

COVID-19 FEDERAL LEGISLATION AND TRANSPORTATION SYSTEM IMPACTS

What we know

In response to the coronavirus (COVID-19) pandemic, Congress has enacted four bills: the [Coronavirus Preparedness and Response Supplemental Appropriations Act](#), the [Families First Coronavirus Response Act](#), and the [Coronavirus Aid, Relief, and Economic Security Act \(CARES Act\)](#), and the [Paycheck Protection Program and Health Care Enhancement Act](#). Together, these bills focus primarily on responding to the pandemic, providing immediate relief to those impacted by mandatory and voluntary closures. This assistance takes several forms including:

- Provide financial assistance for businesses, industries, and hospitals, as well as make provisions for the U.S. Treasury and Federal Reserve to stabilize bond and money markets.
- Assist state and local governments in meeting the unbudgeted health and public safety costs of responding to the outbreak.
- Providing assistance to transit systems and other transportation providers.

CMAP is closely following how the federal and state governments will be implementing some of these programs. Staff have begun compiling information on what these programs are and how they will be implemented. In many cases, the rollout is still underway and individuals, businesses, and communities have not yet received relief. [Linked](#) is the latest version of CMAP staff's interpretation of the legislation's programs, and is meant to be used by local governments for informational purposes. Staff will update the document over the coming weeks as details become available.

What we have learned

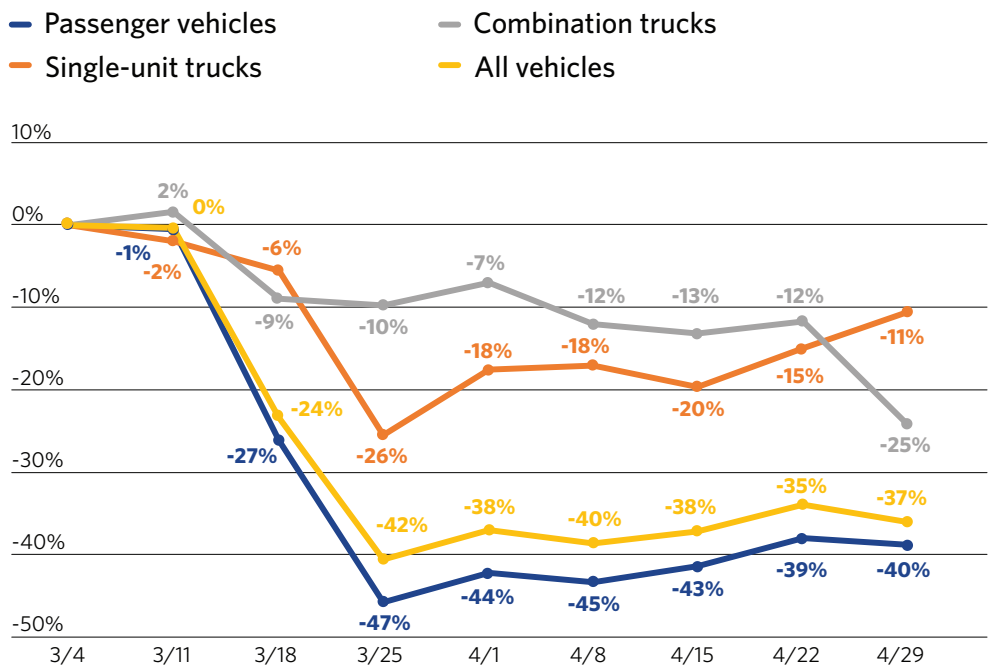
Since the start of the COVID response and stay at home order transit and transportation use has significantly changed. While there is a lot of speculation about what is occurring, we would like to share with you what we have learned so far. This includes data and analysis of movement on our roadways, safety, transit ridership & freight rail movements.

Roadways

Illinois roadways have experienced lower traffic as a result of the COVID pandemic. The decline is much more pronounced for passenger travel than for trucks, reflecting the continued need to ship goods. The decline also depends on the type of roadway and measure.

