



FAIRFAX COUNTY COUNTYWIDE TRANSIT NETWORK STUDY

**Board of Supervisors
Transportation Committee
June 25, 2013
(6/18 presentation draft)**

**Proposed
High Quality Transit Network Concept**



Presentation Agenda

1. Where are we in the study process?
2. Proposed HQTN Concept network/elements
3. Measures of effectiveness
4. Next steps





Where are we in the study process?

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

- Goals/objectives (July 2012)
- Functions (November 2012)
- *Proposed HQTN Concept (July 2013)*
- Final concept (November 2013)

Our next steps are to:

- Review *Proposed HQTN Concept*
- Consider refinements
- Develop additional details on mode, right-of-way, and station locations
- Finalize recommendations





Study goals and objectives

Goal	Objective
CONNECT <i>Provide more transportation choices for Fairfax County and regional connectivity</i>	Enhance transit connections
	Increase ridership
	Improve directness of travel
	Consider transit system cost-effectiveness
GROW <i>Support local and regional economic development goals</i>	Support investment in designated activity centers
	Encourage transit oriented development
THRIVE <i>Strengthen quality of life by making transit-friendly, sustainable investments</i>	Increase access to cultural venues and community facilities
	Reduce environmental and social impacts
	Support countywide vision and livability

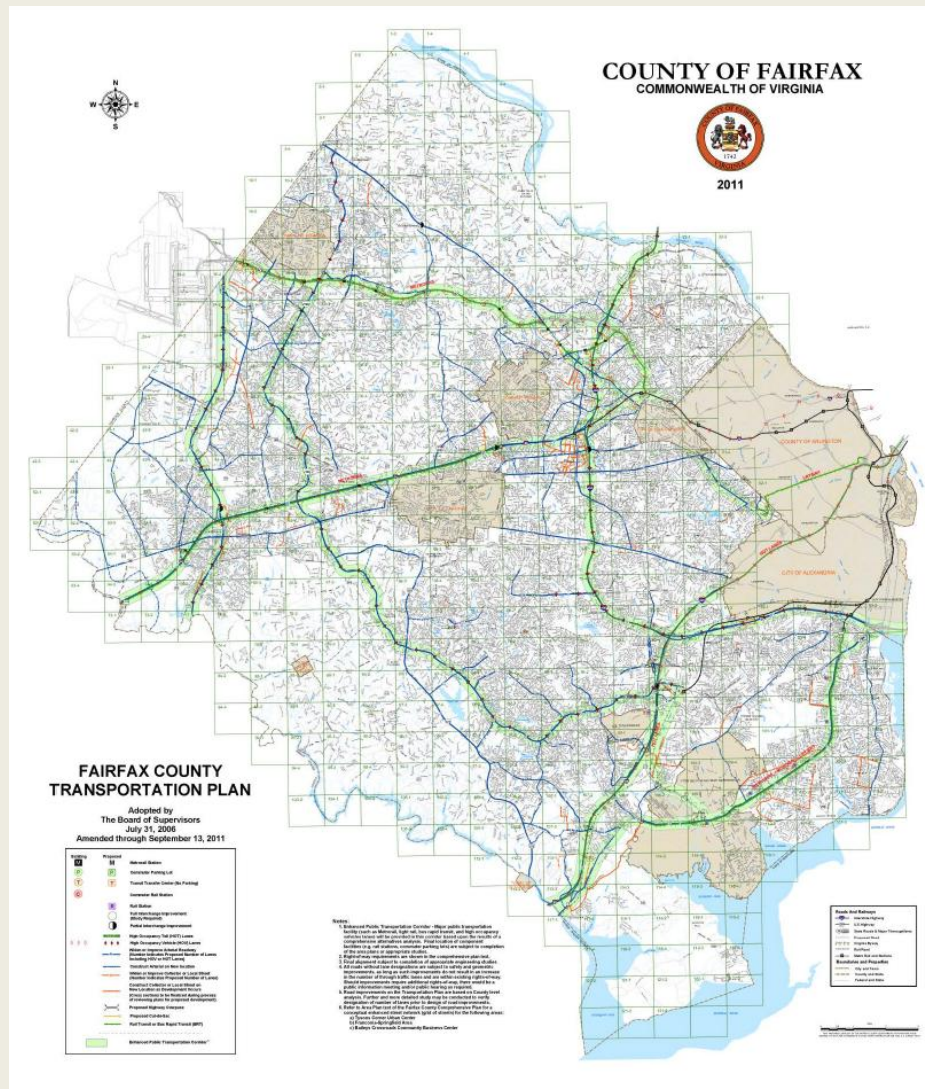
The study goals and objectives reflect the triple-bottom line of economic, environmental, and social benefits.





