

2019

CONSULTING
ENGINEERS
REPORT



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ENGINEERS
REPORT



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1.0 INTRODUCTION

The 2019 Annual Consulting Engineers Report summarizes the Illinois State Toll Highway Authority's (Illinois Tollway) 2019 inspection processes, findings and recommendations of the Consulting Engineers, WSP USA Inc., for the roadway, structures components, facilities and intelligent transportation devices. This report is pursuant to requirements of the Amended and Restated Trust Indenture of the Illinois State Toll Highway Authority, effective March 31, 1999. The primary purpose of this report is to summarize the annual inspections and the current and programmed work which provide the necessary information required by Sections 710 and 715 of the Trust Indenture.

The Illinois Tollway operates five toll roads comprised of 2,290.7 total lane miles throughout 12 counties in Northern Illinois, connecting three international airports, the nation's second largest rail network, inland ports and seven interstates. The system consists of 294 centerline miles, 684 bridges and culverts, 943 structural walls, 900 overhead sign structures, 185 facilities, 2,225 intelligent transportation devices and numerous other roadway appurtenances.

In 2019, the overall condition of the Illinois Tollway system is rated in very good to excellent condition.



Barrington Road bridge over I-90

All Illinois Tollway assets are inspected on multi-year cycles, and condition categorized in a web-based transportation asset management system that is used to track inspection, maintenance and repair of system assets, as well as retain a historical record of these activities. Required and suggested repair activities are identified, prioritized and resolved on a timely basis.

Section 3 of this report provides a summary of the condition of Illinois Tollway assets and the overall quality of the system, as of 2019. In addition, this report highlights some of the Illinois Tollway’s 2019 accomplishments and projects anticipated in 2020.

In 2019, the overall condition of the Illinois Tollway system is rated in very good to excellent condition.

The Illinois Tollway system continues to be maintained in good repair, working order and condition. This assessment is based on inspections of the roadway, bridges, structural walls, overhead sign structures, facilities, roadway appurtenances and intelligent transportation devices.

By maintaining an aggressive and comprehensive capital program, the Illinois Tollway continues to deliver a world-class transportation system to its customers while promoting safety and innovation across the entire organization. This year’s annual report details the result of this year’s inspections which confirms the Illinois Tollway’s commitment to system improvement and preservation.



Ramps to Barrington Road on I-90



2.0 SUMMARY OF THE ILLINOIS TOLLWAY

The Illinois Tollway delivers a world-class transportation system to its customers while promoting safety and innovation throughout the organization. The efforts of the Illinois Tollway outlined in the following section demonstrate how the Illinois Tollway continues to improve safety, service and reliability for its customers, raising the bar for transportation agencies across the country.

Led by the Board of Directors and Executive Staff, the Illinois Tollway serves as a critical link in Chicagoland's world-class transportation network. The Illinois Tollway is a user-financed administrative agency of the State of Illinois whose purpose is to operate, maintain and service a system of roads that make up its 294-mile system. By reinvesting tolls collected into infrastructure and technology, the agency provides critical resources to support safe and convenient service for commuters and communities in Northern Illinois.

2.1 MISSION OF THE ILLINOIS TOLLWAY

The mission of the Illinois Tollway is to provide and promote a safe and efficient system of highways while delivering the highest possible level of service to its customers.

Under the leadership of the Board of Directors and Executive Staff, the Illinois Tollway is committed to achieving the following goals:

- Increase collaboration with regional transportation and planning agencies
- Promote the regional economy
- Foster environmental responsibility and sustainability
- Further transparency and accountability
- Enhance customer service

The Illinois Tollway continued to fulfill its mission in 2019 through integration of new technologies, furthering environmental initiatives and the advancement of economic opportunities for all.

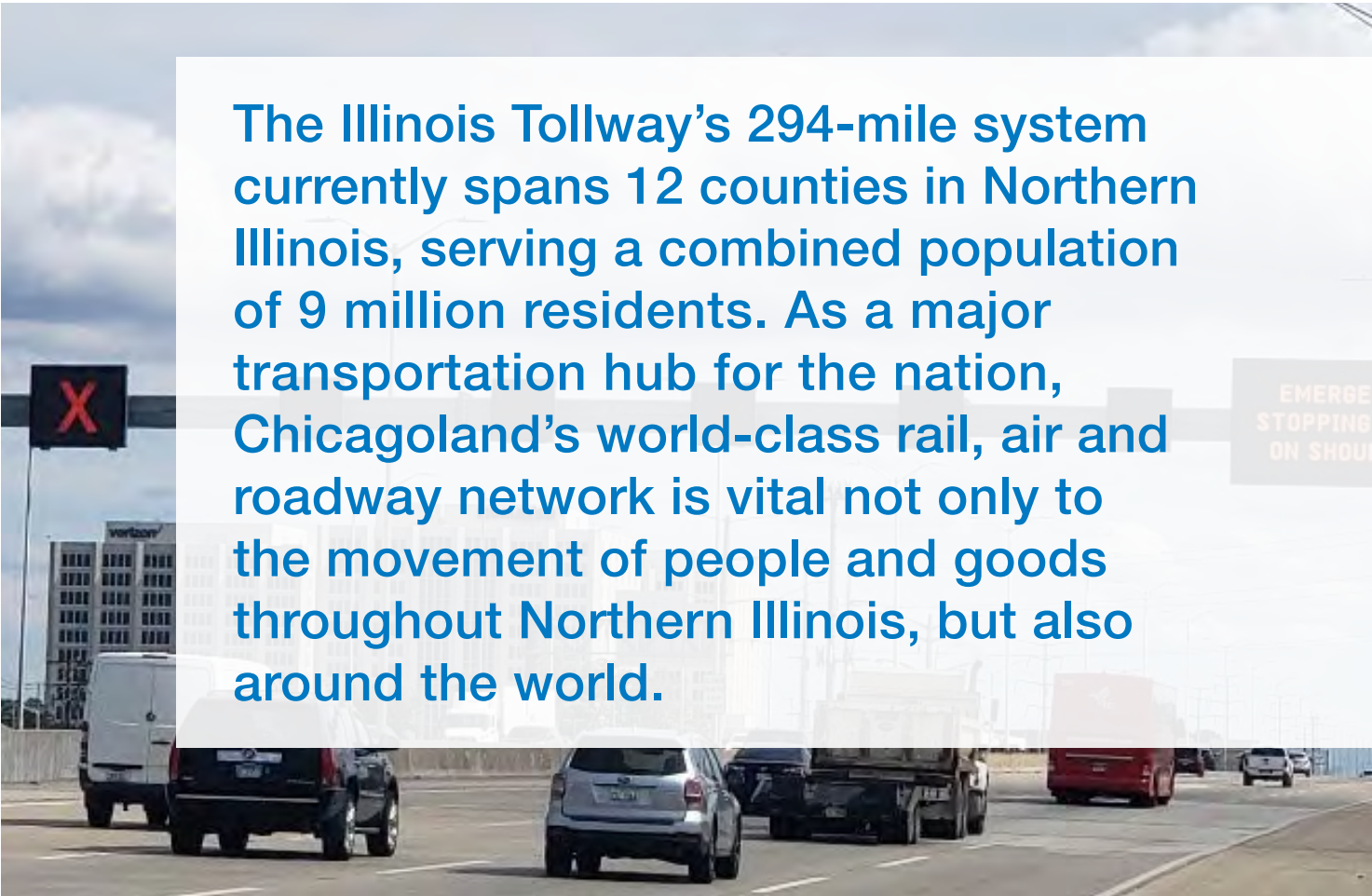
2.2 HISTORY OF THE ILLINOIS TOLLWAY

The original 187-mile Illinois Tollway system opened to traffic in 1958 on what are now known as the Tri-State Tollway, Jane Addams Memorial Tollway and Reagan Memorial Tollway. Over the following six decades, the Illinois Tollway evolved through the construction of extensions, new routes and capacity improvements to enhance mobility throughout the Northern Illinois region. Today, Illinois Tollway operates and maintains 294 miles of interstate tollways in 12 counties in Northern Illinois and is a critical link in Chicagoland’s transportation network.



I-90 & Belvidere Oasis

2.2.1 EVOLUTION OF THE ROADWAY



The Illinois Tollway’s 294-mile system currently spans 12 counties in Northern Illinois, serving a combined population of 9 million residents. As a major transportation hub for the nation, Chicagoland’s world-class rail, air and roadway network is vital not only to the movement of people and goods throughout Northern Illinois, but also around the world.

The Illinois Tollway is a user-financed administrative agency of the State of Illinois whose purpose is to operate, maintain and service a system of toll roads located in Northern Illinois. The Illinois Tollway was formed in 1953 as the Illinois State Toll Highway Commission, created by an act of the Illinois State Legislature. The Illinois State Toll Highway Commission was directed by the Legislature to construct the original 187 miles of the Illinois Tollway system that included the Tri-State, Northwest (now the Jane Addams Memorial) and East-West (now the Reagan Memorial) Tollways. When these routes opened to traffic in 1958, the

Illinois Tollway system was envisioned as a bypass to route traffic around the urban core of Chicago. Over the following six decades, the Illinois Tollway system evolved to serve commercial and commuter traffic throughout Northern Illinois and within the Chicago metropolitan region. Expansion of the system through the construction of extensions, new routes and capacity improvements were implemented to improve mobility throughout the region.

The Illinois Tollway’s 294-mile system currently spans 12 counties in Northern Illinois, serving a combined population of 9 million residents. As a

major transportation hub for the nation, Chicago-land’s world-class rail, air and roadway network is vital not only to the movement of people and goods throughout Northern Illinois, but also around the world.

Today, the Illinois Tollway supports three international airports, interfaces with the nation’s second largest rail network and is an integrated part of the state’s roadway system. The Illinois Tollway provides extensive access to headquarters of the

state’s leading employers and companies; it links hundreds of thousands of people to jobs, and Illinois businesses to consumers around the globe.

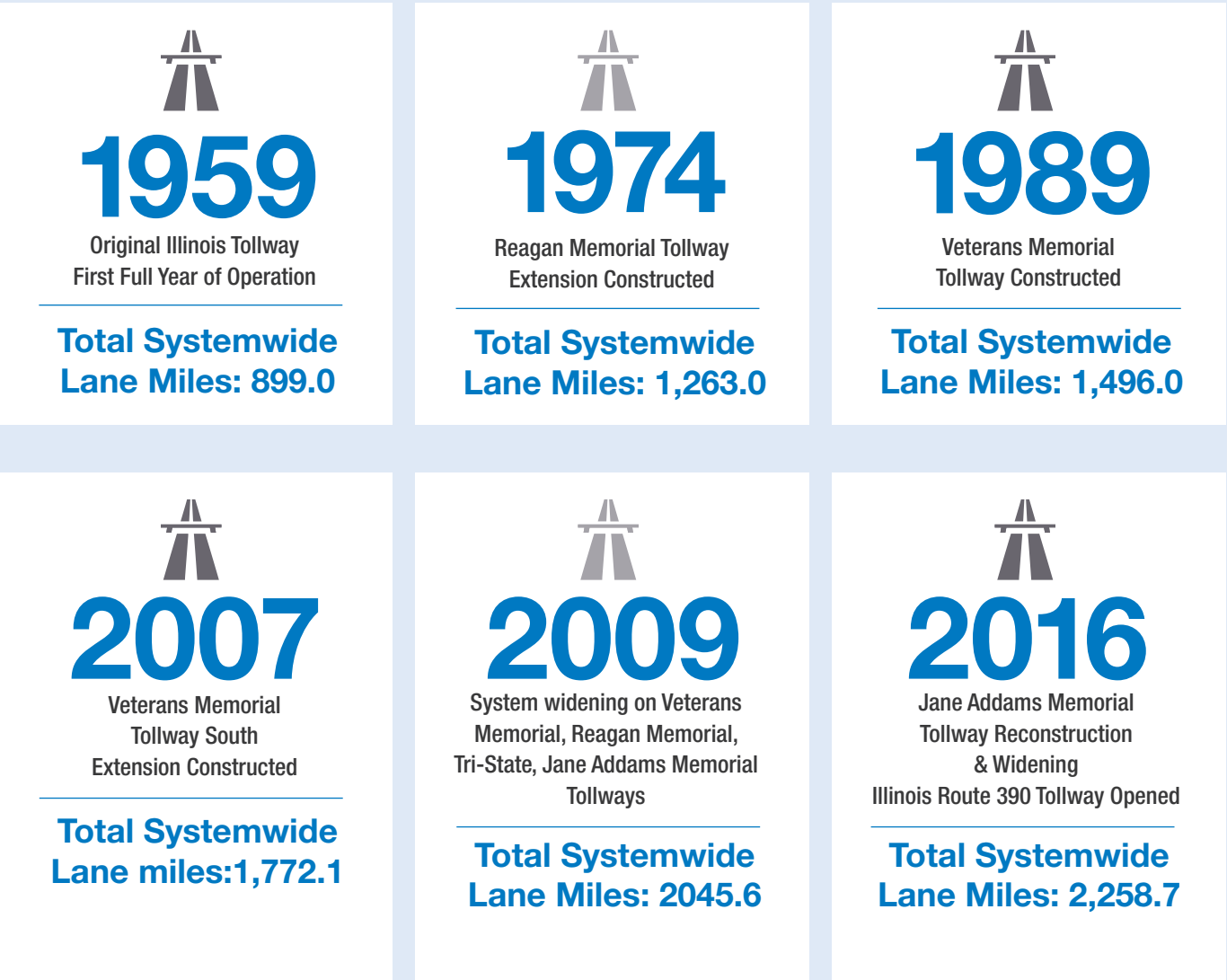
The planning process for Illinois Tollway investments in infrastructure involves coordination with state, regional and local stakeholders. Expansion of the Illinois Tollway system through the construction of new routes may only occur through authorization by the Illinois State Legislature.



I-90 & IL-23 interchange near completion

The expansion of the Illinois Tollway system has occurred periodically throughout the agency’s history in response to legislative directives and stakeholder input. Major system expansion milestones are as follows:

1953 Illinois State Legislature Commissioned the Illinois State Toll Highway Commission to Construct the Original System



Since Its Opening, The Illinois Tollway System Has Grown By 155%, From 899 Lane Miles In 1959, To A Total Of 2,290.7 Lane Miles In 2019. An Overall Timeline Of The Illinois Tollway System Expansion Can Be Found In Appendix A.

New Transportation Links Enhancing Regional Mobility

In 2019, the Illinois Tollway opened new interchanges in the western suburbs that improved accessibility of passenger and commercial vehicles by providing new access to and from major roadways serving local communities.

New ramps constructed at the Illinois Route 47 and the Reagan Memorial Tollway (I-88) Interchange now accomodate full access to I-88 in Sugar Grove, improving the important connection between I-88 and the well-traveled state highway system in Kane County.



New ramps at the I-88 and IL-47 interchange

A new full-access interchange was constructed along the Jane Addams Memorial Tollway (I-90) in Marengo at Illinois Route 23, providing the first direct interstate connection to I-90 in McHenry County.

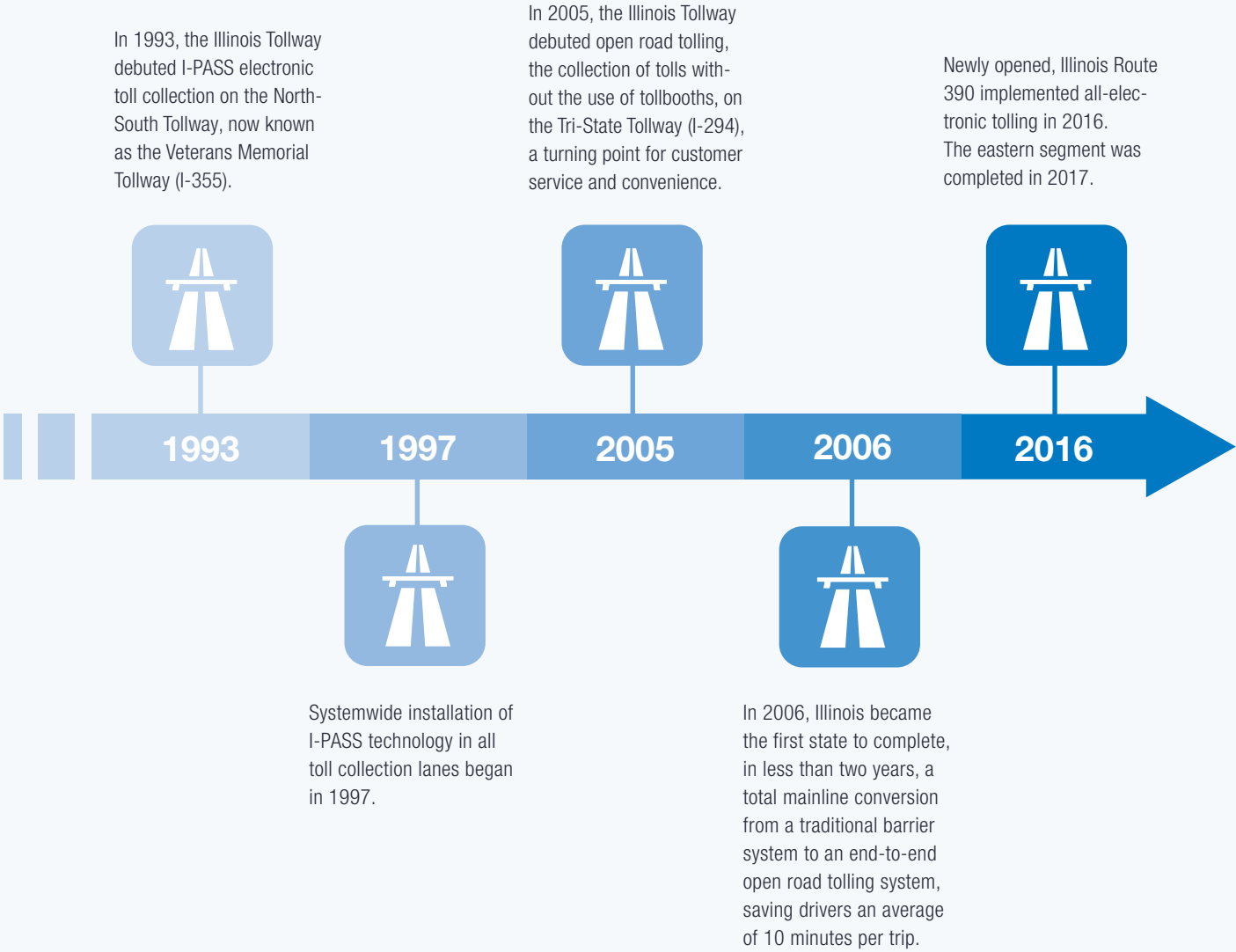
By working with its partner transportation agencies and local governments under the Illinois Tollway’s Interchange and Roadway Cost-Sharing Policy, the agency shared in the costs of these transportation improvements that benefits customers, the local communities and transportation partners.

2.2.2 LEADING TECHNOLOGY IMPLEMENTATION

TOLLING

The Illinois Tollway is a national leader in tolling technology and provides the highest levels of safety, service and reliability to its customers. The Illinois Tollway’s electronic tolling system performs automatic vehicle identification and toll classifica-

tion and includes a violation enforcement system. As of December 2019, more than 4.5 million active I-PASS accounts represent more than 6.8 million active transponders.



2.2.3 FORWARD-THINKING SAFETY LEADER

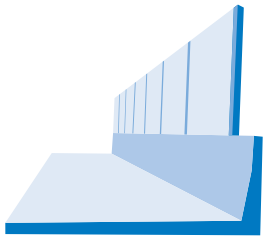
The Illinois Tollway is a leader in promoting safety throughout the planning, design, construction, maintenance and operation of its 294-mile roadway system. The well-being of every person that works and travels on the system is a top priority across all Illinois Tollway operations.

Driver Education Partnerships

The Illinois Tollway continues to expand its driver education partnerships by teaming with the Illinois High School and College Driver Education Association to equip students and their families with the materials and insight to stay safe on Illinois roadways. As new drivers hit the road for their first winter season, the Illinois Tollway released “Get Winter Ready” curriculum to more than 700 educators across Illinois.

Constant Slope Barrier System Sets New Safety Standard

The Illinois Tollway became the first transportation agency in the country to deliver a major advancement in highway safety by successfully designing and crash testing a barrier mounted noise abatement wall that meets AASHTO’s *Manual for Assessing Safety Hardware* (MASH) Test-Level 5 criteria. This new design provides critical safety benefits to the motoring public, roadside workers and first responders, including: accommodating wider and safer shoulder space for disabled vehicles, reduced risk of rollover accidents, shortened accident cleanup time, reduced risk of secondary accidents, and additional clearance for all who use the road.



Wrong-Way Detection Pilot Program

The Illinois Tollway is pursuing opportunities to utilize technology to reduce the number of wrong-way driver incidents through an interconnected, preventative alert system. In 2019, the Wrong-Way Driver Pilot Project was launched at the I-88 and Peace Road Interchange to examine how existing agency technology can communicate with and respond to wrong-way drivers.

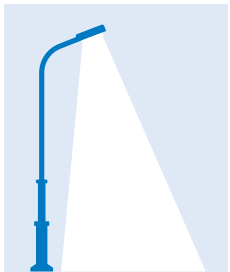


Work Zone Safety

The Illinois Tollway continues to lead advocacy efforts supporting work zone safety, working with stakeholders and lawmakers to increase work zone safety awareness and the penalties for speeding through and encroaching on work zones. The Illinois Tollway also works closely with Illinois State Police District 15 to conduct speed and safety enforcement details to hold accountable drivers who violate work zone laws.

LED Lighting Program

By upgrading lighting across its system to energy-efficient LED fixtures, the Tollway’s efforts are improving customer safety while reducing energy consumption and realizing cost savings. The new lights provide more direct, vivid, and uniform light improving visibility for drivers.



ILLINOIS TOLLWAY PRIORITIZES SAFE, EFFICIENT TRAFFIC INCIDENT MANAGEMENT

The safety of customers, roadway personnel and first responders is core to the Illinois Tollway’s mission. The Illinois Tollway system incorporates the latest in technology and design standards to minimize crashes, and regularly reviews and refines its policies and procedures to provide customers with safe and clear roads, as quickly and safely as possible following an incident.

INCIDENT RESPONSE EFFORTS ACHIEVE NOTABLE RESULTS

PERSONAL INJURY INCIDENTS
CLEARED
in <28 minutes

Incidents Involving a Fatality
CLEARED
1:16 hours

Property Damage Only Incidents Cleared in
<19 MINUTES

According to FHWA, every minute of lane blockage can result in four minutes of congestion and increases the likelihood of a secondary incident by 2.8%. An effective incident response is key to minimizing congestion, motorist delay and the occurrence of secondary crashes, which is especially critical during peak travel times.

Preliminary 2019 data shows the Illinois Tollway cleared incidents involving personal injury in 27:51 minutes on average and 1:16 hours for incidents resulting in a fatality, exceeding its internal benchmarks. At 18:45 minutes in the case of incidents resulting in property damage only, the Illinois Tollway clearance time far exceeded those reported in a nationally cited study.

Work is performed safely and as quickly as possible, reducing the likelihood of secondary incidents which improves both responder and motorist safety and reduces the effects on congestion. This efficient response is made possible through a variety of partners that include Tollway customers, HELP trucks, Illinois State Police, Traffic Operations Center, Tollway Dispatch Center, technology programs and Tollway Engineering Department.

The new Jane Addams Memorial Tollway (I-90) SmartRoad takes incident management to the next level, delivering real-time incident information coupled with added active lane management tools that provide rapid, effective and safe incident response that adds yet another layer of protection for customers, roadway personnel and first responders. Through the use of Flex Lanes and dynamic over-lane signage, Flex lanes can be opened instantaneously, and traffic can be directed out of affected lanes well in advance of an incident or roadway emergency. Over-the-road signs provide key, real-time information to drivers advising them when to change lanes, use caution, and when a lane is clear or closed ahead.

The Illinois Tollway continually works with all its stakeholders to provide the safest and most effective system to its customers.

2.3 LEADERSHIP

The Illinois Tollway has an 11-member Board of Directors appointed by the Governor of Illinois. The Governor and Secretary of the Illinois Department of Transportation serve as ex-officio members. Nine directors are appointed by the Governor, with the advice and consent of the Illinois Senate. No more than five directors may be from the same political party. Of the directors appointed by the Governor, one is appointed by the Governor as Chairman of the Tollway Board of Directors. The Board of Directors sets policy for the operation, maintenance and construction of the tollways.

The Illinois Tollway’s daily operations are managed by the Executive Director, who also oversees the agency’s \$1.45 billion budget and leads its nearly 1,500 employees in ensuring the

Illinois Tollway’s 1.6 million daily drivers travel on a safe, efficient and customer-friendly highway system that incorporates innovative roadway designs and cutting-edge technology.

Under the leadership of the Board of Directors and Executive Staff, the Illinois Tollway is committed to achieving the following goals:

- Increase collaboration with regional transportation and planning agencies
- Promote the regional economy
- Maintain financial integrity
- Foster environmental responsibility and sustainability
- Maintain the safety and efficiency of the Illinois Tollway system
- Further transparency and accountability
- Enhance customer service



Active Traffic Management System (ATMS)

2.4 MOVE ILLINOIS

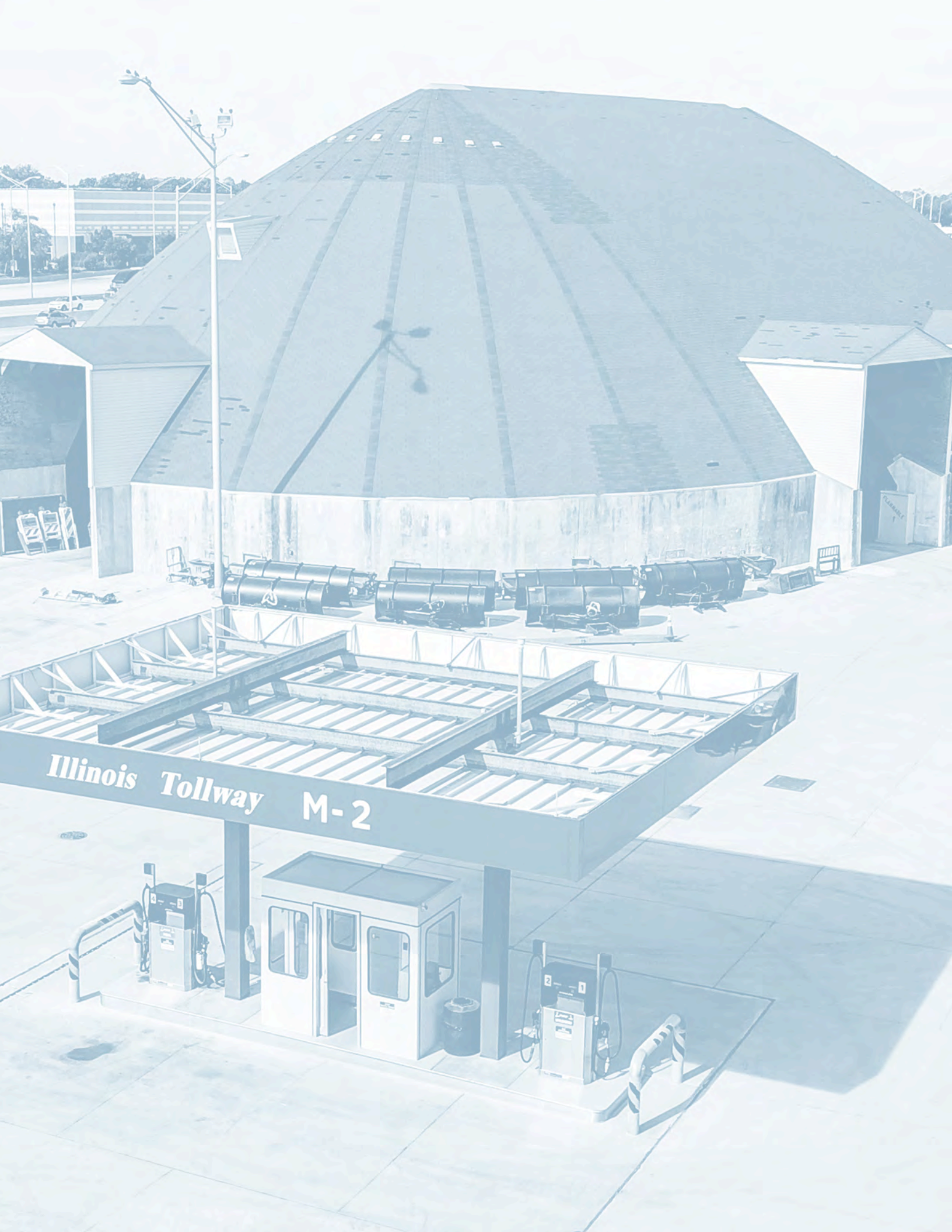


Active Traffic Management System (ATMS)

The Illinois Tollway’s current capital program is *Move Illinois: The Illinois Tollway Driving the Future*. The 15-year, \$14 billion capital program is improving mobility, relieving congestion, reducing pollution, creating as many as 120,000 jobs and linking economies throughout the region. The first eight years of *Move Illinois* are on schedule and within budget, delivering the new Illinois Route 390 Tollway and a rebuilt and widened Jane Addams Memorial Tollway (I-90) SmartRoad corridor, as well as opening a new interchange connecting the Tri-State Tollway (I-294) to I-57. Progress continues on projects addressing the remaining needs of the existing Illinois Tollway system, delivering the new I-490 Tollway Project and reconstruction and widening of the Central Tri-State Tollway (I-294) and planning for emerging projects. The Illinois Tollway has pledged to make *Move Illinois* the “cleanest

and greenest program” in the agency’s history. Such efforts protect the natural environment, help to reduce costs and increase the social benefits to the communities the Illinois Tollway serves.

The Illinois Tollway is a driving force for increasing economic opportunities in the diverse communities it serves. As an economic engine for the region, the Illinois Tollway provides small, diverse and veteran businesses and individuals with opportunities to grow and succeed through training, partnerships and investments in infrastructure. Since the start of *Move Illinois*, more than \$1.8 billion has been committed to small, diverse and veteran businesses. The agency is on track to not only provide more job opportunities, but also training programs to prepare the next wave of diverse businesses and individuals to fill the pipeline for the future.



3.0 TRANSPORTATION ASSET MANAGEMENT SYSTEM

The Illinois Tollway utilizes a transportation asset management system to efficiently track the condition of its assets and identified repair activities, systemwide. Currently the Illinois Tollway leverages Cartegraph Operations and Management System (Cartegraph), which is a web-based solution utilized by the Illinois Tollway Engineering and Planning departments.

Annual inspections are performed utilizing Cartegraph by employing a variety of handheld mobile devices as part of a paperless inspection process. Throughout the annual inspections, asset repair needs are identified and entered to Cartegraph as “repair activities.” The repair activities may be identified by inspectors or by maintenance staff, at any time. The repair activities are then investigated by the appropriate staff based on the type of activity or asset requiring repair.

Repair activities are sorted into work orders that indicate who is responsible for completing the task. In general, work orders are categorized as work performed by either Maintenance or a Contractor. Maintenance work orders are created for each Maintenance division (M-1 through M-16), Roadway Electric, Sign Shop, Carpenter Shop and Facility Maintenance. Activities recommended for repair by one of the Maintenance divisions are assigned to the appropriate work order, which immediately notifies the appropriate manager and supervisor. The repair activities are then addressed and subsequently closed by the manager or supervisor following the successful completion of the work.

Repair activities that are beyond the capabilities or resources of maintenance staff are referred to Engineering staff who work with the appropriate Illinois Tollway department(s) to program the recommended work to be performed as a part of a construction contract. As the construction contracts are completed, a construction walk-through team verifies the repair activity associated with that construction contract has successfully been completed.

If necessary, an item identified for repair or replacement is periodically field checked to ensure that the condition has not worsened until the repair or replacement of the asset is completed.

The following sections summarize the condition of the transportation assets by their overarching asset category. Each asset category includes the recommendations of the Consulting Engineers.

3.1 ROADWAY PAVEMENT

The Illinois Tollway’s roadway pavement is inspected annually, including: a structural evaluation, pavement surface evaluation and a visual inspection that aids the Illinois Tollway’s prioritization of areas in need of repair. Because of the Illinois Tollway’s commitment to maintaining safe and reliable roadway pavement, over 87% of Illinois Tollway pavement assets, approximately 1,600 lane miles, are rated as being in either good or excellent (new) condition.

As of the completion of the 2019 inspections, nearly 84% of the system mainline pavement has an estimated Remaining Service Life (RSL) of more than nine years. This high pavement condition rating level indicates that the Illinois Tollway provides a reliable transportation system for the region that is fundamental for moving people and goods in a safe and efficient manner.

3.1.1 PAVEMENT MANAGEMENT SYSTEM

The Illinois Tollway utilizes a pavement management system, comprised of a comprehensive, georeferenced database of pavement-related data, that allows the Illinois Tollway to monitor and evaluate current pavement conditions, anticipate future pavement performance, identify future pavement maintenance and rehabilitation needs and generate multi-year pavement repair plans.

Accurate and detailed pavement condition data are a requirement for generating dependable performance models and identifying appropriate treatment matrices. Annual updates of the Illinois Tollway’s pavement management system begin with updating the construction history to reflect recent improvements, traffic data, pavement cost and condition data, etc. Periodically, the Illinois Tollway updates their system performance models and rehabilitation matrices to ensure that they continue to accurately represent actual roadway conditions by modeling the data that has been amassed over the years in the pavement management system.

The Illinois Tollway utilizes a network-level management system that considers the routes within a network and selects the best actions to maintain the system at acceptable levels of performance. The best actions are those that maximize the benefit to the users while minimizing the cost of maintenance and rehabilitation. Network-level analysis involves forecasting future needs based on pavement performance predictions. By projecting the rate at which the pavement conditions deteriorate, the optimal time for applying treatments can be determined. Typically, the optimal repair time is the point at which a gradual rate of deterioration begins to increase to a much faster rate. It is critical to identify this point in time to

avoid higher maintenance and rehabilitation costs caused by excess deterioration.

Once a pavement section is recommended for a treatment at the broader network level, further evaluation and design of the treatment is conducted at a project specific level. Additional data is collected to improve the calculations



I-90 Eastbound at Plaza 5

for final work quantities, pre-repairs and design thicknesses. The design may also be supplemented with Falling Weight Deflectometer (FWD) test and material testing data from which engineers can quantify the structural capacity of the pavement in its current condition.

The Illinois Tollway utilizes a state-of-the-art inspection vehicle to inspect Illinois Tollway roadway pavement on an annual basis.

The roadway pavement inspection includes three levels of investigation: visual inspection, structural evaluation and pavement surface evaluation that are used to detail areas to be repaired via

a current or future Illinois Tollway contract or by the Illinois Tollway Division of Maintenance and Traffic (Maintenance Division). A detailed summary of the visual, structural and pavement surface evaluations, including the results of these inspections, is presented in the 2019 Annual Reports for each of the Illinois Tollway’s Maintenance sections. The Maintenance section limits are depicted in Exhibit 1.

A major component of the pavement management system is collecting, reviewing and compiling the latest Illinois Tollway pavement management data and information. The data collection effort is extremely important, as the information forms the basis of the pavement management system and is used to update the history of the in-place pavements, quantify the latest traffic conditions and refine pavement performance models. This data serves as the critical component of the Illinois Tollway’s pavement management software, Decision Support System-RoadCare.



I-94, Northbound

3.1.2 PAVEMENT INSPECTION PROCESS

Pavement Visual Inspection

Visual inspections include recording the visible pavement areas in need of repair from edge-of-shoulder to edge-of-shoulder. The Illinois Tollway performs visual inspections of its roadway system annually during the spring and summer months. Repair needs are prioritized based on the level of defect severity, among other factors. Quantities are calculat-

ed to assist the Illinois Tollway Roadway Maintenance Division in estimating work activities and the Engineering Department in scheduling future contracts. Based upon this information, an overall condition rating is assigned for each area. This rating typically coincides with the Condition Rating System (CRS), which is discussed later in this report. The overall condition ratings utilized for the visual inspections are provided in the following table.

Table 3-1: Pavement Visual Inspection Ratings Summary

RATING	DESCRIPTION
Excellent	No activities requiring repairs other than preventative maintenance noted.
Good	Activities noted requiring repairs are typically within the capabilities of the Illinois Tollway Roadway Maintenance Division.
Fair	Activities noted requiring repairs by contract or by the Illinois Tollway Roadway Maintenance Division. Activities requiring repairs by contract are typically beyond the capabilities of the Illinois Tollway Roadway Maintenance Division due to size, quantity, or repair process.
Poor	Activities noted throughout which are beyond the capabilities of the Illinois Tollway Roadway Maintenance Division.

Pavement Structural Evaluation

This structural evaluation of the Illinois Tollway roadway pavement assesses the structural integrity of mainline pavements and assists in identifying repair activities. This type of evaluation is performed annually during the summer and fall months. The structural evaluation consists of FWD testing and data analysis, and a pavement coring program. The FWD testing and data analysis is used to determine the existing pavement’s layer and sub-grade structural properties, evaluate load transfer characteristics at pavement joints and to identify subsurface voids. Pavement coring is used to verify pavement layer thickness and to inspect material and bonding conditions. A detailed summary of the structural evaluation including the results of the evaluation is presented in the 2019 Annual Reports for each Illinois Tollway maintenance section.



Pavement Inspection Vehicle

Pavement Surface Evaluation

The pavement surface evaluation of the Illinois Tollway’s roadway system is performed annually during the summer and fall months. This evaluation utilizes electronic and visual surveillance of the pavement surface to determine the extent of pavement distress. The Illinois Tollway utilizes a pavement inspection and evaluation system like that used by the Illinois Department of Transportation (IDOT), which categorizes pavement conditions using CRS values. The CRS is a subjective measurement of pavement surface condition. The CRS system generates an overall pavement condition rating on a 1-to-9 scale, with 9 representing a newly constructed or resurfaced pavement and 1 representing a completely failed pavement. CRS ratings are based on the type, amount and severity of the evident pavement distresses, as well as overall rideability of the pavement surface, degree of wheel path rutting and magnitude of transverse joint faulting. The CRS scale utilized by the Illinois Tollway is provided in the following table.

Table 3-2: CRS Ratings Summary

RATING	DESCRIPTION
7.5 – 9.0	Excellent
6.5 – 7.4	Good
6.0 – 6.4	Transitional
4.5 – 5.9	Fair
1.0 – 4.4	Poor

The CRS rating is used primarily for planning and programming pavement rehabilitation projects. Pavement sections with a CRS greater than or equal to 7.5 are in “excellent” condition and require little or no maintenance. As a section’s CRS value drops below 7.5, the pavement is still

in very good condition but begins to require some maintenance. CRS values in the range of 6.0 to 6.4 indicate that the pavement section is beginning to show appreciable levels of deterioration and is transitioning from a pavement that requires maintenance to one that will require rehabilitation (or resurfacing) in the next few years. Once the CRS falls below 6.0, the pavement is in “fair” condition and requires rehabilitation. Generally, pavements with a CRS of less than 5.5, i.e. halfway through the fair section of pavement condition, exhibit very poor interstate pavement ride quality and are in need immediate attention/rehabilitation.

It should be noted that while the riding surface might reflect a high CRS rating, the aging pavement substructure, drainage problems, or other unknown conditions that may exist below the pavement surface are unaccounted for by the CRS rating. For example, a section of newly constructed or reconstructed pavement and a section of recently rehabilitated pavement would both exhibit a high CRS rating; however, the age and condition of the pavement substructures are entirely different.

In conjunction with CRS ratings, the Remaining Service Life (RSL) categories were developed to consider current CRS ratings along with traffic volume and pavement thickness information. This data is used to estimate how many years are remaining before a pavement condition deteriorates to a point where major repairs would be required. The RSL categories are developed using performance models based on specific pavement types, historical condition data for a specific pavement type and assumed rehabilitation treatments. The RSL categories have been found to be a reliable indicator of pavement performance. However, deviations in future rehabilitation treatments from what was assumed in developing the performance model, need to be accounted for to ensure that the model accurately represents the pavement systems and that pavement performance predictions, and assigned RSL category are correct.

The Illinois Tollway’s RSL categories include 0 years, 1-2 years, 3-4 years, 5-8 years, 9-12 years, 13-19 years and 20 years or more. New pavement with an expected life of 30 or more years would typically be categorized with an RSL of 20 or more years. In contrast, pavement categorized with an RSL of 0 years will require extensive intermittent pavement repairs to maintain the pavement integrity.

CRS performance models developed specifically by the Illinois Tollway are used to predict the RSL of each pavement section. The RSL of a pavement is defined as the predicted amount of time (in years) for a given pavement to reach a terminal serviceability level. For the Illinois Tollway, a CRS of 6.0 is used at the terminal point for useful pavement service life. A CRS of 6.0 indicates a pavement in fair condition and in need of immediate repair and/or rehabilitation.



Eastbound I-90 under Barrington Road

3.1.3 PAVEMENT INSPECTION SUMMARY

Systemwide, the 2019 roadway pavement inspections determined that 87.3% of the Tollway roadway pavement surveyed is in “excellent” or “good” condition. Compared to 75.3% in 2018, this represents a 12% increase in lane miles rated in good or better condition. [This improvement is attributed to system improvements that were constructed in 2018 as part of the Illinois Tollway’s continued effort to maintain the highest levels of service for its’ customers.](#)

A typical pavement structure consists of a base of unbound gravel-type materials with an asphalt stabilized subbase beneath a concrete/asphalt pavement surface. The pavement surface is the top layer

that is directly exposed to traffic wear and tear, so pavement surface conditions decline much faster than the rest of the pavement structure. To address this wear and tear, planned asphalt overlays and mill and overlays are periodically applied over the concrete and asphalt pavements, respectively, as a cost-effective way to extend the service life of the overall roadway pavement. As such, the age of an asphalt overlay versus the age of the underlying base of concrete pavement can vary greatly. [As of 2019, the current average surface age of Illinois Tollway pavement is 7.3 years, while the average base pavement age is 16.1 years.](#) The following table summarizes current systemwide pavement surface and base pavement ages in 2019.

Table 3-3: Average Age of Pavement

	0-5 YEARS	6-10 YEARS	11-20 YEARS	21-30 YEARS	31-40 YEARS	41+ YEARS	SYSTEM AVERAGE
Age of Pavement Surface	48.6%	15.1%	32.2%	3.4%	0.4%	0.0%	7.3
Age of Pavement Base	27.4%	4.3%	38.9%	12.6%	7.1%	9.8%	16.1



I-90 Eastbound

The age of the pavement base is an indication of how old the original pavement is since last reconstructed or originally built, regardless of subsequent resurfacings. As of 2019, approximately 32% of the Illinois Tollway Pavement Base is less than ten years old and more than 27% is less than five years old.

As summarized in the following table and figure, only 11.4% of surveyed pavement systemwide, in 2019, was categorized as having an RSL of eight years or less. This indicates that this portion of the pavement will require repairs within the next eight years to maintain its integrity.

