



# Fairfax County Countywide Transit Network Study

Fairfax County Board of Supervisors  
Transportation Committee

September 17, 2013



This presentation summarizes materials presented at the July 10, 2013 public workshop held at the Fairfax County Government Center.

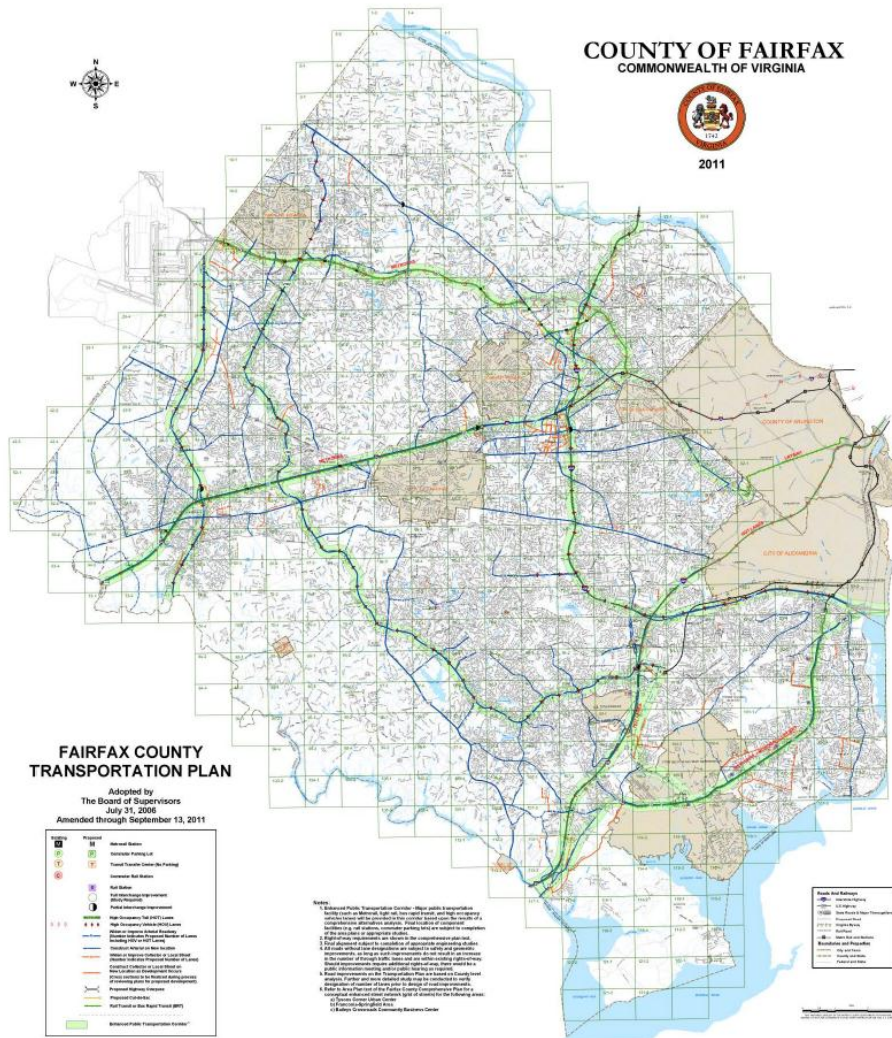
It also incorporates subsequent changes made in response to stakeholder comment to clarify the relationship between the Proposed High Quality Transit Network Concept and corridors under current study.





Establish most effective way to serve the County's needs to accommodate planned growth over the long term by improving public transit usage.

Update Enhanced Public Transportation Corridors (EPTC) with High Quality Transit Network (HQTN) and further define modes, right-of-way, and station locations.





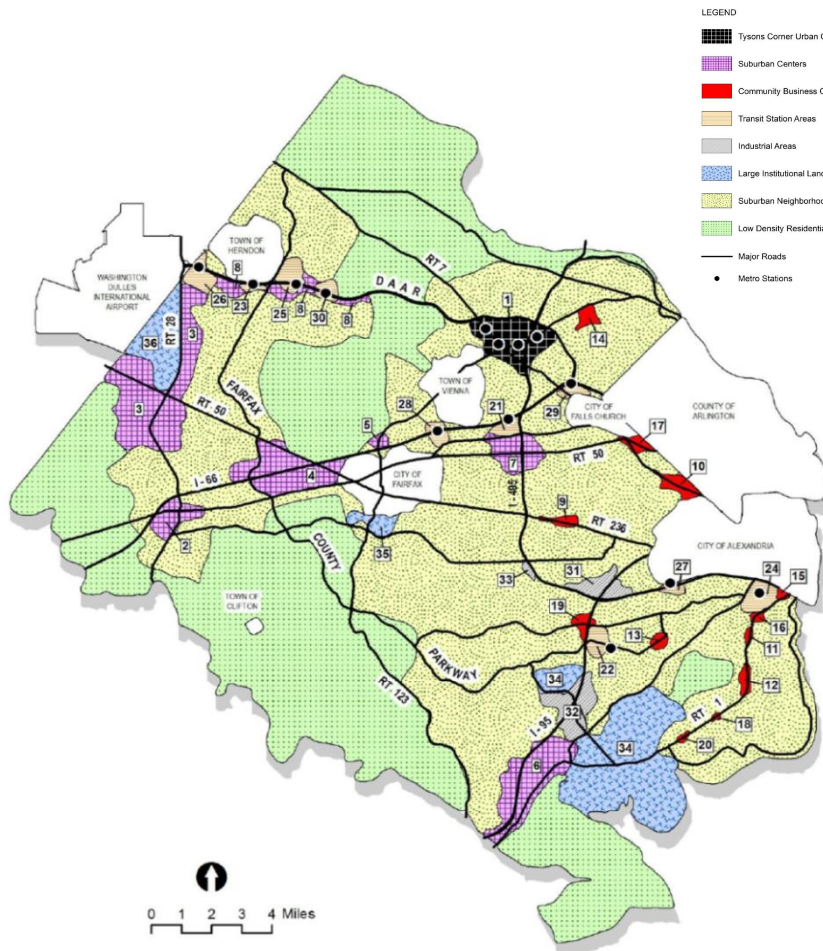


**We are at the third of our four stages of public involvement and review:**

- **Goals/Objectives (July 2012)**
- **Functions (November 2012)**
- **Proposed High Quality Transit Network Concept (July 2013)**
- **Final Concept (Spring/Summer 2014)**

**Our next steps are to:**

- **Continue stakeholder engagement**
- **Consider refinements**
- **Develop additional details on alignments, stations, and costs**
- **Finalize recommendations**



#### LEGEND

- Tysons Corner Urban Center
- Suburban Centers
- Community Business Centers
- Transit Station Areas
- Industrial Areas
- Large Institutional Land Areas
- Suburban Neighborhoods
- Low Density Residential Areas
- Major Roads
- Metro Stations

#### LOCATIONS OF MIXED-USE CENTERS

##### Urban Center

1. Tysons Corner Urban Center

##### Suburban Centers

2. Centreville
3. Dulles (Route 28 Corridor)
4. Fairfax Center
5. Flint Hill
6. Lorton-South Route 1
7. Merrifield
8. Reston-Herndon

##### Community Business Centers

9. Annandale
10. Baileys Crossroads
11. Beacon/Groveton
12. Hybla Valley/Gum Springs
13. Kingstowne
14. McLean
15. North Gateway
16. Penn Daw
17. Seven Corners
18. South County Center
19. Springfield
20. Woodlawn

##### Transit Station Areas

21. Dunn Loring
22. Franconia/Springfield
23. Herndon-Monroe
24. Huntington
25. Reston Parkway
26. Route 28/CIT
27. Van Dorn
28. Vienna
29. West Falls Church
30. Wiehle Avenue

#### LOCATIONS OF LARGE INSTITUTIONAL AND INDUSTRIAL AREAS

##### Industrial Areas

31. Beltway South
32. I-95 Corridor
33. Ravensworth

##### Large Institutional Land Areas

34. Fort Belvoir (Main Post and North Area)
35. George Mason University
36. Washington Dulles International Airport

The proposed 2050 High Quality Transit Network supports the County's future development concept by focusing service on activity centers



