

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.

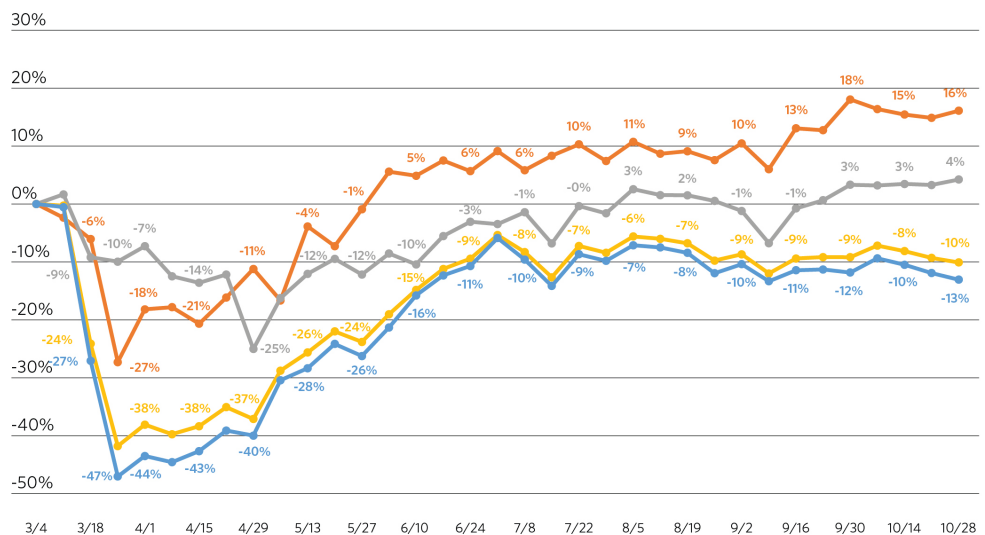
Roadways

Illinois roads have experienced lower traffic as a result of the COVID-19 pandemic, although significant rebound has occurred. The decline has been more pronounced for passenger travel than for trucks, reflecting the continued need to ship goods. The decline also depends on the type of road and measure.

During the first two weeks of the stay-at-home order, average passenger traffic on IDOT arterials and expressways declined by almost one-half and heavy truck (multiunit) traffic declined 10 percent. Travel by single-unit trucks, which typically serve a more local travel market, initially decreased somewhat more than heavy trucks. But since late March single-unit truck traffic has recovered steadily, with single-unit truck volume now about 15 percentage points higher than its pre-COVID level. After running approximately 10 percent lower than pre-crisis levels for most of the time since March, heavy truck traffic now has returned to slightly above pre-crisis levels. A similar decrease and rebound trend has happened with traffic on the Illinois Tollway. Passenger traffic stabilized around 10 percent below pre-COVID levels but has declined slightly since summer. In typical years traffic declines over the fall from its peak in summer.

Estimated percentage change in statewide traffic volumes by vehicle class, Wednesdays, March–October 2020

● Passenger vehicles ● Combination trucks
● Single-unit trucks ● All vehicles



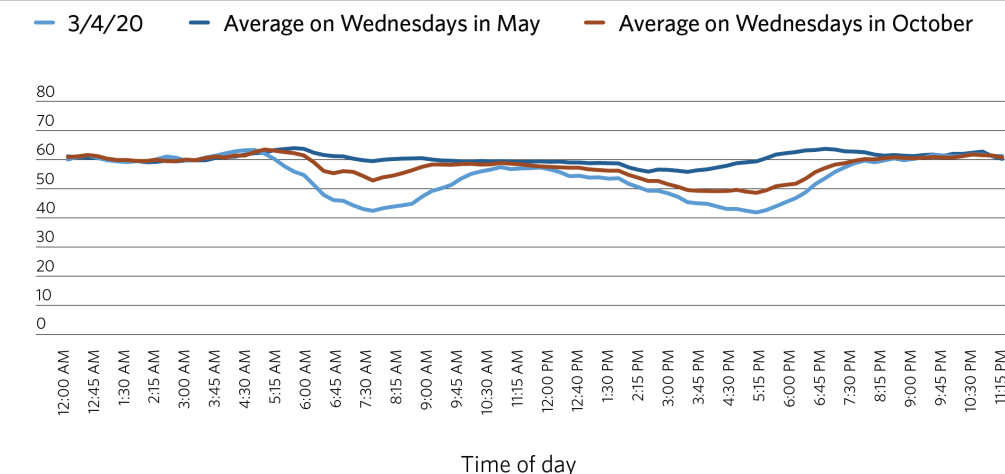
Note: Prepared November 2020.

