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COVID-19 & Transportation Funding in Illinois

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EXECUTIVE SUMMARY

As a result of the novel coronavirus (COVID-19) pandemic, state and local governments are facing unprecedented challenges. A future federal coronavirus relief package aimed to address the growing state and local government revenue shortfalls as a result of business closures and reduced travel from stay-at-home order is already being considered by the U.S. Congress. Federal aid, particularly for transportation, would help ensure quality jobs are not lost, the state's transportation systems will be property maintained, and vital transportation projects will not face delays and cancellations. The following report by the Illinois Economic Policy Institute examines the economic impact of COVID-19 on both local governments and the transportation sector in Illinois.

State and local tax revenues are expected to experience a serious downturn.

- Researchers at the University of Illinois predict the state will face significant losses in individual and corporate income taxes and the state sales tax, ranging from $4.3 billion between 2020 and 2021 and $28 billion between 2020 and 2023 if the economic downturn is longer-lived.
- Local governments – including counties, municipalities, school districts, and others – will also face revenue shortfalls, in the form of reduced local tax collections and less state aid.

As stay-at-home orders, self-quarantines, and social distancing keep people at home, the reduction in travel will equate to lower transportation revenues.

- The primary source of transportation funding across the country is the motor fuel tax (MFT), levied at both the national and state level; the per-gallon tax will be particularly impacted as travel declines.
- In Illinois, passenger vehicle travel was down 46%, while single-unit trucks experienced a 23% drop and multiple-unit trucks traveled 7% less, when comparing travel between the beginning and end of March.
- In Illinois, visits to retail and recreation locations and transit stations declined by 46% and 46%, respectively, in recent weeks compared to January.
- Metra commuter train predicts a 97% decline in ridership through April, while the CTA reported reduction in train ridership by 88% and Pace bus had a decline in 68% ridership.

Illinois motor fuel tax (MFT) revenues for 2020 may be between $300 million and $560 million less than expected.

- Three scenarios were considered, in which reduced traffic is experienced over different timespans through 2020.
- Scenario 1 estimates travel will be affected for 6 months, resulting in $296.4 million less MFT revenues, an 11% decrease.
- Scenario 2 estimates travel will be affected for 7 months, resulting in $375.9 million less MFT revenues, a 14% decrease.
- Scenario 3 estimates travel will be affected for 10 months, resulting in $558.7 million less MFT revenues, a 22% decrease.
- A significant portion of state MFT revenues are distributed to local governments statewide, thus this reduction will have widespread affects across the state.

The COVID-19 pandemic will adversely impact some of the key revenue sources behind Rebuild Illinois.

- Rebuild Illinois is a $45 billion six-year comprehensive capital plan aimed to address the state's widespread crumbling infrastructure, providing funding for roads, bridges, and transit systems, in addition to clean water, broadband, education facilities, and many other projects across the state.
- The largest transportation revenue source for Rebuild Illinois – the MFT – will not reach its full potential for 2020 due to reduced overall travel; the MFT increase in Rebuild Illinois accounts for over 66% of new estimated annual transportation revenues.
- Gambling operations throughout the state were closed beginning March 16, 2020, delaying the gambling expansion implemented under Rebuild Illinois; this source is the largest revenue source for vertical construction projects (43%).

A federal emergency relief package dedicated to state and local governments – including state DOTs – will create jobs and provide overall economic benefits.

- With state DOTs and local government losing revenue, transportation projects are facing the risk of being delayed or cancelled all together.
- A federal emergency relief package would allow state DOTs and local governments to maintain staff and operations and ensure vital transportation projects are still able to move forward.
- Research shows infrastructure spending generates $1.57 for every dollar invested at the national level; and in Illinois, $1 billion invested in road maintenance and repair would save or created approximately 16,300 jobs.

INTRODUCTION

As a result of the novel coronavirus (COVID-19) pandemic, state and local governments are facing unprecedented challenges. Both the nation and Illinois are currently experiencing an historic economic downturn amidst growing COVID-19 related deaths and infections, job losses, reduced consumption, and overall uncertainty. The existing economic downturn is likely to turn into a longer recession that will impact public agencies, businesses, and workers (Frazier, 2020).

While recently-passed federal coronavirus relief packages rightfully focused on the immediate needs of residents, small businesses, and hardest-hit industries to date, an additional federal package aimed to address state and local government revenue shortfalls and a recovery investment in infrastructure is already being considered. Ensuring that local and state infrastructure projects continue can provide necessary jobs, tax revenue, and positive economic activity to stabilize the economy and spur long-run economic growth. This policy memo explores the economic impact of COVID-19 on both local governments and the transportation sector in Illinois before offering an economic impact analysis of any potential infrastructure investment.

