Chapter 5
Financial Plan

Introduction

A key component of a Long-Range Transportation Plan (LRTP) is establishing a vision for the The DuPage County Division of Transportation (DuDOT) oversees 220 miles of highways and 54 miles of multi-use trails in DuPage County. DuDOT is responsible for the planning, design, construction, maintenance, and permitted use of these assets. DuDOT expends significant resources on these and other related activities.

This chapter describes DuDOT's financial means for fulfilling its statutory duties and meeting other departmental goals and objectives set by the County Board. It begins with a look at DuDOT's historic revenues and expenses from fiscal year (FY) 2005 to FY2017. It then examines the capital funding sources available to DuDOT during this period. A section on risk assessment evaluates potential constraints on the revenue and capital funding sources.

Based on these historic figures, the document estimates future revenues and expenses for DuDOT out to FY2040. Elements outside of the DuDOT's control have the potential to impact future funding and spending, particularly the possibility that revenues will not be as high as anticipated due to economic, political, or technological factors. Therefore, this chapter uses these variables to outline several potential future funding scenarios which are evaluated at the end of this document and illustrate potential funds available for capital improvement projects.

5.1 Existing Funding Review

DuPage County publishes an annual financial plan that contains details of its financial operations and accounting. These plans provide a five-year outlook that shows DuDOT's recommended budget for the fiscal year, along with four years of projected revenues and expenses. Expected revenues and expenses are shown for the previous year, and actual results are provided for the two prior years. The County operates on a fiscal year starting on December 1. Financial results were reported on a cash basis through FY2013, after which, the County switched to an accrual basis.1

Financial figures in this report follow the format of the County's five-year outlook, using the same fiscal year as the County and expressing results in current dollars on an accrual basis.

DuDOT's daily operations and maintenance activities are almost entirely funded through motor fuel taxes. Capital projects receive funding from various federal, state, and local sources as well as motor fuel taxes. Details of all DuDOT sources of funding are provided in the following sections.

1 Cash accounting recognizes revenue and expenses when money is exchanged; accrual accounting recognizes revenue and expenses when they're earned and billed, respectively.
5.1.1 Revenue Sources

More than 85 percent of DuDOT’s revenues come from state and locally imposed fuel taxes, as shown in Figure 5-1. Other DuDOT sources of revenue include impact fees and charges for permits, licenses, and services. A detailed table of revenues can be found in Appendix A. Detailed explanations of each revenue source shown in Figure 5-1 follow.

**Figure 5-1. Historic Revenues for DuPage County Division of Transportation**

Source: DuPage County Comprehensive Annual Financial Reports (2010-19).

**Local Gas Tax**

DuPage County imposes a Local Gas Tax (LGT) on the retail sale of motor fuel within the County. This tax was authorized in 1989 by the Illinois legislature under 55 ILCS 5/5-1035.1 and put into effect under 33-110 of the Code of DuPage County, is primarily used for transportation operations, maintenance and capital improvement. Revenues from the local gas tax are pledged as a backup source of payment for the 2015A Transportation (MFT) Revenue Refunding Bonds should the motor fuel tax revenues (see below) be insufficient. The LGT has generated approximately $19 million annually for DuDOT at the 4 cent per gallon rate.

As part of the 2019 Rebuild Illinois Plan, counties imposing the local gas tax have been authorized to collect up to $0.08 per gallon and to index that tax according to the consumer price index. Anticipated revenues throughout the life of this 20-year plan will be discussed later in this chapter.

**Motor Fuel Tax**

The State of Illinois imposes a motor fuel tax (MFT) on gasoline and diesel fuel for the privilege of operating on public roads or waterways. The MFT is governed by the Motor Fuel Tax Law (35 ILCS 505/). The tax, which is $0.19 per gallon of gasoline and $0.215 per gallon of diesel fuel, goes
to the Illinois MFT Fund. These funds are allocated to the counties using a complex formula, which typically results in approximately $15-16 million annually for DuDOT. While the amount users pay is based on fuel consumption, Illinois Motor Fuel Taxes are allocated to counties under 1,000,000 in population in proportion to motor vehicle registration fees paid to entities located in each county.

The MFT, which was established in 1927, has remained at $0.19 per gallon since 1991. Revenues are used for capital maintenance and capital improvements. The MFT is also used to pay debt service on the 2015A Transportation (MFT) Revenue Refunding Bonds (approximately 9.5M per year). Debt service on these bonds has been retired as of January 2021.

In 2019, the State passed a new Capital Bill that retains the original MFT funding calculation and supplements that with additional revenue. MFT revenue will now come to the County in two ways (see Figure 5-2):

- Original 19 cent MFT tax allocations based on current allotment calculations
- New 19 cent tax allocations based on the 2019 Rebuild Illinois Plan allotment calculations, also called the Transportation Renewal Fund (or TRF).

Over the long term, the Chicago Metropolitan Planning Agency (CMAP), has promoted the philosophy of increasing tax bases instead of tax rates. To this end, CMAP recommends replacing the MFT with a revenue source that is not dependent on vehicle fuel consumption and can instead respond to growth in the transportation system and changes in construction costs.

**State Capital Bill Bond**

In addition to the supplemental State MFT allocation, the 2019 State Capital Bill provided IDOT with the authority to issue $1.5B in capital improvement bonds for infrastructure and economic development. Approximately $274M of that amount will be dedicated to counties having less
than 1 million inhabitants. Allocation to the counties is done based on population. DuPage County, having 12.25 percent of the population in counties under 1 million, estimates an allocation of $35 million. The bond proceeds will be distributed to the counties over 3 years beginning in 2021. Restrictions will be placed on the type of project that the counties will be able to use the bond revenue for. Please see Chapter 6 capital improvement program for more detail on the use of these funds. It is assumed that DuPage County will not be responsible for debt service on these bonds.

