

#### THE SECRETARY OF TRANSPORTATION WASHINGTON, DC 20590

March 8, 2016

Dear Colleague:

I am writing to invite you to participate in a new initiative at the U.S. Department of Transportation (DOT) that will increase the availability of data necessary to ensure our transportation system provides ladders of opportunity for millions of people who need and deserve access to jobs and training, health care, and other essential goods and services.

In recent years, private firms and transit agencies have created free, publicly available, transit schedule applications that run on smart phones and computers. For example, Google Transit, the voluntary collaboration between many of the Nation's largest transit agencies, is a cross-agency application that, by allowing users to plan trips across modes, has become far more useful than the sum of its parts. In addition, there are many open source software applications that apply transit data in a variety of novel ways. These applications add particular value for customers planning complex, non-recurring trips, and for users of low volume routes. These transit scheduling applications are largely underpinned by the General Transit Feed Specification (GTFS), and its real time (RT) counterpart, GTFS-RT.

However, we have yet to recognize the full potential of this great innovation:

- Transit vehicles have significantly greater capacity than passenger cars, but are often considered just vehicles because we are unable to show where and when the transit vehicles are scheduled to operate. The realistic treatment of transit for planning, performance measures, and resiliency requires real data on transit system operations.
- One of the most important social values of transit is that it makes transportation available to people who do not have access to private automobiles, and provides transportation options for those who do. Yet, we cannot describe this value at a national level and in many regions because we do not have a national map of fixed transit routes.

About half of the transit agencies in the United States, including almost all of the largest agencies, already collect this information in a common format, GTFS, and make it available either publicly through their Web site or directly to private companies. Each transit agency sets a variety of restrictive terms on the use of their data. This information can be accessed for analytical purposes by the public, planning agencies, researchers, or Government agencies, but it must be requested on a case-by-case basis.

The solution is straightforward: a national repository of voluntarily provided, public domain GTFS feed data that is compiled into a common format with data from fixed route systems.

This will form the basis for a National Transit Map, which is a critical missing element in our National Spatial Data Infrastructure. With this information in hand, DOT, planning agencies, and researchers can do a far better job of demonstrating the importance and role of transit in American society, and identify and address gaps in access to public transportation. More information about the National Transit Map in enclosed.

To make the National Transit Map a reality, I need your help. It would be a service to your community and the Nation if your agency would permit DOT to collect your GTFS data from your Web site on a periodic basis so that we can incorporate your agency's routing and schedule into the National Transit Map.

We need the link to your data just once so that DOT can take periodic snapshots. We are not trying to compete with the many public and private providers of transit schedule and routing information. We do not need to know about every tiny change in your routes. We are trying to construct a national dataset for research, planning, and analytical purposes for which a scheduled, periodic update is sufficient.

We will be placing the compiled information in the public domain as open data. If there are existing contractual relationships or policy considerations that may impede your agency's participation, please get in touch with us by emailing NationalTransitMap@dot.gov. To ensure that providing access to GTFS data does not require additional staff resources from transit agencies, DOT will assume responsibility for supporting users of the National Transit Map.

The development of the National Transit Map will be a collaborative and iterative process that involves stakeholders from the transit industry, civic innovators, and other partners. Working together, we will build a resource that will provide our communities across the Nation with the accurate, reliable data we need to measure the connectivity of the transportation network. Let's get started!

Sincerely,

Anthony R. Foxx

Enclosure

Participating in the National Transit Map

## Introduction

The U.S. Department of Transportation (DOT) envisions the National Transit Map as an asset within the National Transportation Atlas Databases (NTAD), which is a set of nationwide geographic databases of transportation facilities, networks, and associated infrastructure.

The intent of the National Transit Map is to support research, analysis, and planning. The National Transit Map is not intended to replace existing customer services available through transit agency Web sites and commercial trip planning service providers. As with other products in NTAD, the National Transit Map is not intended to be used for navigation or real-time trip planning purposes. The National Transit Map will display stops, routes, and schedules, typically referred to as "static" transit data, for all participating transit agencies.