During the first two weeks of the stay at home order, Illinois Tollway traffic was 55% [lower than forecasted](#) for passenger vehicle traffic and 9 percent for truck traffic. For the same time period, average passenger traffic on IDOT arterials and expressways declined 47 percent and heavy truck (multiunit) traffic declined 10 percent. Travel by single-unit trucks, which typically serve a more local travel market, decreased somewhat more than heavy trucks. But the most recent data suggests that single-unit truck and passenger-vehicle traffic are slowly recovering, though heavy truck traffic has declined to 25 percent below pre-COVID levels. There is still uncertainty, since some other data point to even greater declines in traffic.

Estimated percentage change in statewide traffic volumes by vehicle class, Wednesdays, March-April 2020

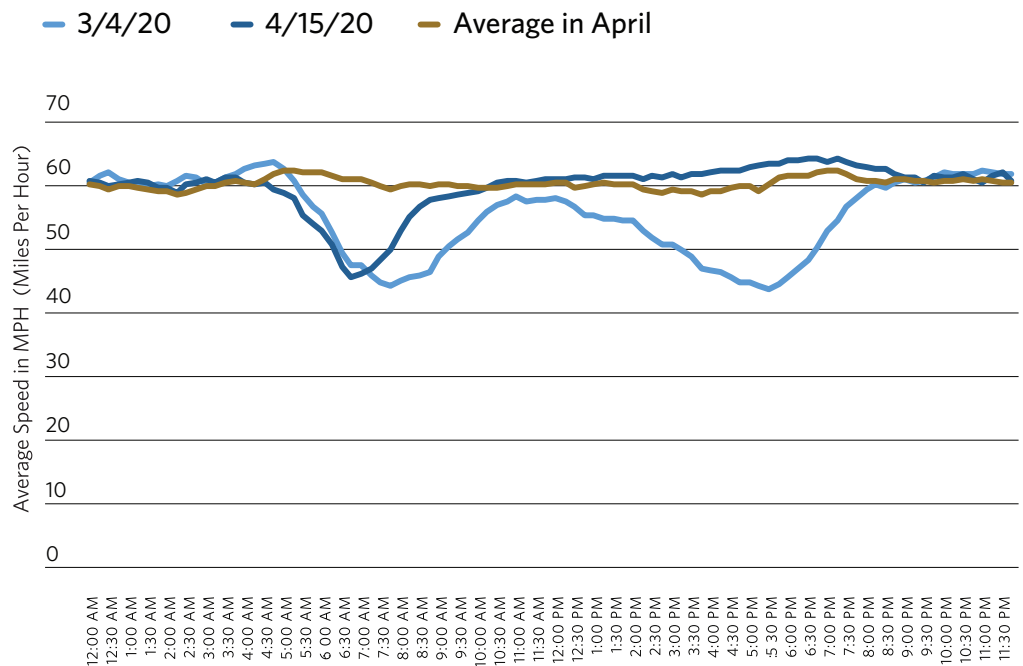


Note: Prepared May 2020

Source: CMAP analysis of IDOT's classification count sensor data. Counts weighted using Table TVT-1, 2018 Illinois Travel Statistics Report. Excludes collector roads and local streets. Also excludes toll highways. Prepared April, 2020.