**Impact Fees**

Impact fees are a means for new development to pay for a share of the costs of transportation and infrastructure improvements that support the new development. DuPage County imposed impact fees in 1989 in accordance with state statute, following a model of one-time charges. The amount of the fee takes numerous variables into account. DuDOT staff determine the impact fee by considering the land use, the size of the building, and the location of the building. Building size is determined through plans submitted by the applicant, or from a letter from the architect stating gross floor area. Impact fees also consider the district where the development is occurring. Adjustments are made based on the percentage of County highways and highway capacity found in each district. Certain new structures are exempt from impact fees, including public schools, post offices, lift stations, utility towers, decks, patios, garages, parking, switching stations, sheds, rail stations, and government buildings. Impact fees are used to improve county highways through capacity improvements. Impact fee revenue is not spent on municipal, state, or toll highways. They are also limited by district geography. While impact fees originally accounted for a significant revenue stream, their share of overall revenue has diminished as the county has approached build-out. Since 1989, impact fee revenues have totaled almost $70 million.

**State and Federal Grants/Intergovernmental Revenue**

This line accounts for grant money that is received to reimburse previously incurred capital expenditures. Sources of this funding are described in more detail under Section 2.2 Capital Funding Sources.

**Licenses and Permits**

Revenue for this line item is generated through permit fees charged for oversized vehicles, utility work in County rights of way, highway permits, driveway permits and special events that make use of the county highways or Illinois Prairie Path or Great Western Trail.

**Charges for Services**

This revenue source accounts for a variety of goods and services that DuPage County makes available, both to the public and to other governmental agencies. For example, revenue from gasoline sold by the county to other government agencies is recorded here. Services that the county charges such as traffic signal maintenance, auto repairs, and highway application and violation inspection fees are included here.

**Investment Income**

This is revenue generated by balances in interest-bearing accounts of funds controlled by DuDOT.
Miscellaneous
This includes revenues not classified under any other category, such as insurance settlements, refunds, overpayments, prepaid agreement costs, other reimbursements, and miscellaneous revenue.

Infrastructure Fund Transfer
This accounts for the one-time transfer of general fund monies into the county Infrastructure Fund in FY2012. These transfers were due to general fund performance and are not regarded as annual occurrences.

5.1.2 Capital Funding Sources
Grant funding to DuDOT is captured under the State and Federal Grants line item (labeled as Intergovernmental Revenue in County annual financial reports). This category includes revenue from a variety of sources and programs, not all of which provide funding every year. The sources and their programs are described in more detail in the following section.

5.1.2.1 Federal Sources

Surface Transportation Block Grant Program
The Surface Transportation Block Grant Program (STBG) evolved from the Surface Transportation Program as part of the Fixing America’s Surface Transportation (FAST) Act (FAST Act § 1109). The FAST Act requires the Federal Highway Administration (FWHA) to apportion funding as a lump sum for each state and then divide that total among apportioned programs. Money for this program comes out of the Highway Trust Fund. There are several set asides that come out of a state’s apportionment. These consist of funding for transportation alternatives, state planning and research, and bridges that are not on federal-aid highways. One of the County’s principal sources of federal funding, the Surface Transportation Program is administered by the DuPage Mayors and Managers Conference (DMMC). DMMC committees select and program the projects. Approximately $12M are apportioned to projects in DuPage County annually. DuPage County is the recipient of STP program funds for some of its intersection, safety and resurfacing projects. This source also provides funding for bicycle, trails/path and traffic signal interconnect projects.

Illinois Transportation Enhancement Program
The goal of the Illinois Transportation Enhancement Program (ITEP) is to allocate resources to well-planned projects that provide and support alternate modes of transportation, enhance the transportation system through preservation of visual and cultural resources and improve the quality of life for members of the communities. Funding for this program comes from a STBG set aside.

Highway Safety Improvement Program
The Highway Safety Improvement Program (HSIP) aims to reduce traffic deaths and injuries that occur on public roads. It is a federal aid program, legislated under Section 148 of Title 23 (23 USC 148) and regulated under 23 CFR 924. Funding of transportation improvements is only one component of the overall HSIP. The HSIP encourages states to take a systematic approach to improving highway safety by establishing a program that identifies needed safety improvements,
plans for their implementation, and then evaluates the overall safety performance of the system and what future improvements are needed.

**Congestion Mitigation and Air Quality Improvement Program**

The FHWA administers the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. Under the FAST Act, funding is provided to regions in nonattainment or maintenance for ozone, carbon monoxide, or particulate matter. CMAP administers the CMAQ program in the region. CMAQ funding is applied for and projects are scored based on various air quality and efficiency criteria. DuPage County applies for and is awarded this funding regularly.

**Transportation Alternatives Program**

The FAST Act replaced the Transportation Alternatives Program (TAP) with a set-aside of Surface Transportation Block Grant (STBG) Program funding for transportation alternatives (TA). These set-aside funds include all projects and activities that were previously eligible under TAP, encompassing a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.

**RAISE Discretionary Grants**

The Rebuilding American Infrastructure with Sustainability and Equity (RAISE) replaces the Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants Program. This is a Department of Transportation grant program that provides about $1 billion annually for investment in surface transportation infrastructure. The grants can be used for roads, bridges, transit, rail, ports, or intermodal transportation projects. This is a highly competitive program; DuPage County will continue to submit projects that are good candidates for federal funding.

