

Centreville-Chantilly-Vienna-Tysons (CCVT) Route Optimization



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> Public Meeting November 17, 2020





Transit Services Planning

- ☐ Goal: enhance bus service in the area
- □ Process: gather public input, evaluate transit performance, and determine future needs
- □ Result: develop proposed service changes with route efficiencies, new route designs, and improved access and mobility





Planning Process

Understanding the **Issues and Needs** (Spring 2020)



2020)





Refinement

and Selection of

Preferred

Service Plan

(Winter

2020-2021)



Provide Recommendation to Board of Supervisors (as part of Transit Development Plan)





Public

Outreach

(Fall 2020)

Alternatives **Evaluation** (Fall 2020)

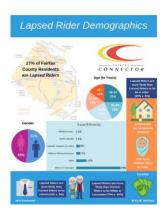






Outreach





Market Survey

- Fall 2018: 2,600 responses
- Gathered data on why residents do not ride buses
- Used to determine what measures could be used to attract non-riders and reconnect with lapsed riders

Onboard Survey

- Spring Summer 2019: 2,550 responses
- Collected information on passengers' origins, destinations, preferences, and demographic characteristics
- Used for future planning purposes to increase ridership and improve the customer experience

Online Survey and Public Meetings

- Conducting two rounds of online surveys
- Conducting two rounds of public meetings and outreach





What We Heard: Service Improvements

Connectivity

Adjust routes:

- Key community locations
- Realign routes with travel patterns

Faster Travel

Adjust routes:

- Realign routes to be more direct
- Reduce unneeded travel patterns

Greater Span of Service

Adjust hours of service:

 Increase service hours on key routes to improve access and mobility

Increased Frequency

Adjust service:

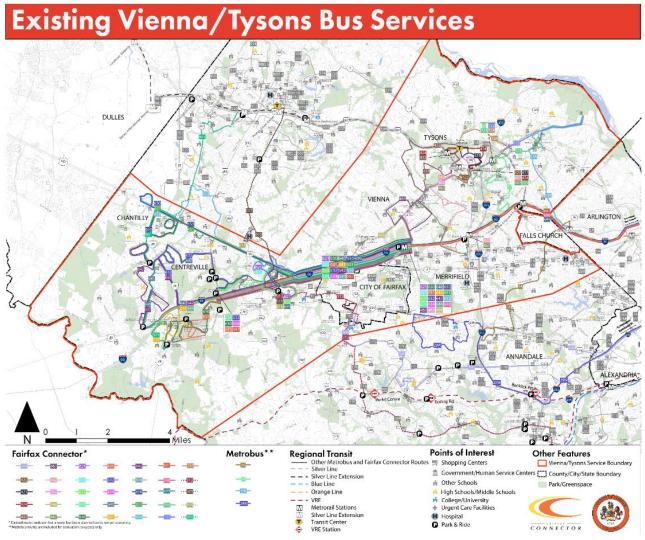
Add
 additional
 buses to
 key routes
 to
 increase
 frequency





CCVT Area Transit Services Overview

- □ Number of routes: 33
- ☐ 31 Connector routes
- Metro routes3T, 15K

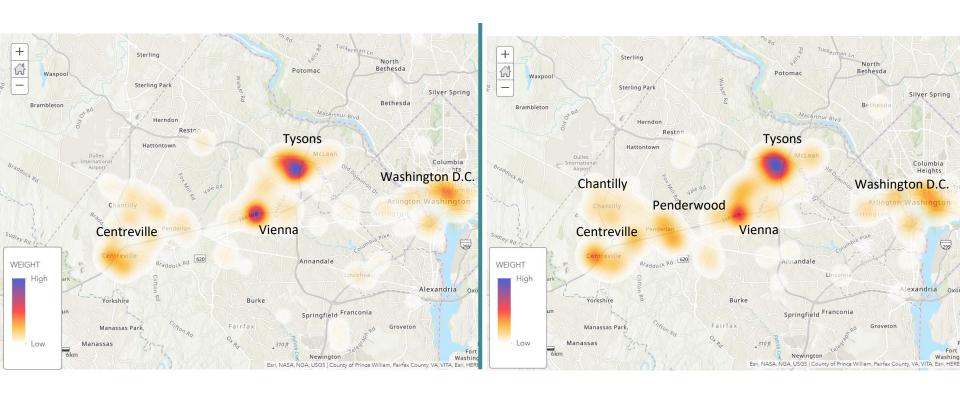




O-D Travel Patterns

Origins

Destinations







Service Alternatives



Three service alternatives are being studied:

Alternative 1 – Modifications to Transit Development Plan recommendations

Alternative 2 – Transformation

Alternative 3 - Hybrid



All alternatives would be developed budget neutral, with no increase (+/-2%) in total revenue hours.