THE EXPECTED ECONOMIC IMPACT

The COVID-19 pandemic has brought the economy to a grinding halt. After growing by an annualized average of 13.5% during the eight years of the Obama Administration and 12.3% during the first three years of the Trump Administration, the S&P 500 stock market index plummeted by 20.7% from the beginning of January 2020 through the end of March 2020 (*Yahoo! Finance*, 2020a; *Yahoo! Finance,* 2020b). With firms temporarily closing to mitigate the spread of the coronavirus, J.P. Morgan expects the U.S. economy to contract by 14% in the second quarter of 2020, Dodge Data & Analytics projects a steeper 18% drop, and Goldman Sachs forecasts a 34% decline (Branch, 2020; J.P. Morgan, 2020; Bivens, 2020).

The labor market could be hit especially hard by the economic consequences of the COVID-19 pandemic as workers' hours are cut and employees are furloughed or laid off. By April 25, 2020, the total number of hourly employees working in Illinois had fallen by 68% and their hours worked have been slashed by 66%– according to Homebase, a free scheduling and time tracking tool used by local businesses and their hourly employees (Homebase, 2020). The U.S. could lose between as many as 47 million jobs, with employment declines in every state (Wolfe & Cooper, 2020; Bivens, 2020; Cox, 2020). Over 26 million Americans filed for unemployment benefits within a five-week span between March 15, 2020 and April 18, 2020 (Gura, 2020). In that same time period, over 750,000 people filed for unemployment benefits in Illinois (DOL, 2020).

EXPECTED IMPACT ON STATE AND LOCAL TAX REVENUES

As a result of the COVID-19 pandemic and subsequent economic downturn, state and local tax revenues are also expected to experience a serious downturn. As reported by the University of Illinois Institute of Government and Public Affairs, Illinois' tax revenue comes from three primary sources: individual income taxes, corporate income taxes, and sales taxes. Together, these three make up almost half of all state revenues (2020). Researchers at the University of Illinois modeled the economic impact on these three revenue sources, considering four different scenarios ranging from a "low severity pandemic" to "severe pandemic" and also modeling a similar impact to the Great Recession. Figure 1 summarizes their results. In the best-case scenario, the state will be facing a $4.3 billion loss between 2020 and 2021. However, if the economic downturn and subsequent recovery are prolonged and the pandemic is severe, the state could be

facing a loss of tax revenue (individual and corporate income taxes and state sales tax) of over $28 billion between 2020 and 2023.

Figure 1: Estimated Total State Tax Revenue Loss Over Different Time Periods and Different Scenarios

Scenario	2020-2021 (Short Downturn, Strong And Fast Recovery)	2020-2023 (Protracted Downturn And/Or Weak Recovery)
2007-2009 Recession	-$6.456 billion	-$12.889 billion
Low Severity Pandemic	-$4.324 billion	-$10.085 billion
Moderate Severity Pandemic	-$8.669 billion	-$17.673 billion
Severe Pandemic	-$14.119billion	-$28.394 billion
Source: University of Illinois Institute of Government and Public Affairs, 2020		

Local governments– including counties, municipalities, school districts, and others– will also face revenue shortfalls in the form of reduced local tax collections and less state aid. Each local government will face unique challenges depending on primary revenues sources and their general fiscal health entering the crisis (IGPA, 2020). But local governments can expect a downturn in sales tax revenues, hotel taxes, and other excise taxes like alcohol, gaming, motor fuel, and tobacco. While these represent the revenue sources that will experience immediate impacts, local governments that depend on property taxes may see a larger impact in coming months, as property taxes lag real estate value growth (CMAP, 2020a).

The Chicago Metropolitan Agency for Planning (CMAP) performed an analysis of primary local tax revenue sources for municipalities in the region to understand potential impacts of this downturn. Of the municipalities in the seven-county CMAP region, 134 depend on property taxes for more than 30% of their revenue, with 26 relying on it for more than 50% of their revenues. Additionally, approximately one-third of municipalities in the region rely on income and sales tax for more than 30% of their revenue (2020a). And looking statewide, local general sales tax revenues accounted for 12% of municipalities' total revenue in 2017 (IGPA, 2020).

In addition to reduced local revenues, counties, municipalities, and other local agencies can expect a reduction in state aid. The State of Illinois shares many of its main revenue sources – individual and corporate income taxes, sales tax, and personal property replacement tax – with counties and municipalities. The shortfalls that are expected at the state level, will result in subsequent shortfalls for local governments. In 2017, unrestricted state aid made up 18% of Illinois municipalities' revenue, thus showing the unfortunate impact reduced state revenues may impose on local governments (IGPA, 2020).

