

## Illinois Statewide



## Intelligent Transportation Systems (ITS) Strategic Plan

## APPENDIX J

Prioritized List of Statewide ITS Projects (Prioritization View)

October 2019



**AECOM** 





Appendix J - Prioritized List of Statewide ITS Projects (Organized by Program Area) Prioritization View

Prioritization View		T		1																		
				Deploym	ent Timeframe				T				Evaluation	n Measures			1					
			Description	Бор.оу			Integration Oppo	rtunity		Financial	Integrity			Perception & Pr	ublic Awareness			Operation	onal Efficiencies		Total Priority	Normalized
Solution Category	Program Area	Title		Project Status	Implementation Timeframe	Solution Ranking	Supports Other Projects	Mainstreaming Opportunity Available	Resources Programmed/ Identified for Implementation	Resources Available for O&M	Acceptable Return on Investment	P3 Opportunities for O&M Funding	Implementation Timeframe	Identified as Key Initiative	Mobility for all Transportation Users	Overcome Impediments to Implementation	Proven Technology I	Promotes Interoperability	High Travel Corridors or Statewide / Regional Coverage	Performance Measures Available	Points	Score
Enhanced Communication Links to Field Devices	Asset Sharing and Control	Fiber Connection Across State Boundaries	High-bandwidth communication links with adjacent state DOTs, e.g. MoDOT is scheduled to be re-established.	Ongoing	Years 1-10	(HIGH) 2.7	(LOW) 3.75	(LOW) 3.75	(MEDIUM)	(MEDIUM) 2.75	(HIGH) 3.25	(LOW) 3	(MEDIUM) 3.75	(HIGH)	(MEDIUM) 2.75	(LOW) 2.75	(LOW) 4.75	(MEDIUM) 4.5	(HIGH) 4.5	(LOW) 3.25	135.4	9.03
Commercial Vehicle Enforcement / Inspection Technologies	Commercial Vehicle Operations	360 SmartView (Commercial Vehicle	An advanced safety e-screening solution that enables commercial hyehicle enforcement officers to focus their resources on carriers most in need of intervention.	n Planned		1.6	2.5	2.75	1.75	1.75	2.25	1.75	2.75	2.25	1.5	2.75	3	3	4	3.5	93.8	6.25
Commercial Vehicle Enforcement / Inspection Technologies	Commercial Vehicle Operations	Automated License Plate Readers (ALPR) at Weigh Stations	Installation of ALPR systems at a weigh station in the region to promote commercial vehicle enforcement.	Ongoing		1.4	3	3	2.25	2.5	3	1	3.25	2.75	1.5	3	4	3.25	3.75	3.5	104.1	6.94
Commercial Vehicle Enforcement / Inspection Technologies	Commercial Vehicle Operations	Expanded ITD Initiative	The expanded ITD (Innovative Technology Deployment) Program is now the Federal program that was formerly known as CVISN. This project is a key component of the FMCSA drive to improve commercial motor vehicle safety. This project would include truck routing studies for the region. Development of a central database containing information on bridge	Ongoing		1.4	3.5	2.75	3	3.25	3	1.75	3.5	3.5	2	3.5	4	3.5	4.25	3.75	118.3	7.89
Localized Traffic Advisory Systems	Commercial Vehicle Operations	Intermodal Information and Statewide Routing Tool	belieben to accomply an accompanies of the belief of the companies of the	Planned		2.2	4	2.75	2.25	2	2.5	2	3.5	3	2.5	3	4.25	4	5	3.5	118.6	7.91
Commercial Vehicle Enforcement / Inspection Technologies	Commercial Vehicle Operations	International Fuel Tax Agreement (IFTA) Electronic Credentialing and Mandatory Efiling	MiTAC system that enables automated electronic logging for commercial vehicle drivers. This system enables compliance with IFTA requirements for commercial vehicle drivers. System includes an in- vehicle tablet that provides truck drivers with proposed routes based on vehicle heights. System also helps trucking companies comply with federal mandates to utilize an Electronic Logging Device (ELD) for logging hours of service to minimize fatigued driving incidents.			1.4	3	2.75	1.75	2	2.5	1.75	3.25	3.5	2	3	4	3.5	4	3.5	106.4	7.10
Commercial Vehicle Enforcement / Inspection Technologies	Commercial Vehicle Operations	ITS for Intermodal Facilities	Includes the deployment of ITS devices at intermodal commercial facilities to improve the throughput of goods and services at the facilities. ITS technology can be implemented on commercial vehicles to increase communication with intermodal facility equipment. Cargo delivered at intermodal facilities can also be monitored in terms of delivery status at the facility.	Planned		1.6	3	2.67	2.33	2.67	2.67	3.67	3.00	2.67	2.00	2.67	3.33	3.33	3.33	3.33	103.5	6.90
Commercial Vehicle Enforcement / Inspection Technologies	Commercial Vehicle Operations	Mobile Compliance Vehicle	Procurement of a mobile compliance vehicle to support commercial vehicle enforcement.	Ongoing		1.4	3.25	2	2.25	2.5	3	2.5	3	3	2	3	4	3.5	4.5	4	111.6	7.44
Commercial Vehicle Enforcement / Inspection Technologies	Commercial Vehicle Operations	OSOW and Other Commercial Vehicle Permitting Systems/Process	IIDOT has an ongoing Statewide Over-Size / Over-Weight (OSOW) system available online and known as Illinois Transportation at Automated Permits (ITAP). System provides information to commercial vehicle operators on restrictions for travel and maps for OS/OW routes to be followed. Permits can be applied for through the site, and other real-time information ca be made available on the site as it pertains to impacted travel routes.	Ongoing		1.4	3.67	3.33	2.67	3.33	3.67	2.00	3.33	3.00	1.67	3.67	4.00	3.67	4.33	3.33	118.9	7.92