Plan Evaluation (3-Bucket Analysis)





Alternatives Evaluation



Transit Propensity

- Ability to serve:
 - Low-income households
 - Houses with one or zero vehicles
 - Minority households
 - Seniors
 - Disabled

Average Travel Time

- Travel time to major destinations
- Used ten origin and destination pairs to create an average travel time per alternative

Key Locations

- Employment Centers
- Schools / Colleges
- Hospitals
- Park-and Ride Lots
- MetrorailStations
- Recreation Centers

Span of Service

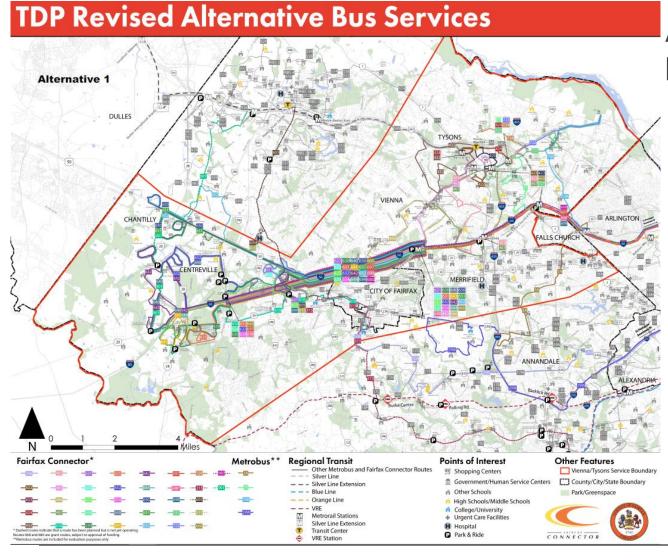
- Assess hours of service by route in each alternative
- Higher score for greater hours of operations
- Used as a weight

Frequency Factor

- Assess service frequency by route in each alternative
- Higher score for greater frequency
- Used as a weight







Alternative 1: Modified TDP

Key service characteristics:

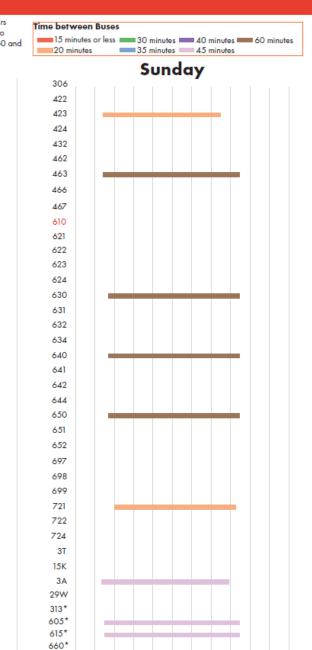
- Most similar to current system
- Builds on existing TransitDevelopment Plan
- Vienna is heavily used to connect to Tysons and Washington, D.C.





TDP Revised: Level of Service

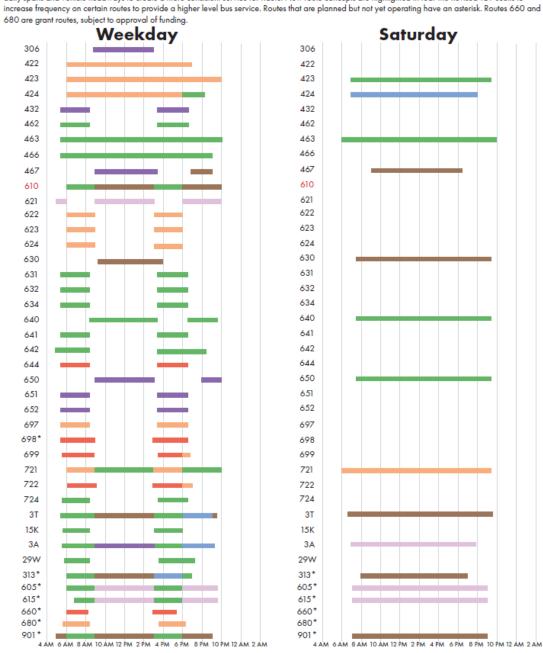
The TDP Revised service alternative seeks a service concept that more efficiently serves major corridors in Tysons-Vienna. This service alternative alters daily spans and vehicle headways to create a more consistent service for riders. New route concepts are highlighted in red. The Revised TDP seeks to increase frequency on certain routes to provide a higher level bus service. Routes that are planned but not yet operating have an asterisk. Routes 660 and



4 AM 6 AM 8 AM 10 AM 12 PM 2 PM 4 PM 6 PM 8 PM 10 PM 12 AM 2 AM

680*

9011



Transformation Alternative Bus Services Alternative 2 DULLES ARLINGTON CHANTILLY ANNANDALE. Metrobus * * Regional Transit Points of Interest Other Features Other Metrobus and Fairfax Connector Routes M Shopping Centers ☐ Vienna/Tysons Service Boundary Silver Line County/City/State Boundary Government/Human Service Centers - - - Silver Line Extension Blue Line A Other Schools Park/Greenspace Orange Line High Schools/Middle Schools in College/University Metrorail Stations + Urgent Care Facilities Silver Line Extension H Hospital Transit Center Park & Ride