IMPACT ON TRANSPORTATION SYSTEMS

In addition to these revenue sources, state and local governments will also feel negative impacts due to the COVID-19 pandemic on vital infrastructure systems, most notably transportation. As stay-at-home orders, self-quarantines, and social distancing keep people at home, the reduction in travel will equate to lower transportation revenues. The primary source of transportation funding across the country is the motor fuel tax, which is levied at both the national and state level. The per-gallon tax will be particularly impacted by COVID-19 as people drive less, and thus purchase less motor fuel.

INRIX– a global leader in transportation analytics– is tracking national traffic volumes on a weekly basis related to COIVID-19, and traffic has experienced significant declines since March 11, 2020. Nationally,

passenger vehicle travel declined 46% by April 17, compared to the control week of February 22, 2020. Over the same time period, long haul truck traffic declined 13% and local area commercial truck travel is down 17%. Traffic rebounded slightly for the week ending April 24, 2020, with national passenger travel down 41% compared to the control week, and long haul truck and commercial traffic down 9% and 7%, respectively (INRIX, 2020). Despite this minimal rebound, the decrease in nationwide traffic in the last month remains unprecedented.

Taking a closer look at Illinois, by March 25, 2020, overall vehicle travel declined 40% compared to the beginning of March. As summarized in Figure 2, passenger vehicle travel was down 46% while single-unit trucks experienced a 23% drop and multiple-unit trucks traveled 7% less. Google's mobility analysis, summarized in Figure 3, tracks the number of visits and time that people spend at particular locations, which corroborates this substantial drop in travel. In Illinois, visits to retail and recreation locations declined by 46% and visits to workplace locations declined 38%. Additionally, transit stations experienced a 46% drop in visits in recent weeks, compared to January. Figure 4 provides further data for the seven counties in the Chicago Region. Most notably, Cook County is experiencing some of the most significant decreases in travel, with retail and recreation visits down 51%, grocery and pharmacy visits down 9%, visits to parks down 6%, and visits to transit stations down 53%.

Figure 2: Estimated Illinois Statewide Travel Reduction Between March 4, 2020 and March 25, 2020

Vehicle Type	Change in Travel
All Vehicles	-40%
Passenger Vehicles	-46%
Single-Unit Trucks	-23%
Multiple-Unit Trucks	-7%
Source: CMAP, 2020b	

Figure 3: Mobility Trends in United States and Illinois for Week Ending April 11, 2020 Compared to January

Location Category	United States	Illinois
Retail & Recreation	-45%	-46%
Grocery & Pharmacy	-7%	-1%
Parks	-16%	10%
Transit Stations	-49%	-46%
Workplaces	-38%	-38%
Source: Google Mobility Report, 2020		

Figure 4: Mobility Trends in Chicago Region Counties for Week ending April 11, 2020 Compared to January

Location Category	Cook County	DuPage County	Lake County	Kane County	Kendall County	McHenry County	Will County
Retail & Recreation	-51%	-54%	-47%	-49%	-31%	-42%	-43%
Grocery & Pharmacy	-9%	-9%	0%	-3%	-7%	3%	1%
Parks	-6%	30%	47%	74%	*	70%	39%
Transit Stations	-53%	-33%	-48%	-27%	*	-56%	-21%
Workplaces	-43%	-43%	-39%	-40%	-39%	-37%	37%
*Not enough data available to provide complete analysis							
Source: Google Mobility Report, 2020							

Additionally, transit agencies nationwide are already seeing a severe drop in ridership, which will similarly impact their ability to maintain vital services moving forward. In the Chicago region, Metra commuter train service is predicting a 97% decline in ridership through April (Wisniewski, 2020). Similarly, on April 6, compared to the same day one year prior, the Chicago Transit Authority reported a reduction of 88% in rail ridership and Pace suburban bus experienced a 68% decline (CMAP, 2020b). Both the reduction in fares and decrease in sales tax revenue– a crucial funding source for many transit agencies, including the CTA, Pace Bus, and Metra Rail in Chicago– will create even more hardships for these vital transportation agencies.

ESTIMATING THE IMPACT ON TRANSPORTATION REVENUES

These trends are expected to continue as the stay-at-home order in Illinois lasts through May. Consequently, both motor fuel tax revenues and transit funding sources will be severely impacted. This will ultimately lead to less money for both state and local governments to support vital transportation services and projects.

With the motor fuel tax (MFT) being the most significant source of transportation funding throughout the state, the following analysis estimates potential MFT revenue shortfalls due to decreased travel throughout Illinois. Three scenarios are considered in which reduced traffic is experienced over different timespans. Figure 5 illustrates these scenarios and estimated reduced traffic over the coming months. The travel reductions are possible scenarios over the coming year based on CMAP's estimated travel reductions as reported in Figure 2. The calculation of truck values is further explained in Appendix A.

