on Active Transportation. The 2022 program awarded over \$129m in state and federal funds. The next program cycle will occur in fall 2024.

Transit Funding

Transit agencies operate at the local and regional levels. For the purposes of administering transit funding, IDOT adopted Federal Transit Administration (FTA) terminology, which categorizes transit as rural, small-urban, or large-urban. Rural transit service area populations are below 50,000; small-urban service area populations are greater than 50,000 but less than 200,000; and large-urban service area populations are greater than 200,000. Outside northeastern Illinois, there are 6 large-urban transit agencies, 7 small-urban agencies, and 43 rural agencies (31 county, 5 municipal, and 7 transit districts). As for ridership, of the nearly 300 million statewide annual transit trips, approximately 92 percent take place in northeastern Illinois, with 6 percent across the 6 large-urban providers, 1 percent across the small-urban providers, and 1 percent across the rural providers.

Transit agencies rely on federal, state, and local funding to support their capital and operating expenditures. Capital expenditures are funded primarily from federal sources, state bond proceeds, and, after Rebuild Illinois, a portion of the state MFT. Small-urban and rural transit agencies also have access to Downstate Transit Improvement Funds (DTIF) to support capital project expenditures. Operating expenditures are paid with system revenues (e.g., fares), local or regional tax revenues (e.g., sales taxes), and state assistance. Small-urban and rural transit agencies also receive federal funds to support operating expenditures.

According to the National Transit Database (NTD), total funding across all sources increased from \$2.17 billion in FY 2017 to \$3.7 billion in FY 2022. Outside of FY 2020 and 2021, which saw significant federal infusions, federal funding typically accounts for 20 to 25 percent of all transit funding statewide, with state funding accounting for 15 to 20 percent and local funding accounting for the majority, 55 to 60 percent. In 2022, the totals amounted to:

- \$969 million in federal funds
- \$612 million in state funds

- \$2,150 million in local funds

Federal sources of transit funding

As with highways, federal transit funding comprises both formula and discretionary programs. IDOT administers federal funds as a pass-through agency for rural transit agencies and directs federal funds to small-urban transit agencies, whereas large urban transit agencies (those in northeastern Illinois) receive federal funds directly. From FFY 2017 to 2021, Illinois transit agencies received between \$500 million and \$1.4 billion annually in federal funding (Table 3). The fluctuations from year to year are attributable to discretionary program awards.

Table 3. All Sources of Federal Funding for Transit Agencies in Illinois in Millions of Dollars (FFY 2021 to FFY 2021)

FFY 2017	FFY 2018	FFY 2019	FFY 2020	FFY 2021	FFY 2022
\$517.3	\$517.7	\$641.8	\$1,373	\$1,110	\$969

* Source: National Transit Database

Under IJJA, in FY 2022, Illinois received just under \$761 million in federal transit formula funding (not including discretionary programs). Federal formula transit funding for Illinois is budgeted to increase by between 2.2% and 2.7% per year through FY 2026 (Table 4).

Table 4. Federal Formula (Not Including Discretionary) Transit Funding for Illinois in Millions of Dollars (FFY 2021 to FFY 2026)

FFY 2021	FFY 2022	FFY 2023	FFY 2024	FFY 2025	FFY 2026	IJJA Total
\$605.3	\$760.9	\$777.6	\$798.7	\$815.7	\$837.2	\$3,990

* Source: AAHSTO IJJA Transit Apportionment by State, *FAST Act.

In addition to the known, expected formula apportionments, discretionary grant funding is available for transit. As examples, in FFY 2022, various Illinois transit agencies and local governments received a total of \$265,476,132 in FTA Capital Investment Grants. In FFY 2023, various agencies received \$36,709,423 in FTA Bus and Low- and No-Emission Grant Awards, including two awards totaling \$24,899,377 to IDOT on behalf of 57 sub-recipients. These grant sources are competitive, and eligibility varies depending on the grant program. Awards to Illinois agencies will vary depending on the applications submitted and award decisions made by FTA and/or U.S. DOT.

State sources of transit funding

The state provides transportation funds and general fund transfers to support transit agencies through several programs, totaling \$612 million in 2022 according to NTD. The Regional Transportation Authority (RTA) receives general funding to support the operating expenditures for the Service Boards (i.e., the Chicago Transportation Authority, Metra Commuter Rail, and Pace Suburban Bus) from the Public Transportation Fund. The debt service on the Additional State Assistance/Additional Financial Assistance is covered by Road Fund cash transferred into the

Public Transportation Fund. The RTA also receives direct funding from the Road Fund for two programs: Reduced Fare and ADA Paratransit. Small-urban and rural transit agencies receive state funds directly from the Downstate Public Transportation Fund through the Downstate Operating Assistance Program to support operating expenditures. With Rebuild Illinois, the state also began providing a portion of state MFT to transit agencies to support capital projects.

The state also supports transit capital spending through bond proceeds. Recently, the state established a dedicated source of capital funding for transit. Of the increased and indexed MFT instituted by Rebuild Illinois, 20 percent is dedicated to transit. Those funds are shared between northeastern Illinois transit agencies (90 percent of the total) and downstate transit agencies (10 percent). In FY 2020, approximately \$190 million in state MFT was dedicated to transit, growing 15 percent (\$28.8 million) and 10 percent (\$21.2 million) in fiscal years 2021 and 2022, respectively. State MFT revenues for transit are projected to increase annually through FY 2032 (Figure 5).