### 5.1.2.2 Federal Sources

**Crossing Safety Improvement Program**

The Illinois Commerce Commission (ICC) oversees this program that seeks to improve the safety of highway-railroad crossings. Funding for this program comes from the Illinois Department of Transportation, local governments, and the railroads. To help with the cost of improvements on local roads, the Illinois General Assembly created the Grade Crossing Protection Fund (GCPF), which receives $39 million annually from the MFT fund. Money from the GCPF can be used for warning device upgrades, grade separations, crossing closures, remote monitoring devices, improved signage at unsignalized crossings, and improvements to the roads at crossings.

**2015A Transportation (MFT) Revenue Refunding Bonds**

These bonds will be fully matured with the final debt payment on January 1, 2021. The debt service on these bonds is paid with MFT funds, with county local gas taxes serving as a backup pledge. These bonds were issued in 2015 to refund the 2005 Transportation (MFT) Revenue Refunding Bonds, resulting in an annual reduction of debt service of $1.1 million.

DuDOT has no other bond funds but has the authority to issue transportation funding bonds in the future.
### 5.2 Revenue Risk

#### 5.2.1 National and State Trends

##### 5.2.1.1 COVID-19

The virus that causes COVID-19 was first identified in Illinois on January 24, 2020. By mid-March, the number of confirmed cases was in the double-digits and Governor Pritzker issued a disaster proclamation, which was quickly followed by a shelter in place order, effective March 21st. The impact on travel throughout the state was immediate. StreetLight Data, a company that compiles traffic information using probe data combined with other sources, estimated that Vehicle Miles of Travel (VMT), dropped an average of 72 percent nationally from the beginning of March through April 7th. Large urban areas in the Northeast saw even greater declines. By mid-July, however, even urban counties had recovered to 90 percent of normal traffic levels.

![Figure 5-3. COVID 19 Effects on Vehicle Miles of Travel in DuPage County, 2020](image)

In DuPage County, StreetLight estimated that overall VMT dropped from an estimated 35 million vehicle-miles per day on March 11th to 16.4 million vehicle miles per day on March 25th – a 53 percent drop. Mirroring national trends, DuPage County saw a gradual increase in vehicle travel beginning in early May and continuing through the Summer (partly reflecting higher travel volumes typically seen in the Summer months), but this trend reversed in the late fall as COVID-19 cases began to increase rapidly. In addition, use of mass transit plummeted in large cities as riders sought safer alternatives or began working from home. Metra's ridership dropped by 97 percent for the month of April 2020 and had only recovered a small portion of that as of

---

2 “Executive Order in Response to COVID-19” [https://www2.illinois.gov/Pages/Executive-Orders/ExecutiveOrder2020-10.aspx](https://www2.illinois.gov/Pages/Executive-Orders/ExecutiveOrder2020-10.aspx),


November 2020. For the purposes revenue estimates, this plan assumes that the major impacts of the pandemic will be resolved by 2023.

Local gas tax allocations to DuPage County fell by nearly 20 percent in 2020. It is expected that because of the pandemic and its effects on businesses and changes in attitude toward telework that it will take two years to see a full recovery of the economy.

### 5.2.1.2 Construction Costs and Consumer Prices

Several larger national economic factors also contribute to erosion of motor fuel tax revenues. For example, based on the Engineering News Record Construction Cost Index (CCI), rising construction expenses since 2010 have slashed the purchasing power of motor fuel taxes by nearly 30 percent. Construction costs include material and labor costs across a number of industries and regions.

On the consumer side, costs of parking, operating personal vehicles, fuel costs, and cost of alternative transportation all factor in the use of vehicles and the consumption of gasoline. In addition, cost of electric and hybrid electric vehicles plays a large role in the adoption of these technologies by consumers. As prices of electric and hybrid vehicles approaches the prices of ICE vehicles, more consumers may choose to adopt that technology for personal mobility. The Consumer Price Index (CPI) includes the cost of goods and services including costs of fees and sales and excise taxes.

Figure 5-4 below compares the indexed CCI and CPI with indexed motor fuel tax allocations and vehicle miles of travel in DuPage County. As the chart points out, since 2010 (all indexes at 1.0), VMT and Gas Tax revenues (prior to State Capital Bill) have seen very nominal growth at less than one half of one percent per year. In comparison, CPI and CCI have increased at 2-3 percent per year.

---

5.2.1.3 Vehicle Fuel Efficiency

The average miles per gallon of fuel consumption for vehicles in the U.S. has risen over time. As shown in Figure 5-5, vehicle miles of travel have continued to rise steadily while fleet fuel consumption has risen but at a much slower rate. U.S. vehicle fuel efficiency has increased from approximately 12 miles per gallon in 1970, to nearly 18 miles per gallon in 2015. CAFÉ standards continue to push light duty consumer and business vehicle efficiency higher. Consumer demand for more fuel-efficient vehicles in response to rising fuel prices has largely driven this trend. It has also been helped by federal policy actions, such as the Gas Guzzler Tax in 1978 that imposed a tax on car manufacturers and importers for cars that did not meet minimum fuel economy standards, making them less price competitive compared to more fuel-efficient models.