Figure 5: Travel Reduction Scenarios for 2020

Scenario	Scenario 1		Scenario 2		Scenario 3	
Month	Passenger Vehicles	Trucks*	Passenger Vehicles	Trucks*	Passenger Vehicles	Trucks*
Jan-20	0%	0%	0%	0%	0%	0%
Feb-20	0%	0%	0%	0%	0%	0%
Mar-20	23%	7%	23%	7%	23%	7%
Apr-20	46%	13%	46%	13%	46%	13%
May-20	46%	13%	46%	13%	46%	13%
Jun-20	23%	7%	46%	13%	46%	13%
Jul-20	23%	7%	23%	7%	46%	13%
Aug-20	12%	3%	23%	7%	46%	13%
Sep-20	0%	0%	12%	3%	23%	7%
Oct-20	0%	0%	0%	0%	23%	7%
Nov-20	0%	0%	0%	0%	12%	3%
Dec-20	0%	0%	0%	0%	12%	3%

* Truck values were calculated by using a weighted average taking into account VMT and estimated travel reductions

Source: Authors' estimates based on CMAP travel reduction estimates

Scenario 1 assumes travel will be affected for 6 months, with the most significant reduction experienced during the stay-at-home order in April and May. Travel will then gradually increase and return to normal by September 2020.

Scenario 2 assumes travel will be affected for 7 months. This scenario is similar to Scenario 1, with the exception that significant travel decreases maintain for 3 months, and then gradually increases with normal travel resuming in October 2020.

Scenario 3 assumes travel will be affected for 10 months, through the end of 2020. Significant travel reductions will be experienced for 5 months, through August, and then gradually increase throughout the remainder of the year.

These three scenarios were then applied to monthly revenue estimates for both gasoline and special fuels, where the estimated travel reduction of passenger vehicles was applied to gasoline totals and the estimated travel reduction of trucks (including both multiple unit and single unit) was applied to special fuel totals. These calculations are shown in Appendix B. The results of these calculations are summarized in Figure 6.

Figure 6: Estimated Annual Motor Fuel Tax Revenue Losses Under Multiple Scenarios

Scenario	Annual MFT Revenues	Annual Loss	Annual % Loss
Baseline (Revenue Estimates Without COVID-19)*	$2,594,549,255	-	-
Scenario 1	$2,298,122,004	$296,427,251	-11%
Scenario 2	$2,218,690,629	$375,858,625	-14%
Scenario 3	$2,035,842,257	$558,706,997	-22%
*As frame of reference, prior to the passage of Rebuild Illinois, annual MFT revenues stood at approximately $1.3 billion.			
Source: Authors' analysis shown in Appendix B			

Based on these scenarios, Illinois MFT revenues for 2020 may be between $300 million and $560 million less than expected. Scenario 1 estimates an 11% loss, while Scenario 3 would result in 22% less transportation funding statewide (Figure 6). Additionally, it is important to note that a significant portion of state MFT revenues is distributed to municipalities, counties, townships, and transit agencies throughout the state. This reduction in state revenues will similarly impact local governments' monthly distributions. Furthermore, many municipalities and a handful of counties also employ local motor fuel taxes. The reduction in travel will similarly impact their local revenue as well. Overall, these numbers are merely estimating the impact COVID-19 will have on travel through the end of 2020. In all likelihood, reduced travel may continue well into 2021 or longer, thus resulting in a further reduction in transportation revenues.

Chicago transit agencies have already estimated a $1 billion loss this year for the Chicago Transit Authority (CTA), Metra Rail, and Pace Bus service. The Regional Transportation Authority (RTA) estimates that the CTA will experience a $551 million loss, while Metra and Pace experience $300 and $71 million losses, respectively. This takes into account both a reduction in state funding and a reduction in regional sales tax collections (Wisniewski, 2020). The RTA will receive $1.43 billion from the CARES Act, money that is dedicated to operational expenses to ensure the continuance of vital services (Blumberg, 2020).

However, the RTA can still expect reduced funding for capital expenses, which come from state sources – both MFT and bonding – and federal funding. This is particularly worrisome, as the RTA had already been facing a $30 billion shortfall in transit capital needs over the next decade. The state's historic capital plan – Rebuild Illinois – provided much needed funding to at least partially address this shortfall ($2.6 billion in bonding authority over five years and an estimated $227 million annually), yet some of the plan's funding sources will face revenue shortfalls due to COVID-19 (RTA, 2020).