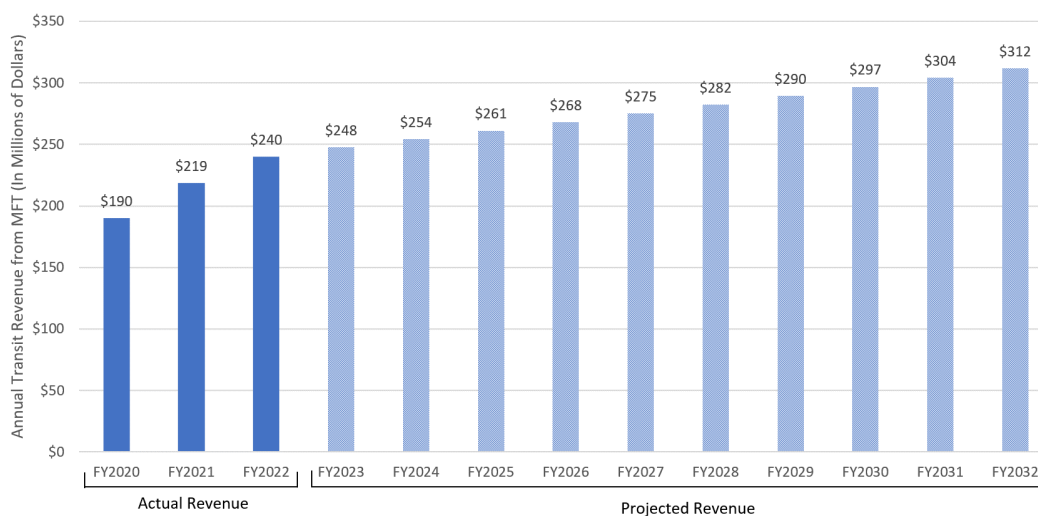


Figure 5: Annual Transit Revenue from MFT in Millions of Dollars (FY 2020 to FY 2032)

Source: Analysis of IDOT data

Local sources of transit funding

The majority of transit funding in Illinois comes from local sources, totaling \$2,150 million in 2022 according to NTD. Nearly all transit agencies in Illinois collect fares directly from passengers, which typically accounts for a portion of operating funding. In addition, some transit agencies receive operating subsidies from dedicated local taxes. For example, the Regional Transportation Authority (RTA), the oversight agency for the three transit Service Boards in the Chicago metropolitan area, receives dedicated revenues from the following sources:

- **The RTA sales tax** is levied in all six counties of the RTA region at rates of 1.25 percent in Cook County and 0.5 percent in the collar counties. RTA sales tax receipts generated roughly \$1.601 billion in 2023, an increase of 2.0 percent from 2022.

- **The City of Chicago Real Estate Transfer Tax (RETT)** is levied in the City of Chicago on real property title transfers. A portion, \$1.50 per \$500.00 of the transfer price, is dedicated to the Chicago Transit Authority (CTA). The RETT generated approximately \$70 million in FY 2023.

In 2023, the RTA sales tax represented 43.2 percent of the region’s \$3.6 billion operating funds.¹² Federal COVID relief funding and system-generated revenues (e.g., fares and advertising) represented similar shares of operating funds, at 18.7 percent and 18.2 percent, respectively. Matching funds from the State, administered through the Public Transportation Fund, represented 13.8 percent, with the remainder of operating revenues coming from State Financial Assistance (3.2 percent), the City of Chicago Real Estate Transfer Tax (2.3 percent), and other sources.

Some transit agencies outside of the RTA also rely on general fund transfers from local governments or dedicated local taxes. As examples, the Champaign-Urbana Mass Transit District (MTD) receives dedicated revenue from property taxes, while Rockford MTD receives annual appropriations from the municipal budget of Rockford to cover costs.

Airport Funding

Federal sources of aviation funding

Capital improvements and operational expenses for airports are supported by federal, state, and local sources of funding. At the federal level, the Federal Aviation Administration (FAA) provides entitlement (allocated annual funding for each individual airport for capital improvements, with the amount entitled determined by airport category and size), state apportionment, and discretionary aviation funding for public-use airports, largely through the Airport Improvement Program (AIP). This funding is made available through the FAA Reauthorization Act, with the most recent version enacted in 2018 and authorizing appropriations from FY 2018 to FY 2023¹³. In FY 2023, the AIP provided \$7.1 billion nationwide, including almost \$190 million for Illinois airports. For large hub airports (Chicago O’Hare and Chicago Midway), the AIP covers 75 percent of eligible costs and 80 percent for noise program projects. For all other publicly owned, public use airports in the state it covers 90 percent of total eligible cost. For airports in an economically distressed area, the AIP covers 95% of project costs (Quincy Regional Airport and Decatur Airport). Further, IIA provides additional federal aviation-related funding programs, including \$15 billion for eligible projects over its five-year period.

State sources of aviation funding

State aviation funding is derived from three sources—Series “B” Aeronautical Bond Funds, State Road Funds and Multimodal Transportation Bond Funds from the Rebuild Illinois Capital Program.

¹² RTA Adopted 2023 Operating Budget, Two-Year Financial Plan, and Five-Year Capital Plan

¹³ Congress is currently considering the reauthorization of FAA programs as of December 2023.

These funds are often used as a source of matching funds for federal dollars for project development activities (e.g., planning or environmental studies, design engineering, construction, and land acquisition). Also, Rebuild Illinois established the Rebuild Illinois Airport Capital Improvement Program (ACIP), which provides \$150 million for public-use airports. ACIP funds are used to supplement federal AIP funding and other state programs for aviation projects, and may be focused towards projects that are either less competitive or ineligible for federal funds.

Local sources of aviation funding

Local funds for aviation can come from a variety of sources. One key locally generated revenue source is the Passenger Facility Charge (PFC) program, which allows certain commercial airports controlled by public agencies to impose a fee of up to \$4.50 for each enplaned passenger. PFC revenues can be spent on certain FAA-approved projects. Another source for local funds is the Aviation Fuel Tax (AFT), that is derived from taxes on aviation fuel. Airports can request for reimbursement for operational expenses through the AFT program. Illinois airports are owned by airport authorities, municipalities, counties, park districts, port authorities, bi-state development agreements, and the state of Illinois. Local match for capital projects and operational expenses typically comes from taxing authority or local general funds, or sometimes interested private parties.

In IDOT's latest multimodal Multiyear Program (MYP), the Proposed Airport Improvement Program reflects the federal, state, and local funding amounts for a \$1.25 Billion dollar program over FY 2024-2028 (**Figure 6**).



