



Intelligent Transportation Systems (ITS) for Fairfax Connector

Project Update

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Fairfax County Department of Transportation
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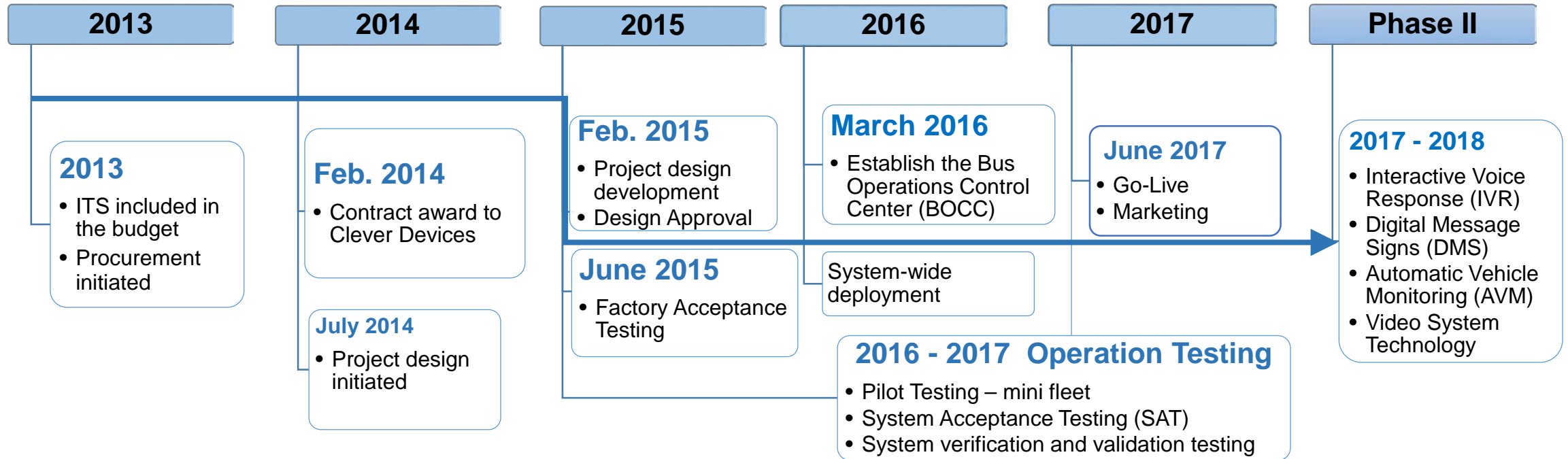


Overview

- Project Time Line
- Key Project Goals
- Status of Implementation
- Use of New Technology on Fairfax Connector Bus Fleet
- Fairfax Connector BusTracker
- Connector Bus Stop ID Project
- Next Steps



ITS Project Timeline





Key Project Goals

- Grow ridership
- Enhance customer experience
- Operational coordination & communication
- Improve data collection
- Enhance system safety and security
- Improve system reliability



Status of Implementation

Phase I Technology:

- Computer-Aided Dispatch and Automatic Vehicle Location (CAD/AVL)
- Automatic Passenger Counters (APC)
- Passenger Information ([BusTracker website](#))
- Reporting Systems
 - Data warehousing and reporting systems
 - Leveraging data and analytics to drive performance
- Bus Operations Control Center (BOCC)



Use of New Technology on Fairfax Connector Buses

Bus Operations Control Center

- 24/7 Dispatch Operations
- Active Service Management
- Incident Management
- Information Management
- Traveler Information





Fairfax Connector Bus Tracker

The screenshot shows the Fairfax Connector BusTracker website. At the top, there is a navigation bar with links for 'Main', 'Sign In', and 'Create Account'. Below this is the Fairfax Connector logo. The main heading reads 'Welcome to Fairfax Connector BusTracker' with the subtitle 'Your official source for real-time arrival information.' A link for 'Access mobile-friendly version of BusTracker' is provided. Two main sections are visible: 'Estimated Arrival Times' and 'Bus Location Map'. The 'Estimated Arrival Times' section includes a search form with fields for 'Stop', 'Date', and 'Time', and a table with columns for 'ROUTE / DESTINATION' and 'ESTIMATED ARRIVAL / VEHICLE #'. The 'Bus Location Map' section shows a map of the Fairfax County area with a 'Street View' icon and a 'Learn more' link. A footer section titled 'What is BusTracker?' explains that the service uses GPS technology to provide real-time information on bus arrival times and locations.