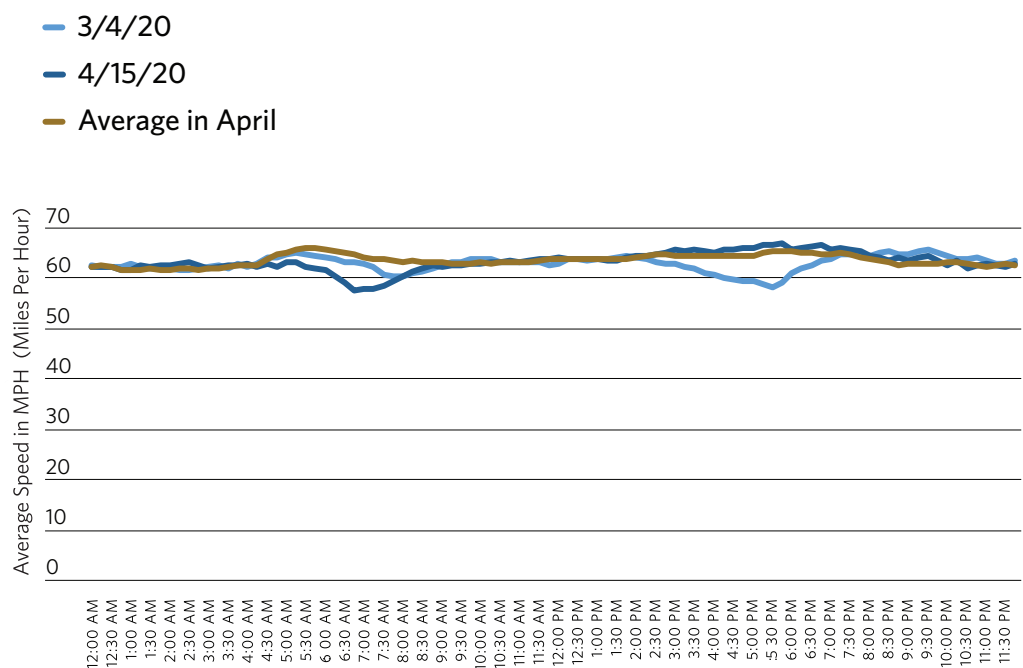
Fewer vehicles on the road has meant decreased congestion on the expressway system, to the point that there is now no noticeable decline in average speed during rush hour. This change is most noticeable on IDOT expressways, which are typically more congested, and somewhat less noticeable on the Tollway. However, slowdowns may still occur due to crashes or other incidents, such as the bad weather and major pileup on the Kennedy Expressway the morning of April 15 that slowed speeds across the entire expressway system.

Average speed on IDOT interstate facilities for Wednesdays in March and April 2020



Source: CMAP analysis of HERE technologies speed data obtained from the Regional Integrated Transportation Information System, University of Maryland.

Average speed on tollway interstate facilities for Wednesdays in March and April 2020



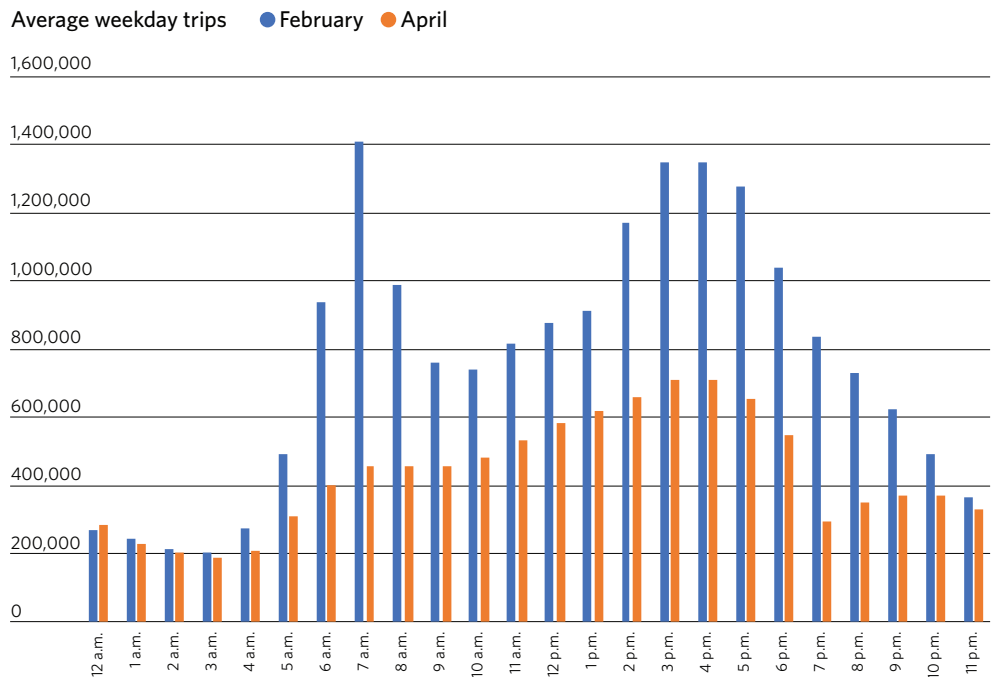
Source: CMAP analysis of HERE technologies speed data obtained from the Regional Integrated Transportation Information System, University of Maryland. Includes Chicago Skyway data.

