

The National Transit Map

Derald Dudley
United States Department of Transportation
Bureau of Transportation Statistics
Office of Spatial Analysis and Visualization

We are the Bureau of Transportation Statistics

Principal Federal Statistical Agency that provides objective, comprehensive, and relevant information on:

- extent and use of the Nation's transportation system
- how well the system performs
- effects of the system on society and the environment.

The Need

- Premise: Transit benefits the United States.
- Provides critical ladders of opportunity for millions of Americans
 - Make transportation available to people that don't have cars.
 - Provides access to Jobs, Healthcare, Education, etc...
 - Better for the environment, Saves fuel and money, and reduces congestion
 - Provides economic opportunities and drives community growth
- We should study transit and demonstrate its benefits at national and regional levels.

The Problem

- Most transit agencies publish GTFS Feeds
- We'll collect, compile, & publish the data
- Problem
 - Agencies set a variety of restrictive terms on the use of the data.
 - The data must be requested on a case-by-case basis.
 - Each dataset would have different terms of use

The Solution

- Create The <u>National Transit Map</u> (NTM)
 - a national repository of voluntarily provided, public domain transit data.
- The public, researchers and government agencies can access the repository and use the data for research

Registration

- Transit Agencies use <u>FACES</u> to opt-in and
- Grant a Creative Commons Attribution 3.0 United States (CC-BY-3.0) license to the USDOT
- Register the URLs from which their GTFS feeds can be downloaded
- The registration is forwarded to BTS

Vetting the Feeds

- The URLs submitted are checked to ensure they are valid end points
- If they are not we search for the correct end point
- Sometimes valid end points cant be found

Scrapping

The URLs are read from the Registry

Each URL points to a zipped GTFS file

Each .zip file is saved to a versioned directory

Building the database

Each Zip file is opened

 Each GTFS file is opened and each record is inserted into the NTM database

 Each record is assigned an NTM ID so they maintain their unique identity

Products and Services

- Spatial
 - Participating agencies
 - Agencies by Volume
 - Stops
 - ¼ mile stop buffers
 - ½ mile stop buffers
 - ¾ mile stop buffers

- Tabular
 - Agencies
 - Feeds
 - Routes
 - Trips
 - Stop Times
 - Stops
 - Calendar
 - Others...

Anticipated Products

- User Guides
- System Documentation
- Agency provided routes
- Inferred Routes
 - (Eventually conflated to road networks)
- National GTFS Files
- APIs and Applications to query the data

Resources

National Transit Map Website

OSAV Data Catalog

- Fmail:
 - NationalTransitMap@dot.gov



Thank you!

Questions and Comments

Derald Dudley derald.dudley@dot.gov