[At the end of 2019, the overall average estimated Remaining Service Life of Illinois Tollway pavement is 17.2 years.](#)

Table 3-4: A Summary of Mainline Pavement RSL Values from the 2019 Evaluation (Lane Miles)

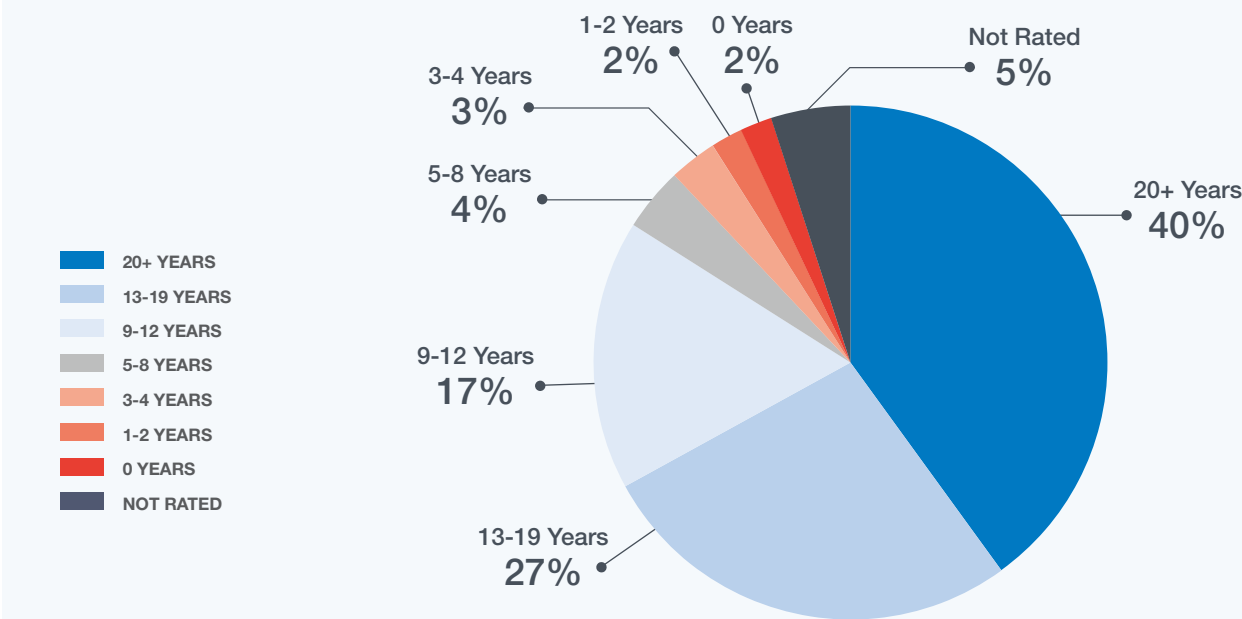
TOLLWAY	20+ YEARS	13-19 YEARS	9-12 YEARS	5-8 YEARS	3-4 YEARS	1-2 YEARS*	0 YEARS*	NOT RATED***
Tri-State (I-294)	131.2	109.8	11.5	45.6	40	40.6	31	12.8
Tri-State (I-94)	76.7	79.5	10.9	0.0	0.0	0.0	1.6	37.65
Edens Spur (I-94)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.05
Jane Addams (I-90)	403.2	5.3	84	8.1	0.0	0.0	0.0	0.0
Reagan (I-88)	105.5	129.5	179.9	25.2	7.8	0.0	0.6	16.7
Veterans (I-355)	0.8	173.3	2.1	3.5	0.0	0.0	0.0	16.7
Illinois Route 390	23.3	0.0	19.3	0.6	3.6	0.0	2.0	6.0
TOTAL **	740.7	497.4	307.7	83	51.4	40.6	35.2	85.9
% of TOTAL	40.2%	27.0%	16.7%	4.5%	2.8%	2.2%	1.9%	4.7%

* Zero Years - Critical areas in need of attention: Reagan Memorial Tollway (I-88) – programmed for rehabilitation and reconstruction in various years, the Tri-State Tollway (I-294) from 95th Street to Balmoral Avenue – programmed for reconstruction in 2024 to 2025 and the Edens Spur (I-94) – programmed for reconstruction in 2018 to 2020, and the Elgin-O'Hare Tollway from Lake Street to Irving Park Road – programmed for patching and overlay in 2023.

** Total - Lane Miles Surveyed does not equal total actual system lane mileage due to approximate beginning and ending points of the field survey, and the exclusion of auxiliary lanes and other lane types.

*** Not Rated – Roadway sections that were under construction and the long bridges such as the Mile Long and Bensenville bridges on I-294 were excluded from the survey and listed as “Not Rated”.

Figure 3-1: Pavement RSL Summary



I-90 Pavement near Rock Cut State Park

The condition of the Illinois Tollway’s mainline pavement systemwide has improved over the last 11 years, as depicted below by the average RSL value.

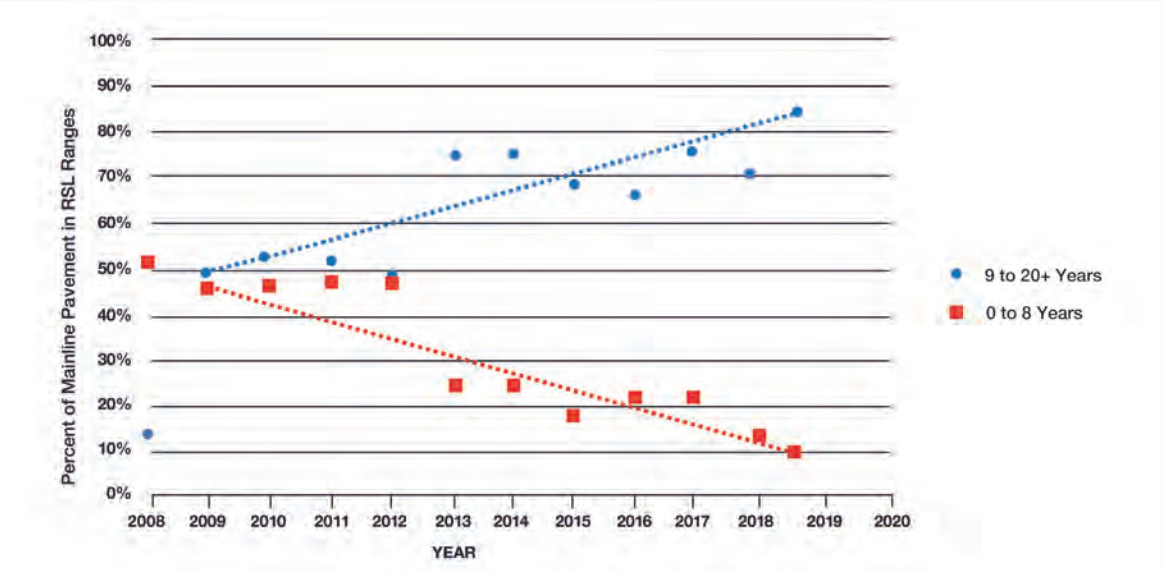
Since 2009, the amount of the system mainline pavement rated with an RSL of nine to 20 years or more increased by 35 percentage points, while the amount of pavement rated with an RSL of 8 to 0 years decreased by 34 percentage points.

For the past seven years (since 2013), the Illinois Tollway has maintained an RSL of nine to 20+ years for 74% of its mainline pavement, and in 2019 reached a 20+ year high of 84%. Over the same seven-year period, the Illinois Tollway has been generally trending annual reductions in the amount of pavement rated from 8 to 0 years, and in 2019 reached a 20+ year low of 11.4%.



Rumble Strip

Figure 3-2: Timeline of Systemwide Pavement RSL Condition (Line Graph)



Predicted CRS ratings are based on the pavement management system models and consider scheduled rehabilitation, resurfacing and reconstruction according to the *Move Illinois* Program developed

by the Illinois Tollway. The pavement CRS value is assumed to be 8.9 following the year of improvement. A summary of the most recent systemwide CRS ratings is included in the following table:

Table 3-5: Summary of Mainline Pavement CRS Values from the 2019 Evaluation (Lane Miles)

TOLLWAY	EXCELLENT >7.5	GOOD 6.6-7.4	TRANSITIONAL 6.0-6.5	FAIR 4.5-5.9	POOR 0-4.4	NOT RATED**
Tri-State (I-294)	177.4	105.6	100.2	26.4	0.0	12.8
Tri-State (I-94)	82.1	85	0.0	1.6	0.0	37.65
Edens Spur (I-94)	0.0	0.0	0.0	0.0	0.0	5.05
Jane Addams (I-90)	476	24.5	0.0	0.0	0.0	0.0
Reagan (I-88)	367.2	68.8	11.9	0.6	0.0	16.7
Veterans (I-355)	159.7	16.5	3.5	0.0	0.0	7.7
Illinois Route 390	42.6	1.7	2.6	2.0	0.0	6.0
TOTAL*	1305	302.1	118.2	30.6	0.0	85.9
% OF TOTAL	70.9%	16.4%	6.4%	1.7%	0.0%	4.7%

* Total - Lane Miles Surveyed does not equal total actual system lane mileage due to approximate beginning and ending points of the field survey, construction activity and the exclusion of auxiliary lanes and other lane types.

** Not Rated - Sections that contained construction and the long bridges were excluded from the survey and listed as "Not Rated". Note: This evaluation does not include auxiliary or ramp lanes that are required for entering and exiting the Illinois Tollway. Due to this, route and system totals may not match information in other sections of the report. Percentages may not total to 100% due to rounding.

In 2019, the percentage of pavement in good to excellent condition is expected to climb to over 90% and remain on average above 90% through year 2024.

Over the past 11 years (since 2009), the Illinois Tollway has, on average, maintained 80.4% of its pavement in good to excellent condition. On the other end of the scale, the percentage of mainline pavement rated from transitional to poor, has been reduced from over 20% to less than 10% over the same period. In 2020, the percentage of pavement in good to excellent condition is expected to climb to over 90% and remain on average above 90% through year 2024.

The pavement condition trends summarized here reflect the Illinois Tollway's commitment to maintain pavement integrity through regular monitoring and programming of intermittent rehabilitation or repairs to maintain high CRS ratings until programmed major rehabilitation or reconstruction occurs.

A detailed overview of the pavement surface evaluation, particularly relating to the development of the CRS ratings and RSL categories described above, is included in the 2019 Annual Reports for each Illinois Tollway Maintenance division.

Figure 3-3: Pavement CRS Condition Summary

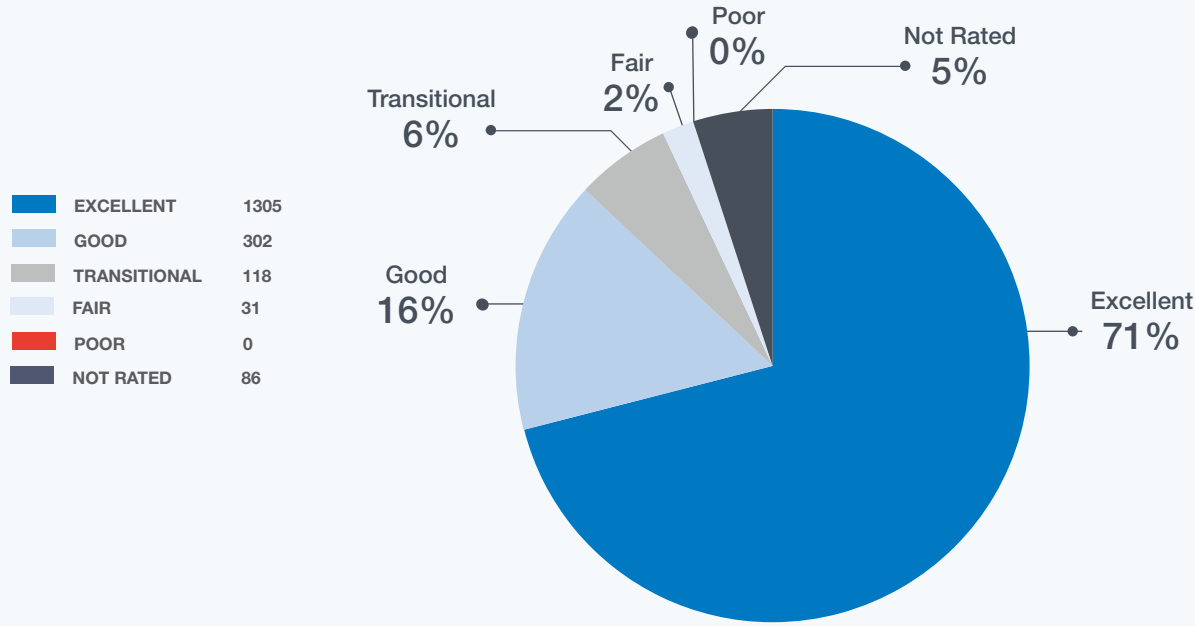
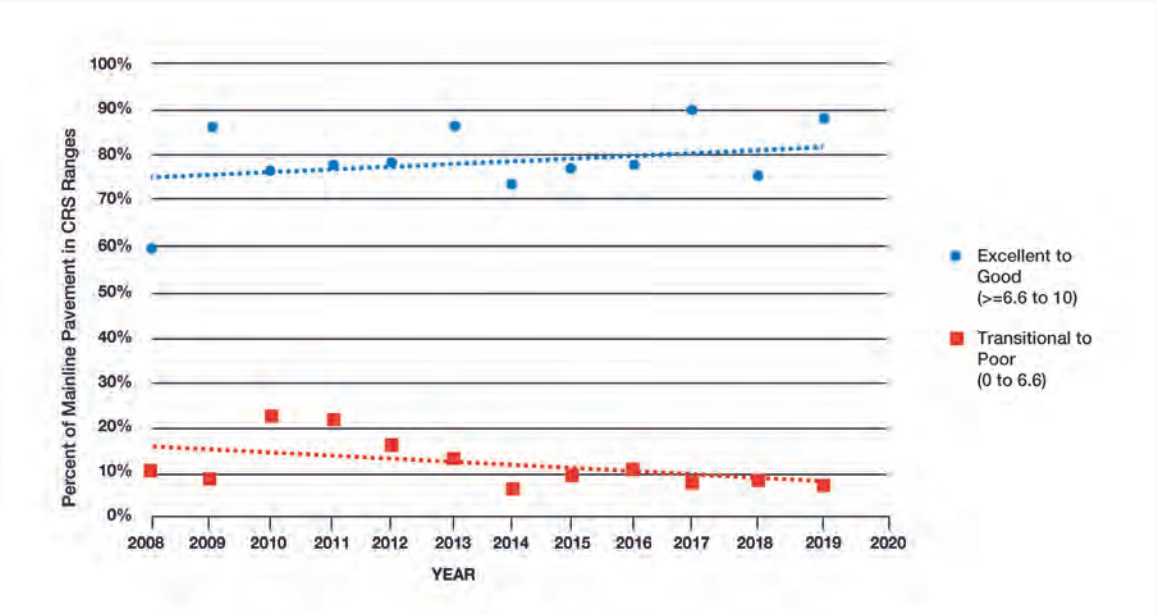


Figure 3-4: Timeline of Systemwide Pavement CRS Condition



A graphical presentation of the percentage of Illinois Tollway pavement area that falls within each CRS rating category since 1997 is illustrated in Exhibit 2. A graphical presentation of the percentage of Illinois Tollway pavement area that falls within each RSL category since 2000 is presented in Exhibit 3. This data is collected and stored on video/georeferenced digital imaging and therefore the pavement distresses can be reviewed to verify results. Areas under

construction at the time of the recordings are listed as “Not Rated” since the staging and shifting of traffic lanes creates inconsistencies in the data.

A graphical depiction of Illinois Tollway pavement within each RSL category is presented in Exhibit 4. A graphical depiction of Illinois Tollway pavement within each CRS range is presented in Exhibit 5.

3.1.4 PAVEMENT RECOMMENDATIONS

The Illinois Tollway focuses annual maintenance efforts on addressing the basic integrity of the sections of pavement which have not recently been reconstructed. It is recommended that these efforts continue annually on an as needed basis. These efforts are typically accomplished through small-scale maintenance projects that may include patching and/or intermittent pavement repairs. While it extends the serviceable life of the roadway pavement, the strategy of maintaining pavement through small-scale maintenance projects is not a desirable long-term solution due to increasing construction costs over time, increasing repair quantities, traffic disruptions and reduced pavement life.

To keep the Illinois Tollway roadway pavement in a state of good repair and to maintain an excellent level of service for its customers, it is recommended that the Illinois Tollway do the following:

- Continue to allocate resources such that some level of effort is provided for all classes of the Illinois Tollway’s roadway pavement system.
- Perform necessary repairs by the Illinois Tollway Roadway Maintenance Division as recommended in the 2019 Annual Reports for each Illinois Tollway Maintenance section.
- Develop training techniques and provide resources that assist the Roadway Maintenance Division’s proficiency with the Illinois Tollway’s transportation asset management system.
- Continue to provide preventative and corrective maintenance on an annual basis.
- Continue to perform minor and major maintenance activities at programmed repair cycles.
- Continue non-destructive testing/evaluation and monitoring of pavement to assure an accurate evaluation of the system and work estimates.
- Put an emphasis on maintaining and prioritizing ramp, arterial and collector pavement.

3.2 STRUCTURAL ELEMENTS

The structural elements inspected throughout the Illinois Tollway’s system consist of bridges, large culverts, retaining walls, noise abatement walls, sight screen walls and overhead sign structures. These assets are a critical

component to the overall health of the Illinois Tollway’s roadway network that receive visual inspections on a set multi-year cycle.

3.2.1 BRIDGES

The Illinois Tollway characterizes bridges as any structure carrying Illinois Tollway vehicular traffic or any structure that crosses the Illinois Tollway (culverts spanning 20 feet or greater are also classified as bridges per the Federal Highway Administration [FHWA]), as well as other bridge structures such as railroad bridges, oasis structures and pedestrian bridges.

There are currently 684 structures classified as bridges throughout the Illinois Tollway system. Of these, there are 610 vehicular bridges, 61 culvert bridges, 12 non-vehicular bridges, and one land bridge.

Table 3-6: Bridge Inventory Summary

BRIDGE TYPE	QUANTITY
Vehicular	610
Culverts	61
Non-Vehicular	12
Land	1
TOTAL	684

For the 12 non-vehicular bridges, six are railroad bridges, two are pedestrian bridges and four are over-the-road oasis structures.

Table 3-7: Non-Vehicular Bridges

BRIDGE TYPE	QUANTITY
Railroad	6
Oasis	4
Pedestrian	2
TOTAL	12



Bridge 1483, I-355, Northbound

The Illinois Tollway bridge inventory is revised on an as needed basis to account for new construction, demolition and/or ownership transfers to or from other agencies. The 2019 inventory revisions for bridge structures under the jurisdiction of the Illinois Tollway include:

Vehicular Bridges (Two Added):

- Bridge 535CD (M-5): I-90 EB Ramp X1 over Higgins Creek
- Bridge 536CD (M-5): I-90 WB Ramp X4, over Higgins Creek

Oasis Structures (One Removed):

- Oasis Structure 394 O (M-3): O’Hare Oasis over I-294

Vehicular Bridges (One Retired):

- Bridge 528A – I-90 WB Ramp over Arlington Heights Road

Several bridges located within the limits of the Illinois Tollway are entirely under the jurisdiction of another agency. Currently, 14 such bridges are omitted from the Illinois Tollway bridge inventory. However, the Illinois Tollway performs cursory inspections of these bridges for safety reasons as they span across Illinois Tollway roadways. Inspections are conducted, and required forms are submitted to the FHWA by the responsible agency. The following table lists bridges entirely under the jurisdiction of, and maintained by, another agency. In 2019, there were no inventory changes for Non-Illinois Tollway Bridges.



I-88 Bridge over Fox River

Table 3-8: Non-Illinois Tollway Bridges Responsibility Table

ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT)		
Bridge 197C	M-1 (TS)	I-294/I-80 over Calumet Union Drainage Ditch
Bridge 198	M-1 (TS)	EB I-80 Ramp A over I-294/I-80
Bridge 521	M-5 (NW)	I-290/Illinois Route 53 over I-90
Bridge 1146	M-11 (EW)	NB I-39 over I-88
Bridge 1146A	M-11 (EW)	SB I-39 over I-88
Bridge 1621	M-16 (EO)	SE Ramp G1 I-290 over WB IL 390 to EB I-290 (Ramp G7), IL 390, I-290
Bridge 1625	M-16 (EO)	NW Ramp G5 over I-290 and IL 390
Bridge 1628	M-16 (EO)	SE Ramp G1 I-290 over WB IL 390 to EB I-290 (Ramp G7)
CHICAGO TRANSIT AUTHORITY (CTA)		
Bridge 366A	M-3 (TS)	EB CTA O’Hare Rapid Transit over I-294
Bridge 366B	M-3 (TS)	WB CTA O’Hare Rapid Transit over I-294
Bridge 366C	M-3 (NW)	CTA O’Hare Rapid Transit over NW I-90 Ramps M and P
DUPAGE COUNTY DIVISION OF TRANSPORTATION		
Bridge 1408	M-14 (NS)	Great Western Trail over I-355
ILLINOIS DEPARTMENT OF CONSERVATION		
Bridge 702	M-7 (NW)	Rock Cut State Park over I-90
VILLAGE OF OAKBROOK		
Bridge 280	M-2 (TS)	Bike Path over I-88



Mile Long Bridge



Ramp B, Northbound I-57 to Northbound I-294, over I-294

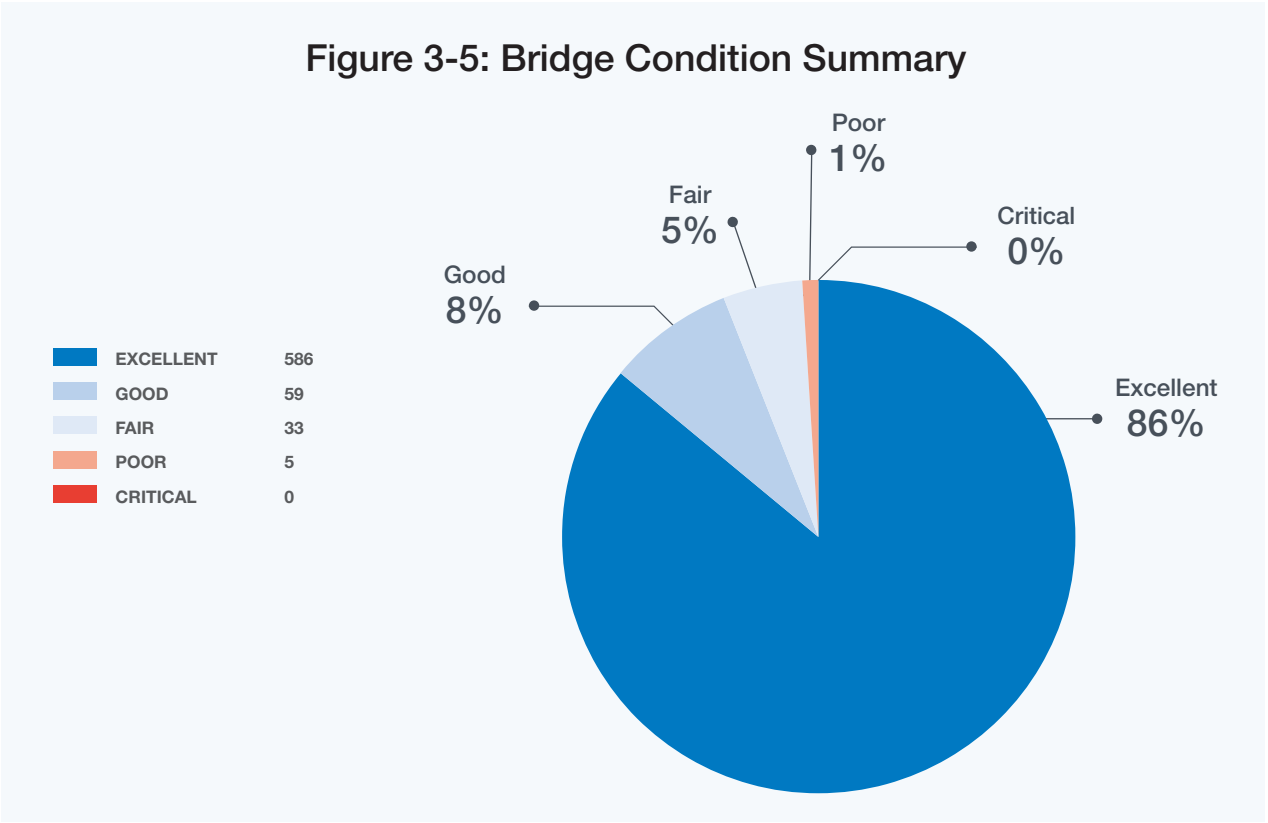
Systemwide Bridge Condition Summary as of 2019

The following data summarizes the Overall Condition Index (OCI), as defined in the next section, for all 684 Illinois Tollway Bridges, systemwide.

Since bridges are on a two-year inspection cycle the following table and figure provide the index ratings for the 2018 and 2019 inspection cycles.

OVERALL CONDITION	CONDITION INDEX	2018	2019	TOTAL*
Excellent	≥ 90	282	304	586
Good	89 – 80	36	23	59
Fair	79 – 70	21	12	33
Poor	69 – 60	4	1	5
Critical	< 60	0	0	0
TOTAL		343	340	683*

* does not include the land bridge because an OCI rating is not assigned for this structure.



Of the 684 structures classified as bridges that receive an Overall Condition Index rating (OCI, as described in the next section), as of 2019, 94.4% of Illinois Tollway bridge structures had an OCI of 80 or higher, indicating that the majority of Illinois Tollway bridges are in good to excellent condition. Approximately 5% are rated in fair condition, and under 1% are rated in poor condition. None of the Routine and Element Level-inspected bridges are in critical condition.

The condition of the Tollway’s infrastructure continues to improve and is in excellent condition. Of the 684 bridges under the Tollway’s jurisdictions there are seven bridges or 1% are categorized as structurally deficient according to the FHWA definition. All of these bridges are either currently scheduled for repair/replacement or are programmed for repair. Nationwide 47,052 bridges out of 616,087 bridges or 7.6% are structurally deficient from the most recent data in 2018.



Cherry Valley interchange

BRIDGE INSPECTION PROCESS

For many transportation agencies, the overall bridge condition rating is a single number that factors into prioritizing bridges for rehabilitation or replacement. Since the bridge deck condition is not part of this rating, the deck is typically not a driving force behind bridge replacement. However, the deck is the most visible bridge component to the traveling motorist and directly affects general rideability and driver safety. Due to these factors, the deck is considered as integral factor in the overall bridge condition rating and, therefore, the Illinois Tollway places a priority on programming bridge deck repairs.

To account for bridge deck condition, the CE, in conjunction with the Illinois Tollway, created an Overall Condition Index (OCI) that quantifies the condition of Illinois Tollway bridges. The OCI is a weighted representation of the deck, super-

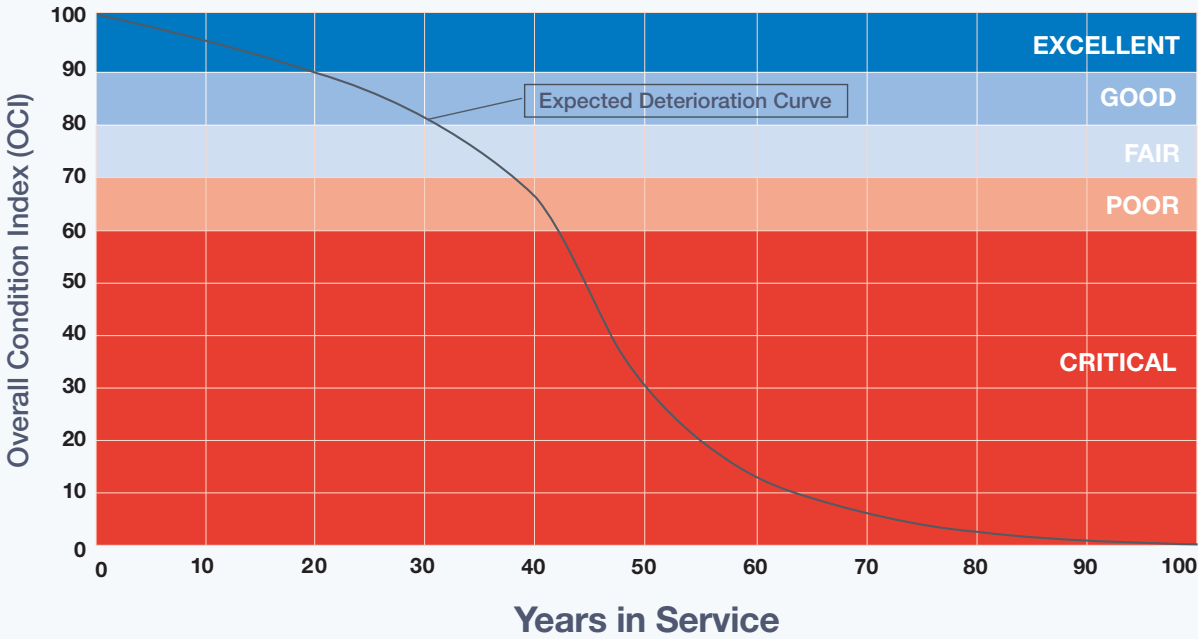
structure and substructure ratings based on field inspection and is intended to provide an overall indication of the structural integrity of a bridge. A higher weight is placed on the deck rating because bridge decks tend to deteriorate faster than the other components of the bridge.

The OCI is a number on a scale from 0 to 100, with 100 representing to the condition of a newly constructed bridge. The individual ratings of elements, such as joints, diaphragms or bearings, are not included in the OCI calculation; however, these ratings are generally used to develop future repair contracts (additional details are in the section on Supplemental Inspections). The OCI replaced the “Overall Condition” rating that had been used prior to 2005 to classify the bridges. The following provides descriptions of the bridge Overall Condition Index numbers:

Table 3-10 Overall Condition Index Descriptions

OVERALL CONDITION	CONDITION INDEX	OVERALL CONDITION INDEX DESCRIPTION
Excellent	≥ 90	No problems or some minor problems noted. Generally, no action required.
Good	89 – 80	Some areas of minor deterioration. Minor repairs would prevent or delay additional deterioration.
Fair	79 – 70	Structural elements are generally sound but exhibit minor section loss or deterioration. Repair Contract likely needed within five years.
Poor	69 – 60	Advanced section loss. Repair Contract should be initiated within two years.
Critical	< 60	Advanced section loss and deterioration. Local failures possible. Immediate attention needed.

Figure 3-6: Bridge Condition Summary



The following types of inspections are performed biannually by the Illinois Tollway: Routine Inspections, Supplemental Inspections, Element Level Inspections, Fracture Critical Inspections, Damage Inspections, and Special.

Routine Inspections: Bridges throughout the Illinois Tollway system are inspected every two years by Illinois Tollway staff. Bridge inspection Team Leaders for the Routine (Biennial) Inspections assign a condition rating to each of the three main bridge components: (1) deck, (2) superstructure and (3) substructure. For culverts, one overall condition rating is assigned.

Supplemental Inspections are performed as a proactive effort for continuous improvement. Defined as Illinois Tollway Supplemental Inspections,

these inspections are different than the FHWA and IDOT definition of Special Inspections which are intended to monitor a specific structural feature, repair activity, or condition that must be monitored more frequently than Routine, Fracture Critical, or other inspection types require.

Supplemental Inspections are generally performed on bridges identified during the previous year’s Routine Inspections as having a small number of outstanding repair activities that do not affect the structural load-carrying capacity of the bridge. Supplemental Inspections are typically performed for monitoring or providing repair recommendations for those activities. Bridges selected for Supplemental Inspection had one or more bridge components and/or elements rated 6 (satisfactory) or worse in the 2016 or 2017 Routine (Biennial) Inspections.



Drone Inspection Testing

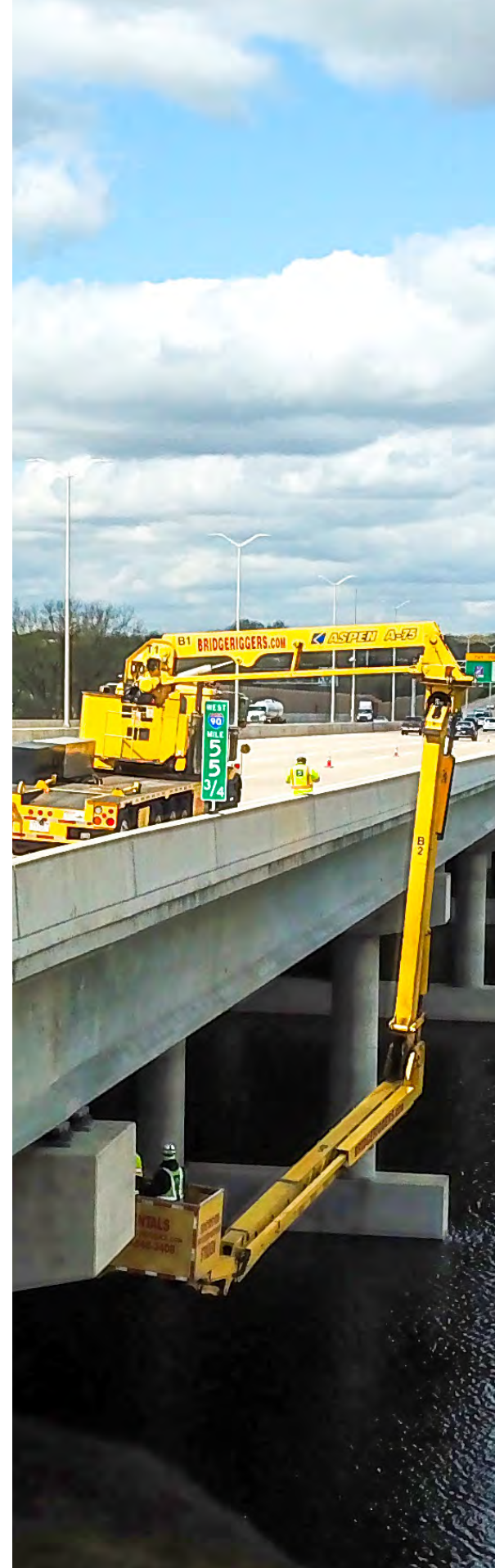
All Supplemental Inspections are conducted primarily to determine an initial or updated rough scope and timeframe for required bridge repairs. These bridges continue to be fully inspected biennially, as are all bridges on the Illinois Tollway system.

Damage Inspections: As part of the Asset Recovery Services, the Illinois Tollway inspects bridges that have sustained damage from vehicle impacts or other events as needed. Damage Inspections are typically included as part of the Supplemental Inspections.

Fracture Critical Inspections: The Illinois Tollway also inspects Fracture Critical bridges as required by FHWA. The FHWA administers the *National Bridge Inspection Standards* (NBIS), which “applies to all structures defined as highway bridges located on public roads” (*IDOT Structural Services Manual*, 2017). Fracture Critical Inspections are typically included as part of the Supplemental Inspections.

Element Level Inspections: Unlike Biennial Inspections, Element Level Inspections require continuously updated quantities for the primary bridge elements. In addition, since the field inspections require a quantification of different defects that vary per the material or environment of a specific bridge element, each bridge element is also classified per material (i.e. concrete, steel or elastomeric), as well as location and environment (i.e. elements under bridge joints or whether elements are exposed to high or low truck traffic volume). Data collection for Element Level Inspection is performed in accordance with the American Association of State Highway and Transportation Officials (AASHTO) *Bridge Element Inspection Manual* and the *IDOT Manual for Bridge Element Level Inspection*.

During 2017, the CE began collecting Element Level Inspection data (elements, quantities and breakdown by defect) for all bridges on the Illinois Tollway system. Field Element Level Inspection data is submitted to IDOT for submittal to FHWA.

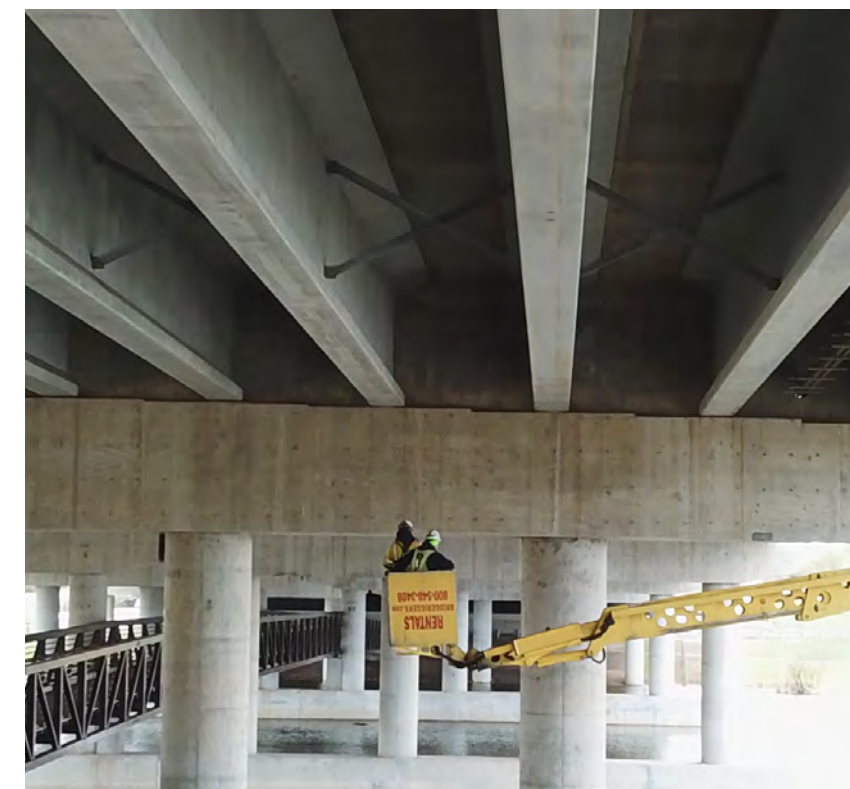


Snooper inspection of I-90 Bridge over Fox River

Element Level Inspection data is used proactively to aid in future programming of bridge repairs as well as new capital programs.

Special Inspections: Bridges that have a specific structural feature, deficiency or condition that must be monitored more frequently than Routine, Underwater or Fracture Critical Inspection Types require. Such Special Inspections are typically initiated by the Illinois Tollway Program Manager. Special Inspections are typically included as part of the Supplemental Inspections.

FHWA Special Inspections: The Illinois Tollway may inspect bridges that have a specific structural feature, deficiency, or condition that must be monitored more frequently than Routine, Fracture Critical, or other inspection types require. The Illinois Tollway Structures Program Manager typically initiates FHWA Special Inspections. Special Inspections are typically included as part of the Supplemental Inspections.



Snooper inspection of I-90 Bridge over Fox River

BRIDGE INSPECTION SUMMARY

Repair activities identified as part of the various structural inspections during the current cycle are logged and tracked through the Illinois Tollway’s transportation asset management system. The Illinois Tollway also develops repair recommendations and cost estimates outside the inspection cycle on an as needed basis. As applicable, memoranda and FHWA-required bridge inspection forms are provided to IDOT by the Illinois Tollway.

Overall, in 2019, the Illinois Tollway performed 771 bridge inspections for five different inspection types. More than one type of inspection may be performed on a given bridge during an inspection cycle depending on various factors as discussed previously. As such, the total number of inspections performed is greater than the number of bridges that were inspected during the cycle. The bridges inspected from September 1, 2018, through September 30, 2019, are discussed in this summary, and any bridges inspected after September 30 will be discussed as part of the 2020 inspection summary.

Table 3-11: Bridge Inspections Performed in 2019

INSPECTION TYPE	2019 NO. OF STRUCTURES	M-SECTIONS
Routine Inspections	353	M-1, M-2, M-3, M-5, M-7, M-8, M-12, M-14
Supplemental Inspections*	72	M-1, M-2, M-3, M-4, M-7, M-8, M-11, M-12, M-14, M-16
Element Level Inspections	341	All M-sections
Fracture Critical Inspections	3	M-2 (BN 247, BN 263), M-8 (BN 821)
Damage Inspections	2	M-1 (BN 169), M-7 (BN 713)
Special Inspections	0	N/A
TOTAL	771	

* Note: Supplemental Inspections were previously referred to as Special Inspections.

2019 Routine Bridge Inspections

During the 2019 inspection cycle, 353 routine bridge inspections were completed. Many of the bridge decks which pass over the Illinois Tollway are not under the Illinois Tollway’s jurisdiction. However, these bridge decks are included with the inspection as an informational courtesy to the responsible agency. These condition ratings (deck, superstructure, substructure and culvert) are based on a 10-point rating scale in accordance with FHWA guidelines.

2019 Supplemental Bridge Inspections

Of the 72 bridges with Supplemental Inspections performed during the 2019 inspection cycle, several bridges exhibited structural or safety defects over traffic, including spalling of the underside of the bridge deck or vertical face of parapet wall. However, no bridges were identified as requiring immediate structural repairs due to the load-carrying capacity of the bridge. The Illinois Tollway Maintenance Division was notified and scaled loose concrete or completed repairs at 19 locations. These bridges are identified in Table 11.

Table 3-12: Bridges with Completed Repairs by Maintenance Division

BRIDGE ID	BRIDGE DEFECT DESCRIPTION	TASK ID AND PRIORITY	YEAR OF REPAIR COMPLETION
105	Scaling of beam bottom flanges	36632; PRC-1	2019
171	Deck underside scaling	18-04810; PRC-1	2019
175	Deck underside scaling	18-62975; PRC-1	2019
181	Deck underside scaling	35784; PRC-1	2019
183	Deck underside scaling	4891; PRC-1	2019
184	Deck underside scaling	4896; PRC-1	2019
859	Deck underside scaling	18-62103; PRC-1	2019
1449	Deck underside scaling	19-03103; PRC-1	2019
1476	Deck underside scaling	18-02975; PRC-1	2019
269	Scaling of beam bottom flanges	19-01158; PRC-1	2019
368	Deck underside scaling	18-06919; PRC-1	2018
374	Replace damaged guardrail	5250; PRC-1	2018
341	Utilities repair	5113; PRC-1	2019
414	Re-attached guardrail	21864; PRC-1	2019
417	Replace bent railing	5255; PRC-1	2018
426	Repair approach slab	21863; PRC-1	2019
433	Deck underside scaling	18-11457; PRC-1	2019
747O	Scaling of beam bottom flanges	18-11333; PRC-1	2018
861	Deck underside scaling	19-57094; PRC-1	2019

2019 Element Level Bridge Inspections

Within the Illinois Tollway System, 341 Element Level bridge inspections occurred during the 2019 inspection cycle. Element Level Inspection data was collected for every bridge this year where Routine Inspections were performed, except for walkway structures at toll plazas and bridges that are entirely under the jurisdiction of and maintained by another agency. The inspection data has been submitted to the Illinois Tollway, which will then be submitted to IDOT for submittal to FHWA. Inspection data includes quantity and element information from available plans as well as quantity breakdowns by condition from field inspections.

2019 Fracture Critical Bridge Inspections:

Fracture Critical Inspections were performed on three bridges within the Illinois Tollway system as part of the 2019 inspection cycle, as noted in the following table:

2019 Damage Inspections:

Damage Inspections for two bridges were performed within the Illinois Tollway system as part of the 2019 inspection cycle. Details of these inspections are as follows:

Bridge 713: I-90 over Elevator Road, I-90 Milepost 4.76

A truck crash on October 3, 2018, impacted the south fascia beam over WB I-90, and caused additional damage to the northern most beam, near the east pier. OMS Tasks 18-603220, 18-60227, 18-60228 and 18-60229 were created, and repairs are being planned.

Bridge 169: I-294 Northbound over 95th Street, I-294 Milepost 17.70

A truck crash on January 15, 2019, caused damage to the southeast parapet and two embedded electrical boxes. OMS Tasks 19-00024, and 19-0022, were created and repairs are planned for inclusion within Contract I-18-4391.

Damage resulting from these incidents did not impact the overall structural load-carrying capacity of each bridge.

2019 Special Inspections:

There were no Special Inspections performed within the Illinois Tollway system during the 2019 inspection cycle.

2019 FHWA Special Inspections:

There were no FHWA Special Inspections performed within the Illinois Tollway system during the 2019 inspection cycle.

BRIDGE REPAIR ACTIVITY SUMMARY

More than 435 repair activities were identified or updated during bridge inspections and logged into the Cartegraph OMS database. The most common defects, representing about 75% of all repair activities, included:

- Approach slab repairs at 45 bridges
- Bearing cleaning, painting or repairs at 51 bridges
- Bridge deck sealing at 18 bridges
- Bridge railing / guardrail repair or replacement at one bridge
- Bridge joint repairs at 32 bridges
- Bridge joint replacement at 36 bridges
- Bridge scupper or downspout cleaning at 17 bridges
- Downspout drain repair or replacement at 11 bridges
- Slopewall repairs at 17 bridges
- Substructure concrete repairs at 38 bridges
- Substructure steel repairs at five bridges
- Substructure erosion repairs at three bridges
- Superstructure concrete repairs at 40 bridges
- Superstructure steel repairs at five bridges
- Utility repairs at six bridges

Inspection findings and further details are summarized in the subsequent sections. More detailed inspection results can be found in the 2019 Bridge Annual Field Inspection Report.