Figure 6: Funding for IDOT's Proposed Airport Improvement Program by Source, FY 2024-2028

Source: IDOT Multiyear Program, 2024

Rail Funding

As with the other modes, rail projects are supported by a variety of federal, state, and local sources, along with direct investments by private freight railroads. As freight rail is operated by private companies, the vast majority of capital investments are made by private owners. Federal sources of funding are primarily authorized in IIJA and include both formula and discretionary grant programs. Some state funds are also provided through state discretionary programs. These funding programs vary by purpose, whether freight rail, passenger rail, or improvements to public highway-rail grade crossings. Each type is briefly described below.

- For freight rail programs, U.S. DOT offers competitive funding programs, such as the Consolidated Rail Infrastructure and Safety Improvements (CRISI) program. Other competitive federal programs, such as INFRA, allow for rail improvements. In addition, some federal highway program funds can be allocated to rail projects. For example, IDOT provided \$45 million in National Highway Freight Program funds to two rail projects and three grade separation projects in 2023. Some state funds are available for freight rail improvements, including \$22 million across the projects tied to port rail facilities through the 2021 Port Facilities Capital Investment Grant Program.
- Intercity passenger rail service is supported by the federal government. Amtrak is reauthorized by Congress, currently through IIJA, and receives formula funds which can be matched by state sources. Illinois also provides state funding for several state-supported intercity rail routes (less than 750 miles) operated by Amtrak, including the Blue Water, Hiawatha, Illini/Saluki, Illinois Zephyr/Carl Sandburg, Lincoln Service, Père Marquette, and Wolverine.
- The Railway Highway Crossing Program (Section 130) is apportioned to the states by formula program to support various improvements to highway-rail crossings. Section 130 is funded at \$245 million annually through FY 2026. IIJA established a new competitive funding program, the Railroad Crossing Elimination Grant Program, supports

grade separation, closures, or other means to eliminate grade crossings. The FY 2022 round of competitive funding included over \$570 million.

At the state level, Illinois has an Illinois Rail Freight Program to improve rail freight service as a means to encourage economic development. The program supports railroads, shippers, and communities in securing funds for rail infrastructure improvements that retain and increase jobs in Illinois businesses. The program includes two revolving loan funds, the Rail Freight Loan Repayment Fund which relies on federal funds, and the State Rail Freight Loan Repayment Fund which relies on state funds. Together, IDOT has programmed \$12.8 million for freight rail improvements for FY 2024 through FY 2029. The General Assembly has previously transferred funds from these programs to General Funds, including in 2017, which limits the capacity of the program. Although state law allows the Rail Freight Program to make grants in addition to loans, this conflicts with the Grant Accountability and Transparency Act, which is interpreted to prevent the award of grants from this program.

State capital programs, currently Rebuild Illinois, also provide additional sources of state funding through bond proceeds for rail improvements. Rebuild Illinois provides approximately \$2.67 billion for rail improvements. The Illinois Commerce Commission also has a Grade Crossing Protection Fund, which relies on a set-aside of state MFT revenues (approximately \$39 million annually) to fund improvements to local jurisdiction grade crossings. In addition, IDOT manages the Illinois Competitive Freight Program, through which IDOT programs National Highway Freight Program funds competitively to a variety of freight projects, including rail improvements.

Illinois is home to two unique rail initiatives. One is the high-speed rail project between Chicago and Saint Louis, which achieves Amtrak speeds up to 110 mph. That project was initially supported by federal stimulus funds authorized in 2009 and has been continually supported by federal investment (\$1.65 billion) and the state investment (\$300 million) to cover \$1.95 billion in estimated costs. This includes \$242 million from FY 2024 to FY 2029. The second is the Chicago Region Environmental and Transportation Efficiency Program (CREATE), a longstanding public-private partnership to advance 70 projects to improve freight, commuter, and intercity passenger rail in northeastern Illinois. CREATE projects are funded on a project-by-project basis, and typically rely on federal competitive programs like CRISI to meet the majority of project costs. Matching funds are provided by a combination of state and local sources. State sources are mentioned above, such as resources provided by Rebuild Illinois, and local sources often come from MFT revenues.

Marine Funding

The U.S. Army Corps of Engineers oversees the navigable waterway system, including the operations, maintenance, and rehabilitation of marine infrastructure. Federal funding for maritime modes is primarily authorized through the Water Resources Development Act (WRDA) for capital improvements. WRDA relies on two trust funds, the Inland Waterways Trust Fund and the Harbor Maintenance Trust Fund, to support its capital program. The Inland Waterways Trust Fund is supported by a tax on diesel fuel for commercial vessels and the Harbor Maintenance Trust Fund is

funded by a tax on the value of cargo of commercial vessels. Projects authorized in WRDA and subject to annual appropriation, and Congress also appropriates from general funds to support waterway improvements. In addition, some federal formula highway funds, such as the National Highway Freight Program, can also be used for marine infrastructure.

U.S. DOT's Maritime Administration (MARAD) also makes federal funding available through three discretionary grant programs: the Port Infrastructure Development Program, the U.S. Marine Highway Program, and the Small Shipyard Grant Program. Between 2021 and 2023, five grants totaling just over \$15 million were awarded to entities in Illinois including three port districts, a city harbor project, and a private business dedicated to servicing marine equipment.

At the state level, IDOT began supporting port projects in 2017. This work is funded in part through the Illinois Port Facilities Capital Investment Grant Program, which was established as part of the Rebuild Illinois legislation. Rebuild Illinois provided \$150 million for port projects, including \$40 million for the Port Terminal Facility project in Cairo and \$110 million awarded through a competitive process. IDOT has also awarded \$22 million in Illinois Competitive Freight Program funds to port projects (as also mentioned above in the section on rail). The Illinois Competitive Freight Program relies on National Highway Freight Program formula funds; federal law permits up to 30 percent of these funds to be spent on Multimodal Projects (rail & waterway).

Port projects are also supported by local funding sources, typically income derived from port operations. Local matching funds for port district projects are provided from port district revenue streams from land and facility use lease agreements. There are some circumstances where local funds are provided privately by tenants, although this rarely occurs. Port district projects may request a project to be funded with 100 percent state funds from the Port Facilities Capital Investment Grant Program. Port Districts may combine funds from other state agency grants such as DCEO or IDNR, apply for federal funds and use state funds as a local match, or coordinate with other local agencies to provide funding. Other agencies that may contribute financially to the project are regional planning agencies, counties, or municipalities.

