



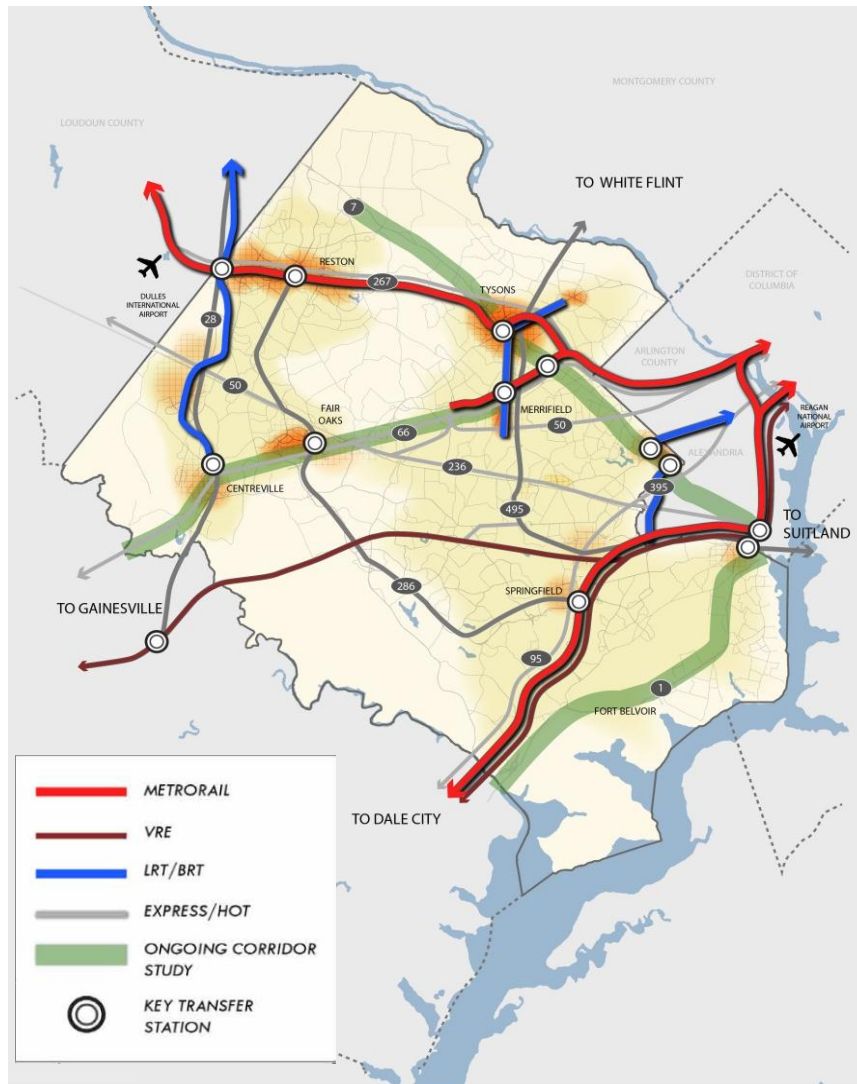
Fairfax County Countywide Transit Network Study

Proposed High Quality Transit Network Concept

Metropolitan Washington Council of Governments
Travel Forecasting Subcommittee

September 20, 2013





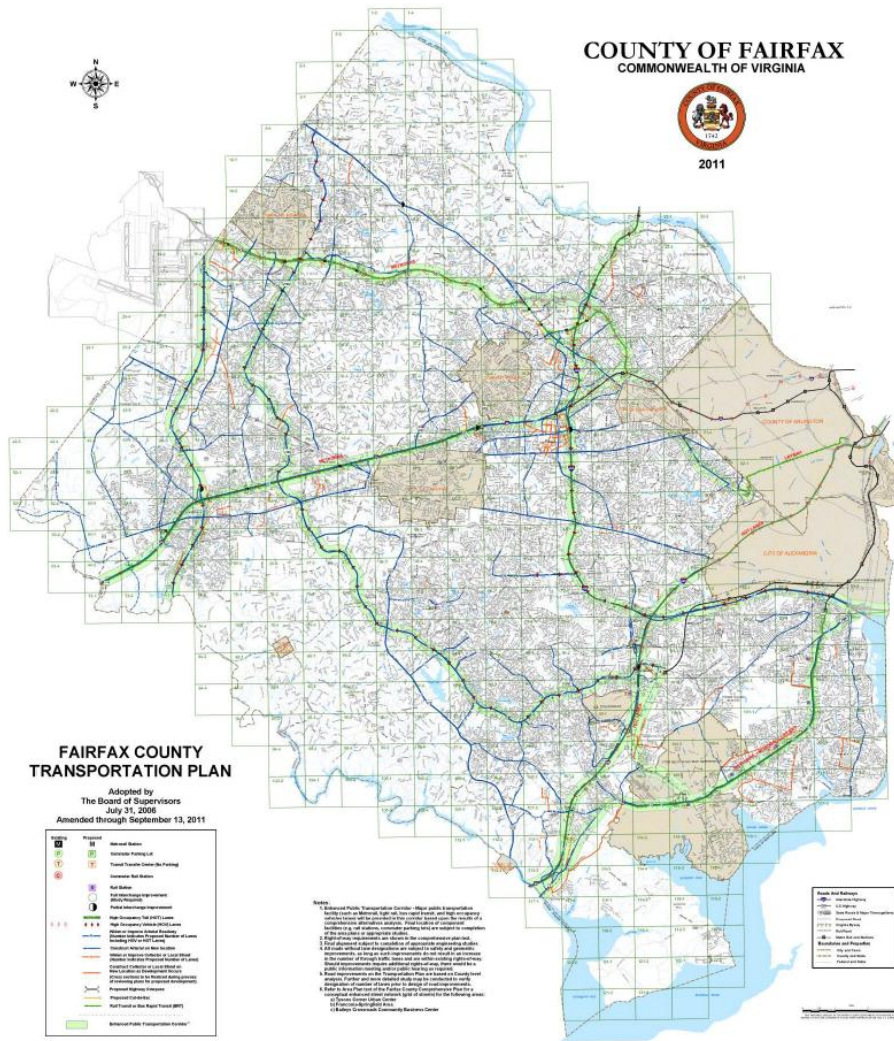
This presentation summarizes materials presented at the July 10, 2013 public workshop held at the Fairfax County Government Center.

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.



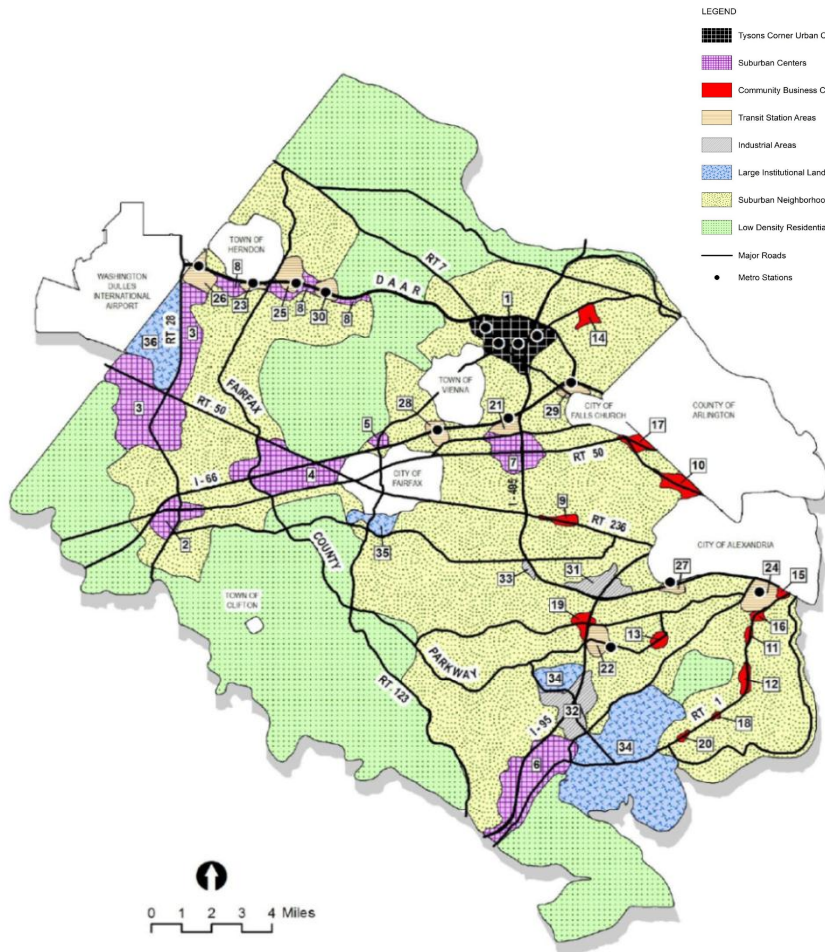


We are at the third of our four stages of public involvement and review:

- 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

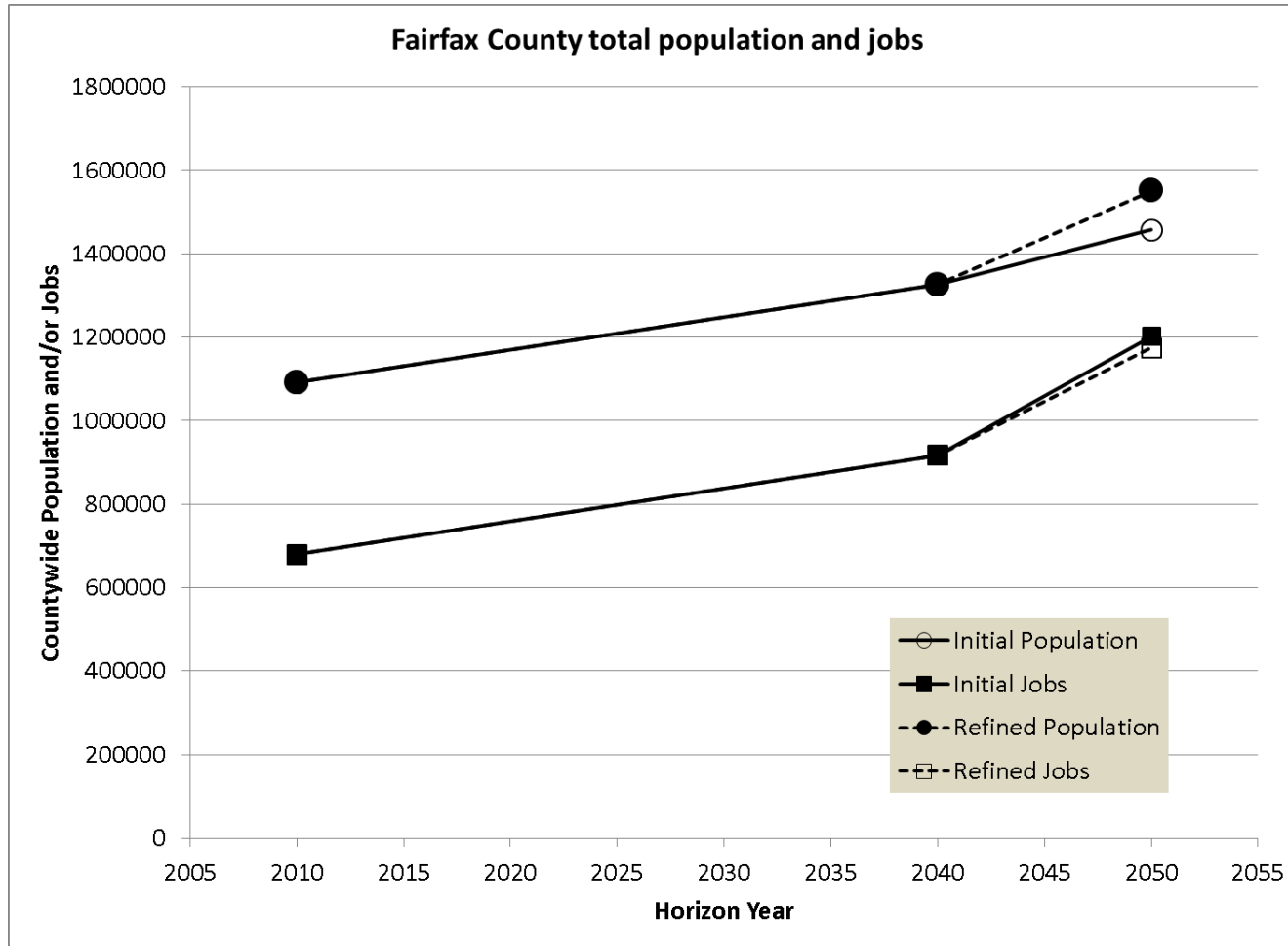
- Community Business Centers**
9. Annandale
 10. Baileys Crossroads
 11. Beacon/Groveton
 12. Hybla Valley/Gum Springs
 13. Kingstowne
 14. McLean
 15. North Gateway
 16. Penn Daw
 17. Seven Corners
 18. South County Center
 19. Springfield
 20. Woodlawn

