Research Need for Public & Intermodal Transportation Technical Advisory Group

Effective/Updated: August 14, 2015

ISSUE: Intelligent Transportation Systems Use

SUMMARY OF PROBLEM: The growing sophistication of digital- and software-based tools available to transit service providers has raised a commensurate need for effective guidance on the feasibility and use of various technologies for different types of providers (e.g. large urbanized, small urbanized, non-urbanized, demand response). IDOT would like to specifically know the following: Which of Illinois’ transit providers are already effectively using next-generation ITS technology? What technologies are they using and what benefits are they receiving? Which transit providers have taken the first step of technology procurement but are barely scratching the surface of system capabilities (and why might this be so)? What further benefits might they realize with a nudge in the right direction? From a funding/regulatory/scale/business process/etc. perspective, what barriers prevent other transit operators from using these technologies?

EXPECTED IMPLEMENTABLE OUTCOME: (1) An illustrative review of Illinois’ current transit operators who use ITS that describes realized and/or unrealized improvements in business practices, cost management, and service provision relative to the real and perceived capabilities of ITS systems; (2) an instructive, semi-technical guide outlining best practices and common errors in using ITS technologies for different types of transit providers (e.g. large urbanized, small urbanized, non-urbanized, demand response); and (3) policy recommendations for ways in which administrators at the federal, state, and regional/local levels might most effectively promote the proliferation and useful adoption of ITS technology among transit providers of all types.

To submit a research idea for consideration at the spring 2016 Executive Committee meeting, prepare and submit a Proposed Research Idea form to IDOT (DOT.BMPR.RESEARCH@illinois.gov) no later than October 1, 2015.