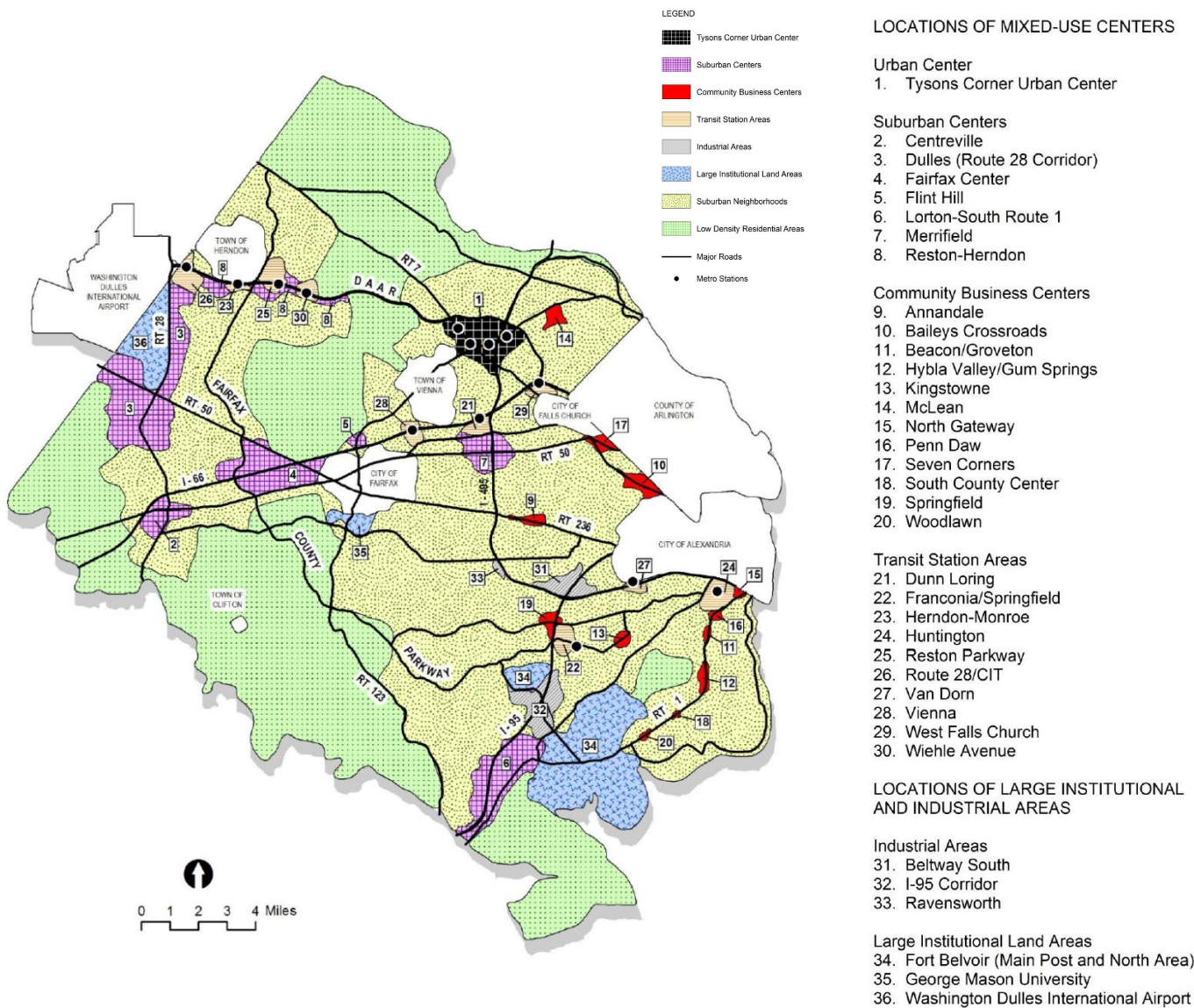
Study purpose

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





Fairfax County Future Development Concept

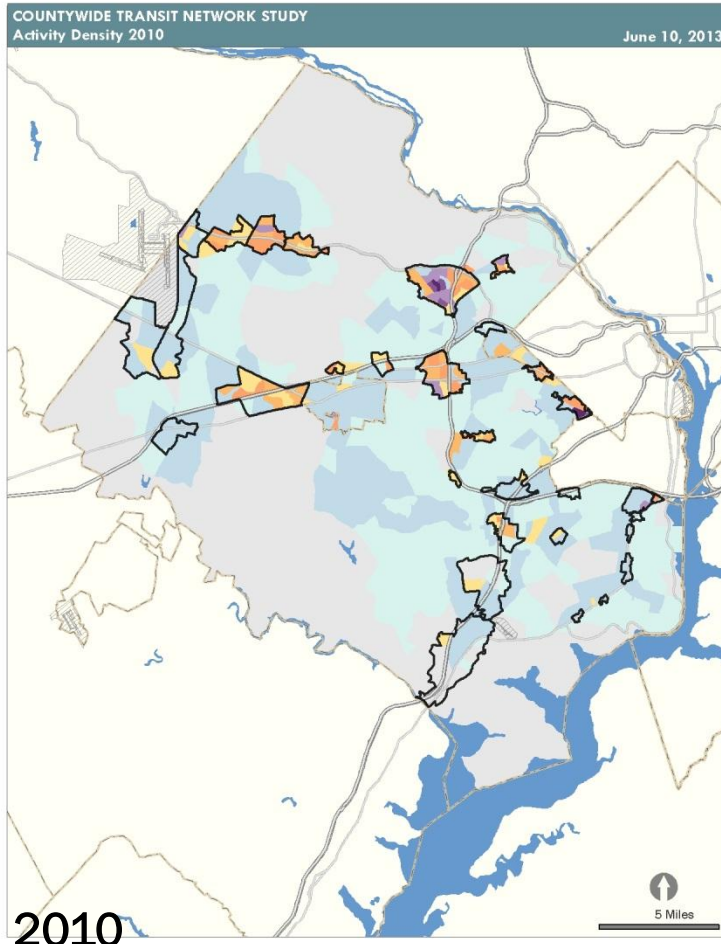




Current land use

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



2010

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

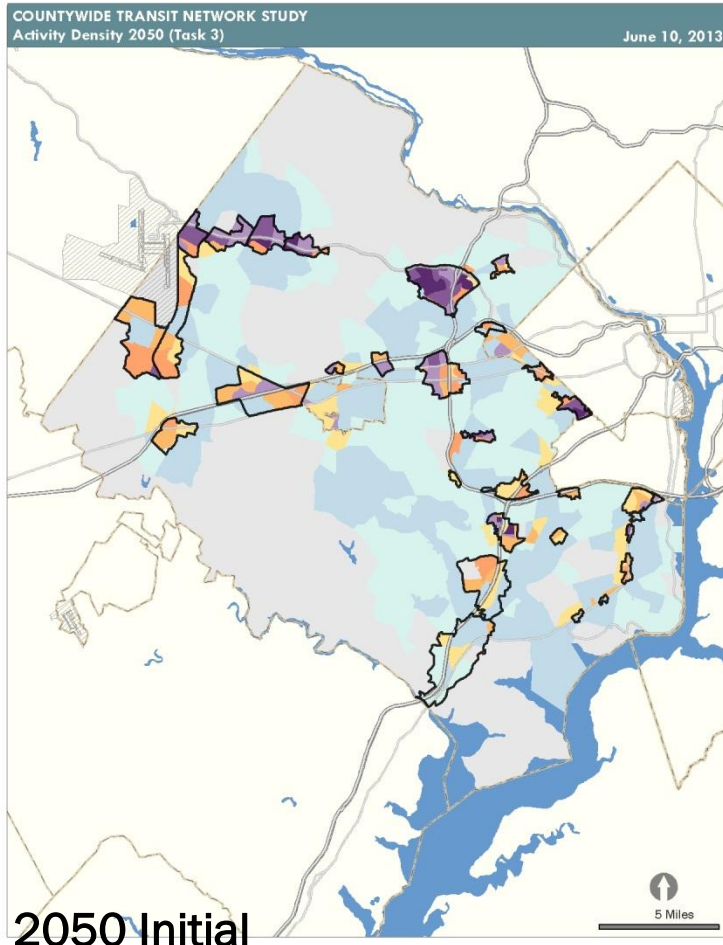




Future land use

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



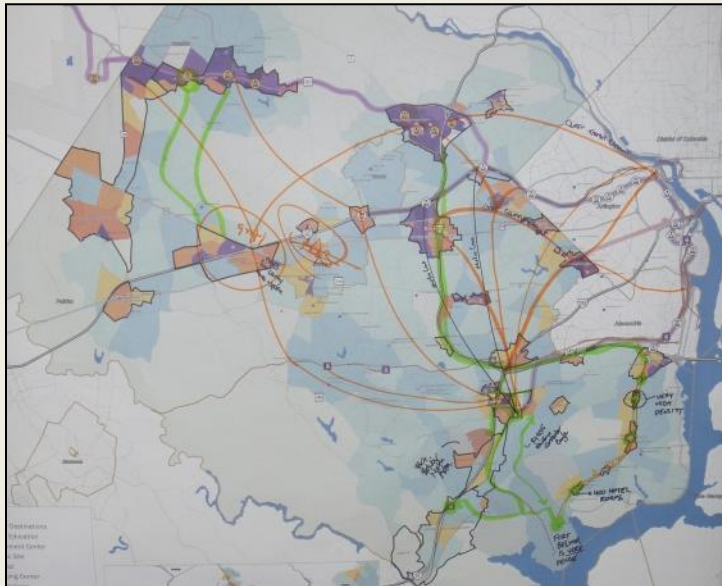


Prior public meetings

Public outreach in July and November 2012 is reflected in our proposed High Quality Transit Network concept.

In July, we reviewed goals, objectives, and potential connections.

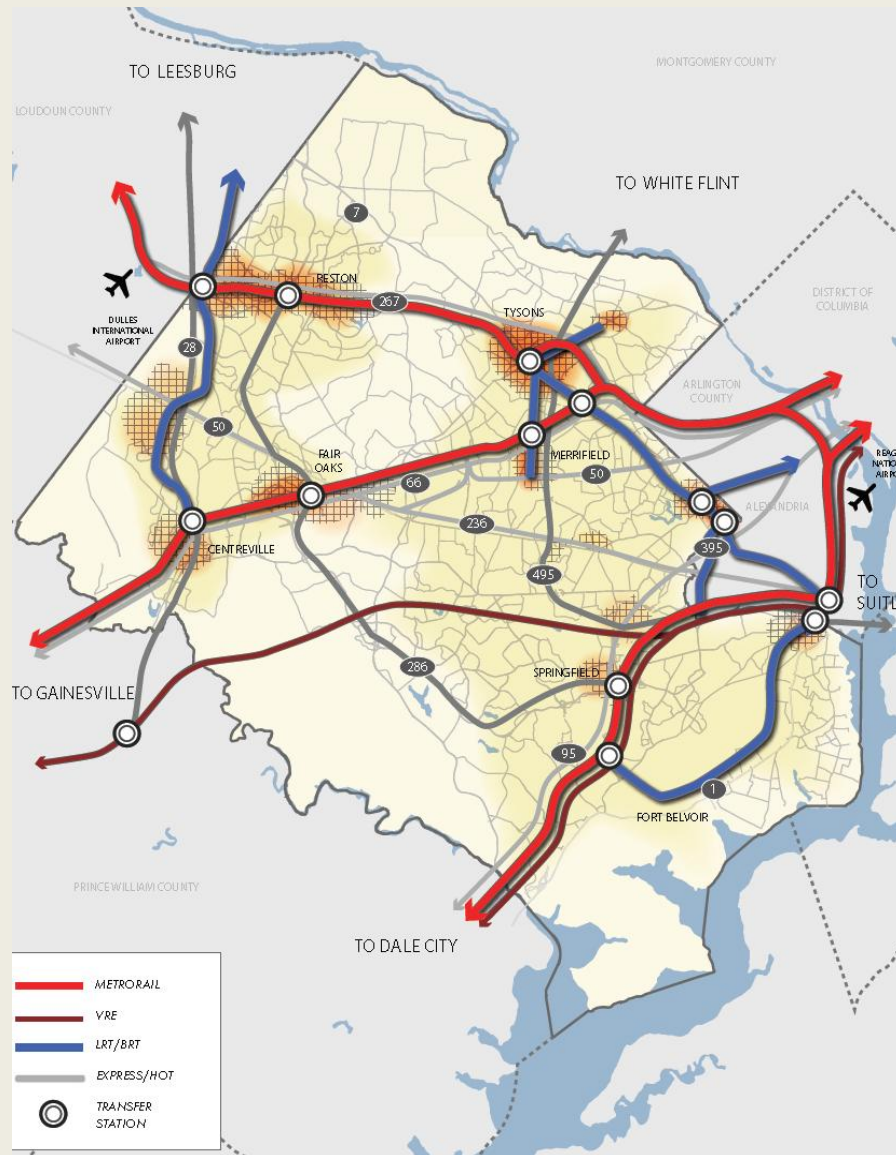
In November, we presented concepts for establishing premium commuter, connector, or destination transit corridors.