IMPACT ON REBUILD ILLINOIS

While this economic downturn has caused unexpected strains on transportation systems statewide, it also strikes at a time when transportation infrastructure is already struggling to meet needs. The American Society of Civil Engineers' 2017 *Infrastructure Report Card* puts the nation at an overall "D+," with roads receiving a "D," bridges a "C+," and transit systems a "D-." In Illinois alone, the Regional Transportation Authority (RTA) estimates Chicago's transit capital State of Good Repair backlog exceeds $19 billion, 20 percent of IDOT roadways are considered to be in "poor condition," and 8.5 percent of Illinois' bridges are considered structurally deficient (ASCE, 2017; RTA, 2018; IDOT, 2018; ARTBA, 2019).

Illinois' $45 billion capital plan – Rebuild Illinois – aimed to address these issues and fix the state's crumbling infrastructure. Signed into law by Governor Pritzker in June 2019, Rebuild Illinois is a six-year comprehensive capital plan, providing funding for the state's critical infrastructure systems, from roads, bridges, and transit systems, to investments in clean water, broadband, education facilities, and many other projects across the state. However, the COVID-19 pandemic will also adversely impact some of the key revenue sources behind this plan.

Multiple tax revenue sources are dedicated to Rebuild Illinois, including an increase in the motor fuel tax, gambling expansion at casinos and racetracks, and increased tax rates for video gaming, sports wagering, vehicle registration fees, cigarette tax, parking excise tax, and others. While some revenue sources may not feel the impact of the COVID-19 pandemic as much as others, two primary sources will take a severe hit: the motor fuel tax and gambling (including casinos, racetracks, video gaming, and sports wagering).

Most significantly, Rebuild Illinois increased the motor fuel tax rate by $0.19 per gallon for gasoline and $0.24 per gallon for special fuels. This is expected to generate an additional $1.3 billion in revenue every year, which will be divided between the state and local governments. This rate increase is the largest transportation revenue generator for Rebuild Illinois, accounting for over 66% of new estimated annual transportation revenues. However, as already discussed, the revenue from this source will not reach its full potential for 2020.

The largest source of vertical construction funding in Rebuild Illinois is the general gambling expansion, which includes gambling at casinos and racetracks, video gaming, and sports wagering. Rebuild Illinois was set to expand gambling operations allowed at casinos and racetracks, permitting eight new casinos to open across the state, increase video gaming operations and the corresponding tax rate, and legalize sports wagering. Combined, tax revenues from these sources were estimated to generate at least $350 million annually, or 43% of the total annualized revenues to support vertical projects in Rebuild Illinois (Rebuild Illinois, 2019).

As a result of COVID-19, all gambling operations– including casinos and video gaming– were shutdown beginning March 16, 2020 and can be expected to continue through the state's stay-at-home order (Illinois Gaming Board, 2020). While sports wagering officially launched with one license at Rivers Casino on March 9, 2020, the rollout was sidelined by the COVID-19 outbreak and subsequent cancellations of sporting events. As a result, any anticipated tax revenues from this new source will also be postponed until sporting events are active (Armentrout, 2020).

To illustrate estimated gambling revenue losses due to these closures, Figure 7 summarizes tax revenues generated by casinos and video gaming in 2019. Illinois' stay-at-home order will likely keep gambling facilities closed through May, thus resulting in two full months of lost revenues, which provide funds for both Rebuild Illinois and other state funds. In 2019, over $158 million was generated between April and May from casinos and video gaming, with local governments receiving over $28 million. It's important to note that gambling

expansions from Rebuild Illinois had not passed yet in April and May, consequently the state stands to lose more in 2020 than what is shown here for 2019.

Figure 7: 2019 Tax Revenues from Casinos and Video Gaming

Type	Casinos		Video Gaming	
Month	State Share*	Local Share*	State Share^	Local Share^
Mar-19	$23,970,572	$7,266,145	$39,678,875	$7,935,763
Apr-19	$26,019,276	$6,585,604	$36,193,421	$7,238,673
May-19	$31,188,520	$6,810,999	$36,936,522	$7,387,293
Jun-19	$33,099,648	$6,404,543	$33,834,644	$6,766,918
Jul-19	$36,031,292	$6,718,844	$37,613,496	$6,716,693
Aug-19	$38,057,318	$6,841,296	$39,618,042	$7,074,648
Sep-19	$37,952,725	$6,465,977	$37,704,670	$6,732,974
Oct-19	$37,096,549	$6,197,509	$39,963,112	$7,136,267
Nov-19	$41,646,972	$6,649,989	$39,588,137	$7,069,307
Dec-19	$46,544,095	$7,112,393	$40,867,144	$7,297,702
* Cumulative tax allocations from 10 casinos statewide				
^ Cumulative tax distribution statewide				
Source: Illinois Gaming Board, 2020				