- 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

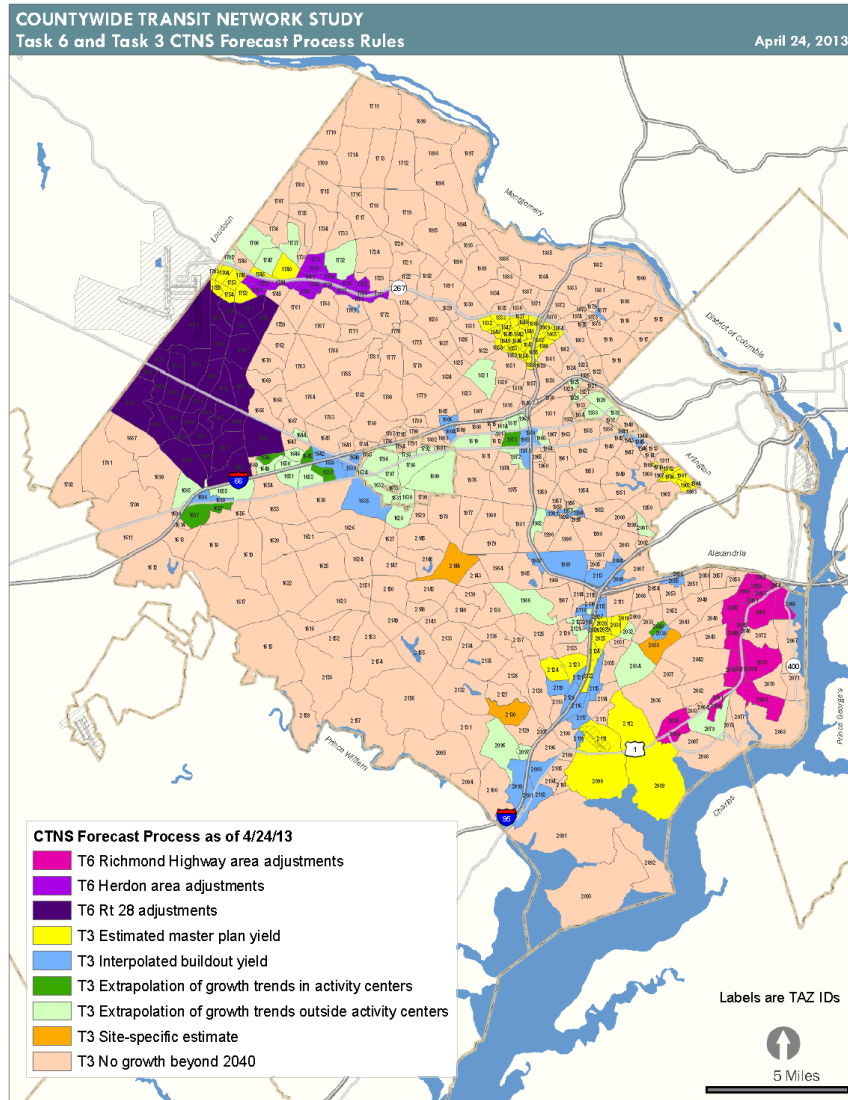
LOCATIONS OF LARGE INSTITUTIONAL AND INDUSTRIAL AREAS

- 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

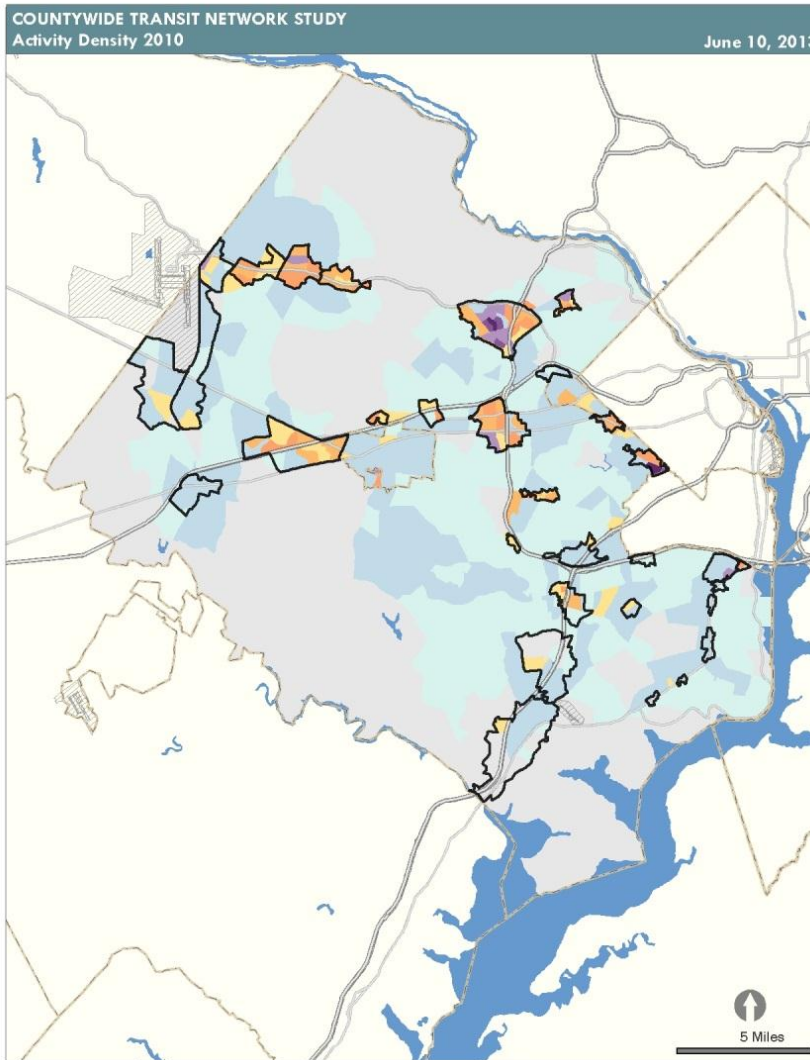


Long-term horizon considering Comprehensive Plan yields



Most of County land area is established residential communities with no significant growth beyond 2040.

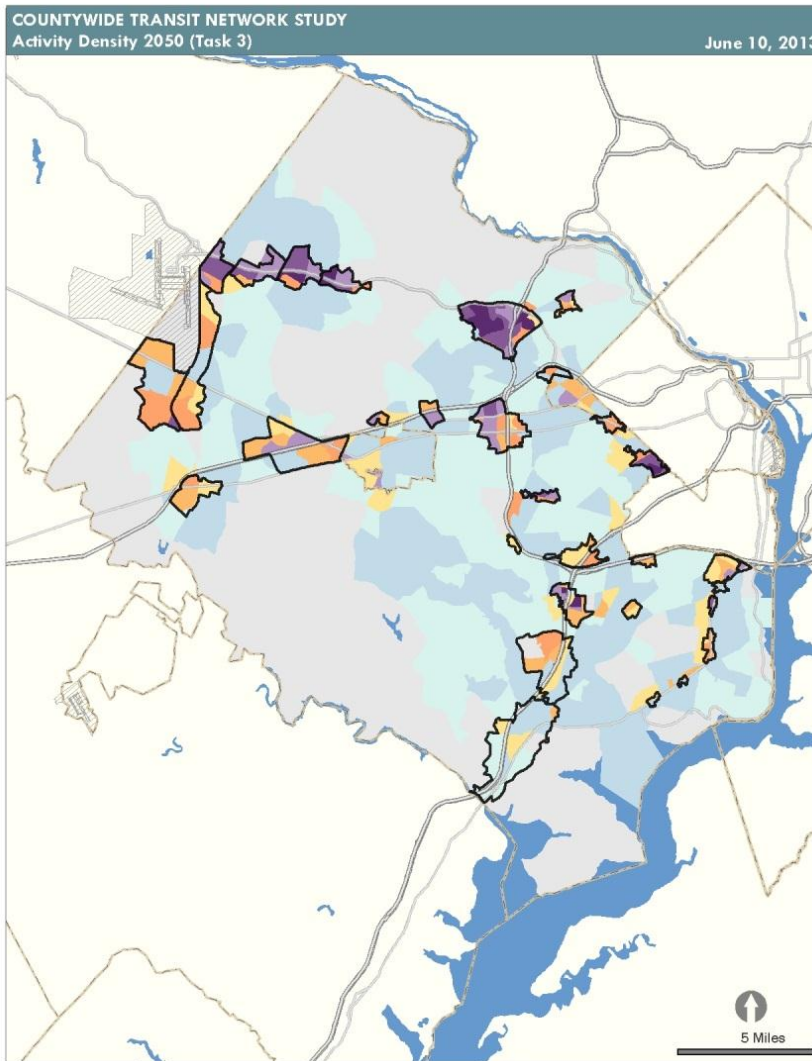
Focus of growth in activity centers, with particular attention in study to TOD opportunities along Richmond Highway and Route 28.



Fairfax County's land use policies encourage development within designated activity centers, which **currently** include about:

- 10% of County acreage
- 19% of County households
- 82% of County jobs

Activity Density = (population+jobs)/acre
Blue: (AD>4): supports local bus service
Red: (AD>20) supports bus rapid transit (BRT)
Purple: (AD>50) supports rail transit



Fairfax County's land use policies encourage development within designated activity centers, which **by 2050** include about:

- 10% of County acreage
- 36% of County households
- 89% of County jobs

Activity Density = (population+jobs)/acre
Blue: (AD>4): supports local bus service
Red: (AD>20) supports bus rapid transit (BRT)
Purple: (AD>50) supports rail transit



High Quality Transit

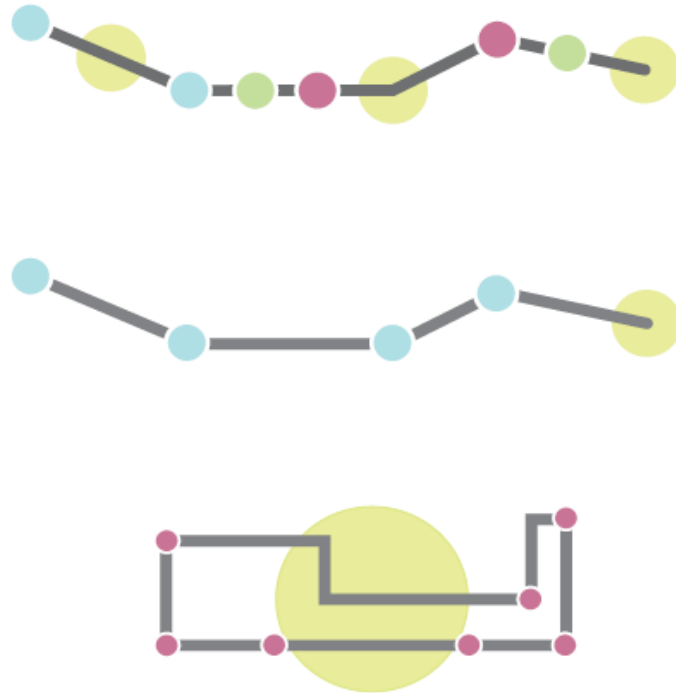
Defining elements of a High Quality Transit Network include providing improved travel speeds and reliable travel times, typically on exclusive right-of-way.



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.