Proposed HQTN Concept

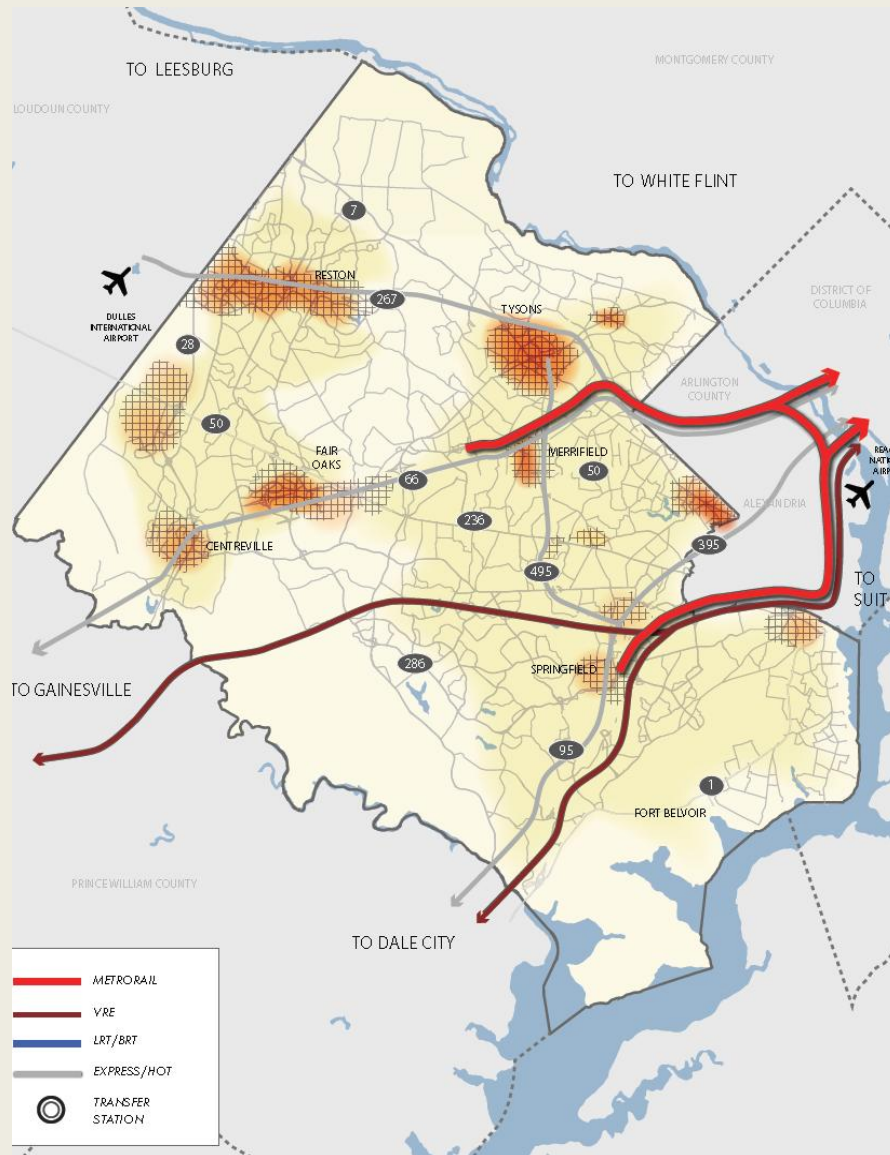
The Proposed HQTN Concept builds upon the existing and Constrained Long Range Plan (CLRP) transit investments to create an interconnected network of commuter corridors, destination corridors, and connecting express bus routes.