Source: CMAP analysis of IDOT's classification count sensor data. Counts weighted using Table TVT-1, 2019 Illinois Travel Statistics Report. Excludes collector roads, local streets, and minor rural arterials. Also excludes toll highways.

Despite increasing traffic volumes, expressway speeds remain significantly higher than they were before Illinois' stay-at-home order. This change is most apparent on IDOT expressways, which typically are more congested, and less noticeable on the Tollway. Slowdowns still may happen in spots due to crashes or other incidents. However, traditional morning and afternoon travel peaks are slowly returning. By contrast, over late spring and summer speeds remained steady in the morning rush period with declines occurring only during the afternoon peak.

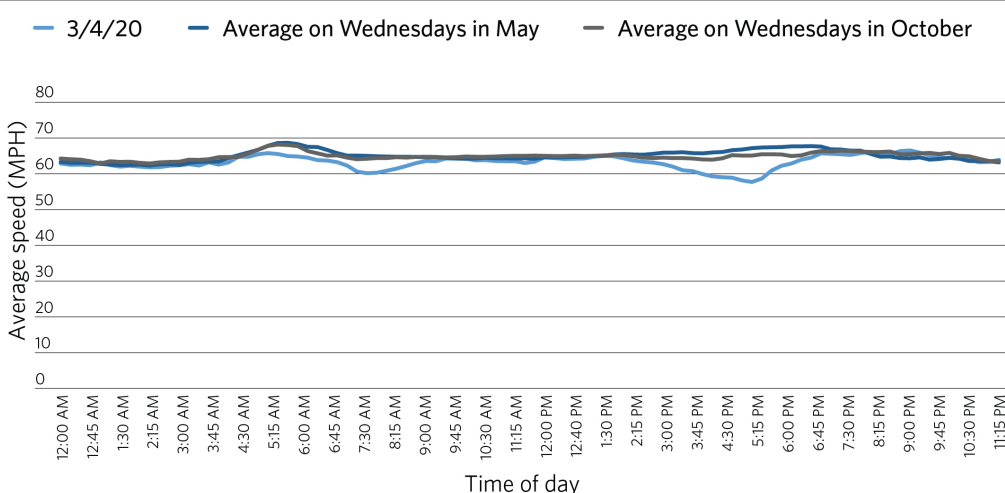
Average speed on IDOT Interstate facilities for selected Wednesdays in March, May, and October 2020

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 selected Wednesdays in March, May, and October 2020