Commercial Vehicle Enforcement / Inspection Technologies	Commercial Vehicle Operations	Portable Weigh Scales and Weigh-in- Motion	Illinois State Police (ISP) operates the portable weigh scales that are provided by IDDT for use in commercial vehicle enforcement. IDDT utilizes a Federal Motor Carrier Safety Administration program to procure weigh scale equipment for use by ISP. Alternatively, weigh-in-motion stations employ sensor and communication technologies to more effectively enforce weight restriction laws. These can be used to complement interstate weigh stations by improving weight enforcement capabilities on non-interstate routes throughout Illinois. By using weigh in-motion scales in conjunction with highly focused enforcement strategies, enforcement personnel can screen more vehicles on more routes for excessively overweight trucks.			1.4	3	3	2.75	3	2.75	1	4.25	3.5	2.25	3.75	4.5	3.75	4	4	117.7	7.85
Automated Vehicle Location	Commercial Vehicle Operations	Regional Truck Delivery Management System	A centralized trucking dispatch center that would promote coordination of freight across the region.	Ongoing		2.3	3.25	2	2	2	2.75	4	2.5	2.75	2.5	2.5	3.5	4.25	4.25	3	111.6	7.44
High Volume Rest Area Truck Parking Management	Commercial Vehicle		Project is modeled after a MAASTO-led initiative that will install cameras to measure real-time parking commercial vehicle parking space availability at IDOT rest areas and provide that information to truckers through a mobile application. Purpose is to provide truckers with information on where they can park for longer periods to be in compliance with hours of service requirements. Project will also include installation of kiosks at rest areas to provide traveler information.	Ongoing	Years 1-3	1.9	3.75	4	3.5	3.25	2.5	4	4.25	5	2.75	4	4.25	4.25	4.75	3.5	139.1	9.28
Connected Vehicle V-2-V and V-2-I Deployments	Connected and Autonomous Vehicles	Develop Connected Vehicle Pilot (ISTHA, IDOT, Pace)	Led by Illinois Tollway, this project is to procure and deploy 11 DSRC units along the tollway for the purposes of data collection from DSRC-equipped vehicles. Data could be used for the purposes of travel time estimation or identifying locations of traffic congestion along the tollway. Data from DSRC units could also be shared with IDOT and Pace to allow for those agencies to disseminate traveler information and / or adjust transit operations as needed.	Ongoing		2.6	4.5	4.25	3.75	3.25	3	3	3.75	4	4	3	2.25	3.75	3.75	3.25	133.1	8.87
Regional Traffic Signal Coordination	Construction and Maintenance	Arterial Operation Centers	Includes the hardware, software, field devices and communication needed to implement network surveillance, traffic signal control, traffic information dissemination, and traffic incident management on arterials.	Planned		2.2	4.25	3.25	2.25	2	2.5	1.75	3.75	4.25	3.75	3.25	4.75	4.75	4.5	4.75	130.4	8.70
Drones for Incident / Traffic Management	Construction and Maintenance	Drones for Incident Response	Planned project would utilize drones to provide video of the roadway network in response to planned lane closures and unplanned roadway incidents. Drones could be quickly deployable with Illinos State Police and local police departments responsible for deployment.			2.3	3	2.5	1.5	1.75	2.5	2.25	3.25	3.5	3.5	2.75	3	3.25	3.75	3.75	110.4	7.36
Work Zone Enhancements	Construction and Maintenance	Smart Work Zones	Smart Work Zone technology can be built into the work zone contract and required of the contractor to provide speed detection for display of actual vehicle speeds in work zones. Other types of applications could also be requested where needed.		Years 1-10	2.3	4	4.25	3.5	3	3	2	4.5	4.5	3.75	4	4.25	4	4.25	4.25	139.9	9.33
Work Zone Enhancements	Construction and Maintenance	Work Zone Management - Statewide Integration	Improve work zone information dissemination in the region through information sharing with the IDOT Gateway. Would include provision of work zone information from transportation stakeholders (i.e., work zone contractors).	Planned		2.3	4.25	3.75	2.5	2.5	2.75	2.25	4	4.25	3.75	3.5	4	4	4.5	4	132.7	8.85
Smart Cities	Data Management	"Array of Things" Project Data Integration	Application of data gathered by the Argonne National Laboratory's  "Array of Things" sensor deployment to support traffic management.	Ongoing		3.0	4	3.5	2.5	2	2	2.75	3.25	3.25	3.25	2.5	2.5	4	3.5	3.5	115.0	7.67
Regional Communications Centers for Operations Interoperability	Data Management	CAD Integration with Traffic Management	Integration of computer-aided dispatch (CAD) information for traffic operations. This project would allow IDOT to view roadway related incidents currently being handled by Illinois State Police (ISP) and other law enforcement agencies electronically. Fiber-optic cable connections would facilitate this sharing of information and video between agencies.	Ongoing		2.3	3.75	3	2.75	3	3	2	3.75	4.75	4	3.75	4.5	4.5	4.75	3.75	139.8	9.32