Table 3-13: Fracture Critical Inspections

FRACTURE CRITICAL BRIDGES FOR HIGHWAY BRIDGES (NBIS)			
Bridge ID	M-Section	Location Description	Year Inspected
247	M-2 (TS)	I-55 Ramp A over I-294	2019
FRACTURE CRITICAL BRIDGES FOR NON-HIGHWAY BRIDGES (NON-NBIS)			
Bridge ID	M-Section	Location Description	Year Inspected
263	M-2 (TS)	Pedestrian Bridge (Maple Avenue) over I-294	2019
821	M-8 (EW)	Canadian National Railroad over I-88	2019



Drone Inspection Testing at SB I-355 to NB I-55 Flyover

BRIDGE RECOMMENDATIONS

It is recommended that the Illinois Tollway continue existing maintenance activities for all bridge structures on the Illinois Tollway’s system. Existing maintenance activities include cleaning, painting, patching and vegetation control. For increased bridge preservation and to maintain the existing conditions and elements, it is recommended that activities such as deck sealing, deck patching and joint repairs continue to be included with programmed preservation and rehabilitation contracts. [Along with these activities, it is recommended that the Illinois Tollway continue to plan bridge rehabilitation improvements and capacity enhancements, such as deck replacements, bridge widenings, superstructure replacements and removal of fracture critical bridge components, that will extend the useful life of a structure.](#)

The Illinois Tollway should focus bridge maintenance attention on work that will reduce exposure to corrosive elements on critical structural members and connections, thereby extending service life. It is also recommended that the Illinois Tollway continue to partner with state and local agencies to clarify maintenance jurisdictions of crossroad bridge elements and transfer ownership of crossroad bridges to respective agencies. This action will aid in decreasing long-term costs to the Illinois Tollway. Lastly, it is recommended that the Illinois Tollway continue to be an industry leader regarding bridges and bridge preservation through investigation into new technologies and techniques for constructing, preserving, rehabilitating and replacing bridges.

[and populated residential or commercial areas adjacent to the tollway; however, the purpose of these walls is to minimize visual impacts of the Illinois Tollway by providing a visual screen between the tollway system and adjacent properties or another roadway.](#) Most Illinois Tollway sight screen walls consist of wood panels or cast-in-place concrete.

In several cases, retaining walls may also support roadway lighting units or other ancillary structures, such as overhead sign structures or roadway signs. Noise abatement walls may have attached roadway signs, as well as fire hydrant or emergency access doors, depending on the length of the structure.

As of 2019, the Illinois Tollway has 943 structural walls under its jurisdiction.

Table 3-14: Structural Wall Types—Systemwide

STRUCTURAL WALL TYPE	SYSTEM QUANTITY
Retaining Walls	492
Noise Abatement Walls	431
Sight Screen Walls	20
TOTAL STRUCTURAL WALLS	943

3.2.2 STRUCTURAL WALLS

The Illinois Tollway maintains a variety of structural wall types across its system that include retaining walls, noise abatement walls and sight screen walls.

Retaining walls are typically relatively rigid walls used for supporting the soil mass laterally so that the soil can be retained at different levels on the two sides. Retaining walls are structures designed to restrain soil to a slope that it would not naturally maintain. [Retaining walls are generally constructed along the Illinois Tollway when spacing is limited or a complex design is required.](#) Most of the Illinois Tollway’s retaining walls consist of cast-in-place concrete, precast concrete, or Mechanically Stabilized Earth (MSE) systems.

Noise abatement walls are solid obstructions installed in Illinois Tollway’s right-of-way between the roadway and populated residential or commercial areas adjacent to the tollway. These walls do not completely block all noise; however, they reduce overall noise levels. [Noise abatement walls are installed as needed in accordance with the Illinois Tollway’s Traffic Noise Study and Abatement Policy.](#) Illinois Tollway noise abatement walls typically consist of wood, masonry, or precast panels with wood, steel, or concrete posts that may or may not have concrete drilled shaft foundations.

[Sight screen walls are similar to noise abatement walls in that they also create an obstruction in Illinois Tollway’s right-of-way between the roadway](#)



Concrete Panel Noise Abatement Wall on I-355 southbound

STRUCTURAL WALLS
INSPECTION PROCESS

Visual inspections of the structural walls located throughout the Illinois Tollway’s system are performed annually through two methods. The first method is for a team of inspectors to walk along the structural wall faces. The other method of inspection is via high definition video of a wall captured by cameras mounted on Unmanned Aerial Vehicles (UAV). This method is preferred in areas where access to walls is restricted or presents a safety concern.

Due to the number of structures to be inspected and a relatively slow rate of deterioration, the inspection efforts are scheduled as a multi-year task. The structural walls throughout the Illinois

Tollway system are generally inspected on a four-year cycle. Newly constructed structures or those last rated in excellent condition may be inspected on a slightly extended cycle due to the slow rate of deterioration and anticipated excellent condition for several years. [Approximately one quarter of the structural walls are inspected each year. Additional inspections are conducted as needed to confirm repairs or monitor outstanding repair activities.](#)

An overall condition rating is assigned to each structural wall inspected. To improve objectivity and uniformity between Maintenance divisions and inspectors, a condition rating system is used for structural wall inspections. The condition ratings are based on a five-point scale that is described in the following table.

Table 3-15: Structural Wall Inspection Condition Rating

RATING	RATING CONDITION	RATING DESCRIPTION
1	Excellent	There are no problems noted.
2	Good	Good condition exists with only minor problems noted.
3	Fair	Fair condition exists with minor section loss, cracking, or spalling observed.
4	Poor	Poor condition exists with signs of advanced deterioration, section loss, wide cracks, water seepage and out-of-plumb but stable condition. Wall requires close monitoring.
5	Critical	Critical condition exists with major defects, significant deterioration and section loss, obvious vertical or horizontal movement affecting wall stability. Wall requires replacement or immediate attention.

During a structural wall inspection, any observed repair activity is assigned a condition rating from 1-Excellent to 5-Critical. Prior to 2017, the overall condition rating of the structural wall was assigned based on the most significant repair activity. Beginning with 2017 structural wall inspections, the overall condition rating of the structural wall is assigned based on the extent and severity of all individual repair activities observed during the inspection using the criteria in the following figure.

For structural walls rated in excellent to fair condition, repair activities are typically minor and do not require immediate attention. These repair activities are usually addressed by a future contract as budget and schedule permit. For structural walls rated in poor or critical condition, repair activities require more immediate action than those rated in excellent to fair condition. Depending on the severity, these repair

activities are either transmitted to the Illinois Tollway’s Roadway Maintenance Division for immediate repair or planned for inclusion in a future contract.

STRUCTURAL WALLS
INSPECTION SUMMARY

In 2019, a total of 236 structural walls were inspected, 198 walls were inspected as part of routine annual inspections and an additional 38 were supplemental inspections.

A majority (79%) of the structural walls inspected in 2019 were rated in excellent to good condition. The following chart summarizes the most recent inspection and condition rating assigned for the 236 structural walls inspected during the 2019 inspection cycle.

Figure 3-7: Structural Wall Condition Categories—Overall

Severity	5 – Critical	Critical		
	4 – Poor	Fair	Poor	
	3 – Fair	Good	Fair	
	2 – Good	Excellent	Good	
Identified Wall Condition		Low	Medium	High
		< 2% of Wall Length	2% to 50% of Wall Length	> 50% of Wall Length
Extent				



Bridge Mounted Noisewall on I-90 over Touhy Avenue

Figure 3-8: Structural Walls Inspected in 2019 Condition Summary

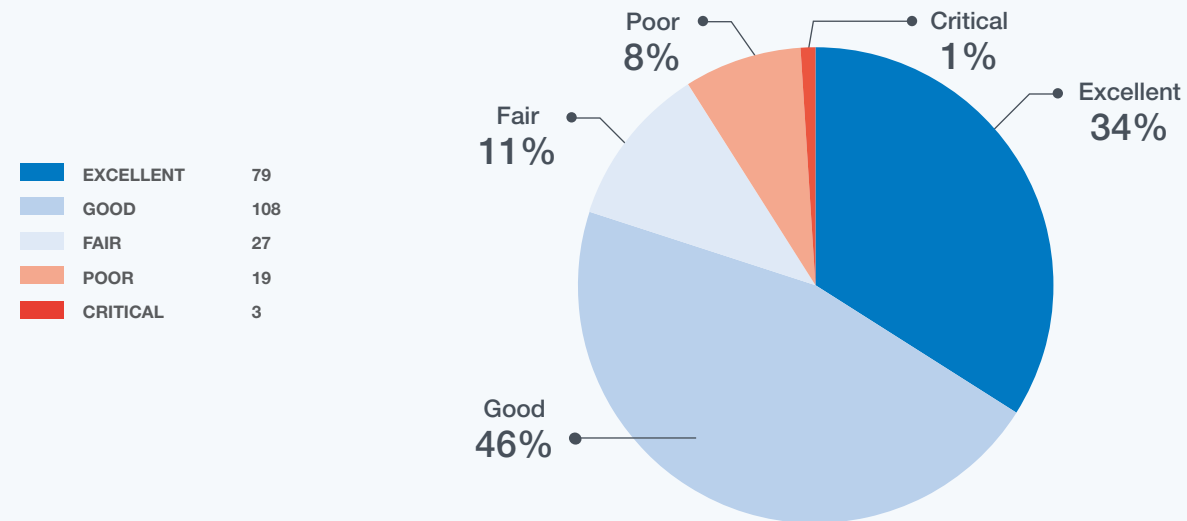
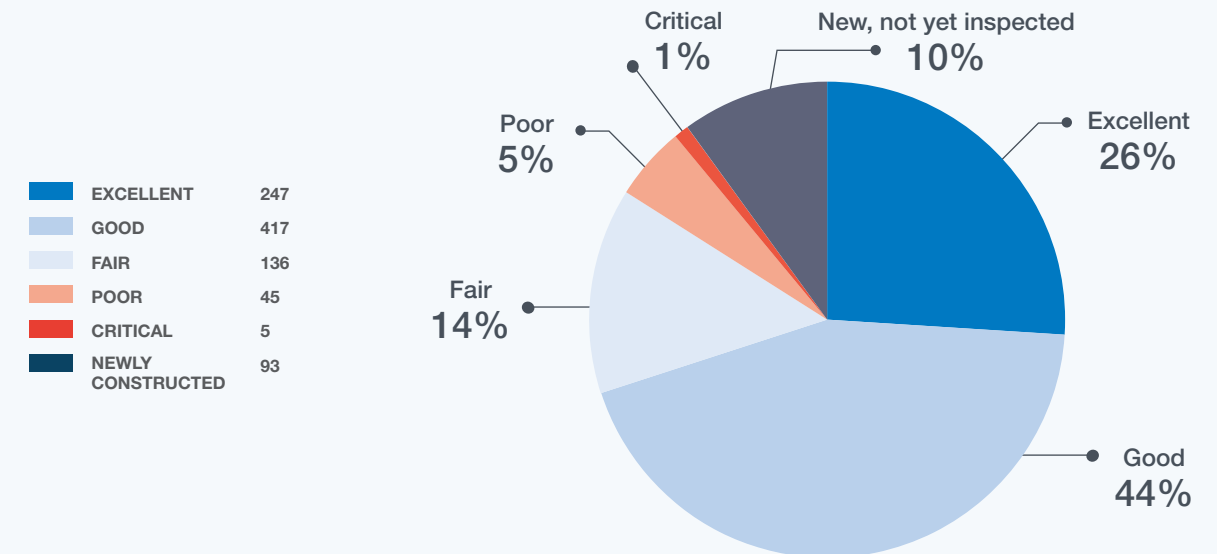


Figure 3-9: Structural Wall Condition Summary (All Walls)



The 2019 annual structural wall inspection resulted in 19 structural walls being assigned a condition rating of poor and three structural walls assigned a condition rating of critical.

Each of the structural walls that were identified as being in poor or critical condition have been programmed for repair. In some cases, repairs have been deferred to coincide with other planned work in the area where prudent. Of the structural walls assigned a condition rating of poor in 2019, five have been transmitted to the Illinois Tollway's Roadway Maintenance Division for repair, the remaining walls are programmed to be included within upcoming repair contracts.

In addition to routine structural wall inspections, the Illinois Tollway performs damage inspections on an as needed basis for asset recovery services. In 2019, the Illinois Tollway performed four damage inspections on structural walls in various maintenance sections across the Illinois Tollway's system.

M-07:

- NW22.95N WB - R (Asset ID: 107523): Noise Abatement Wall, Masonry Block, I-90 Westbound MP: 22.95.
- Car accident on 5/10/2019. Cartegraph OMS Task 19-17956 (Noisewall) was created and repaired by M-7.

M-08:

- EW129.15N EB (Asset ID: 108506): Noise Abatement Wall I-88 Eastbound MP: 129.15.
- Damage to panel 29 of 50 from car accident on 10/15/2019. Cartegraph OMS Task 19-61372 ((Noisewall) was created and will be repaired by JOC (Job Order Contracting) in 2020.

M-14:

- NS25.50N NB (Asset ID: 114527): Noise Abatement Wall I-355 Northbound MP: 25.5.
- Car accident on 4/29/2019. Cartegraph OMS Task 19-15874 ((Noisewall) was created and repairs were completed under Contract 4256.
- NS25.50N NB (Asset ID: 114527): Noise Abatement Wall I-355 Northbound MP: 25.5; Car accident on 5/6/2019. Cartegraph OMS Task 19-16868 ((Noisewall) was created and repairs were completed under Contract 4256. Systemwide Structural Wall Conditions

As of 2019, the majority (80%) of the 943 system-wide structural walls are rated in good to excellent condition based on the four-year inspection period from 2016 through 2019, including new structural walls (not yet inspected).

In total, only 6% of Illinois Tollway structural walls are rated in poor (5%) or critical (<1%) condition.

Detailed inspection results for each structural wall are contained in the *2019 Structural Wall Annual Field Inspection Report* submitted under separate cover.

STRUCTURAL WALLS RECOMMENDATIONS

To properly maintain the Illinois Tollway's structural wall inventory, the following are recommended:

- Continue to perform routine maintenance on structural walls. Examples of typical routine repair activities are: crack sealing and concrete repairs, repair or replacement of wood planks and panels and void filling for retaining walls.
- Continue clearing and mowing vegetation along both faces of structural walls.
- Continue programming repair activities in construction contracts for structural walls that are outside the capabilities of the Illinois Tollway's Roadway Maintenance Division, as budget and schedule permit.
- Continue to monitor and track structural wall repairs that are currently programmed for repair under an Illinois Tollway contract.

3.2.3 OVERHEAD SIGN STRUCTURES

Overhead sign structures, sometimes referred to as gantries, are typically installed at locations where signs posted on the side of the highway would be difficult for drivers to see or as part of the Illinois Tollway’s active traffic management system. Overhead signs include signs over any portion of the Illinois Tollway, including the shoulders, that require vertical clearance to allow vehicles to pass underneath. [Overhead signs are used to provide the traveling public with clear information under a variety of conditions, directly above the roadway.](#)

Illinois Tollway overhead sign structures include cantilever structures (one support), span-type structures (two supports) and bridge-mounted structures either above the Illinois Tollway or attached to the Illinois Tollway system bridges. Typically sign structures support static signs, digital message signs (DMS), or Active Traffic Management System (ATMS). Other equipment for tolling or the Intelligent Transportation System (ITS) is supported as necessary by the sign structures, as well as associated lighting.

Table 3-16: Overhead Sign Structure Types

SIGN STRUCTURE TYPE	SYSTEM QUANTITY
Span Truss	484
Cantilever	175
Monotube or Gantry	160
Bridge-Mounted	81
TOTAL SIGN STRUCTURES	900 *

* Note: Quantity includes structures noted as removed during the current inspection year.

[In total, the Illinois Tollway currently maintains 900 overhead sign structures, of varying ages, within its system. Most sign structures, 84%, are less than 20 years old.](#) The following table summarizes the sign ages across the entire system.

Table 3-17: Age of Overhead Sign Structures

AGE	NUMBER OF SIGNS*	PERCENT OF OVERALL INVENTORY
0-9 Years	355	40%
10-19 Years	397	44%
20-29 Years	96	11%
30-39 Years	39	4%
40-60 Years	13	1%

* Note: Quantity includes structures noted as removed during the current inspection year.

OVERHEAD SIGN STRUCTURES INSPECTION PROCESS

Overhead sign structures located throughout the Illinois Tollway system are visually inspected on an annual basis. While inspections occur on an annual basis, the effort to inspect all signs is planned as a multi-year task due to the number of structures to be inspected. [Generally, Illinois Tollway overhead sign structures are inspected over a four-year cycle with approximately one quarter of overhead sign structures inspected each year.](#)

The overhead sign structure inspection schedule is coordinated as a joint effort between Illinois Tollway inspectors and the Illinois Tollway Sign Shop with the intent of addressing minor repairs or adjustments, such as tightening sign clips or connection bolts, during field inspection. Lift equipment required for field inspection is coordinated with the

Illinois Tollway’s Sign Shop as well as the Roadway Electric Shop depending on availability.

To verify the structural adequacy of overhead sign structures, Supplemental Inspections and Damage Inspections are conducted as needed to confirm repairs or monitor known defects for select overhead sign structures. The various types of overhead sign structure inspections are described in the subsequent sections.

Routine Annual Inspections:

- As part of its planned regular inspection cycle, the Illinois Tollway inspects a quarter of all overhead sign structures each year.

Supplemental Inspections:

- More frequent inspections performed beyond the routine annual Inspections to monitor a specific structural feature, deficiency or condition as identified.

- Overhead sign structures last rated in poor or critical condition are automatically scheduled for annual re-inspection to monitor their condition.

Damage Inspections:

- As part of the Asset Recovery Services, the Illinois Tollway also inspects sign structures that have sustained damage from vehicle impacts or other events.

An overall condition rating is assigned for each overhead sign structure inspected. To improve objectivity and uniformity between Maintenance sections and inspectors, a standardized condition rating system is used for overhead sign structure inspections. The condition ratings are based on a five-point scale that is described in the following table.

Table 3-18: Overhead Sign Structure Inspection Condition Rating

RATING	RATING CONDITION	RATING DESCRIPTION
1	Excellent	There are no repair activities noted.
2	Good	Minor deficiencies noted, such as minor rust or foundation cracking, loose bolts, missing safety chains, damaged lighting, sign legend/background problems, etc.
3	Fair	Moderate corrosion or foundation cracking/spalling, several loose bolts or loose pillow blocks/saddles, etc.
4	Poor	Signs of moderate structural cracking, section loss, heavy foundation cracking/spalling or collision damage. Sign structure requires monitoring.
5	Critical	Major structural repair activities required or loose components that could fall on roadway. Overhead sign requires immediate attention.

The majority (757 out of 900, or 84%) of the overhead sign structures inspected during the 4-year inspection cycle (2016 – 2019) are rated in excellent to good condition.

For overhead sign structures rated in excellent to fair condition, identified repair activities are typically minor and do not require immediate attention. These repair activities are addressed by the Illinois Tollway’s Roadway Maintenance Division or are included in a future contract as budget and schedule permit. Overhead sign structures rated in poor to critical condition require more immediate action and repair activities are assigned to Illinois Toll-

way’s Roadway Maintenance Division work orders or are included in an upcoming contract.

OVERHEAD SIGN STRUCTURES
INSPECTION SUMMARY

Routine Inspections

In 2019, the Illinois Tollway inspected a total of 236 of its 900 overhead sign structures. This included 221 signs as part of the routine annual inspections, 13 supplemental inspections, and two damage inspections. The 2019 overhead sign structure inspection locations were as follows:

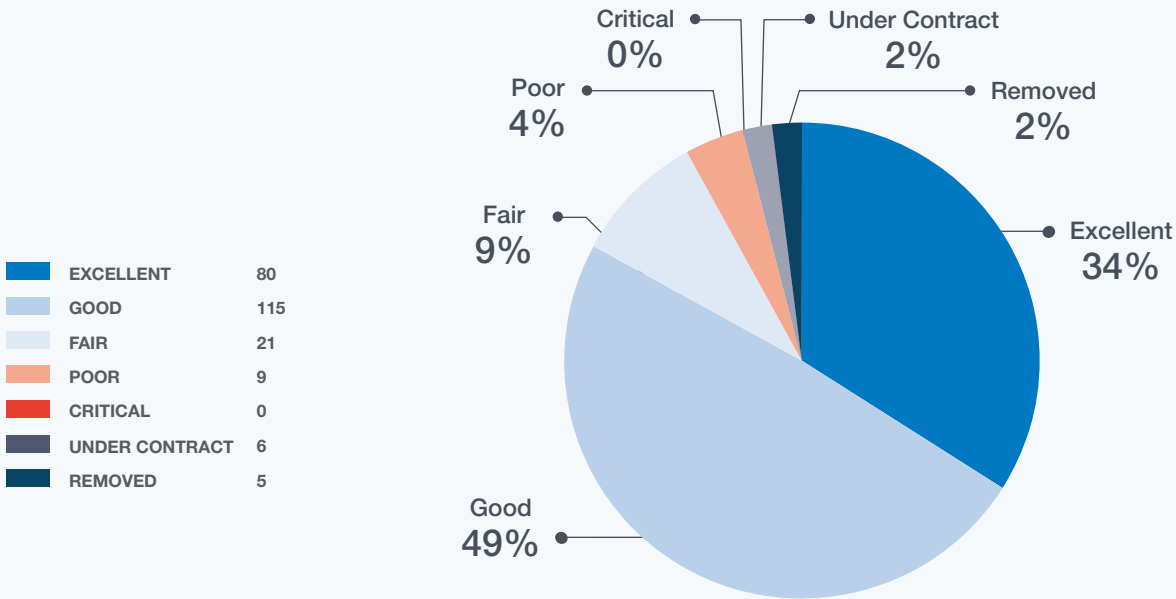
Table 3-19: 2019 Overhead Sign Structure Annual Inspection Locations

INSPECTION TYPE	ROUTE AND M-SECTION	LOCATION (M-SECTION)	2020 INSPECTION QUANTITY
Routine	Tri-State Tollway (I-294)	Alsip (M-1)	31
	Edens Spur Tollway (I-94)	Gurnee (M-4)	38
	Jane Addams Memorial Tollway (I-90)	Schaumburg (M-5)	99
		Marengo (M-6)	46
	Veterans Memorial Tollway (I-355)	Downers Grove (M-14)	3
	Illinois Route 390 Tollway (IL-390)	Biesterfield (M-16)	4
Supplemental	Edens Spur Tollway (I-94)	Gurnee (M-4)	4
	Reagan Memorial Tollway (I-88)	Naperville (M-8)	1
		DeKalb (M-11)	1
	Veterans Memorial Tollway (I-355)	Downers Grove (M-14)	7
Damage	Jane Addams Memorial Tollway (I-90)	Rockford (M-7)	1
	Reagan Memorial Tollway (I-88)	DeKalb (M-11)	1
ALL INSPECTIONS:			236

Of the 236 overhead sign structures inspected in 2019, 92% are rated in fair to excellent condition. Nine sign structures were rated as poor and are

either currently being repaired/replaced or recommended for repair. None of the overhead sign structures inspected in 2019 are in critical condition.

Figure 3-10: 2019 Overhead Sign Structures Condition Summary-2019 Inspections



Sign structure inspection on I-90 Westbound



ITS Inspection at ORT Plaza 324

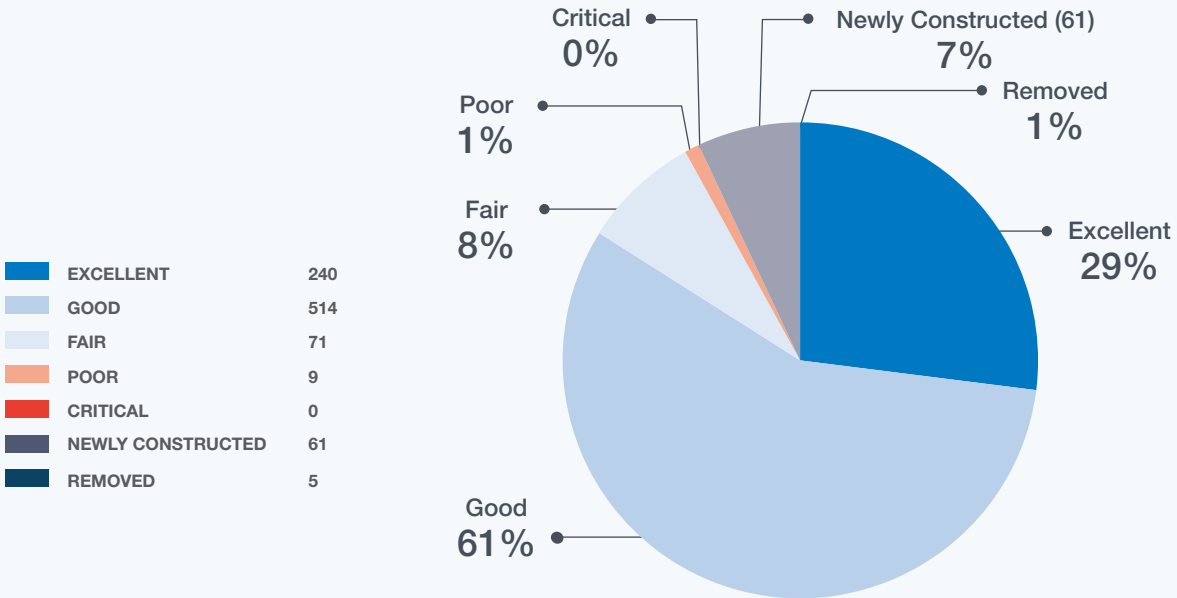
The following five overhead sign structures were removed in 2019:

- TS7.9C, SB (R) (Asset ID 2111): Cantilever over SB I-294 at Milepost 7.9
Sign structure removed, no longer required.
- TS8.1C, NB (R) (Asset ID 2104): Cantilever over NB I-294 at Milepost 8.1
Sign structure removed, no longer required.
- TS8.5C, SB (R) (Asset ID 2115): Cantilever over SB I-294 at Milepost 8.5
Sign structure removed, no longer required.
- EW78.6C, WB (Asset ID 1112): Cantilever over WB I-88 at Milepost 78.6
Sign structure removed with temporary ground-mounted sign in place.

- NW37.7T, EB (R) (Asset ID 10605): Monotube over EB I-90 at Milepost 37.7
Sign structure removed during Plaza Reconfiguration.

As of 2019, 84% of the 900 Illinois Tollway overhead sign structures in excellent to good condition (based on the 2016 to 2019 inspection cycle). Of the remaining signs, 8% are in fair condition and 1% are in poor condition. As of 2019 there are 61 recently installed overhead sign structures that are less than four years old and have not yet been inspected as part of the four-year cycle and are programmed into future inspection cycles.

Figure 3-11: Overhead Sign Structure Condition Summary-Systemwide



Detailed inspection results for each overhead sign structure are contained in the *2019 Overhead Sign Structure Annual Field Inspection Report*.

Supplemental and Damage Inspections

Each year there are overhead sign structure inspections performed in addition to the regular annual inspections to either monitor signs previously identified as being in poor or critical condition, monitor certain signs based on age and structure type, or inspect signs that sustained damage. In 2019, 15 additional inspections were performed as follows:

- Eight supplemental inspections for signs identified as being in poor or critical condition in the 2018 inspections
- Five supplemental inspections due to age and structure type
- Two damage inspections due to vehicle impacts.

Four of the eight signs identified as being in poor condition in 2018 have been removed from the system. However, in 2019, five additional signs were identified as being in poor condition, bringing the total number of signs in poor condition remaining to nine. These nine signs will be automatically included as part of the 2020 supplemental inspections.

OVERHEAD SIGN STRUCTURES
RECOMMENDATIONS

To properly maintain the Illinois Tollway’s overhead sign structure inventory, the following are recommended:

- Continue to perform routine maintenance on sign structures. Examples of typical routine repair activities are: loose nuts, loose or missing sign fasteners/clips, concrete sealing and repairs, spot painting/galvanizing and excessive vegetation.
- Currently, many repairs performed to overhead sign structures are performed under an Illinois Tollway contract. It is recommended that the Tollway investigate the option of creating a systemwide Job Order Contract (JOC) Program to increase efficiency and timeliness of sign structure repairs relating to incidents and inspection observations.
- Continue programming repair activities to overhead sign structures that are outside the capabilities of the Illinois Tollway’s Roadway Maintenance Division, as budget and schedule permit.
- Continue to monitor and track sign structure repairs that are currently programmed for repair by an Illinois Tollway contract. Continue lighting and electrical upgrades, such as:
 - Remove lighting and electrical systems that are no longer necessary due to the installation of highly reflective sign sheeting.
 - Install light emitting diode (LED) luminaires to replace existing luminaires systemwide, as already implemented in several Maintenance sections.



Toll Plaza 6 on eastbound I-90 to southbound IL-47

3.3 FACILITIES

Illinois Tollway Facilities consist of various buildings and non-roadway structures that support the Tollway operations as a whole, including toll collection, operations, telecommunications, maintenance, power

distribution, and storm water management, among others. Each of these facilities play a vital role in the Illinois Tollway’s daily operations.

3.3.1 FACILITIES INVENTORY

The Illinois Tollway owns and operates 185 facilities of a wide variety across the system that enable and support toll collection and operations. There are several types of facilities throughout the Illinois Tollway system including maintenance buildings, toll plazas, tunnels, communication towers, intermediate power distribution and communication (IPDC) buildings, oases and pump station facilities. Each of these facilities are comprised of multiple and varied facility asset types including buildings, parking lots, manned and unmanned toll plazas, communication towers, fuel stations, etc. The table

below summarizes the Illinois Tollway’s systemwide facility inventory as of the 2019 annual inspections.

In addition to normal levels of depreciating value, the Illinois Tollway facilities undergo varying levels of environmental and physical damage due to their proximity to traffic and associated salt spray, flying debris and vehicle collision.

Due to accelerated depreciation resulting from these varying adverse conditions, facilities require regular physical inspections to assess their condition.

Table 3-20: Facilities Inventory Summary

FACILITY TYPE	QUANTITY	PERCENTAGE
Administration	4	2%
Maintenance	14	8%
Salt Dome	2	1%
Toll Plaza	88	47%
Telecommunications Tower	8	4%
IPDCs	57	31%
Oasis / Park n Ride	9	5%
Pump Station	3	2%
TOTAL	185	

3.3.2 FACILITIES INSPECTION PROCESS

Illinois Tollway facilities are visually inspected on an annual basis. Due to the large number of facilities, the varying degrees of complexity between each facility type and the fluctuating anticipated rates of depreciation, all Illinois Tollway facilities are generally inspected on a four-year cycle. However, inspections also focus on average or poor rated facilities. Therefore, approximately one quarter of Illinois Tollway facilities are inspected each year.

Facility inspections are non-invasive, visual assessments of observable conditions; destructive or non-destructive testing is not performed, and no physical samples are collected as part of these inspections. The objectives are:

- Assess the general condition of each facility and its associated site elements
- Document existing conditions and inventory facility assets
- Assess and apply condition ratings on the general condition of Illinois Tollway’s facilities and associated site elements
- Identify elements in need of remedial work
- Make repair and/or replacement recommendations
- Assess the remaining useful life of each facility and associated element or asset

The evaluations and recommendations are based upon visual observations by subject matter experts and discussions with Illinois Tollway Building Maintenance Division personnel and review of available reports and prior inspection summaries. Emphasis is given to specific issues identified by on-site personnel who are knowledgeable of the actual operating conditions of the facility.

During the 2019 inspection cycle, the CE team continued to utilize drones to visually document facilities, canopy roofs and building roofs that historically required the use of lifts operated by Illinois Tollway personnel. This was a limitation that often prevented these assets from being inspected.

Facility inspections are not performed by a licensed structural engineer. Any identified repair activities, including foundation or masonry wall cracks that are observed during these inspections, are noted for further review and consideration by a structural engineer.



Installation of Plows at M-1



DeKalb Oasis

OPERATIONS MANAGEMENT AND RATING SYSTEM

Both the Illinois Tollway and CE team utilize Cartegraph to record and track identified repair tasks or replacement recommendations, document the condition of all facilities and their components, and track associated depreciation. The OMS system prioritizes repair tasks using Priority Rating Codes (PRC) that are on a 1 to 5 scale with the highest priority as a PRC-1 to the lowest as a PRC-5. Asset conditions are rated using an Overall Condition Index (OCI), which is a scale using 0 as the lowest (worst) rating and up to 100 as the highest (best). Only numbers in increments of ten are used in Cartegraph OMS as rating values. An OCI rating is applied to individual components of an existing building, site, toll plaza, fueling station, communications tower or pump station.

An overall facility condition rating called the Container Condition Index (CCI), also a 0 to 100

scale in increments of 10, is calculated by applying established weights and depreciation curves to individual asset OCI ratings. Facilities in the same immediate area, including those typically on both sides of a roadway, entrance, or exit, are grouped as ‘Facility Sites’. Cartegraph OMS rates Facility Sites using the facility OCI and other site conditions, along with independent asset ratings to calculate an overall CCI Facility Site rating. Both the OCI and CCI are weighted condition ratings derived from associated, individual component weights, or pre-established relative component importance rating. A higher priority is assigned to more critical systems, such as structural elements, life safety systems or back-up power systems.

A detailed explanation of condition ratings utilized for visual inspections of facilities, OCI and CCI ratings and PRC’s can be found in the 2019 Facilities Annual Field Inspection Report.

3.3.3 FACILITIES INSPECTION SUMMARY

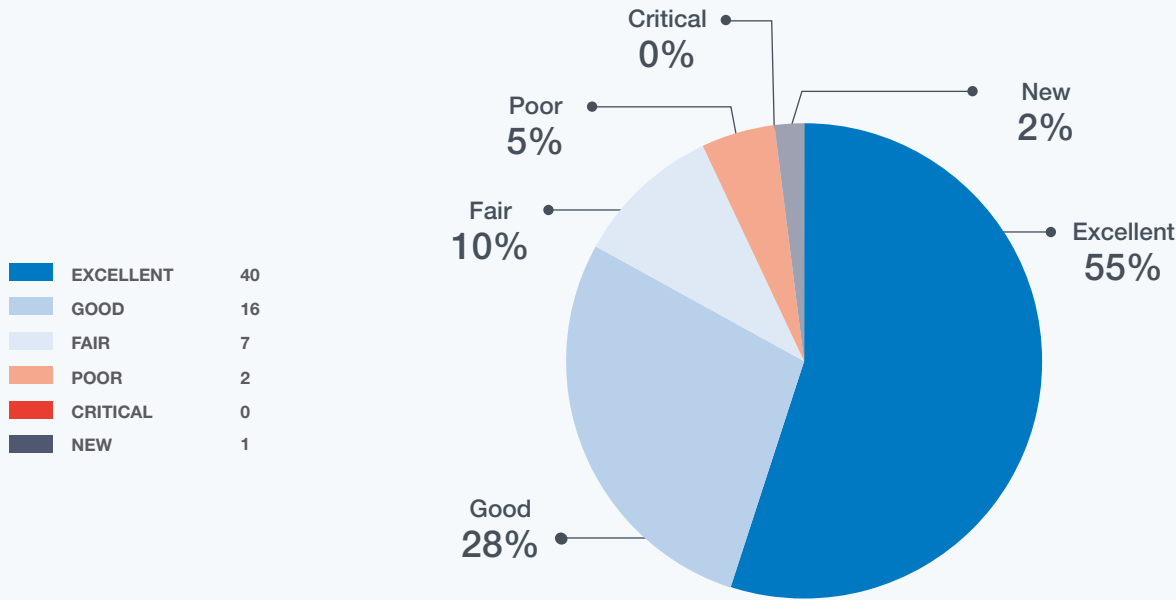
In general, 2019 facility inspection ratings showed that Illinois Tollway facilities are in good overall condition. In 2019, 67 of 185 facilities were inspected including the Central Warehouse, Central Support,

the Belvidere Oasis, a new warehouse facility, a maintenance facility, IPDC's on I-90, toll plazas, salt domes and telecommunication towers.

Table 3-21: 2019 Facility Inspection Type Summary

FACILITY TYPE	QUANTITY
Administration	2
Maintenance	1
Toll Plaza	25
Telecommunications Tower	1
IPDCs	34
Oasis/Park n Ride	1
Pump Station	1
Salt Dome	2
TOTAL FACILITIES:	67

Figure 3-12: 2019 Facility Condition Summary-Inspections



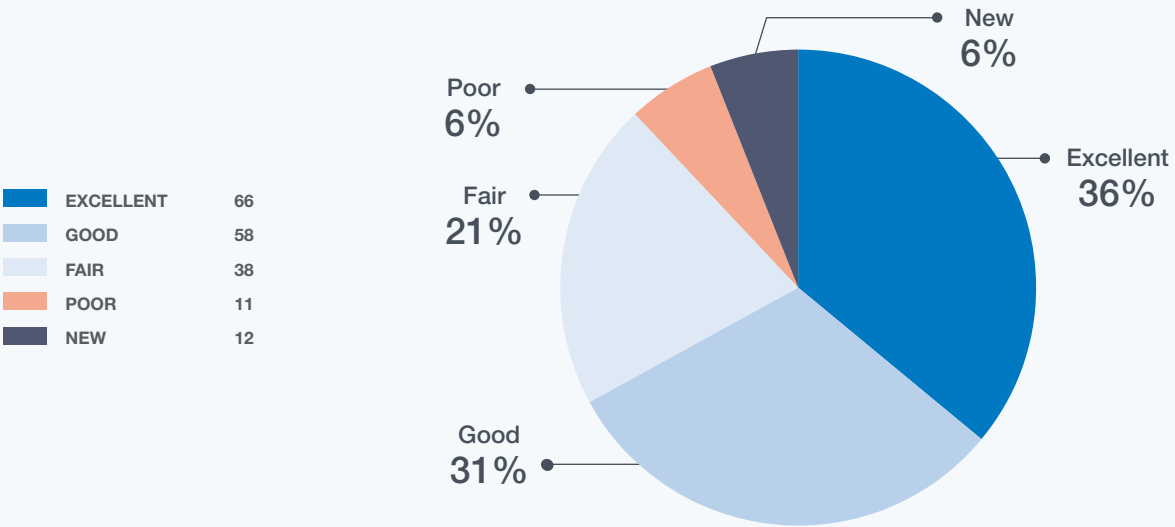
During the 2019 inspections, two facilities were rated in poor condition Plaza 31 and Plaza 47. Various repairs are required at these locations including foundation repairs, external and internal building repairs, and electrical repairs. Plaza 31 was identified as part of *Move Illinois* as a facility in need of replacement due to the age of the structures and equipment, along with multiple conditions requiring repair or replacement.

Due to recent major capital program construction, there have been 12 newly constructed or reconstructed Illinois Tollway facilities systemwide. While many of these facilities may have not yet been formally inspected, they receive an initial inspection as part of construction walkthrough activities. These facilities are rated as being in excellent condition.

Most of facilities throughout the Illinois Tollway system have generally been assigned a condition rating of excellent (new) to good over the previous four-year inspection cycle. There were 20 facilities assigned a condition rating of fair, 38 facilities assigned a condition rating of poor and none that were assigned a condition rating of critical during this period.

Additional inspection details for all Illinois Tollway facilities are available in the 2019 Facilities Annual Field Inspection Report.

Figure 3-13: 2019 Facility Condition Summary-Systemwide



Repair activities noted at facilities rated in excellent to fair condition are typically minor and do not require immediate attention. These repair activities are typically addressed by the Illinois Tollway's Building Maintenance Division or are programmed to be included in a future contract as budget and schedule permit.

Repair activities requiring more immediate action are recorded in the Illinois Tollway's transportation asset management system for tracking. These repair activities are assigned to work orders for immediate completion by the Illinois Tollway's Building Maintenance Division or for inclusion in an upcoming contract.

During the 2019 inspection cycle, 21 repair tasks were completed and documented, with many more undocumented tasks that were identified and completed by maintenance personnel during their routine day-to-day operations.

In addition, any facilities last rated in poor or critical condition are periodically field-checked by the Illinois Tollway to establish whether the condition has worsened until repairs can be performed.

There are currently no Illinois Tollway facilities with a critical rating.

Facility inspection data is utilized by the Illinois Tollway in scheduling repair activities and replacements of facility components, along with the planning and estimating of maintenance or repairs. As inspections occur throughout the year, the quantities that are developed and included in the report should be used as estimates only. Any maintenance activities and contracts that were active during the inspection cycle may have repaired some conditions prior to the release of this report. In addition, since weather, traffic, time and other unforeseen factors may increase the severity and/or the number of conditions requiring repair or replacement, a follow-up inspection is required prior to development of final repair plans.

Detailed inspection results for each facility are contained in the 2019 Annual Reports for each Illinois Tollway Maintenance section, which are submitted separately for each inspection year.



Pace Bus Terminal, I-90 Barrington Road

3.3.4 FACILITIES RECOMMENDATIONS

Complete facility inspection reports are provided in the *2019 Facilities Annual Field Inspection Report*. That information is supplemented with additional inventory information, inspection results, photographs and other condition descriptions on the Cartegraph OMS system, searchable by facility name and task number. It is recommended that the Illinois Tollway perform the necessary repair activities and replacements identified within each Maintenance section's inspection report.

The Illinois Tollway has addressed most of the identified facility deterioration issues across the system, including by constructing new plaza control buildings, implementing major renovations and replacing maintenance facility buildings at mainline toll plazas and maintenance yards. While these repair activities have extended the remaining useful life, many of the Illinois Tollway buildings and facilities are more than 50 years old and the condition of the major systems, such as mechanical, electrical and plumbing, continue to deteriorate. This is resulting in inefficiencies and higher operational costs. The Illinois Tollway is planning for large-scale repair activities or replacement projects by establishing a capital plan for systemwide Illinois Tollway assets. The current capital plan, *Move Illinois*, is due to expire in 2026.

As part of *Move Illinois*, the following maintenance facility replacements are near completion or will soon begin:

- Maintenance Facility M-1
- Maintenance Facility M-7
- Maintenance Facility M-6
- Maintenance Facility M-8

The following facility replacements or major refurbishments, which include five of the remaining seven maintenance facilities, are planned to be completed by *Move Illinois* within the next six to seven years:

- Maintenance Facility M-3
- Maintenance Facility M-4
- Maintenance Facility M-5
- Maintenance Facility M-16 (Major Refurbishment in 2020)
- Central Warehouse (Davey Rd.)

