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Understanding the Economic and Transportation Consequences







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EXECUTIVE SUMMARY

This report utilizes the industry standard IMPLAN economic analysis software to identify the potential impact of the Illinois Department of Transportation's (IDOT) recent announcement that it will be unable to continue paying its contractors and will cease all construction work throughout the state on June 30, 2017. While this is expected to impact all IDOT projects, including transit and rail, this report focuses on the \$2.2 billion in planned road and bridge improvements in fiscal year (FY) 2018. Assuming a shutdown lasting the entire year, we forecast the following impacts:

- **A Shrinking Economy:** The loss of \$2.2 billion in state infrastructure investment would reduce overall economic activity in the state by \$1.77 billion in FY 2018.
- **Job Losses:** A protracted IDOT shutdown will cause a loss of 23,000 jobs. While middle class construction employment will be most affected, the losses will extend beyond construction related industries and will touch all economic sectors.
- Added Strain on Public Budgets: The loss of jobs and economic activity would reduce state and local tax revenues by \$115 million, while increasing demand for taxpayer-funded unemployment insurance by as much as \$155 million.
- More Congestion and Transportation Safety Problems: With infrastructure projects designed to alleviate congestion, address safety issues, and complete important maintenance needs, the IDOT shutdown would likely lead to increased travel times and could subject the public to unsafe travel conditions.

Because IDOT projects are fully funded by federal aid, fuel taxes, vehicle fees, and local sources—funding that is protected by a state constitutional amendment passed by Illinois voters in 2016—there is no reason for IDOT funding to be held hostage as part of the ongoing state budget stalemate. An IDOT shutdown is easily prevented through appropriation of already available funds, as was done for FY 2017.

INTRODUCTION

Road construction workers and commuters throughout Illinois may soon feel the impact of the state's long-running budget stalemate. On June 30, 2017, the Illinois Department of Transportation (IDOT) will be unable to continue paying its contractors and will cease all roadwork throughout the state. While this identical scenario played out a year ago, a full-year funding measure was passed to maintain funding for infrastructure projects (*Chicago Sun-Times*, 2017). However, if legislators are unable to rectify this issue in time, the state will be forced to grapple with added costs, while construction workers face job losses.

UNDERSTANDING THE PROBLEM

Roadway construction is at the height of activity as the State of Illinois approaches the beginning of its new fiscal year (FY) on July 1, 2017. IDOT identifies projects to be completed in FY 2018 and future years through the Highway Improvement Program (HIP), which lists all "fiscally constrained" projects by year over a six-year period. While these projects are carefully prioritized and selected based on need, anticipated benefits, and available funding (IDOT, 2017), the ongoing political battles over the state budget have the ability to derail them.

This is particularly noteworthy because the impending shutdown is not due to a lack of available funds. The majority of the funding for these projects comes from federal sources; under the FY 2018-2023 HIP, 76 percent of funding is federal aid. The state portion, totaling 19 percent, is generated largely from motor fuel taxes and vehicle registration fees. Lastly, 5 percent is from local sources (IDOT, 2017). Consequently, regardless of the source, funding has already been identified and is available; IDOT simply requires the General Assembly to appropriate the resources.

PROJECTS IMPACTED

IDOT planned for \$2.2 billion in road and bridge projects for FY 2018, some of which are continuations from previous years and are currently under construction (IDOT, 2017). Figures 1 and 2 show the scale of existing roadway construction projects that will be impacted if IDOT is required to halt all projects. Work zones include projects ranging from lane restrictions to reduction in the number of travel lanes or planned road closures. Furthermore, Figures 1 and 2 only illustrate existing construction projects; however, if the shutdown endures throughout the year, additional projects planned to begin in FY 2018 will also be delayed.