# High Quality Transit

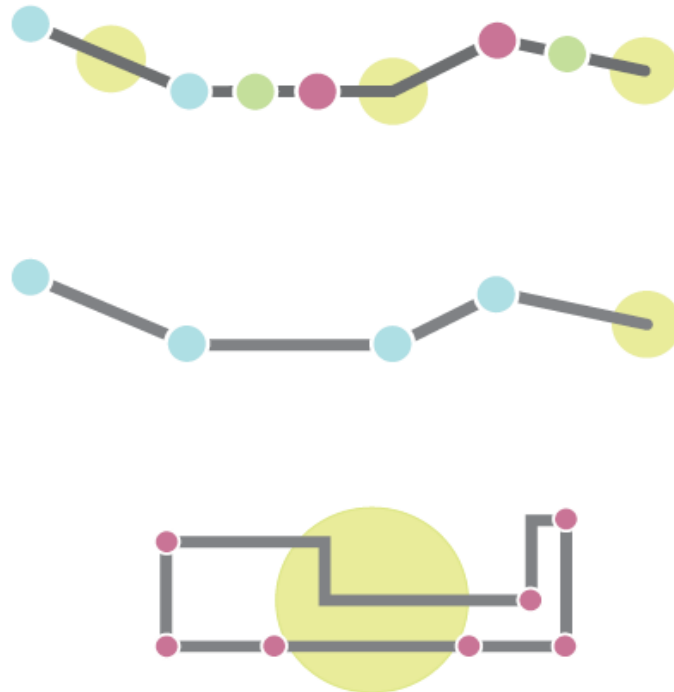
Defining elements of a High Quality Transit Network include providing improved travel speeds and reliable travel times, typically on exclusive right-of-way.



Commuter rail, Metrorail, LRT, and BRT are all examples of High Quality Transit modes.



The type of premium transit service appropriate for each corridor will reflect the traveler needs and land use context in that corridor.



Source: Center for Transit Oriented Development

**Destination corridors**, like the Crystal City Potomac Yards transitway, connect neighborhoods to multiple activity centers, functioning primarily to provide access.

**Commuter corridors**, like Virginia Railway Express, primarily serve one major activity center and tend to focus on journey-to-work trips and function primarily to provide mobility.

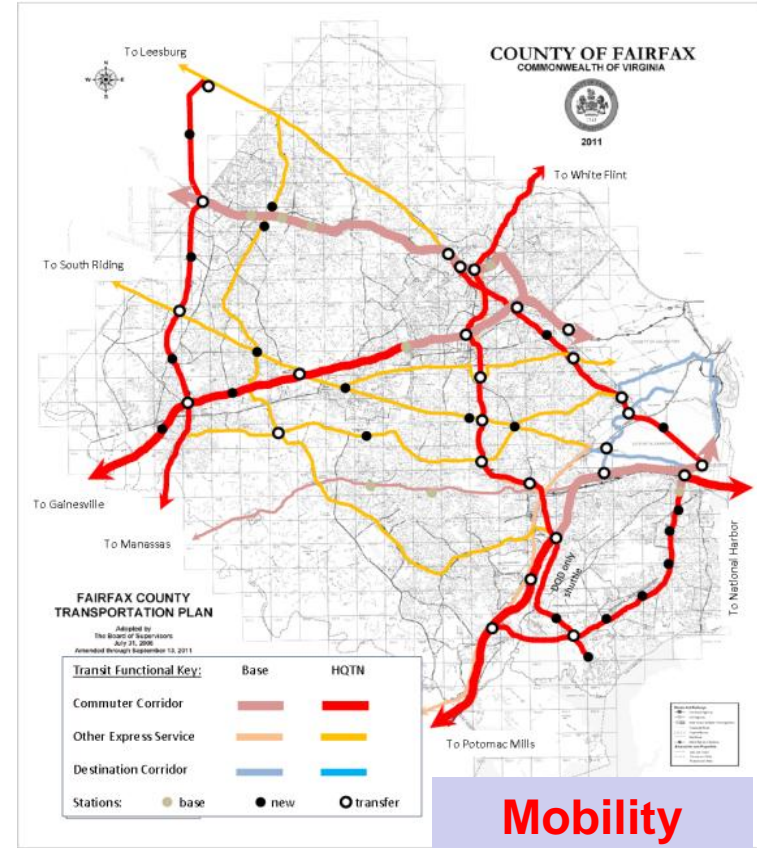
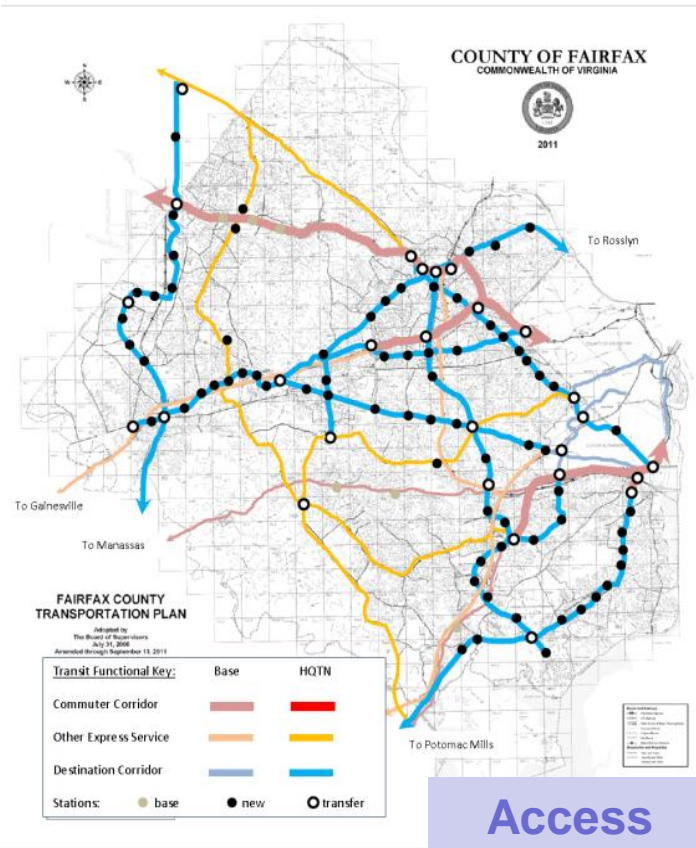
**District circulators**, like the planned Tysons Circulator, enhance mobility within an activity center or group of adjacent centers.





## County of Fairfax, Virginia

# Functional Concepts



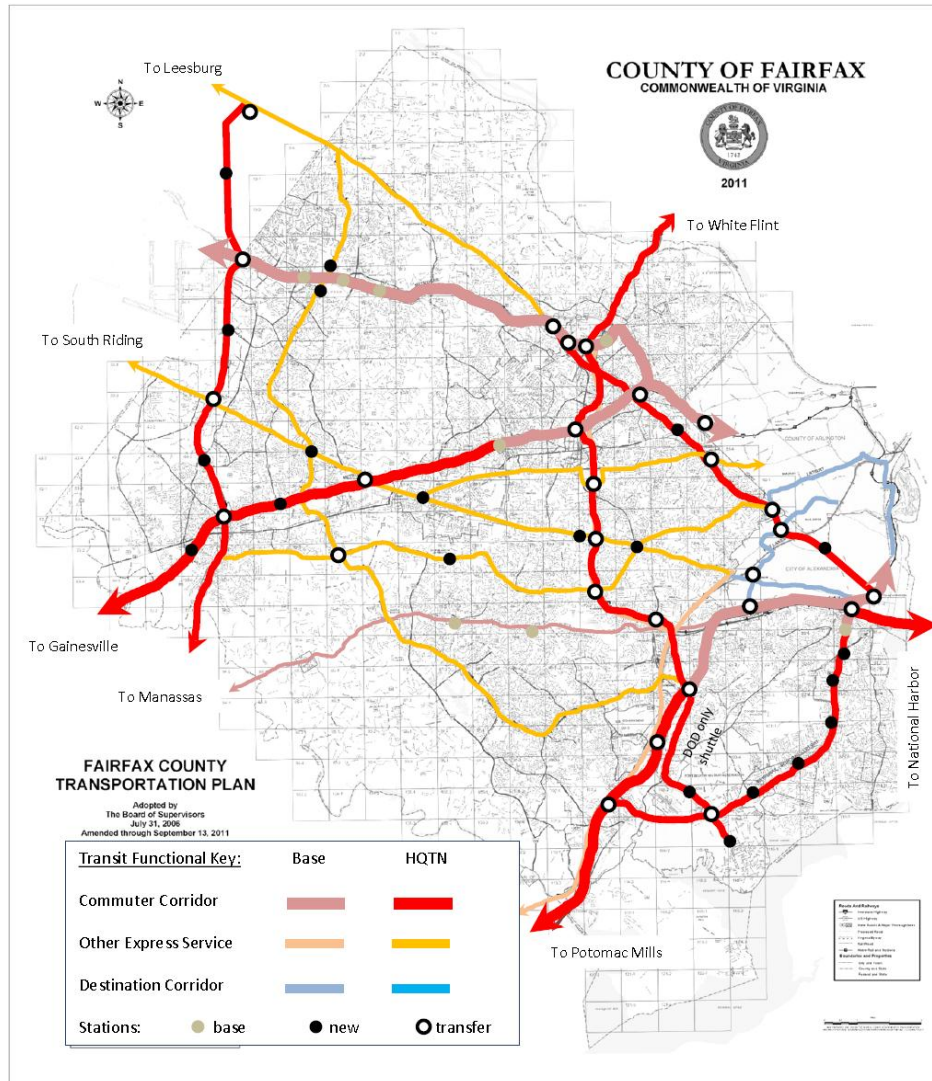
The November 2012 public meeting presented different functional concepts for a High Quality Transit Network. The **access** focus attracted more total transit riders whereas the **mobility** focus provided better access to regional jobs. Both had a similar benefit in reducing vehicle travel.