TRIPS AND TRAVELERS

Using cell phone data made available through IDOT, it is also evident that trip-making patterns have changed significantly. The number of weekday trips taken by any mode of travel decreased by 41 percent in April compared to February. The average distance of trips also decreased, down to 4.6 miles from February’s average of 5.9 miles. The decrease in trip length is likely due to the decline in commutes as some employees began to work from home and many others were furloughed or let go. More of the region’s residents are staying close to home, with trips under 2.5 miles accounting for 58 percent of all trips in April, up from 43 percent in February.

Unlike the typical morning and afternoon peak pattern, trips in April only peaked in the afternoon. Trips starting during the daytime decreased significantly, yet the number of trips taken between 11:00 pm and 4:00 am remained almost unchanged. Many of the job categories considered essential, such as healthcare, food manufacturing, and transportation, rely on shift workers. The steady number of overnight trips likely reflects this identifying characteristic of essential work, capturing late night commutes for essential workers.

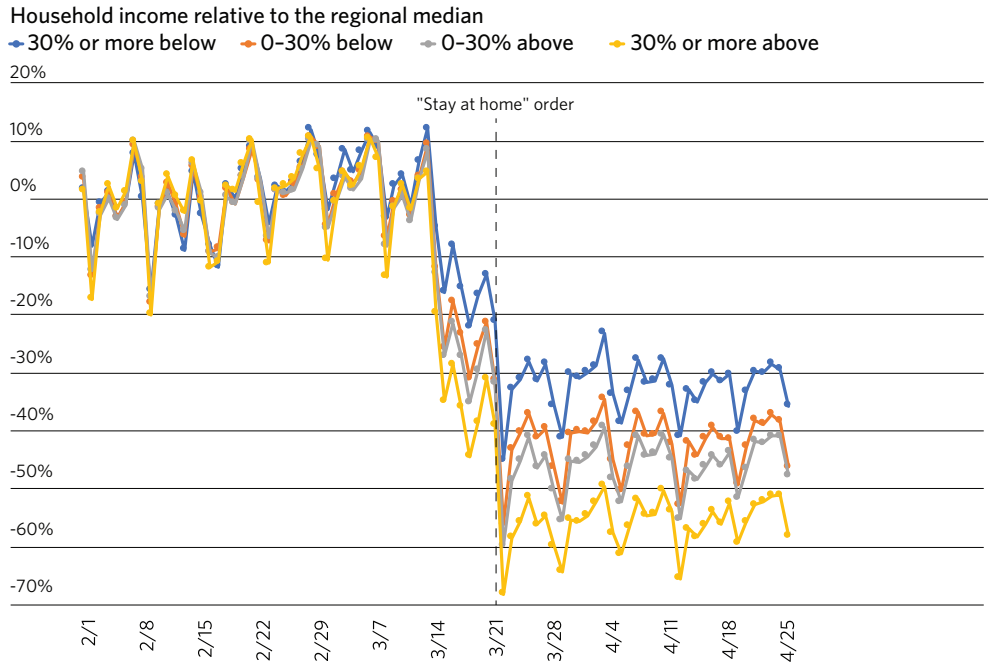
Average number of weekday trips by start hour, February and April 2020



Source: Chicago Metropolitan Agency for Planning analysis of Replica State of Illinois COVID Planning data, 2020, made available by the Illinois Department of Transportation.

[Previous CMAP analysis](#) looked at 12 broad occupations classified as essential workers in metropolitan Chicago and found that these workers disproportionately live in low-income communities with high concentrations of people of color. Trip data mirrors these findings. The number of trips starting in census tracts where the median household income is 30 percent below that of the region have not declined as much as higher-income tracts. These trends reflect the options many higher-income residents have of being able to work from home and shop online for supplies while the stay-at-home order is in effect.