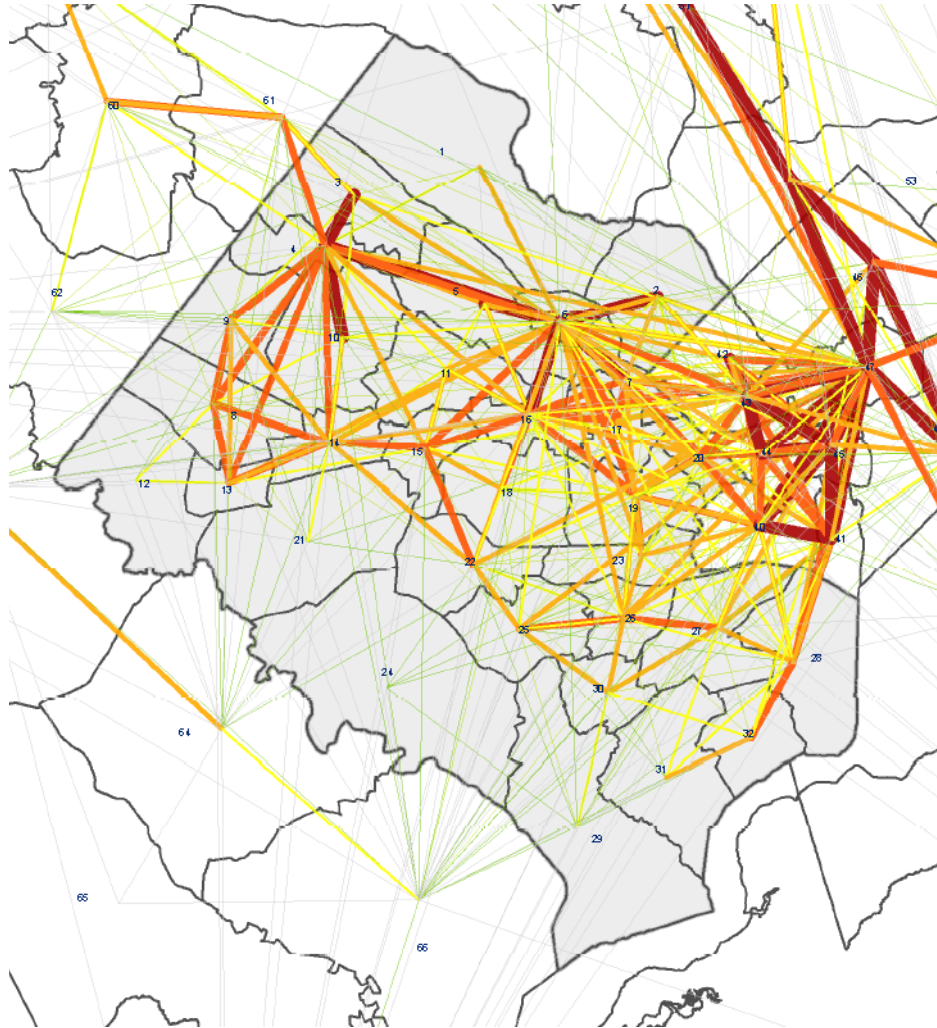


Destination corridors, like the Crystal City Potomac Yards transitway, connect neighborhoods to multiple activity centers, functioning primarily to provide access.

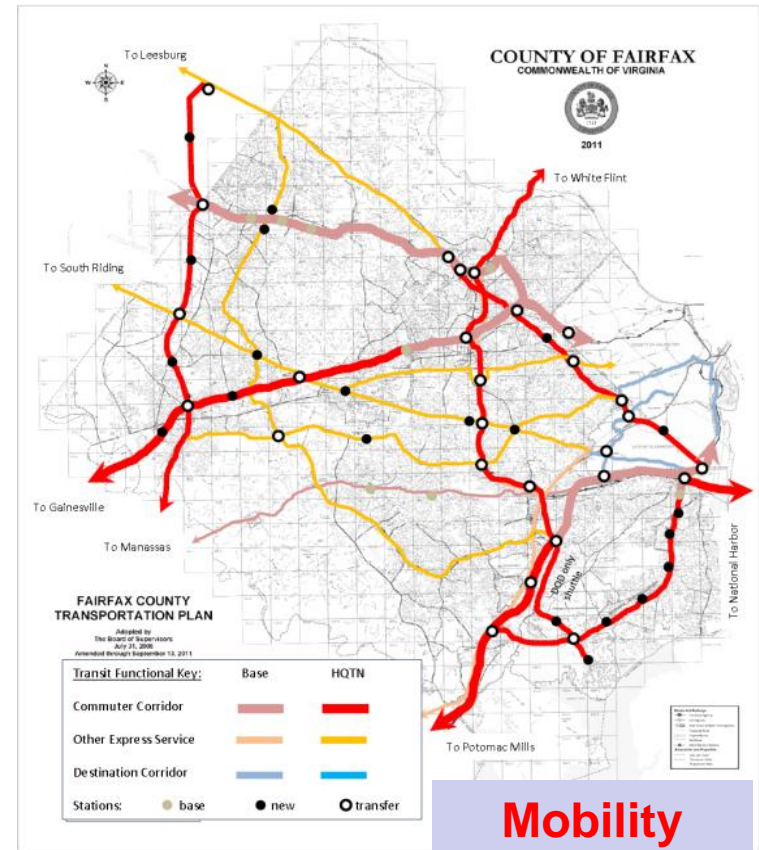
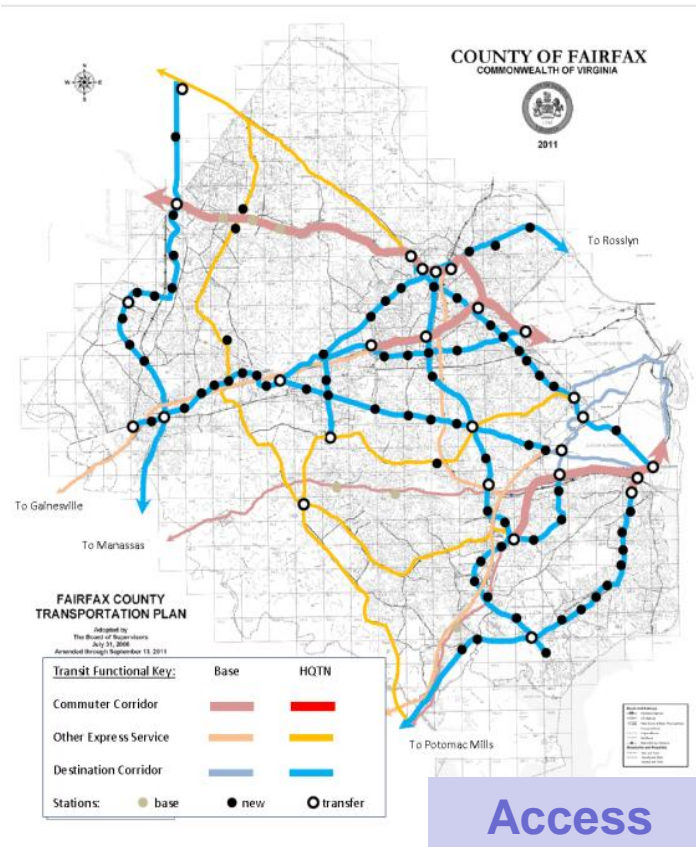
Commuter corridors, like Virginia Railway Express, primarily serve one major activity center and tend to focus on journey-to-work trips and function primarily to provide mobility.

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

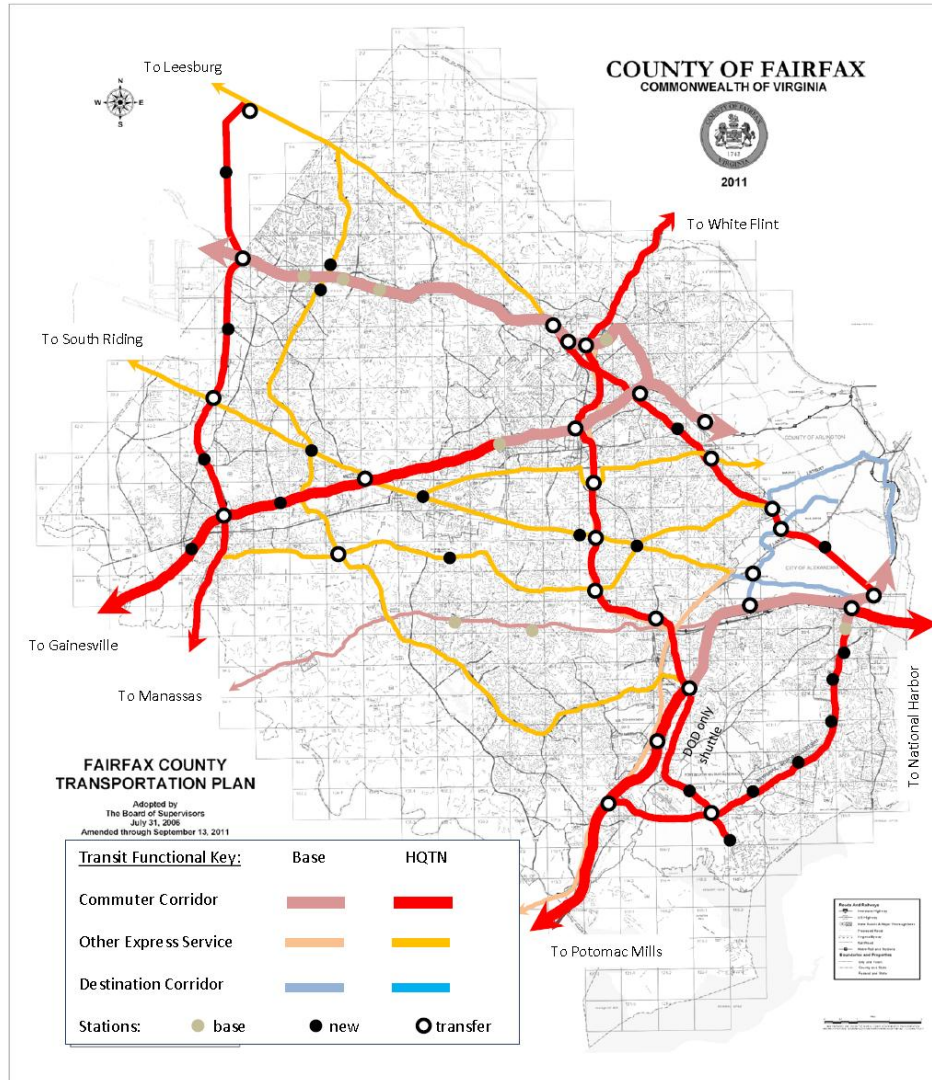
Source: Center for Transit Oriented Development



The travelshed based sketch model facilitated early identification of key person-trip desire lines and potential concepts for developing alternative networks.



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.