Figure 5-5. US Vehicle-Miles Traveled and Fuel Consumption

A more fuel-efficient fleet means that fuel consumption for a given distance traveled will decrease and any per gallon tax revenue suffers. With the introduction of new electric and hybrid car models by various manufacturers, the revenue risk from more fuel-efficient cars is likely to trend higher. According to the International Energy Agency\(^6\), market share (defined as the share of new registrations of electric cars in the total of all passenger light-duty vehicles) of electric cars (both battery and hybrid models) in the U.S. remains low at less than 1 percent of the vehicle fleet. However, electric car purchases are on the rise in the U.S., with more than 500,000 electric vehicles as of 2016. Market penetration of electric vehicles in some other countries surpasses that found in the U.S., with China reporting a 1.4 percent market share, Sweden with 3.4 percent, and Norway with a remarkable 28.8 percent. These market shares indicate that transitioning the existing vehicle fleet to largely electrically powered could occur if corresponding incentives are in

---

place. Impediments to doing so in the U.S. are still substantial, including the relatively high cost of electric vehicles and a lack of vehicle charging infrastructure.

The International Energy Agency estimated that in 2015, the overall cost of a battery powered electric vehicle exceeded the cost of an internal combustion engine (ICE) vehicle by more than 80 percent. It expected that price differential to narrow by 2030 to approximately 25 percent. The federal government currently offers tax credits for buyers of electric vehicles to incentivize their purchase. However, these tax credits expire for each manufacturer once their sales of electric vehicles cross a specified threshold.

Charging stations in the U.S. for electric vehicles are on the rise, but still offer less than complete coverage. With approximately 48,000 charging outlets for vehicles in the U.S., the infrastructure for electric vehicles is well behind that of ICE vehicles, which have an estimated 1.2 million fuel pumps available. This is still the case after considering estimates that electric vehicles will only need a tenth of the fueling stations that are available to ICE vehicles. This assumption is based on the projection that electric vehicles will have 90 percent of their charging needs met by private residences. However, even if electric vehicles only require 10 percent of what ICE vehicles use, that still indicates a need for 120,000 charging outlets, which is more than twice the number of charging outlets currently available. Furthermore, not all private residences are equipped to charge an electric vehicle, and not all commuter parking spaces can be retrofitted with charging stations.

5.2.1.4 Vehicle Technology

Connected and autonomous vehicles offer additional possibilities for changing fuel consumption patterns. An autonomous vehicle (AV) is a vehicle that can perform all driving and navigation functions without input from a human driver. Autonomous vehicle technology has supporters and detractors who argue that the technology will create greater fuel efficiency or will create more traffic and congestion. It is likely that this technology will be coupled with an electric fleet and will be deployed slowly under highly controlled environments. This suggests that it is not likely that DuPage County will be significantly impacted by AV technology in the first ten years of the plan.

Connected vehicles are ICE or EV light and heavy-duty vehicles with enhanced communication abilities. A connected vehicle (CV) is one that communicates with other vehicles and infrastructure, allowing it to share information on the vehicle's velocity, position, and conditions around it. Connected vehicles are already on the market and elements of the future are already installed on many of cars and trucks purchased in the last five years. Connected vehicles communicate not only with other vehicles (vehicle to vehicle, or V2V) but also with surrounding infrastructure (V2I) such as traffic signals, traffic monitoring sensors, and communication and navigation equipment. DuPage County is deploying infrastructure that allow us and our peer agencies to take advantage of the V2I technology for the sake of congestion reduction.

---

According to the U.S. Energy Information Administration’s *Study of the Potential Energy Consumption Impacts of Connected and Automated Vehicles*, predicting whether these technologies will have an overall net positive or negative impact on fuel consumption is challenging because of various factors. The impact that these factors will depend upon several variables – for example, how quickly AVs and CVs penetrate the market, how policy makers regulate these technologies, and how consumers use them. Below are some of the major factors that are expected to influence vehicle fuel usage.

The arguments for reduced fuel consumption are:

- **De-emphasized performance**: With AVs taking humans out of the driving process, vehicle performance may not be as critical for consumers. With a reduced emphasis on vehicle performance, automotive engineers can focus on optimizing fuel efficiency, with estimates of improving fuel economy up to 23 percent by reigning in acceleration capabilities to what was experienced in the 1980s.

- **Eco-driving**: AVs can be programmed to drive using the most economic practices available (smooth acceleration and deceleration, maintaining economical cruise speed, etc.). CVs, through their ability to communicate with nearby vehicles and infrastructure, can maintain optimum speeds to coordinate with traffic lights, optimize routes, and platoon with other vehicles to reduce drag. Studies have found that eco-driving can yield up to a 20 percent improvement in fuel efficiency as compared to the typical driver.

- **Congestion mitigation**: AVs and CVs are expected to enable higher throughput on roads because they will lower the crash rate (reducing crash-related delays and allowing roads to make use of their full throughput more often), and AV technology may allow reduced separation between vehicles without compromising safety. Both of these factors may help alleviate congestion on roadways to some degree.

Factors that may drive up vehicle usage and fuel consumption include:

- **Increased user base**: With fully autonomous vehicles, people that are currently unable to drive, including visually impaired or other disabled individuals unable to operate a standard vehicle, seniors who may have surrendered their driving privileges, or children ineligible for a driver’s license, may make use of this technology. With these additional users making trips, vehicle miles traveled (VMT) would increase.

- **Increased highway speeds**: With human inattention and reaction times eliminated from driving decisions, safe driving speeds can be increased. Higher speeds result in greater aerodynamic drag with a corresponding increase in fuel consumption.