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Prioritization View			1			Evaluation Measures																
		Title	Description	Deploym	ent Timeframe		Internation Co.			Elman el 1	Into sults:		Evaluation		ublic Auror		<u> </u>		and Efficienc' -			
Solution Category	Program Area						Integration Opport		Resources	Financial	1	P3		Perception & Pu	Iblic Awareness	Ι.,		Operation	onal Efficiencies	Df	Total Priority Points	
				Project Status	Implementation Timeframe	Solution Ranking (HIGH)	Supports Other Projects	Mainstreaming Opportunity Available (LOW)	Programmed/ Identified for Implementation (MEDIUM)	Resources Available for O&M (MEDIUM)	Acceptable Return on Investment	Opportunities for O&M Funding (LOW)	Implementation Timeframe (MEDIUM)	Identified as Key Initiative (HIGH)	Mobility for all Transportation Users (MEDIUM)	Overcome Impediments to Implementation (LOW)	Proven Technology	Promotes Interoperability (MEDIUM)	High Travel Corridors or Statewide / Regional Coverage	Performance Measures Available	Points	Score
Third Party Traveler Information Applications	Data Management	Expansion of Public-Private Data	Expanded use and procurement of IDOT agreements with private traffic data providers allows them to input real-time traffic data into the publicly accessible Illinois Gateway Traveler Information System (GTIS). The agreement would provide access to more traffic management agencies.	Ongoing	Year 1	1.9	<b>(LOW)</b> 4.5	3.5	3.5	2.75	(HIGH) 2.75	4	(WEDIOM)	4.75	(MEDIOM) 4	3	(LOW) 4.25	3.5	(HIGH) 4	(LOW) 3.75	136.1	9.08
Automated Vehicle Location	Data Management	IDOT Maintenance Vehicle AVL System Deployment	Project that will upgrade maintenance vehicle communication equipment to be able to relay vehicle location in real time to a central management center to improve awareness of maintenance operations. Other data to be communicated to central software could include plow up / plow down status and material treatments. Based on a pilot project in IDOT District 5.	Planned		2.3	3.5	3.5	2	2.25	2.25	1.75	3.75	3.75	2.5	3.25	4.5	3.75	4	3.75	117.4	7.83
Traffic Data Archive	Data Management	Regional Transportation Data Archive	Regional archive that can receive transportation from the Gateway Traveler Information System for use by traffic management agencies.	Planned		2.6	4.75	3.25	2	2.5	2.75	2	3.5	3.75	3.5	3.5	4	4.75	4.75	3.5	130.7	8.71
Security Surveillance	Data Management	Video Sharing with ISP	This project would allow Illinois State Police (ISP) and other law enforcement agencies to view live video from IDOT cameras. Fiber- optic cable connections would facilitate this sharing of information and video between agencies.	Planned		1.6	4.00	3.00	2.67	3.00	3.33	1.33	3.00	3.67	3.00	3.67	4.67	4.33	4.67	3.67	126.5	8.43
Enhanced Communication Links to Field Devices	Improved Communications	Chicago Cellular Signal Interconnect	Includes the use of cellular modems for the purpose of data collection and archiving from traffic signal systems. Cellular modems could be used in locations where fiber-optic cable cannot be provided due to cos constraints.	Ongoing		2.7	3.75	3.75	3.5	3.5	3.75	2.25	4.25	4	3.25	3.5	4	4	3	4	134.8	8.98
Enabling Backbone Communications Infrastructure	Improved Communications	Dedicated & Higher-Bandwidth Links between Agencies (Non-Centralized)	other agencies to utilize the ATMS software package for information and video sharing purposes.	Planned	Years 1-10	3.4	4.5	3.75	3.25	3.25	3	1.25	3.5	4	3.25	3.75	4.5	4.5	4.5	3.75	140.3	9.35
Enabling Backbone Communications Infrastructure	Improved Communications	DoIT Smart State for ITS Projects	Refers to the Illinois DoIT (Department of Innovation and Technology) office deployment of fiber communications infrastructure that support various functions, including links to ITS technologies, such as intelligent street lighting or centralized control of field-based ITS devices. DoIT supports state agencies in a turn-key type of operation with respect to communications infrastructure needs. This would include fiber cable deployments, connectivity to central offices, and other communications related needs.	Ongoing	Years 1-10	3.4	5	4	3.75	3.5	3.25	1.75	4	4.5	3	3.25	4	4.5	3.75	3.25	142.5	9.50
Enabling Backbone Communications Infrastructure	Improved Communications	Fiber Installation to Support ITS Expansion	Fiber optic cable installation to improve traffic signal coordination and connections with other ITS field devices operated/maintained by IDOT.	Planned	Years 1-10	3.4	4.75	4.5	3	3	2.75	2	4	4.25	3.25	3.75	5	4.5	4	4	140.3	9.35
Enabling Backbone Communications Infrastructure	Improved Communications	Public-Private Municipal Fiber Buildou	Linking of public facilities via fiber optic cable within a municipality to ut promote data sharing and interagency coordination. An example would be the Bi-state MPO in the Quad Cities area.	Planned		3.4	4.25	4	2	2.25	2.25	5	3.5	3.75	3.5	3.25	4.25	4.25	3.25	3.75	126.4	8.43