Alternative 2: Transformation

- ☐ Key service characteristics:
 - New service
 - All-day local service
 - Frequent service to Metrorail Stations via feeder routes during peak periods
 - Improves frequencies and travel time
- New / improved connections:
 - Vienna to Reston
 - Centreville to Tysons
 - Chantilly to Franconia-Springfield Metrorail
 - Vienna/Monument Garage as transfer point





Transformation: Level of Service

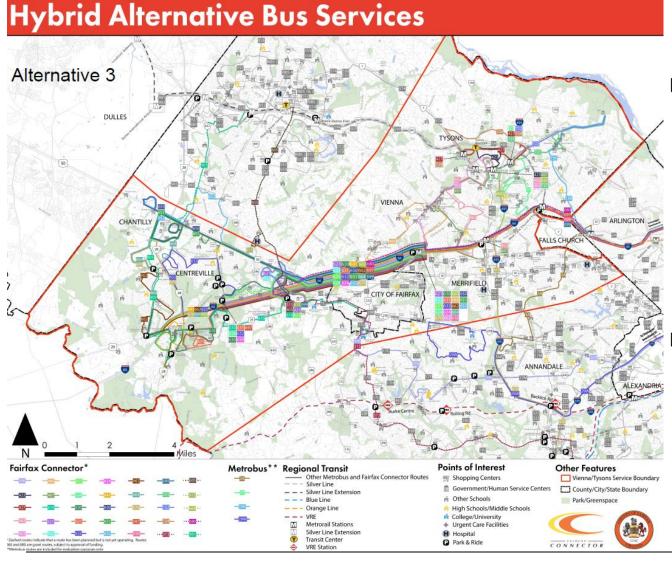
The Transformation service alternative seeks to redefine service in Tysons Vienna by consolidating routes, increasing frequency, and providing a more efficient service to riders. Service changes include interlining existing routes (630/631, 622/651) during off-peak hours, creating new routing concepts (highlighted in red), and revising existing routes (461). Routes that are planned but not yet operating have an asterisk. Routes 660 and 680 are grant routes, subject to approval of funding.







County of Fairfax, Virginia



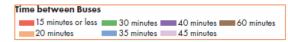
Alternative 3: Hybrid

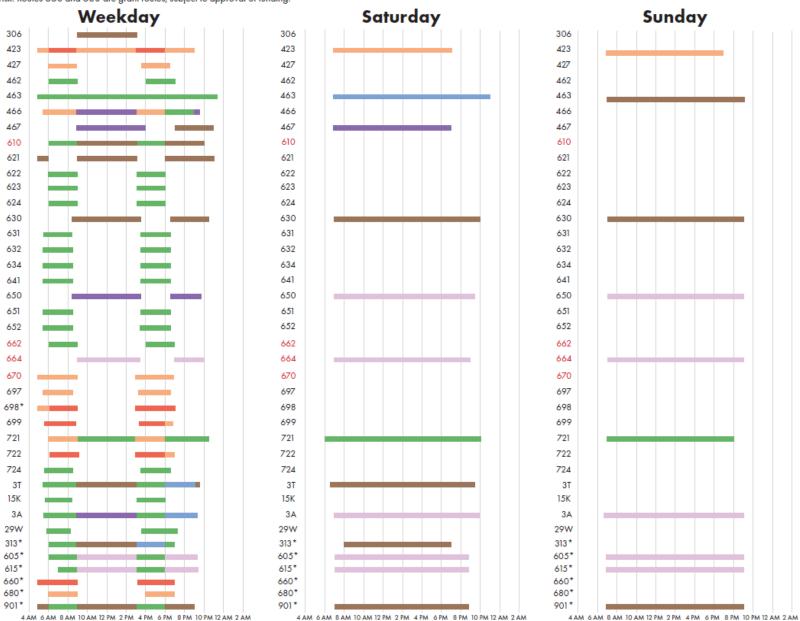
- □ Key service characteristics:
 - Combines elements
 of existing service
 with new regional
 connections
 - Builds on existing
 Transit Development
 Plan
- New and Improved connections:
 - Centreville to Tysons
 - Chantilly to
 Franconia Springfield Metrorail



Hybrid: Level of Service

Alternative 3 seeks a service concept that more efficiently serves major corridors in Tysons-Vienna. This service alternative alters some daily spans and vehicle headways to improve existing service while introducing new route concepts to better serve different corridors, especially in the Centreville area. New route concepts are highlighted in red, routes that are planned but not yet operating have an asterisk. Routes 660 and 680 are grant routes, subject to approval of funding.





Next Steps

1

Board input

Conduct public outreach

2

Develop preferred plan Conduct public outreach



Board approval

Service implementation





Providing Feedback – We Want to Hear From You!

Provide your comments by Wednesday, Dec 9, 2020.

- 1. Take an online survey at https://www.fairfaxcounty.gov/connector/ccvt-bus-service-review
- 2. E-mail us at fairfaxcounty.gov
- 3. Call 703-339-7200, TTY 703-339-1608
- 4. Mail your comments to:

Fairfax County Department of Transportation C/O Transit Planning – Public Comment 4050 Legato Road, Suite 400 Fairfax, VA 22033







Questions and Discussion