- **Increased travel demand**: With AVs freeing drivers of the need to pay attention to the road, many may find that time in the vehicle is more productive. This could lead to people taking trips that they otherwise wouldn’t have taken since the opportunity cost of driving is greatly reduced. Additionally, longer trips by car become more practical with the ability

---

to sleep through the trip. For example, some users may switch from using airline travel to using AV travel or may find a longer commute more palatable. With commutes being more productive in AVs, people may be willing to buy less expensive homes further from their place of work since the extra commute time (and extra VMT) would not be considered wasted.

The ability of an AV to drive itself means it can make itself available to other users when a conventional vehicle would just sit in a parking lot. This increased utility of the AV comes with a downside since additional VMTs are necessary for it to reposition itself. Conversely, users could also send their AVs away from their present location to avoid parking fees (e.g. commuters dropped off in a central business district).

**Figure 5-6** shows the estimated impacts from each of the previously described factors according to the U.S. Energy Information Administration. It is obvious that given the wide range of some of the estimates, the overall impact is difficult to assess with any degree of accuracy. What it does illustrate well is that any tax revenue that is tied to fuel consumption faces a future involving a great degree of uncertainty, which is a primary reason for CMAP recommending, in the long term, a replacement for the MFT that is tied to vehicle use instead of fossil fuel consumption. Such a replacement should account for growth in the transportation system and its associated construction costs.

**Figure 5-6. Estimated Impacts on Energy Consumption from Various Aspects of AVs/CVs**

### 5.2.1.5 Federal and State Revenue Uncertainty

The Highway Trust Fund (HTF) is the primary source of federal grants for highway funding to the states. It was established by the Highway Revenue Act of 1956 to finance the interstate highway system. A funding mechanism for mass transit was added as part of the Surface Transportation
Assistance Act of 1982. Funding for the HTF predominately comes from motor fuel taxes ($0.184 per gallon of gasoline and $0.244 per gallon of diesel).

Prior to the recession that began in late 2007, tax revenues had generally risen year over year as annual increases in driving resulted in higher fuel consumption. With the recession causing a contraction in spending, tax revenues to the HTF fell. Even though vehicle usage has since surpassed vehicle usage levels just prior to the recession, fuel tax receipts have not recovered to the same degree thanks to increases in vehicle fuel economy.

An additional challenge for the HTF is that, ever since 2008, outlays from the HTF have exceeded tax revenues and the trend is expected to continue. Congress has shored up the HTF over the years with more than $143 billion in transfers from the general fund to the HTF. However, this Congressional intervention cannot be counted on every time there is a revenue shortfall in the HTF. Critics of this measure point out that it undermines the idea that users of the system should be funding it. Without Congressional intervention, either through transfers from the general fund or a restructuring of the tax feeding the HTF, fewer federal grant dollars must be considered as a potential future outcome.

Despite the general availability of federal and state-backed funding opportunities (see STBG, CMAQ, HSIP, and RAISE above), DuPage County has no competitive advantage. All of the programs previously mentioned continue to experience greater competition. In years to come, while DuPage County will have its gas tax resources to help leverage federal and state funding, it is likely that grants will become harder to procure. It is also possible that counties with good revenue resources may be required to provide more local match in order to be attractive to granting agencies. At the State level, even with the State’s recent Capital Bill, user or consumer tax programs popular under one administration may not last or may be rolled back.

With pressure on local governments to hold the line on property tax and sales tax increases, more local governments are applying for critical grant money for designing and building infrastructure. Additional competition for state and federal grants lessens the chances that the County will garner as much revenue from these sources throughout the life of the program.

Given the pressures faced by both state and federal funding sources, it would be prudent to acknowledge that funding levels of these revenue sources have the potential to decrease.

### 5.2.2 Local Trends

#### 5.2.2.1 Electric Vehicles

In January 2020, the State announced that electric vehicles will pay the same as vehicles of the first division and that these vehicles shall pay an additional $100 as part of the registration fee in lieu of the payment of motor fuel taxes.\(^9\) This payment is approximately one-half of what a comparable internal combustion engine vehicle would pay based on conservative estimates.\(^10\)

---

\(^9\) 625 ILCS 5/3-805

\(^10\) At 10,000 miles per year and 25 mpg, a typical ICE vehicle would pay approximately $184 per year in state motor fuel and local gas taxes.
Between November 2017—when the state began tracking electric vehicle registrations—and June 2021, the number of electric vehicles registered in DuPage County tripled from 1400 to nearly 5,000. This number is the second highest among counties in Illinois. With electric vehicles penetrating more of the regional market, the County expects declining growth in MFT revenues based on local travel.

### 5.2.2.2 Impact Fees

Impact fees are one-time fees that financially support infrastructure needs that are driven by new development. These fees are assessed on new development and then used to mitigate the cost of off-site infrastructure necessary to support the new development. This includes arterial and collector roads, interchanges, overpasses, and other capacity improvements. DuPage County passed Ordinance ODT-016-88 in 1989 that implemented impact fees in the County.

Impact fees, which are related to property development in DuPage, face a diminishing future as less and less land is available for development. Historically, the source of DuPage County’s impact fee revenue has primarily been new development on previously vacant land. While redevelopment to higher densities can also be assessed an impact fee under the ordinance, the revenue generated is expected to be small, at least for the foreseeable future. Impact fees will represent a diminishing share of DuDOT revenue moving forward.

### 5.3 Financial Commitment Analysis

The department has chosen to represent its commitments under three categories: Operations, Maintenance and Contractual, and Capital. DuDOT is obligated to operate and maintain its present system of assets and facilities with its existing revenues. Revenues and cash balances are used to fund operations and maintenance activities first. Capital improvements are funded with remaining balances or specific federal or state funds. The following sections provide details on County obligations.