Main | Sign In | Create Account

FAIRFAX CONNECTOR

Welcome to Fairfax Connector BusTracker
Your official source for real-time arrival information.

[** Access mobile-friendly version of BusTracker**](#)

Estimated Arrival Times

11:52 AM 32°F

ROUTE / DESTINATION ESTIMATED ARRIVAL / VEHICLE #

Please select route/destination and stop.

[Learn more](#)

Bus Location Map

11:55 AM 32°F

You can also access a "Street View" from this map where you can set a pop-up alert to notify you when a vehicle reaches a given stop.

[Learn more](#)

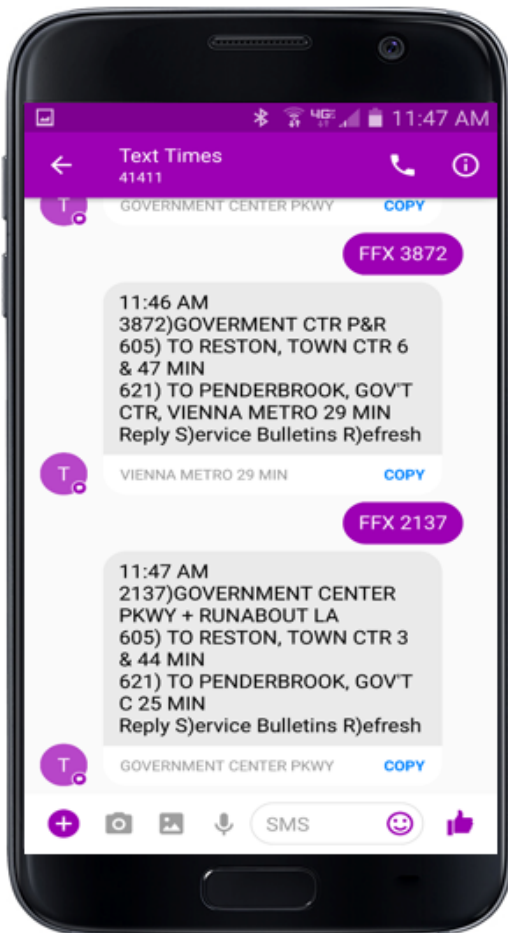
What is BusTracker?
Fairfax Connector BusTracker uses GPS technology to provide real-time information on the arrival times and locations of buses. It lets you know when your bus will arrive at your stop.

- Provides real-time estimated arrival times via smart phone, mobile phone, tablet or computer
- ADA compliance - [text-only version](#) (for text-readers and mobile devices)
- [Riders can sign up to receive alerts by text and/or email](#)



Track Buses by Text or E-mail


- Text bus stop ID # to 41411 to get ETA via text
- Subscribe to get alerts via text & e-mail






Connector Bus Stop ID Project


Current
Design

- 


STOP ID **4444** **703-339-7200**
703-339-1608 TTY

fairfaxconnector.com
-  **Text: FFX 4444 to 41411**
for estimated arrival times.

