

Modes-Update: A Shared GTFS Editor for Rural Transit Providers

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Transit agencies—including bus, rail, and ferry service providers—need to keep riders updated about route changes and schedule information. In rural areas, however, many transit agencies lack the resources needed to computerize their transit management systems and thus have not been able to share real-time information with the public. Castle Rock has worked with several smaller transit properties since 2004 to develop software solutions to these challenges. These collaborations have resulted in Modes, a real-time transit tracking and incident reporting system designed to offer a unified source of data for transit systems within a state or region. Castle Rock developed the Modes system as a major transit-based enhancement to the typical highway-focused 511 traveler information system. It has subsequently been deployed by Maine, Idaho, and the Sacramento region. Modes uses GTFS data, which has become a ubiquitous standard in the transit industry. In 2006, Google released GTFS, the Google Transit Feed Specification (now General Transit Feed Specification), which—according to Google’s web site--” defines a common format for public transportation schedules and associated geographic information.” It has become the de facto industry standard for defining transit services. Since 2006, Google has imported GTFS data sets from transit providers worldwide in an effort to make them available in their map-based trip planner. As such, most transit agencies feel a pressure to produce and maintain GTFS for their systems, if they do not do so already. Many smaller agencies struggle to produce and maintain GTFS files, either for Modes or simply for sharing with Google. Some of the larger transit agencies use in-house tools to produce GTFS datasets for integration with Modes. Others are currently unable to produce or maintain them due to resource constraints and the complexity of the GTFS standard. Without automation or a simple GUI, the update process is time-consuming. In response to this challenge, Castle Rock is working with the Idaho Transportation Department and 11 bus companies in that state to create Modes-Update, which will allow operators to create, edit, and manage GTFS data for use by Modes and by Google. Changes will be able to be made as often as necessary, i.e., whenever there have been system changes that need to be communicated to the public. Operators will use a simple map-based interface to modify route paths and stop locations in addition to timetable information. This presentation will discuss the latest developments in the Modes-Update design process, including the challenges of maintaining a back-end GTFS database feeding into a “live” website. It will also discuss the recent addition of Sacramento to the Modes-Update project partnership.