#### 5.3.1 Operations Commitments

DuDOT has an annual core operating cost that is typically around $20 million. This cost recently decreased when the 2015A annual bond debt service, a cost of more than $9.5 million per year, was retired in the first quarter of 2021. Operations refers to in-house activities related to maintaining a safe, accessible, and efficient system of highways and trails. The Operations group maintains a range of assets including roads, signs, sidewalks and path, retaining walls, and drainage structures. They respond to public complaints and work to address issues like potholes, fallen trees, downed fences, and many other emergency issues in a timely manner.

Operations also procures and maintains various capital equipment necessary for the maintenance of County assets. Equipment includes snow plows, dump trucks, lift trucks, mowers, and a host of other fleet vehicles. The Operations group also procures, stores and delivers material used for clearing roadways of ice and snow during the winter months.

---

DuDOT’s core operating expenses between 2010 and 2019 are presented by category in Figure 5-7.

![Figure 5-7. DuDOT Historical Expenses, 2910-2019](image)


The bullets below provide a detailed description of each of the core operating expense:

- **Personnel Services** – These expenses include salaries, benefits, overtime, and the employer share of social security and the Illinois Municipal Retirement Fund for all of the departments comprising DuDOT.

- **Commodities** – These are costs incurred for small equipment, fuel, lubricants, parts, maintenance supplies, and miscellaneous items. These also include annual material costs for snow removal.

- **Contractual** – The contractual expenses cover the costs of various services related to the operations and maintenance group (e.g., collective bargaining, communication, custodial, equipment repair, insurance, garbage and special waste disposal and utilities). Capital Maintenance contracts, as described below, will be listed separately in the 2021-2040 LRTP projection of expenses.

- **Capital Outlay** – For the Operations group, capital outlay refers to equipment purchases, facility improvements and the expenses related to maintenance or replacement of assets. These expenses usually total 1.5 to 2.5M per year and are co-mingled with Capital projects.
- **Capital projects** – highway and bridge construction, reconstruction, intersection improvements and signals, new sidewalk and path and other new assets will appear under a separate project program and cost estimates will be provided.

- **2015A Transportation (MFT) Revenue Refunding Bonds Debt Service** – In 2001, the County issued a $130 million bond to fund highway construction projects. These bonds were refunded in 2005. The County elected to refund the bonds again in 2015 by issuing the Series 2015A Transportation Revenue Refunding Bonds. Residual funds of approximately $11.8 million from the 2005 bond were transferred to the 2015A bond fund and debt service payments were restructured with the final payment scheduled for January 2021. Annual debt service payments fell from approximately $10.6 million to approximately $9.6 million following the 2015 refunding. Debt service repayment was completed in the first quarter of 2021 and will not continue into the 20-year LRTP program.

**5.3.2 Capital Maintenance and Contractual Commitments**

These commitments include contracts with third party vendor specialists in asset maintenance. DuDOT issues contracts on an annual or biennial basis for a variety of inspection, repair and maintenance activities including bridges, pavement, signals, lighting, wetlands, walls, engineering and land acquisition services. Typical annual commitments have ranged from around $12 to about 14 million. Two of the significant capital maintenance contracts are the annual pavement maintenance and the signals and lighting contract (approximately $1.5 million). DuDOT has approximately 970 lane-miles of pavement and owns 324 traffic signals. This volume of inventory requires constant inspection and regular maintenance cycles to preserve a quality system.

As the highway network and supporting infrastructure ages, and with a static personnel headcount, it is expected that additional contractual obligations will arise around inspections and repairs and that these commitments will need to increase to keep pace with cost inflation.

**5.3.3 Capital Program Commitments**

Capital programs encompass all new and reconstruction projects not covered by maintenance and operations. These projects include highway add lane, widening, and reconstruction, new or reconstructed bridges, intersection improvements and signals, and new sidewalks and trails. The capital program is constrained by operating and maintenance budgets. Often, County gas tax revenue and impact fees are used to leverage federal funds which were described in section two above resulting in substantially lower costs to the County.

DuDOT has been highly constrained in building and reconstructing its facilities over the last five to ten years due to its debt service obligations. The capital program will remain constrained over the life of this Plan but new funding scenarios should help alleviate many of the debt related choices DuDOT has needed to make in the last decade.

**5.4 Plan Funding Scenario**

As mentioned earlier, the new State Rebuild Illinois Capital Bill of 2019 provided a welcome infusion of funding through the State Motor Fuel Tax (Transportation Renewal Fund) for DuDOT
revenues. Despite the doubling of the state motor fuel tax rate from 19 cents to 38 cents, the formula for the new 19 cents under the Transportation Renewal Fund (TRF) apportions the revenues in a new way such that the County will receive about seventy (70) percent of what it receives under the existing 19 cent tax. To assist the State and its recipient agencies, the State has also allowed the TRF to be indexed to inflation.

In addition, the State issued a series of bonds for which the proceeds will be allocated to State, Local, Transit, and Aviation agencies. Over $1.5 billion will be distributed to counties, townships, and municipalities. DuPage County will receive approximately $35.4 million of that total over three years (2021-23).

Subsequent to Rebuild Illinois, the County amended its County Motor Fuel Tax Ordinance. This amendment permits the County to collect the maximum amount of 8 cents per gallon as allowed under the Transportation Funding Act, P.A. 101-0032. This county motor fuel tax is also indexed to inflation starting with this increase in rate. The County will begin to collect this additional revenue in 2021.