Other identified major facility refurbishment or replacement for facility sites that have either exceeded their expected useful life, are associated with escalating maintenance costs or are of an arrangement or technology that has become obsolete and should be replaced by a more cost-effective approach within the next 10 years, are highlighted in the following list:

- Plaza 47 (Halsted Street), Installed 1960
- Plaza 37 (I-55 Joliet Road), Installed 1958
- Plaza 27 (Willow Road), Installed 1972
- Plaza 63, Installed 1960
- Plaza 56B EB, Installed 1958
- Plaza 53, Installed 1961

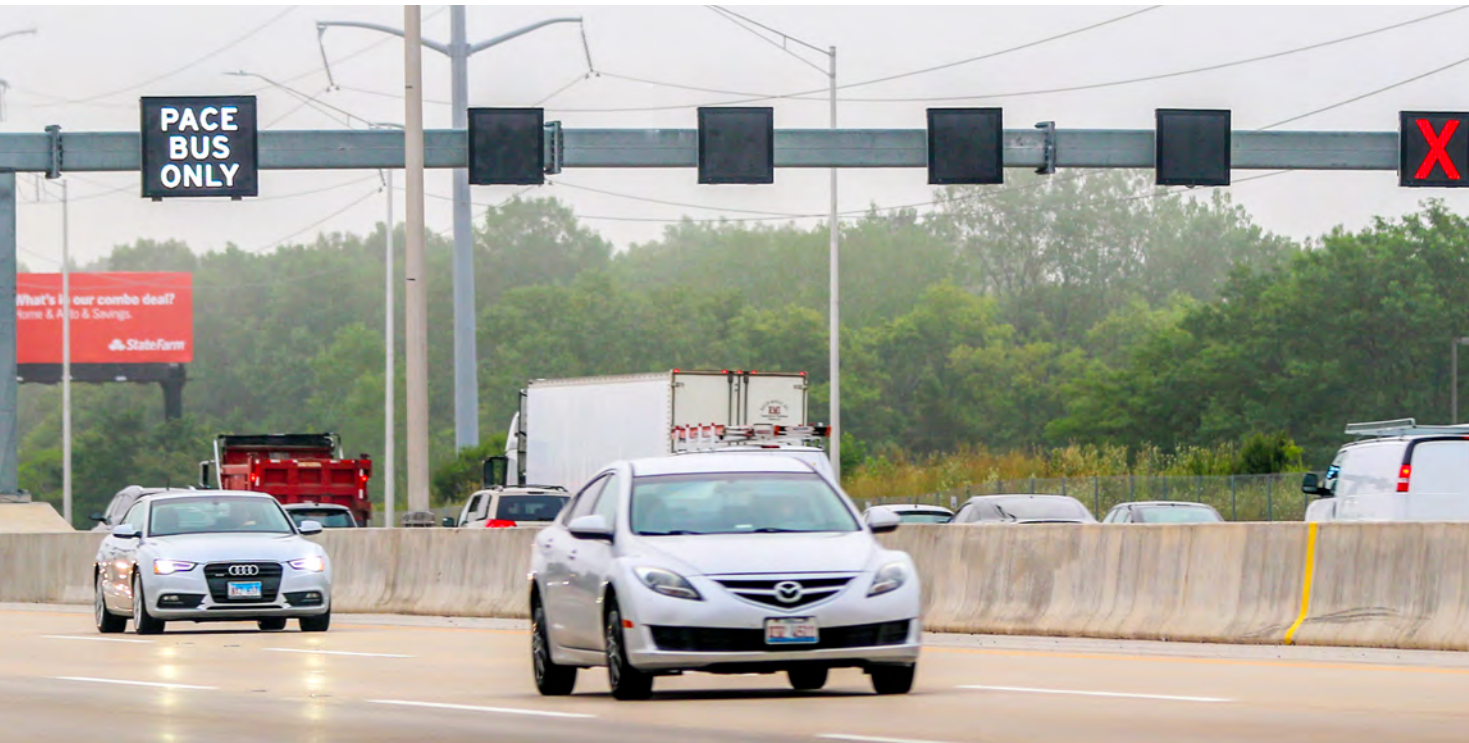
It is recommended that refurbishment or replacement of these facilities be accomplished through a future contract as budget and schedule permit.

The Illinois Tollway utilizes its Job Order Contracting (JOC) program to implement more involved asset repairs or replacements. During the 2019 inspection cycle, 18 JOC task orders or DUR processes have been initiated. And 50 have been issued over the last 10 years. It is recommended that the Illinois Tollway continue regular maintenance and repair activities utilizing the JOC program to maintain its facilities and associated assets in an efficient operating condition. For continued capital planning activities, it is recommended that the Illinois Tollway continue to schedule facility replacements in advance of their respective obsolescence timelines.

3.4 INTELLIGENT TRANSPORTATION SYSTEM (ITS)

The Illinois Tollway continues to invest in and expand its Intelligent Transportation System (ITS) infrastructure to enhance the safe and efficient operation of its system of highways. The Illinois Tollway performs a yearly inspection of its ITS assets that include closed-circuit television (CCTV) cameras, vehicle detection systems (VDS), dynamic message signs (DMS), roadway weather information systems (RWIS), weigh-in-motion (WIM) stations, advanced warning flash beacons, active traffic management systems (ATMS), and infrastructure that is associated with each ITS device (cabinet enclosures, pole mounting structures, site foundations).

In 2019, the Illinois Tollway System had 2,992 ITS assets deployed systemwide (not including ITS specific cabinets or enclosures). The 2019 inspections found that 94.8% of these ITS assets are operating within their intended lifecycle and are found to be in “good” condition. Communication between these devices from a networking perspective is considered to be stable and reliable with majority (77%) of their devices utilizing fiber optic cable installations over cellular and wireless radio communications.



Active Traffic Management System (ATMS) on eastbound I-90

3.4.1 ITS INVENTORY

Intelligent Transportation System technologies advance transportation safety and mobility and enhance productivity by integrating advanced communications technologies into transportation infrastructure and into vehicles. Intelligent Transportation Systems encompass a broad range of wireless and traditional communications-based information and electronic technologies. Intelligent Transportation System applications focus on both the infrastructure and vehicle technology, as well as integrated applications between the two that are key enabling aspects of a intelligent transportation system.

Deployment of ITS devices on the Illinois Tollway began in the late 1980s with the installation of RWIS systems for monitoring atmospheric and pavement conditions. The Illinois Tollway’s ITS system was further expanded in the late 1990s with the I-PASS electronic tolling initiative and the installation of a systemwide fiber optic communications network.

Since then, the ITS system has been expanded and modernized to reduce the incident response and reaction timeline by including a systemwide network of communications, monitoring and traveler information tools. This system has enhanced the Illinois Tollway’s ability to meet its overarching traffic and incident management goals and objectives of improving the mobility, efficiency and safety of the Illinois Tollway routes.

There are several types of ITS devices and component systems deployed throughout the Illinois Tollway. These include:

- ITS Cabinet: An enclosure for CCTV, VDS and flash beacon devices.
- Closed-Circuit Television (CCTV) Camera: Device used to monitor traffic conditions and to determine appropriate incident responses.

- Vehicle Detection System (VDS): Device that utilizes either microwave radar or Bluetooth technology for traffic and queue detection along the mainline and ramps.
- Flash Beacon: Warning lights used in conjunction with queue detection.
- Dynamic Message Sign (DMS) Cabinets: A ground mounted device cabinet that houses the components for a DMS. This asset consists of the device cabinet and site foundation.
- Dynamic Message Sign (DMS): Electronic, remotely changeable signs that inform motorists of current traffic conditions, including travel times.
- Weigh-In-Motion (WIM) Cabinets: A ground mounted device cabinet that houses the components for a WIM station. This asset consists of the device cabinet and site foundation.
- Weigh-In-Motion (WIM) Stations: Vehicle detection and weigh scales that identify overweight trucks operating at speed to establish probable cause for a fine or removal from roadway.
- Roadway Weather Information System (RWIS) Cabinet: A device cabinet that houses the components for a RWIS. This asset consists of the device cabinet, mounting structure, and site foundation.
- Roadway Weather Information System (RWIS): A field data collection system comprised of fixed roadside sensors that measure and report environmental and pavement conditions.
- Active Traffic Management System (ATMS): It’s an operational concept that uses smaller DMS with a highly specialized purpose of informing motorists of current lane conditions for advance warnings. These associated devices are known as lane control usage signs (LCS) and 3ftx9ft full matrix display signs. The ATMS concept is currently deployed along I-90 within the M-5 maintenance section.

These devices and component systems are integrated into the Illinois Tollway’s centralized Traffic & Incident Management System (TIMS), which is monitored and controlled 24/7/365 from the Traffic Operations Center (TOC) at the Central Administration Building. TIMS is a comprehensive system management platform that is used to monitor traffic and roadway conditions in real-time, manage response to and clearance of incidents, monitor construction zones and efficiently communicate with a variety of stakeholders including first responders, Illinois Tollway staff, other Traffic Management Centers, the media and directly to motorists.

The following table summarizes the primary type and number of Illinois Tollway ITS devices that are deployed systemwide as of 2019.

Table 3-22: ITS Asset Breakdown

ASSET	QUANTITY
ITS Cabinets	671
CCTV	1,309
VDS	433
Flash Beacon	4
DMS Cabinet	70
DMS	77
WIM Cabinet	7
WIM	7
RWIS Cabinet	19
RWIS	19
ATMS	376
TOTAL	2,992



Active Traffic Management System (ATMS)

The total number of ITS assets deployed as of 2019 is summarized by Illinois Tollway corridor in the following table. Assets that are located outside of Illinois Tollway right-of-way (ROW), denoted as

IDOT right-of-way in the below table, are typically Dynamic Message Signs for motorists entering the Illinois Tollway system or CCTV cameras for monitoring each DMS display message.

Table 3-23: ITS Asset Summary

ITS ASSET TYPES	ROADWAY						TOTAL	TOTAL (%)
	JANE ADDAMS MEMORIAL TOLLWAY (I-90)	REAGAN MEMORIAL TOLLWAY (I-88)	TRI-STATE TOLLWAY (I-94/I-55)	VETERANS MEMORIAL TOLLWAY	ILLINOIS ROUTE 390 TOLLWAY (IL-390)	IDOT RIGHT-OF-WAY		
ITS Cabinets	274	75	200	63	55	4	671	22.4%
CCTV	430	238	425	165	47	4	1,309	43.8%
VDS	157	50	126	33	59	8	433	14.5%
Flash Beacon	0	0	4	0	0	0	4	0.1%
DMS Cabinets	35	8	11	8	4	4	70	2.3%
DMS	42	8	11	8	4	4	77	2.6%
WIM Cabinets	4	0	2	1	0	0	7	0.2%
WIM	4	0	2	1	0	0	7	0.2%
RWIS Cabinets	3	6	5	3	2	0	19	0.6%
RWIS	3	6	5	3	2	0	19	0.6%
ATMS	376	0	0	0	0	0	376	12.6%
TOTAL	1,328	391	791	285	173	24	2,992	
TOTAL (%)	44.4%	13.1%	26.4%	9.6%	5.8%	0.8%		

The ITS infrastructure also consists of other supporting components such as network switches, which are Ethernet switches that allow the above ITS devices to communicate with each other across the Illinois Tollway's network through TIMS. The Illinois Tollway's ITS devices transmit and receive data through the network switches using the following communication types:

- Fiber Optic Communication: Uses a cable that contains strands of glass fibers inside an insulated casing that transports field device data using generated light. Fiber optic cables can carry larger loads of data over longer distances. The design also allows for no interference due to outside elements.
- Cellular Communication: Uses wireless cellular technology, such as 3G or 4G (LTE), to transmit field device data to the nearest cellphone tower. This type

of communication is generally deployed in areas where there are no fiber optic cables installed and where no clear line of sight could be established for wireless radios. Cellular communication is also referred to as "leased" communication because service is usually provided through a third party.

- Wireless Radio Communication: Uses a radio device that transmits field device data via properties of electromagnetic waves to a receiver. This type of communication works best with a clear line of sight between both the transmitter and receiver. Wireless communication is subject to interference due to outside elements.

Figure 3-14 is a illustrates the Tollway's relative utilization of these communication methods by the number of ITS devices deployed.

Figure 3-14: Communication Type Utilization–ITS Devices deployments

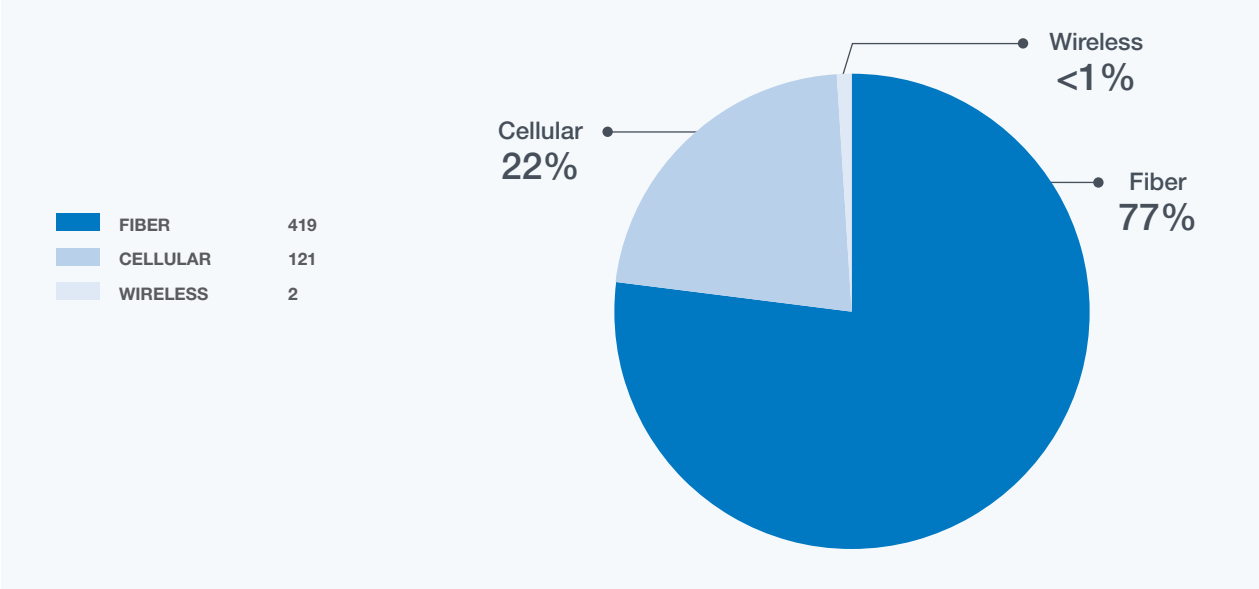
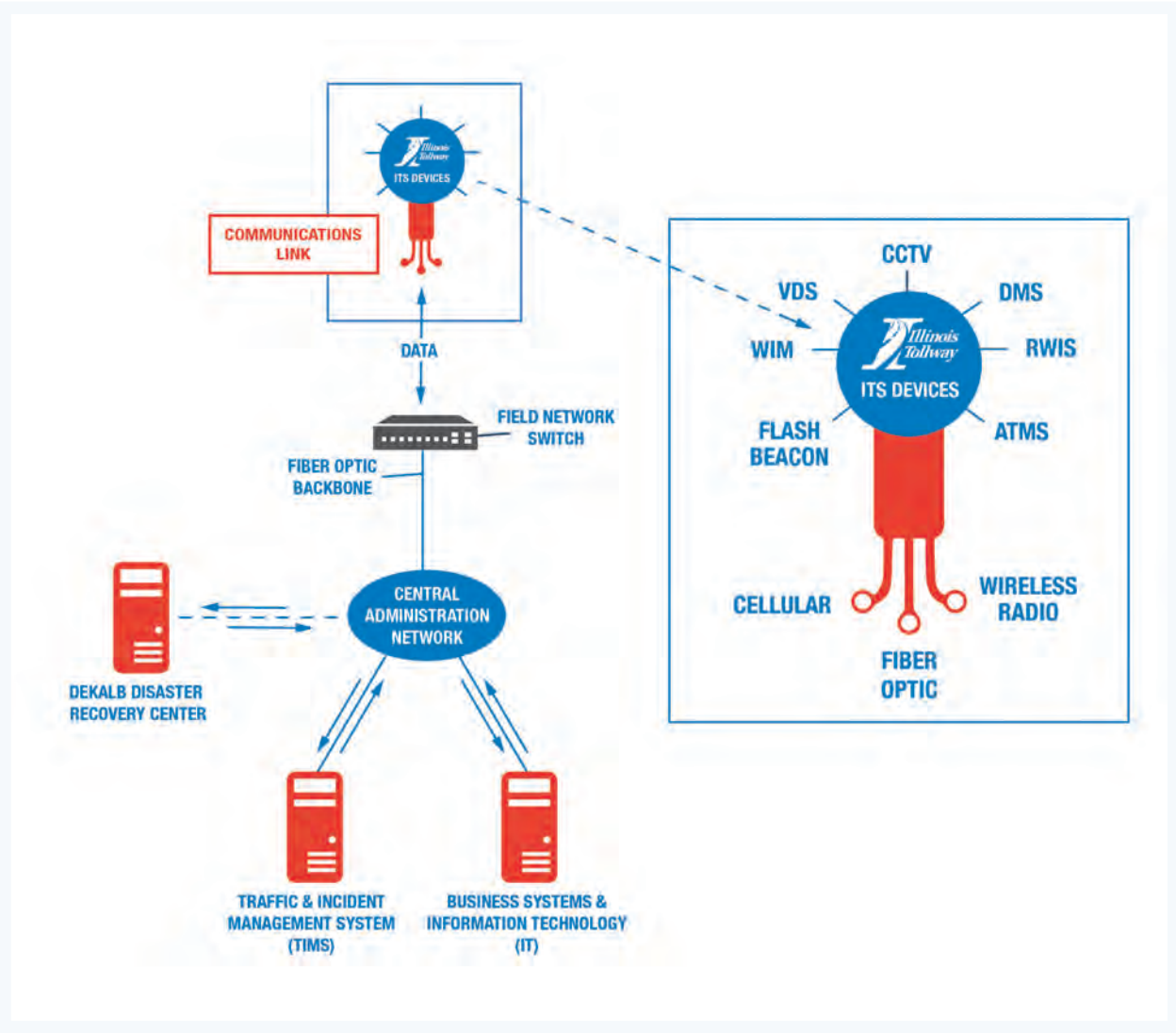


Figure 3-15: Illinois Tollway ITS Infrastructure Network Overview



3.4.2 ITS INSPECTION PROCESS

To efficiently manage and perform the ITS inspections, they were scheduled by corridor and by ITS asset type, with priority placed on any ITS asset that was not inspected in 2018. Assets that were located within an active construction zone were not inspected due to the increased safety risk to Illinois Tollway inspectors and oncoming motorists. Other assets that were deemed unsafe to be inspected by the inspector were noted and not completed as well. All ITS assets that were not inspected in 2019 will be prioritized in the 2020 inspection cycle.

ITS inspections assess the general condition of Illinois Tollway ITS devices and associated site elements, evaluate the remaining useful life for each device and/or component element, identify elements requiring preventative maintenance and determine repair or replacement recommendations. The evaluations and recommendations are based upon visual observations, discussions with Illinois Tollway ITS Maintenance personnel, consultation with equipment suppliers, and the reviews of available reports. Emphasis is placed on capturing specific issues identi-

fied by on-site personnel experienced with the actual operating conditions of the ITS equipment. Neither destructive nor non-destructive testing is performed, and no physical samples are collected as part of these inspections.

The data generated by these inspections is utilized by the Illinois Tollway to programing immediate repairs and replacements of various ITS components and to aid the Illinois Tollway ITS Maintenance Division in estimating and planning future maintenance repair needs.

Inspections were performed per the ITS Inspection Manual that is updated by the Illinois Tollway each year, prior to the inspection season. This manual sets forth the inspection criteria for each ITS asset as is referenced in the 2019 ITS Annual Field Inspection Report.

It is important for public agencies to maintain an updated record of assets and their conditions in a transportation asset management system. To manage assets in an effective and efficient manner, an agency must ensure that all assets are being maintained correctly and are not at risk of becoming a liability. For the Illinois Tollway, this means ensuring that assets are kept in a satisfactory condition for the sake of safety, quality and usefulness. The Overall Condition Index (OCI) is utilized to measure the condition of assets throughout the Illinois Tollway system.

OCI is a rating system used to evaluate an asset's condition on a scale from 0 to 100, 100 being the most satisfactory rating. The information collected during inspections is expressed using the following condition rating system:

100 to 90: Excellent

- New device, element, or component
- Device, element, or component is performing as intended
- No repair required
- Condition like new

89 to 70: Good

- Device, element, or component is performing as intended
- Only minor repair (i.e. paint, clean, etc.) required to return the device, element, or component to intended condition

69 to 50: Fair

- Device, element, or component is performing essentially as intended
- Device, element, or component is within the second half of their estimated useful lifecycle
- Substantial repair (i.e. component/system required replacement) required to return the device, element, or component to intended condition

49 to 30: Poor

- Device, element, or component has reached predicted end of useful life but is functioning
- Major components requiring extensive repair/ replacement work to return the device, element, or component to intended condition

29 to 0: Critical

- Device, element, or component is non-functioning
- Safety or environmental concerns are prevalent.

There are two types of OCI, Inspected and Estimated. An Inspected OCI is assigned when an inspector visually assesses the condition of an asset in the field. An Estimated OCI is calculated and assigned using an algorithm within the Illinois Tollway's Cartegraph OMS. The algorithm factors the asset's age, predicted performance, prior inspections and maintenance performed on the asset. If an asset is older and has had a considerable amount of work performed on it, the algorithm assigns an Estimated OCI that is lower than the inspected OCI.



ITS Cabinet Inspection between I-88 and I-355

3.4.3 ITS INSPECTION SUMMARY

For the 2019 ITS inspection cycle, the Illinois Tollway inspected all the Illinois Tollway’s ITS system assets that were not located in active construction areas.

For the 2019 inspection cycle, the overall ITS infrastructure was determined to be in “Good Condition” with an average OCI of 87.2. The following table summarizes the inspection results for the Illinois Tollway’s ITS infrastructure by corridor and ITS site.

Table 3-24: ITS Device Condition Summary by Corridor

ROADWAY	ITS SITE ¹	DMS SITE ²	RWIS SITE ³	WIM SITE ⁴	ATMS SITE ⁵
Jane Addams Memorial Tollway (I-90)	Excellent	Good	Excellent	Excellent	Excellent
Reagan Memorial Tollway (I-88)	Good	Excellent	Good	~	~
Tri-State Tollway (I-94/I-294/I-80)	Good	Good	Good	Excellent	~
Veterans Memorial Tollway (I-355)	Good	Excellent	Good	Fair	~
Illinois Route 390 Tollway (IL 390)	Excellent	Excellent	Excellent	~	~
OVERALL	Good	Excellent	Good	Good	Excellent

¹ITS Site consists of all associated devices (CCTV, VDS, flash beacon) along with their cabinet enclosures, pole mounting structures, and ground foundation.
²DMS Site consists of the DMS and LCS, along with its cabinet enclosure and ground foundation.
³RWIS Site consists of the RWIS devices, along with their cabinet enclosure, mounting structure, and ground foundation.
⁴WIM Site consists of the WIM sensors, along with the cabinet enclosure and ground foundation.
⁵ATMS Site consist of the LCS and 3x9 full-matrix display signs, along with their cabinet enclosure, mounting structure, and ground foundation.

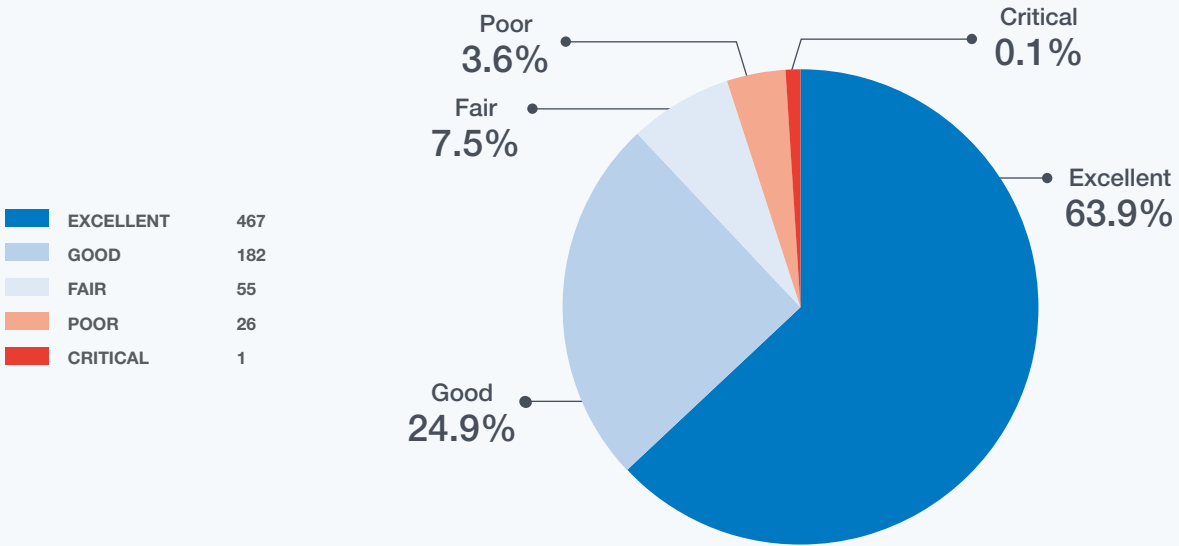


Gantry repair on WB I-90



Dynamic Message Board inspection on I-90 westbound at Hennig Road

Figure 3-16: ITS Device Condition Summary



Each type of ITS device has an expected lifecycle, at the end of which it will be scheduled for examination by a design engineer and considered for replacement under a Systemwide contract. The forecasted life of each major device category is as follows:

- CCTV: 10 years
- VDS: 10 years
- DMS: 15 years
- RWIS: 13 years
- WIM: 15 years
- ATMS: 10 years

Every ten years it is expected there will be a full replacement of the common CCTV and VDS devices, two battery replacements, and approximately 2/3 of the more expensive DMS, RWIS, and WIM installations will need replacement.

Detailed ITS inspection reports are included in the 2019 Annual Reports prepared for each Illinois Tollway Maintenance division.

While there were no major repair activities identified that would create a life-safety condition or have a moderate or high potential of affecting Illinois Tollway operations, there were issues noted during the inspection process. The maintenance concerns observed included, but were not limited to, the following:

- Missing rodent protections
- Safety covers not being present over the high voltage components in the cabinet
- Electrical grounding issues
- Site foundation issues
- Maintenance accessibility to ITS devices

Table 3-25: Percentage of ITS Devices Beyond Their Life Expectancy

ROADWAY	CCTV (10 YEARS)	VDS (10 YEARS)	FLASH BEACON (10 YEARS)	DMS (13 YEARS)	RWIS (10 YEARS)	WIM (15 YEARS)	LCS (13 YEARS)
Jane Addams Memorial Tollway (I-90)	0.5%	0.0%	~	7.1%	33.3%	0.0%	0.0%
Reagan Memorial Tollway (I-88)	6.3%	2.0%	~	25.0%	83.3%	~	~
Tri-State Tollway (I-94/I-294/I-80)	8.7%	6.3%	0.0%	100.0%	100.0%	0%	~
Veterans Memorial Tollway (I-355)	12.1%	6.1%	~	0.0%	100.0%	100%	~
Illinois Route 390 Tollway (IL 390)	0.0%	0.0%	~	0.0%	0.0%	~	~
System Overall	11.1%	2.6%	0.0%	24.2%	73.7%	0.0%	0.0%

Overall, 94.8% of all the Illinois Tollway’s ITS devices are operating within their intended lifecycle, and their infrastructures’ are estimated to be in “Good Condition”.

Inspection details are contained in the 2019 ITS Annual Field Inspection Report.

3.4.4 ITS RECOMMENDATIONS



The purpose of Intelligent Transportation Systems is to process and disseminate information in real time to respond to dynamic safety, traffic, and environmental conditions. It is an essential part of the Illinois Tollway’s system and processes in place to maintain a safe and reliable system for its users.

The Illinois Tollway benefits from an Intelligent Transportation System that is fully connected; information-rich; and able to address safety, mobility and environmental conditions. Updates and enhancements to the Tollway’s ITS network will positively affect all Illinois Tollway users and work to enhance livability for surrounding communities.

All poor or critical categorized conditions and ITS devices that are operating past their intended service lifecycle are recommended for replacement within the next three years as part of a systemwide maintenance or ITS maintenance contract. All ITS assets rated as critical will be scheduled for inspections every year until the asset has been replaced. This practice will continue to help the Illinois Tollway monitor the condition of those assets until they are replaced. All recommendations are made to ensure the ITS infrastructure of the Illinois Tollway operates as intended to promote a safe and efficient highway system.

3.5 ROADWAY APPURTENANCES

Illinois Tollway roadway appurtenances are visually inspected annually by the Illinois Tollway. This inspection consists of the recording of areas in need of repair from the edge-of-shoulder to the right-of-way fence including the drainage systems and all safety appurtenances. Repair quantities are then estimated and prioritized based on the level of severity. These quantities are used to assist the Illinois Tollway’s Roadway Maintenance Division in scheduling work activities and the Engineering Department in scheduling future contracts.



Dynamic Message Board inspection on I-88 eastbound

Based upon this information, an overall condition rating was assigned for each area. The overall condition ratings utilized for the visual inspections are provided in the following table.

Table 3.26: Roadway Appurtenances Inspection Ratings Summary

RATING	DESCRIPTION
Excellent	No activities requiring repairs other than preventative maintenance noted.
Good	Activities noted requiring repairs typically within the capabilities of the Illinois Tollway’s Roadway Maintenance Division.
Fair	Activities noted requiring repairs by contract or by the Illinois Tollway’s Roadway Maintenance Division. Activities requiring repairs by Contract are typically beyond the capabilities of the Illinois Tollway’s Roadway Maintenance Division due to size, quantity, or repair process.
Poor	Activities noted throughout which are beyond the capabilities of the Illinois Tollway Roadway’s Maintenance Division due to size, quantity, or repair process.

3.5.1 DRAINAGE SYSTEMS

Generally, visual inspection of the Illinois Tollway roadway drainage systems is performed annually, however some drainage assets are inspected on a four-year cycle. This inspection consists of visibly identifying any required repair activities of drainage structures, crossing culverts, slopes, ditches, detention basins, bioswales, and storm water outfalls.

The drainage systems throughout the Illinois Tollway are generally in good condition, and most of the embankment slopes are stable. Typical repair activities noted during the inspections included concrete headwall repair activities, drainage structures requiring cleaning or repair, gutter heaving or sinking, rill erosion, washouts, sinkholes and ditch restoration due to erosion.

Closed drainage systems are typical throughout the urban areas where curb and gutter is used along the roadway to control pavement drainage. These systems typically consist of storm sewers installed under the roadway pavement and shoulders that receive rain-

fall runoff via storm sewer catch basins. Only limited inspections can be performed on closed drainage systems due to access constraints; therefore, it is recommended that these systems be cleaned and televised to better determine their condition. Televising of closed drainage systems to identify areas of concern is programmed to occur prior to the development of designs for programmed roadway rehabilitation so that issues are addressed as part of the programmed roadway construction. As of 2019, there are 24,413 storm sewers, systemwide, and each are captured in Cartegraph.

Crossing culverts are pipes that generally cross perpendicularly under the roadway to allow water to continue to flow from one side of the roadway to the other. Culverts are inspected for functionality, physical damage, obstructions and conveyance. The crossing culverts throughout the Illinois Tollway system are generally structurally sound. However, some have exposed reinforcement bars, misaligned wingwalls, honeycombing of the concrete surface, open joints or



Culvert inspection in progress

deterioration of the metal pipe (metal pipe culverts), or require cleaning. Crossing culverts not replaced during recent reconstruction or rehabilitation projects may in some cases be over 50 years old.

Deterioration of older Corrugated Metal Pipes (CMP) that were installed as part of the original construction of the Illinois Tollway continues to be a concern in those roadway sections not recently reconstructed. CMP deterioration typically occurs along the flow line or at the joints of the pipe. This deterioration may lead to perforation of the pipe that results in the erosion of the supporting soil and backfill material during rain events creating voids beneath the roadway. As the volume of the voids increase, the probability of roadway pavement slab settlement or failure increases. In many cases, these pipes may have been extended due to roadway widening or other construction. Although the ends of these pipes may appear in excellent condition, further examination may reveal deterioration of the original pipe and separation at the joints where the original pipe joins the new.

Due to the collapse of several CMPs, in 2007, the Illinois Tollway completed a detailed systemwide inspection of CMPs with a diameter of three feet or greater. The purpose of this inspection was to identify CMP culverts that require lining, repair or replacement. Culverts classified as bridges by the Federal Highway Administration (FHWA) were not included in the inspection and are included with the bridge inspections.

Over time, most of the older CMPs have been replaced with reinforced concrete pipe as part of reconstruction or rehabilitation contracts. [Currently, there are 569 CMP storm sewers and seven CMP culverts known to exist systemwide.](#) Two maintenance contracts completed in 2010 repaired and/or lined existing CMPs with a diameter of three feet or greater that cross beneath the pavement. Although these contracts addressed many concerns with CMPs, smaller diameter and some non-mainline-crossing CMPs still require repair or replacement in future projects.

accidents be addressed within 24 hours, though in some cases material procurement timelines do not allow for adherence to the policy.

[The guardrail, terminals, and impact attenuators within projects as part of the Move Illinois and recently completed Congestion-Relief capital programs have been upgraded to meet Illinois Tollway standards in place at that time in adherence with the National Cooperative Highway Research Program \(NCHRP\) Report 350 or Manual for Assessing Safety Hardware \(MASH\), as appropriate.](#) Guardrail standards used by the Illinois Tollway are regularly updated to reflect current crash test data and new technologies, in conformance with the requirements of NCHRP Report 350 and MASH.

The NCHRP, which conducts research in areas of highway planning, design, construction, operation and maintenance nationwide, published *Report 350* in 1993. NCHRP Report 350 presents uniform guidelines for the crash testing of highway safety features, recommends evaluation criteria for the assessment of the crash test results and presents guidelines for the in-service evaluation of safety features. These guidelines are developed utilizing

current technology and the collective judgment and expertise of experts in the field of roadside safety design.

MASH is an update to NCHRP Report 350, for the purposes of evaluating new safety hardware devices based primarily on changes in the vehicle fleet. Any new or revised highway safety hardware under development as of the October 15, 2009, publication of MASH may continue to be tested using NCHRP Report 350 criteria. However, FHWA stopped accepting or reviewing requests for new or revised highway safety hardware tested using NCHRP 350 criteria after January 1, 2011. In the summer of 2015, the American Association of State Highway and Transportation Officials (AASHTO) established construction sunset dates for NCHRP Report 350 devices, whereas new roadway safety products must comply with the new MASH requirements.

The FHWA does not require that existing safety appurtenances be upgraded if they do not meet MASH. Installations of safety appurtenances are considered acceptable if they were installed per the standard at the time of installation. In other words, if the safety appurtenances were authorized

3.5.2 SAFETY APPURTENANCES

Illinois Tollway roadway safety appurtenance inspections are performed annually, or on an annual rotation cycle as appropriate. Safety appurtenances include positive protection devices (such as concrete barriers, guardrail, impact attenuators, and cable median barrier systems), as well as pavement markings, delineators, lighting, right-of-way fencing, and ground mounted signs. [All these systems are designed to work together to provide a safe and comprehensible system for the traveling public.](#)

Concrete Barriers, Guardrail/Terminals, Cable Median Barriers and Impact Attenuators

[Concrete barriers, guardrails, cable median barrier systems and impact attenuators throughout the Illinois Tollway system are generally in good to excellent condition.](#) Any repair activities are promptly transmitted to the Illinois Tollway's Division of Maintenance and Traffic for repair. Illinois Tollway policy requires that any guardrail/terminal safety concerns or damage resulting from vehicular



Type T-1 Guardrail Terminal

at the time of installation, they are permitted to be used to the end of their useful life. However, Illinois Tollway’s Risk Management Division consideration of the NCHRP *Report 350* lead to the recommendation that all existing guardrail installations which have not been successfully tested under NCHRP *Report 350* requirements be programmed to be upgraded to MASH-tested devices over the next several years. As such the Illinois Tollway is scheduled to meet or exceed the dates outlined by AASHTO for the installation of safety appurtenances.

In 2019, a detailed audit and inspection of existing guardrail, cable median barrier and impact attenuator installations was performed to provide a more comprehensive and concise condition assessment of these critical features. The audit and inspections were performed in the office by reviewing high definition geo-located 360-degree video footage of the system. This method allows for a thorough and safe inspection of guardrail allowing the inspectors to carefully review the data in the safety of the office. Per this audit there are 2,627 of these assets, with 78 repairs addressed systemwide in 2019.

Specific repair activities identified during the inspections are documented in the Annual Field Inspection Report prepared for each Maintenance

section. It is recommended that corrective repairs be performed by the Illinois Tollway’s Roadway Maintenance Division that are within their capabilities. All repair activities beyond the capabilities of the Roadway Maintenance Division are recommended for inclusion with future contracts.

Cable median barrier systems consist of tensioned cables extending between bridges and emergency turnarounds in grassy median locations to minimize the occurrence of vehicles crossing into oncoming traffic. There are few federal standards for cable median barrier systems; however, all installations are inspected to confirm that they meet the current industry practices. Cable median barrier systems are in excellent condition due to most of these assets being replaced or newly installed as of 2016. Currently they are installed:

- West of Deerpath Road on the Reagan Memorial Tollway (I-88)
- At the southern terminus of the Veterans Memorial Tollway (I-355)
- Along the Reagan Memorial Tollway (I-88) connector ramps with the Tri-State Tollway (I-294)
- Along Illinois Route 390

Table 3-27: Guardrail, Attenuators and Cable Median Barriers Systemwide

	TOTAL #	2019 DEFECT REPAIR
Guardrail Installations	1,898	63
Impact Attenuators	554	12
Cable Median Barrier Installations	175	3
TOTAL	2,627	78



Mile Long Bridge

Delineators and Reflectors

Delineators and reflectors are installed throughout the Illinois Tollway system, typically affixed to guardrail or on sticks mounted in the ground. In general, these assets were found to be in fair condition. Damage to these is typically caused by traffic accidents or snowplows. [Inspections of these devices are performed safely in the office by close review of high definition 360-degree camera footage that is typically captured at the end of the winter season when it is common to find large quantities of missing or damaged reflectors.](#) The Illinois Tollway’s Division of Maintenance and Traffic performs regularly scheduled maintenance on these items systemwide at least twice annually.

Specific repair activities identified during the 2019 annual inspections are documented in the Annual Report prepared for each Illinois Tollway Maintenance section. Corrective repairs are recommended to be performed by the Illinois Tollway’s Roadway Maintenance Division within their capabilities. All repair activities beyond the capabilities of the Roadway Maintenance Division are recommended for inclusion with future contracts.

Pavement Markings

Pavement markings generally refer to lane striping and other demarcations designed to be in place under active traffic conditions. These pavement markings consist of durable thermoplastic material that is affixed directly to the pavement and is utilized throughout the Illinois Tollway system.

[The Illinois Tollway’s Pavement Management Consultant maintains a Pavement Marking Database which contains historical installation data and retroreflectivity values.](#) These values are updated as new information becomes available, typically through field measurement of reflectivity by the Pavement Management Consultant. The retroreflectivity values, in conjunction with visual inspection and age of the markings, is utilized by the Illinois Tollway to determine areas for inclusion in the annual systemwide pavement marking contract and the scheduling of future contracts.

[In 2019, 1,227.5-line miles of pavement marking were field inspected, and any repair activities communicated to the Illinois Tollway.](#) Overall, lane markings were found to be in fair to excellent condition.

Typical repair activities noted were missing or damaged sections of pavement markings. Specific repair activities identified during the inspections are documented in the Annual Report prepared for each Illinois Tollway Maintenance division.

The ongoing annual pavement marking renewal program continues to improve the pavement marking visibility throughout the Illinois Tollway system. As part of this annual program, pavement markings are maintained and upgraded as appropriate.

Since pavement marking replacement is typically beyond the capabilities of the Maintenance Division, it is recommended that areas of deficient pavement markings as identified in the visual inspection and areas which exhibit low retro reflectivity be included within the annual systemwide pavement marking contract.

Raised Pavement Markers

Raised pavement markers (RPMs) are low-profile reflectors affixed to the pavement that are typically used in conjunction with pavement markings to help delineate lanes at night or in other reduced visibility conditions. Areas of missing reflectors or castings were noted during the inspections that typically occur at the end of the winter season when it is common to note large quantities of missing or damaged reflectors due to winter plowing. The Illinois Tollway performs regularly scheduled maintenance on these items systemwide on a three-year cycle within each individual Maintenance section. During this regularly scheduled work, they replace damaged or missing reflectors and remove any castings that are damaged or appear as if they may become loose. Due to regularly scheduled inspections and maintenance activities, RPMs throughout the Illinois Tollway system are generally in excellent to fair condition.

It should be noted that reconstruction projects occurring from 2007 to 2009 did not include the installation of RPMs while a study was conducted to

review their use. In 2012, it was decided to include RPMs as part of all contracts systemwide. In 2014, the contract work commenced for the installation of RPMs in sections of pavement in which they were not originally included. However as of 2019, the Illinois Tollway halted the installation of RPMs as part of any construction contracts pending the conclusion of an ongoing study initiated in 2019 regarding their safety and effectiveness.

Roadway Lighting System

The general purpose of roadway lighting is to provide improved safety, security and aesthetics for the various users of the roadway and associated facilities. Lighting enables the driver to recognize the geometry and condition of the roadway at extended distances, thereby simplifying the driving task at night. This, in turn, increases driver visual comfort and reduces driver fatigue, which contributes measurably to highway safety.

As of 2019 there were 12,945 light poles systemwide. The roadway lighting systems throughout the Illinois Tollway system are generally in excellent to fair condition. The majority of the light poles appeared to be plumb with no noticeable movement or tilt. The typical repair activities noted during the inspections were concrete or helix foundations which have been installed too high (over four inches from finished grade) or installations with improper breakaway devices. These installations are typically replaced to facilitate the effectiveness of the breakaway devices. Additionally, instances of missing light pole handholes with exposed pole wiring are reported.

It is recommended that as part of any future contracts, designers research available data from the Illinois Tollway and perform field analyses within their design contract sections to determine where existing light pole foundations are unshielded from traffic, installed at an incorrect elevation relative to the adjacent roadway and locations where ground mounted light poles do not include sufficient

FHWA approved breakaway devices. Based on the results of this research and field analysis, it is recommended that the designer undertake appropriate engineering studies to identify the appropriate repair or replacement activity to be included in the subsequent construction project.

Specific repair activities identified during the inspections are documented in the Annual Report prepared for each Illinois Tollway Maintenance section. Corrective repairs are recommended to be performed by the Illinois Tollway’s Roadway Maintenance Division within their capabilities. All repair activities beyond the capabilities of the Roadway Maintenance Division are recommended for inclusion with future contracts.

Roadway LED Implementation

The Illinois Tollway has committed to being one of the safest, cleanest and greenest agencies through their current capital program. In keeping with its commitment, the Illinois Tollway has been implementing its plan to retrofit or replace existing High Pressure Sodium (HPS) luminaires with newer, brighter, and more energy efficient LED luminaires. Any new or replacement roadway lighting installed utilizes LED technology, and by 2022 the Illinois Tollway estimates that 90% of its system will be illuminated by LEDs.

As of 2019, LED lighting technology on the Illinois Tollway’s system has been implemented along:

- Jane Addams Memorial Tollway (I-90) from east of Mill Road to the eastern terminus
- Tri-State Tollway (I-294) from Bensenville Bridge to Lake Cook Road
- Tri-State Tollway (I-294) from southern terminus to 95th Street
- Tri-State Tollway (I-94) from northern terminus to Duffy Lane
- Reagan Memorial Tollway (I-88)
- Illinois Route 390 from Lake Street to Illinois Route 83
- Veterans Memorial Tollway (I-355) from southern terminus to Butterfield Road

It is also anticipated that the various construction contracts that were active in 2019 will implement LED lighting technology on the Illinois Tollway’s system by the end of 2020 along:

- Jane Addams Memorial Tollway (I-90) from western terminus to I-39
- Tri-State Tollway (I-94) from Duffy Lane to Lake Cook Road
- Edens Spur (I-94) from eastern terminus to Lake Cook Road
- Veterans Memorial Tollway (I-355) from Butterfield Road to Army Trail Road



LED Lighting Retrofit on I-88

Right-of-Way Fence

Fencing at the right-of-way is utilized throughout the Illinois Tollway system to control and limit unauthorized or unintended access to its facility (by animals, persons, or vehicles) and is a critical safety feature that minimizes the potentially hazardous conflicts to the traveling public.

Right-of-Way fence inspections are conducted in the office by reviewing high definition, 360-degree drone video footage. Based on this year's review, the right-of-way fence is generally in good condition, systemwide. Reconstruction projects include replacement of any existing four-foot high right-of-way fence within the contract limits with the current Illinois Tollway standard six-foot high chain-link fence. This type of fence is more compatible with the continued development of land adjacent to the roadway and serves as a more secure barrier preventing pedestrians and animals from entering Illinois Tollway property.

The Illinois Tollway follows guidelines for land use such that fence near residential or public access is to be upgraded to the current Illinois Tollway standard six-foot chain-link fence; whereas fence located in rural or other areas not readily accessible such as farm fields may remain with the four-foot high field fence.

Most right-of-way fence along the Tri-State Tollway (I-94/I-294/I-80) and the Reagan Memorial Tollway (I-88) and all the Veterans Memorial Tollway (I-355) has been upgraded to the current Illinois Tollway standard chain-link fence as required. Additionally, over half of the Jane Addams Memorial Tollway (I-90) has been upgraded to the current Illinois Tollway standard chain-link fence as required.