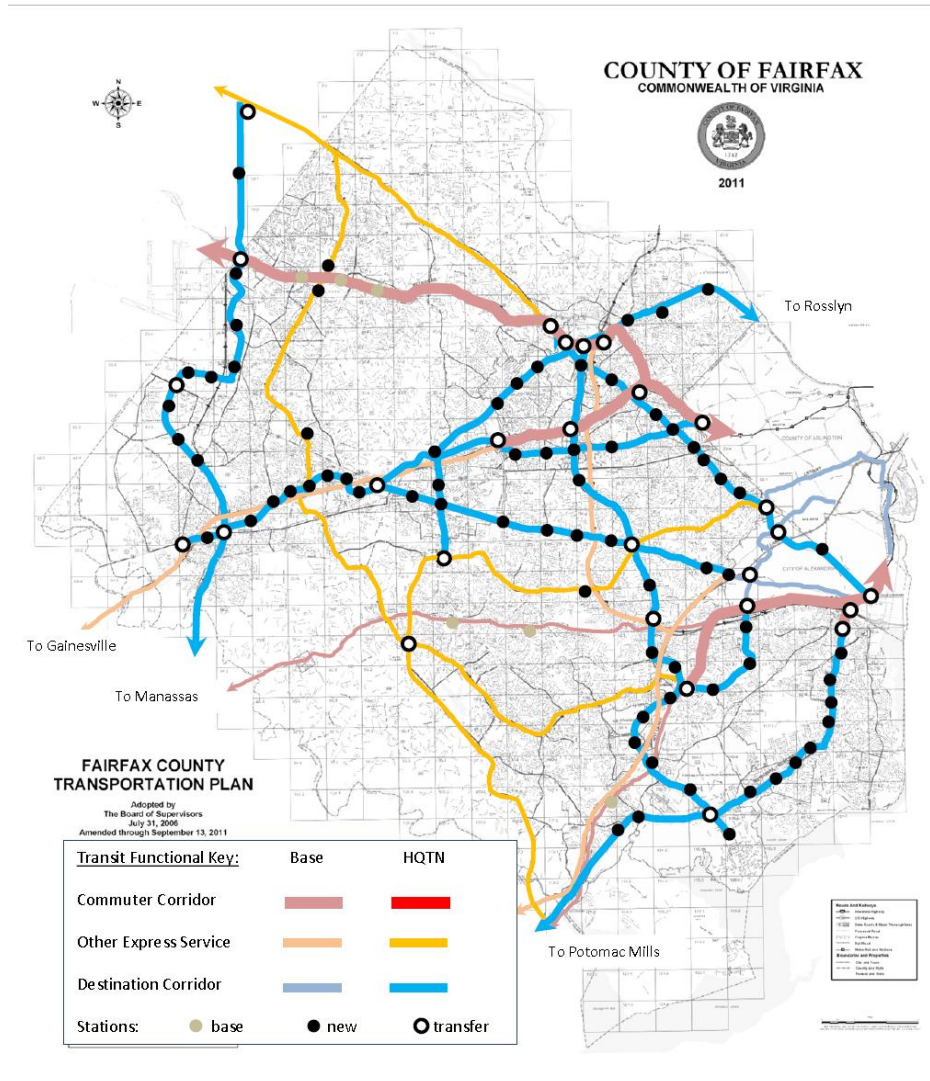
Mobility focus

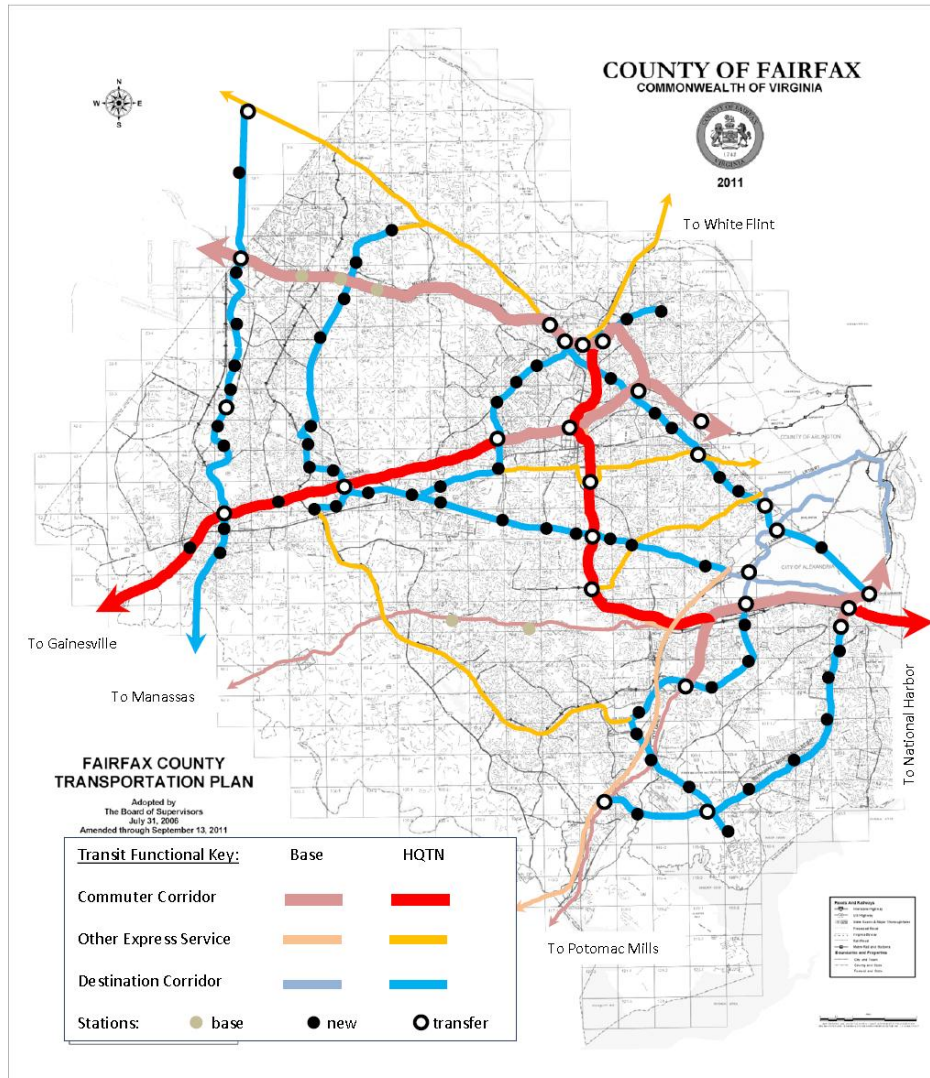
Connect activity centers within Fairfax County and adjacent jurisdictions with **high speed commuter corridors** that best serve **longer-distance** trips.



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

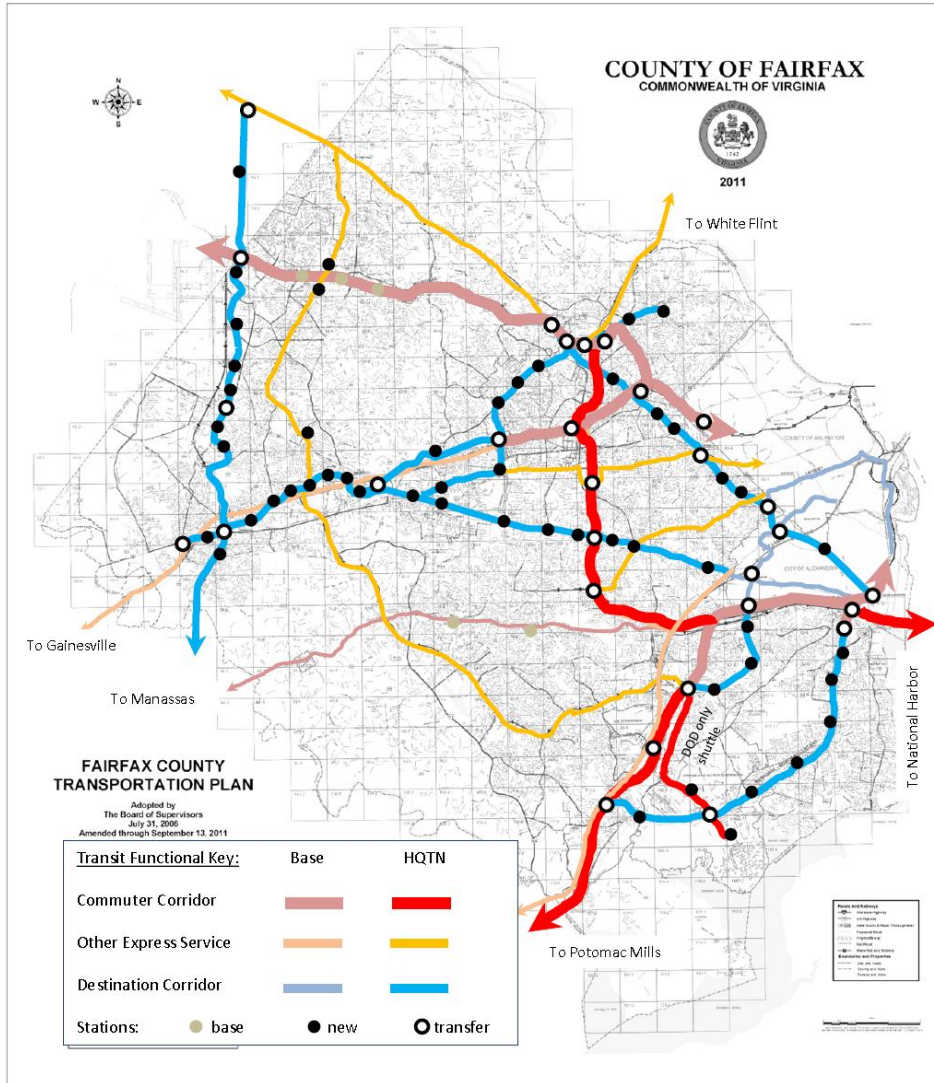




Blended approach

Orange Line Extension

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



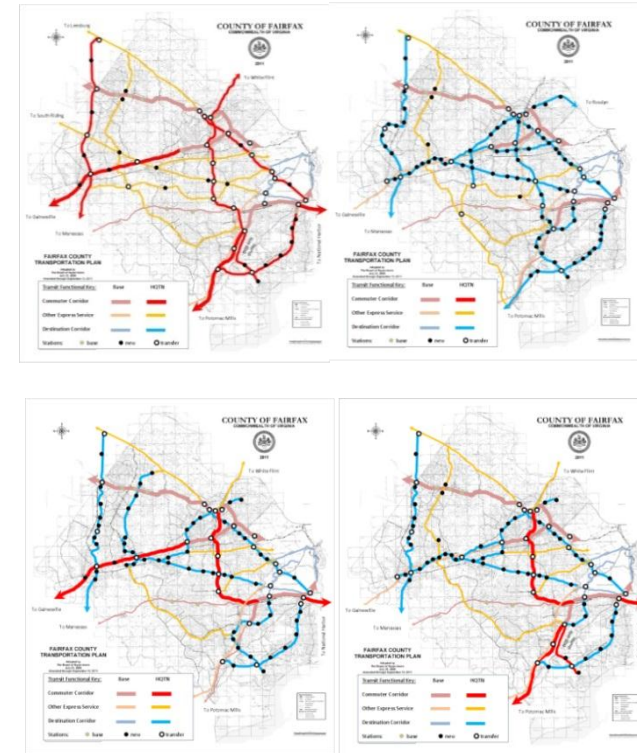
Blended approach *Blue Line Extension*

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

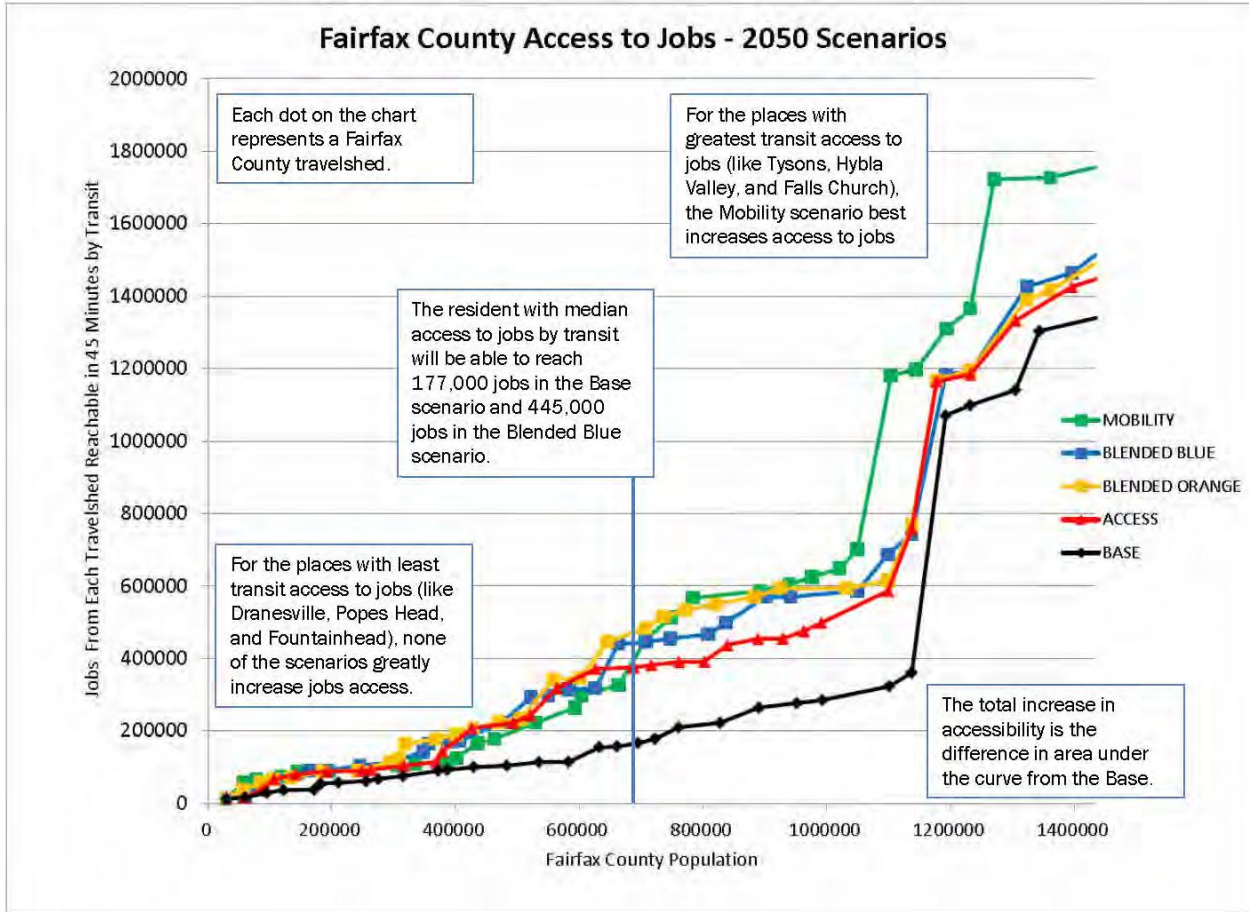


Constituents value multiple objectives:

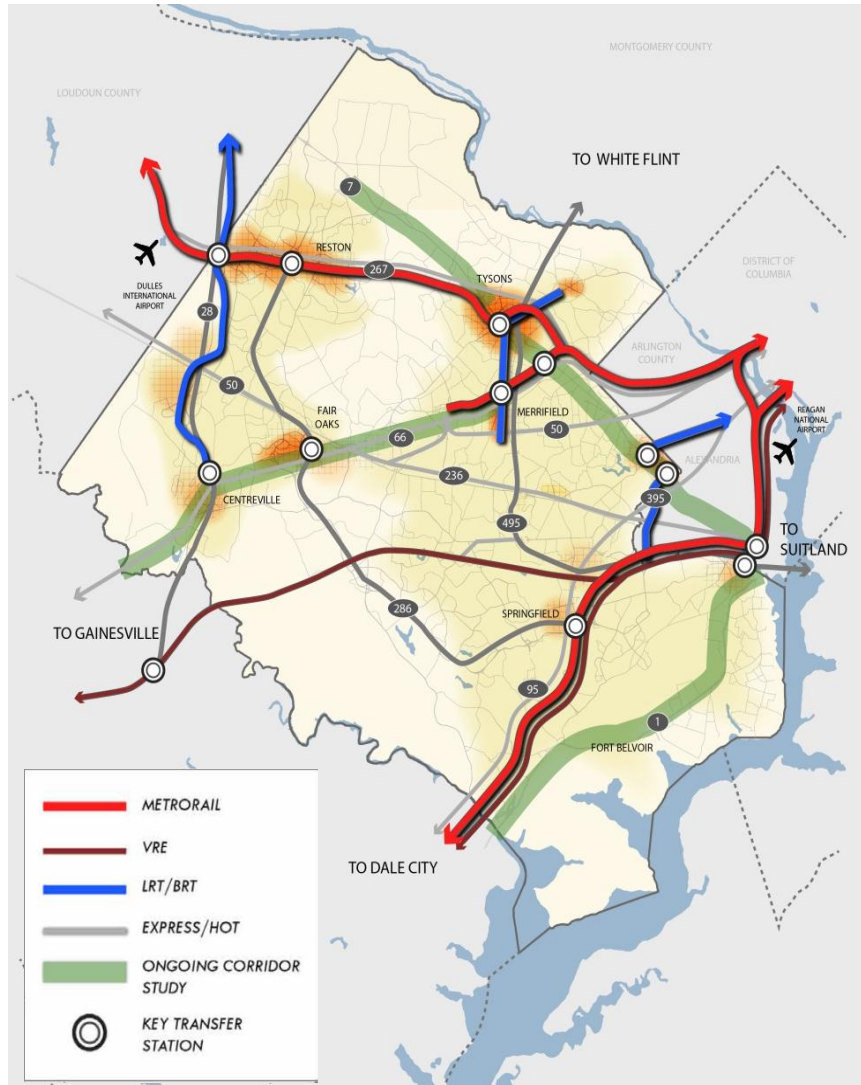
- Increase access to destinations
- Include both high demand **commuter** and Transit Oriented Development (TOD) **destination** corridors
- Increase transit ridership
- Take cars off the road
- Encourage TOD
- Support Countywide vision for managed growth
- Be affordable
- Be understandable/usable
-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



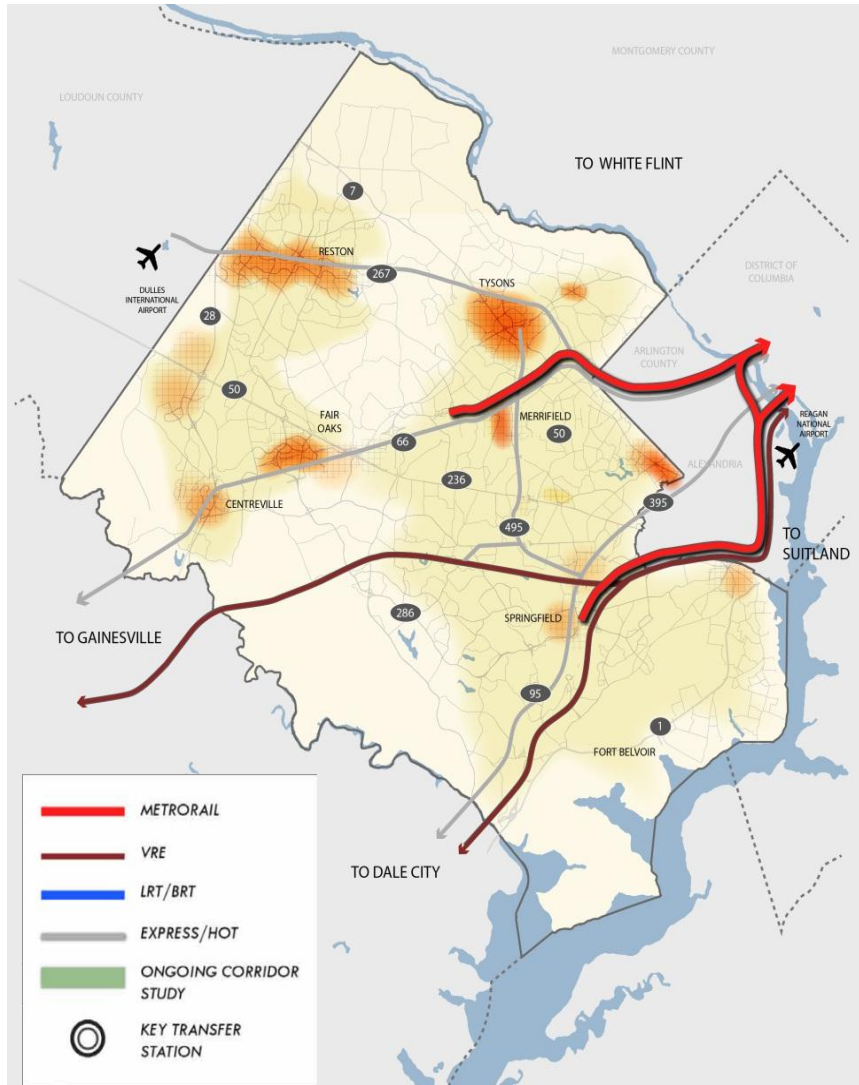
The sketch model also facilitated consideration of metrics like access to regional jobs for County residents.

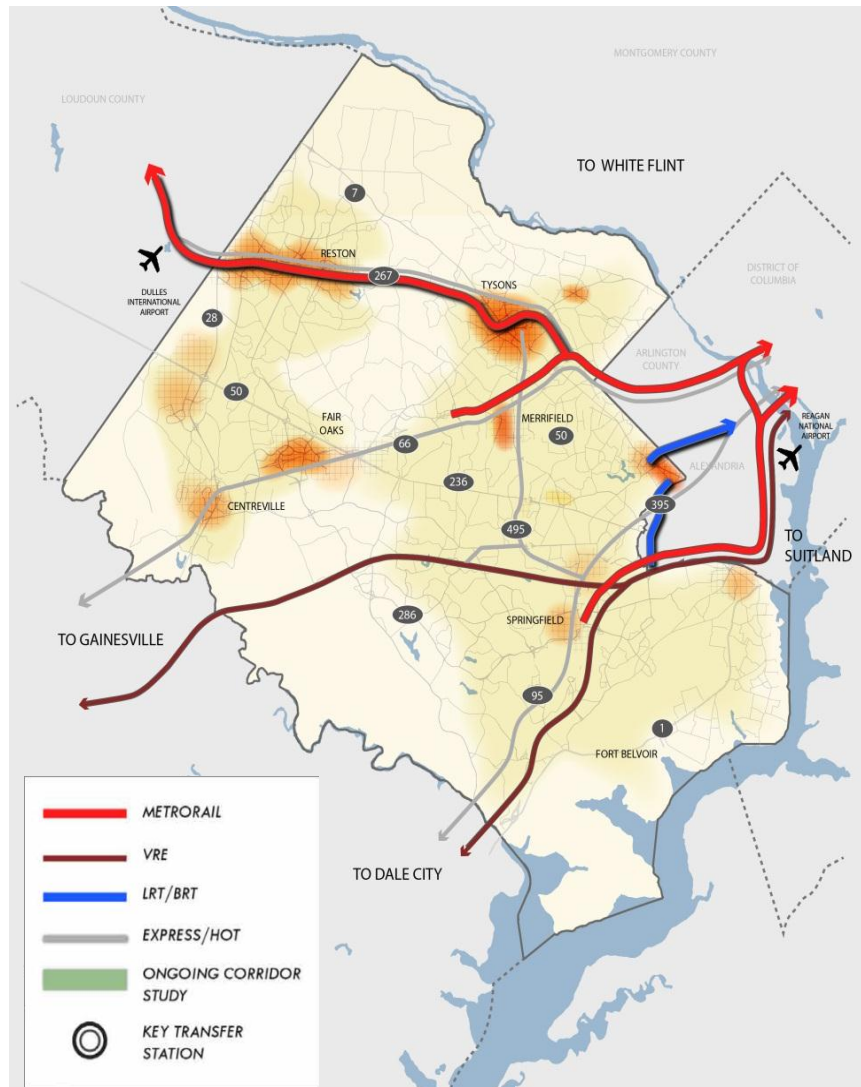


The Proposed High Quality Transit Network Concept builds upon the existing and Constrained Long Range Plan (CLRP) transit investments to create an interconnected network of commuter and destination corridors, supported by connecting express bus routes.



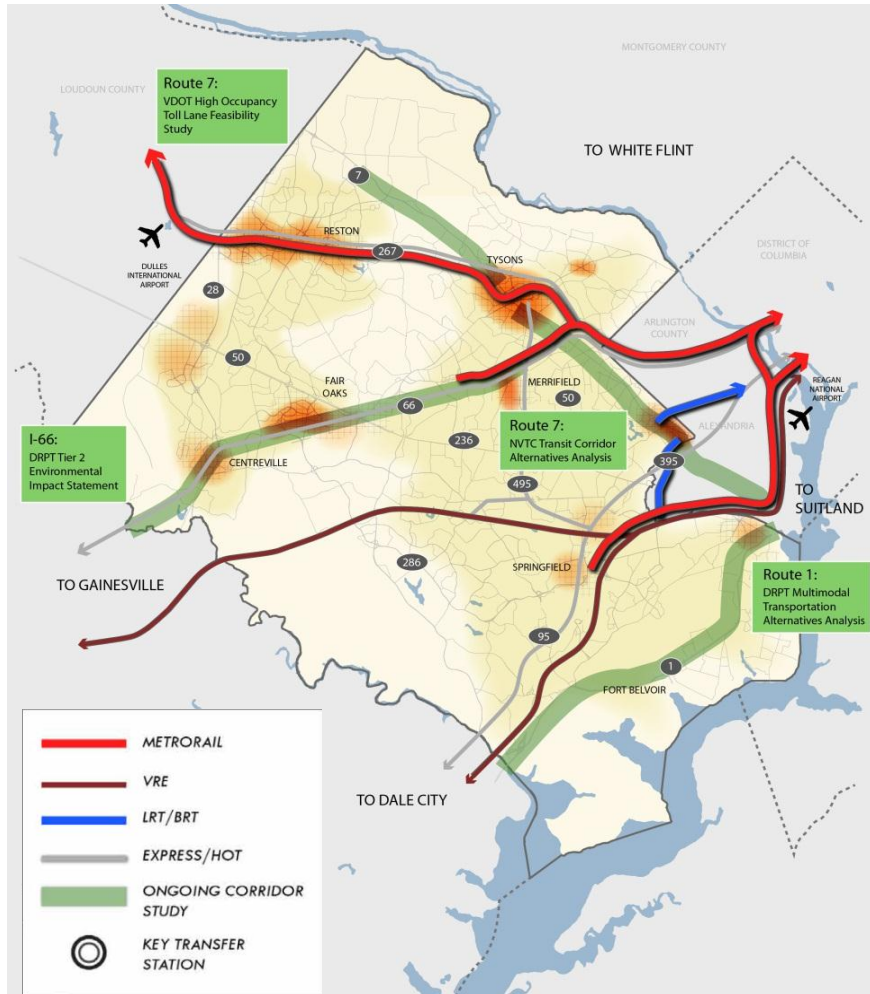
Existing High Quality Transit Network elements serving Fairfax County include Metrorail and VRE with supportive express bus services on HOV/HOT lanes.