DuDOT has developed the following funding scenario to evaluate future constraints and opportunities. This section provides an estimate of forecasted capital funds available through FY2040 compared against projected operating, maintenance and capital costs.

### 5.4.1 2020-2040 Constrained Revenue Scenario

The Constrained Revenues Scenario is the baseline scenario and uses conservative assumptions regarding traffic, land use, economic and behavioral impacts on revenue. This scenario provides the estimate of available capital funds used to constrain capital projects in Chapter 6. The scenario will be regularly reviewed and updated by DuDOT as needed.

The methods and assumptions used to project revenues and expenses for the Constrained Revenues Scenario are explained in the following section. The assumptions used in this forecast align with CMAP’s ON TO 2050 assumptions for DuDOT’s core revenues.

### 5.4.1.1 Methodology and Assumptions

General notes on methodology and limitations:

- The financial projections that appear in this memo are estimated revenues, and expenses, which are based on data provided by the County’s financial plan, DuDOT, research by CDM Smith, and the assumptions discussed with and decided upon by DuDOT. Expected revenues, core operating expenses, and capital costs for the projected periods are subject to uncertainty resulting from variability in demand for services, economic conditions, legislative changes, and other unknowns. No guarantee is presented or implied as to the accuracy of the financial projections or predictive statements in this document.

---


Financial calculations were carried out using exact numbers, but results were rounded to avoid implying a level of precision that does not apply to these forecasts.

All dollar figures are expressed in year of expenditure dollars. No adjustments have been made to express dollar figures in a base year.

Unless otherwise noted, all financial figures are expressed on an accrual basis.

Scenarios use FY2021 as the starting year and project out twenty years to FY2040. DuPage County, in its FY2019 Financial Plan, provides actual results up through FY2019. MFT and LGT revenues for FY2021 are also projected based on historical receipts; MFT revenue has been augmented based on 2020 first time revenues under the TRF and County Option MFT is projected based on anticipated receipts which begin in the second half of 2021.

As noted in section 3, there are several risk factors that may impact future DuDOT revenues and costs. The estimates in this scenario are based the assumptions listed below. Any significant departure from these assumptions could materially affect the estimates for future revenues and expenses.

- It is assumed that DuPage County will avoid deficit spending, and, in order to do so, will prioritize operations and maintenance by strategically reprogramming capital projects where feasible or necessary. Capital costs were also reduced as necessary to ensure that adequate funds were available for bond payments.
- State MFT and County Local Gas Tax are indexed in FY22-40 and the offsetting factors noted above were applied.
- An end to the direct social and economic impacts of the COVID-19 pandemic by 2023. Beyond 2023, an increase in work from home trends promoted by the experiences of the pandemic and contributing to a 4 percent reduction in passenger car traffic. (see additional details below).
- Continued improvements in fuel efficiency. An annual increase of 0.6 percent in average vehicle fuel efficiency, or a total 2020-2040 increase in fuel efficiency of 12 percent.
- No substantial change in transit use or impact of changes in retail delivery services.

Effects of the Pandemic
As discussed in Section 5.2.1.1 and demonstrated in Figure 5-3 above, personal and work-related travel were impacted greatly by the pandemic.

Short-term effects
DuDOT calculated that revenues declined in 2020 by about twenty (20) percent. DuDOT projects that the effects will carry over into 2021 and 2022 with lesser impacts. DuDOT expects a full recovery by 2023. The pandemic did bring forward a greater dependency on warehousing, distribution and local delivery services. The increase in these movements should wane slightly as the population begins to move about again but the efficiency of the delivery systems now in place should a) cause slight decreases in personal vehicle miles traveled, and b) cause slight
increases in light and heavy-duty vehicle miles of travel. The latter will have implications for diesel fuel consumption.

Long-term effects
As the pandemic demonstrated, many non-essential workers could work from home reliably and efficiently such that the work commute might not be necessary five days per week. DuDOT has assumed a 4 percent work from home percentage going forward, which reflects a reduction in vehicle-miles of travel and fuel consumption. This assumption will be reviewed periodically throughout the life of the Plan.

Effects of Fleet Conversion
DuDOT has seen a gradual conversion in the DuPage County market to more hybrid and electric vehicles. These changes are representative of North America in general as fuel efficiency standards have pushed manufacturers to develop alternative fueled vehicles. DuDOT assumes a conservative transition over the course of the 20-year program. Fuel efficiency improvements without increases in vehicle miles of travel means a lower fuel consumption and, therefore, lower motor fuel tax revenues. DuDOT has used a 0.6 percent per year factor to apply to fuel efficiency. Over the course of the Plan, fuel efficiency improves by about 12 percent resulting in a commensurate reduction in fuel tax income per year.

Electric vehicles, as we have pointed out in Section 3.2 above, are growing in popularity but at rate that does not promise to effect motor fuel tax revenue in the next 5 to 10 years. Currently, 0.7 percent of all registered automobiles are electric. Doubling or tripling that number will have light effect on revenue. As incentive and recharging facility barriers currently exist in DuPage County, DuDOT assumes a low rate of electric vehicle conversion in this scenario. Absorption of EVs by the public and by trucking will be monitored closely and DuDOT may modify the effects of electric vehicles in Plan updates.

Ongoing Societal Changes
DuPage County assumes that public transit in the County will continue throughout the life of this plan in much the same way as it has since 2000. Despite efficiencies brought about by information systems and payment applications, service costs will continue to rise, capacity of bus and rail service will remain fairly similar, and autonomous vehicles will not enter the scene in any meaningful way until later in the Plan.