It is recommended that the original four-foot high field fence continue to be upgraded, where necessary, to the current Illinois Tollway standard six-foot high chain-link fence as major projects are programmed.

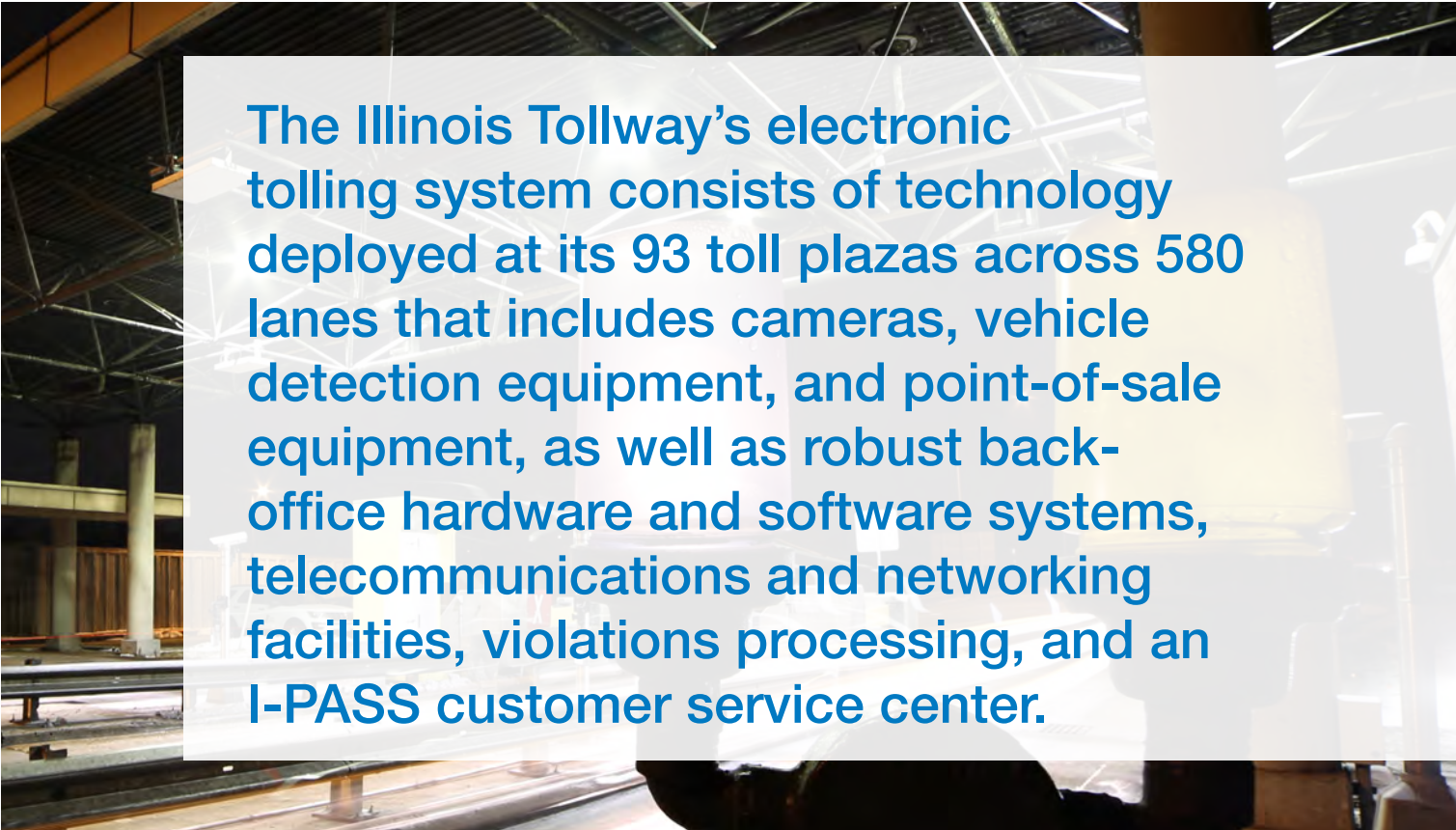
Specific repair activities identified during the inspections are documented in the Annual Field Inspection Report prepared for each Maintenance section. Corrective repairs are recommended to be performed by the Illinois Tollway's Roadway Maintenance Division within their capabilities. All repair activities beyond the capabilities of the Roadway Maintenance Division are recommended for inclusion with future contracts.

Ground-Mounted Traffic Signs

In 2019 there were 38,774 ground-mounted traffic signs throughout the Illinois Tollway system. The ground mounted signs are generally in fair to good condition. Damage to these signs is typically caused by traffic accidents or snowplows. The Illinois Tollway Sign Shop repairs or replaces these signs when damage is reported.

Specific repair activities identified during the inspections are documented in the Annual Field Inspection Report prepared for each Maintenance section. Corrective repairs are recommended to be performed by the Illinois Tollway's Roadway Maintenance Division within their capabilities. All repair activities beyond the capabilities of the Roadway Maintenance Division are recommended for inclusion with future contracts.

3.6 ELECTRONIC TOLLING SYSTEM



The electronic tolling system encompasses technologies related to automatic vehicle detection, automatic vehicle classification and violation enforcement systems that support traffic and revenue monitoring and collections. The electronic tolling system is operated by the Illinois Tollway's Department of Business Systems whose primary objective is revenue collection and assurance. Due to the business-critical nature of this system, it is compartmentalized, firewalled, and operated independently from any other Illinois Tollway system, including ITS.

The Illinois Tollway's electronic tolling system consists of technology deployed at its 93 toll plazas across 580 lanes that includes cameras, vehicle detection equipment, and point-of sale equipment, as well as robust back-office hardware and software systems, telecommunications and networking facilities, violations processing, and an I-PASS Customer Service Center. Back-office operations are located across multiple and redundant facilities, including the Central Administration data center, the Call Center located at the University of Illinois Chicago campus and a Disaster Recovery site located in DeKalb.

Tollway Staff and external personnel are responsible for preventive, routine and corrective maintenance.

nance of tolling system technologies. The lifecycle of electronic tolling system equipment varies by sub-system components, while the average age and predicted replacement of critical components and parts are tracked and managed by Department of Business Systems. Replacement and upgrade of components has followed a planned and budgeted process. Department of Business Systems utilizes an independent asset management consultant who performs routine inspections to ensure the health and reliability of these technologies. Specific repair activities identified during these inspections will be documented and tracked in the Department of

Business Systems Asset Management System and preventative maintenance activities are deployed as needed to mitigate identified concerns. These systems are maintained in good condition.

Due to the increased deployment of, and reliance on electronic tolling system devices, it is recommended that the Illinois Tollway’s independent inspectors continue to perform inspections, report findings to the Department of Business Systems asset management consultant, and perform maintenance activities as directed to ensure the Illinois Tollway’s assets remain in a state of good repair.

3.7 STORMWATER FLOODING MANAGEMENT AND MITIGATION

Several storm events have occurred throughout the Illinois Tollway’s history that have resulted in pavement flooding. The Illinois Tollway maintains an updated list of known flooding issues on its system, with emphasis on locations that have the potential to impact the traveling public. Until long-term mitigation measures are completed, the Illinois Tollway monitors these locations during, or following, severe rain events to determine the extent and impact of flooding to the public and to deploy temporary mitigation strategies as appropriate.

As of the 2018 annual report there were nine identified flooding locations across the system. [In 2019, no new flooding issues were identified, and four existing flooding issues have been corrected.](#) The remaining five locations which lie along the Central Tri-State Tollway (I-294) corridor are programmed to be remediated as part of its future reconstruction.



Ramp B, NB I-57 to NB I-294, over I-294

Table 3-28: Flooding Locations and Mitigation

LOCATION	MITIGATION STATUS
WB I-88 near Watson Road	Completed under Contract (RR-16-4254)
SB I-355 near Boughton Road	Completed under Contract (RR-16-4255)
I-94 near Lake Forest Oasis	Completed under Contract (RR-17-4341)
SB Balmoral Ramp to I-294	Completed under Contract I-18-4389 (I-17-4303)
I-294 & Cermak Ave	In design (I-17-4299)
I-294 & Archer Ave	In design (I-17-4296)
I-294 & St. Charles	In design (I-17-4301)
I-294 & 95th Street	In design (I-17-4296)
NB I-294 to Hinsdale Oasis	In design (I-17-4298)



4.0 2019 ACCOMPLISHMENTS

The Illinois Tollway's goal is to provide a world-class transportation system to its customers while promoting safety and innovation across every aspect of the organization. In 2019, the Illinois Tollway advanced its goals by delivering major design and construction innovations and launching new initiatives in support of providing unparalleled safety, service, access and reliability to customers and the community.

Many of the Illinois Tollway's 2019 accomplishments, such as the new Constant Slope Barrier System, are shaping the future of road safety. Other innovative safety measures launched this year include a wrong-way driver detection pilot program and LED lighting program. With the start of ConstructionWorks in 2018, the Illinois Tollway continues to lead the region in measures of diversity by establishing a pipeline for employment of diverse men and women ready to enter careers in the heavy highway and related construction industries.

The Illinois Tollway continued its focus on sustainable practices, from implementing a new environmentally conscious deicing effort, to forming partnerships to study innovative ways of repurposing invasive plants along the system.

With the support of Illinois Tollway leadership, the agency continued to be a leader in promoting roadway safety through its passionate advocacy of Work Zone Safety and Move Over Law through the Give Them Distance campaign, and expansion of strategic networking partnerships to communicate vital safe driving messages to drivers across the state.

The efforts of the Illinois Tollway team continue to improve safety and service to its customers, raising the bar for transportation agencies across the country.

4.1 DIVERSITY INITIATIVES

As an economic engine for the region, the Illinois Tollway provides small, diverse and veteran-owned businesses and individuals with opportunities to grow and succeed through training programs, strategic partnerships and investments in infrastructure. Illinois Tollway diversity programs support long-term success through training and business development opportunities, as well as a multitude of economic opportunities created by investments in infrastructure and the resources to ensure continued growth in a high-demand industry. The focus is on increasing access to economic opportunities for disadvantaged, minority and women-owned enterprise (D/M/WBE) firms, veteran-owned businesses, as well as underemployed individuals.



4.1.1 CONSTRUCTIONWORKS

Launched in 2018, ConstructionWorks is creating a pipeline of qualified diverse men and women ready to enter careers in the heavy highway and related construction industry. New workers, including laborers, equipment operators, carpenters, electricians, iron workers, cement masons and others within the critical heavy highway construction industry, are needed to work on construction projects as part of the Illinois Tollway’s 15-year, \$14 billion *Move Illinois* capital program, as well as other capital projects advanced by the Illinois Department of Transportation, Cook County and transit agencies.

Contractors with ConstructionWorks hires working on Illinois Tollway contracts earn bid credits that may be used toward future Illinois Tollway construction bids, as well as a cash incentive for each hour worked by ConstructionWorks hires. Both incentives are applicable for ConstructionWorks hires working on Illinois Tollway projects.

4.2 DESIGN ADVANCEMENTS

The Illinois Tollway continues to build on its commitment to innovation with forward-thinking design advancements. These efforts are improving safety, service and reliability for all who work and travel along the system, while setting new standards for other agencies to follow.

4.2.1 NEW CONSTANT SLOPE BARRIER SYSTEM

Working closely with the nation’s leading road safety experts at the Texas Transportation Institute, the Illinois Tollway became the first transportation agency in the country to deliver a major advancement in highway safety by successfully designing and crash testing a barrier mounted noise abatement wall meeting MASH Test-Level 5 (TL-5) criteria.

Not only is the Constant Slope Barrier System designed with a smaller footprint, but by combining the noise abatement wall and concrete barrier, it increases usable shoulder space. The barrier also enlists a constant slope design to optimize safety performance while withstanding an impact from an 80,000-lb. tractor trailer.

This new design provides critical safety benefits to Illinois Tollway customers, roadside workers and first responders, including:

- Safer, wider shoulder space for stranded motorists
- Reduced risk of rollover accidents
- Shortened accident cleanup time and reduced risk of secondary accidents
- Additional clearance for first responders, construction and maintenance

As the Illinois Tollway works to rebuild corridors throughout the system, this forward-thinking innovation demonstrates the agency’s commitment to the safety of its customers and the quality they can expect.



Pre-crash test staging includes tractor trailer with newly installed Constant Slope Barrier System at TTL.

4.2.2 LED LIGHTING PROGRAM

The Illinois Tollway continued upgrading lighting across its system to energy-efficient Light-Emitting Diode (LED) fixtures throughout 2019. By retrofitting existing light fixtures and designing and building new LED fixtures as part of the *Move Illinois* capital program, the Illinois Tollway’s LED lighting efforts are improving customer safety while reducing energy consumption and realizing cost savings.

The Illinois Tollway estimates that by 2022, 90% of system lighting will be LED, including a large portion of the Jane Addams Memorial Tollway (I-90), all of the Illinois Route 390 Tollway and portions of the Tri-State Tollway (I-94/I-294/I-80), Veterans Memorial Tollway (I-355) and the Reagan Memorial Tollway (I-88).

Long-term benefits for customers will be realized through an overall energy usage reduction as each light fixture is estimated to save about 1000 kilowatt-hours annually. For example, a mile-long section of the Tri-State Tollway (I-294) realized a 55% reduction in energy usage, which resulted in more than 38% cost savings. Other benefits include a longer lifespan, which results in less maintenance for Illinois Tollway personnel. The Illinois Tollway plans to achieve 100% LED lighting by the end of 2026.



LED light pole retrofit on EB I-88



4.2.3 DIGITAL DESIGN DELIVERY

Building Information Modeling (BIM) and Civil Integrated Management (CIM) design practices are transforming the way the Illinois Tollway delivers projects to customers by improving collaboration between design, construction and community stakeholders. BIM design practices represent a dramatic advancement in engineering technology that is creating a complete, high-quality digital footprint of the Illinois Tollway.

The 2019 completion of the Illinois Route 47 Interchange Project marks a significant milestone in Tollway efforts to implementing BIM and digital delivery as it was first pilot project to require 3D modeling as the official construction plans. Implementing BIM today is preparing the Illinois Tollway and its consulting and construction partners for the digital delivery models of tomorrow.



New ramps at the I-88 and IL-47 interchange

4.3 IMPROVING SAFETY

The Illinois Tollway continually strives to be a leader in safety efforts, through both innovative roadway practices and statewide public safety awareness efforts. In 2019, the Illinois Tollway further expanded the use of

its state-of-the-art data capture techniques, such as 360-degree cameras and UAVs, to minimize time on active roadways while improving site condition documentation for maintenance and design.

4.3.1 DETAILED AUDIT OF GUARDRAIL AND CABLE BARRIERS

The Illinois Tollway presently has approximately 1,898 guardrail installations, 175 median cable barrier installations and 554 crash attenuator installations located throughout the system.

In 2019, the Illinois Tollway performed a comprehensive audit of all guardrails, cable barriers and associated systems. The audit included a detailed visual inventory and inspection to provide enhanced assurance that these barrier systems are continuing to operate and protect the traveling public as intended.

Various barrier systems and crash attenuators are installed throughout the Illinois Tollway's system to restrain and redirect vehicles from potentially hazardous areas or obstacles. The Illinois Tollway presently has approximately 1,898 guardrail installations, 175 median cable barrier installations and 554 crash attenuator installations located throughout the system.

This audit was the first comprehensive assessment of its kind related to the guardrail located along the Illinois Tollway's roadways and not only provided an accurate and reliable comprehensive accounting of these features, but it also identified and prioritized repairs needed to properly safeguard customers.

4.3.2 WRONG-WAY DETECTION PILOT PROGRAM

Through an ongoing Wrong-Way Driver Pilot Project at the I-88 and Peace Road Interchange, the Illinois Tollway is identifying ways to use technology to prevent the number of wrong-way driver incidents through an interconnected, preventative system.

At the project testing site, drivers who enter the interchange ramp from the wrong direction are first alerted by flashing "Wrong Way" and "Do Not Enter" signs. Concurrently, the incident is immediately communicated to the Traffic Incident Management System and

Illinois State Police (ISP) for an immediate response. If the wrong-way driver does not self-correct, the nearest ISP trooper will be dispatched to respond to the incident. Additionally, signage placed along the system will warn other drivers of a reported wrong-way driver on the system.

Once the project findings are collected and analyzed, the Illinois Tollway will identify future opportunities for implementation of the technology.



Wrong Way Signs at Butterfield Rd & I-355

4.3.3 MOVE OVER LAW

The Illinois Tollway continues to raise awareness for Illinois’ Move Over Law through the Give Them Distance statewide road safety campaign. In 2019, Scott’s Law was strengthened through the enhancement of penalties upon violation and the establishment of a statewide Move Over Task Force to study the causes of violations and identification of potential solutions. The Illinois Tollway remains focused on educational and promotional Give Them Distance messaging which highlights critical public safety issues that impact emergency personnel, roadway workers and the everyday driver.

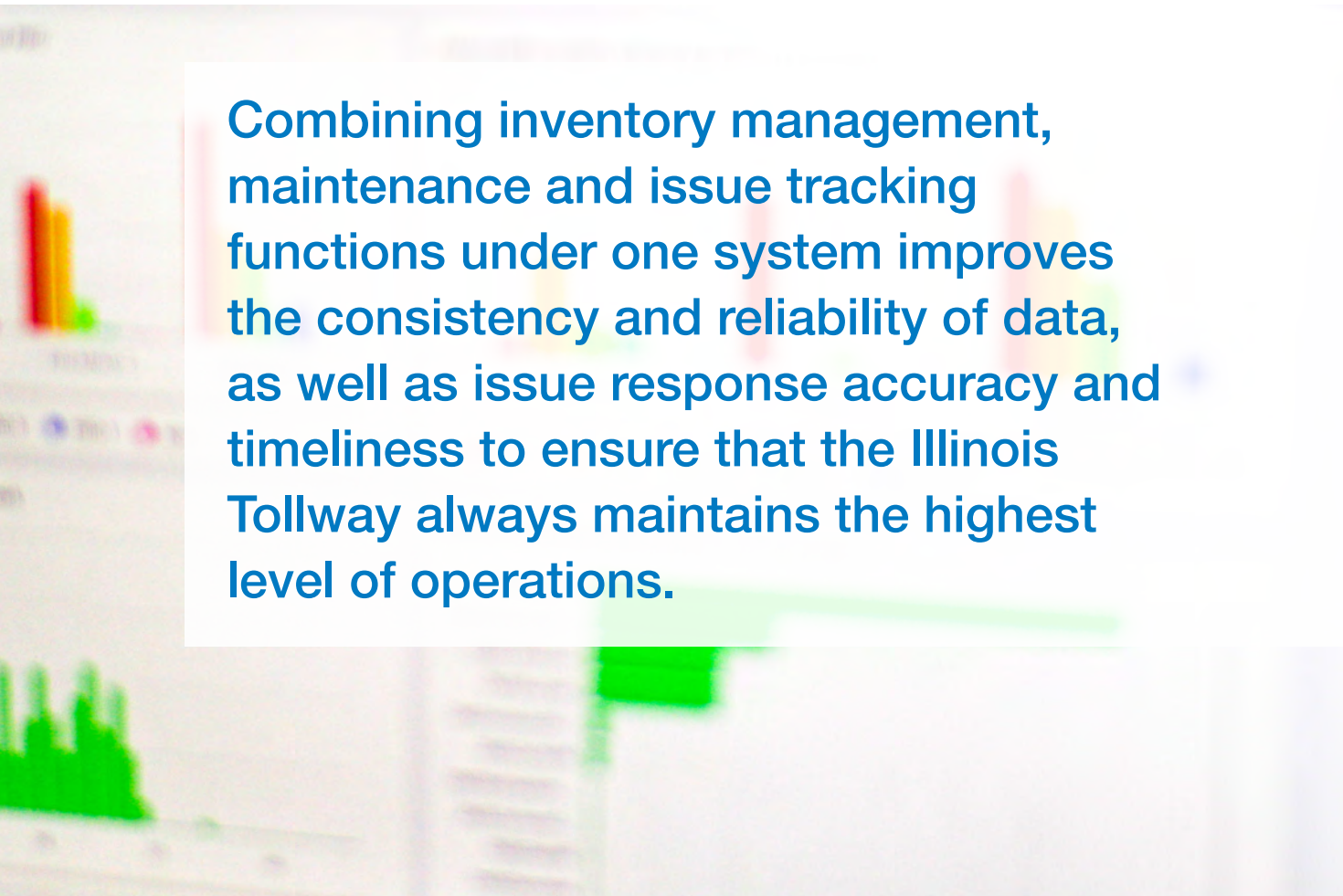
To expand the reach of the campaign, the Illinois Tollway has partnered with driver education stakeholders to promote best practices and safety tips at schools across Illinois to prepare the next generation of drivers. Through a partnership with the Illinois High School and College Driver Education Association (IHSCDEA), more than 700 driver education educators statewide were provided with educational resources pertaining to Move Over Law to integrate into their curriculum. Additionally, Give Them Distance resources have been integrated into in-classroom presentations led by the Distressed Bandanna™ Teen Driver Safety Program, reaching over 5,000 students in 2019. The Illinois Tollway will continue outreach to raise public awareness of the “Move Over” Law.



The Illinois Tollway continues to emphasize the importance of the Move Over Law through its Give Them Distance public safety campaign.



4.4 ADVANCES IN TRANSPORTATION ASSET MANAGEMENT



The Illinois Tollway continues to invest in its robust transportation asset management system to inventory its assets and to identify and track repair activities systemwide. The Illinois Tollway leverages Cartegraph Operations and Management System (Cartegraph), a web-based platform for use by the Illinois Tollway Engineering and Planning departments.

Using Cartegraph for asset management reduces the number of specialized hardware devices and time required for field data collection. Field personnel can quickly enter and update data directly into the database from the field using common electronic devices

such as tablets and smartphones, reducing the time traditionally spent reporting data.

In addition, Cartegraph allows for a continuous, wireless connection to the master database which enables quicker and more accurate reporting of asset inventory or repair activities. This connection also provides the Illinois Tollway up-to-date progress reports and data reviews.

As part of its commitment to continually improve the Asset Management System, the following are some of the more notable enhancements implemented in 2019:

- Data Driven Decision Making for Assets Tracked by Cartegraph–The prioritization of asset inspections were enhanced utilizing an assets Overall Condition Rating (OCR) in Cartegraph to calculate and assign an overall health value to be used in identifying appropriate asset inspection schedules. This has been implemented for several assets, including ITS, and is planned to be expanded in 2020.
 - Integrated Inventory Reporting with New TIMS Tool –Traffic and Incident Management System (TIMS) assets, which previously had not been fully integrated to Cartegraph, are now inventoried and cataloged.
 - Testing of New ITS Maintenance Tracking Tool new ITS maintenance issue ticketing tool is now in a testing phase. This tool adds powerful features such as ArcGis to the robust reporting tools already available in Cartegraph and will become the ITS maintenance stand-alone platform for asset management and system issue reporting and tracking.
- Combining inventory management, maintenance and issue tracking functions under one system improves the consistency and reliability of data, as well as issue response accuracy and timeliness to ensure that the Illinois Tollway always maintains the highest level of operations.



Cartegraph Tablet

4.5 ENVIRONMENTAL INITIATIVES

The Illinois Tollway is committed to protecting the environment and implementing green initiatives throughout the Illinois Tollway system and its construction projects. From LEED-certified facilities to environmentally conscious deicing efforts, the Tollway is constantly

looking for ways to make its footprint leaner and greener. During the 2019 calendar year, environmental initiatives throughout the Illinois Tollway system included the continuation of previous commitments, along with new and innovative programs.

4.5.1 EXPANDED USE OF BRINE FOR ROADWAY DEICING

The Tollway is making firm investments into expanding its use of brine across its system. Salt brine is produced by dissolving dry salt into a solution which can then be directly sprayed on the pavement or used to ‘wet’ dry salt before it is applied, depending on the conditions.

Use of brine has benefits for the Illinois Tollway, customers and the environment. Traditionally, dry salt crystals have been used primarily to deice roadway pavement. Dry salt released from plow truck spreaders tends to bounce and scatter, with a substantial amount of salt (approximately 30%) being lost on the shoulders, in the median or beyond, where it is not effective. Thus, salt spreading rates need to be set high enough to ensure an adequate amount salt remains on the pavement for safe roadway operations.

When dry salt is pre-wetted with brine before it is applied to the pavement, it reduces the tendency for salt to bounce and scatter and enhances its ability remain on the pavement; when prewetted, only 4% of salt is lost beyond the road surface. The implications are that pre-wetting the salt can allow application rates to be reduced up to approximately 25% and achieve the desired deicing effect.

From a safety and operations perspective, pre-wetting immediately activates the salt, jump-starting the de-icing process, resulting in more rapid improvement of roadway driving conditions during icing events.

From an environmental perspective, reducing the amount of salt applied to the system subsequently results in less salt entering rivers, streams and lakes.

Increased use of brine will also decrease the Illinois Tollway’s dependency on salt. This can reduce costs, particularly during winter seasons when salt supplies are low and demand is high. The Illinois Tollway has been testing brine for several years, having procured two mobile brine makers, with limited production capacity and outfitting its fleet for increased brine applications.

In 2019, the Illinois Tollway committed to constructing the first permanent, high production brine maker on its system, which will be installed at the new M-8 Maintenance Facility and will begin construction in early 2020. This pilot program will guide the installations of future permanent brine makers across the Illinois Tollway system, supporting agency efforts to reduce environmental impacts while maintaining the high level of safety of customers.

4.5.2 ENHANCED ENVIRONMENTAL INSPECTIONS

In 2019, the Illinois Tollway enhanced its physical inspection program of detention basins, bioswales, and storm water outfalls. Ensuring that these assets are operating as intended is imperative to protecting surface water resources that are conveyed through, and received by, the Illinois Tollway’s drainage system.

The enhanced inspection program incorporates additional assessment criteria as part of an improved asset management rating system that better addresses individual components and conditions that may have changed since the initial construction or since the previous inspection. The assessment criteria for storm water outfalls now includes nine physical and sensory indicators of illicit discharges as defined per U.S. Environmental Protection Agency guidance. Furthermore, assessment of basin inlet and outlet structures has been expanded to include criteria that more specifically evaluate the function and safety of

the basins including nuisance issues (e.g. animal dens and burrows), vegetation components (e.g. invasive, woody, inhibited or dead), cleanliness (e.g. litter and debris accumulations), and erosion (e.g. unstable or eroding banks, damaged erosion controls). In addition to assessment of physical conditions, criteria related to bioswale function and vegetation have been incorporated to enhance the assessment of effectiveness and overall health.

This enhanced inspection program and rating system was implemented to improve tracking and identification of maintenance issues, aid in planning preventative maintenance to avoid more costly drainage repairs, and more effectively identify and eliminate potential illicit storm water discharges to maintain compliance with Illinois Environmental Protection Agency permit requirements.



Bioswale, I-88, Westbound, MP 52.36

4.5.3 INVASIVES TO ENERGY RESEARCH PROGRAM

In 2019, the Illinois Tollway began working with the University of Connecticut to evaluate the water quality benefits, and energy production potential, of invasive vegetation, such as cattails harvested from drainage ditches and ponds. In particular, the Illinois Tollway is looking to cattail harvesting as a way of removing environmentally detrimental chlorides (salt from winter de-icing activities) from the environment, while also improving the function of the drainage system.

This three-year research program will evaluate the costs and benefits of harvesting and removing cattail biomass annually, along with the chlorides it has accumulated, and identifying ways to utilize the harvested material for other useful purposes. Potential benefits include:

- Removal of chlorides and other pollutants from the system
- Water quality improvement within the Illinois Tollway’s drainage system, as well as downstream
- Reduced drainage system waste and the creation of a sustainable maintenance program
- Determination of whether this harvested material can be used as an energy source in wastewater treatment processes or as compost



Softrak Harvester



Cattails

4.5.4 INVEST PROGRAM

The Illinois Tollway continues to utilize the Infrastructure Voluntary Evaluation Sustainability Tool (INVEST) process developed by the Federal Highway Administration (FHWA) that enables transportation agencies to assess the sustainability of their projects and systems. The Illinois Tollway customized the FHWA's INVEST program by incorporating supplements to existing FHWA criteria and creating new criteria. In 2019, the INVEST team assessed the Illinois Tollway's system using the INVEST System Planning and Operations and Maintenance modules to determine system scores. The 2019 System Planning and Operations and Maintenance scores continue to reflect the highest level of achievement, platinum.

In 2019, the Illinois Tollway also used the INVEST Project Development module to evaluate in-progress design and construction contracts with an estimated construction cost exceeding \$10 million. Projects that reached construction substantial completion in 2013 and 2014 averaged a silver rating, while projects in 2015, 2016, 2017 and 2018 averaged a gold rating. In 2019, Illinois Tollway projects earned regional employment points for the first time due to the Construction-Works Program.

Innovations implemented in 2019 also include the use of precast panels and rapid setting concrete on a bridge pavement rehabilitation contract, along with the use of LIDAR to analyze the existing pavement surface. Planners, designers (including engineers of various disciplines), construction managers, contractors and Illinois Tollway employees have also been participating in a rigorous sustainability process, including project scoring and workshops that involve brainstorming sustainability practices. The Illinois Tollway's INVEST Program not only improves Illinois Tollway sustainability, which directly benefits its customers and the community, but it also provides exposure to sustainable principles and practices to many industry professionals. These professionals can in turn incorporate sustainable principles and practices into other projects they are involved with throughout the region and country.

4.6 CONSTRUCTION AND PROFESSIONAL SERVICE 2019 CONTRACTS

In 2019, the Illinois Tollway successfully concluded the eighth year of the agency's *Move Illinois* Program. Projects included under the capital program continue to increase mobility, relieve congestion, reduce pollution, create jobs and link economies throughout the region. The Illinois Tollway is committed to providing opportunities for all types and sizes of businesses as part of the

Move Illinois Program. Contracting activities in 2019 provided for a variety of work that is necessary to maintain the Illinois Tollway system in a state of good repair. For fiscal year 2019, approximately \$1.4 billion is allocated for *Move Illinois* projects. At the completion of 2019, the Illinois Tollway will have spent more than 50% of the \$14 billion *Move Illinois* Program budget.

4.6.1 CONSTRUCTION CONTRACTS

Numerous construction contracts that involved roadway, utility, facility and bridge reconstruction or rehabilitation throughout the Illinois Tollway system were completed and/or active in 2019. A complete list of these projects is included in the Appendix B of this report. A map indicating the locations of these projects is depicted in Exhibits 6 and 7.

The highlights of construction contracts active in 2019 include:

Systemwide

- ITS and fiber optic infrastructure improvements
- Facilities improvements
- Toll plaza lighting improvements
- Various toll plaza HVAC improvements
- Structural repair and preservation
- Signage improvements
- Landscape improvements
- Drainage improvements
- Intermittent pavement repairs
- Pavement marking

Jane Addams Memorial Tollway (I-90)

- Fiber optic removal
- Grading
- Tree planting
- Landscaping
- Right-of-way fence installation

Tri-State Tollway (I-94/I-294/I-80)

- Roadway rehabilitation and widening between the O'Hare Oasis and Balmoral Avenue
- Construction of the I-294/I-490 Interchange.
- Advanced Intelligent Transportation Systems relocation between 95th Street and Balmoral Avenue
- Construction of new Mile Long Bridge over the Des Plaines River
- Reconstruction of Burlington Northern Santa Fe Railroad Bridge over I-294

Veterans Memorial Tollway (I-355)

- Resurfacing from I-55 to Army Trail Road
- Roadway widening between Illinois Route 56 and Illinois Route 38

Reagan Memorial Tollway (I-88)

- Pavement rehabilitation between Illinois Route 251 and Illinois Route 56
- Roadway reconstruction between York Road and I-290
- Reconstruction of the connector ramp between I-88 and I-294

Elgin O'Hare Western Access Project (IL 390/I-490)

- Roadway design of I-490 south segment from I-294 to Franklin Avenue/Green Street
- Roadway design of the I-490 north segment
- Design for the I-490/I-90 Interchange



I 294 Rehabilitation

4.6.2 PROFESSIONAL SERVICES CONTRACTS

Numerous professional services contracts that involved roadway, utility, facility and bridge reconstruction or rehabilitation throughout the Illinois Tollway system were completed and/or active in 2019. Professional services contracts include design, construction management and planning study contracts. A complete list of these professional services contracts is provided in Appendix C of this report.

The highlights of 2019 professional services contracts include:

Systemwide

- Design Upon Request
- Construction Management Upon Request
- Maintenance Facilities Construction Management Services Upon Request
- Environmental Studies Upon Request
- Maintenance Facilities Site Plan and Design Upon Request
- Materials Engineering Services Upon Request
- Land Acquisition and Surveying Services Upon Request
- Utility Location and Identification Assistance Upon Request
- Aerial Mapping Services Upon Request
- Geotechnical Services Upon Request
- Traffic Operation and Maintenance Performance Evaluation and Enhancement Support
- Intelligent Transpiration Systems (ITS) Services Upon Request

Jane Addams Memorial Tollway (I-90)

- Construction Management - Pavement and Bridge Preservation Milepost 2.6 (Rockton Road) to Milepost 18.3 (Kishwaukee River Bridge)

Tri-State Tollway (I-94/I-294/I-80)

- Construction Management - Mile Long Bridge Reconstruction
- Phase II Engineering - Mile Long Bridge Rehabilitation/Reconstruction

- Phase II Engineering - Roosevelt Road (Milepost 30.5) to St. Charles Road (Milepost 32.3)
- Design Corridor Management, Project Management and Phase II Engineering
- Phase II Engineering - I-55 Ramps (Milepost 24.1) to Ogden Avenue (Milepost 27.8)
- Phase II Engineering - 95th Street (Milepost 17.8) to LaGrange Road (Milepost 20.7)
- Construction Management - Elgin O'Hare Western Access, I-294 (Grand Avenue to Wolf Road)
- Construction Management - I-294/I-57 Interchange, Tri-State Tollway Milepost 7.6 (I-57)
- Phase II Engineering - Wolf Road (Milepost 36.2) to O'Hare Oasis (Milepost 37.8) Services
- Phase II Engineering - St. Charles Road (Milepost 32.3) to North Avenue/Lake Street (Milepost 33.5)
- Phase II Engineering - 75th Street (Milepost 22.3) to I-55 Ramps (Milepost 24.1)

Veterans Memorial Tollway (I-355)

- Phase II Engineering - Roadway and Bridge Rehabilitation, Milepost 22.3 (STA 11260+00, Butterfield Road) to Milepost 29.8 (Army Trail Road)
- Construction Management - Roadway and Bridge Rehabilitation, I-55 (Milepost 12.3) to Army Trail Road (Milepost 29.8)
- Phase II Engineering - Roadway and Bridge Rehabilitation - Milepost 12.3 (I-55) to Milepost 22.3 (STA 11260+00, Butterfield Road)

Reagan Memorial Tollway (I-88)

- Construction Management - Roadway and Bridge Rehabilitation, Annie Glidden Road (Milepost 76.1) to IL 56 (Milepost 113.3)
- Construction Management - Roadway Reconstruction, York Road Plaza (Milepost 138.1) to I-290 (Milepost 140.5).
- o Phase II Engineering - Roadway and Bridge Rehabilitation, Milepost 117.8 (Aurora Toll Plaza) to Milepost 123.4 (IL 59).

Elgin O'Hare Western Access (IL 390/I-490)

- Construction Corridor Manager and Owner's Representative
- Phase II Engineering - I-294 to I-90- Bensenville Yard Underpass
- Design Corridor Manager Services
- Phase II Engineering - I-294 to I-90 - Tri-State and Franklin/Green Street
- Phase II Engineering - I-294 to I-90- Franklin/Green Street and Bensenville Yard
- Phase II Engineering - EOWA and Jane Addams Memorial Tollway System Interchange



Bridge Replacement at I-94 over the West Fork of the Chicago River

4.7 ANTICIPATED 2020 CONSTRUCTION CONTRACTS

The *Move Illinois* capital program will be in its ninth year in 2020, during which the Illinois Tollway will continue to expand and improve the Illinois Tollway system, implement technological innovations, expand opportunities for small, diverse and veteran firms, and strive to exceed the needs of Illinois' customers and communities.

The Illinois Tollway's 2020 capital program calls for investing \$1.46 billion in projects to build and repair roadways, bridges and interchanges and other capital investments across the system. The ninth year of the *Move Illinois* capital program has nearly \$330 million budgeted for systemwide roadway, bridge repairs and technology investments to keep the existing Illinois Tollway system in good repair and funding for key projects including:

- Nearly \$560 million to continue planning and advance construction for the new I-490 Tollway and new interchanges connecting to the Jane Addams Memorial Tollway (I-90), Tri-State Tollway (I-294), the Illinois Route 390 Tollway, as well as providing direct access in and out of O'Hare International Airport as part of the Elgin O'Hare Western Access Project.
- Roughly \$450 million to continue design and reconstruction of the Central Tri-State Tollway (I-294) Project.
- Approximately \$70 million to begin design and construction to complete the I-294/I-57 Interchange

This section highlights the Illinois Tollway's *Move Illinois* capital program projects anticipated to be in construction in 2020. This information is updated with the most recent data available from the Illinois Tollway's Program Management Office. With these projects, the Illinois Tollway system will continue to better serve the needs of its patrons. The *Move Illinois* capital program consists of projects required to maintain the integrity of the existing system infrastructure,

provide new interchanges, improve access to and from the Illinois Tollway System, address congestion areas across the system and evaluate the construction of new Illinois Tollway routes. The following is a listing of significant projects that are programmed to be under construction or design during 2020. A map of the proposed construction for 2020 is contained in Exhibits 8 and 9 of this report. A complete project list for the *Move Illinois* capital program is contained in the Appendix D and Exhibit 10 of this report.

Systemwide

- Bridge, pavement and safety improvements
- Facility repairs and construction
- Toll plaza modifications for Electronic Tolling upgrades
- Intelligent transportation system (ITS) and incident management system upgrades
- Engineering and maintenance support contracts

Jane Addams Memorial Tollway (I-90)

- Roadway reconstruction and add lanes: Kennedy Expressway to Elgin Toll Plaza
- Bridge and ramp repairs between Rockton Road and I-39
- Landscaping, tree planning, fence repair

Tri-State Tollway (I-94/I-294/I-80)

- Roadway reconstruction and add lanes: 95th Street to Balmoral Avenue (22.3 miles)
- Archer Avenue bridge over I-294 reconstruction
- BNSF bridge over I-294 reconstruction
- Mile Long Bridge reconstruction advance work
- Edens Spur reconstruction (5 miles)
- Bridge and ramp repairs
- Utilities, ROW and corridor support

Veterans Memorial Tollway (I-355)

- Complete ongoing roadway and Bridge Rehabilitation I-55 to Army Trail Road (17.5 miles)

Reagan Memorial Tollway (I-88)

- Interchange improvements at IL 47
- Pavement and Structure Reconstruction and Rehabilitation Aurora Toll Plaza to Route 59 (5.4 miles)

Elgin O'Hare Western Access Project (IL 390/I-490)

- Interchange Construction: I-490/I-294 Interchange
- Interchange Construction: I-490/I-90 Interchange
- Mainline I-490 from I-294 to Franklin Avenue/Green Street
- Right-of-way acquisitions and utility relocations

Complete 43 miles of ongoing infrastructure renewal: Mill, patch and overlay

- IL Route 251 to IL Route 56 (38.1 miles)
- Aurora Toll Plaza to IL Route 59 (5.5 miles)

Complete 5.2 miles of ongoing reconstruction

- York Road to I-290 (1.5 miles)
- I-294/I-88 east-west connector (3.7 miles)



I-94 Spur Reconstruction



5.0 EXPANSION OF THE SYSTEM

Since it began operations in 1958, the Illinois Tollway system has served an important role in the development of the economy in Northern Illinois, initially providing rapid interstate travel between Northern Illinois, Indiana and Wisconsin.

As the growth in suburban areas surrounding Chicago occurred throughout the 1960s and 1970s, the Illinois Tollway system evolved into serving an ever-increasing commuter travel market and connecting suburban Chicago and O'Hare International Airport. Now, the five interstates that compose the Illinois Tollway system serve suburban Cook County and the Chicago-area collar counties, which together represent some of the fastest-growing areas in Illinois in terms of population and employment.

Table 5-1: Recent Growth of the Illinois Tollway System per Corridor (By Lane Miles)

TOLLWAY	2012	2013	2014	2015	2016	2017	2018	2019
Tri-State (I-294 & I-94)	781.0	781.0	793.1	795.7	794.9	794.9	794.9	799.7
Jane Addams (I-90)	473.2	476.9	793.1	545.4	615.6	615.6	616.1	619.2
Ronald Reagan (I-88)	527.7	527.7	528.5	530.1	530.1	530.1	530.1	534.0
Veterans (I-355)	262.3	262.3	262.3	262.3	263.1	263.1	263.1	264.5
Illinois Route 390	0.0	0.0	0.0	0.0	51.4	73.3	73.3	73.3
Total Lane Miles	2,044.2	2,047.9	2,127.7	2,133.5	2,255.1	2,277.0	2,277.5	2,290.7
% INCREASE-ANNUAL		0.18%	3.90%	0.27%	5.70%	0.97%	0.02%	0.58%
% INCREASE-AGGREGATE		0.2%	4.1%	4.4%	10.3%	11.4%	11.4%	11.6%

Expansion of the Illinois Tollway system is measured by an increase in both mainline and ramp lane miles. In 1959, the Illinois Tollway system’s first full year of operation, there were 899 lane miles open. Since then, lane miles have been added through the construction of new routes, expansion of existing routes and by interstate widening and interchange projects.

As of the end of 2019, the Illinois Tollway system consisted of approximately 2,290.7 lane miles open to traffic, representing a growth of 155% since 1959. An overall timeline of the Illinois Tollway system expansion can be found in Appendix A.

The future growth of the Illinois Tollway system throughout the implementation of the *Move Illinois* program is provided in the below table, by corridor. This estimate is based on the projected growth due to the *Move Illinois* program, and additional growth may also occur as part of other systemwide improvements that may be identified, planned, designed and constructed during this time. All lanes (mainline, auxiliary, ramps and toll plaza manual lanes) are included. Lane mile inventory is tracked in Cartegraph OMS that categorizes each individual lane across the system. The Cartegraph OMS database is reviewed and updated when projects are completed that result in a change in system lane miles.

The Illinois Tollway system will continue to grow until the completion of the *Move Illinois* program in 2026. As improvement projects add new lanes, such as IL 390, I-490 and I-294, the total lane mile values will update accordingly in future versions of this and/or other reports, based on the evolution of those designs. The system growth projections from 2018 to 2026 are based on calculations provided by the Illinois Tollway Design Corridor Managers (DCM) of the respective improvement projects. Based upon the proposed project scopes,

specifically those that increase capacity on the mainline, add interchange ramps and add mainline elements, the overall system lane-mile total is expected to grow by 17.9% from 2012 through 2026.

The current projected growth of the Illinois Tollway system is largely driven by the Elgin O’Hare Western Access Project. This project is and will continue to change the face of Chicago’s northwest suburbs, the Midwest region and beyond.

Table 5-2: Projected Growth of the Illinois Tollway System per Corridor (By Lane Miles)

TOLLWAY	2020	2021	2022	2023	2024	2025	2026
Tri-State (I-294 & I-94)	800.2	811.9	811.9	814.9	823.9	847.1	847.1
Jane Addams (I-90)	619.2	619.2	619.2	619.2	619.2	619.2	619.2
Ronald Reagan (I-88)	534.0	534.0	534.0	534.0	534.0	534.0	534.0
Veterans (I-355)	264.5	264.5	264.5	264.5	264.5	264.5	264.5
Illinois Route 390	78	111.4	117.6	142.3	142.3	153.1	153.1
Total Lane Miles	2,295.9	2,341.0	2,347.2	2,374.9	2,383.9	2,417.9	2,417.9
% INCREASE-ANNUAL	0.23%	1.96%	0.26%	1.18%	0.38%	1.43%	0.00%
% INCREASE-AGGREGATE	11.8%	13.8%	14.1%	15.3%	15.6%	17.1%	17.1%



6.0 INSURANCE

The purpose of the *Property Insurance Report*, a separate report submitted under the name *2019 Property Insurance Report*, is to calculate estimated replacement costs for the assets of the Illinois Tollway system. Estimated replacement costs derived in that report serve as a basis for the Illinois Tollway to determine the amount of insurance coverage to maintain in accordance with the requirements of Section 715 of the Amended and Restated Trust Indenture of the Illinois State Toll Highway Authority, effective March 31, 1999.