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



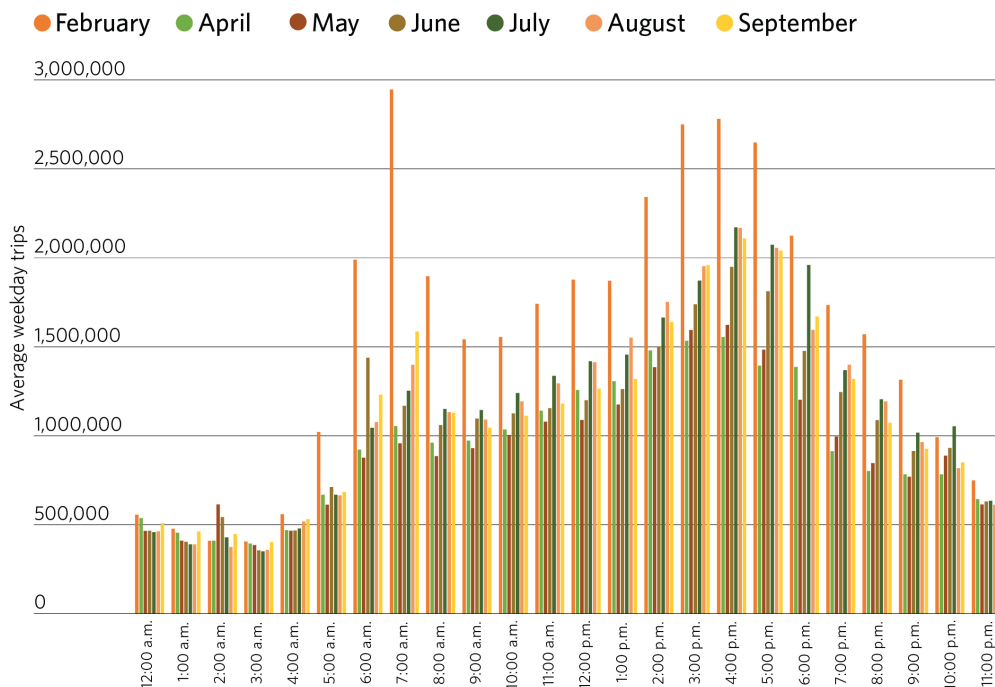
TRIPS AND TRAVELERS

Using a big data tool provided by IDOT that includes information collected from cell phones, it is also apparent that trip-making patterns have changed markedly. The number of weekday trips taken by any mode of travel decreased by approximately 40 percent in April and May compared to February, but the number has rebounded significantly since then. The average distance of trips also decreased, down to 4.6 miles in April from February’s average of 5.9 miles. The decrease in trip length likely was 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 stayed close to home during the shutdown, with the share of trips under 2.5 miles going from 43 percent in March to almost 60 percent in May.

While all of these measures have returned closer to pre-COVID conditions, they have not bounced back entirely. In fact, since August average trip distance has again declined slightly (from 5.34 to 5.19 miles), as has the number of weekday trips. The share of trips under 2.5 miles also grew slightly from 49 percent to 51 percent.

Unlike the typical morning and afternoon peak pattern, trips in the first few months following the stay-at-home order only peaked in the afternoon. More recently, trips have begun showing a peak in the morning. Trips starting during the daytime decreased significantly, yet the number of trips taken between 11:00 p.m. and 4:00 a.m. remained almost unchanged. Many of the job categories considered essential, such as health care, 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-September 2020

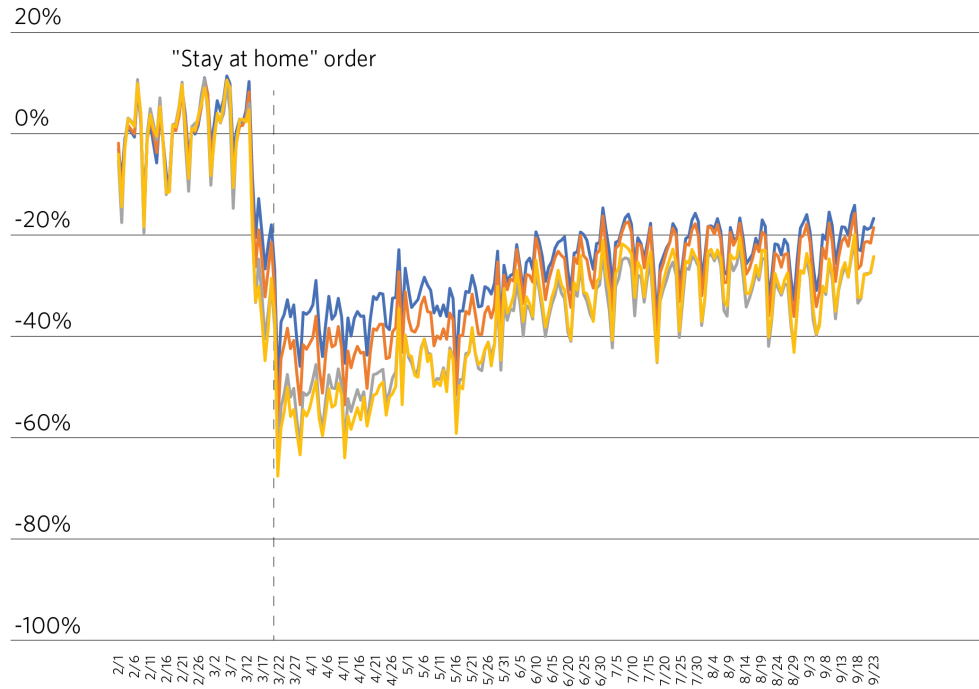


Source: Chicago Metropolitan Agency for Planning analysis of Replica State of Illinois COVID Planning data, 2020, made available by the Illinois Department of Transportation.

[Previous CMAP analysis](#) looked at 12 broad occupations classified as essential workers in northeastern Illinois 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 during the stay-at-home order, from being able to work from home to being able to shop online for supplies. As travel rebounds, the gap in travel between income groups has shrunk somewhat but has not fully reverted to pre-crisis conditions.