Trends Impacting Transportation Funding

Several recent trends have the potential to change the long-term outlook for transportation funding in Illinois. Travel behavior, the shifts brought by the COVID-19 pandemic, changing consumer spending patterns, and the adoption of innovative vehicle technologies all impact the primary revenue sources that support the transportation system.

Travel behavior

Transit usage has been flat or declining across the state since FY 2018 (Figure 7). Notwithstanding a significant dip in FY 2020 caused by the COVID pandemic and subsequent recovery (in FY 2021 in RTA and FY 2022 in other urban systems), current ridership levels remain well below levels seen five years ago. Similarly, 28 of the 44 rural transit agencies have seen ridership declines of at least 10% between FY 2018 and FY 2022. Existing trends, exacerbated by COVID, have substantially

reduced system-generated revenue, primarily from transit fares. Emergency Federal assistance has helped to offset this loss in operating revenues, but those additional funds will expire in the near-term.

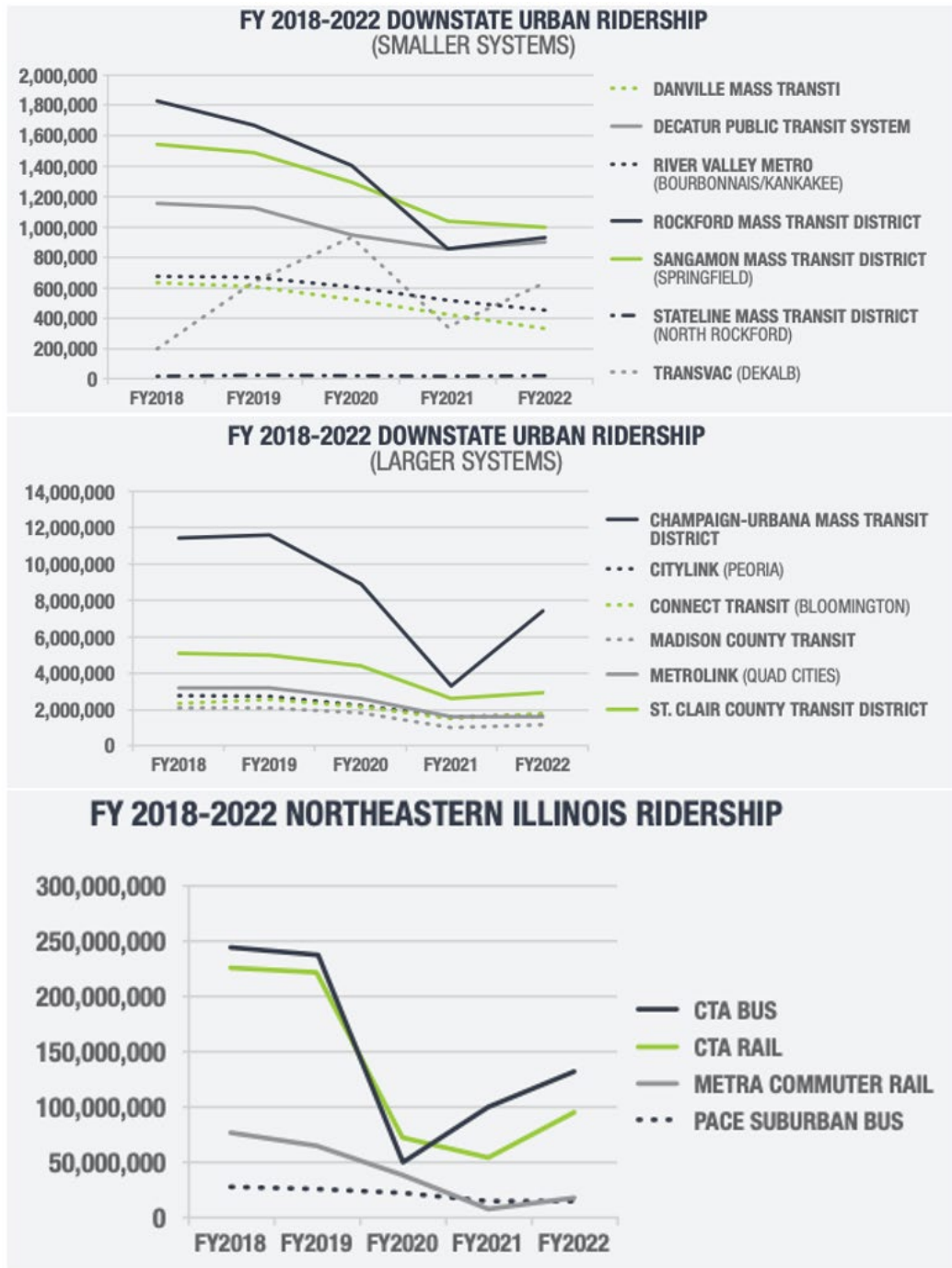


Figure 7: Illinois Transit Ridership Trends, FY 2018-2022

Source: IDOT Proposed Highway and Multimodal Improvement Program, FY 2024-2029

COVID impacts on travel

Although not a trend in itself, the COVID-19 pandemic caused significant disruptions to overall travel and travel patterns. With significant portions of the workforce furloughed or working remotely and in-person classes canceled for students at the peak of the pandemic in 2020 and 2021, total vehicle miles traveled (VMT), transit ridership, and air travel all declined sharply. For highway travel, passenger car travel declined sharply, but commercial vehicle travel increased during the pandemic, as more consumer spending shifted in favor of goods over services and as more goods were purchased online. While total vehicle miles traveled have largely recovered after the pandemic, the timing and location of that travel have shifted, which in turn could impact MFT, toll, rental car, and parking revenues in some locations. Further, the growth in trucking has implications for diesel tax revenues, truck registration fees, and commercial vehicle toll revenues.

Consumer spending patterns

In Illinois, sales tax applies to goods, not services. However, an increasing share of consumer spending has gone towards services rather than goods over time, which could affect the sustainability of the RTA Sales Tax and other local sales taxes dedicated to transportation. Services now represent approximately two-thirds of national household spending, with goods representing the remaining one-third.

