GTFS Builder

Why GTFS Builder? What will my agency need?

GTFS Builder (General Transit Feed Specification Builder) is a web application and training tools from National RTAP for managing data to offer integrated on-line trip planning at Google Maps. Google Maps and Transit trip planning provide benefits to both travelers and transit agencies. Travelers can find transit options for their trips and connections to adjacent areas, get step-by-step directions, and even see a comparison of driving and transit cost. In addition to attracting new or more frequent riders, transit systems may experience fewer calls to customer service for route and schedule information or need to print fewer schedules.

GTFS Builder is free and includes workshop webinars, Excel tools, checklist, Getting Started Guide and on-line topic-specific training videos to create and update these data files, as well as securely host the validated GTFS data file. GTFS Builder includes training for all required and optional data.
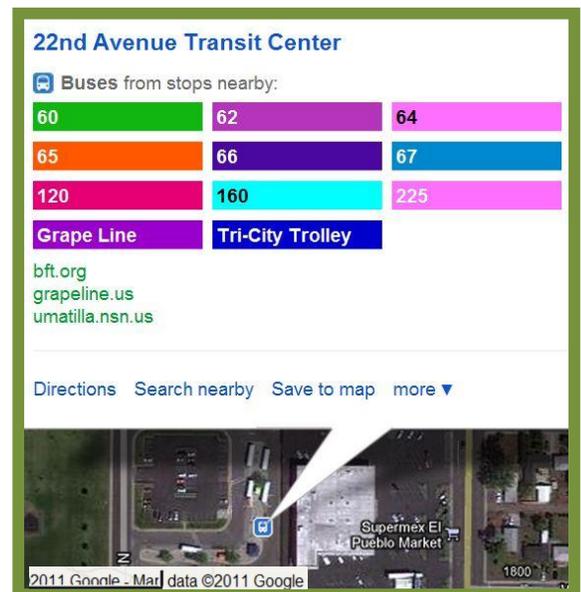
National RTAP has prepared a summary video, in the toolset, of what your agency will need including staff resources, data and potential request for your agency's GTFS files, once complete. (For the location of the summary video, see Step 3 in the last section of this brief.)

Released: 2011

What data is needed for GFTS? How is it collected?

GTFS uses precise bus stop locations as well as scheduled timepoints to display routes and trip plans. GTFS Builder offers on-line tools to gather bus stop information. Once the data is collected in the GTFS Builder Excel files, macros (scripted functions for repeated steps) are used to test and output the data files.

The display of routes on the road (shapes) is helpful to travelers but not required. GTFS Builder includes simple tools for enhancing your route displays on the road using Google Earth to create and edit the lines. Optional data also includes displaying fares.
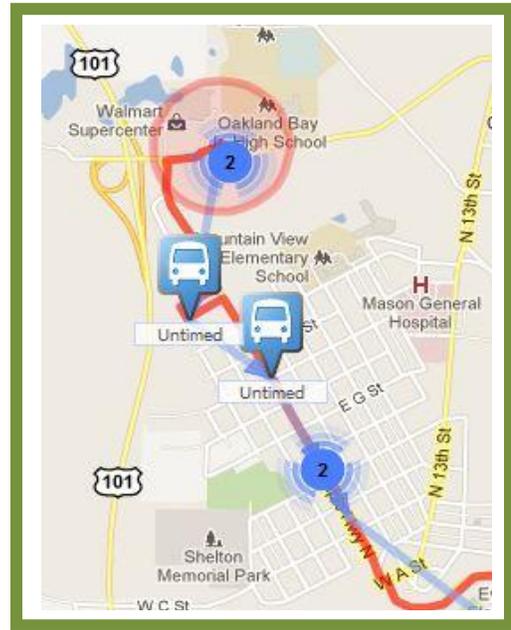
What is the largest transit system using GTFS Builder?

At this writing, a transit agency with 48 routes, nearly 1,200 bus stops and over 140 variations of shapes uses GTFS Builder tools. While we have not tested any larger system, GTFS Builder may be best for rural and small transit systems.

Who tests for data accuracy?

Agencies fully test the data with Google's validation tools. The testing tools include map displays by route, to confirm which stops are in or out of each trip. Within the Excel spreadsheets the data is also tested for duplicate data or data that is "out of range." Feed Validator is a tool that confirms that the most recent specifications are met. Ultimately, once your agency requests a pre-launch, the data engineers at Google determine that the data is consistent with your website before the data is released. If your agency needs a website, consider National RTAP's Website Builder, a separate web app.

How soon will my agency's data display at Google Maps?

GTFS Builder suggests that one entire route be completed and fully validated before requesting that Google activate a transit partner account to test trip planning using your agency's GTFS data.

Depending on the quality and availability of the data elements, you might prepare, for example, three routes per week and fully test trip planning over four to eight weeks and make data modifications to improve the trip-planning results.

Google may need up to two months to further test and approve your agency's GTFS data for launch. Without any guarantees, once a fully validated GTFS file is complete it may be three to six months before the data is live for travelers. Google asks that no "launch date" is proposed to the media until the GTFS data is released and fully launched.

West Richland Transit Center
🚌 120 Bus towards 22nd Avenue Transit Center
3:46pm - 4:30pm (44 mins, 35 stops)

Three Rivers Transit Center
🚌 Tri-City Trolley Bus towards Hermiston
4:50pm - 5:43pm (53 mins, 4 stops)

Hermiston Convention Center
🚌 Hermiston Hopper Bus towards Pendleton
5:58pm - 6:36pm (38 mins, 3 stops)

WalMart (Pendleton)
🚌 Mission Metro Bus towards Arrowhead Plaza
7:39pm - 8:07pm (28 mins, 5 stops)

Senior Center (Mission)

Senior Center (Mission)

Travel time: about **4 hours 21 mins**
Cost: **$1.25** (vs. $49.34 driving)

1. Activate an account at National RTAP in the Cloud. Click Cloud Sign Up in the upper right corner of www.nationalrtap.org to get started.

2. Add the GTFS Builder.

3. Watch the video: Should my agency consider GTFS Builder? Find the video in the Support Center under GTFS Builder. Go to the How-to Videos section, Overview Videos and Webinars, and click the first item in the list.

4. Download the Checklist & Getting Started Guide. Go to the GTFS Builder section of the Support Center, How-to Videos section, First Things First. Click Download: GTFS Builder Checklist. The Getting Started Guide, Checklist and GTFS Builder Excel file are all available in that location.

5. Watch the Basic and Advanced workshop webinars and some or all of the brief training videos. Webinars can be found in the Support Center under GTFS Builder. Go to the How-to Videos section, Overview Videos and Webinars, and click the arrow at the top of the list. The Basic and Advanced workshop webinars are Overview 4 and Overview 5, respectively. The remaining items in the How-to Videos section are the training videos that correspond to each GTFS Builder step.

6. Start filling-in the GTFS Builder spreadsheets and build one entire validated route.

7. Follow the training tutorials which explain all the necessary steps.