CONSIDERING THE CONSEQUENCES

Most basically, it can be expected that additional costs will be incurred by the state as a result of contractors being required to stop an ongoing construction project and restart at an undetermined later date. While it is difficult to quantify this exact amount, it can be anticipated to be substantial as it will encompass a host of factors, including change orders to existing contracts and the corresponding IDOT administration costs to handle these changes. More significantly though, is the impact this shutdown will have on the construction workers throughout the state and the resulting ripple effect that will impact the state's economy.

Impact on Jobs

As previously mentioned, IDOT plans to invest \$2.2 billion in roadway construction projects over the following 12 months. These projects require thousands of construction and engineering jobs, not to mention the corresponding industries that provide services and materials for the projects. An economic impact analysis was performed to understand how the impending shutdown would affect Illinois' economy in FY 2018.

Economic impact analyses are used by policy experts to determine the effects on those who will benefit or lose as a result of a change in policy or project status, understanding the impact as it compares to what would have otherwise occurred in the absence of the change. The analysis accounts for the interrelationship between industries and households in a regional market, following a dollar as it cycles through the economy. This report uses IMPLAN, an industry-standard software which uses U.S. Census Bureau data to capture all transactions in Illinois, while also accounting for business and household taxes (IMPLAN, 2017). IMPLAN is considered the "gold standard" in economic impact analyses (Vowels, 2012).

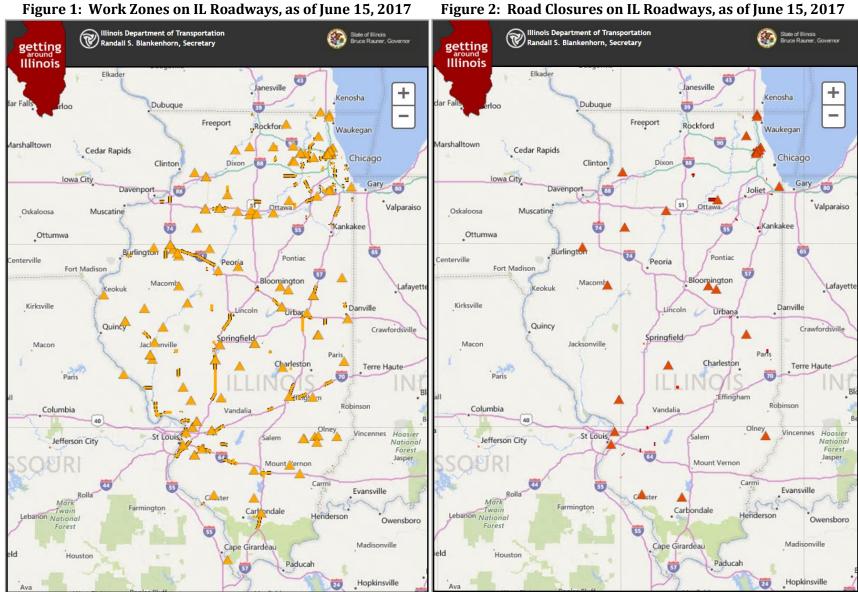


Figure 1: Work Zones on IL Roadways, as of June 15, 2017

Source: Illinois Department of Transportation

Figure 3 summarizes the data used in the economic impact analysis. The breakdown of expenditures for FY 2018 projects was assumed to be equivalent to that of the entire FY 2018-2023 HIP, with 86 percent attributed to road and bridge maintenance and 14 percent for expansions and new construction.

Figure 3: Breakdown of Expected IDOT Road Project Expenditures, FY 2018

Project Expenditures	Value	Share
Total Road Projects	\$2,200,000,000	100%
Maintenance of Roads and Bridges	\$1,892,000,000	86%
Expansions and New Roads and Bridges	\$308,000,000	14%

Source: IDOT, 2017

Based on a stoppage of \$2.20 billion in road and bridge infrastructure investment in FY 2018, an IDOT shutdown lasting the entire year would result in nearly 23,000 jobs lost and reduced economic activity by \$1.77 billion in the state (Figure 4). Middle-class road construction workers would suffer most, with the loss of more than 13,200 highway, street, and bridge construction jobs, which pay nearly \$59,000 on average in annual wages. Additionally, nearly 4,500 jobs in related industries, from architectural and engineering positions to jobs at retail stores that sell materials, equipment, and supplies to road-builders, will be lost. Finally, by putting construction and related employees out of work, an IDOT shutdown would reduce consumer demand in the Illinois economy, resulting in another 5,200 jobs lost in sectors such as restaurants, hospitals, and real estate.