Change in trips compared to February 2020 daily average



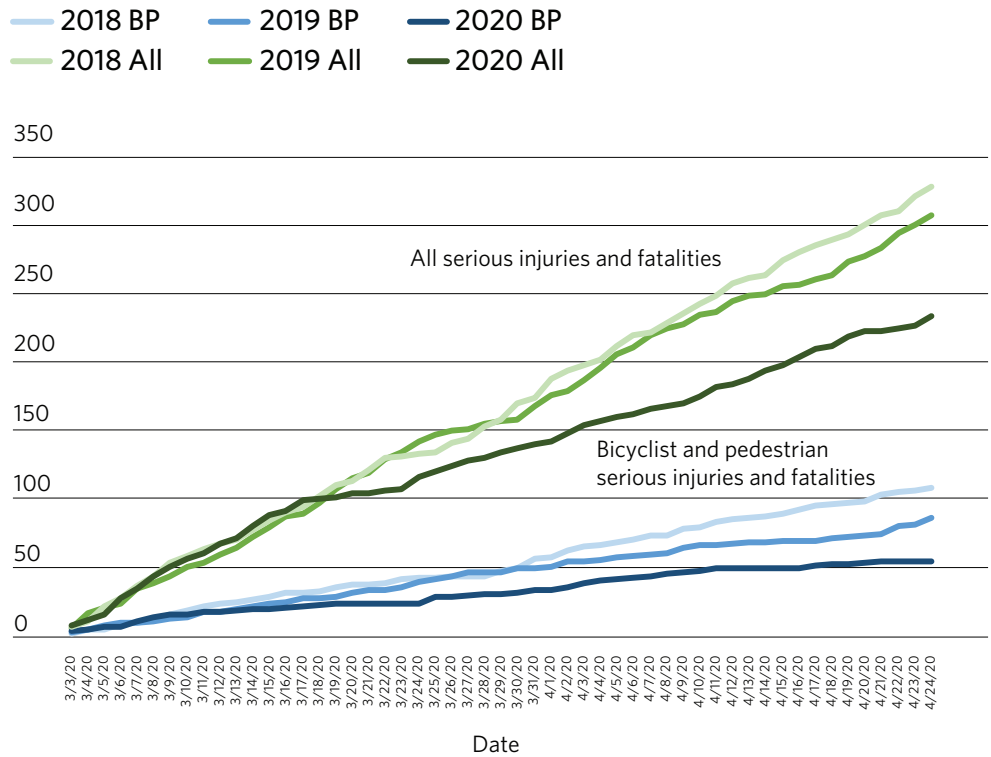
Note: Regional median household income is approximately \$70,500 and income is based on census tract median income for each trip origin.

Sources: Chicago Metropolitan Agency for Planning analysis of Replica State of Illinois COVID Planning data, 2020, made available by the Illinois Department of Transportation and American Community Survey data, five-year estimates, 2014-2018.

Safety

Besides reducing congestion, cutbacks in travel from COVID-19 are also reducing injuries from crashes. In the City of Chicago, the number of serious and fatal traffic injuries from the first week of March to the first week of May has grown more slowly this year than in the two preceding years. Safety has improved for car occupants as well as bicyclists and pedestrians. In fact, the reduction in serious injuries and fatalities has been more pronounced for bicyclists and pedestrians. While the count of serious injuries and fatalities overall has decreased, an [analysis from Northwestern University](#) suggests that the proportion of crashes that result in serious injuries and fatalities has increased slightly, potentially because having fewer cars on the road is encouraging speeding.