Within the Illinois Tollway system

there are 12 maintenance facilities, one maintenance annex facility (a smaller maintenance yard), 15 stand-alone salt storage facilities, the Central Administration Complex, the Central Maintenance Support facility and other miscellaneous facilities that support the maintenance and operations of the Illinois Tollway system. These facilities include buildings, equipment and hardware needed to operate and maintain the integrity of the Illinois Tollway system.

Given the varying level of completeness of the current capital program (*Move Illinois*) projects, and the components that make up those projects, Illinois Tollway infrastructure is in an ongoing state of change.

To simplify this replacement cost valuation process, the assets of the Illinois Tollway system have been categorized into two sections: Structures and Real Property.

Table 6-1: Structures and Real Property Components

STRUCTURES	REAL PROPERTY
Bridges	Toll Plazas
Bridge Culverts	Central Administration complex
Retaining Walls	Maintenance Facilities
Noise Abatement Walls	Information Technology
	Oases
	Building Contents

The Structures and Real Property categories are comprised of the following components: The Illinois Tollway has elected to self-insure components valued up to \$1 million. Accordingly, this report lists components of Structures and Real Property with estimated replacement cost values greater than \$1 million. Additional assets not included as part of the asset valuation for insurance purposes are mainline and ramp pavements and drainage systems.

The 2019 cost values combined with the updates to the inventory of assets resulted in a 2019 replacement cost value of \$5,504,833,000 that is 1.36% greater than the replacement cost value of \$5,430,878,000 shown in the 2018 report.

Figure 6-1: Property Insurance Data 2018

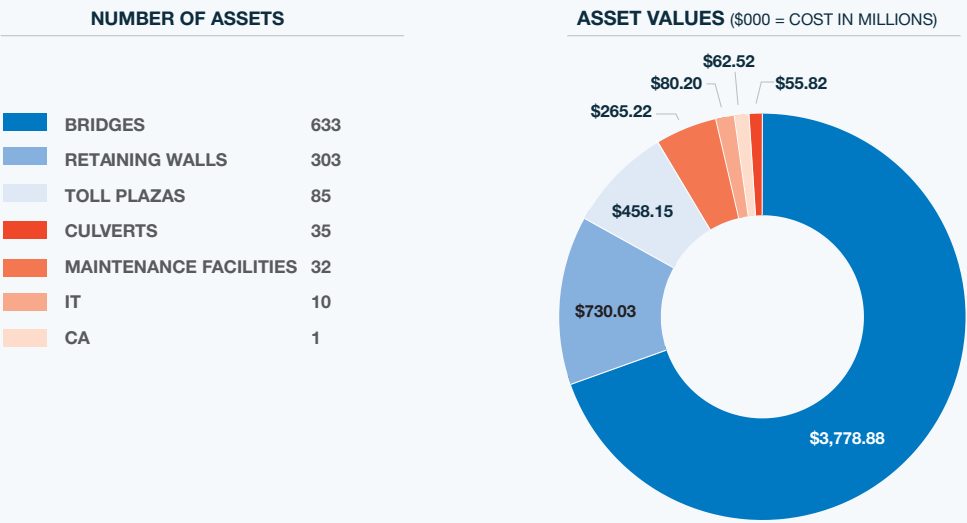
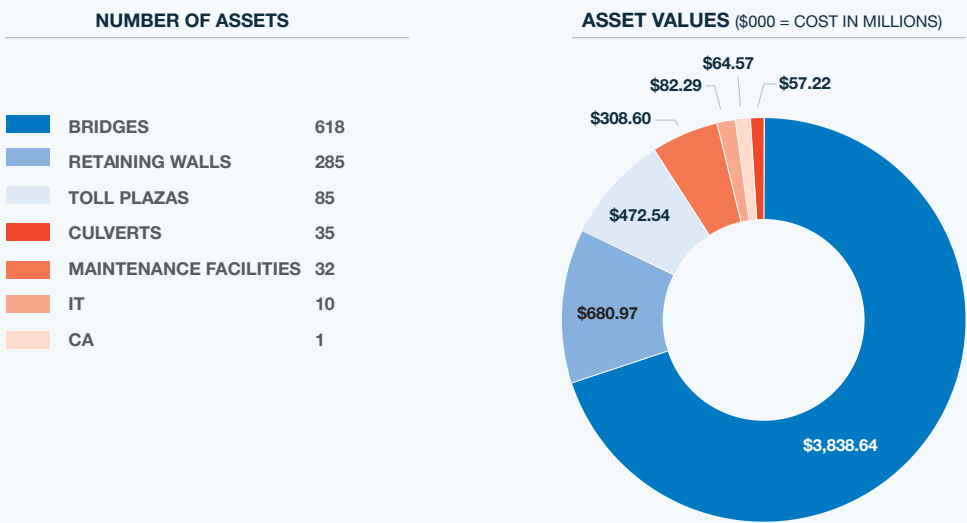


Figure 6-2: Property Insurance Data 2019



There are additional factors recommended for Illinois Tollway consideration should major structures or real property like a bridge or the Central Administration Complex require replacement. These factors have not been included in the replacement costs presented herein. If the Illinois Tollway determines that it is appropriate to obtain insurance coverage for such additional factors, the following percentage amounts should be added to the replacement costs presented herein:

- Design Engineering: approximately 9% of the construction cost.
- Construction Engineering: approximately 9% of the construction cost.
- Removal Costs: approximately 15% of the construction cost for buildings, bridges, bridge culverts, retaining walls and noisewalls.
- Costs of equipment, technology and code required upgrades.

The Illinois Tollway’s current Schedule of Insurance Policies in Force are listed on the following pages.

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
SCHEDULE OF INSURANCE POLICIES & SERVICES
DECEMBER 2019

COMMERCIAL GENERAL LIABILITY

Carrier	Policy Limits	Expires
The Insurance Company of the State of Penn.	\$10,000,000/occurrence \$10,000,000/aggregate	06/01/2020

The Policy provides general liability protection for the operations of the Tollway. Coverage includes financial protection for bodily injury and property damage incidents on a per occurrence basis subject to the annual aggregate. This policy is written with a \$500,000 per occurrence retention. Coverage includes Employment Practices and errors and omissions for public officials. Policy is combined with commercial auto liability.

Broker: Mesirow/Alliant Insurance Services

COMMERCIAL AUTO LIABILITY

Carrier	Policy Limit	Expires
The Insurance Company of the State of Penn.	\$10,000,000/occurrence	06/01/2020

Policy provides accident liability protection for the Authority’s fleet of road licensed vehicles. Policy includes \$25,000 per person/\$50,000 per occurrence of uninsured/underinsured motorist protection and \$5,000 of auto medical payments protection. Policy limit provides coverage on a per occurrence basis. This policy is written with a \$250,000 per occurrence retention. Policy is combined with commercial general liability

Broker: Mesirow/Alliant Insurance Services

EXCESS LIABILITY

Carrier	Policy Limit	Expires
Hallmark	\$10,000,000/occurrence and aggregate	06/01/2020
Endurance Am. Specialty	\$20,000,000/occurrence and aggregate	06/01/2020
Aspen Insurance	\$25,000,000/occurrence and aggregate	06/01/2020
Great American (p/o \$85M)	\$25,000,000/occurrence and aggregate	06/01/2020
Axis Surplus Ins. Co. (p/o \$85M)	\$25,000,000/occurrence and aggregate	06/01/2020
Berkley Ins Co (p/o \$85M)	\$15,000,000/occurrence and aggregate	06/01/2020
RSUI Indemnity Co. (p/o \$85M)	\$20,000,000/occurrence and aggregate	06/01/2020

Policies are excess of coverage provided by the commercial general liability policy and the business auto policy. Total excess coverage of \$150 million, coverage is in the order shown, top to bottom.

PROPERTY COVERAGE

Carrier	Policy Limit	Expires
RSUI Indemnity Co.	\$200,000,000	04/01/2020

This policy provides “all risk” protection for toll road structures including but not limited to: bridges, buildings, retaining walls, etc, subject to retention by the Tollway of \$1,000,000 per occurrence. This policy also provides for protection from toll revenues lost due to a covered incident. Protection is subject to policy limits and its specific sub-limits.

Hiscox/Lloyd’s Syndicate Terrorism Coverage	\$100,000,000 (excess of \$100,000,000)	04/01/2020
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Broker: Mesirow/Alliant Insurance Services

BUILDING INSURANCE		
Carrier	Policy Limit	Expires
Federal Insurance Co.	\$65,745,000 (Structure)	04/01/2020
Provides coverage for the Central Administration Building includes contents and EDP coverage subject to \$50,000 deductible. Policy includes several sub-limits of coverage.		
Broker: Mesirow/Alliant Insurance Services		

EQUIPMENT BREAKDOWN INSURANCE		
Carrier	Policy Limit	Expires
Federal Insurance Co.	\$125,000,000/occurrence	08/01/2020
Policy provides protection for losses involving boilers and machinery at any of the Authority's locations. This coverage is subject to a \$25,000 deductible per occurrence.		
Broker: Mesirow/Alliant Insurance Services		

PUBLIC OFFICIALS BOND		
Carrier	Policy Limit	Expires
Ohio Casualty Insurance	Blanket Bond	03/16/2021
Bond provides Public Officials Bonding for Directors and Officers of the Authority.		
Broker: Mesirow/Alliant Insurance Services		

FIDELITY AND SURETY BOND		
Carrier	Policy Limit	Expires
State of Illinois Central Management Services	Self-Insured Bond for All Tollway Employees	05/01/2020
Workers' Compensation protection of the Tollway coverage is self-funded Claim Administration Services with CorVel Corporation		

CYBER LIABILITY		
Carrier	Policy Limit	Expires
Beazley Group	\$10,000,000/occurrence	01/01/2020
Policy provides breach response services to the Insured Organization because of an actual or reasonably suspected data breach or security breach that the insured discovers subject to a \$500,000 deductible.		
Broker: Mesirow/Alliant Insurance Services		



7.0 RENEWAL AND REPLACEMENT DEPOSITS

The Consulting Engineers for the Illinois Tollway have reviewed the renewal and replacement needs of the Illinois Tollway system to develop recommendations for the deposit to be made to the Renewal and Replacement (R&R) Account in 2020. In addition to the maintenance and rehabilitation needs of the system, the Amended and Restated Trust Indenture, dated March 31, 1999 also permits the purchase of capital equipment under the R&R Account.

In March 1999, an amended and re-stated Trust Indenture became effective, replacing the 1985 Trust Indenture. Modifications to the 1985 Trust Indenture included renaming the Major Improvement Account and the Capital Improvement Account. These are now called the Renewal and Replacement Account and the Improvement Account, respectively. Definitions of the types of work to be included in each account were also revised.

In accordance with Section 710 of the Trust Indenture, on September 26, 2019, the Consulting Engineers recommended that the sum of \$240,000,000 be deposited into the Renewal and Replacement Account for 2020. The account was debited during 2019, against repair and replacement projects aimed at maintaining the quality of existing Illinois Tollway facilities. [The combination of deposits and draws on the cash balance of the Renewal and Replacement Account will fund the projects in the Program, I-PASS Transponders, Information Technology projects, the Intelligent Transportation Systems program and other Capital Projects.](#)

APPENDICES

Appendix A Illinois Tollway System Expansion History

YEAR	CEN-TERLINE MILES	LANE MILES*	ADDITIONS
1959	185.1	899.0	ORIGINAL TOLLWAY (FIRST FULL YEAR OF OPERATION)
1960	185.1	900.0	TRI-STATE TOLLWAY & JANE ADDAMS MEMORIAL TOLLWAY WIDENED (3RD LANE) AT O'HARE AIRPORT
1963	185.1	900.5	TRI-STATE TOLLWAY WILLOW ROAD INTERCHANGE (2 RAMPS)
1966	185.1	913.5	TRI-STATE TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 0.0 TO MP 5.0; I-80 INTERCHANGE ADDED (3 RAMP-MILES)
1967	185.1	931.5	JANE ADDAMS MEMORIAL TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 2.5 TO MP 11.0; TRI-STATE TOLLWAY LINCOLN OASIS RAMPS ADDITION (4 RAMPS)
1970	185.1	933.0	JANE ADDAMS MEMORIAL TOLLWAY ARLINGTON HEIGHTS INTERCHANGE ADDITION
1971	185.1	935.0	TRI-STATE TOLLWAY PLAZA 37 RAMP WIDENING; WILLOW ROAD INTERCHANGE ADDITION
1972	185.1	936.5	TRI-STATE TOLLWAY WIDENED (4TH LANE) MP 39.0 TO MP 40.0; JANE ADDAMS MEMORIAL TOLLWAY ILLINOIS ROUTE 47 INTERCHANGE ADDITION
1973	185.1	954.0	TRI-STATE TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 16.0 TO MP 24.0; PLAZA 32 RAMPS
1974	254.5	1263.0	REAGAN MEMORIAL TOLLWAY EXTENSION CONSTRUCTED; TRI-STATE TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 44.0 TO MP 49.0; JANE ADDAMS MEMORIAL TOLLWAY WIDENED (3RD LANE) MP 11.0 TO MP 17.0
1975	254.5	1286.0	JANE ADDAMS MEMORIAL TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 5.0 TO MP 16.0; BARRINGTON RD. INTERCHANGE
1976	254.5	1310.0	TRI-STATE TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 49.0 TO MP 53.0 AND MP 62.5 TO MP 70.5
1977	254.5	1332.0	REAGAN MEMORIAL TOLLWAY WIDENED (3RD LANE) IN EACH DIRECTION MP 145.0 TO 156.0
1979	254.5	1345.0	TRI-STATE TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 70.5 TO MP 77.0
1982	254.5	1349.5	REAGAN MEMORIAL TOLLWAY U.S. ROUTE 51 INTERCHANGE & ILLINOIS ROUTE 59 INTERCHANGE RAMPS; TRI-STATE TOLLWAY HINSDALE OASIS RAMPS, PLAZA 37 EXTENDED & WIDENED
1984	254.5	1354.0	JANE ADDAMS MEMORIAL TOLLWAY WIDENED (4TH LANE) WESTBOUND MP 1.2 TO MP 2.5 & ROSELLE ROAD INTERCHANGE RAMPS; TRI-STATE TOLLWAY WIDENED (4TH LANE) NORTHBOUND MP 41.5 TO MP 42.5
1986	254.5	1354.5	REAGAN MEMORIAL TOLLWAY NAPERVILLE ROAD INTERCHANGE (1 RAMP ADDED)
1987	254.5	1367.0	REAGAN MEMORIAL TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 123.5 TO MP 129.5; JANE ADDAMS MEMORIAL TOLLWAY EAST RIVERSIDE BOULEVARD INTERCHANGE RAMP
1988	254.5	1368.0	REAGAN MEMORIAL TOLLWAY ORCHARD ROAD INTERCHANGE
1989	272.0	1496.0	VETERANS MEMORIAL TOLLWAY OPENED; TRI-STATE TOLLWAY 95TH STREET INTERCHANGE (2 ADDITIONAL RAMPS) & ILLINOIS ROUTE 60 INTERCHANGE (2 ADDITIONAL RAMPS); JANE ADDAMS MEMORIAL TOLLWAY EAST RIVERSIDE BOULEVARD INTERCHANGE (2 ADDITIONAL RAMPS)

Appendix A Illinois Tollway System Expansion History

YEAR	CEN-TERLINE MILES	LANE MILES*	ADDITIONS
1990	272.0	1497.5	TRI-STATE TOLLWAY LAKE-COOK ROAD INTERCHANGE (2 RAMPS ADDED); JANE ADDAMS MEMORIAL TOLLWAY RANDALL ROAD INTERCHANGE (2 RAMPS ADDED)
1991	272.0	1499.0	TRI-STATE TOLLWAY 159TH STREET INTERCHANGE (4 RAMPS ADDED)
1992	272.0	1512.5	REAGAN MEMORIAL TOLLWAY ILLINOIS ROUTE 59 INTERCHANGE (4 RAMPS ADDED); JANE ADDAMS MEMORIAL TOLLWAY WIDENED IN BOTH DIRECTIONS MP 16.6 TO MP 22.6 TRI-STATE TOLLWAY PLAZA 32 TO RIVER ROAD RAMP
1993	272.0	1571.5	TRI-STATE TOLLWAY WIDENED IN BOTH DIRECTIONS 95TH STREET TO I-190; BALMORAL AVENUE INTERCHANGE (1 RAMP ADDED)
1994	272.0	1580.9	TRI-STATE TOLLWAY 75TH STREET INTERCHANGE; REAGAN MEMORIAL TOLLWAY WINFIELD ROAD INTERCHANGE; JANE ADDAMS MEMORIAL TOLLWAY BEVERLY ROAD INTERCHANGE; VETERANS MEMORIAL TOLLWAY WIDENED (3RD LANE) MP 14.4 TO MP 18.5
1995	272.0	1583.9	LAKE-COOK RD. EXIT RAMP, TS SOUTHBOUND BUCKLEY RD. (ROUTE 137) INTERCHANGE, TS ROCKTON RD. INTERCHANGE, NW
1997	272.0	1603.4	VETERANS MEMORIAL TOLLWAY WIDENED (3RD LANE) IN BOTH DIRECTIONS MP 22.6 TO MP 27.9; JANE ADDAMS MEMORIAL TOLLWAY RANDALL ROAD INTERCHANGE, BARRINGTON ROAD & ROSELLE ROAD INTERCHANGE PLAZAS W/ ADDITIONAL WESTBOUND LANE; TRI-STATE TOLLWAY ILLINOIS ROUTE 137 INTERCHANGE EXPANSION; REAGAN MEMORIAL TOLLWAY ORCHARD ROAD INTERCHANGE
1998	272.0	1622.6	REAGAN MEMORIAL TOLLWAY WIDENED MP 118.7 (PLAZA 61 – AURORA) TO MP 123.5 (ILLINOIS ROUTE 59); EDENS SPUR PLAZA 24 (EDENS SPUR); JANE ADDAMS MEMORIAL TOLLWAY FOX RIVER & PLAZA 9 (ELGIN) WIDENING MP 21.75 TO MP 22.0; U.S. ROUTE 20 BYPASS EXIT LANE ADDED REAGAN MEMORIAL TOLLWAY PEACE ROAD INTERCHANGE (2 RAMPS ADDED); TRI-STATE TOLLWAY WILLOW ROAD INTERCHANGE (2 RAMPS ADDED); GOLF ROAD INTERCHANGE PLAZA 28 LANES VETERANS MEMORIAL TOLLWAY 63RD STREET INTERCHANGE PLAZA 85 WIDENING; OGDEN AVENUE INTERCHANGE PLAZA 81 WIDENING
1999	272.0	1640.2	VETERANS MEMORIAL TOLLWAY PLAZA 73 (ARMY TRAIL ROAD); BOUGHTON ROAD INTERCHANGE AND PLAZA EXPANSION; JANE ADDAMS MEMORIAL TOLLWAY I-290/ROUTE 53 INTERCHANGE & PLAZA 15 EXPANSION; TRI-STATE TOLLWAY WIDENED (4TH LANE) NORTHBOUND FROM EDENS SPUR TO HALF DAY ROAD
2000	272.0	1649.4	REAGAN MEMORIAL TOLLWAY PLAZA 61 (AURORA) I-PASS EXPRESS EXPANSION MP 117.6 TO MP 118.2; TRI-STATE TOLLWAY WIDENED (4TH LANE) SOUTHBOUND FROM HALF DAY ROAD TO EDENS SPUR SPLIT AND ADDITIONAL SOUTHBOUND EXIT RAMP LENGTH TO LAKE-COOK ROAD (MP 52.9 TO MP 56.4); TRI-STATE TOLLWAY PLAZA 41 (163RD STREET) I-PASS ONLY LANES & INCREASED RAMP TAPERS TO 159TH STREET INTERCHANGE MP 5.0 TO MP 6.5

Appendix A Illinois Tollway System Expansion History

YEAR	CEN-TERLINE MILES	LANE MILES*	ADDITIONS
2001	272.0	1652.5	TRI-STATE TOLLWAY WIDENED FROM PLAZA 36 (82ND STREET) TO 95TH STREET (MP 18.0 TO MP 19.8); DEERFIELD ROAD NORTHBOUND EXIT RAMP ADDED FROM EDENS SPUR AND NORTHBOUND ENTRANCE RAMP ADDED FROM LAKE COOK ROAD (MP 52.9); GRAND AVENUE INTERCHANGE RAMP ADDED (MP 69.8)
2002	272.0	1653.5	REAGAN MEMORIAL TOLLWAY PLAZA 61 (AURORA) RECONFIGURE FOR ADDITIONAL I-PASS EXPRESS LANE EASTBOUND (MP 117.6 TO MP 118.2); TRI-STATE TOLLWAY PLAZA 29 (TOUHY) ADDITIONAL I-PASS ONLY LANE NORTHBOUND (MP 41.8)
2003	272.0	1657.2	JANE ADDAMS MEMORIAL TOLLWAY PLAZA 19 (RIVER ROAD) ADDITIONAL I-PASS ONLY LANES (MP 0.6); PLAZA 17 (DEVON AVENUE) ADDITIONAL I-PASS ONLY LANES (MP 1.7); REAGAN MEMORIAL TOLLWAY PLAZA 51 (YORK ROAD) WESTBOUND CONVERT SHOULDER TO INCREASE I-PASS ONLY LANE TAPER (MP 138.2)
2004	272.0	1662.3	JANE ADDAMS MEMORIAL TOLLWAY ROUTE 31 INTERCHANGE ADDITIONAL RAMP LANE AT PLAZA 11 (MP 24.1); PLAZA 9 (ELGIN) ADDITIONAL LANE IN BOTH DIRECTIONS (MP 25.0); REAGAN MEMORIAL TOLLWAY FARNSWORTH AVENUE INTERCHANGE ADDITIONAL RAMP LANE AT PLAZA 59 (MP 19.3); PLAZA 51 (YORK ROAD) CONVERTED SHOULDER EASTBOUND ON BOTH SIDES OF PLAZA (MP 138.2); VETERANS MEMORIAL TOLLWAY WIDENED NORTHBOUND FROM MAPLE AVENUE TO OGDEN AVENUE (MP 18.3 TO MP 19.5); I-55 INTERCHANGE (SOUTHBOUND EXIT TO SOUTHBOUND I-55) ADDITIONAL RAMP LANE (MP 12.3)
2005	272.0	1669.5	REAGAN MEMORIAL TOLLWAY WIDENED IN BOTH DIRECTIONS FROM ILLINOIS ROUTE 59 (MP 123.3) TO WASHINGTON STREET (MP 126.5); JANE ADDAMS MEMORIAL TOLLWAY RANDALL ROAD INTERCHANGE ADDITIONAL RAMP LANE (MP 26.6)
2006	272.0	1674.1	TRI-STATE TOLLWAY WIDENED IN BOTH DIRECTIONS FROM I-394 TO HALSTED STREET; ORT PROJECTS REMOVED I-PASS AUXILIARY LANES
2007	284.1	1772.1	VETERANS MEMORIAL TOLLWAY SOUTH EXTENSION CONSTRUCTED FROM INTERSTATE 55 TO INTERSTATE 80; JANE ADDAMS MEMORIAL TOLLWAY ILLINOIS ROUTE 173 INTERCHANGE (MP 79.3) RAMPS ADDED
2008	284.1	1796.5	VETERANS MEMORIAL TOLLWAY WIDENED NORTHBOUND FROM 75TH STREET (MP 15.5) TO OGDEN AVENUE (MP 19.5); REAGAN MEMORIAL WIDENED IN BOTH DIRECTIONS FROM WASHINGTON STREET (MP 126.5) TO FINLEY ROAD (MP 132.0); TRI-STATE TOLLWAY WIDENED IN BOTH DIRECTIONS FROM STEARNS SCHOOL ROAD (MP 70.8) TO ILLINOIS ROUTE 173 (MP 75.7)
2009	284.1	2045.6	VETERAN'S MEMORIAL TOLLWAY WIDENED SOUTHBOUND FROM 75TH STREET (MP 15.5) TO OGDEN AVENUE (MP 19.5); REAGAN MEMORIAL TOLLWAY WIDENED IN BOTH DIRECTIONS FROM FINLEY ROAD (MP 132.0) TO ILLINOIS ROUTE 83 (MP 137.1); TRI-STATE TOLLWAY WIDENED IN BOTH DIRECTIONS FROM 163RD STREET (MP 6.0) TO 95TH STREET (MP 17.6) AND FROM BALMORAL AVENUE (MP 40.0) TO STEARNS SCHOOL ROAD (MP 70.8); JANE ADDAMS MEMORIAL TOLLWAY WIDENED IN BOTH DIRECTIONS FROM NEWBURG ROAD (MP 61.4) TO ROCKTON ROAD (MP 75.5); IRENE ROAD INTERCHANGE WESTBOUND EXIT RAMP ADDED

Appendix A Illinois Tollway System Expansion History

YEAR	CEN-TERLINE MILES	LANE MILES*	ADDITIONS
2010	284.1	2045.8	REAGAN MEMORIAL TOLLWAY FARNSWORTH INTERCHANGE RAMP "A" WIDENED AT PLAZA 59 FOR IPO LANE (MP 119.2)
2011	284.1	2046.4	TRI-STATE TOLLWAY BALMORAL INTERCHANGE (MP 39.8) EXIT RAMP FROM NORTHBOUND I-294 ADDED
2012	284.1	2048.9	REAGAN MEMORIAL TOLLWAY (I-88) ROADWAY RECONSTRUCTION AND WIDENING ILLINOIS ROUTE 56 (MP 113.4) TO RANDALL ROAD (MP 115.8)
2013	284.1	2052.6	RECONSTRUCTION/WIDENING OF THE EASTBOUND JANE ADDAMS MEMORIAL TOLLWAY (I-90) FROM WEST OF ELGIN PLAZA 9 (MP 53.8) TO MILL ROAD (MP 17.6); RECONSTRUCTION OF JANE ADDAMS MEMORIAL TOLLWAY (I-90) & ILLINOIS ROUTE 47 INTERCHANGE (MP 46.4)
2014	284.1	2132.4	RECONSTRUCTION/WIDENING OF THE WESTBOUND JANE ADDAMS MEMORIAL TOLLWAY (I-90) FROM WEST OF ELGIN PLAZA 9 (MP 53.8) TO MILL ROAD (MP 17.6); CONSTRUCTION OF THE TRI-STATE TOLLWAY (I-294) & INTERSTATE 57 INTERCHANGE (MP 7.6)
2015	284.1	2138.2	RECONSTRUCTION OF THE JANE ADDAMS MEMORIAL TOLLWAY (I-90) & GENOA ROAD INTERCHANGE (MP 25.0); CONSTRUCTION OF JANE ADDAMS MEMORIAL TOLLWAY (I-90) & IRENE ROAD INTERCHANGE RAMPS (MP 20.8); RECONSTRUCTION OF THE TRI-STATE TOLLWAY (I-94) & GRAND AVENUE INTERCHANGE (MP 8.4); RECONSTRUCTION OF THE REAGAN MEMORIAL TOLLWAY (I-88) & ILLINOIS ROUTE 59 INTERCHANGE (MP 123.3)
2016	290.6	2258.7	RECONSTRUCTION/WIDENING OF THE JANE ADDAMS MEMORIAL TOLLWAY (I-90) FROM EAST OF ELGIN PLAZA 9 (MP 53.8) TO EASTERN TERMINUS (MP 78.6); MODIFICATIONS OF THE REAGAN MEMORIAL TOLLWAY (I-88) & FARNSWORTH AVENUE INTERCHANGE (MP 119.2) ROADWAY WIDENING OF THE VETERANS MEMORIAL TOLLWAY (I-355) SOUTHBOUND FROM SOUTH OF 71ST STREET TO NORTH OF 75TH STREET EXISTING ELGIN O'HARE TOLLWAY (IL 390) REHABILITATION/WIDENING FROM ILLINOIS ROUTE 19/IRVING PARK ROAD (MP 7.6) TO MEACHAM ROAD (MP 11.2) TOLLING OF EXISTING ELGIN O'HARE TOLLWAY (IL 390) FROM US ROUTE 20/LAKE STREET (MP 6.0) TO ILLINOIS ROUTE 19/IRVING PARK ROAD (MP 7.6)
2017	294.0	2277.0	CONSTRUCT NEW LANES OF THE ELGIN O'HARE TOLLWAY (IL 390) FROM MEACHAM ROAD (MP 11.2) TO EAST OF ILLINOIS ROUTE 83/BUSSE ROAD (MP 16.0)
2018	294.0	2277.5	CUMBERLAND FLYOVER RAMP FROM I-90 EB TO SB CUMBERLAND AVE OPEMED
2019	294.0	2,290.7	CONSTRUCTION OF NEW FULL ACCESS INTERCHANGE AT JANE ADDAMS MEMORIAL TOLLWAY (I-90) AND IL ROUTE 23 (MP 36.2) CONSTRUCITON OF TWO ADDITIONAL INTERCHANGE RAMPS AT REAGAN MEMORIAL TOLLWAY (I-88) AND IL ROUTE 47 CENTRAL TRI-STATE (I-294 EXPANSION BETWEEN O'HARE OASIS AND BALMORAL AVENUE) ROADWAY RECONSTRUCTION AND WIDENING CONSTRUCTION OF ADDITIONAL LANES ON THE VETERANS MEMORIAL TOLLWAY (I-355) FROM ROOSEVELT ROAD (MP 24.4) TO SOUTH OF 22ND STREET.

* MAINLINE LANE MILES INCLUDES AUXILLARY LANES, RAMPS AND TOLL PLAZAS.

Appendix B 2019 Active Construction Projects

CONTRACT NUMBER	ACCOUNT	AWARD AMOUNT	CONTRACT DESCRIPTION	CONTRACTOR
ELGIN O'HARE WESTERN ACCESS (EOWA)				
I-18-4691	CONSTRUCTION	\$874,028.50	EOWA - LANDSCAPING IMPROVEMENTS - ILLINOIS ROUTE 390 - PARK BOULEVARD TO WOOD DALE ROAD (MILE POST 13.1 TO MILE POST 15.0	NATURAL CREATIONS LANDSCAPING, INC.
I-18-4692	CONSTRUCTION	\$448,409.00	EOWA - LANDSCAPE - WOOD DALE RD TO EAST OF IL 83	NATURAL CREATIONS LANDSCAPING, INC.
I-18-4693	CONSTRUCTION	\$640,622.50	LANDSCAPING - ELGIN O'HARE ACCESS TOLLWAY (IL 390) - LAKE ST TO YORK RD	CARDINAL STATE, LLC
I-18-4690	CONSTRUCTION	\$1,318,928.00	LANDSCAPING - ELGIN O'HARE ACCESS TOLLWAY (IL 390) - IL 53 TO PARK BLVD	NATURAL CREATIONS LANDSCAPING, INC.
I-18-4694	CONSTRUCTION	\$11,280,765.35	ELGIN O'HARE WESTERN ACCESS TOLLWAY - BRIDGE CONSTRUCTION AND BUILDING DEMOLITION AT JANE ADDAMS MEMORIAL TOLLWAY (I-90) - I-90 FROM ELMHURST ROAD TO MOUNT PROSPECT ROAD - I-90 MILE POST 73.50 TO MILE POST 74.4 - I-490 MILE POST 6.25	LORIG CONSTRUCTION COMPANY
I-18-4699	CONSTRUCTION	\$19,486,606.72	I-490 AT I-90 INTERCHANGE EASTBOUND AND WESTBOUND, I-90 RAMP CONSTRUCTION - MILE POST 73.2 TO MILE POST 74.5	F.H. PASCHEN, S.N. NIELSEN & ASSOC., LLC
I-17-4688	CONSTRUCTION	\$13,907,770.96	ELGIN O'HARE WESTERN ACCESS TOLLWAY, ADVANCE EARTHWORK GRADING PHASE II, WESTERN ACCESS (I-490) FROM SUPREME DRIVE TO OLD HIGGINS ROAD, M.P. 3.6 TO M.P. 5.5	LAKE COUNTY GRADING COMPANY
I-17-4683	CONSTRUCTION	\$38,317,847.79	ROADWAY AND BRIDGE CONSTRUCTION - EOWA (IL 390) - IL 83 TO YORK RD	JUDLAU CONTRACTING, INC.
I-17-4673	CONSTRUCTION	\$33,474,192.14	WESTERN ACCESS TOLLWAY (I-490) - ROADWAY CONSTRUCTION - IRVING PARK ROAD (ILLINOIS ROUTE 19) TO ILLINOIS ROUTE 390	PLOTE CONSTRUCTION, INC.
JANE ADDAMS MEMORIAL TOLLWAY (I-90)				
I-18-4392	CONSTRUCTION	\$20,122,221.99	INTERCHANGE CONSTRUCTION - JANE ADDAMS MEMORIAL TOLLWAY (I-90) AT ILLINOIS ROUTE 23 (IL 23)	CURRAN CONTRACTING COMPANY

Appendix B 2019 Active Construction Projects				
CONTRACT NUMBER	ACCOUNT	AWARD AMOUNT	CONTRACT DESCRIPTION	CONTRACTOR
I-18-4695	CONSTRUCTION	\$4,385,014.00	I-90 COLLECTOR-DISTRIBUTORS OVER HIGGINS CREEK BRIDGE CONSTRUCTION - I-490 TOLLWAY - JANE ADDAMS MEMORIAL TOLLWAY (I-90) - MILE POST 73.9 TO MILE POST 74.2	LORIG CONSTRUCTION COMPANY
I-17-4327	CONSTRUCTION	\$1,127,987.37	FIBER OPTIC REMOVAL - EAST JANE ADDAMS MEMORIAL TOLLWAY, (I-90) IL-53 TO KENNEDY EXPRESSWAY, M.P. 68.2 TO M.P. 78.9	J.A. WATTS, INC.
I-17-4323	CONSTRUCTION	\$1,997,616.00	TREE PLANTING AND LANDSCAPING, JANE ADDAMS MEMORIAL TOLLWAY (I-90), ELGIN PLAZA 9 TO KENNEDY EXPRESSWAY M.P. 53.8 TO M.P. 78.9	NATURAL CREATIONS LANDSCAPING, INC.
I-17-4334	CONSTRUCTION	\$647,739.50	BIOSWALE IMPROVEMENTS, WEST JANE ADDAMS MEMORIAL TOLLWAY (I-90) FROM M.P. 53.8 (ELGIN PLAZA 9) TO M.P. 68.3 (IL ROUTE 53)	CARDINAL STATE, LLC
I-17-4335	CONSTRUCTION	\$822,937.80	BIOSWALE IMPROVEMENTS - EAST JANE ADDAMS MEMORIAL TOLLWAY (I-90) FROM IL ROUTE 53 TO KENNEDY EXPRESSWAY, M.P. 68.3 TO M.P. 78.9	NATURAL CREATIONS LANDSCAPING, INC.
I-16-4269	CONSTRUCTION	\$3,790,982.00	FIBER OPTIC RELOCATION SYSTEMWIDE, REAGAN MEMORIAL TOLLWAY (I-88), JANE ADDAMS MEMORIAL TOLLWAY (I-90), TRI-STATE TOLLWAY (I-294/I-94), VETERANS MEMORIAL TOLLWAY (I-355) AND ILLINOIS ROUTE 390 TOLLWAY (IL-390)	JOHN BURNS CONSTRUCTION COMPANY
REAGAN MEMORIAL TOLLWAY (I-88)				
RR-16-4253	CONSTRUCTION	\$48,560,404.32	ROADWAY AND BRIDGE REHABILITATION, REAGAN MEMORIAL TOLLWAY (I-88) IL 251 TO ANNIE GLIDDEN ROAD, FROM M.P. 76.1 TO M.P. 91.4	WILLIAM CHARLES/ROCK ROAD JOINT VENTURE
RR-18-4422	CONSTRUCTION	\$2,938,686.35	RAMP RECONSTRUCTION, REAGAN MEMORIAL TOLLWAY (I-88), IL 56 RAMP B, MP 113.3 TO MP 113.7	FOUNDATION MECHANICS, LLC
RR-16-4254	CONSTRUCTION	\$83,812,597.51	ROADWAY AND BRIDGE REHABILITATION, REAGAN MEMORIAL TOLLWAY (I-88)_ANNIE GLIDDEN ROAD TO IL 56, MILE POST 91.4 TO MILE POST 113.3	CURRAN CONTRACTING COMPANY / GENEVA CONSTRUCTION CO (JV)
RR-13-4117R	CONSTRUCTION	\$14,211,815.14	ROADWAY RECONSTRUCTION, REGAN MEMORIAL TOLLWAY(I-88), RAMP N- MILE POST 138.7, TRI-STATE TOLLWAY(I-294), RAMP M- MILE POST 29.1	WALSH CONSTRUCTION COMPANY II, LLC
RR-13-4116	CONSTRUCTION	\$44,931,291.06	ROADWAY RECONSTRUCTION REAGAN MEMORIAL TOLLWAY (I-88) MILE POST 138.1 TO MILE POST 140.5	WALSH CONSTRUCTION COMPANY II, LLC

Appendix B 2019 Active Construction Projects				
CONTRACT NUMBER	ACCOUNT	AWARD AMOUNT	CONTRACT DESCRIPTION	CONTRACTOR
SYSTEMWIDE IMPROVEMENTS (SW)				
RR-18-4362	CONSTRUCTION	\$1,288,926.82	LED RETROFIT - VETERANS MEMORIAL TOLLWAY (I-355) - MP 0.00 (I-80) TO MP 12.3 (I-55)	DEMARC ELECTRIC AND COMMUNICA-TIONS, LLC
RR-18-4395	CONSTRUCTION	\$1,195,644.23	ROADWAY LIGHTING UPGRADES AND LED RETROFIT - REAGAN MEMORIAL TOLLWAY (I-88) - MILE POST 116.2 TO MILE POST 122.0.	DEMARC ELECTRIC AND COMMUNICA-TIONS, LLC
RR-18-4371	CONSTRUCTION	\$1,750,042.32	SYSTEMWIDE FENCING AND SITE IMPROVEMENTS, REAGAN MEMORIAL TOLLWAY (I-88) FROM M.P. 49.8 TO M.P. 91.5 AND VETERANS MEMORIAL TOLLWAY (I-355) FROM M.P. 3.3 TO M.P. 14.3	FENCE MASTERS, INC.
RR-18-4397	CONSTRUCTION	\$1,768,916.00	SYSTEMWIDE FENCING AND SITE IMPROVEMENTS - TRI-STATE TOLLWAY (I-294) - MILE POST 2.6 TO MILE POST 40.5	FOUNDATION MECHANICS, LLC
RR-17-4343	CONSTRUCTION	\$1,430,241.75	CLOSED CIRCUIT TELEVISION (CCTV) CAMERA ENHANCEMENT, REAGAN MEMORIAL TOLLWAY (I-88) FROM M.P. 54.0 TO M.P. 138.1, VETERANS MEMORIAL TOLLWAY (I-355) FROM M.P. 3.3 TO M.P. 29.2	PAGODA ELECTRIC & CONSTRUCTION
RR-18-9208	CONSTRUCTION	\$1,317,848.90	SYSTEMWIDE CCTV CAMERA AND COMMUNICATIONS UPGRADE - REAGAN MEMORIAL TOLLWAY (I88) MILE POST 78.6 - TRI-STATE TOLLWAY (I294) - MILE POST 0.0 TO MILE POST 15.4 AND MILE POST 49.4 TO MILE POST 52.2	PAGODA ELECTRIC & CONSTRUCTION
RR-18-4396	CONSTRUCTION	\$873,976.40	SYSTEMWIDE EXIT RAMP ADVISORY SIGNING AND TOLL PLAZA SIGNING IMPROVEMENTS - TRI-STATE TOLLWAY (I-294), REAGAN MEMORIAL TOLLWAY (I-88), VETERANS MEMORIAL TOLLWAY (I-355) AND JANE ADDAMS MEMORIAL TOLLWAY (I-90)	WESTERN REMAC, INC.
RR-17-5000	CONSTRUCTION	\$4,698,370.00	RENOVATION OF DATA CENTER, CENTRAL ADMINISTRATION BUILDING, 2700 WEST OGDEN AVENUE, DOWNERS GROVE, VETERANS MEMORIAL TOLLWAY (I-355) AT M.P. 19.8	THE BOWA GROUP, INC.
RR-16-4258	CONSTRUCTION	\$25,795,281.70	M-7 RECONSTRUCTION, JANE ADDAMS MEMORIAL TOLLWAY (I-90) AT M.P.15.2, ROCKFORD, IL	WILLIAM CHARLES CONSTRUCTION COMPANY, LLC
RR-17-4328	CONSTRUCTION	\$1,689,804.76	LANDSCAPE PLANTING IMPROVEMENTS, VETERANS MEMORIAL TOLLWAY (I-355) FROM M.P. 0.0 TO M.P. 2.65	SEMPER FI YARD SERVICE, INC.
RR-17-4329	CONSTRUCTION	\$2,079,436.20	LANDSCAPE PLANTING IMPROVEMENTS, VETERANS MEMORIAL TOLLWAY (I-355) FROM M.P. 2.65 TO M.P. 11.45	ALLIED LANDSCAPING CORPORATION

Appendix B 2019 Active Construction Projects				
CONTRACT NUMBER	ACCOUNT	AWARD AMOUNT	CONTRACT DESCRIPTION	CONTRACTOR
RR-17-4330	CONSTRUCTION	\$827,457.60	LANDSCAPE PLANTING IMPROVEMENTS, VETERANS MEMORIAL TOLLWAY (I-355) FROM M.P. 12.2 TO M.P. 19.85	ALLIED LANDSCAPING CORPORATION
RR-18-4398	CONSTRUCTION	\$1,397,789.25	SYSTEMWIDE FENCING AND IMPROVEMENTS - JANE ADDAMS MEMORIAL TOLLWAY (I-90) - MILE POST 3.6 TO MILE POST 56.2	FENCE MASTERS, INC.
RR-17-4349	CONSTRUCTION	\$13,499,314.84	BRIDGE RECONSTRUCTION AND RAMP REHABILITATION, TRI-STATE TOLLWAY (I-294) AT 159TH STREET	HERLIHY MID-CONTINENT COMPANY
RR-17-4336	CONSTRUCTION	\$1,110,619.00	SYSTEMWIDE CCTV CAMERA ENHANCEMENTS, JANE ADDAMS MEMORIAL TOLLWAY (I-90) FROM M.P. 3.5 TO M.P. 78.5, TRI-STATE TOLLWAY (I-294) FROM M.P. 5.1 TO M.P. 42.0, TRI-STATE TOLLWAY (I-94) FROM M.P. 4.9 TO M.P. 26.4	DEMARC ELECTRIC AND COMMUNICATIONS, LLC
RR-18-4441	CONSTRUCTION	\$1,603,782.20	NOISE ABATEMENT WALL CONSTRUCTION - NORTH TRI-STATE TOLLWAY (I-294) - SOUTHBOUND OVER CENTRAL ROAD AT MILE POST 46.1 - NORTHBOUND OVER BALLARD ROAD AT MILE POST 44.9.	DUNNET BAY CONSTRUCTION CO.
I-18-4368	CONSTRUCTION	\$1,223,000.00	E0-6 BUILDING, M-6 MAINTENANCE FACILITY, JANE ADDAMS MEMORIAL TOLLWAY (I-90), HAMPSHIRE AT M.P. 41.9	PAGODA ELECTRIC & CONSTRUCTION
RR-18-4400	CONSTRUCTION	\$2,120,557.22	SYSTEMWIDE FENCING AND SITE IMPROVEMENTS TRI-STATE TOLLWAY (I-94/I-294) - MILE POST 4.9 TO MILE POST 26.4 (I-94) AND MILE POST 41.6 TO MILE POST 48.1 (I-294).	FENCE MASTERS, INC.
RR-17-4314	CONSTRUCTION	\$13,804,364.21	PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION - TRI-STATE TOLLWAY (I-294) MILE POST 40.0 (BALMORAL AVE) TO MILE POST 52.9 (LAKE COOK ROAD)	F.H. PASCHEN, S.N. NIELSEN & ASSOC., LLC
RR-18-4447	CONSTRUCTION	\$723,227.00	MISCELLANEOUS DRAINAGE AND ENVIRONMENTAL REPAIRS AND IMPROVEMENTS ALONG I-90 - JANE ADDAMS TOLLWAY (I-90)	FOUNDATION MECHANICS, LLC
RR-16-4285	CONSTRUCTION	\$23,063,000.00	RECONSTRUCTION AND SITE IMPROVEMENTS, M-6 MAINTENANCE FACILITY, JANE ADDAMS MEMORIAL TOLLWAY (I-90) AT M.P. 41.9	STENSTROM GENERAL CONTRACTOR / DESIGN-BUILD, INC.
RR-18-4399	CONSTRUCTION	\$1,343,753.55	SYSTEMWIDE FENCING AND SITE IMPROVEMENTS - JANE ADDAMS MEMORIAL TOLLWAY (I-90) MILE POST 59.4 TO MILE POST 78.5 AND VETERANS MEMORIAL TOLLWAY (I-355) MILE POST 22.6 TO MILE POST 29.2	ANTIGUA, INC. DBA ANTIGUA CONSTRUCTION, INC.
RR-19-4450	CONSTRUCTION	\$844,102.00	SOUTH TRI-STATE ACCIDENT REPAIRS. TRI-STATE TOLLWAY (I-294) MILE POST 3.2 TO MILE POST 14.7 AND SN 124 REMOVAL.	LORIG CONSTRUCTION COMPANY