## Mobility focus

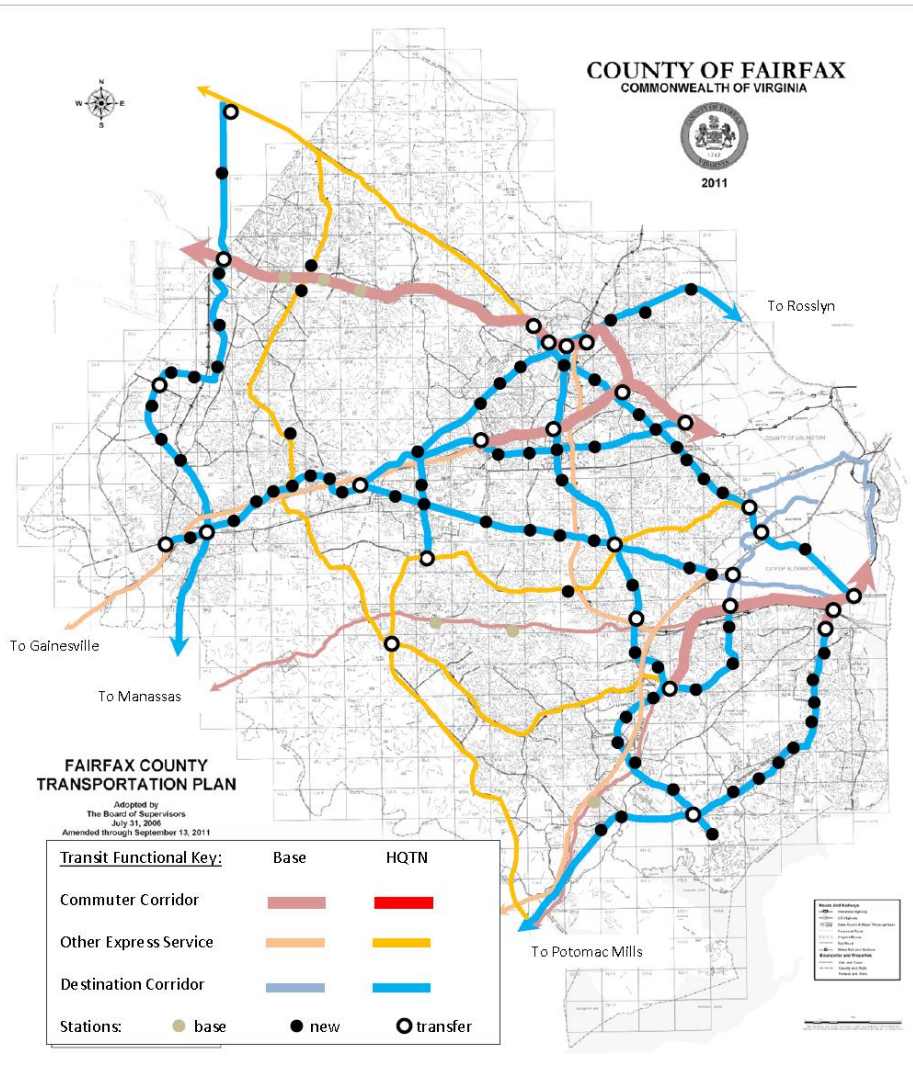
Connect activity centers within Fairfax County and adjacent jurisdictions with **high speed commuter corridors** that best serve **longer-distance** trips.





## Accessibility focus

Connect activity centers within Fairfax County and adjacent jurisdictions with **high access** transitways (light rail or bus rapid transit) **destination corridors** that best serve **shorter-distance** trips

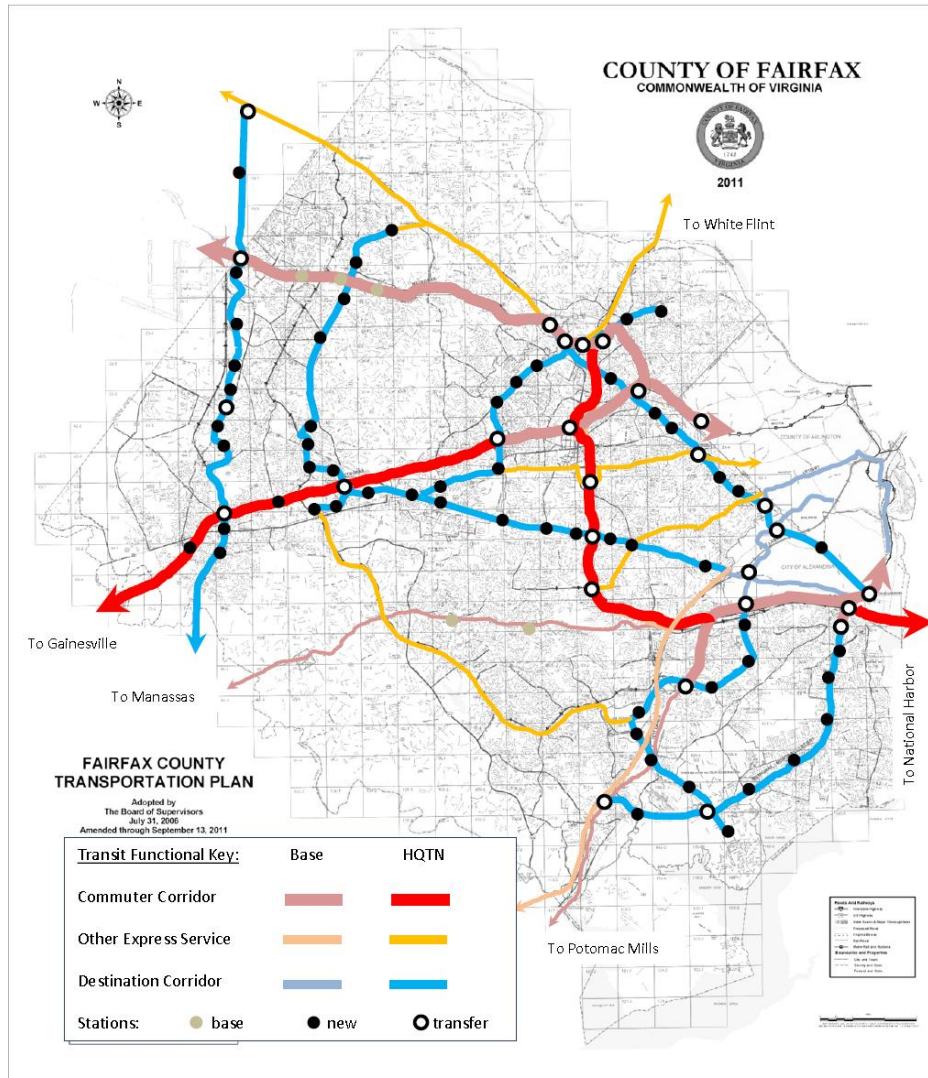




## Blended approach

### *Orange Line Extension*

Blend **mobility** and **accessibility** approaches with Orange Line Metrorail extension in I-66 corridor as envisioned in Comprehensive Plan