City of Chicago serious injury or fatalities in traffic crashes: all crashes and bicyclist and pedestrian (BP), March-April 2020



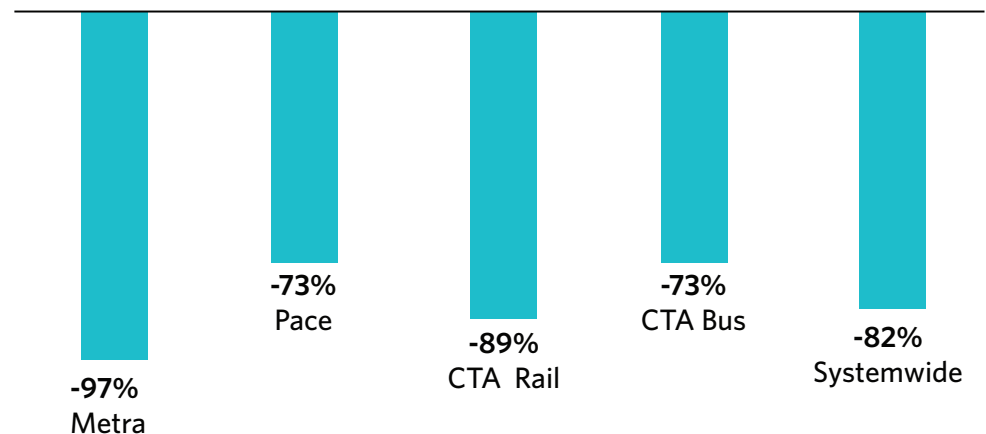
Note: The chart shows the cumulative injuries beginning on March 3, 2020 vs March 5, 2019 vs March 6, 2018 so that the beginning was a Tuesday for all 3 years. City of Chicago data excludes expressway crashes.

Source: City of Chicago.

Transit

Transit usage has declined to an even greater degree than passenger car traffic as social distancing continues. Transit ridership had declined by more than 80 percent across the RTA system by the end of April. The largest decline was on Metra (97 percent) whose customer base is dominated by downtown commuters who have largely shifted to working remotely. As a result, Metra is running a reduced schedule at about half of typical weekday service on most lines. Service on the North Central and Heritage Corridor has been cut to one inbound and outbound train per day. Pace stopped service on most of its Metra feeder routes and shuttle buses, which have seen steep ridership drop-offs. Pace is reallocating those buses and personnel to routes retaining higher ridership to avoid crowding. CTA has not reduced service in general but is making some