Appendix B 2019 Active Construction Projects				
CONTRACT NUMBER	ACCOUNT	AWARD AMOUNT	CONTRACT DESCRIPTION	CONTRACTOR
RR-19-4455	CONSTRUCTION	\$395,899.65	GRADING, EROSION CONTROL, AND SLUICE GATE PATH TRI-STATE TOLLWAY (I-294) MILEPOST 44.3 (DEMPSTER STREET) TO MILEPOST 44.6 (BALLARD ROAD)	NATIVE LANDSCAPE CONTRACTORS, LLC
RR-19-4451	CONSTRUCTION	\$8,190,544.95	PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, REAGAN MEMORIAL TOLLWAY (I-88), MILE POST 113.6 (ILLINOIS ROUTE 56) TO MILE POST 123.9 (EAST OF ILLINOIS ROUTE 59)	F.H. PASCHEN, S.N. NIELSEN & ASSOC., LLC
RR-19-4470	CONSTRUCTION	\$2,146,432.15	INTERMITTENT PAVEMENT REPAIRS - TRI-STATE TOLLWAY (I-294) - MILE POST 17.7 TO 36.9 AND ELGIN-O'HARE TOLLWAY (I-390) - MILE POST 7.6 TO 11.2.	K-FIVE CONSTRUCTION CORPORATION
RR-16-4277R	CONSTRUCTION	\$29,485,412.78	PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION - TRI-STATE TOLLWAY (I-94) - HALF DAY ROAD TO EDENS SPUR PLAZA - MILE POST 21.86 TO MILE POST 26.25.	PLOTE CONSTRUCTION, INC/PETER BAKER & SON CO.
RR-18-4448	CONSTRUCTION	\$649,712.45	MISCELLANEOUS DRAINAGE AND ENVIRONMENTAL REPAIRS AND IMPROVEMENTS ALONG I-90, JANE ADDAMS TOLLWAY MILE POST 15.90, 21.90, 22.17, 22.22, 24.07, 54.60, & 54.70.	SEMPER FI YARD SERVICE, INC.
RR-19-9216	CONSTRUCTION	\$1,945,259.78	SYSTEMWIDE PAVEMENT MARKING	A C PAVEMENT STRIPING COMPANY
RR-19-4471	CONSTRUCTION	\$440,519.61	PAVEMENT RESURFACING & INTERMITTENT PAVEMENT REPAIRS - JANE ADDAMS MEMORIAL TOLLWAY (I-90) - MILE POST 14.87 TO 17.00	CURRAN CONTRACTING COMPANY
I-16-4274	CONSTRUCTION	\$14,058,392.88	ILLINOIS ROUTE 47 INTERCHANGE - REAGAN MEMORIAL TOLLWAY (I88) - MILE POST 108.8 TO MILE POST 109.9	CURRAN CONTRACTING COMPANY
RR-18-4404	CONSTRUCTION	\$2,894,390.00	M-14 ANNEX B PARKING STRUCTURE - VETERANS MEMORIAL TOLLWAY (I-355) - MILE POST 3.25	PACIFIC CONSTRUCTION SERVICES, INC
RR-18-4407	CONSTRUCTION	\$3,174,786.40	SYSTEMWIDE ITS PRESERVATION AND REHABILITATION - REAGAN MEMORIAL TOLLWAY (I-88), JANE ADDAMS MEMORIAL TOLLWAY, TRI-STATE TOLLWAY (I-94/I-294) AND VETERANS MEMORIAL TOLLWAY (I-355)	ALDRIDGE ELECTRIC, INC.
RR-18-4418	CONSTRUCTION	\$338,862.90	LANDSCAPING PLANTING IMPROVEMENTS - REAGAN MEMORIAL TOLLWAY (I-88), IL 251 INTERCHANGE	LIZZETTE MEDINA & CO. DBA LIZZETTE MEDINA LANDSCAPE MANAGEMENT

Appendix B 2019 Active Construction Projects

CONTRACT NUMBER	ACCOUNT	AWARD AMOUNT	CONTRACT DESCRIPTION	CONTRACTOR
RR-18-9017	CONSTRUCTION	\$2,112,236.29	SYSTEMWIDE CCTV CAMERA AND RAMP DETECTION INSTALLATION - TRI-STATE TOLLWAY (I-294) - REAGAN MEMORIAL TOLLWAY (I-88) AND VETERANS MEMORIAL TOLLWAY (I-355).	MEADE, INC
RR-18-9212	CONSTRUCTION	\$1,789,000.00	COOLING TOWER & CHILLER REPLACEMENT CENTRAL ADMINISTRATION BUILDING, VETERANS MEMORIAL TOLLWAY (I-355) MILEPOST 19.80	OAK BROOK MECHL SVCS INC
RR-18-4425	CONSTRUCTION	\$9,659,337.00	M-2 MAINTENANCE FACILITY RENOVATION AND ADDITION, TRI-STATE TOLLWAY (I-294), MILE POST 29.5	MADISON CONSTRUCTION
RR-18-4443	CONSTRUCTION	\$1,059,800.00	LANDSCAPING PLANTING IMPROVEMENTS - JANE ADDAMS MEMORIAL TOLLWAY (I-90) - PLAZA 1 TO EAST RIVERSIDE BLVD - MILE POST 3.3 TO MILE POST 13.	CARDINAL STATE, LLC
RR-18-4445	CONSTRUCTION	\$31,350,443.00	M-8 MAINTENANCE FACILITY AND SITE IMPROVEMENTS. REAGAN MEMORIAL TOLLWAY (I-88) MILE POST 117.8.	W.E. O'NEIL CONSTRUCTION COMPANY
RR-18-4442	CONSTRUCTION	\$1,324,035.56	LANDSCAPE PLANTING IMPROVEMENTS REAGAN MEMORIAL TOLLWAY (I-88) MILEPOST 76.50 (IL-251 INTERCHANGE) TO MILEPOST 91.62 (KISHWAUKEE RIVER BRIDGE)	SEMPER FI YARD SERVICE, INC.
RR-18-4444	CONSTRUCTION	\$1,429,406.57	LANDSCAPE PLANTING IMPROVEMENTS JANE ADDAMS MEMORIAL TOLLWAY (I-90), MILE POST 13.00 (EAST RIVERSIDE BOULEVARD) TO MILE POST 25.40 (EAST OF GENOA ROAD).	SEMPER FI YARD SERVICE, INC.
I-18-4393	CONSTRUCTION	\$1,793,990.00	M-14 SITE IMPROVEMENTS, VETERANS MEMORIAL TOLLWAY (I-355) M-14 MAINTENACE FACILITY AT M.P. 21.2, DOWNERS GROVE, IL	ABARI CONSTRUCTION, INC.
RR-16-9195	CONSTRUCTION	\$1,642,063.00	SIGN PANEL FABRICATION AND INSTALLATION UPON REQUEST, SYSTEMWIDE	WESTERN REMAC, INC.
TRI-STATE TOLLWAY (I-94/I-294/I-80)				
I-18-4433	CONSTRUCTION	\$18,753,146.12	I-57 MEDIAN NORTH OF I-294, RAMP L	D CONSTRUCTION, INC.
I-17-4338	CONSTRUCTION	\$4,743,152.20	ELGIN O'HARE WESTERN ACCESS TOLLWAY (I-490) ADVANCED FIBER OPTIC RELOCATION INSTALLATION, TRI-STATE TOLLWAY (I-294) FROM M.P. 32.9 TO M.P. 36.3	MEADE, INC
I-18-4389	CONSTRUCTION	\$37,514,348.63	ROADWAY AND BRIDGE REHABILITATION - TRI-STATE TOLLWAY (I-294) - MILE POST 36.3 TO MILE POST 40.0	PLOTE / DUNNET BAY, JV
I-18-4388	CONSTRUCTION	\$4,583,567.67	ROADWAY REHABILITATION AND WIDENING, TRI-STATE TOLLWAY (I-294), TOLL PLAZA 35, M.P. 29.4 TO M.P. 30.6	K-FIVE CONSTRUCTION CORPORATION

Appendix B 2019 Active Construction Projects

CONTRACT NUMBER	ACCOUNT	AWARD AMOUNT	CONTRACT DESCRIPTION	CONTRACTOR
RR-17-4325	CONSTRUCTION	\$2,597,340.50	FIBER OPTIC RELOCATION - SYSTEMWIDE	WESTERN UTILITY LLC
I-18-4390	CONSTRUCTION	\$4,668,269.31	O'HARE OASIS BRIDGE DEMOLITION AND GRADING - TRI-STATE TOLLWAY (I-294) - BRIDGE NO BN 394-0 - MILE POST 37.8 TO MILE POST 37.9.	F.H. PASCHEN, S.N. NIELSEN & ASSOC., LLC
I-18-4436	CONSTRUCTION	\$868,198.00	ITS DEVICES RELOCATION - PROCUREMENT OF FIBER OPTIC AERIAL CABLES, MESSENGER WIRE AND WOOD POLES - TRISTATE TOLLWAY - I-294 95TH STREET (MILE POST 17.4) TO NORTH AVE/LAKE STREET (MILE POST 33.5).	HECKER AND COMPANY, INC.
I-18-4373	CONSTRUCTION	\$45,774,502.77	ROADWAY AND BRIDGE RECONSTRUCTION, EDENS SPUR, TRI-STATE TOLLWAY (I-94), M.P. 26.9 TO M.P. 29.	WALSH CONSTRUCTION COMPANY II, LLC
RR-18-4439	CONSTRUCTION	\$1,931,481.00	BRIDGE REHABILITATION - TRI-STATE TOLLWAY (I-294) - MILE POST 18.70 TO MILE POST 39.25 - STATION 989+00 TO STATION 2080+00.	SUMIT CONSTRUCTION CO., INC.
I-18-4391	CONSTRUCTION	\$12,206,238.24	ROADWAY REHABILITATION AND WIDENING TOLL PLAZAS 36 AND 39 - TRI-STATE TOLLWAY (I-294) - MILE POST 19.1 TO MILE POST 19.7	JUDLAU CONTRACTING, INC.
I-18-4438	CONSTRUCTION	\$9,095,944.31	TEMPORARY ITS AND FIBER RELOCATION - TRI-STATE TOLLWAY (I-294)	ALDRIDGE ELECTRIC, INC.
I-18-4446	CONSTRUCTION	\$12,387,295.13	RETAINING WALL CONSTRUCTION, GRADING AND SHOULDER REHABILITATION - TRI-STATE TOLLWAY (I-294) - MILE POST 31.5 TO MILE POST 34.9	JUDLAU CONTRACTING, INC.
I-18-4427	CONSTRUCTION	\$55,391,651.16	ROADWAY AND BRIDGE REHABILITATION, TRI-STATE TOLLWAY (I-294). MILE POST 37.85 TO MILE POST 40.15, STATION 200+00 TO STA. 2123+00	PLOTE CONSTRUCTION, INC. / DUNNET BAY CONSTRUCTION CO., JV
I-18-4430	CONSTRUCTION	\$184,551,677.19	ROADWAY AND BRIDGE RECONSTRUCTION - TRI-STATE TOLLWAY (I-294) - MILE LONG BRIDGE - MILE POST 20.7 TO MILE POST 22.3 - STA 5096+23.33 TO STA 1176+62.01	F.H. PASCHEN, S.N. NIELSEN & ASSOC., LLC
I-18-4374	CONSTRUCTION	\$37,892,153.97	EDENS SPUR (I-94) - ROADWAY AND BRIDGE RECONSTRUCTION - MP 29.0 (WEST OF UNION PACIFIC RAILROAD) TO MP 30.0 (EDENS EXPRESSWAY)	LORIG CONSTRUCTION COMPANY
I-18-4428	CONSTRUCTION	\$77,307,869.87	BRIDGE RECONSTRUCTION (BN 261) - BURLINGTON NORTHERN SANTA FE RAILWAY (BNSF) OVER THE TRI-STATE TOLLWAY (I-294) - MILE POST 26.6	WALSH CONSTRUCTION COMPANY II, LLC

Appendix B 2019 Active Construction Projects

CONTRACT NUMBER	ACCOUNT	AWARD AMOUNT	CONTRACT DESCRIPTION	CONTRACTOR
I-18-4369	CONSTRUCTION	\$1,003,340.00	BUILDING REMOVAL, SYSTEMWIDE, WILLOW SPRINGS, HODGKINS AND COUNTRYSIDE, FROM M.P. 20.9 TO M.P. 23.0	FOX EXCAVATING, INC.
I-18-4423	CONSTRUCTION	\$742,459.00	BUILDING REMOVAL - TRI-STATE TOLLWAY (I-294) - MILE POST 17.8 TO MILE POST 40.00	FOX EXCAVATING, INC.
I-19-4452	CONSTRUCTION	\$1,103,340.93	BUILDING REMOVALS VILLAGES OF JUSTICE, WILLOW SPRINGS, BERKELEY AND THE CITY OF COUNTRYSIDE TRI-STATE TOLLWAY (I-294) MILE POST 17.8 TO MILE POST 40.00	SCHWARTZ EXCAVATING, INC.
I-19-4453	CONSTRUCTION	\$1,103,271.00	BUILDING REMOVALS VILLAGE OF HINSDALE AND CITY OF ELMHURST TRI-STATE TOLLWAY (I-294) MILE POST 17.8 TO MILE POST 40.00	FOX EXCAVATING, INC.
I-19-4454	CONSTRUCTION	\$1,104,928.75	PROPERTY MAINTENANCE TRI-STATE TOLLWAY(I-294) MP 17.8 TO MP 40.00	WESTERN REMAC, INC.
VETERANS MEMORIAL TOLLWAY (I-355)				
RR-16-4255	CONSTRUCTION	\$49,213,891.28	ROADWAY AND BRIDGE REHABILITATION, VETERANS MEMORIAL TOLLWAY (I-355) FROM M.P. 12.1 TO M.P. 22.3	K-FIVE /LORIG , JV
RR-16-4256	CONSTRUCTION	\$50,813,308.12	ROADWAY AND BRIDGE REHABILITATION, VETERANS MEMORIAL TOLLWAY (I-355) BUTTERFIELD ROAD TO ARMY TRAIL ROAD, FROM M.P. 22.3 TO M.P. 29.8	PLOTE / DUNNET BAY , JV

Appendix C 2019 Active Professional Services Contracts

CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
ELGIN O'HARE WESTERN ACCESS (EOWA)				
I-18-4701	CM	CONSTRUCTION CORRIDOR MANAGER AND OWNER'S REPRESENTATIVE SERVICES (CCM/OR) – EOWA CORRIDOR (ILLINOIS ROUTE 390/I-490). (CCM AND CM SERVICES – DIRECT LABOR MULTIPLIER)	KNIGHT E/A, INC. / V3 COMPANIES, LTD. (KNIV3C_ TM)	\$74,877,601.40
I-15-4658	DESIGN	EOWA, I-294 TO I-90- BENSENVILLE YARD UNDERPASS. PHASE II ENGINEERING SERVICES.	STANTEC CONSULTING SERVICES, INC. / TERRA ENGINEERING, LTD (TM)	\$35,803,003.19
I-18-4700	DESIGN	DESIGN CORRIDOR MANAGER SERVICES (DCM) – EOWA CORRIDOR (ILLINOIS ROUTE 390/I-490)	JACOBS ENGINEERING GROUP, INC.	\$29,500,000.00
I-15-4656	DESIGN	EOWA, I-294 TO I-90- TRI-STATE AND FRANKLIN/ GREEN STREET. PHASE II ENGINEERING SERVICES.	ALFRED BENESCH & CO. / CHRISTOPHER B. BURKE ENG, LTD. / LIN ENGINEERING, LTD. (TM)	\$24,442,011.52
I-15-4657	DESIGN	EOWA, I-294 TO I-90- FRANKLIN/GREEN STREET AND BENSENVILLE YARD. PHASE II ENGINEERING SERVICES.	WOOD ENVIRONMENT & INFRASTRUCTURE/T.Y. LIN INTL GREAT LAKES INC	\$13,491,452.94
I-17-4676	DESIGN	EOWA JANE ADDAMS MEMORIAL TOLLWAY SYSTEM INTERCHANGE	EXP U S SERVICES, INC.	\$13,398,000.00
I-17-4677	DESIGN	ELGIN O'HARE WESTERN ACCESS, DEVON AVENUE TO PRATT BOULEVARD. PHASE II ENGINEERING.	RS&H, INC./TOLTZ, KING, DUVAL, ANDERSON AND ASSOCIATES, INC.	\$8,000,000.00
I-18-4698	DESIGN & CM	I-490, DESIGN AND CONSTRUCTION MANAGEMENT SERVICES UPON REQUEST. ON-CALL, AND AS-NEEDED PHASE II ENGINEERING AND CONSTRUCTION MANAGEMENT SERVICES.	ESI CONSULTANTS, LTD	\$7,000,000.00
I-17-4680	CM	ELGIN O'HARE WESTERN ACCESS, IL 390 FROM IL 83 TO YORK ROAD. CONSTRUCTION MANAGEMENT SERVICES.	BLA, INC. (DBA BOLLINGER, LACH & ASSOCIATES., INC.)	\$6,523,000.00
I-15-4659	DESIGN	EOWA, DESIGN AND CONSTRUCTION MANAGEMENT SERVICES UPON REQUEST. ON-CALL AND AS-NEEDED ENVIRONMENTAL SITE ASSESSMENT SERVICES.	WIGHT & COMPANY / GSG CONSULTANTS, INC. (TM)	\$6,500,000.00
I-17-4682	CM	ELGIN O'HARE WESTERN ACCESS, CONSTRUCTION MANAGEMENT UPON REQUEST. ON CALL AND AS NEEDED CONSTRUCTION MANAGEMENT SERVICES.	HAMPTON, LENZINI & RENWICK, INC.	\$6,000,000.00
I-17-4678	DESIGN	ELGIN O'HARE WESTERN ACCESS, PRATT BOULEVARD TO TOUHY AVENUE. PHASE II ENGINEERING.	BURNS & MCDONNELL ENGINEERING CO., INC.	\$5,500,000.00

Appendix C 2019 Active Professional Services Contracts

CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
I-13-4624	DESIGN	DESIGN UPON REQUEST - ELGIN O'HARE WESTERN ACCESS	EXP U S SERVICES, INC.	\$5,000,000.00
I-17-4681R	CM	ELGIN O'HARE WESTERN ACCESS, WESTERN ACCESS AT IL 19 INTERCHANGE	WIGHT & COMPANY / ORION ENGINEERS, LLC	\$4,550,000.00
I-14-4646	DESIGN	LAND ACQUISITION AND SURVEYING SERVICES UPON REQUEST - SYSTEMWIDE	HAMPTON, LENZINI & RENWICK, INC.	\$3,000,000.00
I-15-4660	DESIGN	LAND ACQUISITION SERVICES UPON REQUEST - SYSTEMWIDE. ON-CALL AND AS-NEEDED SURVEYING SERVICES.	HDR ENGINEERING, INC.	\$3,000,000.00
I-17-4675	DESIGN	ELGIN O'HARE WESTERN ACCESS, JANE ADDAMS MEMORIAL TOLLWAY SYSTEM INTERCHANGE (EASTBOUND COLLECTOR DISTRIBUTOR ROAD). PHASE II ENGINEERING.	INFRASTRUCTURE ENGINEERING, INC.	\$1,862,000.00
I-17-4674	DESIGN	ELGIN O'HARE WESTERN ACCESS, JANE ADDAMS MEMORIAL TOLLWAY SYSTEM INTERCHANGE (WESTBOUND COLLECTOR DISTRIBUTOR ROAD). PHASE II ENGINEERING.	GRAEF-USA INC. (FORMERLY GRAEF, ANHALT, SCHLOEMER & ASSOCIATES)	\$1,725,000.00
I-13-4612	CM	WETLAND MITIGATION SITE, ELGIN O'HARE WESTERN ACCESS	HEY AND ASSOCIATES, INC.	\$1,244,000.00
ILLINOIS ROUTE 53/120 EXTENSION AND OTHER PLANNING STUDIES				
I-16-4266	STUDY	IL 53/IL 120 ENVIRONMENTAL IMPACT STATEMENT (EIS) AND RELATED REPORTS	CH2M HILL, INC. / KNIGHT E/A, INC. (CH2KNI_TM)	\$50,000,000.00
RR-18-4383	STUDY	TRI-STATE TOLLWAY, 95TH STREET TO BALMORAL AVENUE, PLANNING STUDIES UPON REQUEST. ON-CALL AND AS-NEEDED PHASE I ENGINEERING SERVICES FOR PLANNING STUDIES AND MASTER PLAN SERVICES.	CHRISTOPHER B. BURKE, ENGINEERING, LTD.	\$5,000,000.00
REAGAN MEMORIAL TOLLWAY (I-88)				
RR-16-4254	CM	REAGAN MEMORIAL TOLLWAY, ROADWAY AND BRIDGE REHABILITATION, ANNIE GLIDDEN ROAD (M.P. 91.4) TO IL 56 (M.P. 113.3). CONSTRUCTION MANAGEMENT SERVICES.	EJM ENGINEERING, INC. (DBA TRANSMART/EJM CORPORATION)	\$7,098,410.24
RR-16-4253	CM	REAGAN MEMORIAL TOLLWAY, ROADWAY AND BRIDGE REHABILITATION, IL 251 (M.P. 76.1) TO ANNIE GLIDDEN ROAD (M.P. 91.4). CONSTRUCTION MANAGEMENT SERVICES.	LOCHMUELLER GROUP, INC.	\$5,713,801.15

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CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
RR-18-4434	CM	I-88 AND SYSTEMWIDE, CONSTRUCTION MANAGEMENT SERVICES UPON REQUEST	INFRASTRUCTURE ENGINEERING, INC.	\$5,000,000.00
RR-13-4116	CM	REAGAN MEMORIAL TOLLWAY, ROADWAY RECONSTRUCTION, YORK ROAD PLAZA (M.P. 138.1) TO I-290 (M.P. 140.5). CONSTRUCTION MANAGEMENT SERVICES.	PARSONS TRANSPORTATION GROUP, INC.	\$3,348,578.95
RR-18-4379	DESIGN	REAGAN MEMORIAL TOLLWAY, ROADWAY AND BRIDGE REHABILITATION, M.P. 117.8 (AURORA TOLL PLAZA) TO M.P. 123.4 (IL 59). PHASE II ENGINEERING SERVICES.	WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS, INC. (F/K/A AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.)	\$3,000,000.00
RR-13-4117	CM	REAGAN MEMORIAL TOLLWAY, ROADWAY RECONSTRUCTION, EAST WEST CONNECTOR	BOWMAN CONSULTING GROUP, LTD	\$2,993,467.42
I-18-4352	DESIGN	REAGAN MEMORIAL TOLLWAY (I-88), WINDSOR ROAD BRIDGE WIDENING. PHASE II ENGINEERING SERVICES	UPCHURCH GROUP, INC., THE	\$1,597,911.28
I-18-4352	CM	REAGAN MEMORIAL TOLLWAY, WINDSOR ROAD BRIDGE RECONSTRUCTION, CONSTRUCTION MANAGEMENT	UPCHURCH GROUP, INC., THE	\$1,597,911.28
SYSTEMWIDE IMPROVEMENTS (SW)				
RR-17-4313	CM	REAGAN MEMORIAL TOLLWAY (I-88), PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, M.P. 126.9 (EAST OF WASHINGTON STREET) TO M.P. 139.1 (YORK ROAD). CONSTRUCTION MANAGEMENT SERVICES.	BLOOM COMPANIES, LLC	\$1,498,250.00
RR-13-4154	DESIGN	UTILITY LOCATION AND IDENTIFICATION ASSISTANCE UPON REQUEST	HBK ENGINEERING, LLC	\$5,000,000.00
RR-14-4200	CM	MAINTENANCE FACILITIES - CONSTRUCTION MANAGEMENT UPON REQUEST	D'ESCOTO, INC.	\$600,000.00
RR-17-4314	CM	TRI-STATE TOLLWAY (I-294), PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, M.P. 40.0 (BALMORAL AVE) TO M.P. 52.9 (LAKE COOK ROAD). CONSTRUCTION MANAGEMENT SERVICES	HARRY O. HEFTER - ASSOCIATES, INC.	\$2,515,679.00
RR-14-4199	DESIGN	MAINTENANCE FACILITIES - SITE PLAN / DESIGN UPON REQUEST	MILHOUSE ENGINEERING & CONSTRUCTION, INC.	\$600,000.00
RR-16-4252	CM	SYSTEMWIDE, MAINTENANCE FACILITIES, CONSTRUCTION MANAGEMENT SERVICES UPON REQUEST	ESI CONSULTANTS, LTD	\$4,000,000.00

Appendix C 2019 Active Professional Services Contracts

CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
RR-17-4312	CM	REAGAN MEMORIAL TOLLWAY (I-88), PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, M.P. 123.4 (IL ROUTE 59) TO M.P. 126.9 (EAST OF WASHINGTON STREET). CONSTRUCTION MANAGEMENT SERVICES.	TRANSLAND ENGINEERING GROUP, LLC	\$699,800.00
RR-17-4314	DESIGN	TRI-STATE TOLLWAY, PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, M.P. 40.0 (BALMORAL AVE) TO M.P. 52.9 (LAKE COOK ROAD). PHASE II ENGINEERING SERVICES.	HARRY O. HEFTER - ASSOCIATES, INC.	\$2,515,679.00
RR-18-4381	DESIGN	REAGAN MEMORIAL TOLLWAY, PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, M.P. 113.3 (ILLINOIS ROUTE 56) TO M.P. 117.8 (AURORA TOLL PLAZA). PHASE II ENGINEERING SERVICES.	LOCHMUELLER GROUP, INC.	\$1,511,894.07
RR-16-4282	CM	TRI-STATE TOLLWAY (I-94), PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, M.P. 0.5 (RUSSELL ROAD) TO M.P. 25.2 (LAKE COOK ROAD). CONSTRUCTION MANAGEMENT SERVICES.	COLLINS ENGINEERS, INC.	\$3,820,586.72
RR-14-4202	CM	MAINTENANCE FACILITIES - SITE RECON - CM	THE RODERICK GROUP, INC. (DBA ARDMORE RODERICK)	\$3,582,822.61
I-16-4274	DESIGN	DM SERVICE UPON REQ - IL 47 INTERCHANGE	CIVILTECH ENGINEERING, INC./MILLENNIA PROFESSIONAL SERVICES	\$2,066,000.00
RR-14-4195	DESIGN	MATERIALS ENGINEERING SERVICES UPON REQUEST - SYSTEMWIDE	INTERRA INC.	\$3,750,000.00
RR-17-4293	CM	SYSTEMWIDE, CONSTRUCTION MANAGEMENT UPON REQUEST. ON CALL AND AS-NEEDED CONSTRUCTION MANAGEMENT SERVICES.	SE3, LLC	\$2,000,000.00
RR-18-4377	CM	SYSTEMWIDE, MAINTENANCE FACILITIES, CONSTRUCTION MANAGEMENT SERVICES UPON REQUEST. ON-CALL AND AS-NEEDED CONSTRUCTION MANAGEMENT SERVICES.	THE RODERICK GROUP, INC. (DBA ARDMORE RODERICK)	\$6,500,000.00
RR-18-9013	CM	SYSTEMWIDE, CONSTRUCTION MANAGEMENT UPON REQUEST, NON-ROADWAY. ON CALL AND AS-NEEDED CONSTRUCTION MANAGEMENT SERVICES.	R.M. CHIN & ASSOCIATES, INC.	\$2,500,000.00
RR-18-9016	CM	SYSTEMWIDE, CONSTRUCTION MANAGEMENT UPON REQUEST, NON-ROADWAY. ON-CALL AND AS-NEEDED CONSTRUCTION MANAGEMENT SERVICES.	ARCADIS U.S., INC.	\$2,500,000.00

Appendix C 2019 Active Professional Services Contracts

CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
RR-17-4313	DESIGN	REAGAN MEMORIAL TOLLWAY, PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, M.P. 126.9 (EAST OF WASHINGTON STREET) TO M.P. 139.1 (YORK ROAD). PHASE II ENGINEERING SERVICES	BLOOM COMPANIES, LLC	\$1,498,250.00
RR-16-4277	CM	TRI-STATE TOLLWAY (I-94), PAVEMENT AND STRUCTURAL PRESERVATION AND REHABILITATION, M.P. 21.85 (HALF DAY ROAD) TO M.P. 25.2 (LAKE-COOK ROAD). CONSTRUCTION MANAGEMENT SERVICES.	WYNNDALCO ENTERPRISES/MIDWEST ENGINEERING ASSOC. (WYDMD_TM)	\$1,489,097.00
RR-18-4360	CM	SYSTEMWIDE, CONSTRUCTION MANAGEMENT UPON REQUEST. ON CALL AND AS-NEEDED CONSTRUCTION MANAGEMENT SERVICES.	COTTER CONSULTING, INC.	\$3,000,000.00
I-18-4409	CM	CONSTRUCTION MANAGEMENT SERVICES UPON REQUEST. ON-CALL AND AS-NEEDED. SYSTEMWIDE	STANTEC CONSULTING SERVICES, INC.	\$3,000,000.00
I-14-4225	DESIGN	LAND ACQUISITION AND SURVEYING SERVICES UPON REQUEST - SYSTEMWIDE	MATHEWSON RIGHT OF WAY COMPANY/DYNASTY GROUP, INC.	\$3,000,000.00
RR-16-4267	DESIGN	MAINTENANCE FACILITIES SITE DESIGN	ENVIRONMENTAL DESIGN INTERNATIONAL, INC.	\$3,900,000.00
I-16-4274	CM	REAGAN MEMORIAL TOLLWAY, ILLINOIS ROUTE 47 INTERCHANGE, M.P. 109.3. CONSTRUCTION MANAGEMENT SERVICES.	CIVILTECH ENGINEERING, INC./MILLENNIA PROFESSIONAL SERVICES	\$2,066,000.00
RR-18-4378	CM	SYSTEMWIDE, CONSTRUCTION MANAGEMENT UPON REQUEST. ON-CALL AND AS-NEEDED CONSTRUCTION MANAGEMENT SERVICES.	INTERRA INC.	\$2,500,000.00
RR-16-4278	DESIGN	SYSTEMWIDE TRAFFIC OPERATION AND MAINTENANCE PERFORMANCE EVALUATION AND ENHANCEMENT SUPPORT. ON-CALL AND AS-NEEDED TRAFFIC OPERATION AND MAINTENANCE SUPPORT.	J.A. WATTS, INC.	\$2,500,000.00
RR-18-9008	DESIGN	SYSTEMWIDE, DESIGN UPON REQUEST, NON-ROADWAY. PHASE II ENGINEERING SERVICES.	SINGH & ASSOCIATES, INC.	\$2,000,000.00
RR-18-4435	CM	JANE ADDAMS MEMORIAL TOLLWAY, PAVEMENT AND BRIDGE PRESERVATION M.P. 2.6 (ROCKTON ROAD) TO M.P. 18.3 (KISHWAUKEE RIVER BRIDGE), CONSTRUCTION MANAGEMENT	COLLINS ENGINEERS, INC.	\$2,499,800.00
RR-18-4355	DESIGN & CM	INTELLIGENT TRANSPORTATION SYSTEMS (ITS) SERVICES UPON REQUEST. ON CALL AND AS-NEEDED PHASE II ENGINEERING SERVICES AND CONSTRUCTION MANAGEMENT SERVICES	EJM ENGINEERING, INC. / TRANSMART TECHNOLOGIES, INC. (TM)	\$3,500,000.00

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CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
I-16-4257	STUDY	ENVIRONMENTAL STUDIES UPON REQUEST	HUFF & HUFF, INC.	\$5,000,000.00
RR-18-4353	DESIGN	SYSTEMWIDE DESIGN UPON REQUEST. ON CALL AND AS-NEEDED PHASE II ENGINEERING SERVICES.	CRAWFORD, MURPHY & TILLY, INC.	\$3,000,000.00
RR-18-9210	DESIGN	INTELLIGENT TRANSPORTATION SYSTEMS (ITS) SERVICES UPON REQUEST. ON-CALL AND AS-NEEDED INTELLIGENT TRANSPORTATION SYSTEM SERVICES.	SRF CONSULTING GROUP, INC./SINGH & ASSOCIATES (SRFSIN_TM)	\$4,000,000.00
RR-18-4410	DESIGN	GEOTECHNICAL SERVICES UPON REQUEST. ON-CALL AND AS-NEEDED. SYSTEMWIDE	WANG ENGINEERING, INC.	\$2,000,000.00
RR-16-9196	DESIGN	AERIAL MAPPING SERVICES UPON REQUEST - SYSTEMWIDE. AERIAL MAPPING SERVICES.	QUANTUM SPATIAL INC	\$1,500,000.00
RR-18-9206	DESIGN	MATERIALS ENGINEERING SERVICES, SYSTEMWIDE	STATE MATERIALS ENGINEERING LLC DBA S.T.A.T.E. TESTING, LLC	\$19,894,939.18
RR-18-4354	DESIGN & CM	SYSTEMWIDE, DESIGN AND CONSTRUCTION MANAGEMENT SERVICES FOR LANDSCAPE SERVICES UPON REQUEST. ON CALL AND AS-NEEDED PHASE II ENGINEERING SERVICES AND CONSTRUCTION MANAGEMENT SERVICES	2IM GROUP, LLC	\$8,000,000.00
TRI-STATE (I-294)/I-57 INTERCHANGE				
I-18-4419	DESIGN	I-294 /I-57 INTERCHANGE, SOUTHBOUND I-57 TO SOUTHBOUND I-294 FLYOVER, COLLECTOR DISTRIBUTOR (CD) ROAD RAMP AND I-57 WIDENING OF MAINLINE CSX RAILROAD BRIDGES, M.P. 6.8 TO M.P. 7.7. PHASE II ENGINEERING SERVICES.	T.Y. LIN INTERNATIONAL GREAT LAKES, INC.	\$2,351,174.60
I-18-4420	CM	I-294 /I-57 INTERCHANGE, TRI-STATE TOLLWAY M.P. 7.6 (I-57), CONSTRUCTION MANAGEMENT SERVICES.	WIGHT & COMPANY	\$13,765,424.98
TRI-STATE TOLLWAY (I-94/I-294/I-80)				
I-18-4411	CM	TRI-STATE TOLLWAY (I-294), BRIDGE RECONSTRUCTION, MILE LONG BRIDGE (M.P. 21.5). CONSTRUCTION MANAGEMENT SERVICES	BOWMAN CONSULTING GROUP, LTD	\$48,000,000.00
RR-14-4221	DESIGN	TRI-STATE TOLLWAY, BRIDGE REHABILITATION / RECONSTRUCTION, MILE-LONG BRIDGE (MP 21.5)	H.W. LOCHNER INC./HDR ENGINEERING, INC./QUIGG ENGINEERING INC.	\$38,900,334.54
I-17-4300	DESIGN	TRI-STATE TOLLWAY, ROADWAY RECONSTRUCTION, ROOSEVELT ROAD (M.P. 30.5) TO ST CHARLES ROAD (M.P. 32.3). PHASE II ENGINEERING SERVICES.	JACOBS ENGINEERING GROUP, INC.	\$38,500,000.00

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CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
RR-16-4265	DESIGN	TRI-STATE TOLLWAY, DESIGN CORRIDOR MANAGEMENT. PROJECT MANAGEMENT AND PHASE II ENGINEERING.	AECOM TECHNICAL SERVICES, INC.	\$32,993,500.00
I-17-4298	DESIGN	TRI-STATE TOLLWAY, ROADWAY RECONSTRUCTION, I-55 RAMPS (M.P. 24.1) TO OGDEN AVENUE (M.P. 27.8). PHASE II ENGINEERING SERVICES.	TRANSYSTEMS CORPORATION/HANSON PROFESSIONAL SERVICES, INC.	\$23,000,000.00
I-17-4296	DESIGN	TRI-STATE TOLLWAY, ROADWAY RECONSTRUCTION, 95TH STREET (M.P. 17.8) TO LAGRANGE ROAD (M.P. 20.7). PHASE II ENGINEERING SERVICES.	HDR ENGINEERING, INC.	\$16,010,435.51
I-18-4356	CM	TRI-STATE TOLLWAY (I-294), ROADWAY AND BRIDGE REHABILITATION AND WIDENING, WOLF ROAD (M.P. 36.2) AND THE BALMORAL AVENUE (M.P. 40.0). CONSTRUCTION MANAGEMENT SERVICES	H.W. LOCHNER, INC.	\$13,500,000.00
I-18-4380	CM	ELGIN O'HARE WESTERN ACCESS, I-294 (GRAND AVENUE TO WOLF ROAD). CONSTRUCTION MANAGEMENT SERVICES.	EXP U S SERVICES, INC.	\$13,499,986.41
I-17-4302	DESIGN	TRI-STATE TOLLWAY, ROADWAY RECONSTRUCTION AND BRIDGE REHABILITATION, WOLF ROAD (M.P. 36.2) TO O'HARE OASIS (M.P. 37.8). PHASE II ENGINEERING SERVICES.	V3 COMPANIES OF ILLINOIS, LTD./MICHAEL BAKER INTERNATIONAL, INC.	\$10,600,000.00
I-17-4301	DESIGN	TRI-STATE TOLLWAY, ROADWAY RECONSTRUCTION, ST CHARLES ROAD (M.P. 32.3) TO NORTH AVENUE / LAKE STREET (M.P. 33.5). PHASE II ENGINEERING SERVICES.	ALFRED BENESCH & COMPANY/THE RODERICK GROUP, INC. (DBA ARDMORE RODERICK)/2IM GROUP, LLC	\$10,400,000.00
I-17-4297	DESIGN	TRI-STATE TOLLWAY, ROADWAY RECONSTRUCTION, 75TH STREET (M.P. 22.3) TO I-55 RAMPS (M.P. 24.1). PHASE II ENGINEERING SERVICES.	STRAND ASSOCIATES, INC.	\$10,100,000.00
RR-16-4275	DESIGN	I-94, ROADWAY AND BRIDGE RECONSTRUCTION, M.P. 26.25 (WEST OF PLAZA NO. 24) TO M.P. 30.0 (EDENS EXPRESSWAY). PHASE II ENGINEERING.	GIORBA GROUP, INC.	\$8,933,857.83
RR-16-4275	CM	EDENS SPUR (I-94), TRI-STATE TOLLWAY (I-294), ROADWAY AND BRIDGE RECONSTRUCTION, M.P. 25.2 (TRI-STATE TOLLWAY) TO M.P. 30.0 (EDENS EXPRESSWAY). CONSTRUCTION MANAGEMENT SERVICES.	GIORBA GROUP, INC.	\$8,933,857.83
I-18-4412	CM	TRI-STATE TOLLWAY (I-294), BRIDGE RECONSTRUCTION, BURLINGTON NORTHERN SANTA FE (BNSF) RAILROAD BRIDGE (M.P. 26.6). CONSTRUCTION MANAGEMENT SERVICES.	TRANSYSTEMS CORP./HR GREEN, INC. (TSCHRG_TM)	\$7,950,000.00

Appendix C 2019 Active Professional Services Contracts				
CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
I-17-4303	DESIGN	TRI-STATE TOLLWAY, ROADWAY RECONSTRUCTION AND BRIDGE REHABILITATION, O'HARE OASIS (M.P. 37.8) TO BALMORAL AVENUE (M.P. 40.0). PHASE II ENGINEERING SERVICES.	GANNETT FLEMING, INC./CHRISTOPHER B. BURKE ENGINEERING, LTD.	\$6,700,000.00
I-17-4308	DESIGN	TRI-STATE TOLLWAY, ITS & LIGHTING INSTALLATION, 95TH STREET (M.P. 17.8) TO BALMORAL AVENUE (M.P. 40.0). PHASE II ENGINEERING SERVICES.	GANDHI & ASSOCIATES, INC.	\$5,189,000.00
I-18-4357	CM	TRI-STATE TOLLWAY, CONSTRUCTION MANAGEMENT UPON REQUEST. ON CALL AND AS-NEEDED CONSTRUCTION MANAGEMENT SERVICES.	GONZALEZ COMPANIES, LLC / JA WATTS, INC. (TM)	\$5,000,000.00
I-18-4414	CM	I-294, CONSTRUCTION MANAGEMENT SERVICES UPON REQUEST. ON-CALL, AND AS-NEEDED CONSTRUCTION MANAGEMENT SERVICES.	JUNEAU ASSOCIATES, INC., P.C.	\$5,000,000.00
I-17-4315	CM	TRI-STATE TOLLWAY, CONSTRUCTION MANAGEMENT UPON REQUEST. PHASE III ENGINEERING SERVICES.	GLOBETROTTERS ENGINEERING CORPORATION	\$5,000,000.00
I-17-4311	DESIGN	TRI-STATE TOLLWAY, GEOTECHNICAL UPON REQUEST, 95TH STREET (M.P. 17.8) TO BALMORAL AVENUE (M.P. 40.0). PHASE II ENGINEERING SERVICES.	GEO SERVICES, INC	\$5,000,000.00
I-17-4304	DESIGN	TRI-STATE TOLLWAY, DESIGN UPON REQUEST, PHASE II ENGINEERING SERVICES. 1. PEDESTRIAN BRIDGE; 2. PLAINFIELD ROAD BRIDGE; 3. DEMOLITION; 4. AS NEEDED.	A. EPSTEIN AND SONS INTERNATIONAL INC., DBA EPSTEIN	\$5,000,000.00
I-18-4424	DESIGN	TRI-STATE TOLLWAY, DESIGN UPON REQUEST	TERRA ENGINEERING, LTD.	\$5,000,000.00
I-17-4305	DESIGN	TRI-STATE TOLLWAY, BRIDGE REHABILITATION, REPAIRS, & DEMOLITION, VARIOUS LOCATIONS. PHASE II ENGINEERING SERVICES.	BAXTER & WOODMAN INC	\$3,462,900.00
I-18-4415	DESIGN	UTILITY LOCATION AND IDENTIFICATION ASSISTANCE UPON REQUEST. SUB SURFACE AND UTILITY ASSISTANCE SERVICES	AMERICAN SURVEYING & ENGINEERING, P.C.	\$3,000,000.00
I-17-4306	DESIGN	TRI-STATE TOLLWAY, BRIDGE REHABILITATION, REPAIRS, & DEMOLITION, VARIOUS LOCATIONS. PHASE II ENGINEERING SERVICES.	RUBINOS & MESIA ENGINEERS, INC.	\$2,715,500.00
I-17-4299	DESIGN	TRI-STATE TOLLWAY, ROADWAY RECONSTRUCTION, EW CONNECTOR (M.P. 29.1) TO ROOSEVELT ROAD (M.P. 30.5). PHASE II ENGINEERING SERVICES.	QUIGG ENGINEERING, INC.	\$2,650,000.00
I-17-4307	DESIGN	TRI-STATE TOLLWAY, ADVANCED ITS ASSETS RELOCATION, 95TH STREET (M.P. 17.8) TO BALMORAL AVENUE (M.P. 40.0). PHASE II ENGINEERING SERVICES.	DELTA ENGINEERING GROUP, LLC	\$2,522,500.00