HQTN Concept Elements

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

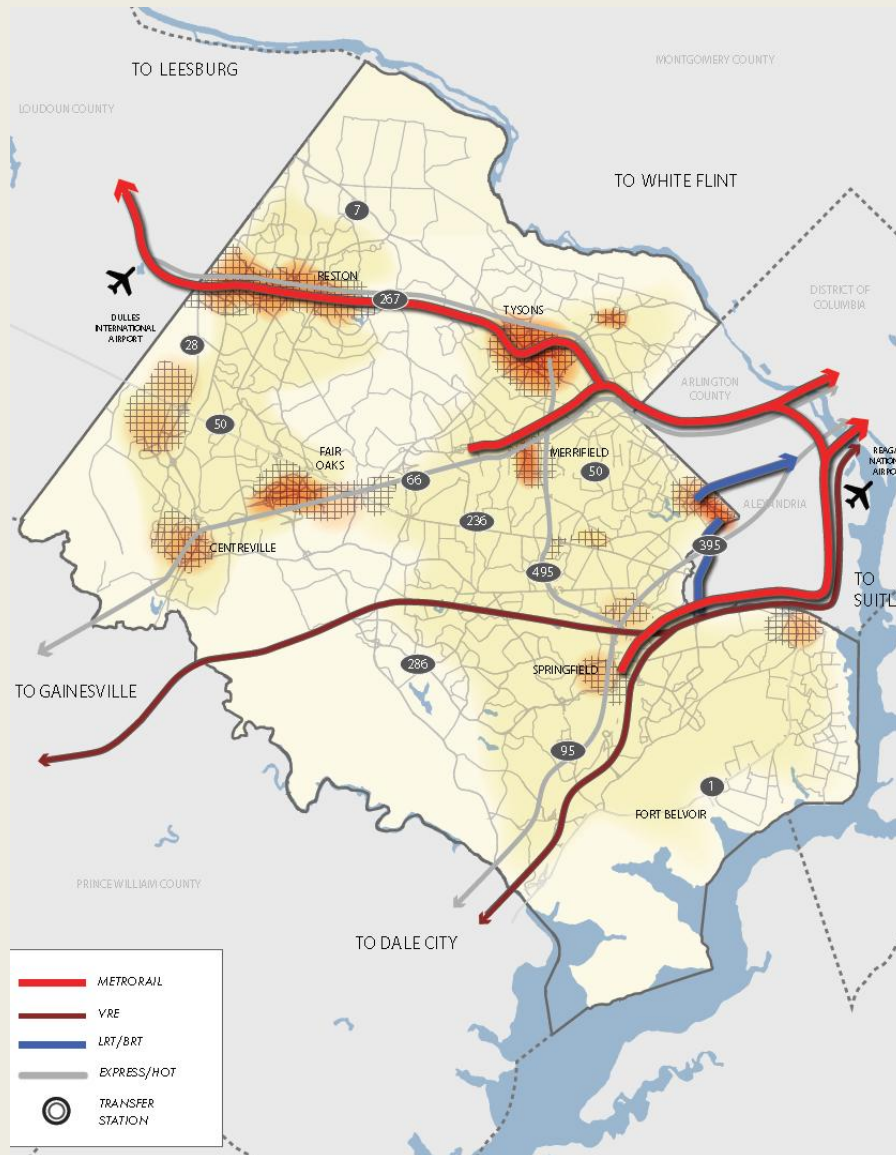




HQTN Concept Elements

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

- Silver Line
- Columbia Pike
- Beauregard/Van Dorn Transitway



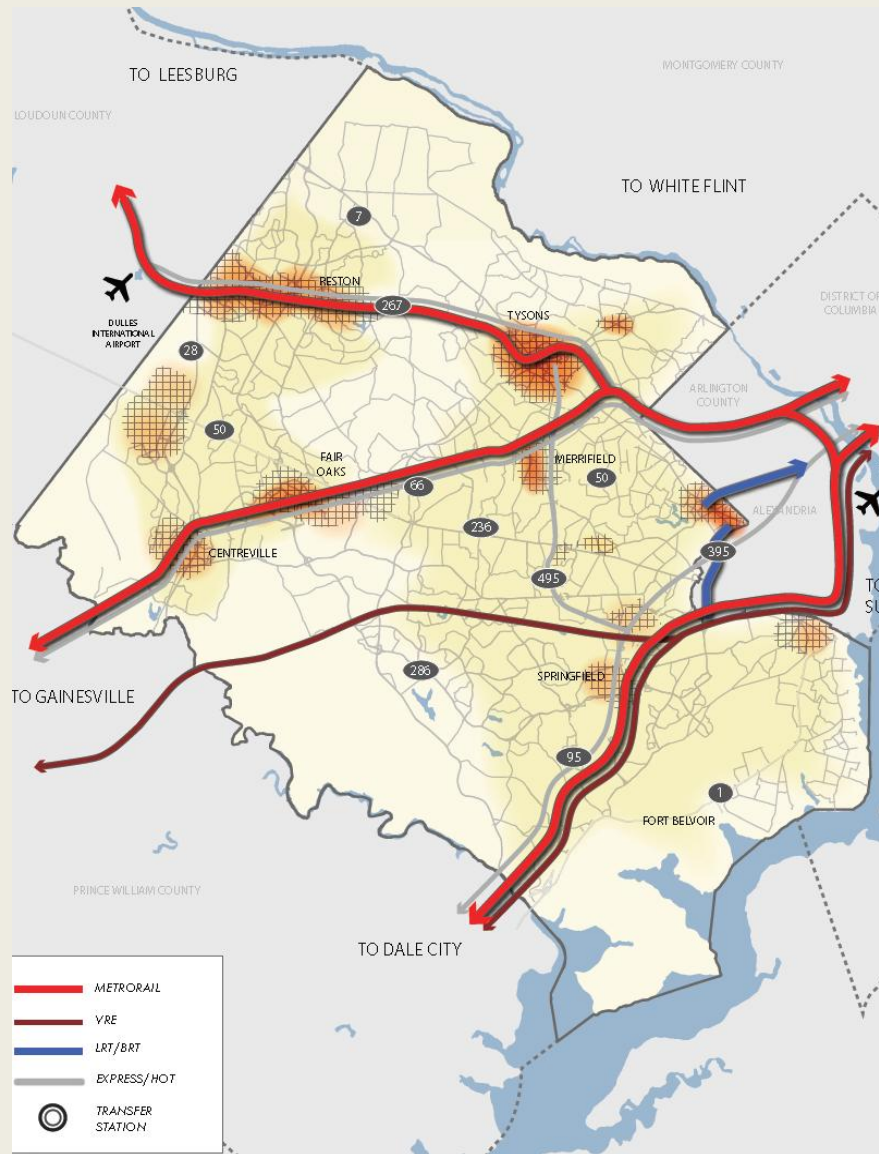


HQTN Concept Elements

Commuter Corridors

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

- Metrorail Orange Line Extension
- Metrorail Blue Line Extension



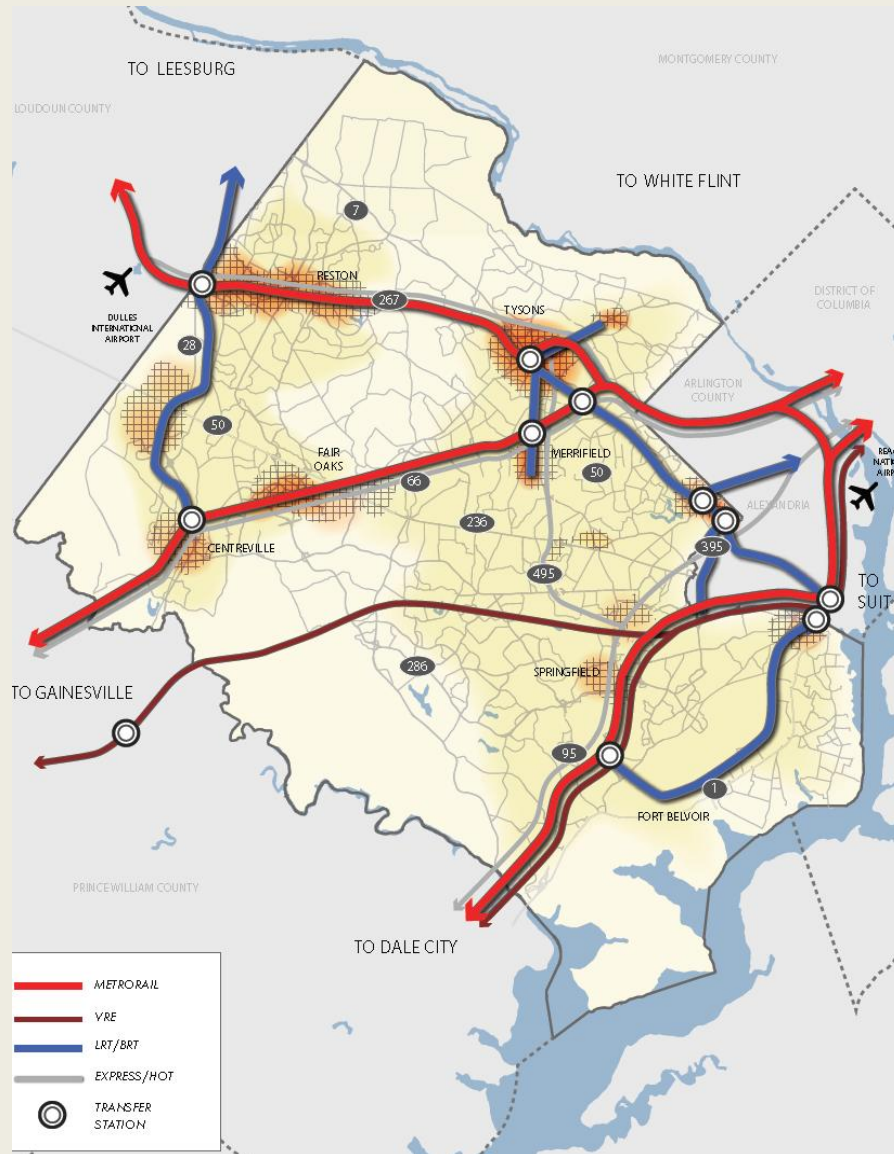


HQTN Concept Elements

Destination

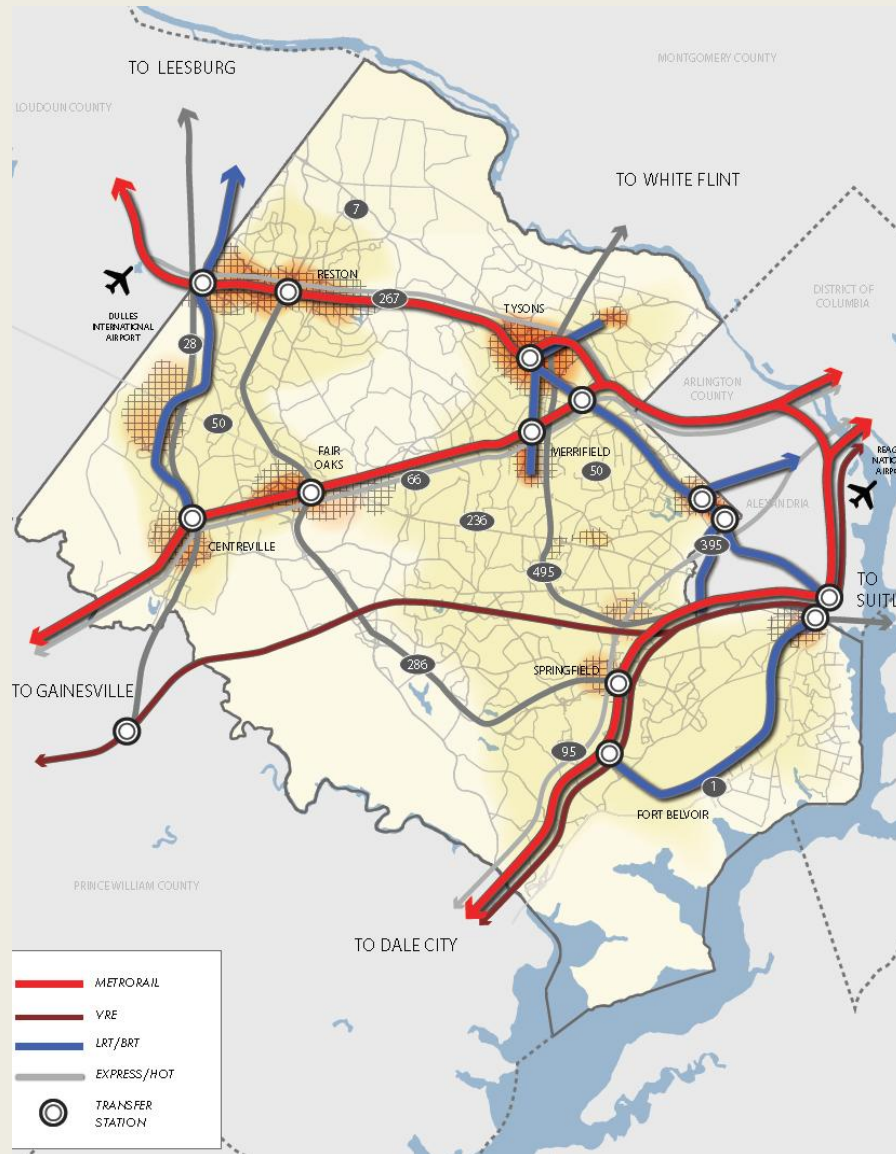
Corridors provide service to support access to and within transit-oriented development along linear corridors:

- Route 7 LRT
- Richmond Highway LRT
- Route 28 LRT/BRT
- Merrifield/McLean LRT/BRT





HQTN Concept Elements



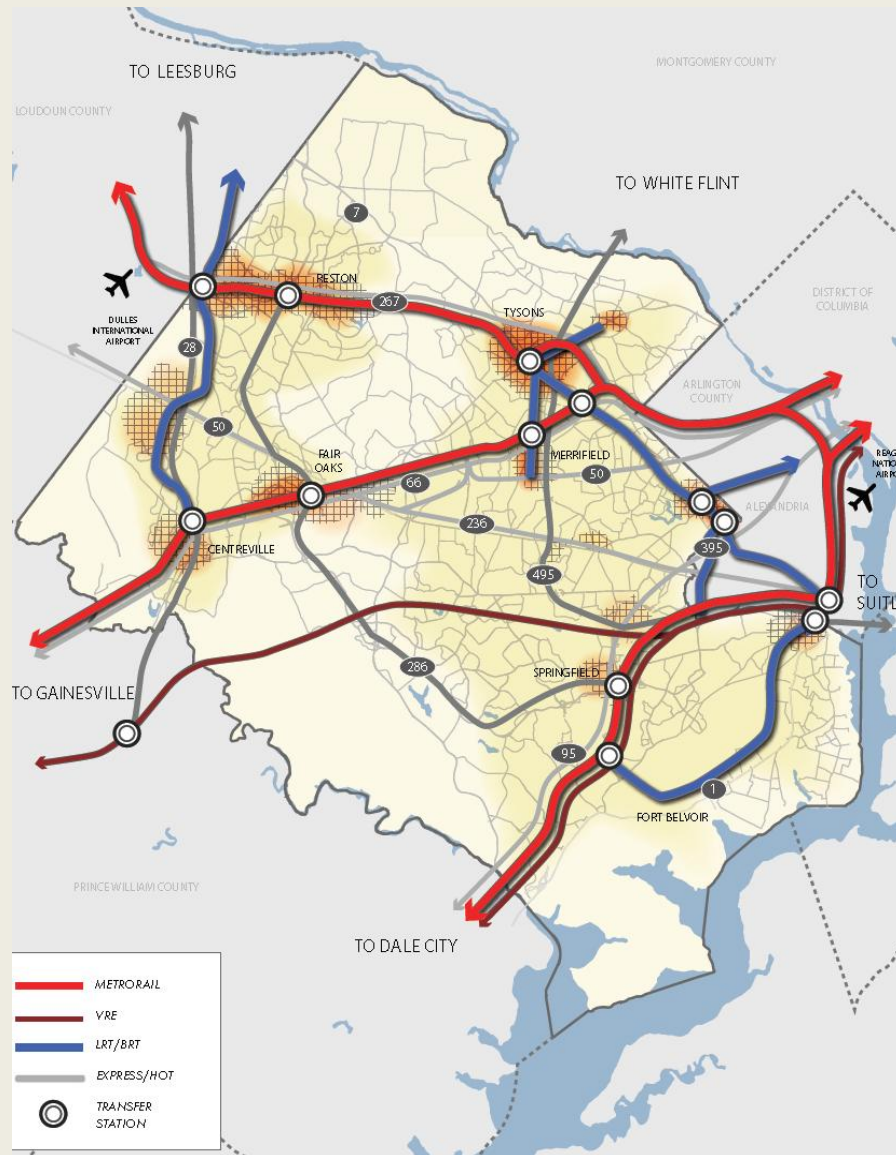
North-South Express Bus Services connect activity centers and HQTN services in radial corridors and provide flexibility for through-routing:

- Beltway Express
- Fairfax County Parkway
- Route 28
- May share managed lanes with HOV





HQTN Concept Elements



**East-West
Express Bus
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



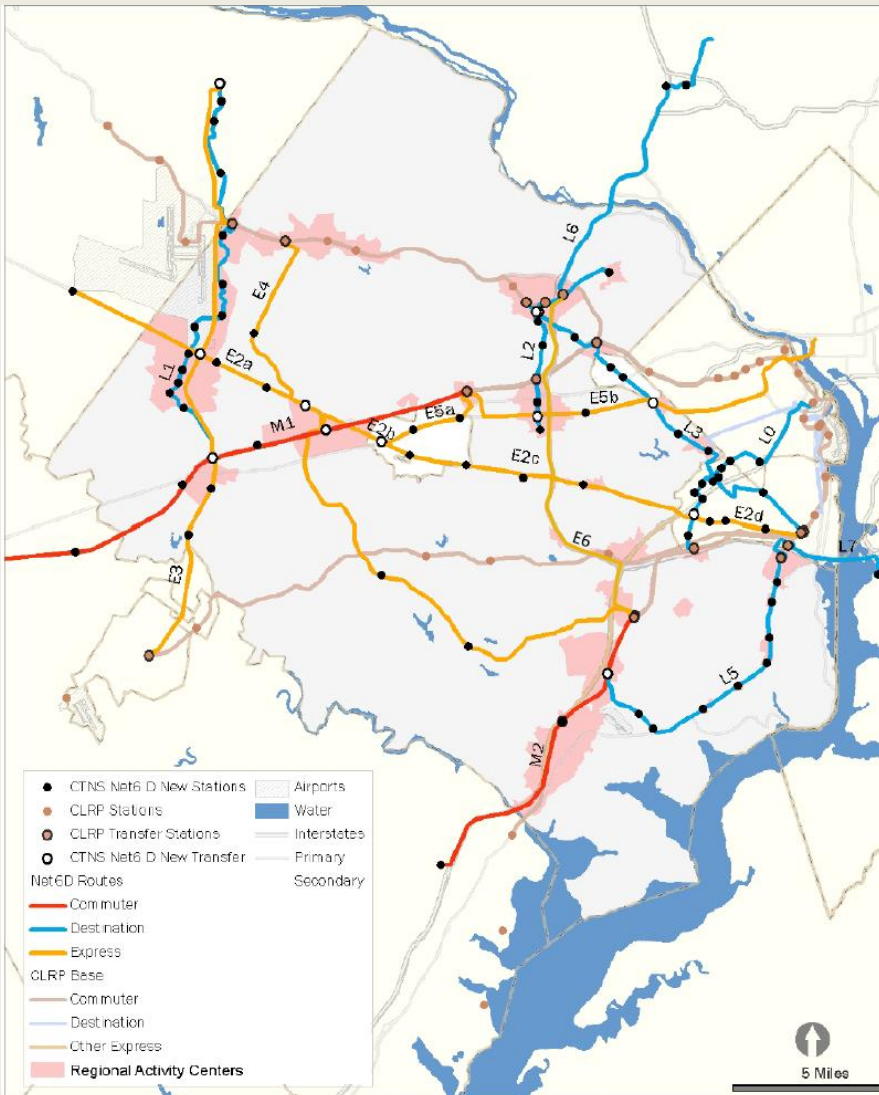


HQTN Concept Elements

The Proposed HQTN Concept includes 214 miles of new transitway and 74 new stations.