Change in trips compared to February 2020 daily average

Household income relative to the regional median
 — 30% or more below — 0-30% below — 0-30% above — 30% or more above



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

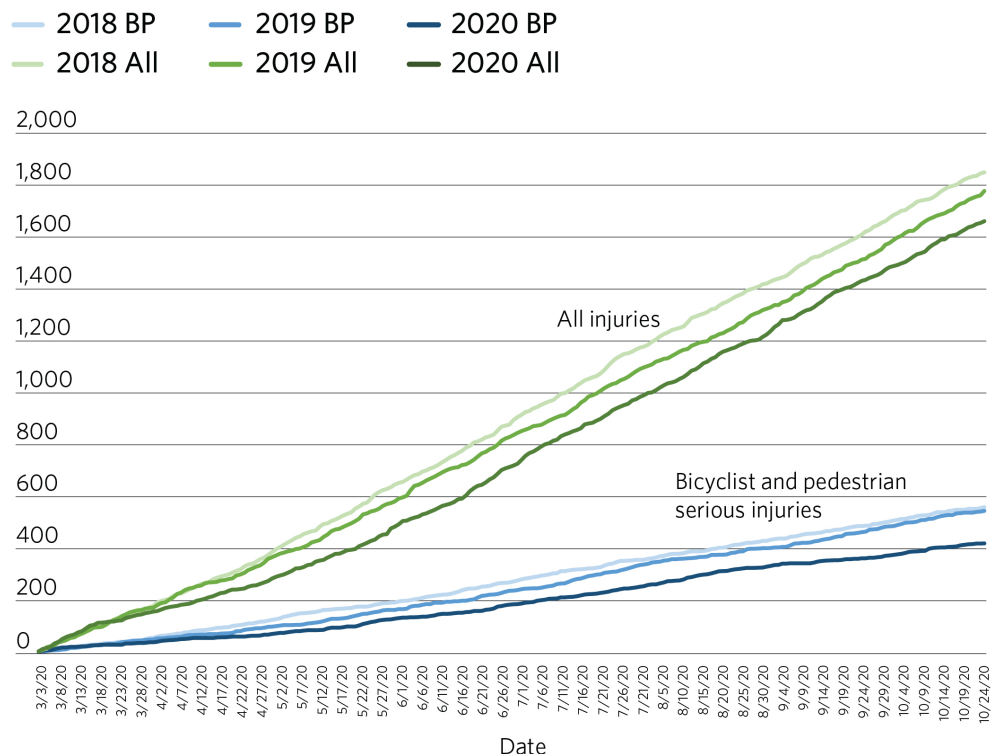
Sources: Chicago Metropolitan Agency for Planning analysis of Replica State of Illinois COVID Planning data, 2020, made available by the Illinois Department of Transportation and American Community Survey data, five-year estimates, 2014–2018.

Safety

Besides reducing congestion, cutbacks in travel from COVID-19 also are reducing injuries from crashes. In Chicago, the number of serious traffic injuries from the first week of March to the end of October hasn't grown as fast as the two preceding years. Conditions have improved for car occupants as well as bicyclists and pedestrians. In fact, the reduction in serious injuries in Chicago has been more pronounced for bicyclists and pedestrians.

Fatalities, yet, have not decreased. For the state as a whole, fatalities as of the end of October were higher than they were in 2018 and 2019. For Chicago, fatalities were up about one-quarter relative to 2018 at the end of October and up more than a half relative to 2019. Given that total mileage driven this year is much lower than last year, the risk of dying in a car crash has increased significantly over the spring and summer. Injuries this year simply appear to be more serious, which may be due to increased speeding among other factors. Fatalities have a greater degree of randomness than serious injuries as a whole, which may account for some of the difference in trends.