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

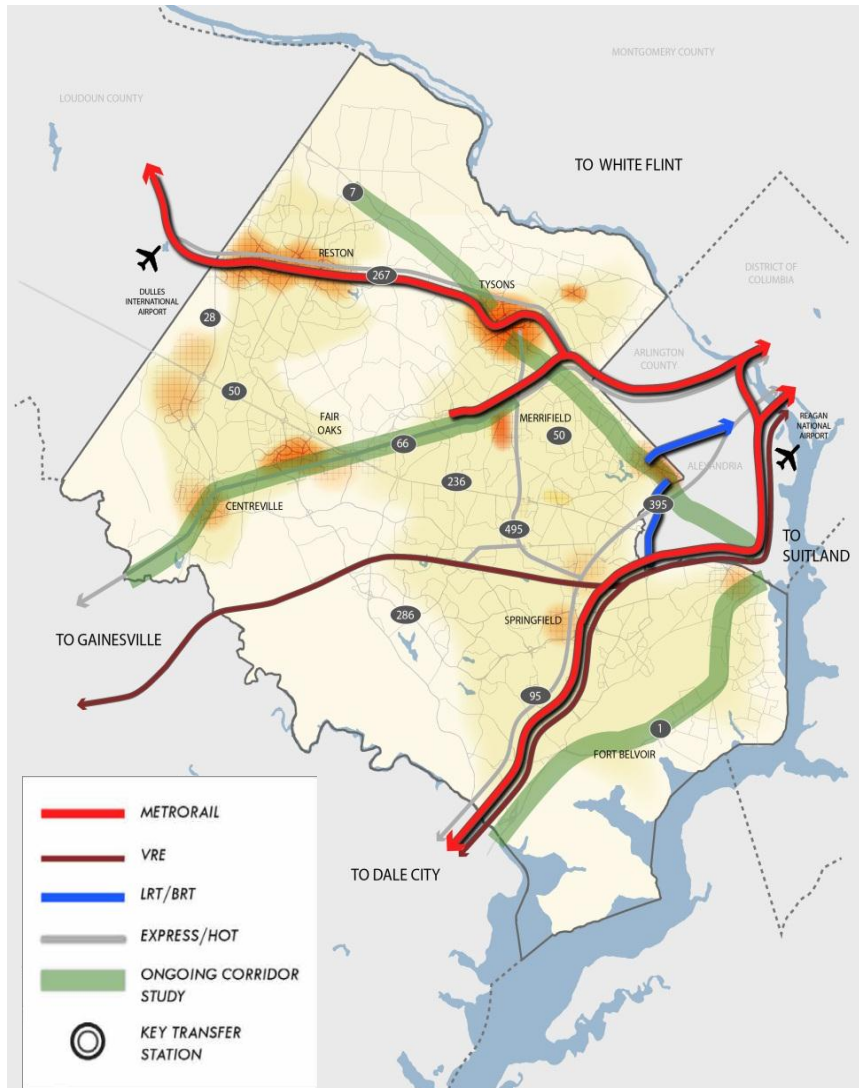
- Silver Line (Metrorail)
- Columbia Pike (Streetcar)
- Beauregard/Van Dorn Transitway (TBD)



These concepts are being coordinated with current studies:

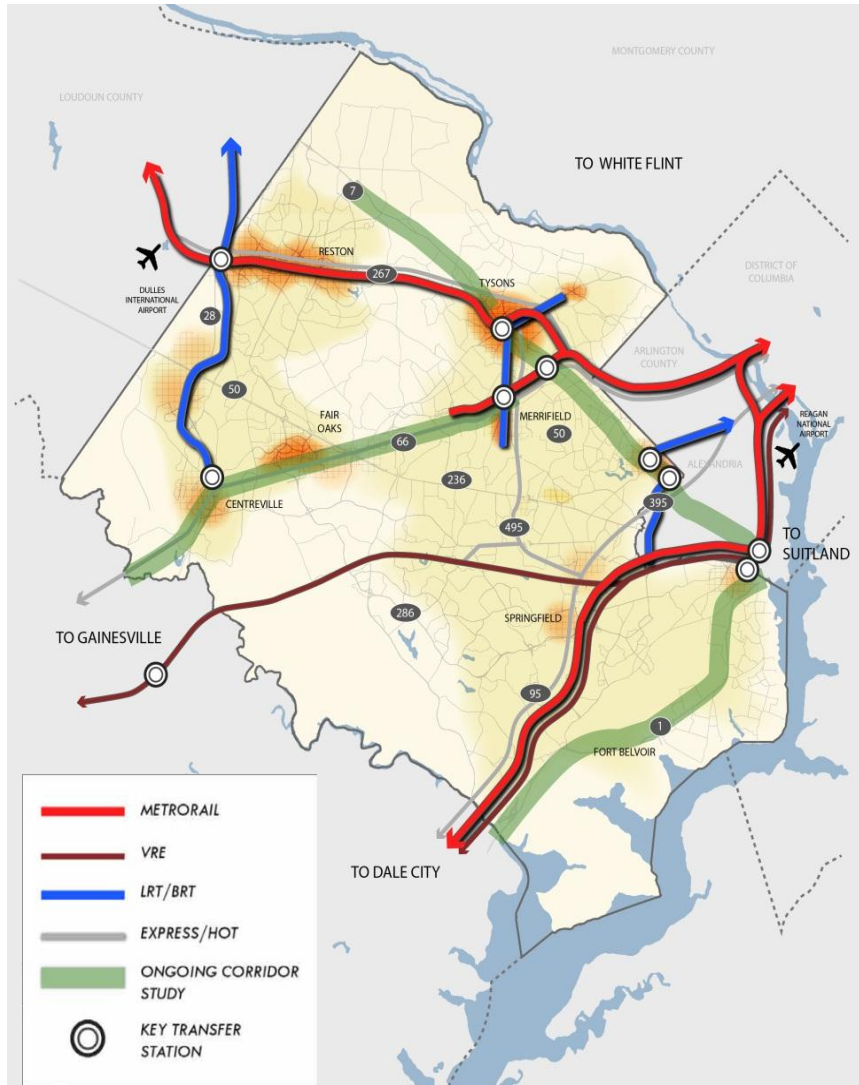
- Route 1 Alternatives Analysis
- Route 7 Alternatives Analysis (Tysons to Alexandria)
- Route 7 High Occupancy Toll Lane Study (North of DTR)
- I-66 Environmental Impact Statement (EIS)

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



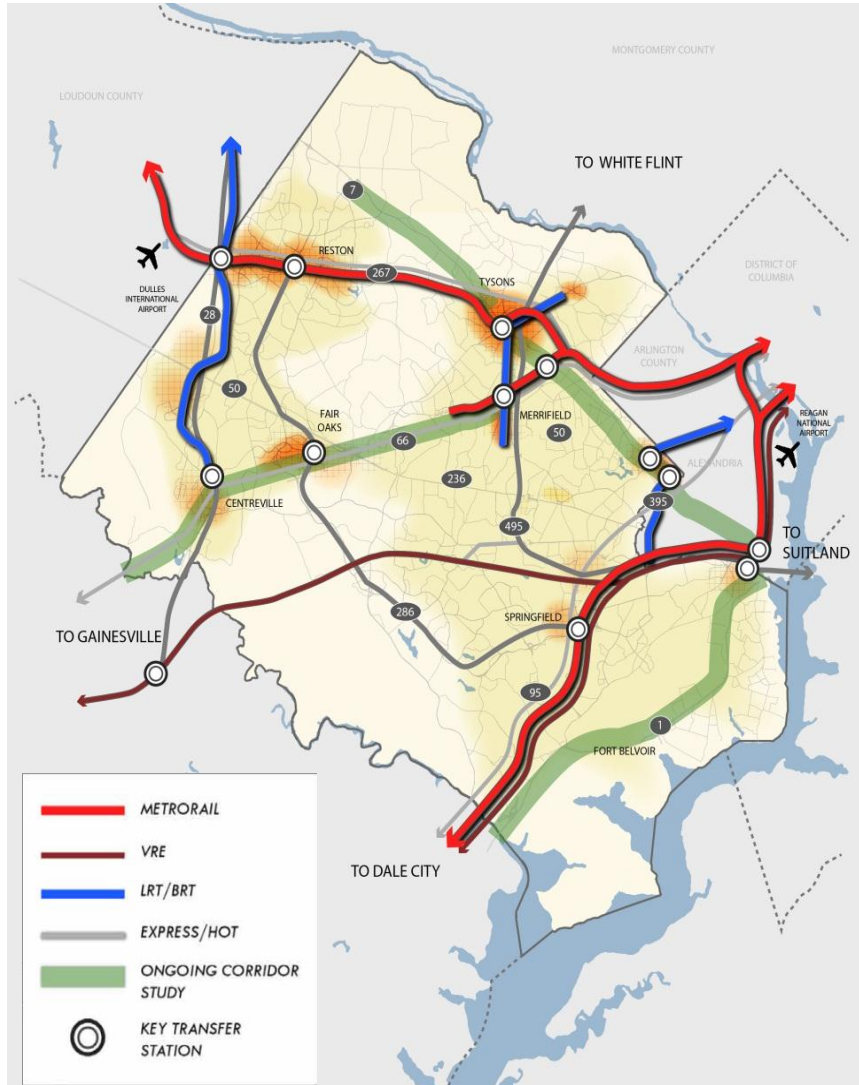
Commuter Corridors provide capacity to connect Fairfax County with other jurisdictions for longer-distance trips as region expands over time:

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



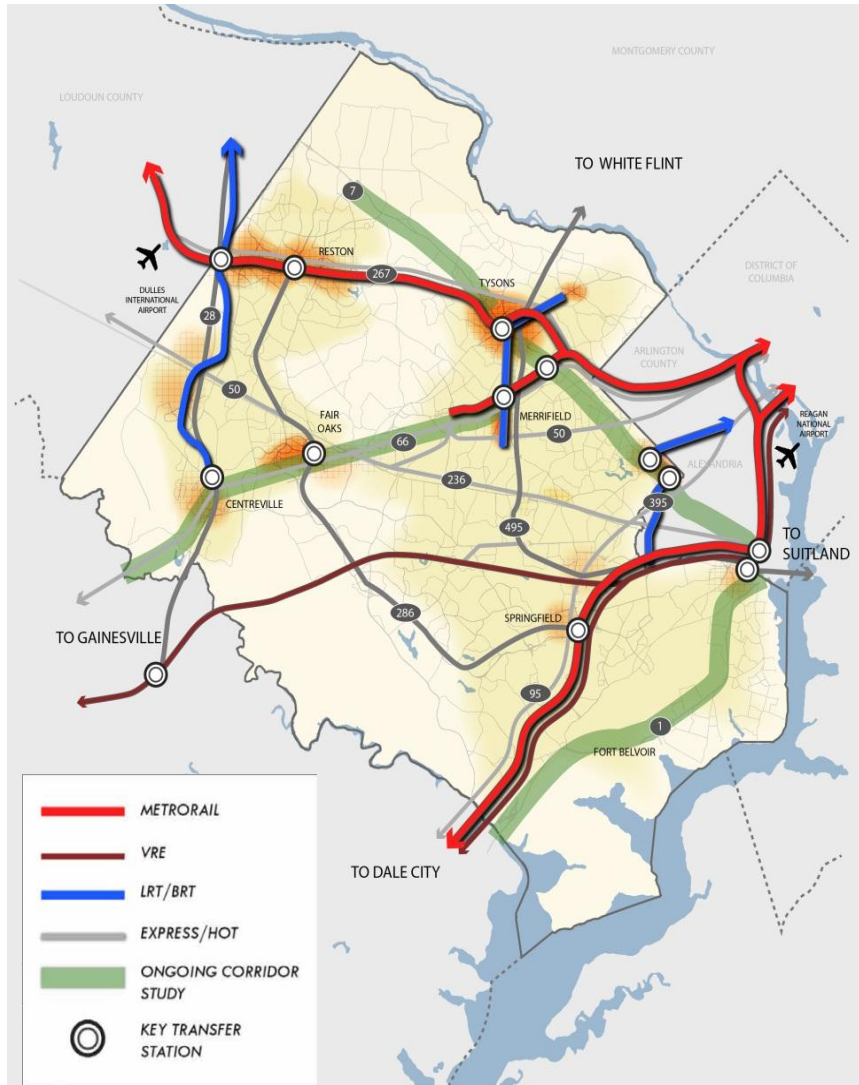
Destination Corridors provide service to support access to and within transit-oriented development along linear corridors:

- 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



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:

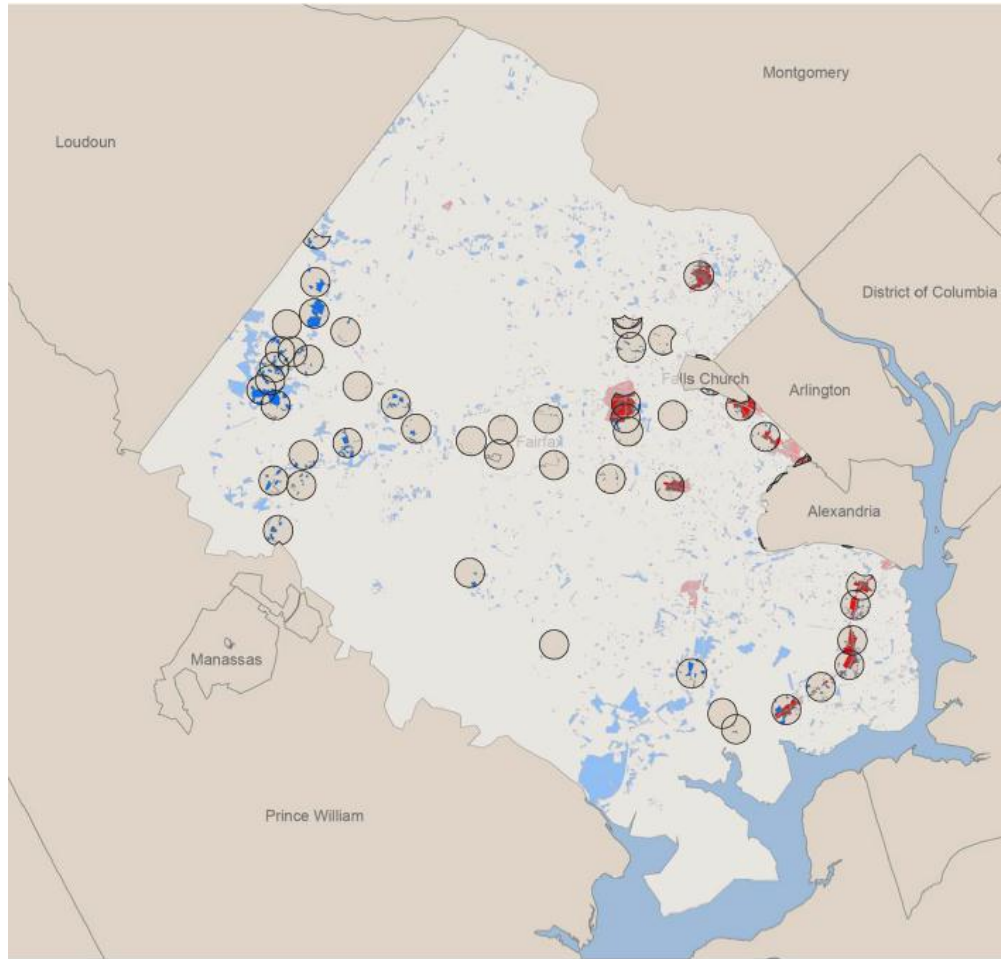
- 114 miles & 21 stations Express Bus



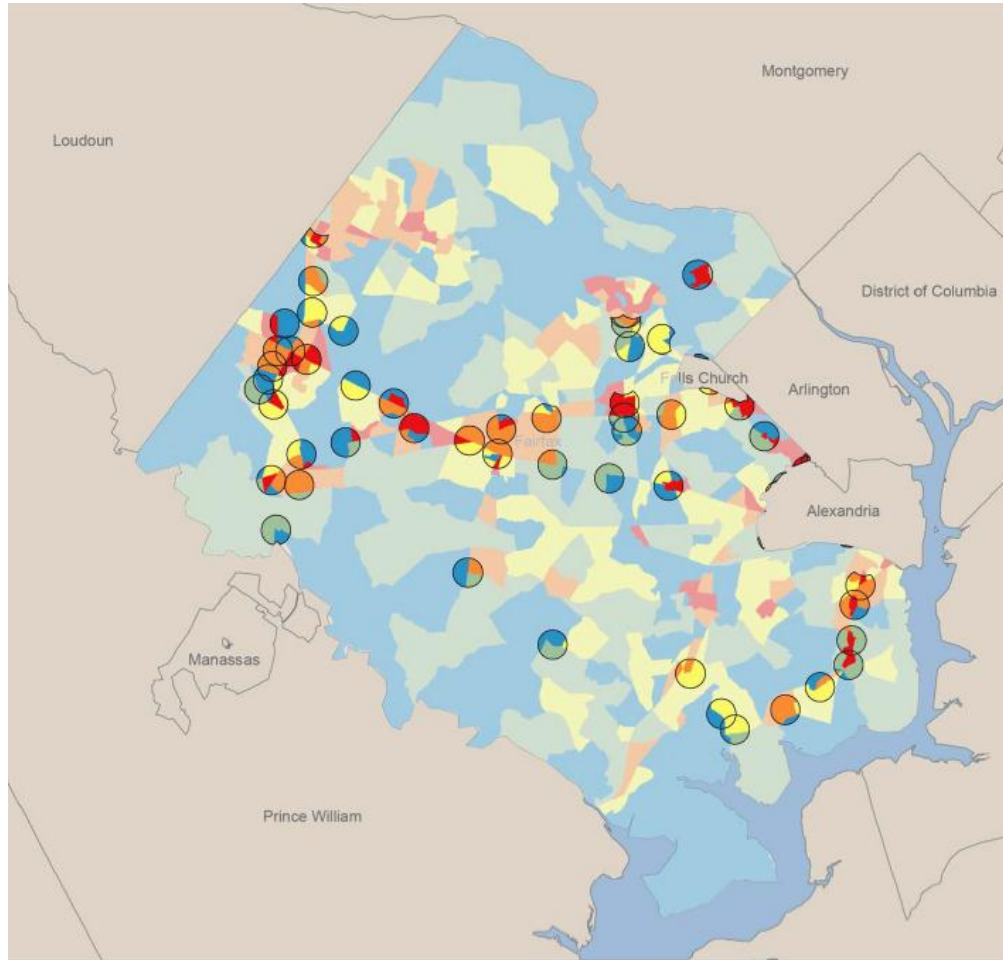
Final Network Concept to be defined in coordination with ongoing studies.



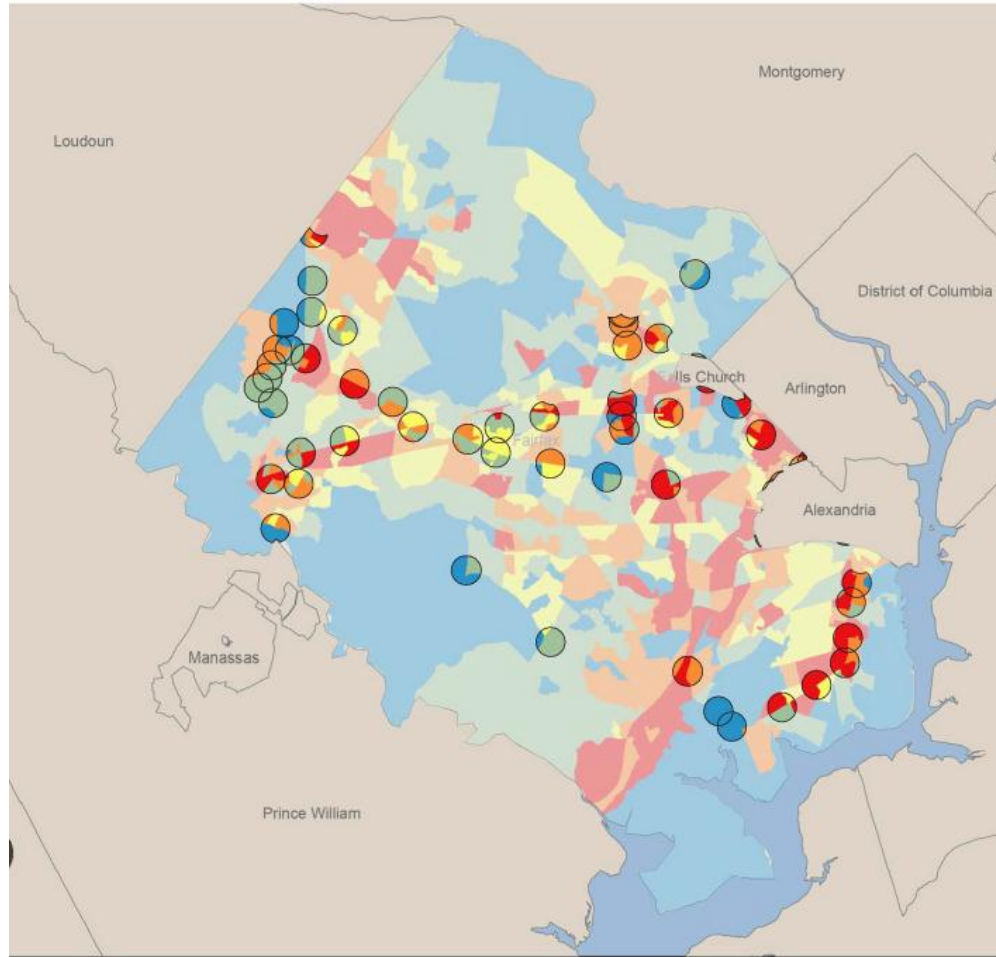
Goal	Achievement (compared to 2050 CLRP conditions)
<p>CONNECT</p> <p><i>Provide more transportation choices for Fairfax County and regional connectivity</i></p>	Allows average County resident to reach 190,000 more jobs within a 45 minute transit commute
	Increases Fairfax County transit trips by 150,000 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
<p>GROW</p> <p><i>Support local and regional economic development goals</i></p>	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
<p>THRIVE</p> <p><i>Strengthen quality of life by making transit-friendly, sustainable investments</i></p>	Serves 28 new station areas with higher than average transit dependency.
	Reduces weekday peak period Vehicle Hours of Travel by 68,000
	Furthers Comprehensive Plan concepts for Enhanced Public Transportation Corridors