The mileage includes:

- 31 miles **Metrorail**
- 73 miles **LRT/BRT**
- 110 miles **express bus**



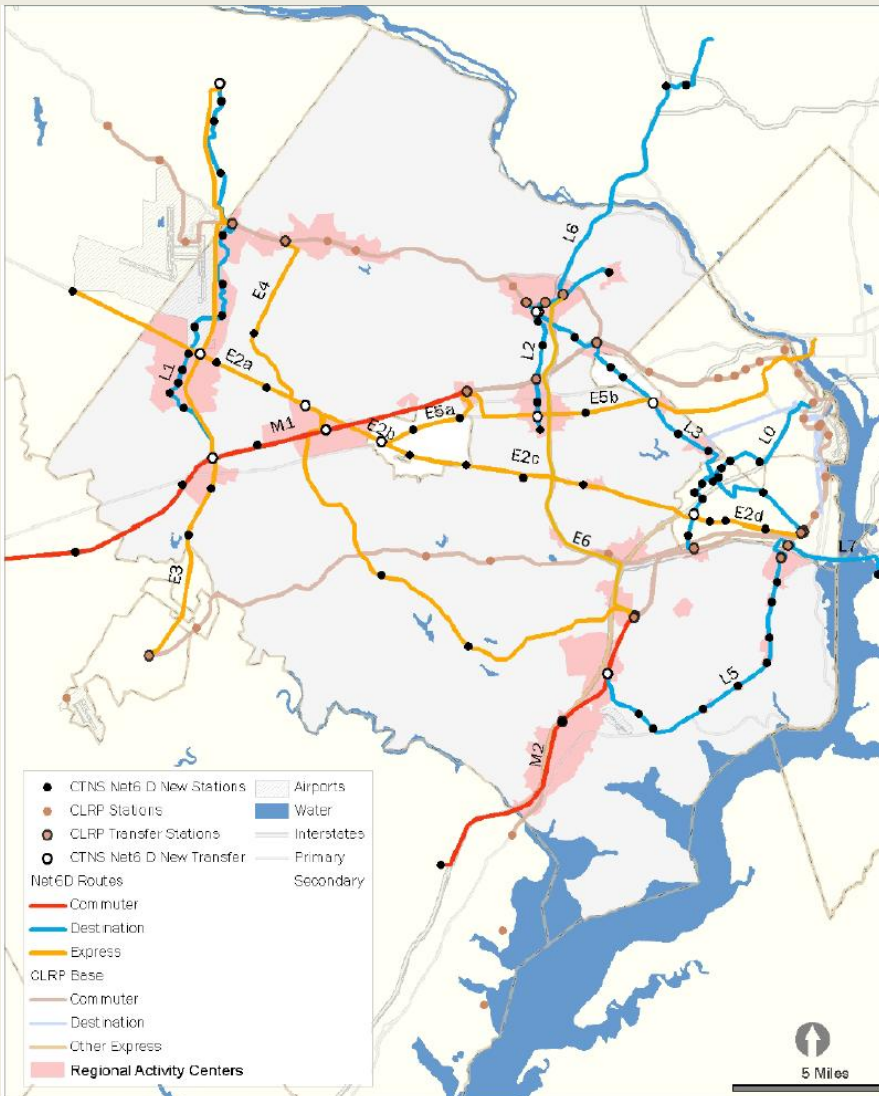


HQTN Concept Elements

The Proposed HQTN Concept has an estimated capital cost of about \$7.5 billion in current dollars

The cost includes:

- \$4.0B **Metrorail**
- \$3.2B **LRT/BRT**
- \$0.3B **express bus**





Measures of effectiveness

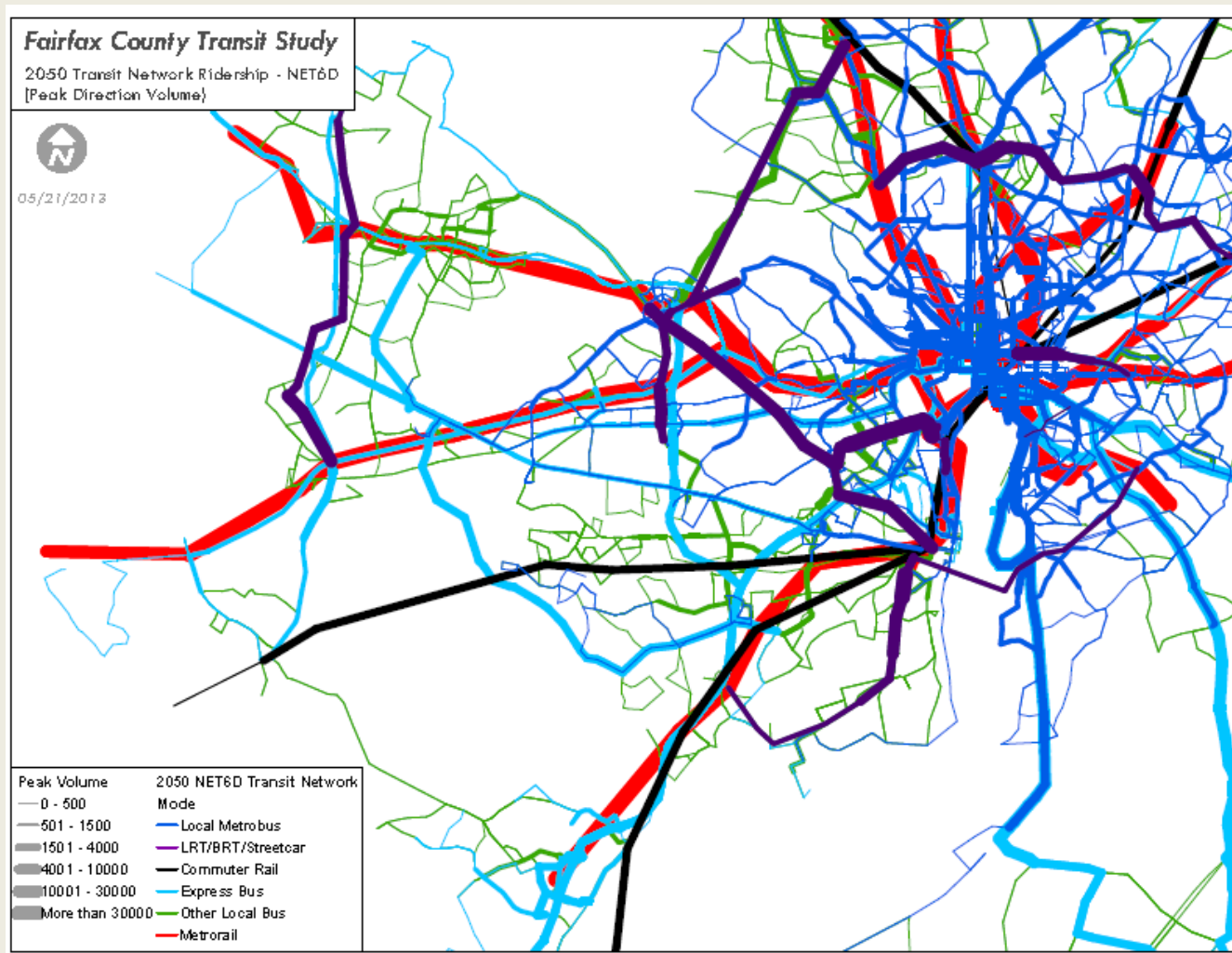
Goal	Achievement (compared to 2050 CLRP conditions)
CONNECT <i>Provide more transportation choices for Fairfax County and regional connectivity</i>	<p>Allows average County resident to reach 190,000 more jobs within a 45 minute transit commute</p> <p>Increases Fairfax County transit trips by 150,000 per day, a 35% increase over base conditions.</p> <p>Introduces rail service to 14 previously unserved activity centers</p> <p>Roughly \$7.5B capital cost has cost per rider consistent with recent New Starts approvals</p>
GROW <i>Support local and regional economic development goals</i>	<p>Serves 27 new station areas within designated activity centers.</p> <p>Brings 120,000 new County households and 263,000 County jobs within ½ mile of high quality transit station</p>
THRIVE <i>Strengthen quality of life by making transit-friendly, sustainable investments</i>	<p>Serves 28 new station areas with higher than average transit dependency.</p> <p>Reduces weekday peak period Vehicle Hours of Travel by 68,000</p> <p>Furtheres 2011 vision of Enhanced Public Transit Corridors</p>

The Proposed HQTN Concept achieves a range of triple-bottom line goals and objectives.