New
Design

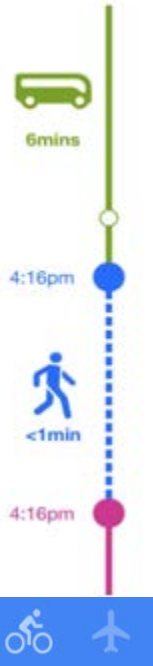
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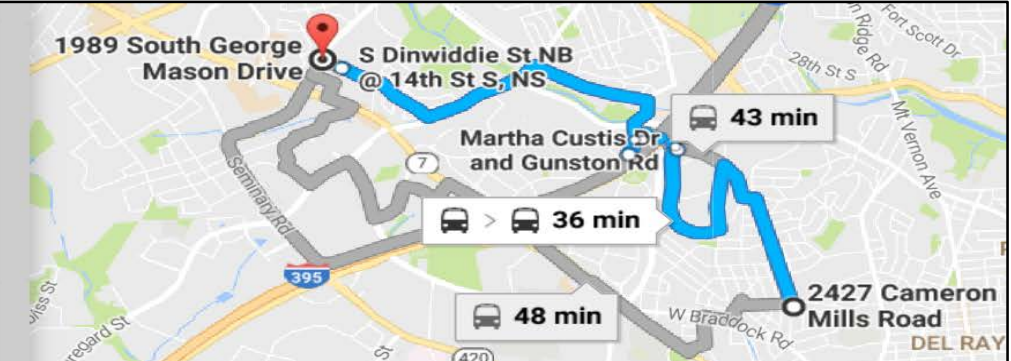

FAIRFAX CONNECTOR
BusTracker STOP ID **4444**

703-339-7200
703-339-1608 TTY
fairfaxconnector.com
-  **Text: FFX 4444 to 41411**
for estimated arrival times.



Open Data Sourcing

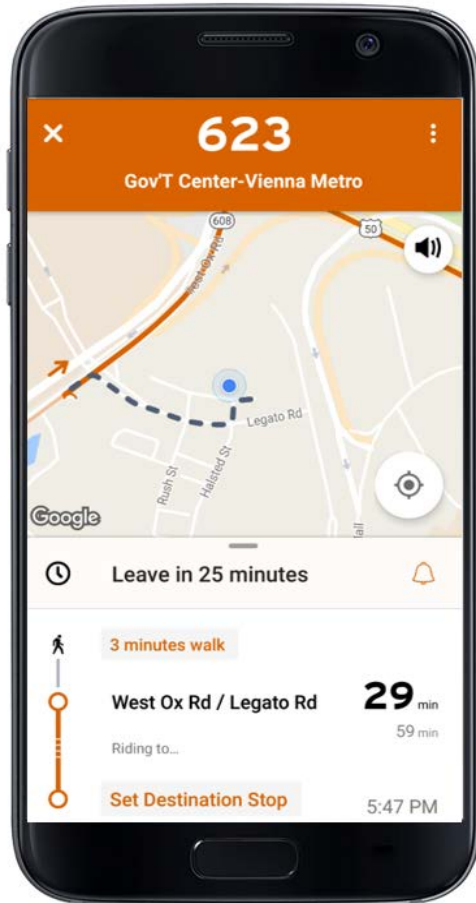


 7:31 AM—8:07 AM 36 min AT4 > > > 75 7:31 AM from Cameron Mills Rd and Virginia Ave > 10 min DETAILS	 <p>Map showing transit routes between 1989 South George Mason Drive and 2427 Cameron Mills Road. The routes are color-coded: blue for the fastest route (36 min), grey for a 43 min route, and another grey for a 48 min route. The map includes labels for streets like S Dinwiddie St, Martha Custis Dr, and Gunston Rd.</p>
 7:31 AM—8:20 AM 49 min	

- Connector trips will now appear in the Google Transit trip planner
- Riders will be able to easily plan inter-jurisdictional trip transfers to other local transit systems



3rd – Party Transit App Developers



- Provide real-time data to providers of transit information via an open API (Application Programming Interface)
- Fairfax Connector routes and trips will show up on apps that are popular in the region
- Integrated trip planning between public and private transportation service providers



Potential Partners for Collaboration

Transit app developers:

- DC Metro and Bus
- Transit App
- Citymapper
- BusTrack DC



Planning, research and collaboration:

- MobilityLab
- MetroLab Network
- RITIS Platform - Regional Integrated Transportation Information System (RITIS)





Next Steps

- Open Data Sourcing
- Phase II Technology



ITS Phase II – Implementation

Phase II Technology:

- Interactive Voice Response System (IVR)
- Digital Message Signs (DMS)
- Vehicle Component Monitoring
- Video System Technology
- Provide predicted bus arrivals via an integrated voice system
- Display vehicle arrival or departure information at bus stations or centers
- Provide alerts of maintenance issues by vehicle location, date, and time
- Real-time on-board video monitoring



Questions?