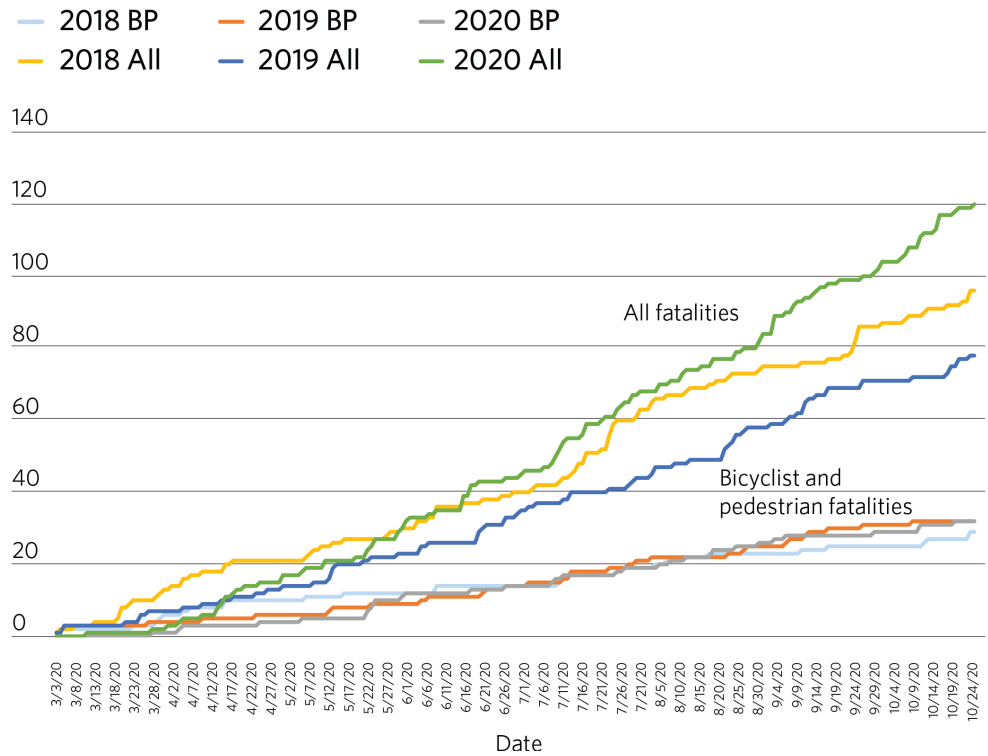
City of Chicago serious injuries in traffic crashes: all crashes and pedestrian and bicyclist (BP), March 3-October 28, 2020



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.

City of Chicago fatalities in traffic crashes: all crashes and pedestrian and bicyclist (BP), March 3-October 28, 2020



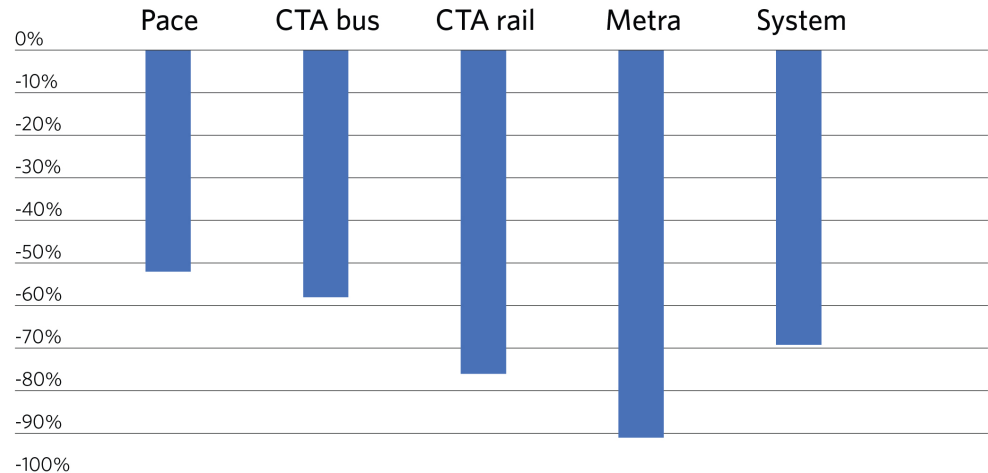
Note: The chart shows the cumulative injuries beginning on March 3, 2020 vs March 5, 2019 vs March 6, 2018 so that the beginning was a Tuesday for all 3 years. City of Chicago data excludes expressway crashes.

Source: City of Chicago.

Transit

Transit use 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 but since has slowly recovered to now just shy of 70 percent. Metra saw the largest decline (97 percent) — a transit agency whose customer base is dominated by downtown commuters who have largely shifted to working remotely. Transit agencies in general have increased cleaning of vehicles and stations, and have implemented a number of measures to increase safety, such as encouraging the use of face coverings, social distancing on board, and rear-door boarding on buses. While CTA kept its overall service levels, Metra and Pace made several service adjustments in response to changes in ridership. As Illinois has entered Phase 4 of its COVID-19 recovery plan, Metra has restored some service.