Automated Vehicle Location	Incident Management	AVL / CAD Systems for Emergency Vehicles	Installation of an AVL / CAD system for fire and police vehicles. Central software will be used for communications with the vehicles, though there are no current plans to communicate data with traffic management agencies. System was noted as being provided by Tyler Technologies.	Ongoing		2.3	4	3.25	3	3	3.25	1	3.75	4.5	2.75	3.75	5	4.5	3.25	4	130.0	8.67
Regional Communications Centers for Operations Interoperability Regional Communications	Incident Management	Centralization of Alerts	Purpose would be to provide more traveler information, including AMBER Alerts for missing and endangered persons. Builds on efforts to centralize the messaging of the AMBER alerts.	Planned		2.3	3	2	2	2	2.25	2.5	3	3	2.5	3.25	3.75	4.25	4.5	3.5	112.6	7.51
Centers for Operations Interoperability	Incident Management	Combined & Electronic Dispatch	Ongoing project of combining dispatch centers to improve emergency response.  Project refers to traffic signal pre-emption, otherwise known as	Ongoing		2.3	3.5	2.25	2.5	2.5	3	1.75	3	3.5	2.5	3	4.75	4.75	4	4	121.4	8.09
Traffic Signal Preemption / Priority	Incident Management	Emergency Vehicle Preemption (EVP) Deployment	Emergency Vehicle Pre-emption (EVP), which is in place in many areas of the state.	Ongoing		2.1	3	3.75	2.75	3	3.25	1	3.75	4	3	3.75	5	4.25	3.5	4.25	126.7	8.45
Security Surveillance	Incident Management	Expansion of Expressway CCTV System (Cook County)	Includes CCTV camera replacements throughout IDOT District 1 to require CCTV cameras capable of license plate recognition for enforcement purposes. The new cameras will replace older cameras that do not have a high enough resolution for license plate recognition.	Planned		1.6	4.00	3.00	3.00	4.00	3.00	2.00	3.33	3.33	3.00	3.67	4.33	3.33	4.67	4.33	125.8	8.39
Security Surveillance	Incident Management	Law Enforcement Radio System	Common microwave radio system for law enforcement is being upgraded, but it does not include all agencies, e.g., the St. Louis Area Regional Response System (STARRS).	Planned		1.6	3.75	2.75	2.75	3	3.5	1.25	3.25	3.5	2.5	3.75	4.75	4	3.5	3.25	118.6	7.90
Localized Traffic Advisory Systems	Incident Management	Red Alert System	Project to alerting cell phones within a geographic area for emergency management of flooding or other serious emergencies.	Ongoing		2.2	2.5	2	2.25	2.5	2.25	1.25	3.5	3.5	2.5	3	3.75	2.75	3.25	3	105.3	7.02
Localized Traffic Advisory Systems	Incident Management	Special Event Traffic Management	Includes the use of ITS tools dedicated to planned special events, e.g., tracking databases similar to the work zone management project, alternate route applications, parking management systems. Establishment of a training program that meets on a regular basis to	Planned		2.2	3.75	3	2.25	2.5	2.5	2.75	3.25	3.25	3.75	3	3.75	4.25	3.75	4	118.8	7.92
Statewide ITS Teams	Incident Management	Traffic Incident Management Training	conduct training, debrief incident response, conduct tabletop exercises, and develop a TIM training plan, e.g., TIMTAC.	Ongoing	Year 1	2.9	4	2.75	2.75	3	3.25	1.75	4	4.5	3.25	4.25		2.5	4.5		127.1	9.78
Statewide ITS Teams	Incident Management	Traffic Safety Teams	Establishment of Traffic Safety Teams to manage incidents, assess response (lowa example).	Planned		2.9	4.25	2.75	2	2	2.25	1.75	3.5	4.25	3	4		2.5	4		112.1	8.63
Enhanced Communication Links to Field Devices	Interagency Coordination	Fiber Links Between Transportation and Law Enforcement	Relates to the installation of fiber between IDOT communications/dispatch centers and nearby law enforcement agencies, e.g., city police and Illinois State Police. The fiber would allow for the sharing of CCTV camera video from IDOT offices with city police and ISP to improve emergency response to traffic incidents.	Ongoing	Years 1-10	2.7	4.75	3.75	2.5	2.75	3.5	2.5	4	4.5	3	2.75	4.25	4.25	3.75	3.75	135.3	9.02
Statewide ITS Teams	Outreach / Public Education	Education about ITS	Development of outreach materials, videos, etc. to introduce ITS, describe benefits, and provide resources to the public.	Ongoing	Year 1	2.9	4.5	2.25	2.5	2.5	2.5	2.25	3.75	4.25	3.75	3.5		1.75	4.25		117.5	9.04
Statewide ITS Teams	Outreach / Public Education	ITS Resource Library	Creation of a centralized database of ITS specifications, standard drawings, documented costs and benefits, best practices documents, etc.	Planned		2.9	4.5	2.5	2	2	2.25	1	3.25	3.5	2.5	3.5		2.5	4		105.3	8.10
Traffic Signal System Upgrades	Traffic Management	Adaptive Traffic Control Signal Operations	Expansion of adaptive traffic control systems throughout the state. Systems have been deployed in District 1 and in Champaign. Springfield plans to implement system with traffic signal modernization efforts.	Ongoing		1.9	3.25	3.75	2.5	2.5	3.25	1.25	3.75	3.5	3	3.25	4	3.75	3.75	4.5	120.6	8.04