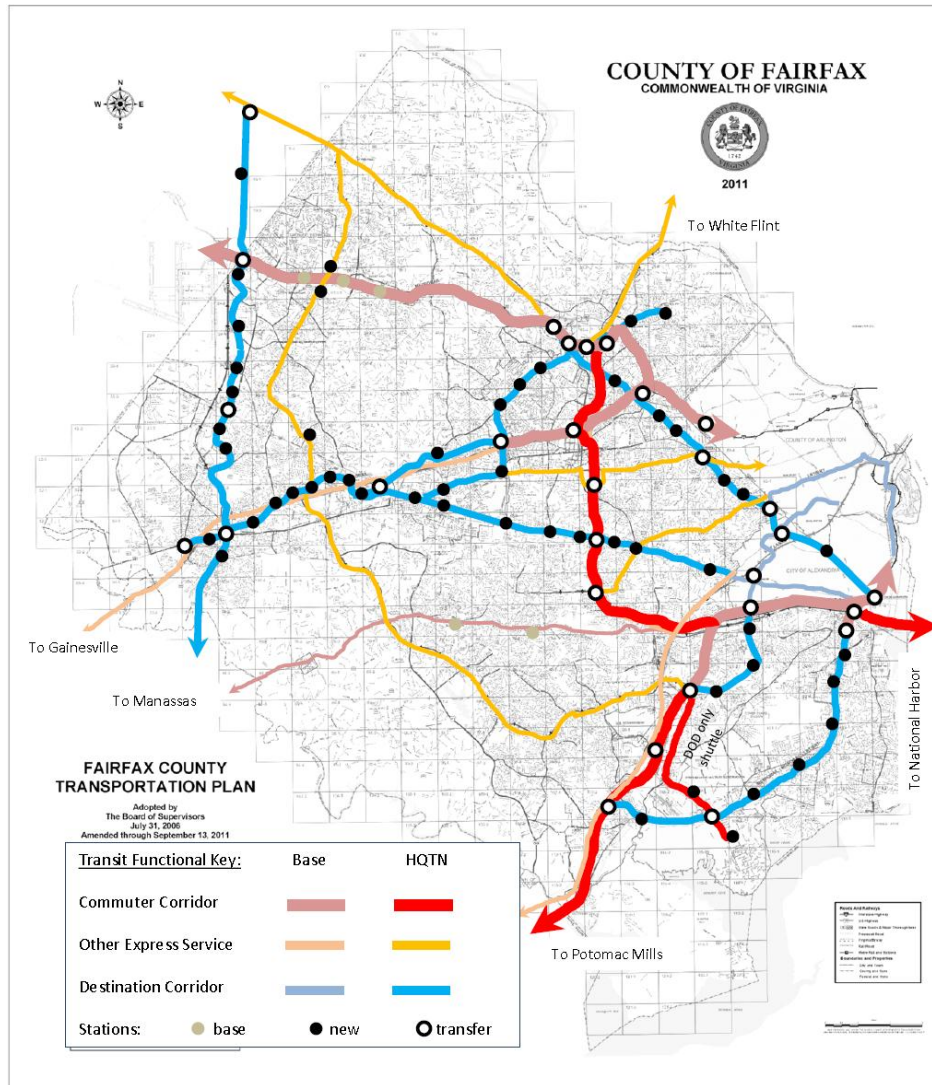






## Blended approach *Blue Line Extension*

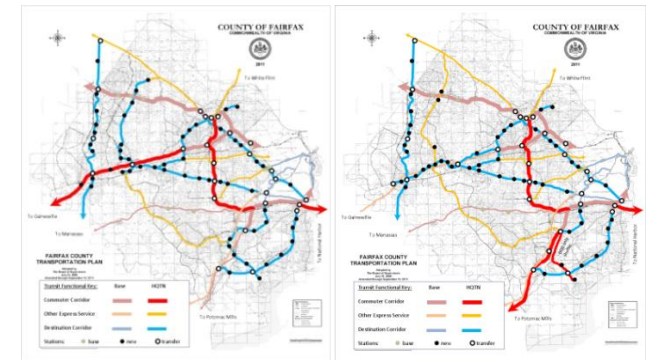
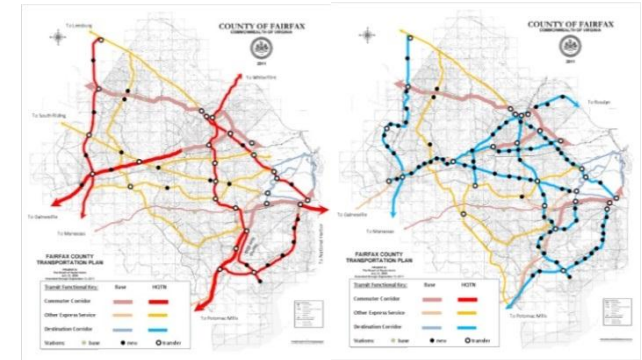
Blend **mobility** and **accessibility** approaches with Blue Line Metrorail extension in I-95 corridor in contrast to Comprehensive Plan



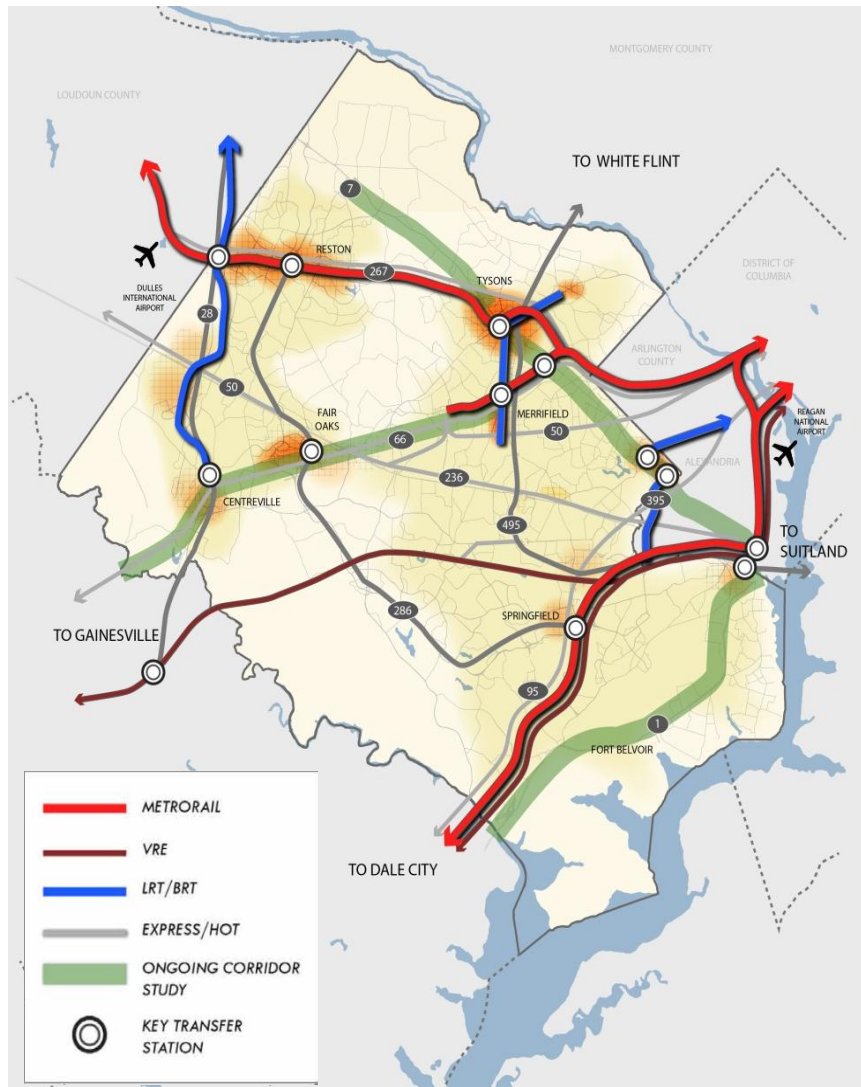


Constituents value multiple objectives:

- Increase access to destinations
- Include both high demand **commuter** and Transit Oriented Development (TOD) **destination** corridors
- Increase transit ridership
- Take cars off the road
- Encourage TOD
- Support Countywide vision for managed growth
- Be affordable
- Be understandable/usable
- Be connected



Four concepts were reviewed in November. The Proposed High Quality Transit Network Concept utilizes the best ideas from each for a context-sensitive fit to individual corridor needs.