Additionally, an increasing share of retail spending occurs online. Nationally, e-commerce retail sales as a percent of total sales have generally increased steadily since 2000. As of the second quarter of 2023, e-commerce retail sales represent 15.4% of total sales.¹⁴ While some state sales taxes capture online purchases, they are less common for capturing regional and local sales taxes such as Metro East Mass Transit District's sales tax.

Vehicle fuel economy improvements

In an era of rapid technological changes, numerous trends could impact future transportation revenue. Most notably, the increasing adoption of electric vehicles (EVs) and other alternative fuel vehicles, and increasing fuel economy of internal combustion engine vehicles, will reduce gasoline and diesel consumption over time, thus reducing MFT receipts along with prepaid sales tax revenues on motor fuel sales. At the same time, increased adoption of EVs will increase MVR fee revenue, given the imposition of a \$100 annual EV registration surcharge in 2019.

Although it is not possible to predict the future share of EVs and fuel economy improvements with precision, recent consumer trends, automaker investments in EV technology, and vehicle regulations allow for creation of a reasonable range of scenarios. Drawing on this information, IDOT recently completed an EV Revenue Options Study examining the impact of vehicle fleet changes on MFT and MVR revenues. The study considered three scenarios for EV adoption.

¹⁴ Federal Reserve Bank of St. Louis. *E-Commerce Sales as a Percent of Total Sales*.

- In the most aggressive EV adoption scenario, 100 percent of new cars sold in Illinois in 2035 are zero-emission vehicles (ZEVs), consistent with the California Air Resources Board ZEV mandate adopted in 2022.
- In the moderate scenario, Illinois reaches 100 percent ZEVs among new vehicle sales in 2045.
- In the least aggressive scenario, Illinois reaches 40 percent ZEVs among new vehicles sold in 2050.

In addition, each of the three scenarios assumes improvements in the fuel economy of new internal combustion engine vehicles sold in the time frame 2023-2050. The results of these fuel reduction trends reveal a cumulative state MFT revenue gap between \$24 billion and \$44 billion over the period 2023-2050, compared to the scenario in which vehicle fuel economy stays constant. In the moderate scenario, the gap is \$36 billion (Figure 8).

Appendix A covers the potential impacts on MFT and MVR of changes in the technology of the state's vehicle fleet over the period through 2050.

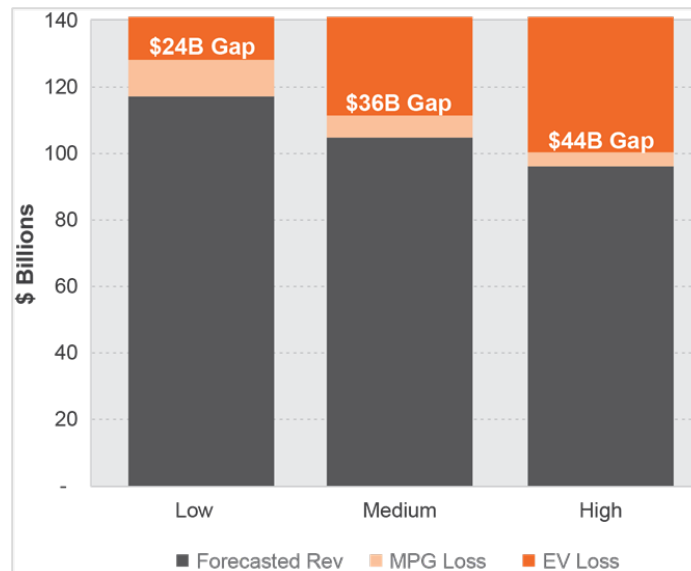


Figure 8: Cumulative Impacts of Electrification and Fuel Economy Improvements on MFT and MFT Funding, 2023-2050

Source: IDOT Revenue Options Study

Appendix A: Projected Revenue Impacts of EV Adoption Scenarios

The Climate and Equitable Jobs Act required the Department to study revenue options for addressing lost motor fuel tax (MFT) due to increased electric vehicle (EV) adoption. IDOT completed this Revenue Options Study in spring 2023. The following describes the EV adoption scenarios and revenue impact assessments developed in that study.

EV adoption scenarios

Given the evolving nature of EV technology, EV manufacturing capacity, EV incentives, and consumer preferences and public sentiment around EVs, various government agencies and private energy investment firms have forecasted a wide range of EV adoption scenarios depending on the assumptions used. Three of the most reputable and widely referenced industry sources include the U.S. Energy Information Administration (EIA) 2022 Annual Energy Outlook, the Bloomberg New Energy Finance (BNEF) 2022 Electric Vehicle Outlook, and standards set by the California Air Resources Board (ARB) Advanced Clean Cars II Regulation, which requires 100 percent zero emission vehicle (ZEV) sales by 2035 in California and several other states that have adopted to California's ZEV regulations.

The Revenue Options Study estimated the annual EV share of new vehicles statewide using population forecasts based on the IDOT 2019 travel demand model under a low EV adoption scenario (based on the U.S. Energy Information Administration (EIA) 2022 Annual Energy Outlook), a medium EV adoption scenario (based on the Bloomberg New Energy Finance (BNEF) 2022 Electric Vehicle Outlook), and a high EV adoption scenario (based on the recently adopted ARB Advanced Clean Car II Regulation).

The scenarios are described in greater detail as follows:

- **Low EV Adoption** – Based on U.S. Energy Information Administration (EIA) 2022 Annual Energy Outlook, which relies on conservative assumptions for EV adoption.¹⁵
 - The most recent report (released in March 2022) was used to estimate the annual new vehicle sales share of EVs through 2050.
 - EIA's annual forecast relies on regulatory assumptions at the time the analysis occurs. The March 2022 outlook analysis largely predated the adoption of California's ZEV mandate, EV incentives provided in the Inflation Reduction Act, EV charging infrastructure funding included in the Infrastructure Investment and Jobs Act, and higher corporate average fuel economy (CAFE) standards adopted in August 2021.