Measures of effectiveness



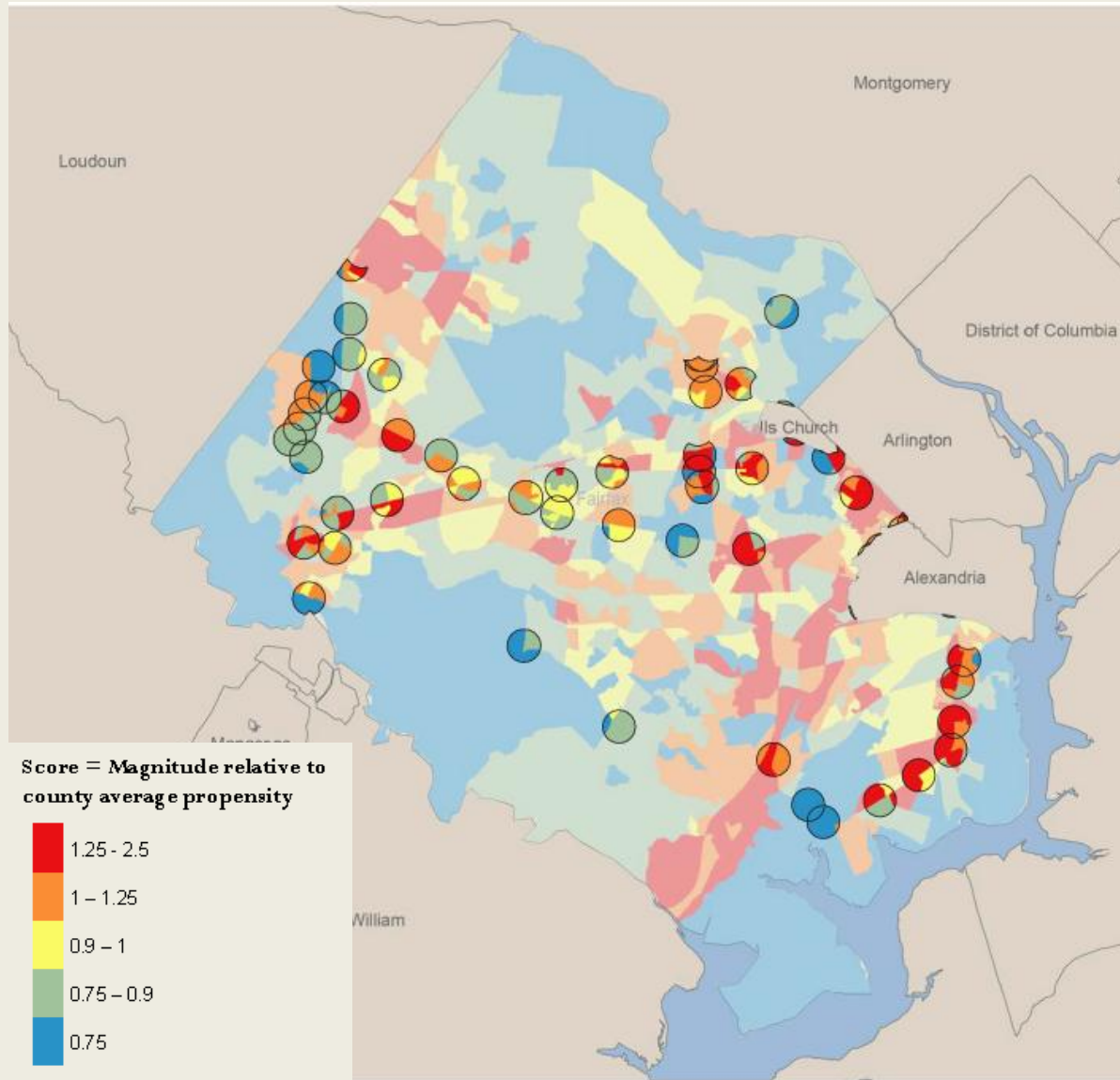
2050 weekday peak period ridership compares favorably to other regional transit routes





Measures of effectiveness

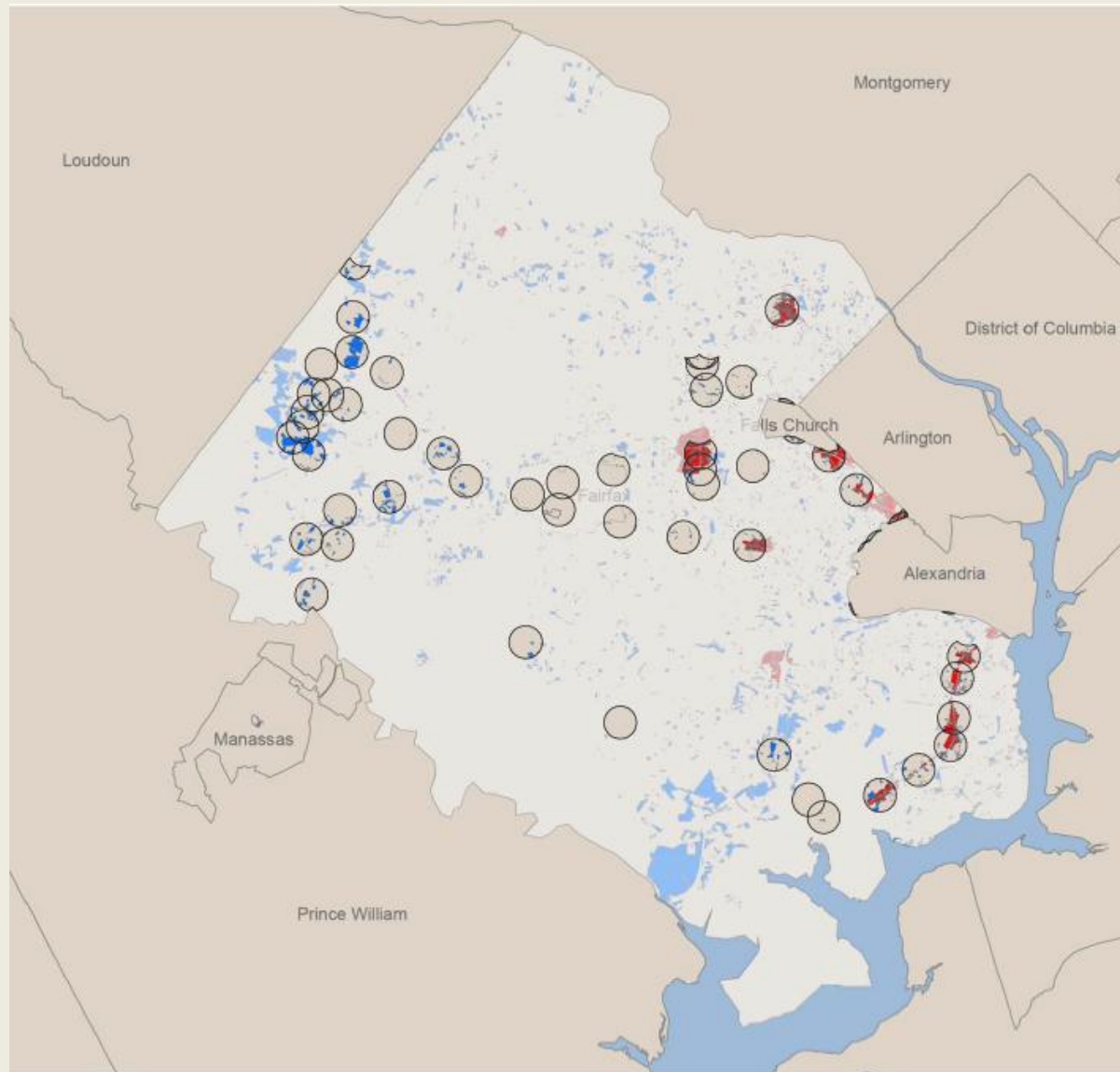
The Proposed HQTN Concept provides new transit access to 28 activity centers with higher than average levels of transit ridership propensity based on transit dependency.