Traffic Signal System Upgrades	Traffic Management	Alternate Route Traffic Management	Similar to integrated corridor management, this project would identify corridors that experience frequent traffic diversions and implement systems along the alternate routes to manage traffic. This could include detection systems, new traffic signal systems, and alternate route signing. Examples include IL Route 178 leading traffic through Starved Rock State Park.	Ongoing		1.9	3.75	3.25	2.75	2.75	2.75	1.75	4	3.75	3.25	3.5	4.5	3.75	3.75	4	122.6	8.18
Regional Traffic Signal Coordination	Traffic Management	Central Signal System Expansion	Expansion of municipal, e.g., DuPage County, central signal system to connect to signal systems for adjacent jurisdictions. Project will incorporate 170 signals into the existing signal management system operated by DuPage County. Related to the Regional Arterial TMC project listed below.	Ongoing	Years 2-4	2.2	4.75	3.75	3	3.25	3.25	1.5	3.75	4.5	3.5	4	4.25	5	4.75	4.5	142.4	9.50

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	Program Area		Description	Deploym	nent Timeframe		Integration Oppor	rtunity		Financial	Integrity			Perception & Pu	ublic Awareness			Operati	onal Efficiencies			
Solution Category		Title		Project Status	Implementation Timeframe	Solution Ranking	Supports Other Projects	Mainstreaming Opportunity Available	Resources Programmed/ Identified for Implementation	Resources Available for O&M	Acceptable Return on Investment	P3 Opportunities for O&M Funding	Implementation Timeframe	Identified as Key Initiative	Mobility for all Transportation Users	Overcome Impediments to Implementation	Proven Technology	Promotes Interoperability	High Travel Corridors or Statewide / Regional Coverage	Performance Measures Available	Total Priority Points	Normalize Score
ITS Data Collection Systems	Traffic Management	Centralized CCTV Camera Monitoring and Control	Project to install pan-tilt-zoom (PTZ) cameras for monitoring and control, e.g., at the IDOT District 5 office, along I-74 between Urbana and Danville.	Planned		(HIGH) 3.4	(LOW) 4	(LOW) 3.75	(MEDIUM)	(MEDIUM)	(HIGH) 3.25	(LOW)	(MEDIUM) 3.75	(HIGH) 3.75	(MEDIUM) 3.25	(LOW) 3.75	(LOW) 4.75	(MEDIUM) 4.5	(HIGH) 4.5	(LOW) 4	139.8	9.32
Regional Traffic Signal Coordination	Traffic Management	Centralized Traffic Signal Control for Municipalities	Installation of centralized traffic signal management software to suppor remote monitoring and control of municipal signal systems. Such systems should promote compatibility with other software/signal controllers to support regional signal control projects.	rt Planned		2.2	4.25	3.5	2.25	2.5	2.25	1.25	3.5	4.25	3.5	3.75	4.75	4.5	4.25	4.5	127.3	8.49
TS Data Collection Systems	Traffic Management	District 1/District 3 Joint ITS Project along I-80 and I-55 Corridors	Includes one DMS on I-80 (EB I-80 near MM 102.1) and two DMS on I-55 (NB I-55 near MM 214, SB I-55 near MM 223), along with a number of CCTV cameras for traffic monitoring. Server in District 1 hosts the ATMS software responsible for communicating with the DMS. Also includes installation of 31 Bluetooth detectors along I-55/I-80 for traffic detection to understand where congestion is forming.	Planned	Year 1	3.4	3.5	3.5	3	3	3.25	2	4	4.25	3.25	3.75	4.75	4.75	4.5	4	143.4	9.56
Emergency Traffic Patrol Expansion	Traffic Management	Emergency Traffic Patrol / Emergency Traffic Vehicle (ETP/ETV) Expansion	Project refers to the expansion of two similar emergency traffic assistance programs to cover additional areas of the state. IDOT's Chicago area Emergency Traffic Patrol (ETP) and Metro-East area Emergency Patrol Vehicle (EPV) programs, respectively, dispatrol teams of emergency patrol vehicles and drivers to traffic disruptions and potential safety problems caused by accidents, disabled vehicles or hazardous debris. The primary objective of the ETP-EPV workers, also referred to as "Minutemen," is to respond to all disruptive incidents on the state's busiest urban expressway systems and to take immediate corrective action to safely restore normal traffic flow. Minutemen then execute help that motorists need when breakdowns or mishaps occur.			2.2	2.67	3.00	4.33	4.00	4.33	4.33	4.33	4.67	2.33	4.00	4.67	2.67	4.33	4.67	145.1	9.67
Managed Lanes / HOT Lanes	Traffic Management	Expansion of Lane Closure System	Lane closure system project geared towards lane closure based on events such as road construction. System would be integrated into the Travel Midwest site and information made available there for the public			2.1	4	3.25	2.75	3	2.5	1	3.5	3.5	3	3.5	4.5	3.25	3.75	3.75	117.8	7.85
Managed Lanes / HOT Lanes	Traffic Management	I-55 Project Managed Lanes	This project would add managed lanes from I-355 to the Dan Ryan. Because of the wide inside shoulder with full-depth pavement along part of the route, adding managed lanes can be relatively inexpensive, making it the most cost-effective congestion reduction project evaluated. IDOT currently anticipates adding two new lanes to assure travel time reliability.	Ongoing	Years 4-6	2.1	3.5	4.25	2.5	2.5	3	2	4.25	5	4	4.25	4.5	3.75	5	5	141.3	9.42