THE CASE FOR IMMEDIATE FEDERAL INVESTMENT IN INFRASTRUCTURE

State and local governments both in Illinois and nationwide are feeling the impacts of COVID-19. With state DOTs and local government losing revenue, transportation projects are facing the risk of being delayed or cancelled all together. The American Association of State Highway Transportation Officials – an organization representing all 50 state departments of transportation (DOTs) – estimates state DOTs will face a minimum 30% loss in state transportation revenues over the next 18 months (AASHTO, 2020). As a means to offset lost revenue due to reduced travel and closures from stay-at-home orders, the federal government may want to consider an emergency relief and economic recovery package. Not only would it allow state DOTs and local governments to maintain staff and operations, it could enable a more expeditious economic recovery by helping to ensure vital transportation projects are still able to move forward.

A federal emergency relief package dedicated to state and local governments--including state DOTs--will create jobs and provide overall economic benefits. In particular, investment in key infrastructure projects like transportation, energy and utilities, broadband, and buildings has a high return on investment. Research from Moody's Analytics has found increased infrastructure spending generates $1.57 for every dollar invested at the national level (Zandi, 2010). Every $1 billion invested in infrastructure boosts private-sector output by an estimated $17 billion in the long run and saves or creates 10,000 full-time jobs (Bivens, 2017). Impacts are larger, however, for specific types of infrastructure. For example, every $1 billion invested in transportation infrastructure saves or creates over 20,000 jobs and every $1 billion invested in water infrastructure saves or creates 15,000 jobs (Brun et al., 2014; Quinn et al., 2017). An Indiana report on broadband found that every $1 billion invested in broadband returns nearly $4 billion to the economy (Grant et al., 2018). On average, infrastructure jobs offer wages that are around 28% higher than the national average (Freedman et al., 2017). This is because infrastructure investment often promotes high-quality, family-supporting jobs that pay middle-class wages and include health insurance and retirement benefits.

These estimates are corroborated by an analysis of 2020 estimates for Illinois using IMPLAN, an industry-standard economic modeling software (IMPLAN, 2020). For every $1 billion invested in road maintenance and repair, approximately 16,300 total jobs are saved or created– including about 9,300 direct construction jobs– and economic output expands by $2.3 billion, a multiplier of $2.30 per dollar invested. For every $1 billion invested in the construction of new roads and bridges, total employment increases by about 8,300 jobs– including 4,500 direct construction jobs– and the economy grows by $1.8 billion. The output multiplier for all other types of transportation infrastructure investment ranges from $1.74 per dollar invested in air travel to $3.52 per dollar invested in public transit systems (Figure 8).

Figure 8: Economic Impact of Investing $1 Billion in Infrastructure in Illinois, By Type

$1 Billion Investment by Infrastructure Type in Illinois		Total Jobs	Direct Jobs	Output Multiplier
Transportation	Maintenance and Repair of Roads and Bridges	16,300	9,300	$2.30
	Construction of New Roads and Bridges	8,300	4,500	$1.80
	Public Transit Systems	24,700	14,800	$3.52
	Airports and Air Transportation	6,700	2,600	$1.74
	Rail Transit Systems	7,200	2,200	$2.01
Source: Implan (2020), with job estimates rounded to the nearest hundred				

CONCLUSION

The U.S. Congress has passed economic relief packages that have focused on the needs of people, businesses, and industries that have been directly impacted by COVID-19 and the imminent recession. As part of this approach, the U.S. Congress is now considering immediate funding to state and local governments to support growing revenue shortages as a result of business closures and reduced travel from stay-at-home orders. Much uncertainly remains for how long stay-at-home orders and business closures will persist, but it is certain that governments and residents will have to face the impacts.

Federal aid, particularly for transportation, can help ensure quality jobs are not lost, the state's transportation systems will be properly maintained, and vital transportation projects will not face delays and cancellations. The COVID-19 pandemic has caused unprecedented impacts on so many people and businesses, but federal aid can at least provide some level of economic stability for Illinois and its diverse local governments, populations, and workforce.