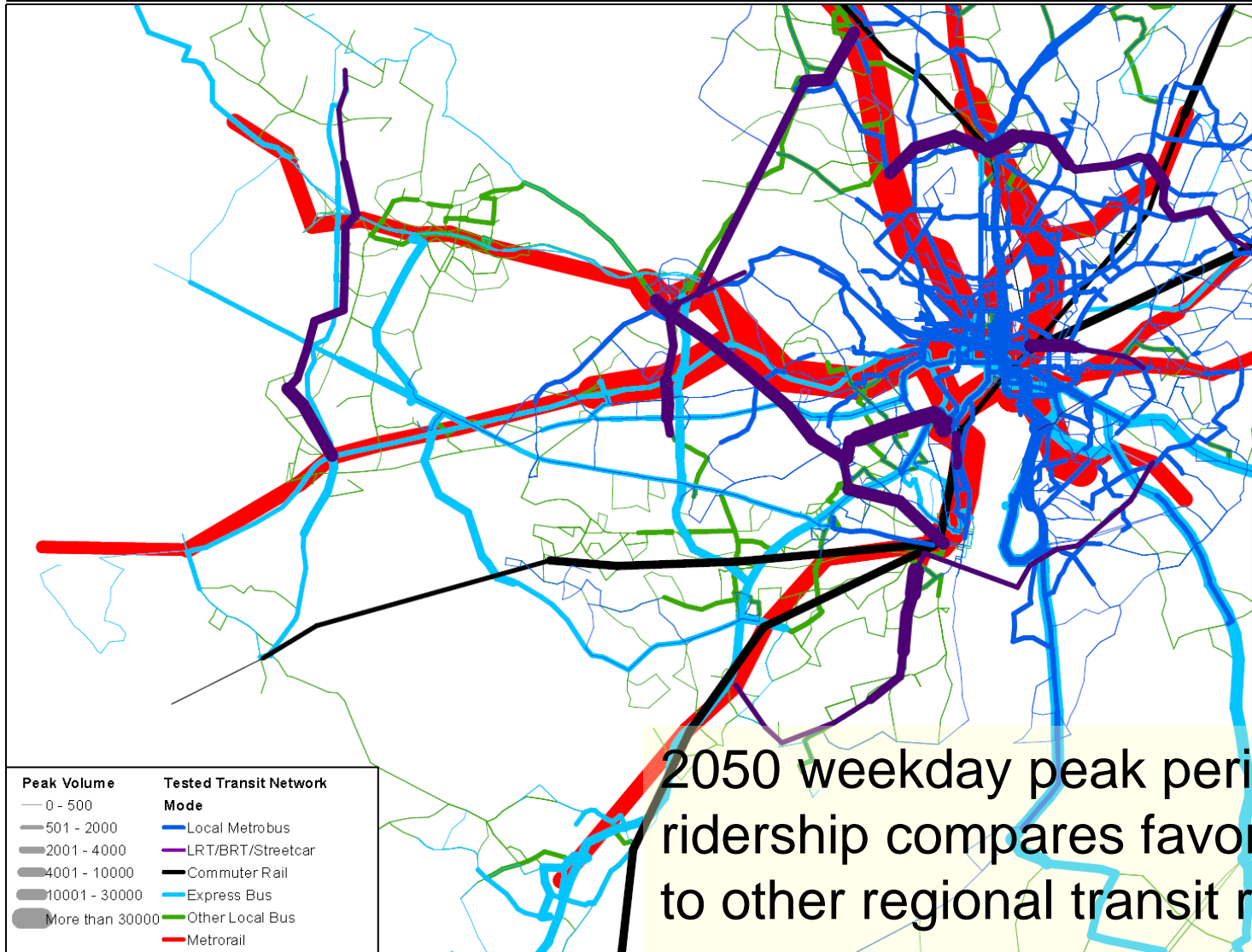
The tested transit network provides new destination corridor transit routes to serve places with **developable properties** and **designated revitalization areas**

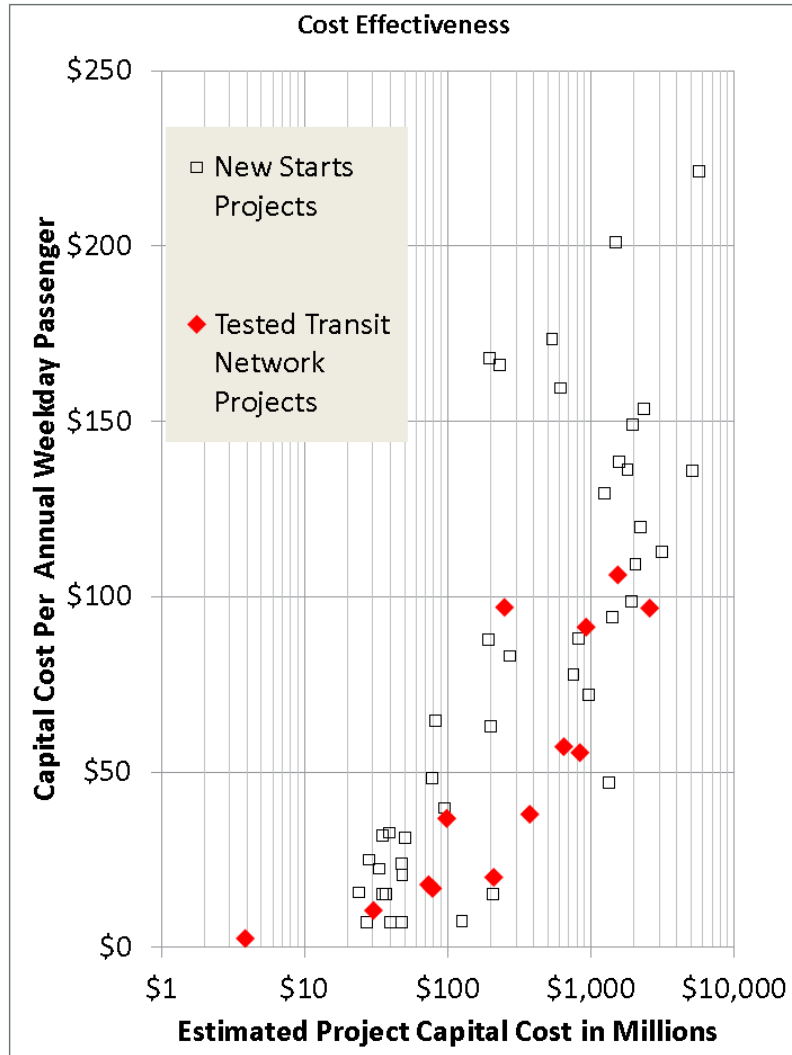


The tested transit network provides new transit access to activity centers with key retail/service destinations

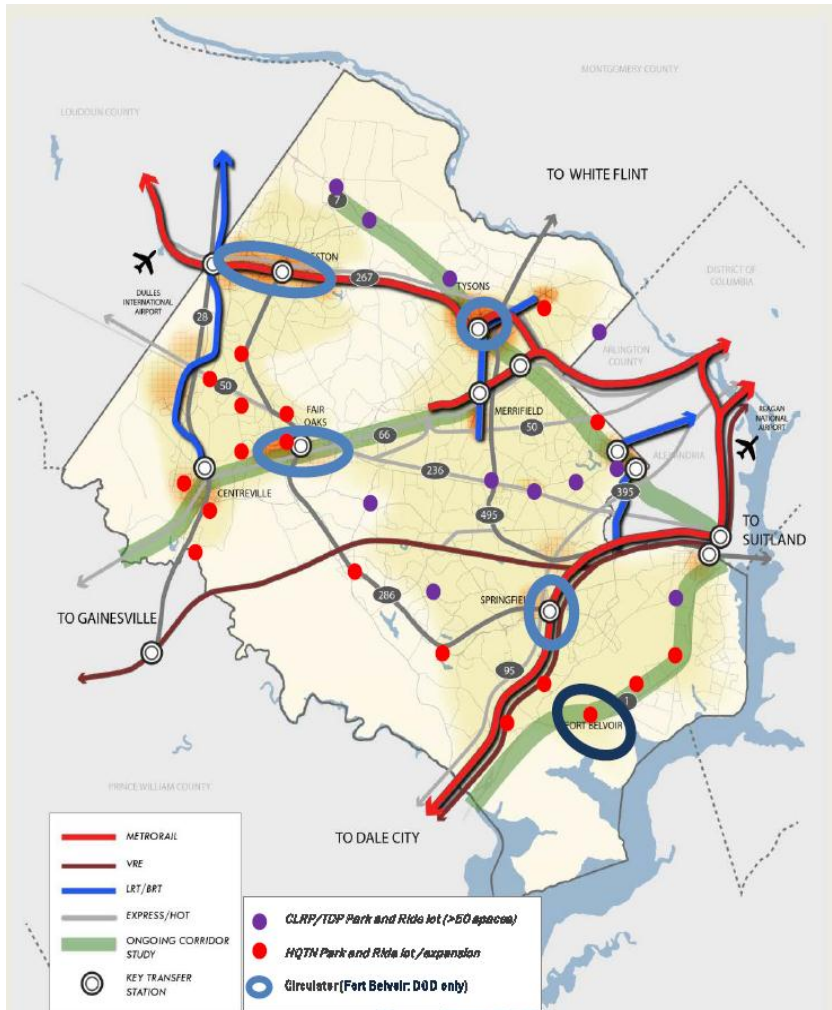


The tested transit network provides new transit access to activity centers with higher than average levels of transit ridership propensity based on transit dependency.





- 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



Transit-oriented community designs promote safe and effective pedestrian and bicyclist access to stations.

Feeder bus, **park and ride** (beyond existing or **TDP/CLRP** spaces), and **circulator** systems provide broader access to commuter services and increased coverage within larger activity centers.

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

Campaigns

Fairfax Countywide Transit Network Study

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circulators brt streetcar

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 **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.

14
votes

 **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.

12
votes

 **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.

10
votes

 **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.

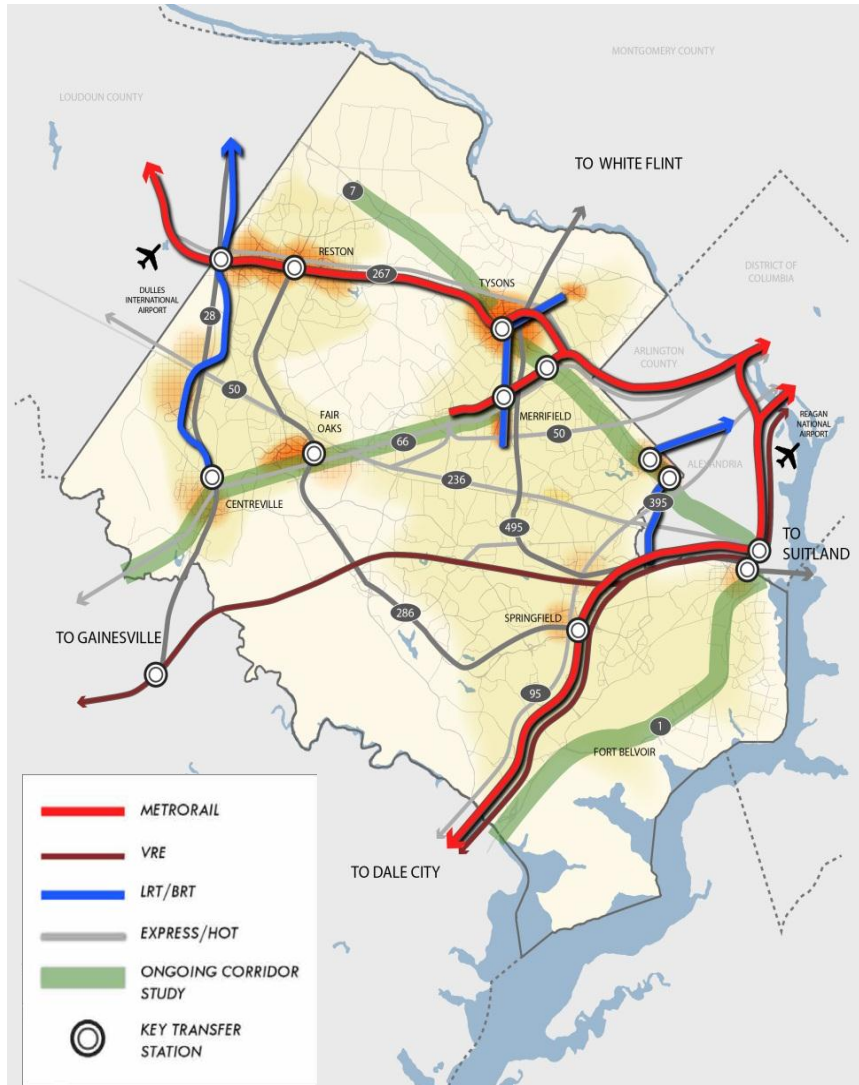
9
votes

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

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