Even before the pandemic, many retailers were struggling and were moving to online purchasing. Many restaurants and services cannot move to online only business. Those businesses that have moved out of brick and mortar in DuPage County represent millions of square feet. Loss of these businesses will have an effect on traffic in corridors and around the traditional mall sites. However, as noted throughout this section, online ordering and direct delivery is moving into that retail space and the net effect on fuel consumption and travel is negligible. DuDOT is assuming no net effect on revenues due to trends in transit or retail delivery.
5.4.1.2 DOT Projected Revenues and Expenditure

The primary sources of transportation revenues are fuel taxes, both the Local Gas Tax (LGT) and the Motor Fuel Tax (MFT). The LGT and MFT are collected and distributed to Illinois counties by the Illinois Department of Transportation.

Table 5-1 and Figure 5-8 below summarize the total revenues, total expenses, surplus/deficit (total revenues minus total expenses) shown as the available capital funds from FY2021 to FY2040. The complete list of projected revenues can be located in Appendix B.

### Table 5.1. Summary of Constrained Scenario Revenues, 2021-2040 ($ millions)

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimated Revenue (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Local Gas Tax</td>
<td>$840.8</td>
</tr>
<tr>
<td>State Motor Fuel Tax</td>
<td>564.0</td>
</tr>
<tr>
<td>State Capital Bill Bonds</td>
<td>23.6</td>
</tr>
<tr>
<td>Impact Fees</td>
<td>22.7</td>
</tr>
<tr>
<td>State and Federal Grants</td>
<td>103.4</td>
</tr>
<tr>
<td>Licenses and Permits</td>
<td>14.0</td>
</tr>
<tr>
<td>Charges for Services</td>
<td>28.4</td>
</tr>
<tr>
<td>Other</td>
<td>17.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,614.3</strong></td>
</tr>
<tr>
<td>Total Expenses</td>
<td><strong>$818.8</strong></td>
</tr>
<tr>
<td>Core Operating Expenses</td>
<td>$435.6</td>
</tr>
<tr>
<td>Capital Maintenance and Contractual Expenses</td>
<td>$383.2</td>
</tr>
<tr>
<td><strong>Available Capital Funds (Total Revenue – Expenses)</strong></td>
<td><strong>$795.5</strong></td>
</tr>
</tbody>
</table>

Source: DuPage County Financial Plans and CDM Smith.
DuDOT is projecting over $1.6 Billion in revenue over the 20-year plan horizon. This averages out to approximately $81 million per year. Operating and Capital Maintenance and Contractual costs are projected to rise at rates slightly greater than the consumer price index. Revenues are projected to exceed base costs by approximately $828 million (or $41 million per year). It is this amount that the County will use as a maximum or constraining value to allocate to capital projects.

**Figure 5-9** illustrates the Constrained Revenues Scenario graphically. The graph shows gradually increasing operating and maintenance costs after the retirement of the 2015 Bond debt in 2021. Under the new State MFT and County Local Gas Tax, and the availability of State MFT Bonds in 2021-2023, the County expects a revenue surplus of approximately $50 million in 2022 and 2023. Thereafter, surpluses remain steady at about $41-42 million per year through 2040.

![Figure 5-9. Constrained Revenue Scenario Projection, 2021-2040 Revenues and Expenditures](image)

With the influx of three new revenue streams, the short-term outlook for capital programs is very strong. Indexing revenue permits revenues to grow modestly and to offset some of the erosion of revenues due to conversion of personal and commercial vehicles to alternative fuels. DuDOT will continue to stage its larger capital projects and equipment acquisitions over multiple years using as many revenue sources as are available. Large capital projects also generally mean larger engineering contracts which DuDOT will run over several years. Greater revenue without debt service payments allows the County to consider bonding large capital projects at strategic times in the Plan. Elevated local gas and motor fuel tax earnings also allow DuDOT greater leverage in pursuing federal and state grant opportunities.
Key Takeaways

- This chapter describes DuDOT’s financial means for fulfilling its statutory duties and meeting other departmental goals and objectives set by the County Board. The funds expected to be available for the 2020-2040 capital program are estimated under the Constrained Revenues Scenario based on historical revenue trends, existing financial commitments, and several assumptions addressing uncertainties.

- Under the proposed MFT and LGT increases, DuDOT projects that more than 85% of its funding will stem from fuel receipts. While this additional revenue is extremely welcome at a time of escalating costs and state of good repair backlogs, it is concerning to have budgets that are reliant on a volatile and declining source of income. In their ON TO 2050 Plan, CMAP, the regional Metropolitan Planning Organization, advocates for a gradual replacement of motor fuel taxes with another, more consistent and reliable, source of revenues.

- Total receipts are anticipated at more than $1.61 Billion over the 20-year program. Slightly more than half of this budget is expected to be needed for operating, capital maintenance, contractual costs commitments.

- The remaining $795 million (approximately $40 million per year) is expected to be available for the capital improvements identified in Chapter 6 of this plan. Projects will be given precedence based on costs, benefits, feasibility, and compliance with the goals and objectives set out in the LRTP Vision.

- This scenario provides more flexibility than what the DOT has been accustomed to. It will allow for increased pavement maintenance and expanding costs due to replacement of aging infrastructure, while providing enough resources for several major capital programs. The revenue scenarios also allow DuDOT to leverage federal and state resources for our projects and allow the County to issue new bonds for major capital projects if the need should arise.