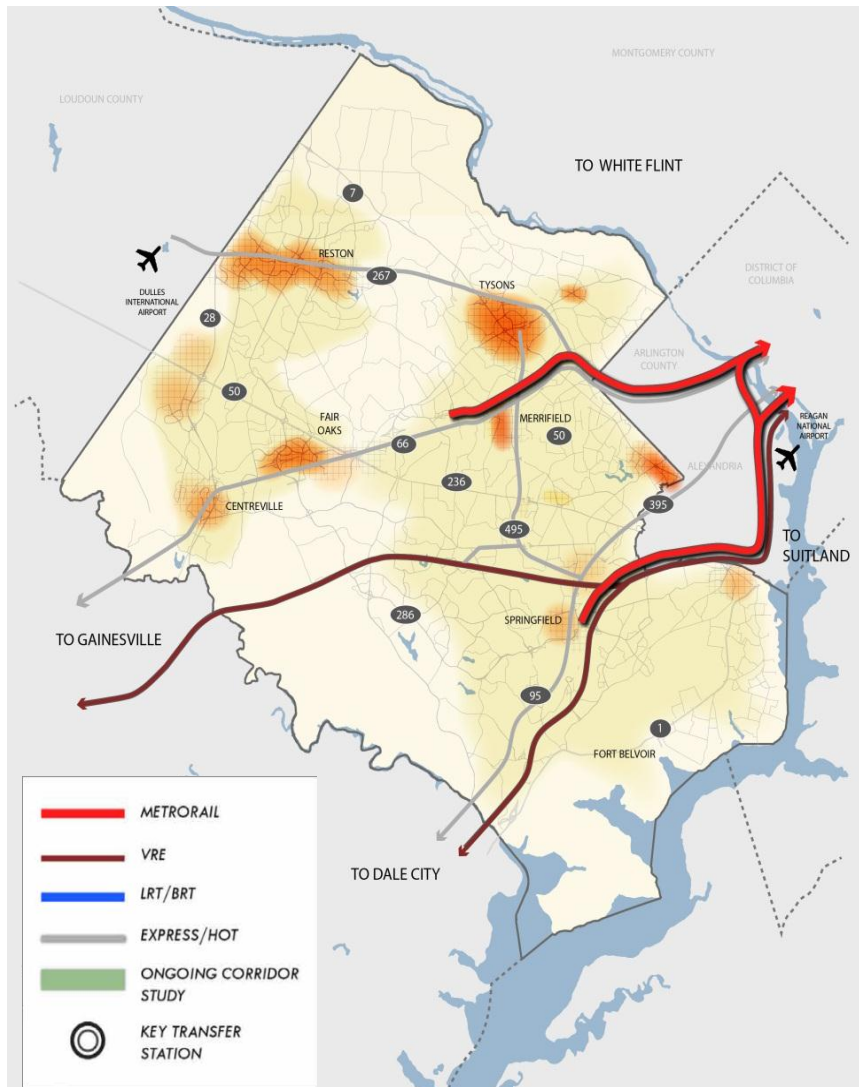
The Proposed High Quality Transit Network Concept builds upon the existing and Constrained Long Range Plan (CLRP) transit investments to create an interconnected network of commuter and destination corridors, supported by connecting express bus routes.





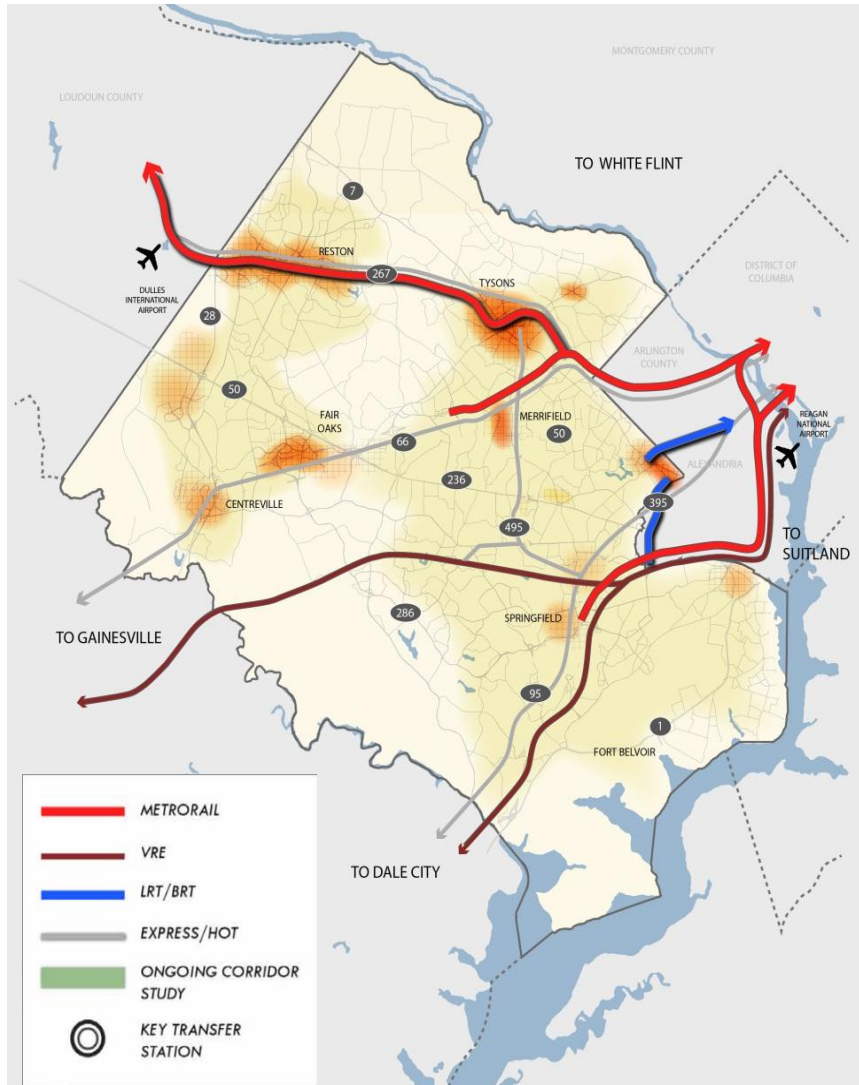
# County of Fairfax, Virginia **Proposed Concept Elements**

Existing High Quality Transit Network elements serving Fairfax County include Metrorail and VRE with supportive express bus services on HOV/HOT lanes.