¹⁵ "Annual Energy Outlook 2022," EIA. Accessed November 2022, <https://www.eia.gov/outlooks/archive/aeo22/>

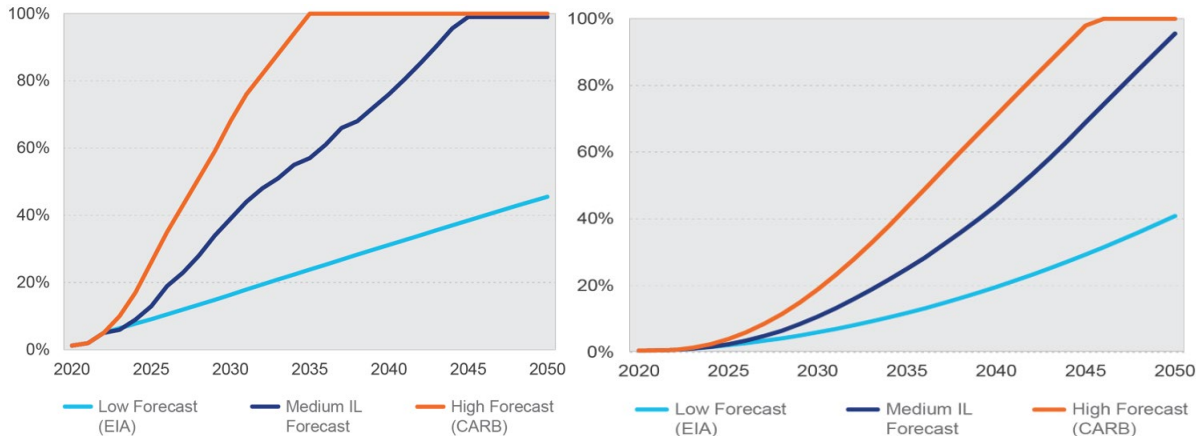
- These shares were adjusted slightly higher to align with historical data on EV sales share and Illinois vehicle registration data. This involved moving the baseline share of EV sales higher to reflect the fact that EV sales in Illinois outpace the national rate. The methodology maintained the national growth rate in EV sales assumed in the EIA forecast. As a result, this scenario is independent of the recent EV regulatory and incentive initiatives identified in the previous bullet.
- **Medium EV Adoption** – Based on Bloomberg New Energy Finance (BNEF) 2022 Electric Vehicle Outlook. BNEF is a private research provider that covers global commodity markets and has been an industry-trusted source in EV adoption forecasts.¹⁶
 - The EV share of new passenger vehicles nationally through 2040 was pulled from the report and extended through 2050 by using the average growth rate of the period 2035 to 2040.
 - The baseline share of new EV sales was adjusted to be slightly lower than the national rate, aligning with historical EV adoption data for Illinois (6% of new sales in 2022 compared to 6.9% nationally). The methodology maintained the BNEF’s growth rate.
- **High EV Adoption** – Based on the recently adopted CARB Advanced Clean Car II Regulation, which requires 100 percent ZEV sales by 2035.¹⁷ CARB is a national leader in air quality regulation, adopting stricter standards than federal requirements for low-emission vehicles and ZEVs.
 - Three states (Oregon, Washington, and Vermont) have adopted California’s ZEV regulation, while two others have indicated their intent to do so (New York and Massachusetts), collectively representing 20 percent of the U.S. auto market.
 - The year-by-year roadmap or annual light-vehicle sales included in the regulation was used as a forecast for EV adoption.
 - The impact of California's recent regulation is expected to impact auto sales nationally by accelerating the number and diversity of ZEV models available to consumers.

The share of new EV sales in the low scenarios increases relatively slowly and linearly, not quite reaching 50 percent by 2050. The medium forecast shows EV sales reaching 50 percent by 2035 (the year in which California and several other states are required to reach 100 percent), then rising to 100 percent a decade later. In the high scenario, EV adoption increases rapidly, reaching 100 percent in 2035 (**Figure A-1**).

¹⁶ “Electric Vehicle Outlook 2022,” Bloomberg NEF. Accessed November 2022, <https://about.bnef.com/electric-vehicle-outlook/>

¹⁷ “Advanced Clean Cars II Regulations: All New Passenger Vehicles Sold in California to be Zero Emissions by 2035,” CARB; Accessed November 2022, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>

Figure A-1. Electric Vehicle Adoption Scenarios: Share of New Sales in Illinois (Left) and Share of All Registered Vehicles in Illinois (Right)



Source: IDOT Revenue Options Study. “EIA” refers to the U.S. Energy Information Administration and “CARB” refers to the California Air Resources Board.

Regardless of how quickly EVs reach 100 percent of new vehicle sales, it will take several additional decades for EVs to reach 100 percent of the entire vehicle fleet. This is because the average vehicle age in the U.S. is over 10 years, and many cars are driven over 15 or 20 years before being scrapped. However, once EVs reach 100 percent of sales, almost all the vehicles being scrapped will be internal combustion engine vehicles, meaning that it will take only about a decade to electrify most of the on-road fleet. In the high scenario, the fleet reaches virtually 100 percent EVs by 2045, whereas the medium scenario does not achieve 100 percent EVs by 2050 but does reach over 90 percent (**Error! Reference source not found.**). This medium scenario also sees 1 million EVs on the road in Illinois by 2030, aligning with the CEJA target. In the low scenario, EVs reach 40 percent of the fleet by 2050.