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APPENDIX A

Weighted Average Calculation to Estimate Total Truck Reduction Takes Into Account Total VMT For Each Truck Type

Annual Truck VMT		**% Total**
Single-Unit Trucks & Buses	5.167	39%
Multiple-Unit Trucks	7.974	61%
TOTAL	13.141	100%
Estimated Reduction in VMT		
Single-Unit Trucks & Buses		23%
Multiple-Unit Trucks		7%
Weighted Average To Estimate Total Truck Travel Reduction		
Single-Unit Trucks & Buses	VMT % Total x Estimated Reduction	9.04%
Multiple-Unit Trucks	VMT % Total x Estimated Reduction	4.25%
	SUM	13.29%
Sources: IDOT Travel Statistics, 2018 (VMT); CMAP, 2020b (Reduction in VMT)		

APPENDIX B

BASELINE: Illinois Motor Fuel Tax Revenue Estimates

	2019 Taxable Gallons Gasoline	2019 Taxable Gallons Special Fuels	Monthly Revenue Gasoline (Gallons x $0.38)^	Monthly Revenue Special Fuels (Gallons x $0.455)^	Total Estimated Monthly Revenue
January	375,538,043	134,744,954	$142,704,456	$61,308,954	$204,013,410
February	353,122,484	125,578,707	$134,186,544	$57,138,312	$191,324,856
March	399,068,519	135,490,656	$151,646,037	$61,648,248	$213,294,286
April	391,623,175	136,249,915	$148,816,807	$61,993,711	$210,810,518
May	415,501,916	137,110,789	$157,890,728	$62,385,409	$220,276,137
June	415,239,698	138,480,189	$157,791,085	$63,008,486	$220,799,571
July	399,561,753	122,411,632	$154,230,837	$56,554,174	$210,785,011
August	408,492,901	129,711,176	$157,678,260	$59,926,563	$217,604,823
September	381,046,724	124,631,488	$147,084,035	$57,579,747	$204,663,783
October	405,819,999	140,943,022	$156,646,520	$65,115,676	$221,762,196
November*	403,917,844	136,034,375	$155,912,288	$62,847,881	$218,760,169
December	491,444,496	153,153,506	$189,697,575	$70,756,920	$260,454,495
TOTAL	4,840,377,552	1,614,540,409	$1,854,285,172	$740,264,082	$2,594,549,255

*2018 numbers were used, as 2019 is showing a significant decrease compared to past years, and author is assuming some form of data mistake

^ This calculation takes into account the MFT increase on July 1, 2020 tied to inflation; as law stipulates, the rate will be increased based on any increase in the CPI-U for the 12 months ending in March each year. Between March 2019 and March 2020, the CPI-U increased by 1.5%. Consequently, beginning in July the gasoline rate is assumed to be $0.386 per gallon and special fuel rate is assumed to be $0.462 per gallon.

Sources: IDOR, 2020 (taxable gallons); BLS, 2020 (CPI-U)

SCENARIO 1: Illinois Motor Fuel Tax Revenue Estimates

	2019 Taxable Gallons Gasoline	2019 Taxable Gallons Special Fuels	Monthly Revenue Gasoline (Gallons x $0.38)^	Monthly Revenue Special Fuels (Gallons x $0.455)^	Total Estimated Monthly Revenue
January	375,538,043	134,744,954	$142,704,456	$61,308,954	$204,013,410
February	353,122,484	125,578,707	$134,186,544	$57,138,312	$191,324,856
March	307,282,760	126,486,523	$116,767,449	$57,551,368	$174,318,817
April	211,476,515	118,140,735	$80,361,076	$53,754,034	$134,115,110
May	224,371,035	118,887,189	$85,260,993	$54,093,671	$139,354,664
June	319,734,567	129,277,384	$121,499,136	$58,821,210	$180,320,345
July	307,662,550	114,276,675	$118,757,744	$52,795,824	$171,553,568
August	361,516,217	125,401,149	$139,545,260	$57,935,331	$197,480,591
September	381,046,724	124,631,488	$147,084,035	$57,579,747	$204,663,783
October	405,819,999	140,943,022	$156,646,520	$65,115,676	$221,762,196
November*	403,917,844	136,034,375	$155,912,288	$62,847,881	$218,760,169
December	491,444,496	153,153,506	$189,697,575	$70,756,920	$260,454,495
TOTAL	4,142,933,233	1,547,555,707	$1,588,423,076	$709,698,928	$2,298,122,004

*2018 numbers were used, as 2019 is showing a significant decrease in gallons compared to past years, and author is assuming some form of data mistake

^ This calculation takes into account the MFT increase on July 1, 2020 tied to inflation; as law stipulates, the rate will be increased based on any increase in the CPI-U for the 12 months ending in March each year. Between March 2019 and March 2020, the CPI-U increased by 1.5%. Consequently, beginning in July the gasoline rate is assumed to be $0.386 per gallon and special fuel rate is assumed to be $0.462 per gallon.