April 24 ridership by mode year-over-year percent change

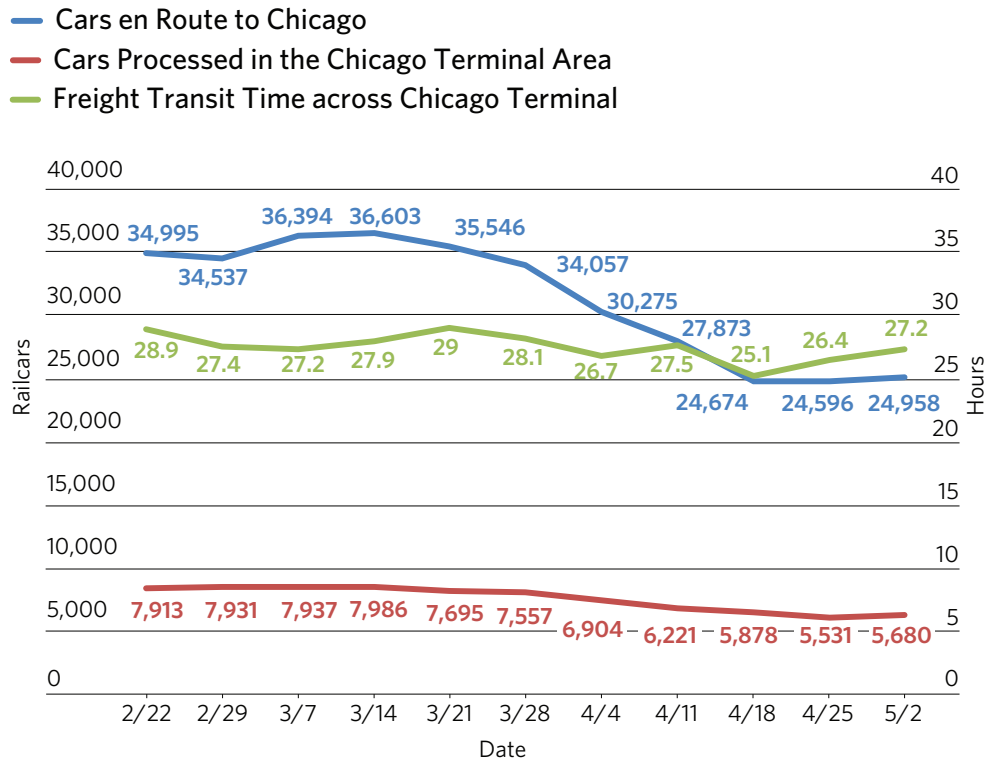


Source: Regional Transportation Authority.

Freight rail

Freight rail activity has declined somewhat, but as with trucking, shipments of goods have continued. The number of rail cars en route to Chicago were down 22 percent from the first week of March to the second week of April, and rail cars processed in the Chicago terminal were down 22 percent over the same time period. For the remainder of April, volumes remained at lower levels. Despite this reduction in volume, the average time it takes cars to move through the Chicago terminal (terminal transit time), which includes yard dwell time, has remained relatively flat.

Rail: Chicago terminal area carload volumes and transit times, weeks ending February 22 through May 2, 2020



Source: AAR Chicago Terminal Weekly Report via Railinc's Clearpath System.

Transportation funding impacts

Vehicle travel in 2020 will experience unprecedented declines due to both the statewide order to limit travel and the pandemic's resulting economic impacts. Lower than anticipated revenues will affect transportation investments and operations by IDOT, counties, townships, municipalities, and transit agencies. Illinois may be fortunate in that our legislature recently passed a motor fuel tax (MFT) increase, raising the rate to 38 cents per gallon from 19 cents per gallon. Even with the decline we are currently seeing it is most likely that the state motor fuel tax revenues for 2020 will be higher than 2019 due to this rate increase.

It is probable that this will still impact or delay some projects in the Rebuild Illinois capital bill due to the lower than anticipated revenues. In addition, state and county-option rates are set to increase on July 1, 2020 based on the rate of inflation as of March 2020. Based on data as of this writing, the rate would increase by a little more than a half-cent per gallon.

Staff looked at two different scenarios for motor fuel tax revenues for 2020. In the first scenario, the state would experience significant reductions in vehicle miles traveled for six months of 2020, resulting in 12.5 percent lower passenger vehicle miles traveled and 10 percent lower overall MFT revenues than forecast. In the second scenario, the state would experience significant reductions for three-quarters of 2020, pushing passenger VMT to drop by 27.5 percent and MFT to drop by 21 percent relative to CMAP’s forecast. Under these scenarios, MFT revenues that would be invested by state, local, and transit agencies may experience a reduction of 9 and 20 percent, respectively, relative to what was previously forecast.

	BASELINE FORECAST	SCENARIO 1	SCENARIO 2
Number of months of significant VMT reductions*	0 months	6 months	9 months
Average change in full year VMT from forecast - passenger vehicles	--	12.5%	27.5%
Average change in full year VMT from forecast - commercial vehicles	--	1.5%	4.0%
Total MFT revenues	\$2.6 billion	\$2.3 billion	\$2.0 billion
IDOT	\$1.2 billion	\$1.1 billion	\$950 million
Local governments	\$940 million	\$840 million	\$730 million
RTA	\$220 million	\$200 million	\$180 million
Portion to northeastern IL	\$1.3 billion	\$1.2 billion	\$1.1 billion
Percent decrease from forecasted	--	9%	20%

*Assumes reductions will phase out over this period of time. Source: CMAP analysis

CMAP staff will continue to monitor these trends and review and share data as it becomes available.

What is still unknown

The COVID-19 pandemic presents unprecedented challenges to our nation and world. CMAP understands that the true impact of this situation is beyond the information we have today. As data becomes available, CMAP will continue to provide analysis and reflection. In coming weeks, staff will look at municipal revenue impacts, environmental impacts, stimulus principles to strategically guide our region, and the continued rollout of state and federal relief programs.

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