EV revenue impact estimates

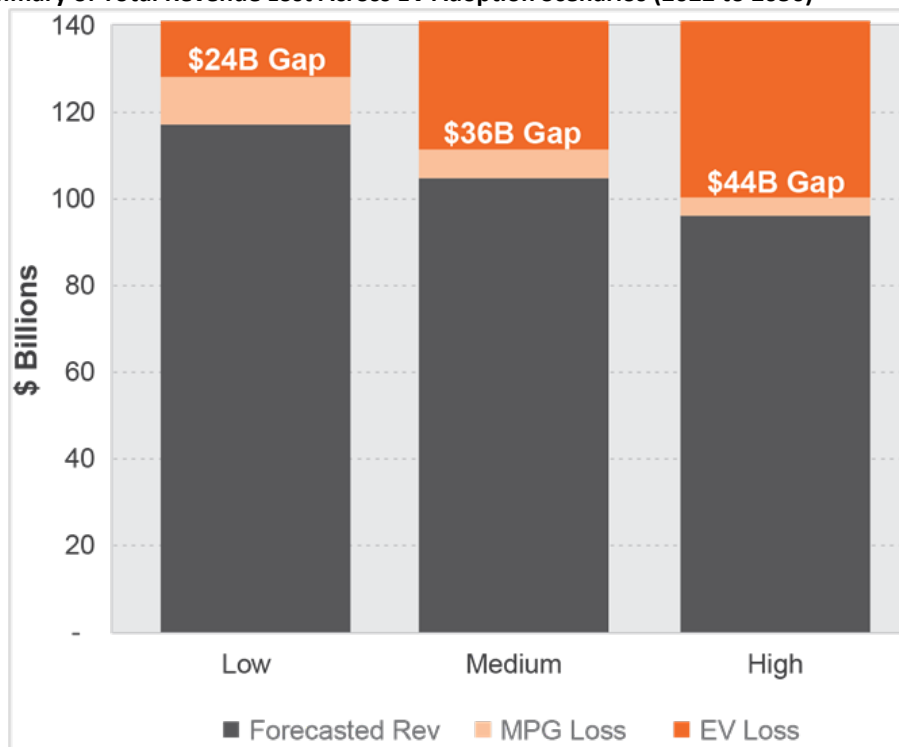
Using the forecasted light-duty vehicle fleet composition under the three (low, medium, high) EV adoption scenarios described above, The Revenue Options Study estimated the long-term revenue gap over baseline conditions through 2050 as MFT and motor fuel sales tax revenues are expected to decline because of the reduction in fuel consumption caused by the increased adoption of EVs and higher-efficiency ICE, hybrid, and PHEV vehicles. The revenue gap forecast also considers the expected increase in in motor vehicle registration fees due to the \$100 EV surcharge and the growing number of EVs registering in Illinois.

For each of those scenarios, revenues were estimated based on assumptions of future tax rates and tax bases for each source. The assumptions and methodology used are described in the appendix.

Under baseline conditions, revenue from MFT and registration fees would reach \$6.3 billion by 2050. This forecast includes revenues raised from the sales tax on motor fuels, which is combined with MFT revenues for ease of presentation, given that sales tax revenues are a relatively small share of the total. Under baseline conditions, the model assumes that light-duty vehicle fuel economy improves through 2050, while the size of the vehicle fleet and number of miles driven grows. As a result, under baseline conditions, both MFT and registration fee revenues grow even with more-efficient vehicles on the road.

Revenues raised under each of the three EV adoption scenarios (low, medium, and high) are compared to the baseline revenue forecast to estimate revenue losses over time. As shown in Figure 3 1, the total revenue loss for the 2022 to 2050 period is \$24 billion in the low EV adoption scenario, \$36 billion in the medium adoption scenario, and \$44 billion in the high EV adoption scenario. The shares of revenue loss due to EV adoption and improvements to fuel economy are shown in, with the share attributable to EV adoption substantially larger in the medium and high EV adoption scenario than in the low EV adoption scenario.

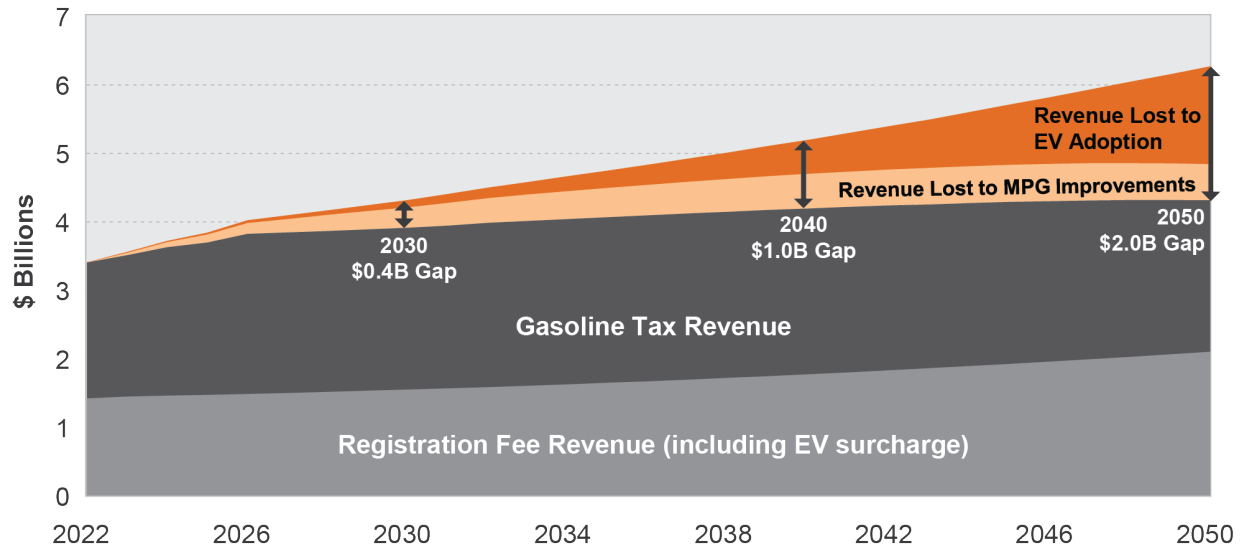
Figure A-2. Summary of Total Revenue Lost Across EV Adoption Scenarios (2022 to 2050)



Source: IDOT Revenue Options Study

In the low EV adoption scenario, gas tax and registration fee revenues are forecast to increase at a low rate over the planning period, resulting in a small increase over existing revenues by 2050 (**Figure A-3**). This is due to increasing fleet size of internal combustion engine vehicles, as the state population grows, offsetting revenue losses from EV adoption during the time frame. Compared to the baseline revenue forecast, the annual gap increases to about \$2 billion in 2050, due to both EV adoption and fuel economy improvements in the non-EV fleet. Unlike the other two scenarios, fuel economy improvements remain a significant contributor to the revenue gap through 2050. Registration fee revenue increases slowly and gasoline tax revenue does not decline nearly as much as the other scenarios because of low EV adoption rates.