October 30 ridership by mode year-over-year percent change

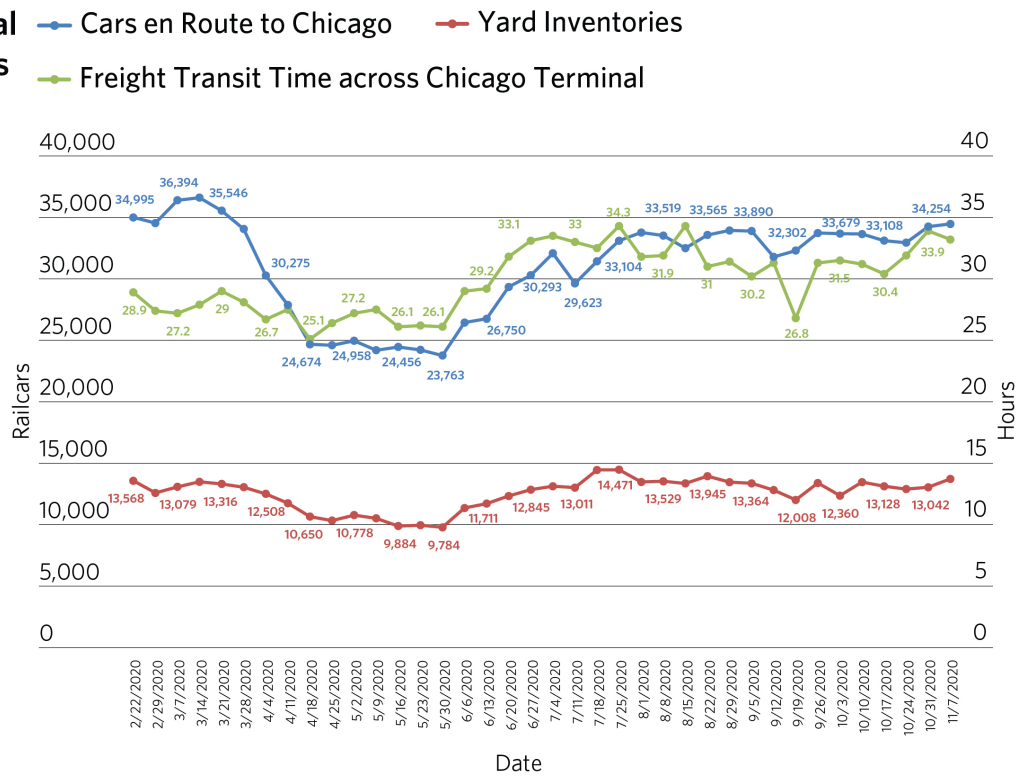


Source: Regional Transportation Authority.

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 period. Volumes remained low through May but saw a large rebound during June which continued through the summer. While freight-rail transit times through the Chicago region remained relatively steady through May, despite the decrease in volume being handled, transit times spiked higher than before the pandemic as volumes began increasing in June. Transit time has remained elevated into November.

Rail: Chicago terminal area carload volumes and transit times, weeks ending February 22 through November 7, 2020



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

Transportation funding impacts

The statewide order to limit travel and the pandemic's resulting economic impacts has reduced vehicle travel as well as other activities that generate transportation user fee revenue. Lower than anticipated revenues will affect transportation investments and operations by IDOT, counties, townships, municipalities, and transit agencies. However, even with any declines in revenue, overall 2020 revenues will likely be higher than 2019 due to the various rate increases enacted as part of Rebuild Illinois, including raising the state motor fuel tax to 38 cents per gallon from 19 cents per gallon.

In particular, state motor fuel tax revenues have been impacted by reduced vehicle travel. Reductions in gallons sold will be partially mitigated by the annual inflationary rate increase. On July 1, 2020, the rate is set to increase from 38.0 to 38.7 cents based on the rate of inflation.

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 five months of 2020, resulting in 15 percent lower passenger vehicle miles traveled and 13 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 25 percent and MFT to drop by 21 percent relative to CMAP's forecast.

In all likelihood, actual revenues will fall somewhere in between these two scenarios. Thus, MFT revenues accruing to state, local, and transit agencies in the region may be between 12 and 20 percent less than what was previously forecast.

	BASELINE 2020 FORECAST	ESTIMATES BASED ON SCENARIOS
Total MFT revenues statewide	\$2.6 billion	\$2.0-2.3 billion
IDOT	\$1.2 billion	\$940 million-\$1.0 billion
Local governments	\$930 million	\$740-820 million
RTA	\$225 million	\$175-200 million
Portion to northeastern IL	\$1.3 billion	\$1.1-1.2 billion
Percent decrease from forecasted	--	12-20%

Source: Chicago Metropolitan Agency for Planning analysis

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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