Integrated Transportation Corridors	Traffic Management	IL 64 / IL 56 Smart Arterial Corridors	Relates to IL Highways 64 and 56, which are parallel facilities to the I- 290 corridor. ITS technologies, including traffic surveillance, road weather surveillance, communications infrastructure, DMS, incident detection, dynamic lane management and incident management systems would be deployed to support the project.	Planned	Years 1-3	2.4	4	4	3.75	3.5	3.25	2	4	4.5	4.5	4	4.5	4.75	4.5	4.5	147.5	9.83
Managed Lanes / HOT Lanes	Traffic Management	I-290 Project (IDOT) Integrated Corridor	Reconstruction of I-290 from Jane Byrne to Mannheim. ITS components may include traffic surveillance, traveler information, as well as a managed lane or congestion pricing on a managed lane. Integrated corridor components could also be incorporated along parallel arterial routes. Project is not funded at this time but has been identified in the CMAP ON TO 2050 plan.	Ongoing	Years 4-6	2.1	4	3.75	3.5	3	3.5	2	3.5	4.75	3.75	3.75	4.5	3.75	4.5	5	140.8	9.39
Integrated Transportation Corridors	Traffic Management	Integrated Corridor Management (ICN	Interconnect traffic signals, DMS, CCTV and potential vehicle-to- f) infrastructure technology communications and other applicable system components to support traffic management along key travel corridors.	Ongoing	Years 7-10	2.4	4	4.25	3.5	3.5	3.25	2	3.75	4.5	4.25	3.75	4.25	4	4.25	5	142.6	9.51
Security Surveillance	Traffic Management	Interagency video sharing	Project to increase the amount of video shared between agencies that monitor CCTV cameras deployed along roadways. Project would allow multiple agencies to view roadway related incidents currently being responded to law enforcement and emergency management agencies . Fiber-optic cable connections between agencies can facilitate this sharing of video between agencies.			1.6	3	2.5	2	2.25	2.5	1.75	2.25	2.25	2.25	2.5	3.25	3.25	3.25	3	93.8	6.25
Traffic Signal System Upgrades	Traffic Management	ITS Expert Resources	Identification of personnel with expertise in areas related to ITS, including computer programming, communications, and networking.	Planned		1.9	4.75	2	1.5	1.75	2.25	1.5	3.5	2.75	2	3.5		1.5	4		91.8	7.06
Managed Lanes / HOT Lanes	Traffic Management	Managed Lanes (IDOT)	Several managed lanes projects have been identified in the CMAP ON TO 2050 plan. IDOT plans to implement managed lanes along several key interstates (i.e., I-55, I-290, I-80) to address traffic congestion. Management could include congestion pricing during periods of heavy congestion.	Ongoing		2.1	3.75	4	3.25	2.75	3.5	2	3	4.75	3.5	3.25	4.25	3.5	4.5	5	136.3	9.09
Connected Vehicle V-2-V and V-2-I Deployments	Traffic Management	Multimodal Traffic Signal System Integration including Connected Vehicles	Integration of transit, e.g., Pace, buses with traffic signals to enable vehicle to infrastructure communication.	Ongoing		2.6	4.5	3.5	2.5	2.5	3	2.5	2.75	3.75	3.5	2.75	3.25	3.75	3.75	3.5	122.8	8.19
Advanced Railroad Highway Interface Technologies	Traffic Management		Project could include advanced warning systems, including pre-trip alerts, so motorists are aware of the pending train blockages	Planned		1.8	2	3.25	1.75	2.25	2.5	1.75	3.25	3.5	2.75	3.5	3.25	2.5	3.25	4	104.0	6.93
Regional Communication Centers for Operations Interoperability	Traffic Management	Regional Arterial TMC	Development of regional arterial TMC for communicating with ITS equipment operated by counties and municipalities in IDOT District 1.	Ongoing	Year 5	2.4	4.75	2.75	3.25	3	3.5	1.5	3.5	4.25	3.5	3.75	4.25	5	4.75	4	141.0	9.40
Regional Traffic Signal Coordination	Traffic Management	Regional Traffic Signal Control for Municipalities	Establishment of links between municipal and IDOT traffic signal systems to support regional traffic signal control and monitoring within and across jurisdictions. Examples include IDOT District 2 linkages with Rockford, Quad Cities.	Planned		2.2	4	3.75	2.25	2	3	1.75	3	4.25	3.75	3.5	4.25	4.75	4.75	4.25	131.8	8.79
Localized Traffic Advisory Systems	Traffic Management	Replacement of Obsolete Field Devices	Replacement of obsolete ITS field devices that serve traffic management, incident management, or traveler information purposes. Includes an ongoing project in District 2 to replace older DMS that were installed in 1999 to provide information to traffic approaching the aging 1-74 bridge over the Mississippi River, as well as for traffic on I-80 and 88.	Ongoing	Years 1-10	2.2	3.33	4.00	3.67	3.67	4.00	2.67	3.67	4.33	3.33	3.33	4.67	4.67	4.67	4.33	145.8	9.72
ITS Data Collection Systems	Traffic Management	Rest Area Security Video Upgrades	Planned project to upgrade security video recording systems at IDOT rest areas, including integration into existing video management software, e.g., Milestone in IDOT District 5.	Ongoing		3.4	3.5	2.5	2.75	2.5	2.25	2.75	3	2.75	2.5	2.75	4.75	2.75	3.5	3	112.4	7.49

Appendix J - Prioritized List of Statewide ITS Projects (Organized by Program Area) Prioritization View