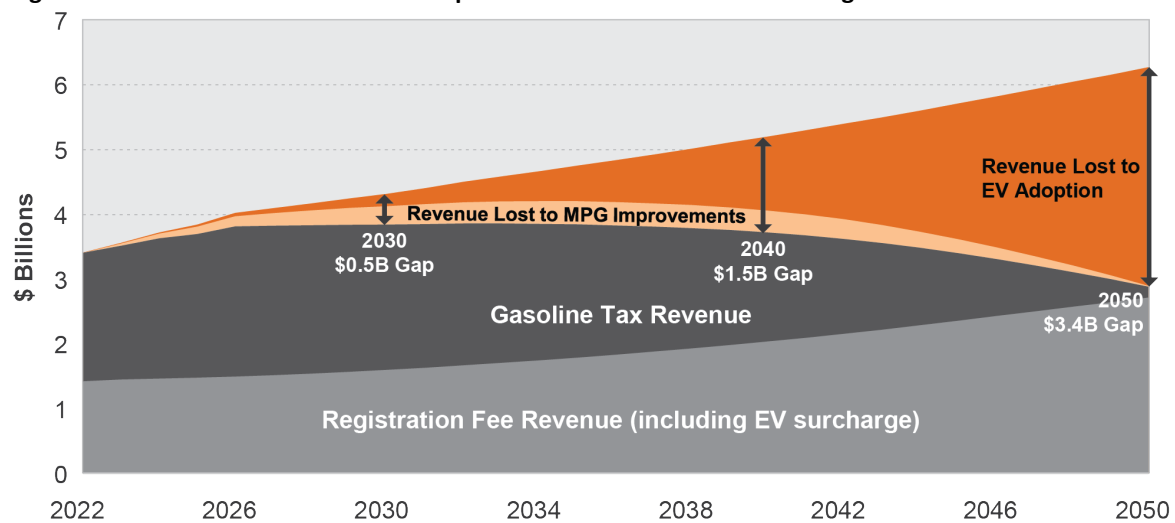
Figure A-3. Low Electric Vehicle Adoption: State Motor Fuel Tax and Registration Revenue



Source: IDOT Revenue Options Study

As shown in **Figure A-4**, the medium EV adoption scenario forecasts revenues are expected to decrease significantly by 2050, with a gap in that year compared to the baseline of \$3.4 billion. In this scenario, nearly all vehicles in the fleet are EVs by the year 2050, and correspondingly gasoline tax revenues decline sharply over the planning horizon. As EV adoption increases throughout the forecast, reaching about one million EVs by 2030, registration fee revenues correspondingly increase because of the \$100 EV surcharge. Of the revenue gap compared to the baseline, the majority is directly attributable to EV adoption, rather than fuel economy improvements in the non-EV fleet, particularly in the later years of the forecast.

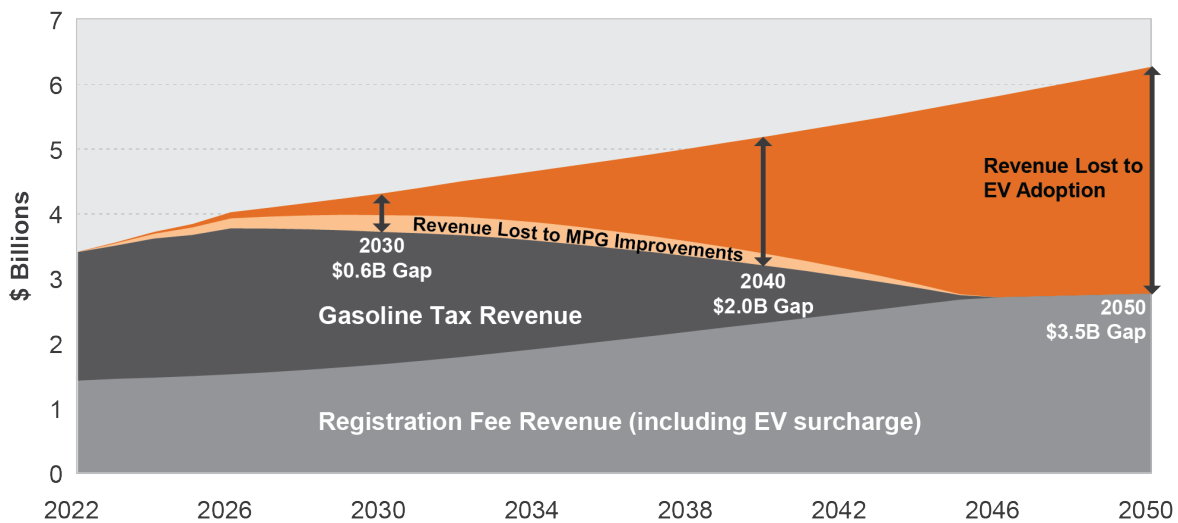
Figure A-4. Medium Electric Vehicle Adoption: State Motor Fuel Tax and Registration Revenue



Source: IDOT Revenue Options Study

In the high EV adoption scenario, shown in **Figure A-5**, revenues are expected to decline below current levels by the year 2050. Compared to the baseline revenue forecast, the annual revenue gap in the year 2050 reaches approximately \$3.5 billion. This scenario is the only one in which EV adoption eliminates gasoline consumption for light-duty vehicles, beginning in 2046, resulting in a complete loss of MFT revenue in the later years of the forecast. Revenue from registration fees increases throughout the forecast and rises at the fastest rate of all three scenarios, but the additional revenue from the \$100 EV surcharge is insufficient to offset losses in fuel taxes. Nearly all of the revenue gap in this scenario is directly attributable to EV adoption, rather than fuel economy improvements in the non-EV fleet.

Figure A-5. High EV Adoption: State Motor Fuel Tax and Registration Revenue



Source: IDOT Revenue Options Study