ABSTRACT(S) IN THIS SESSION

An AADT for Transit? Modeling Ridership and Generating Multimodal Performance Measures from the U.S. DOT National Transit Map (GTFS) and Other Nationally-Available Data
Alexander Oberg, US Department of Transportation Volpe Center, Cambridge, MA

ABSTRACT TEXT: As spatial data for highways became standard across the country, Average Annual Daily Traffic (AADT) took on new usefulness as an accompanying baseline measure of road usage. In contrast, the General Transit Feed Specification (GTFS), the de facto standard spatial format for transit data, is a user-focused format with no mechanism for reporting usage. Ridership data remains challenging for many agencies to collect and there is no standard way to share and analyze it across agencies or make comparisons between modes.

This U.S. DOT project explores whether the recently released U.S. DOT National Transit Map, which includes GTFS feeds across the country, can help alleviate this challenge. The project team developed a model that estimates link-level ridership based on GTFS data, the national spatial database of public roads, and other nationally-available information such as Census demographic data. The project also creates a method for mapping other multimodal and transit-specific measures from GTFS, including service frequency and transit mode share by corridor. This presentation discusses the resulting tools and insights and how they may be relevant to transit agencies and other stakeholders.

Small Urban and Rural GTFS: From Zero to a Service Planning
Shuman Tan, Associate Transportation Researcher, Texas A&M Transportation Institute, College Station, TX

ABSTRACT TEXT: Google General Transit Feed Specification (GTFS) is a standardized, open data specification for fixed-route transit. GTFS has powered transit trip planning and transit service planning since the beginning of the Google Transit Partner Program. Small urban and rural transit systems are less benefited by GTFS due in part to lack of resources, such as dispatching/scheduling software with GTFS export, and incompatible modes, such as deviated/flexible or demand responsive services. These smaller systems or non-fixed route modes delay the application of GTFS to trip and service planning.

Researchers at Texas A&M Transportation Institute developed a GTFS creation toolset compatible with common software utilized by small urban and rural transit systems. In addition, researchers developed a methodology utilizing GTFS, service information, and GIS to evaluate and compare transit supply geographically. Several transit operators and regions have used the toolset/method to implement GTFS and evaluate service gaps and overlaps. The presentation will introduce the toolset and present the GTFS-GIS transit supply methodology.

The presenter aim is to receive feedback from peer GIS professionals and to disseminate information to assist other GIS/transit planners to improve transit service in small urban and rural areas.

Beyond Google Maps: Easily Build, Edit, & Analyze GTFS to Impact Planning Decisions
Stuart Powell, Account Executive, TransLoc, Durham, NC
Rodney Bunner, Solutions Manager/TBEST Developer, TBEST/ServiceEdge Solutions, Tampa, FL

ABSTRACT TEXT: General Transit Feed Specification (GTFS) began as a side project at Google. It has since evolved from the “language” of trip planning platforms to the center of analytics and modeling for transit agencies, planning organizations, and consultants. GTFS is a challenging language to learn, but technological advancements have uncomplicated and decreased the learning curve. Additionally, the number of GTFS-centered analytical tools grows each year, which transit agencies and planning organizations leverage during the decision-making process.

In this panel, we will touch on how to build, manipulate, or validate a feed rapidly with no GTFS experience and how agencies are using modeling platforms to assist with planning estimation and analysis (all without the headache of an RFP process).