				D1	ant Timefree								Evaluation I	Measures								
	Program Area	Title	Description	Deployme	ent Timeframe		Integration Oppo	rtunity		Financial	ntegrity			Perception & Pu	blic Awareness			Operation	onal Efficiencies			
Solution Category				Project Status	Implementation Timeframe	Solution Ranking	Supports Other Projects	Mainstreaming Opportunity Available	Resources Programmed/ Identified for Implementation	Resources Available for O&M	Acceptable Return on Investment	P3 Opportunities for O&M Funding	Implementation Timeframe	Identified as Key Initiative	Mobility for all Transportation Users	Overcome Impediments to Implementation	Proven Technology	Promotes Interoperability	High Travel Corridors or Statewide / Regional Coverage	Performance Measures Available	Total Priority Points	Normali Score
			Relates to the use of ITS technologies like traffic surveillance, road			(HIGH)	(LOW)	(LOW)	(MEDIUM)	(MEDIUM)	(HIGH)	(LOW)	(MEDIUM)	(HIGH)	(MEDIUM)	(LOW)	(LOW)	(MEDIUM)	(HIGH)	(LOW)		4
Integrated Transportation Corridors	Traffic Management	Smart Highway Deployments	weather surveillance, communications infrastructure, DMS, incident detection, dynamic lane management and incident management systems along interstate routes. In particular, corridors like 1-94 and US 41, which are parallel facilities. I-94 is operated by the Tollway, while US 41 is operated by IDOT, requiring high levels of cooperation and coordination to implement and operate the project.	Ongoing	Years 2-4	2.4	4.5	4.5	3.5	3.5	3.25	2	3.75	4.5	3.5	3.25	4	4.25	4	5	140.1	9.34
Connected Vehicle V-2-V and V-2-I Deployments	Traffic Management	Smart Lighting	Smart Lighting systems can adjust the lighting along roadways based on a number of factors, such as environmental conditions or the presence of connected vehicles along roadways. Systems can also be managed and configured by traffic management centers.	Planned		2.6	3.67	4.00	3.00	3.00	4.00	3.33	3.33	3.00	2.33	2.67	4.00	2.67	3.67	3.33	123.0	8.20
Localized Traffic Advisory Systems	Traffic Management	Special Event Information/Reporting Systems	Improve special events information dissemination in the region through information sharing with the IDOT Gateway. Would include provision of information from non-traditional stakeholders (i.e., event promoters).	Ongoing		2.2	3.5	2.75	2.25	2.5	2.75	4	3	3	2.75	3	3.75	4.25	3.25	3.5	113.4	7.56
Statewide Communications Center/Station One Upgrade	Traffic Management	Statewide Communications Center/Station One Upgrade	Upgrades of IDOT's existing emergency radio/phone service, Station One, can be implemented to have it serve as a Central Office Communications Center. Data from a statewide traveler information system would be available for viewing at the center. The center would also be connected with the State Emergency Operations Center (SECO) to provide transportation information and support in case of emergencies. Additional communication devices can be used to make the Station One system more robust and ensure that it operates at peek effectiveness.	Planned	Year 2	3.2	4	3	3.5	3.5	3.5	1.5	3.5	4.5	3.5	3.75	4.5	4.5	5	4	148.0	9.87
Regional Communication Centers for Operations Interoperability	Traffic Management	Statewide Advanced Traffic Management System (ATMS)	Deployment and operation of a central IDOT ATMS to communicate with and control field ITS devices, potentially across IDOT district boundaries.	Planned	Years 3-4	2.4	4.75	3	3.5	3.75	3.5	1.75	3.25	5	3.75	4	4.75	5	5	4.25	150.0	10.00
Localized Traffic Advisory Systems	Traffic Management	Statewide Deployment of Additional ITS Field Devices	Additional ITS field devices can be deployed to serve traffic management, incident management, or traveler information purposes. Deployment can include Dynamic Message Signs, CCTV cameras, and traffic detection equipment to expand the ITS coverage of existing metro areas.	Ongoing	Years 1-10	2.2	3.33	4.00	3.67	3.67	4.00	2.67	3.67	4.67	3.67	3.33	4.67	4.67	4.33	4.33	146.7	9.78
Traffic Signal System Upgrades	Traffic Management	Traffic Signal Modernization	Ongoing projects to modernize traffic signal controllers in municipalities across the state.	Ongoing	Years 1-10	1.9	4.75	4.25	3.25	2.75	4	1.25	3.75	4.75	3.75	3.75	4.75	4	4	4.5	140.1	9.34
TS Data Collection Systems	Traffic Management	Travel Time Detection Systems	Includes installation of detectors, e.g., Bluetooth, along interstate corridors to understand where congestion is forming, e.g., along I-55 and I-80.	Ongoing		3.4	4.25	4	3	3.25	3	2.25	3.5	4	2.75	3.75	4.25	3	4	5	134.1	8.94
Automated Vehicle Location	Transit	Automated Vehicle Location (AVL) Deployments for Transit Agencies (MCORE Project: Restructuring Campus Area Bus Routes, Stops, Access, Signals, etc. (BRT))	Ongoing larger project to improve transit operations in the Champaign- Urbana campus area for bus routes, stops, and signals. Phase 1 of the project has been completed and Phase 2 is ongoing with the deployment of a Routematch AVL system for automated routing of transit vehicles and improved transit fleet management.	Planned		2.3	4	2.5	3.5	3.5	3.25	2	4.25	4.25	4	3.75	5	3.75	3.25	3.75	133.8	8.92