Sources: IDOR, 2020 (taxable gallons); BLS, 2020 (CPI-U)

CALCULATION

Taxable Gallons x (1 - % travel decrease for each month estimated in Figure 5)

Passenger travel reductions apply to gasoline and truck travel reductions applied to special fuels

SCENARIO 2: Illinois Motor Fuel Tax Revenue Estimates

	2019 Taxable Gallons Gasoline	2019 Taxable Gallons Special Fuels	Monthly Revenue Gasoline (Gallons x $0.38)^	Monthly Revenue Special Fuels (Gallons x $0.455)^	Total Estimated Monthly Revenue
January	375,538,043	134,744,954	$142,704,456	$61,308,954	$204,013,410
February	353,122,484	125,578,707	$134,186,544	$57,138,312	$191,324,856
March	307,282,760	126,486,523	$116,767,449	$57,551,368	$174,318,817
April	211,476,515	118,140,735	$80,361,076	$53,754,034	$134,115,110
May	224,371,035	118,887,189	$85,260,993	$54,093,671	$139,354,664
June	224,229,437	120,074,580	$85,207,186	$54,633,934	$139,841,120
July	307,662,550	114,276,675	$118,757,744	$52,795,824	$171,553,568
August	314,539,534	121,091,123	$121,412,260	$55,944,099	$177,356,359
September	337,226,351	120,490,249	$130,169,371	$55,666,495	$185,835,866
October	405,819,999	140,943,022	$156,646,520	$65,115,676	$221,762,196
November*	403,917,844	136,034,375	$155,912,288	$62,847,881	$218,760,169
December	491,444,496	153,153,506	$189,697,575	$70,756,920	$260,454,495
TOTAL	3,956,631,046	1,529,901,636	$1,517,083,462	$701,607,167	$2,218,690,629

*2018 numbers were used, as 2019 is showing a significant decrease compared to past years, and author is assuming some form of data mistake

^ This calculation takes into account the MFT increase on July 1, 2020 tied to inflation; as law stipulates, the rate will be increased based on any increase in the CPI-U for the 12 months ending in March each year. Between March 2019 and March 2020, the CPI-U increased by 1.5%. Consequently, beginning in July the gasoline rate is assumed to be $0.386 per gallon and special fuel rate is assumed to be $0.462 per gallon.

Sources: IDOR, 2020 (taxable gallons); BLS, 2020 (CPI-U)

CALCULATION

Taxable Gallons x (1 - % travel decrease for each month estimated in Figure 5)

Passenger travel reductions apply to gasoline and truck travel reductions applied to special fuels

SCENARIO 3: Illinois Motor Fuel Tax Revenue Estimates

	2019 Taxable Gallons Gasoline	2019 Taxable Gallons Special Fuels	Monthly Revenue Gasoline (Gallons x $0.38)^	Monthly Revenue Special Fuels (Gallons x $0.455)^	Total Estimated Monthly Revenue
January	375,538,043	134,744,954	$142,704,456	$61,308,954	$204,013,410
February	353,122,484	125,578,707	$134,186,544	$57,138,312	$191,324,856
March	307,282,760	126,486,523	$116,767,449	$57,551,368	$174,318,817
April	211,476,515	118,140,735	$80,361,076	$53,754,034	$134,115,110
May	224,371,035	118,887,189	$85,260,993	$54,093,671	$139,354,664
June	224,229,437	120,074,580	$85,207,186	$54,633,934	$139,841,120
July	215,763,347	106,141,719	$83,284,652	$49,037,474	$132,322,126
August	220,586,167	112,471,069	$85,146,260	$51,961,634	$137,107,894
September	293,405,977	116,349,009	$113,254,707	$53,753,242	$167,007,950
October	312,481,399	131,576,548	$120,617,820	$60,788,365	$181,406,185
November*	357,467,292	131,514,242	$137,982,375	$60,759,580	$198,741,954
December	434,928,379	148,064,541	$167,882,354	$68,405,818	$236,288,172
TOTAL	3,530,652,833	1,490,029,814	$1,352,655,872	$683,186,385	$2,035,842,257

*2018 numbers were used, as 2019 is showing a significant decrease compared to past years, and author is assuming some form of data mistake

^ This calculation takes into account the MFT increase on July 1, 2020 tied to inflation; as law stipulates, the rate will be increased based on any increase in the CPI-U for the 12 months ending in March each year. Between March 2019 and March 2020, the CPI-U increased by 1.5%. Consequently, beginning in July the gasoline rate is assumed to be $0.386 per gallon and special fuel rate is assumed to be $0.462 per gallon.

Sources: IDOR, 2020 (taxable gallons); BLS, 2020 (CPI-U)

CALCULATION

Taxable Gallons x (1 - % travel decrease for each month estimated in Figure 5)

Passenger travel reductions apply to gasoline and truck travel reductions applied to special fuels