Appendix C 2019 Active Professional Services Contracts				
CONTRACT NUMBER	ACCOUNT	CONTRACT DESCRIPTION	PRIME VENDOR	AWARD AMOUNT
I-18-4413	CM	I-294 TEMPORARY ITS RELOCATION. CONSTRUCTION MANAGEMENT SERVICES	TECHKNOW ENGINEERING, LLC	\$2,307,000.00
RR-16-4281	CM	TRI-STATE TOLLWAY, 159TH STREET BRIDGE RECONSTRUCTION. M.P. 6.3. CONSTRUCTION MANAGEMENT SERVICES.	GSG CONSULTANTS, INC.	\$1,647,571.20
RR-18-4382	DESIGN	TRI-STATE TOLLWAY, STEARNS SCHOOL ROAD BRIDGE RECONSTRUCTION (M.P. 7.5). PHASE II ENGINEERING SERVICES.	STV, INC.	\$1,485,608.40
RR-18-4382	CM	TRI-STATE TOLLWAY, STEARNS SCHOOL ROAD BRIDGE RECONSTRUCTION, M.P. 7.5, CONSTRUCTION MANAGEMENT	STV, INC.	\$1,485,608.40
I-17-4309	DESIGN	TRI-STATE TOLLWAY, ADVANCED MOT REHABILITATION, 95TH STREET (M.P. 17.8) TO EAST WEST CONNECTOR (M.P. 29.1). PHASE II ENGINEERING SERVICES.	TERRA ENGINEERING, LTD.	\$580,000.00
I-17-4310	DESIGN	TRI-STATE TOLLWAY, ADVANCED MOT REHABILITATION, EAST WEST CONNECTOR (M.P. 29.1) TO BALMORAL AVENUE (M.P. 40.0). PHASE II ENGINEERING SERVICES.	PERALTE-CLARK, LLC	\$479,820.00
VETERANS MEMORIAL TOLLWAY (I-355)				
RR-17-4295	CM	VETERANS MEMORIAL TOLLWAY, ROADWAY AND BRIDGE REHABILITATION, I-55 (M.P. 12.3) TO ARMY TRAIL ROAD (M.P. 29.8). CONSTRUCTION MANAGEMENT SERVICES.	CHASTAIN & ASSOCIATES LLC	\$9,253,293.29
RR-16-4255	DESIGN	ROADWAY AND BRIDGE REHABILITATION - DESIGN, VETERANS MEMORIAL TOLLWAY M.P. 12.3 (I-55) TO M.P. 22.3 (STA 11260+00, BUTTERFIELD ROAD)	PRIMERA ENGINEERS, LTD.	\$5,954,232.28
RR-16-4256	DESIGN	ROADWAY AND BRIDGE REHABILITATION - DESIGN, VETERANS MEMORIAL TOLLWAY M.P. 22.3 (STA 11260+00, BUTTERFIELD ROAD) TO M.P. 29.8 (ARMY TRAIL ROAD)	PATRICK ENGINEERING, INC.	\$12,030,050.00

Appendix D Move Illinois Program Summary

NEED	PROJECT	SCOPE & APPROXIMATE MILEPOST LIMITS	LENGTH (CENTERLINE MILES)	ESTIMATED CONSTRUCTION PERIOD	STATUS
TRI-STATE TOLLWAY (I-294/I-80 & I-294)					
RECONSTRUCT INFRASTRUCTURE REPLACEMENT	RECONSTRUCT 8 LANES ADD LANES	95TH STREET TO BALMORAL AVENUE (MP 17.6 TO 40.2)	22.6	2018-2026	PROGRAMMED
RESTORE INFRASTRUCTURE RENEWAL	BRIDGE AND RAMP REPAIRS	TRI-STATE TOLLWAY (I-294) (MP 0.0 TO 52.8)	52.8	2012-2026	IN-PROGRESS
CORRIDOR	ROW ACQUISITION	TRI-STATE TOLLWAY (I-294) (MP 0.0 TO 52.8)	52.8	2017-2022	IN-PROGRESS
CORRIDOR	UTILITY AND FIBER OPTIC RELOCATION	TRI-STATE TOLLWAY (I-294) (MP 0.0 TO 52.8)	52.8	2017-2021	IN-PROGRESS
TRI-STATE TOLLWAY (I-94) & EDENS SPUR (I-94)					
RECONSTRUCT INFRASTRUCTURE REPLACEMENT	RECONSTRUCT 4 LANES ADD LANES	EDENS SPUR (I-94) (MP 25.3 TO 30.1)	4.8	2018-2020	IN-PROGRESS
RESTORE INFRASTRUCTURE RENEWAL	BRIDGE AND RAMP REPAIRS	TRI-STATE TOLLWAY (I-94) (MP 1.0 TO 25.3)	25.3	2012-2026	IN-PROGRESS
CORRIDOR	ROW ACQUISITION	TRI-STATE TOLLWAY (I-94) (MP 1.0 TO 25.3)	25.3	2015-2021	IN-PROGRESS
CORRIDOR	UTILITY AND FIBER OPTIC RELOCATION	TRI-STATE TOLLWAY (I-94) (MP 1.0 TO 25.3)	25.3	2017-2021	IN-PROGRESS
TRI-STATE TOLLWAY (I-294) & INTERSTATE 57 INTERCHANGE					
REGIONAL GROWTH SYSTEM EXPANSION	NEW RAMPS, STRUCTURES AND TOLL PLAZAS	TRI-STATE TOLLWAY (I-294)/I-57 INTERCHANGE NEW RAMPS TO AND FROM MEMPHIS AND 147TH STREET	-	2012-2014	COMPLETE
REGIONAL GROWTH SYSTEM EXPANSION	ROW ACQUISITION	TRI-STATE TOLLWAY (I-294)/I-57 INTERCHANGE	-	2013-2017	COMPLETE
REGIONAL GROWTH SYSTEM EXPANSION	UTILITY AND FIBER OPTIC RELOCATION	TRI-STATE TOLLWAY (I-294)/I-57 INTERCHANGE	-	2013-2015	COMPLETE

Appendix D Move Illinois Program Summary					
NEED	PROJECT	SCOPE & APPROXIMATE MILEPOST LIMITS	LENGTH (CENTERLINE MILES)	ESTIMATED CONSTRUCTION PERIOD	STATUS
REGIONAL GROWTH SYSTEM EXPANSION	NEW RAMPS AND STRUCTURES	TRI-STATE TOLLWAY (I-294)/I-57 INTERCHANGE NEW RAMPS TO COMPLETE SYSTEM INTERCHANGE	-	2019-2022	IN-PROGRESS
REGIONAL GROWTH SYSTEM EXPANSION	ROW ACQUISITION	TRI-STATE TOLLWAY (I-294)/I-57 INTERCHANGE NEW RAMPS TO COMPLETE SYSTEM INTERCHANGE	-	2020-2021	IN-PROGRESS
REGIONAL GROWTH SYSTEM EXPANSION	UTILITY AND FIBER OPTIC RELOCATION	TRI-STATE TOLLWAY (I-294)/I-57 INTERCHANGE NEW RAMPS TO COMPLETE SYSTEM INTERCHANGE	-	2020-2021	IN-PROGRESS
JANE ADDAMS MEMORIAL TOLLWAY (I-90)					
RECONSTRUCT INFRASTRUCTURE REPLACEMENT CONGESTION RELIEF	RECONSTRUCT 4 LANES ADD 2 LANES	I-39 TO ILLINOIS ROUTE 47 (MP 17.5 TO 46.5)	29	2013-2015	COMPLETE
RECONSTRUCT INFRASTRUCTURE REPLACEMENT CONGESTION RELIEF	RECONSTRUCT 4 LANES ADD 2 LANES	ILLINOIS ROUTE 47 TO ELGIN TOLL PLAZA 9 (MP 46.5 TO 54.0)	7.5	2013-2015	COMPLETE
RECONSTRUCT INFRASTRUCTURE REPLACEMENT CONGESTION RELIEF	RECONSTRUCT 6 LANES ADD 2 LANES	ELGIN TOLL PLAZA 9 TO KENNEDY EXPRESSWAY (MP 54.0 TO 78.6)	24.6	2013-2016	COMPLETE
RECONSTRUCT CONGESTION RELIEF	TRANSIT ACCOMMODATION	I-39 TO KENNEDY EXPRESSWAY (MP 17.5 TO 78.6)	61.1	2013-2015	COMPLETE
RESTORE INFRASTRUCTURE RENEWAL	BRIDGE AND RAMP REPAIRS	I-39 TO KENNEDY EXPRESSWAY (MP 17.5 TO 78.6)	61.1	2013-2026	IN-PROGRESS
CORRIDOR	ROW ACQUISITION	I-39 TO KENNEDY EXPRESSWAY (MP 17.5 TO 78.6)	61.1	2012-2016	COMPLETE
CORRIDOR	UTILITY AND FIBER OPTIC RELOCATION	I-39 TO KENNEDY EXPRESSWAY (MP 17.5 TO 78.6)	61.1	2012-2016	COMPLETE
REAGAN MEMORIAL TOLLWAY (I-88)					
RECONSTRUCT INFRASTRUCTURE REPLACEMENT	RECONSTRUCT 6 LANES	YORK ROAD TO EISENHOWER EXPRESSWAY (I-290) (MP 138.9 TO 140.4)	1.5	2018-2019	IN-PROGRESS

Appendix D Move Illinois Program Summary					
NEED	PROJECT	SCOPE & APPROXIMATE MILEPOST LIMITS	LENGTH (CENTERLINE MILES)	ESTIMATED CONSTRUCTION PERIOD	STATUS
RESTORE INFRASTRUCTURE RENEWAL	MILL, PATCH AND OVERLAY	ILLINOIS ROUTE 251 TO ILLINOIS ROUTE 56 (MP 76.1 TO 113.3)	37.2	2018-2019	IN-PROGRESS
RESTORE INFRASTRUCTURE RENEWAL	MILL, PATCH AND OVERLAY	AURORA TOLL PLAZA 61 TO ILLINOIS ROUTE 59 (MP 117.8 TO 123.3)	5.5	2020-2021	PROGRAMMED
RECONSTRUCT INFRASTRUCTURE REPLACEMENT	RECONSTRUCT 4 LANES	EAST-WEST CONNECTOR ROAD BETWEEN I-294 AND I-88	3.7	2019-2020	IN-PROGRESS
RESTORE INFRASTRUCTURE RENEWAL	BRIDGE AND RAMP REPAIRS	US ROUTE 30 TO EISENHOWER EXPRESSWAY (I-290) (MP 44.2 TO 140.4)	96.2	2013, 2019, 2021-2026	IN-PROGRESS
CORRIDOR	ROW ACQUISITION	US ROUTE 30 TO EISENHOWER EXPRESSWAY (I-290) (MP 44.2 TO 140.4)	96.2	2016-2020	IN-PROGRESS
CORRIDOR	UTILITY AND FIBER OPTIC RELOCATION	US ROUTE 30 TO EISENHOWER EXPRESSWAY (I-290) (MP 44.2 TO 140.4)	96.2	2018-2020	IN-PROGRESS
VETERANS MEMORIAL TOLLWAY (I-355)					
RESTORE INFRASTRUCTURE RENEWAL	MILL, PATCH AND OVERLAY	I-55 TO BOUGHTON ROAD, COLLECTOR-DISTRIBUTOR ROADS, NORTH AVENUE TO ARMY TRAIL ROAD (MP 12.3 TO 29.8)	17.5	2013	COMPLETE
RESTORE INFRASTRUCTURE RENEWAL	MILL, PATCH AND OVERLAY	I-55 TO ARMY TRAIL ROAD (MP 12.3 TO 29.8)	17.5	2018-2019	IN-PROGRESS
RESTORE INFRASTRUCTURE RENEWAL	BRIDGE AND RAMP REPAIRS	I-80 TO ARMY TRAIL ROAD (MP 0.0 TO 29.8)	29.8	2018-2026	IN-PROGRESS
CORRIDOR	ROW ACQUISITION	I-80 TO ARMY TRAIL ROAD (MP 0.0 TO 29.8)	29.8	2019	IN-PROGRESS
CORRIDOR	UTILITY AND FIBER OPTIC RELOCATION	I-80 TO ARMY TRAIL ROAD (MP 0.0 TO 29.8)	29.8	2018-2019	COMPLETE
ELGIN-O'HARE (IL-390 & I-490)					
REGIONAL GROWTH SYSTEM EXPANSION	REHABILITATE 4 LANES ADD 2 LANES	EXISTING ELGIN O'HARE (IL-390) US ROUTE 20 TO ROHLWING ROAD	6.1	2013	COMPLETE

Appendix D Move Illinois Program Summary

NEED	PROJECT	SCOPE & APPROXIMATE MILEPOST LIMITS	LENGTH (CENTERLINE MILES)	ESTIMATED CONSTRUCTION PERIOD	STATUS
REGIONAL GROWTH SYSTEM EXPANSION	CONSTRUCT 6 NEW LANES	ELGIN O'HARE (IL-390) EXTENSION ROHLWING ROAD TO ILLINOIS ROUTE 83 VIA THORNDALE AVENUE	3.8	2014-2017	COMPLETE
REGIONAL GROWTH SYSTEM EXPANSION	CONSTRUCT 6 NEW LANES	ELGIN O'HARE (IL-390) EXTENSION ILLINOIS ROUTE 83 TO YORK ROAD VIA THORNDALE AVENUE	1	2020-2022	IN-PROGRESS
REGIONAL GROWTH SYSTEM EXPANSION	CONSTRUCT 4 NEW LANES	ELGIN O'HARE WEST BYPASS (I 490) - SOUTH LEG THORNDALE AVENUE TO I-294 VIA YORK ROAD	3	2016-2026	IN-PROGRESS
REGIONAL GROWTH SYSTEM EXPANSION	CONSTRUCT 4 NEW LANES	ELGIN O'HARE WEST BYPASS (I 490) - NORTH LEG THORNDALE AVENUE TO I-90 VIA YORK ROAD	3.2	2016-2024	IN-PROGRESS
REGIONAL GROWTH SYSTEM EXPANSION	TOLL COLLECTION INFRASTRUCTURE	US ROUTE 20 TO ELGIN O'HARE WEST BYPASS	-	2014-2025	IN-PROGRESS
SYSTEMWIDE IMPROVEMENTS					
INFRASTRUCTURE RENEWAL	BRIDGE, PAVEMENT, DRAINAGE AND SAFETY APPURTENANCE REPAIRS	SYSTEMWIDE	-	2012-2026	IN-PROGRESS
INFRASTRUCTURE ENHANCEMENTS	BUSINESS SYSTEMS AND TOLL COLLECTION UPGRADES	SYSTEMWIDE	-	2013-2026	IN-PROGRESS
INFRASTRUCTURE ENHANCEMENTS	INFORMATION TECHNOLOGY AND INTELLIGENT TRANSPORTATIONS SYSTEM (ITS) UPGRADES	SYSTEMWIDE	-	2012-2026	IN-PROGRESS
MAINTENANCE AND OPERATIONS SUPPORT	CAPITAL	SYSTEMWIDE	-	2013-2025	IN-PROGRESS
MAINTENANCE AND OPERATIONS SUPPORT	ITEMS CRITICAL TO TOLLWAY OPERATIONS, TECHNICAL AND ADMINISTRATIVE CONTRACTS.	SYSTEMWIDE	-	2012-2026	IN-PROGRESS

Appendix D Move Illinois Program Summary

NEED	PROJECT	SCOPE & APPROXIMATE MILEPOST LIMITS	LENGTH (CENTERLINE MILES)	ESTIMATED CONSTRUCTION PERIOD	STATUS
INFRASTRUCTURE ENHANCEMENTS	RELOCATION OF FIBER OPTIC AND PRIVATE UTILITIES ASSOCIATED WITH RECONSTRUCTION OR REPAIR PROJECTS.	SYSTEMWIDE	-	2014-2018	COMPLETED
INFRASTRUCTURE ENHANCEMENTS	RIGHT-OF-WAY ACQUISITION NECCESARY FOR INTERCHANGE IMPROVEMENTS OR MAINT. FACILITIES.	SYSTEMWIDE	-	2018-2020	IN-PROGRESS
ACCESS EXPANSION	SERVICE INTERCHANGES	SYSTEMWIDE	-	2012-2019	IN-PROGRESS

EXHIBITS

EXHIBIT 1 Maintenance Districts

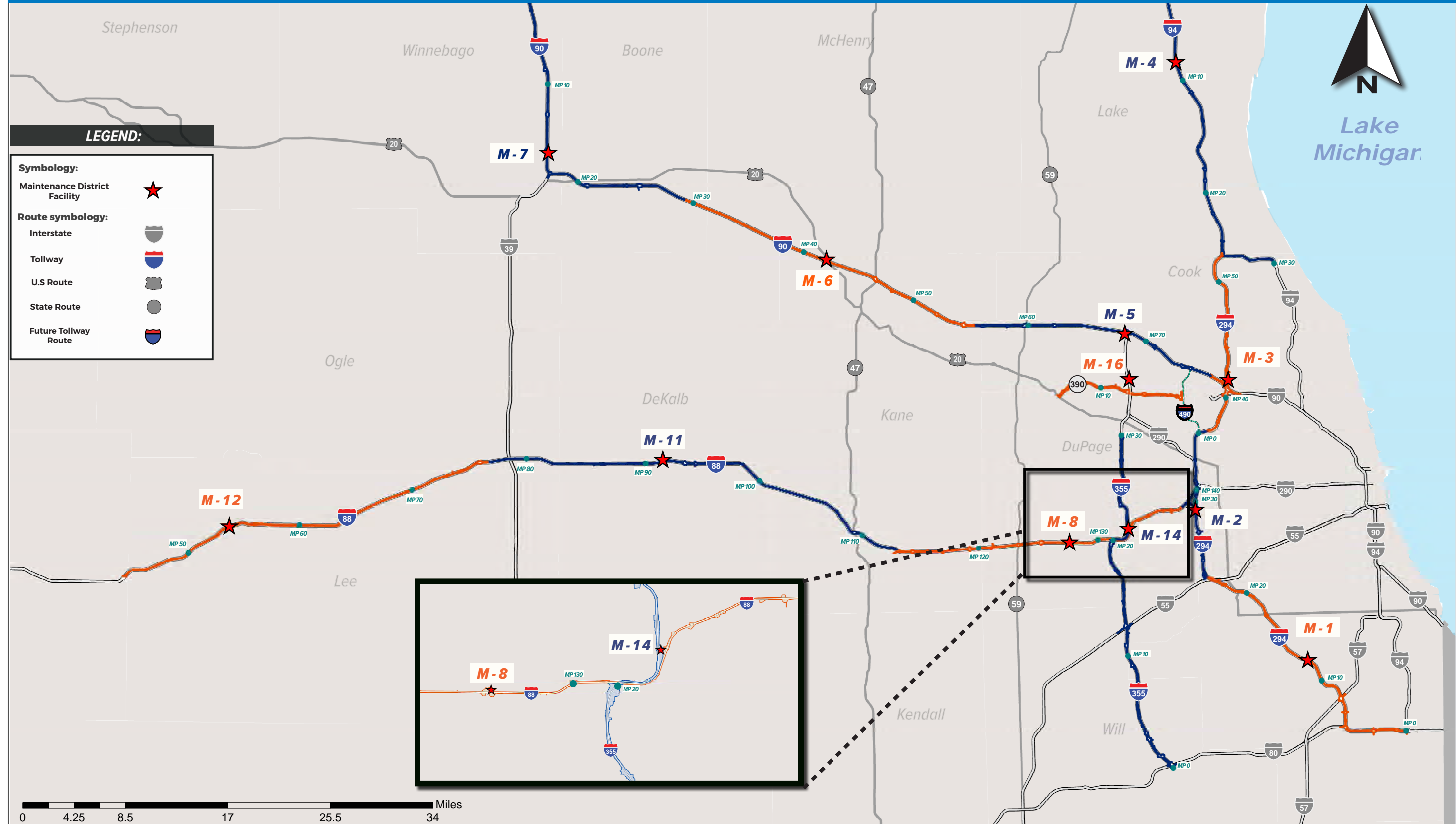


EXHIBIT 2 Percent of Mainline Pavement Within Each CRS Range (Systemwide)

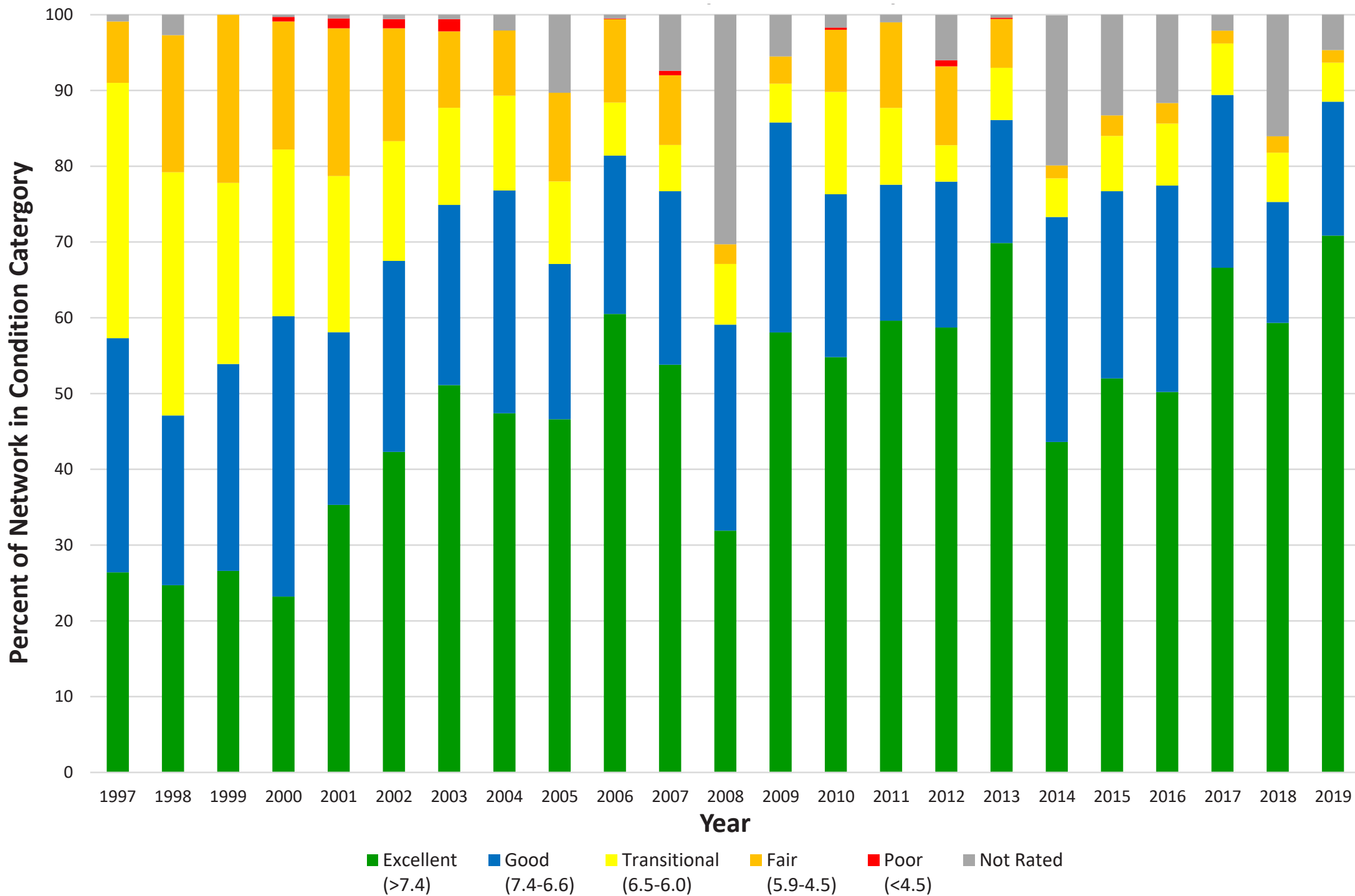


EXHIBIT 3 Percent of Mainline Pavement within each RSL Range (Systemwide)

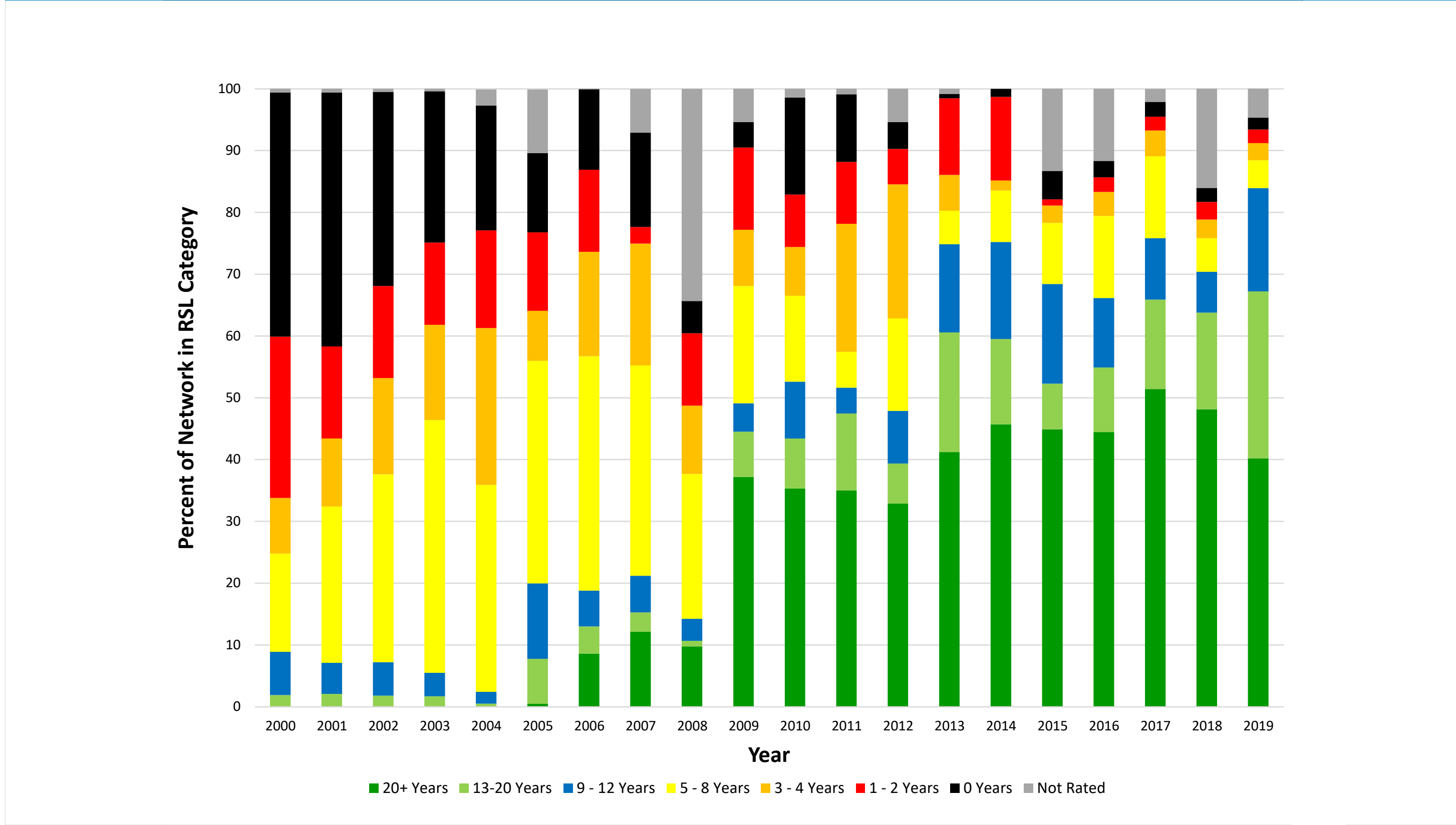


EXHIBIT 4 2019 Pavement RSL Category – Systemwide

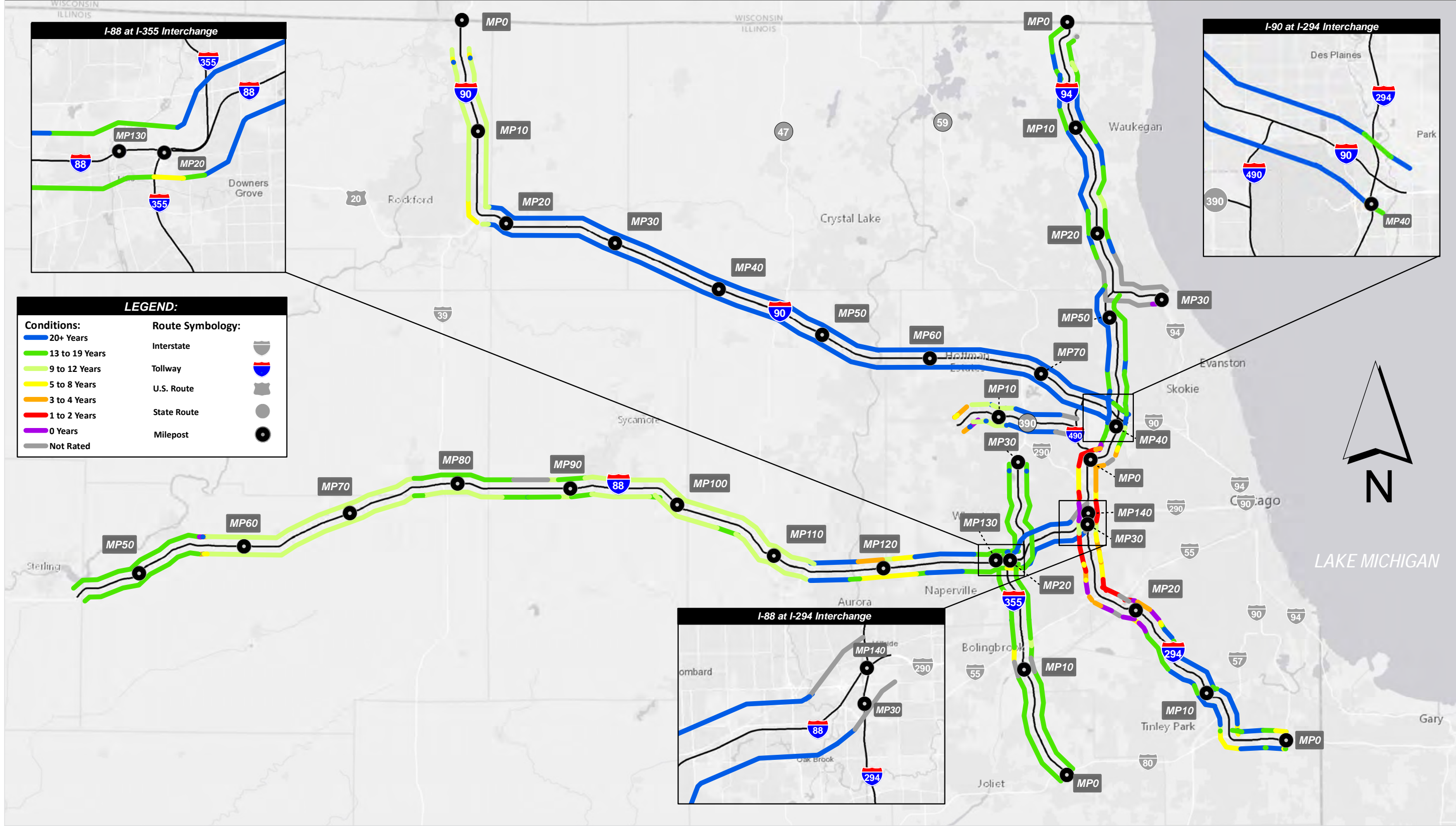


EXHIBIT 5 2019 Pavement CRS Category – Systemwide

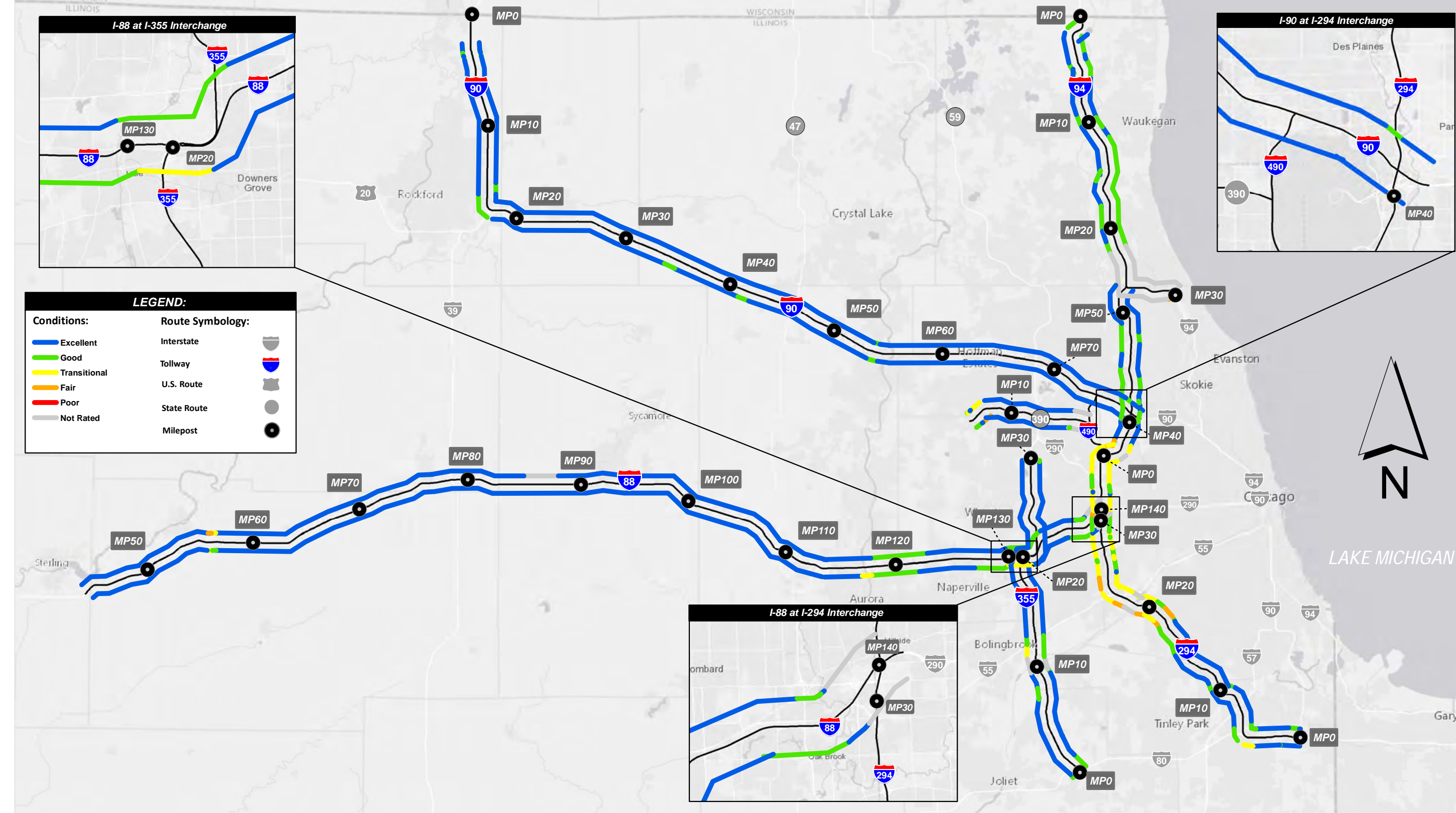


EXHIBIT 6 2019 Capital Program Construction

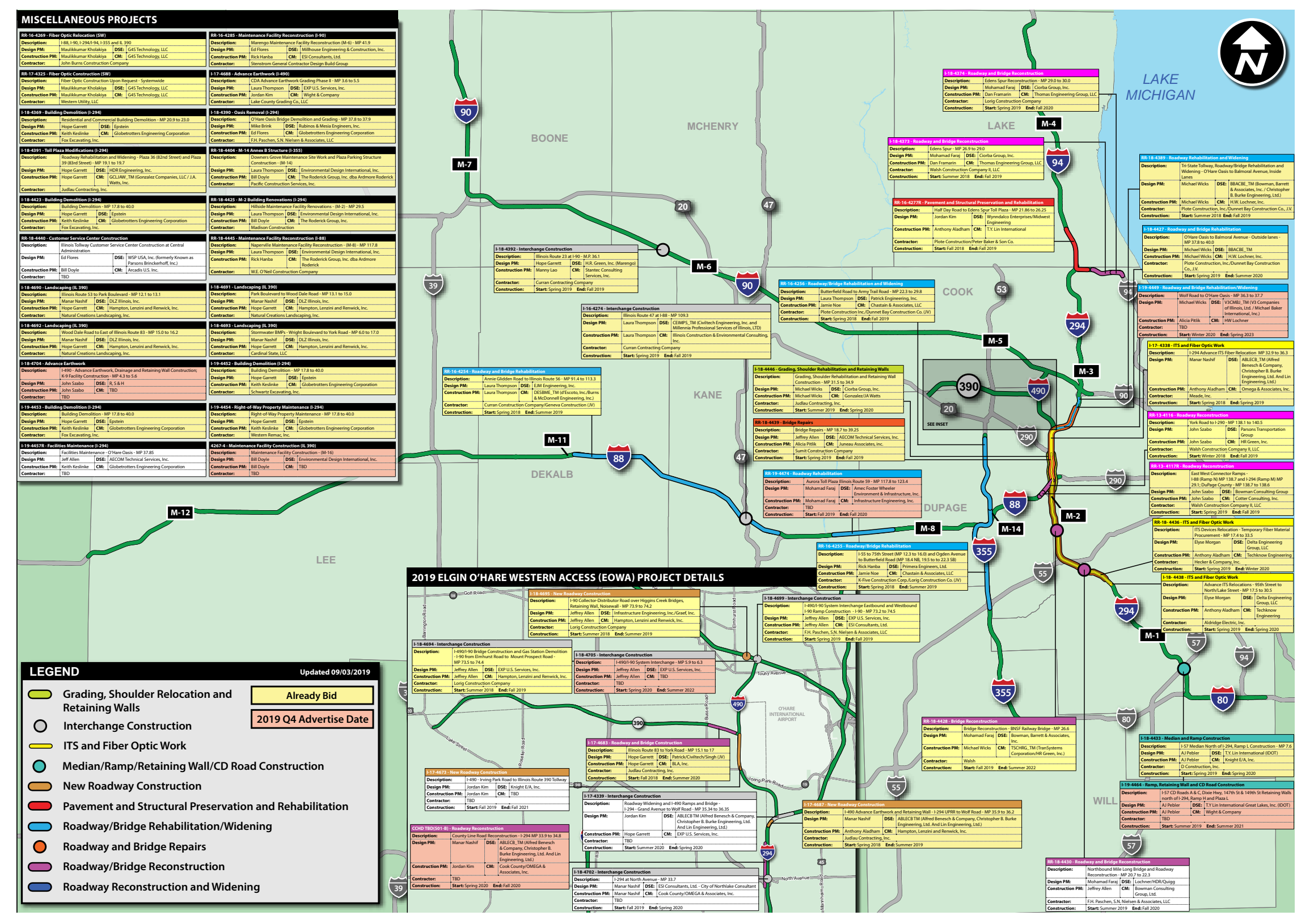


EXHIBIT 7 2019 Systemwide Construction Map

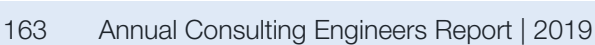


EXHIBIT 8 2020 Budget Book Construction Projects

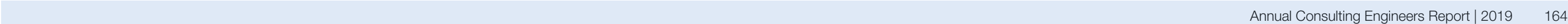


EXHIBIT 9 2020 Systemwide Construction Map

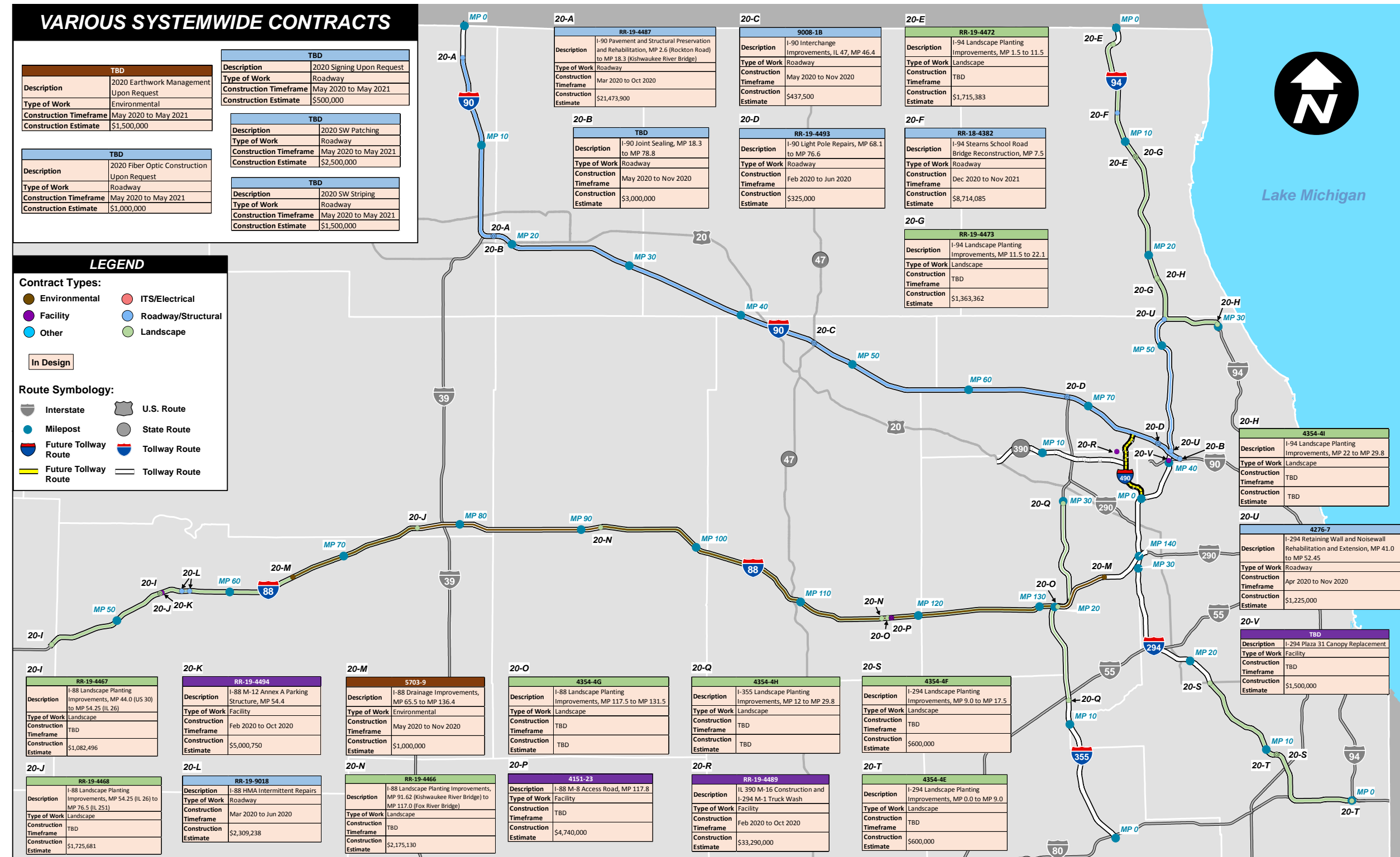


EXHIBIT 10 Move Illinois Capital Program Summary Map