Figure 4: Annual Economic Impacts of an IDOT Shutdown, FY 2018

	Employment	Labor Income	GDP
	(FTE Jobs)	Per Job	(Value Added)
Total Impact	-22,973	\$52,629	-\$1,767,323,529
Direct Effect (Highway, street, and bridge construction)	-13,278	\$58,715	-\$1,013,048,450
Indirect Effect (Activities supporting road construction)	-4,459	\$49,519	-\$369,814,123
Induced Effect (Consumer demand by households)	-5,235	\$39,841	-\$384,460,956

Source: Author's analysis of total cost of projects using IMPLAN

Impact on Tax Revenues

The reduction in both jobs and net economic activity caused by the budget crisis would decrease state income tax revenues, state and local sales tax revenues, and employer and employee social insurance tax contributions, among other fees and taxes (Figure 5). The economic impact analysis forecasts that an IDOT shutdown would reduce annual state and local tax revenues by \$68 million \$47 million, respectively.

Figure 5: Annual State and Local Revenue Impacts of an IDOT Shutdown, FY 2018

Social Costs	Annual Impact
Forgone State Taxes	\$69,791,623
Forgone Local Taxes	\$46,922,038
New Unemployment Insurance Costs*	\$154,797,285

^{*}Among the 13,278 road construction workers laid off, who receive the maxmimum weekly UI benefit of \$448.38 for 26 weeks

Source: Author's analysis of total cost of projects using IMPLAN

Moreover, the State of Illinois could incur up to \$155 million in additional unemployment insurance (UI) costs, assuming all 13,278 road construction workers were laid off and qualified for the program.

As shown in Figure 4, the average road construction worker earns \$58,715 annually, or about \$1,129 per week. In Illinois, UI benefits are calculated as the lesser of 47 percent of the worker's previous income or 47 percent of the "Statewide Average Weekly Wage," which is \$954.01 in 2017 (IDES, 2017). Because the average road construction worker earns more than this amount, unemployed workers are eligible for 47 percent of the Statewide Average Weekly Wage, or \$448.38 per week. Multiplying this benefit by 26, the maximum number of weeks a person is eligible to receive benefits, and each worker would be eligible to receive \$11,658. Consequently, if the maximum number of construction workers apply for and receive UI, the state will be on the hook for an additional \$155 million in costs as a result of the IDOT shutdown.

Impact on Businesses

In addition to the direct impact on construction workers, the impending IDOT shutdown will adversely impact businesses throughout Illinois. Figure 6 presents the top 10 sectors impacted by a \$2.2 billion stoppage of state projects. Stores supplying materials and supplies for road construction workers, restaurants, gas stations, and other retailers would lose hundreds of jobs from the shutdown. Notably, architectural and engineering firms contracted to design, build, and maintain infrastructure projects would lose an estimated \$107 million in business revenue and be forced to cut nearly 700 jobs.

Figure 6: Top 10 Sectors Impacted by an IDOT Shutdown, FY 2018

	rigure of Top To Sectors Impacted by ar	Employment Change in Output	
Rank	Detailed Sector	- ·	(Industry Revenue)
	Highway, street, and bridge construction	-13,278	-\$2,200,000,000
1	Retail - Building material and supplies stores	-715	-\$66,237,296
2	Architectural, engineering, and related services	-698	-\$107,388,938
3	Full-service restaurants	-386	-\$17,440,699
4	Wholesale trade	-383	-\$83,233,994
5	Retail - Miscellaneous store retailers	-365	-\$14,382,761
6	Hospitals	-361	-\$51,090,441
7	Limited-service restaurants	-360	-\$28,397,616
8	Employment services	-264	-\$17,319,386
9	Real estate	-260	-\$40,860,839
10	Retail - Gasoline stores	-227	-\$13,304,246