Active Transit Station Signs	Transit	Real-Time Transit Information Signage	Project to expand the dissemination of real-time transit information in the region. RTA / CTA / Pace have deployed signage within District 1. MetroLINK in District 2 has ongoing project with the existing challenge of using the same vehicle radio for voice and data transmissions.	Ongoing		1.5	3.25	3.25	3.25	3	3.25	2.5	3.75	3.5	3.75	4	5	4	3.5	4	125.1	8.34
Localized Traffic Advisory Systems	Transit	Rural Transit Information Applications	Project to develop smartphone-based applications for use by rural transit providers to disseminate information to passengers using fixed	Planned		2.2	2.5	2.25	1.5	1.75	2.5	2.75	3	3	3.75	2.75	4.25	3.5	3	3	104.8	6.98
Automated Vehicle Location	Transit	Single Source Transit Service Call- Taking	route or paratransit services.  Project is similar in nature to the Metro Call-A-Ride type of transit service call taking offered in the metro St. Louis area. Project would identify a single location to receive requests from customers with disabilities who qualify for Americans with Disabilities Act (ADA) paratransit services. Requests would then be arranged with the appropriate transit provider that could fulfill the requests.	Ongoing		2.3	3.33	2.67	3.33	3.33	3.67	2.67	3.33	3.67	4.33	3.67	4.00	3.67	3.33	3.67	129.8	8.66
Traffic Signal Preemption / Priority	Transit	Transit Signal Priority	TSP deployment was a planned project of a high priority for transit agencies, e.g., SMTD (Sangamon Mass Transit District). The potential may exist for the coordinated use of intersection-based system hardware that could potentially support both EVP and TSP operations.	Planned		2.1	3.25	3.75	3	3	3	1.5	3.75	3.75	4	3.75	4.75	4	3.25	4.25	125.9	8.40
Localized Traffic Advisory Systems	Transportation Safety	Crash Warning Systems	Planned project refers to an intelligent driver warning system based on information from Road Weather Information Systems and traffic counters (stopped/slowed traffic) and Computer Aided Dispatch data.	Ongoing		2.2	2.25	2.5	2.5	2.5	2.5	1.5	3.75	3	2.5	3	3.25	3.25	3.5	4	108.8	7.25
Localized Traffic Advisory Systems	Transportation Safety	Intersection Collision Warning System (D-5)	ICWS systems enhance driver awareness of the traffic situation at the intersection by providing warnings through flashing beacons of vehicles entering the intersection. Drivers approaching the intersection on a major through road are given a warning when a vehicle has been detected as entering the intersection from the cross street. Also drivers waiting at the stop signs on the minor approaches are given a "crossing traffic" aller thwen approaching vehicles are detected along the major approach from either direction.	Planned		2.2	3.00	3.67	3.00	3.00	4.00	1.33	3.00	4.33	4.00	3.33	4.00	3.67	3.00	4.67	129.3	8.62
Localized Traffic Advisory Systems	Transportation Safety	Pedestrian Safety Proximity and Intersection Detection	Includes Lake County DOT, Kane County DOT, and Pace as agencies to deploy vehicle / intersection-based sensors for detection of pedestrians in blind spots of transit vehicles.	Ongoing		2.2	2.75	2.75	3	3	3.5	1.5	3.75	3.75	3	3.25	3	3	3.25	4	120.1	8.01
Localized Traffic Advisory Systems	Traveler Information	Downtown Parking Guidance Systems	Systems that gather parking availability data and relay it to motorists through dynamic signs, apps, and traveler information websites.	Ongoing		2.2	2.67	3.00	2.33	2.67	3.00	3.67	3.33	3.33	2.00	2.67	3.67	2.67	2.33	3.67	106.2	7.08
Illinois Statewide Transportation Information Network	Traveler Information	Gateway Traveler Information System/Travel Midwest Website Enhancement	Includes enhancements to existing Gateway Traveler Information System, and could include the display of more ITS field devices in various IDOT Districts, as well as agreements with private data providers that could add traffic detection data and incident information to the system where IDOT does not have communications links to field based ITS devices.	Ongoing	Years 1-2	3.4	4	3.25	3	4	2.75	2.5	3.5	4	4	2.75	4.5	3.75	5	4.25	142.6	9.51
Localized Traffic Advisory Systems	Traveler Information	Rest Area Traveler Information	Project is to provide a video screen at IDOT rest areas showing travel information including weather, road conditions, and camera feeds along the corridor, e.g., in District 5.	Planned		2.2	2.33	2.33	3.00	3.00	2.00	4.00	3.33	2.67	2.67	3.33	4.67	2.67	3.67	2.33	108.3	7.22

Weighting - High (5 points), Medium (2.5 points), Low (1 point)
High - Solution ranking, Publicized Strategic Priority, Acceptable Return on Investment,
Medium - Resources Programmed/Identified, Resources Available for O&M, Implementation Timeframe, Promotes Interoperability
Low - Upcoming Deadline for Compliance, Performance Measures Available, Supports Other Projects, Mainstreaming Opportunity Available, Proven Technology
Added\* - High Proirity Project added to project listing upon IDOT review and comment