

Illinois Statewide



Intelligent Transportation Systems (ITS) Strategic Plan

APPENDIX E

Top Priority ITS Needs Identified by Region

October 2019









IDOT Region 1 – Chicagoland	
Top Priority Regional Needs	
Enhanced data collection and monitoring capabilities for traffic management agencies	
Improved Safety through the use of ITS	
Regional Needs Discussed at Statewide I'	TS Architecture Workshops
Traffic safety (save lives)	Shift from DMS to in-vehicle (anticipate
	transition/horizon)
Congestion (save time)	Incident information (not just detection, but also
	clearance)
Economic impacts (save money)	Robust & diverse communications infrastructure
Real-time data requirements	Integrated fare systems
Performance measures reporting	Railroad grade crossing, transit, pedestrian safety
requirements	
Data access for unconnected agencies	"Connected pedestrians" for improved safety
Prepare for connected and autonomous	Funding –FAST ACT funding opportunities, build
vehicles	team to pursue
Public-private partnerships (alternate	Truck delivery management in the downtown
funding)	(pricing)
Sorting through data from different	Rail crossing condition reporting/alert/coordination
sources, public & private	system (including predictive)
Need to obtain private data (pool	ITS security – data, infrastructure, control
resources across agencies)	
Need info (e.g., on DMS) to be real-time	

IDOT Region 2 – Rock River Valley	
Top Priority Regional Needs	
Enhanced interagency coordination and data sharing	
Additional funding for ITS deployment, operations, and maintenance	
Regional Needs Voted on at Statewide ITS Architecture Workshops	Votes
Better data sharing (e.g., across state lines)	11
Statewide funding for regional projects / operations	9
Real-time transit information	6
Maintenance of existing ITS equipment	6
Centralized operations for 24/7 traffic management	6
Communications infrastructure upgrades / expansion	6
Getting systems to talk to each other (integration)	6
Better weather / road condition data	5
Mitigate non-recurring congestion (seasonal/special events)	4
Improved / easier coordination between transit agencies	4
Standardization and procurement	4
More specific traveler information	1

IDOT Region 3 - Commerce Corridors	
Top Priority Regional Needs	
Expanded communications infrastructure network	
Improved and expanded traveler information	
Additional funding for ITS deployment, operations, and maintenance	
Regional Needs Voted on at Statewide ITS Architecture Workshops	Votes
Communications and power backbone	8
Timely road condition collection (construction, weather, etc.)	8
Identifying funding sources	7
Managing incident impacts (SWZ, queue detection / warning)	7
ATMS / traffic signal coordination	6
Special event coordination	2
Traveler information dissemination	2
Predictive traffic modeling	2
Emergency vehicle routing	1

IDOT Region 4 – Great Rivers Country	
Top Priority Regional Needs	
Enhanced data collection and monitoring capabilities for traffic management agencies	
Enhanced interagency coordination and data sharing	
Increased capacity of the transportation system	
Regional Needs Voted on at Statewide ITS Architecture Workshops	Votes
Expand real-time emergency information dissemination	12
Additional connections between IDOT and other agencies, e.g., use excess fiber	10
to connect agencies	
Further improve incident management	9
Exchanging information with private sources, e.g., Google	8
More accurate travel information	7
Statewide transit routing information source	7
Capacity issues, e.g., 2-lane Highway 24 in Fulton County	6
Better weather/road condition information	4
Monitoring data in rural locations	1
Railroad crossing blockage information	1
Freight content information (rail, to match highway)	1

IDOT Region 5 – University Trail	
Top Priority Regional Needs	
Enhanced interagency coordination and data sharing	
Additional funding for ITS deployment, operations, and maintenance	
Enhanced incident management programs	
Advanced traffic signal systems	
Regional Needs Voted on at Statewide ITS Architecture Workshops	Votes
Connections between county/state/city	16
Access to advanced traffic signal systems – staff and resources	13
CAD integration and data sharing (police and traffic)	10
Construction work zone information	9
Rural transit operations ITS capabilities	9
IDOT ITS Program office – what support needed over 5-10 years?	9
ICN (Illinois Century Network) & UC2B fiber sharing/access	6
Statewide roadway jurisdictional maps	6
Robust partnership with private sector (PPP)	5
Outreach to public via many methods –web, news, radio, DMS	5
Updating legacy systems	3
Station 1 and TMCs network	2

IDOT Region 6 – Capital West	
Top Priority Regional Needs	
Expanded communications infrastructure network	
Interagency coordination	
Funding	
Data collection	
Regional Needs Voted on at Statewide ITS Architecture Workshops	Votes
Interagency data connections (info sharing, regional / statewide)	14
Complete communications network	12
Explore additional funding sources (all modes)	10
Eliminate duplications (coordinate overlapping projects)	10
Additional monitoring capabilities	7
Connected vehicle preparations	7
Improve signal timing on alternate routes (e.g., for traffic surges)	6
Timely traveler info (social media, all modes, public and private)	6
Promotion of fixed-route and demand-responsive transit (including TSP schedule	4
protection)	
Combined transit dispatch centers	2
Be industry-leader in CVO deployments	1

IDOT Region 7 – Little Wabash	
Top Priority Regional Needs	
Improved and expanded traveler information	
Enhanced interagency coordination and data sharing	
Incident response	
Safe driving training	
Regional Needs Voted on at Statewide ITS Architecture Workshops	
City/county/fire/911	11
Improved access/communications between state/local emergency radio dispatch	8
Camera use at interchanges for verification of incidents	7
Data clearing house/standards, API for the state – PSAP consolidation	6
Using DMS signs to train/advise drivers on safety (Only sees Click-it or Ticket,	5
Put Phone Down)	
Better Traveler Information that is available and disseminated	4
Developing fixed route transit and transfer center (RMT – previous contracts)	2
Statewide transit route info	1

IDOT Region 8 – Metro East	
Top Priority Regional Needs	
Additional funding for ITS deployment, operations, and maintenance	
Enhanced interagency coordination and data sharing	
Interagency coordination	
Traveler information	
Regional Needs Voted on at Statewide ITS Architecture Workshops	Votes
Utilize available CMAQ funds (matching funds, staffing to develop projects)	8
Expand video / data sharing with other agencies	8
Rural transit funding (capital, operations, and management)	8
Provide timely incident information	7
Upgrade CCTV cameras and stream video	5
Develop maps for transit routes	5
Expand traffic incident management training	5
Disseminate transit info to riders	4
Getting traveler info to people when and where they need it	3
Focus on maintenance and operations	2
Overcome institutional issues to facilitate rural transit transfers	0*

IDOT Region 9 – Little Egypt	
Top Priority Regional Needs	
Advanced traffic signal systems	
Enhanced incident management programs (includes construction and unplanned in	ncidents)
Traveler information	
Stronger partnerships with private industry (e.g., cell phone probe data)	
Regional Needs Voted on at Statewide ITS Architecture Workshops	Votes
How to capture and use info from Cell phones (HERE, Inrix)	10
Web based accessible system	10
Wider coverage for traffic signal info	9
Improved queue measurement tools	4
Informed system operations	3
Coordinating transit routing services	3
Re-routing info from I-57 incidents/detours	3
At-grade rail crossings causing massive peak-hour backups – diversion	3
capabilities	
Improve truck permit process – potential centralization	2
Improved Toll Road information	1
CAD integration - state police, agreements, local /county/sheriff	1