To build this important asset, DOT intends to leverage data that transit agencies already make available to the public. The DOT's goal is to develop and publish the National Transit Map periodically - no more than monthly - concurrent with other elements of NTAD.

# **Guidelines for Agencies Already Providing Open Data**

Agencies with open data on stops, routes, and schedules shared on their agency Web site should first review any Terms of Use or other restrictions already placed on their data. Transit agencies are encouraged to make their data available license-free, consistent with Federal practices outlined at https://project-open-data.cio.gov/open-licenses. For a model terms of use, refer to the practices outlined at

https://github.com/GSA/APIResources/blob/master/developer\_tos/vanilla\_tos.md

In general, DOT may not be able to use an agency's open data if an agency has asserted copyright. Copyright assertions may only require attribution to the agency, or they may establish other intellectual property restrictions prohibiting the use of agency data in a National Transit Map. Examples of such restrictions include share-alike or no-derivative provisions, which limit reuse and redistribution.

After careful consideration, DOT has determined that the only way to fully develop the National Transit Map is through the use of a common license and terms of use for stops, routes, and schedules data. The DOT requests that all transit agencies having reuse restrictions on their data to grant to DOT a variation of a Creative Commons standard copyright license for the sole purpose of building out the National Transit Map. The DOT will not individually negotiate or alter the license. It is in the best interest of all parties and the general public to ensure data availability under the same standard form agreement and terms and conditions.

To take this step, DOT will use the Creative Commons license, commonly referred to as the "CC-BY," version 3.0, U.S. license. This license would grant the DOT the right to copy, redistribute, publicly display or perform, remix, transform and build upon your data (i.e. incorporate in a collective work). The DOT would be required to provide an attribution to your organization for its contribution to NTAD's combined transit data layer, as well as provide a link to the license, and indicate if any changes were made to your incorporated information.

To participate in the National Transit Map, transit agencies must register their data with the Bureau of Transportation Statistics and agree to the standard license. Transit agencies may designate any of their existing personnel with a username and password for Federal Transit Administration (FTA)'s National Transit Database to register their data for the National Transit Map. The designated user should go to https://faces.fta.dot.gov and visit the National Transit Map module to register their data and agree to the license.

**March 31, 2016** will be the first National Transit Map Collection Day. On that date, DOT will "crawl" all the data sets that agencies have registered and begin processing those for inclusion in the first release of the National Transit Map. The DOT will repeat this process periodically, no more than monthly.

### Instructions for Agencies with Closed Data

Agencies that have developed data on stops, routes, and schedules but are not sharing that data on their agency Web site are encouraged to consider sharing data openly. Agencies with closed data will not be able to participate in the National Transit Map. Agencies with closed data may still visit the National Transit Map submission site listed above and indicate that they decline to participate in allowing open use of GTFS for the National Transit Map.

Agencies that are not providing open data are encouraged to review Transit Cooperative Research Program (TCRP) Synthesis 115: *Open Data: Challenges and Opportunities for Transit Agencies*. In general, the synthesis found that benefits to transit agencies strongly support open transit data. The top five benefits cited were:

- Increased awareness of services
- Empowered customers
- Encouraging innovation outside the agency
- Improved perception of the agency
- New opportunities for private businesses

Notably, the synthesis also found that legal fears often thought to be barriers to opening transit data have not been realized.

### Instructions for Agencies with No Data Available

Agencies with no data may still visit the National Transit Map submission site listed above and indicate that they do not have data to offer.

Agency activities to develop data on stops, routes, and schedules may also be eligible expenses under the Metropolitan Planning program as well as the State Planning and Research program jointly administered by the Federal Highway Administration and the Federal Transit Administration. Agencies are encouraged to work with their Metropolitan Planning Organizations and States to confirm.