# County of Fairfax, Virginia **Proposed Concept Elements**

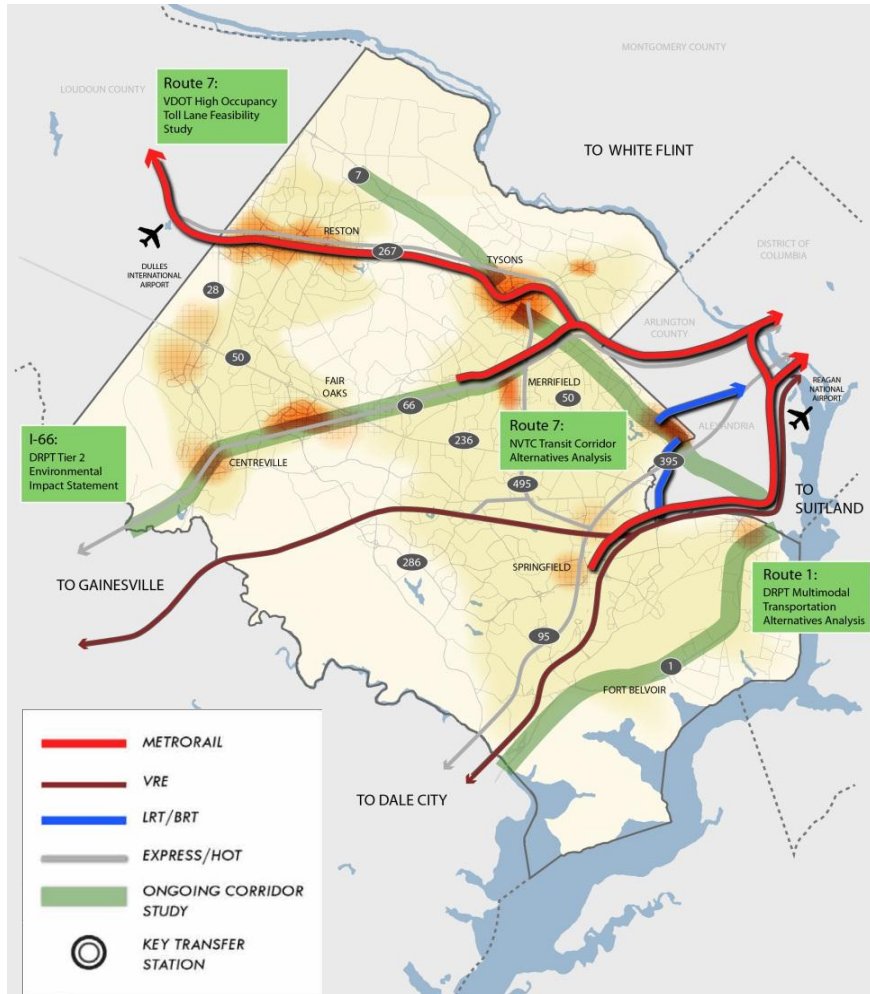


**Constrained  
Long Range  
Plan transit connections  
provide starting point for  
Proposed HQTN Concept:**

- Silver Line (Metrorail)
- Columbia Pike (Streetcar)
- Beauregard/Van Dorn Transitway (TBD)



# County of Fairfax, Virginia **Proposed Concept Elements**



These concepts are being coordinated with current studies:

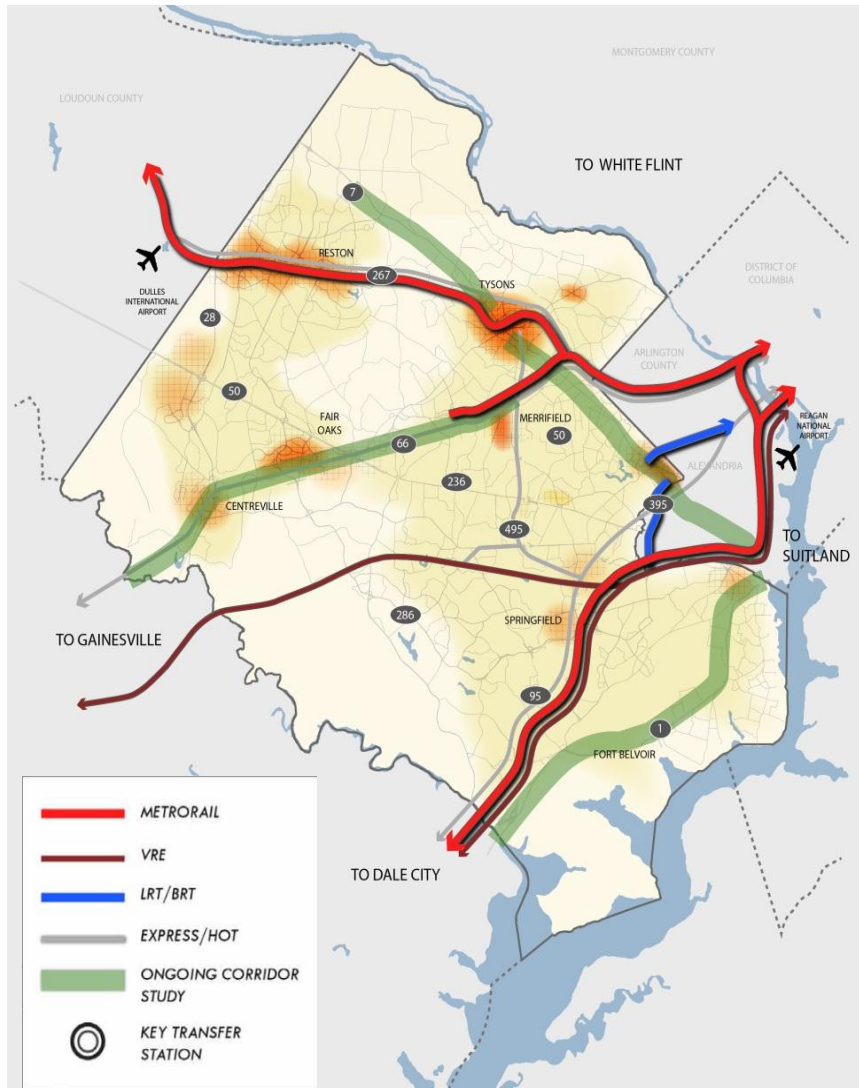
- Route 1 Alternatives Analysis
- Route 7 Alternatives Analysis (Tysons to Alexandria)
- Route 7 High Occupancy Toll Lane Study (North of DTR)
- I-66 Environmental Impact Statement (EIS)

*Tested Transit Network includes modes in ongoing study corridors for complete Network;  
Additional coordination and outreach will be needed to develop study recommendations.*





# County of Fairfax, Virginia **Proposed Concept Elements**

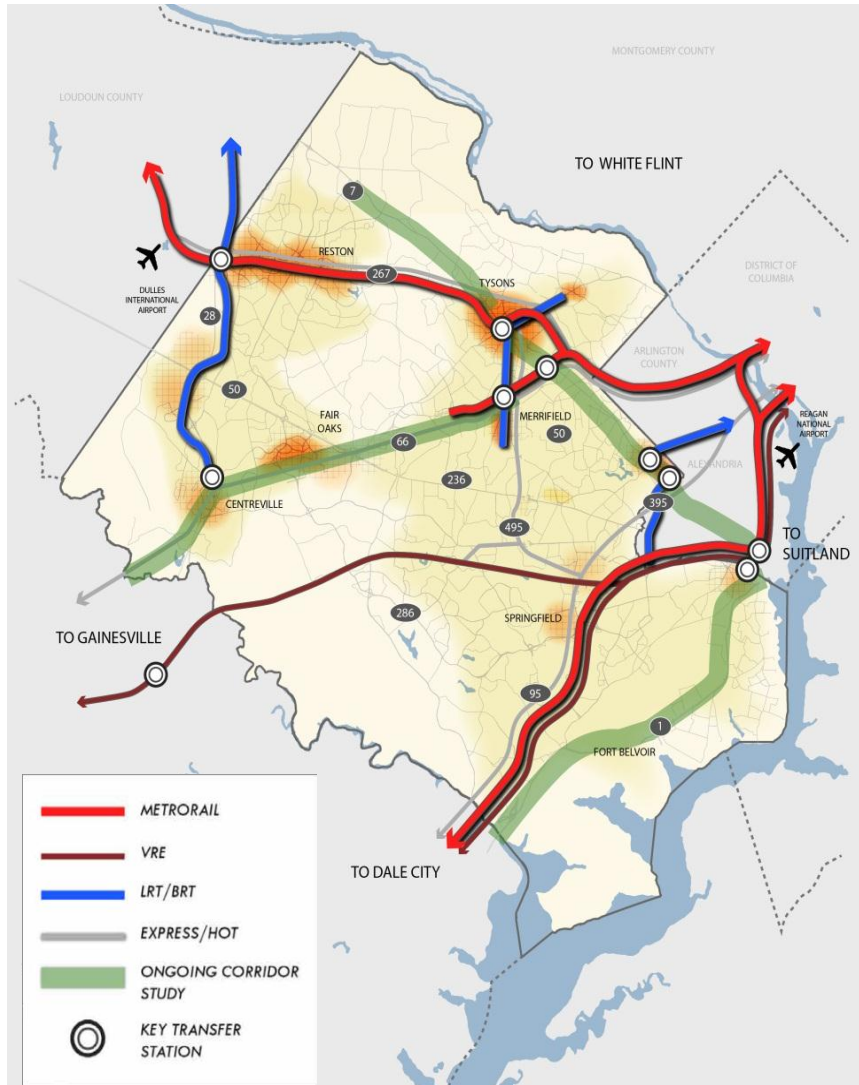


**Commuter Corridors** provide capacity to connect Fairfax County with other jurisdictions for longer-distance trips as region expands over time:

- High Capacity Transit in Orange Line Corridor
- Metrorail Blue Line Extension

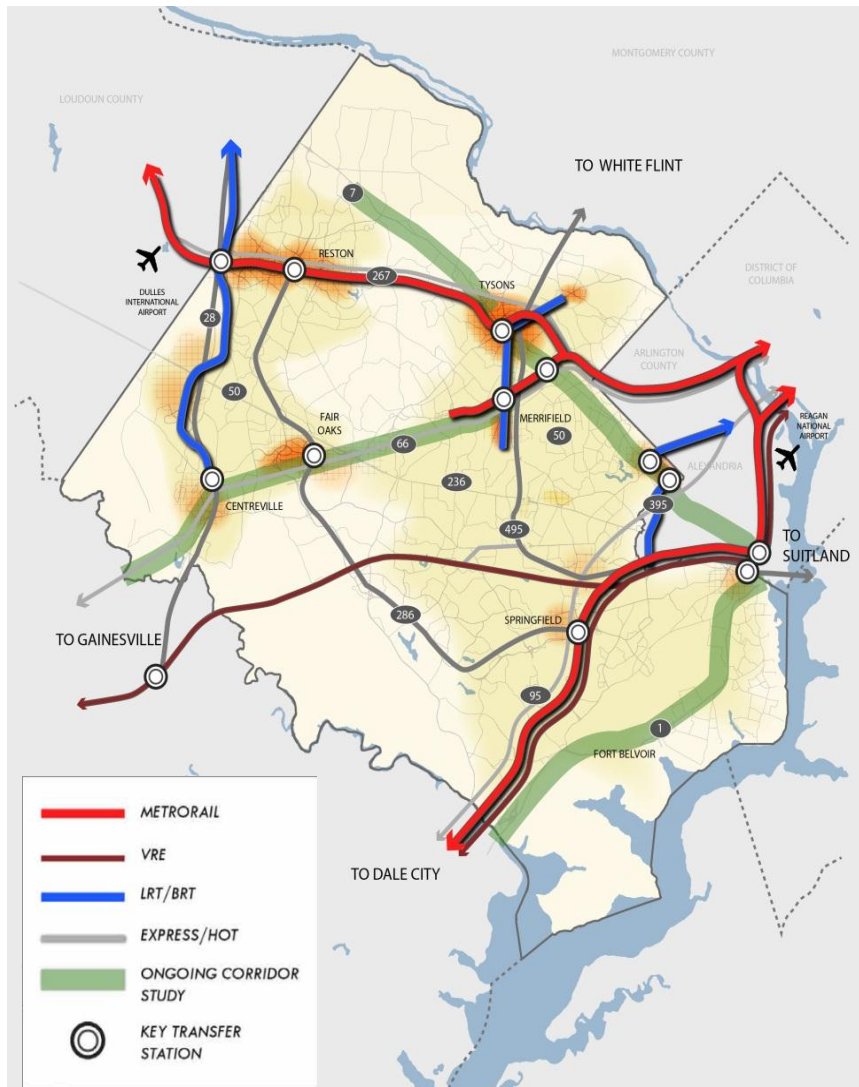


# County of Fairfax, Virginia **Proposed Concept Elements**



Destination Corridors provide service to support access to and within transit-oriented development along linear corridors:

- Route 1 (Richmond Highway) High Capacity Transit
- Route 7 High Capacity Transit east of Tysons
- Route 28 LRT/BRT
- Merrifield/McLean LRT/BRT



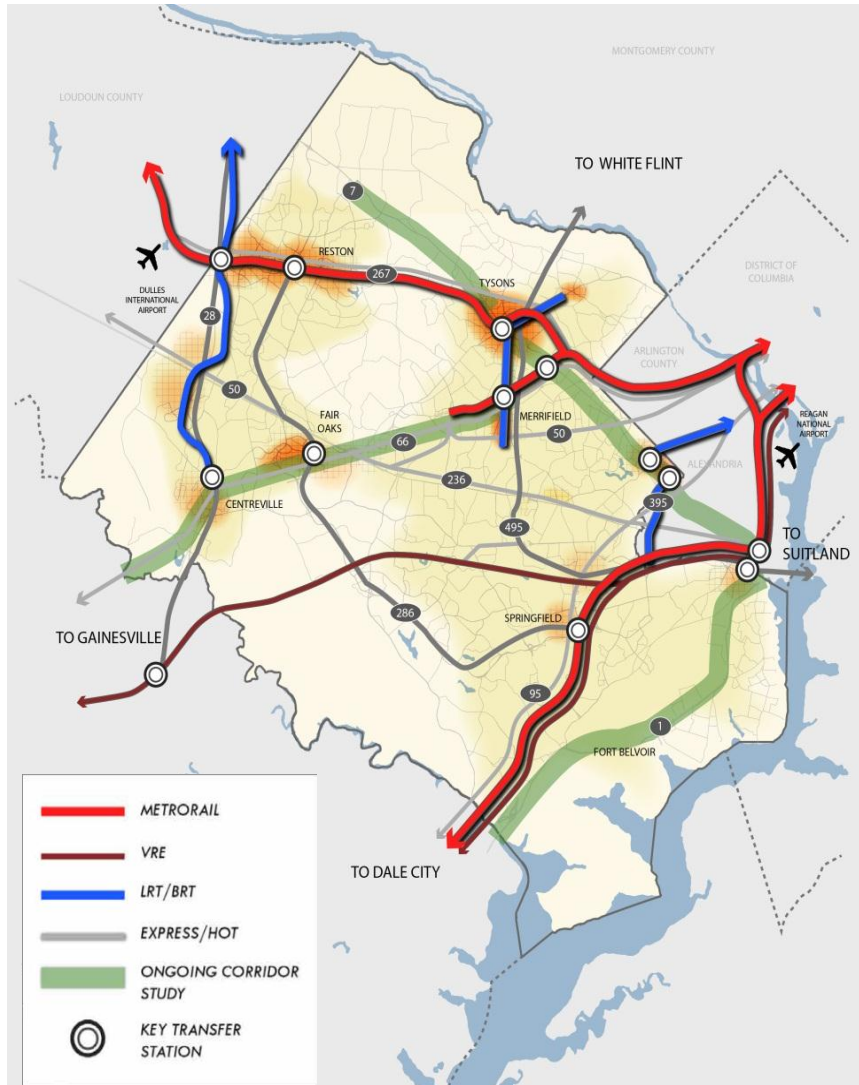
North-South Express Bus  
Services connect activity centers and transit services in radial corridors and provide flexibility for through-routing:

- I-495 (Beltway) Express (Enhanced)
- Fairfax County Parkway
- Route 28
- Bus lanes may also include HOV/HOT





# County of Fairfax, Virginia **Proposed Concept Elements**



## East-West Express Bus

Services support HQTN services, augment grid of direct and flexible transit connections:

- Route 50 – Orange Line bus bridge function
- Route 236 – continuation of Alexandria transitway
- Express bus route mileage at least 50% managed lanes



## Tested Network Elements

Adds: 104 miles and 53 stations to CLRP  
(of which, 61 miles and 35 stations are in Fairfax County)

The full 104-mile system has:

- 31 miles & 9 Stations Metrorail
- 73 miles & 44 Stations LRT/BRT

Supported by:

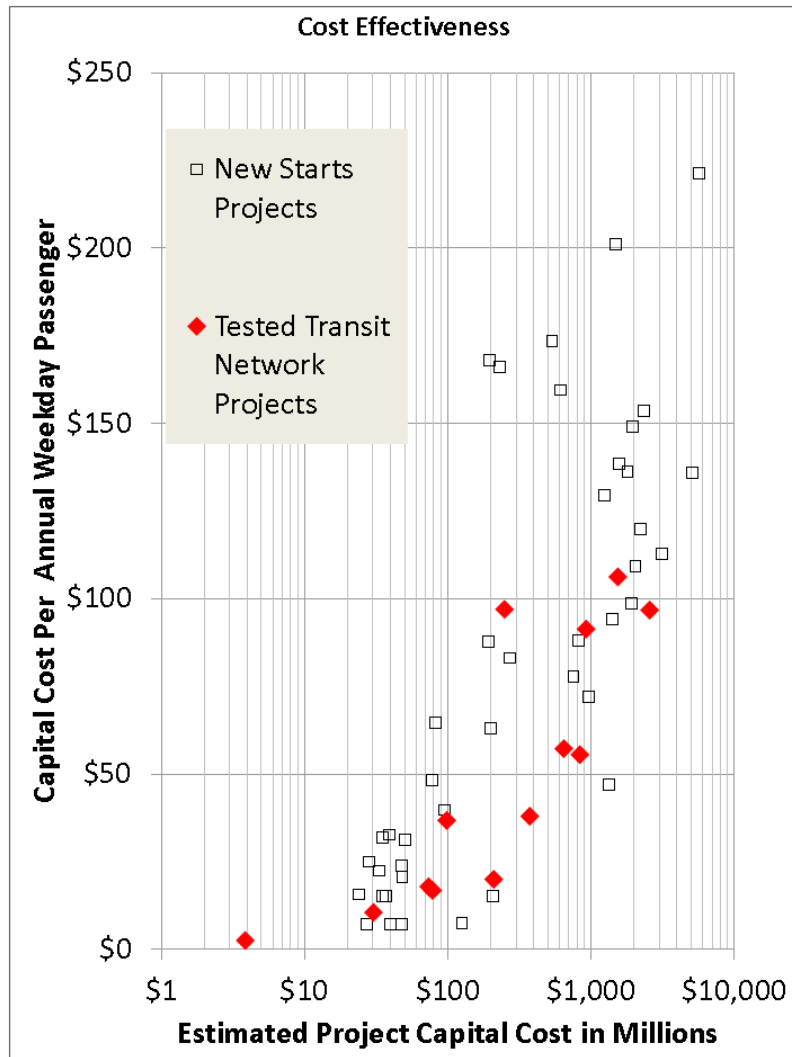
- 114 miles & 21 stations Express Bus

*Final Network Concept to be defined in coordination with ongoing studies.*



Goal	Achievement (compared to 2050 CLRP conditions)
<b>CONNECT</b> <i>Provide more transportation choices for Fairfax County and regional connectivity</i>	Allows average County resident to reach 190,000 more jobs within a 45 minute transit commute
	Increases Fairfax County transit trips by 150,000 per day, a 35% increase over base conditions.
	Introduces rail service to 14 previously unserved activity centers
	Cost per passenger consistent with recent New Starts approvals
<b>GROW</b> <i>Support local and regional economic development goals</i>	Serves 27 new station areas within designated activity centers.
	Brings 120,000 new County households and 263,000 County jobs within ½ mile of high quality transit station
<b>THRIVE</b> <i>Strengthen quality of life by making transit-friendly, sustainable investments</i>	Serves 28 new station areas with higher than average transit dependency.
	Reduces weekday peak period Vehicle Hours of Travel by 68,000
	Furtheres Comprehensive Plan concepts for Enhanced Public Transportation Corridors





- Capital cost per passenger is a measure of cost effectiveness.
- Higher cost projects can bear higher capital costs per passenger due to operating efficiencies
- New Starts approvals indicate current federal/local funding climate
- Tested Transit Network projects compare favorably



## Campaigns

Fairfax Countywide Transit Network Study

## Social Web



 Tweet 24

## Usage statistics

**16 ideas posted**

11 comments 96 votes 43 users

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## What we're discussing ?

bicycle bus metro  
light rail commuter bus  
advertising public meeting  
social media twitter  
facebook mixed-use  
yellow line route 1  
public transportation  
mass transit beltway  
circulators brt streetcar

## Browse Popular Ideas

Recent (1)

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Complete (0)

 **I agree**

FAIRFAX COUNTYWIDE TRANSIT NETWORK STUDY »

### Bicycle lanes to metro stations

Bicycle lanes on 29, 50 and other roads adjacent and accessible to Vienna, Dunn Loring, and West Falls Church metro stations. Connect these with W&OD trail.

 **I disagree**

 2 comments

Submitted by

2 months ago

 **I agree**

FAIRFAX COUNTYWIDE TRANSIT NETWORK STUDY »

### Use social media to advertise July 10 public meeting

Advertising the IdeaScale meeting information through Fairfax County's social media outlets can help distribute news about both the IdeaScale site and the July 10 public meeting to review the Proposed High Quality Transit Network Concept from 6 - 9 PM at the Fairfax County Government Center.

 **I disagree**

 Add your comment

Submitted by

2 months ago

 **I agree**

FAIRFAX COUNTYWIDE TRANSIT NETWORK STUDY »

### Adopt and Implement the County Bicycle Master Plan

The hard work has been done in preparing this. All we need is the approval and commitment to implementation. Establish infrastructure that enables people to feel safe enough to use their bikes for those over 50% of trips that are within 3 miles of their home.

 **I disagree**

 Add your comment

Submitted by

2 months ago

 **I agree**

FAIRFAX COUNTYWIDE TRANSIT NETWORK STUDY »

### Hire a Bicycle Coordinator for FCPS

Get someone in this position who will encourage schools and parents to get kids out of the kiss and ride and on to buses, walking, or cycling.

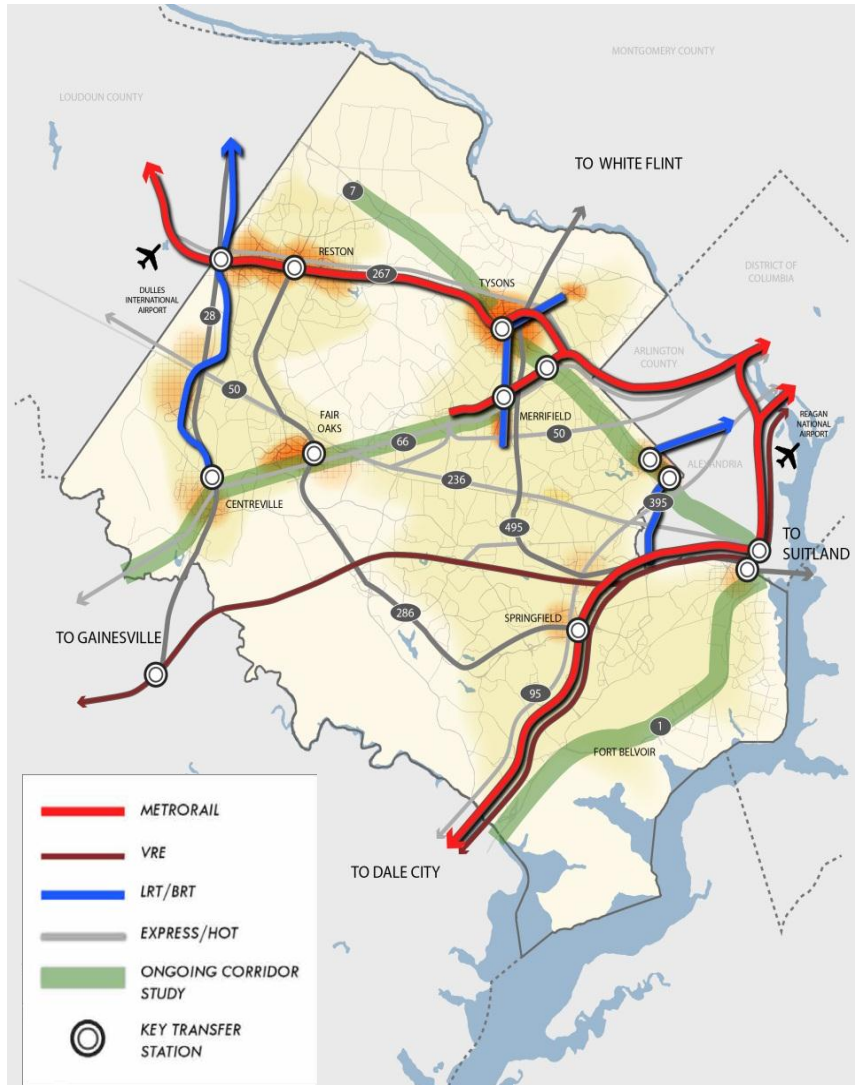
 **I disagree**

 Add your comment

Submitted by

2 months ago





- Response to comments and further stakeholder coordination
- Network refinements
- Evaluation of network performance
- Mode, ROW, station, and typical section requirements
- Implementation phasing, timing, and funding strategies
- Comprehensive Plan Amendment(s)



# FAIRFAX COUNTY COUNTYWIDE TRANSIT NETWORK STUDY

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703-877-5600

<http://www.fairfaxcounty.gov/fcdot/2050transitstudy/>

<http://www.fairfaxcountydott.ideascale.com/>