Source: Author's analysis of total cost of projects using IMPLAN

Impact on the Transportation Network

While it is clear that the shutdown of all IDOT projects will have direct impacts on those directly involved in the highway construction industry, it will also impact Illinois residents throughout the state by worsening travel conditions and delaying needed transportation projects.

The most basic issue will be the result of existing construction sites remaining in place without any work being performed. Drivers will be required to travel through work zones that have a reduced number of lanes or reduced lane sizes and lane shifts, which can contribute to congestion and increased travel times for the public. More significantly, existing work zones will subject the public to unsafe conditions, as a result of unexpected lane shifts and travel patterns and changing speeds. In 2014, 26 drivers were killed in work zone crashes in Illinois and, on average, more than 4,300 motor vehicle crashes occur annually throughout the state (IDOT, 2015). While work zones are inevitable in order to improve the state's transportation network, it is particularly irresponsible for

the state to allow a shutdown that will result in their presence without work actually being accomplished.

Furthermore, important transportation projects will be delayed during Illinois' limited construction season. The timely completion of all IDOT projects is dependent on a productive construction season during the mild-weather months of summer. Illinois is already struggling to adequately maintain its road and bridge infrastructure, with 18 percent of the state's roads being in poor condition and 8 percent of bridges considered structurally deficient (ASCE, 2017). A further delay, particularly during prime construction season, will only harm the Illinois' ability to address existing issues and make needed improvements to remain economically competitive.

Figure 7 summarizes a select project from each of IDOT's districts that will potentially be delayed if the shutdown occurs. These projects illustrate only a small sample of the \$2.2 billion worth of improvements that are planned for FY 2018 in Illinois. They will offer needed congestion relief to the Chicago region, safety benefits for those crossing the Mississippi River in Northwest Illinois, and bridge and pavement maintenance throughout the state.

Figure 7: Select Projects Planned for FY 2018 by IDOT District

District	Location	Name	Project Description	Benefit	FY 2018 Cost (in millions)
1	Chicago	Jane Byrne Circle Interchange	Interchange reconstruction	Reduce regional congested vehicle hours travelled (VHT) by 7,247	\$158.40
2	Moline	I-74 / US 6 Bridge over Mississippi River	New bridge construction	Reduce nubmer of crashes (77 on existing bridges in 2007) and related bottlenecks	\$27.50
3	Pontiac and Livingston Counties	I-55	Overlay and bridge repairs	Maintenance	\$63.50
4	I-39 / US 51	Woodford County	Bridge rehabilitation and repair	Maintenance	\$1.70
5	I-57 / I-74	Champaign County	Utility adjustments for bridge repairs	Maintenance	\$1.70
6	I-55 / I-72	Springfield	Resurfacing and bridge repairs	Maintenance	\$12.00
7	I-70	Effingham	Overlay and bridge repairs	Maintenance	\$38.00
8	I-64	St. Clair County	Engineering and environmental studies for bridge repairs	Maintenance	\$3.00
9	I-64	White County	Engineering and environmental studies for bridge repairs	Maintenance	\$0.30

Source: CMAP (District 1 Benefit); Iowa DOT (District 2 Benefit); IDOT, 2017 (Districts 1-9)

CONCLUSION

The impacts of the shutdown of all IDOT construction projects will be widespread, affecting workers, travelers, and the economy on the whole. Governor Rauner and the General Assembly must act to prevent these negative consequences. The projects have been carefully considered and planned, the funding is available and protected by the 2016 amendment to the Illinois Constitution. If appropriate action is not taken, Illinois can add this issue to the long-list of public services that have been adversely impacted due to partisan politics.

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