Improving Rider Experience and System Performance through Bus Stop Evaluation in York, Pennsylvania

Mike Pritchard, Senior Transportation Planner, York County Planning Commission, York, PA

**ABSTRACT TEXT:** During the development of rabbittransit Transit Development Plan, it became apparent that the network bus stops were impeding system performance and customer experience. Acting as the consultant to rabbittransit, the York County Planning Commission collected a field inventory of more than 500 bus stops that included geolocated data about the stops ADA compliance, surrounding sidewalk, shelter and seating condition, landscaping, lighting, and safety. The inventory also collected photographs of each bus stop. Using this information, YCPC first created a summary that identified immediate repairs to bus stops to remedy accessibility issues.

Next, by combining the field inventory with APC and schedule adherence data in a GIS environment, YCPC was able to identify high-use, well-appointed bus stops to become anchors for each bus route. YCPC then created a five-minute walking buffer around each of these anchors to find redundant bus stops for eventual elimination from the system. In areas without obvious anchors, the geolocated field data allowed YCPC and rabbittransit to select best-case bus stops for future investment that will spur further consolidation. In total, YCPC identified 165 redundant bus stops, or about one-third of the stops in rabbittransit system. By consolidating and enhancing the system stops, rabbittransit expects to improve riders experience through better amenities and schedule adherence.

Using GIS and Widely Available Data to Link Public Trails with Public Transportation

Sara Hendricks, AICP, Senior Research Associate, Center for Urban Transportation Research, Tampa, FL

**ABSTRACT TEXT:** This presentation will describe a methodology developed using GIS, to evaluate intermodal connections between public transportation and public trails. As applied to the trails and transit systems of Pinellas County and Hillsborough County, Florida, the research team used data sets and analysis tools that are widely available, including GTFS and the EPA SLD. Based upon the selection of a transportation goal of importance to the community, as defined by a particular travel market and trip purpose, mapping discerned areas within the counties where larger concentrations of the target traveler market are located. Locations of greater concentrations of the desired trip destination type also were determined.

The locations of bus routes and bus stops, bicycle and pedestrian facilities, and public trails also were mapped. A trail/transit crossing inventory template was developed and used to conduct audits of the conditions present at selected transit/trail junctures found within the subareas. Recommendations were developed for improvements for each of these transit/trail junctures to make the connections stronger so that someone using nonmotorized transportation could use both public transit and a public trail to complete a multimodal trip to the destination.
ABSTRACT TEXT: Crowdsourced data from WAZE and other 3rd parties is starting to be adopted by state and local DOTs to increase situational awareness and aid in the planning process. While the data shares significant promise especially in rural areas where traditional ITS deployments and detection technologies are not widely adopted. Yet, agencies around the world are still struggling to varying degrees to trust and adopt crowdsourced data.

The reasons range from procurement and technical challenges to trust issues and philosophical concerns. In the process of working with Waze and other crowdsourced data providers, we at the CATT Lab encountered a number of opportunities and challenges related to their services, procurement, and technical implementation. Our goal in this session is to share these positive and negative experiences to guide agencies in building effective partnerships and avoiding pitfalls some early adopters may have encountered. We will cover the most common challenges that agencies are likely facing with some thoughts on how to overcome them.

These recommendations apply to agencies attempting to broker agreements with WAZE, probe data providers like HERE, INRIX, and TomTom, as well as other new players in this space.