Measures of effectiveness

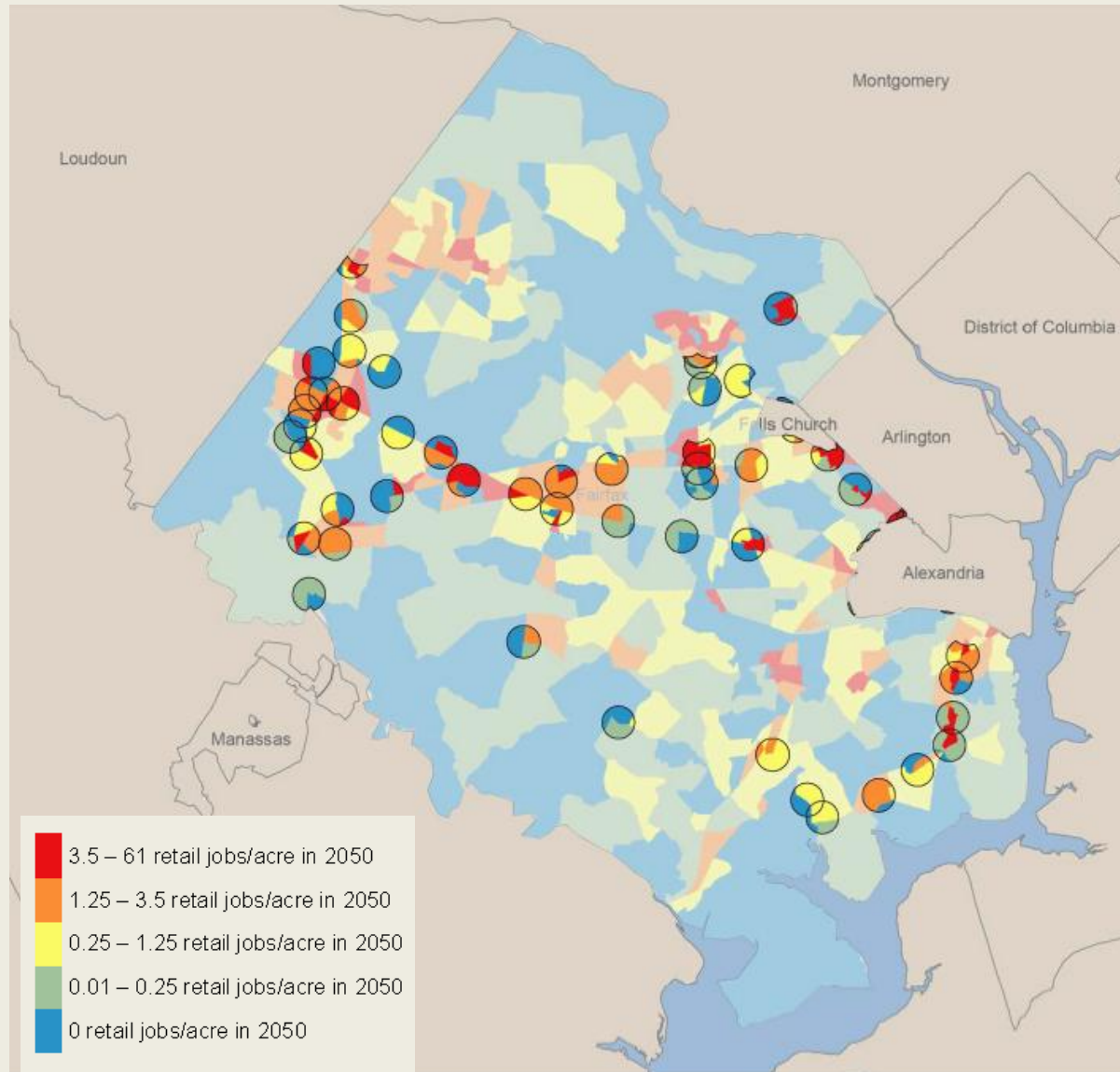
The Proposed HQTN Concept provides new destination corridor transit routes to serve places with **developable properties** and **designated revitalization areas**





Measures of effectiveness

The Proposed HQTN Concept provides new transit access to activity centers with key retail/service destinations



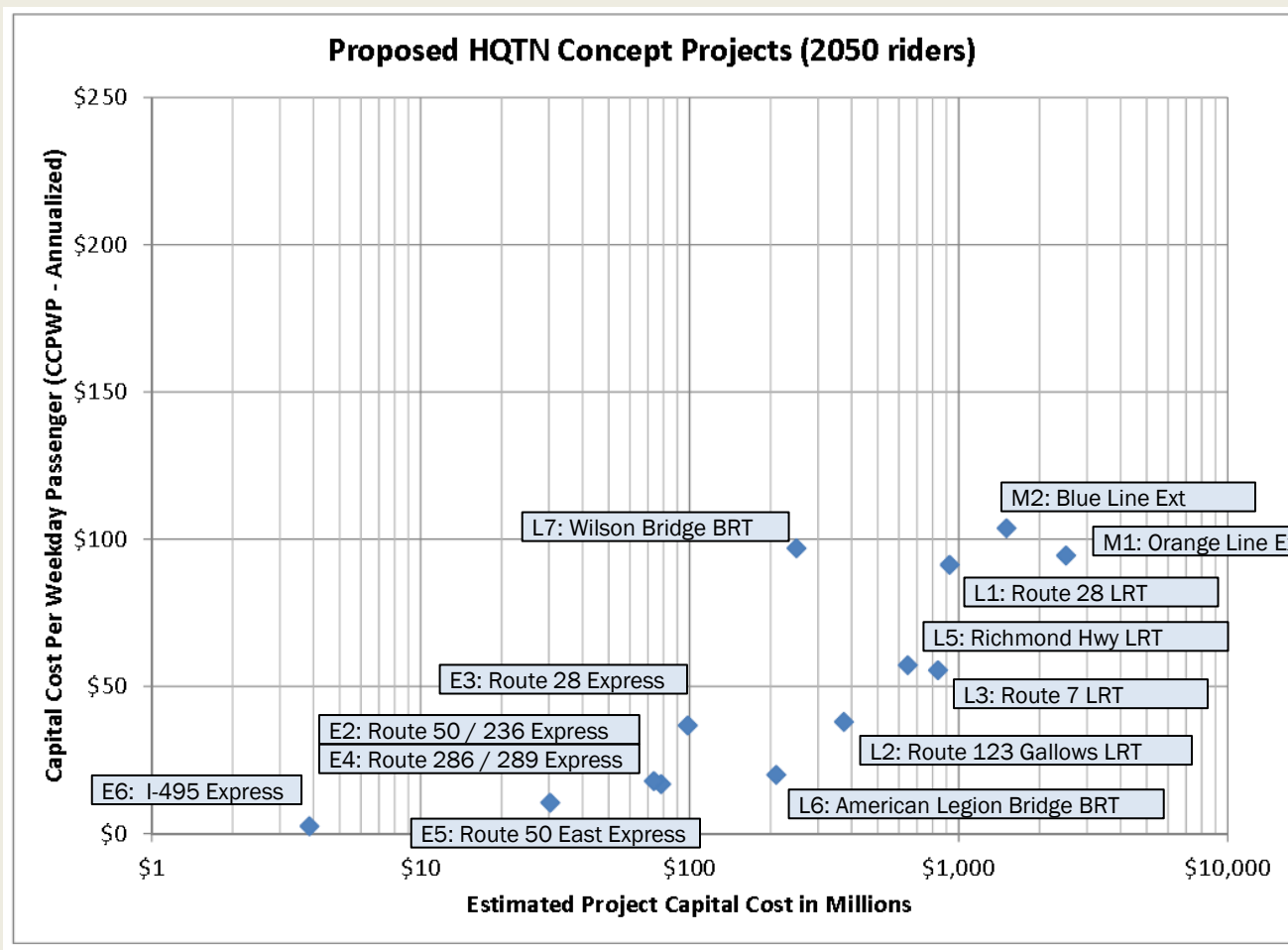
New Starts projects show a relationship between total capital cost and cost per passenger.





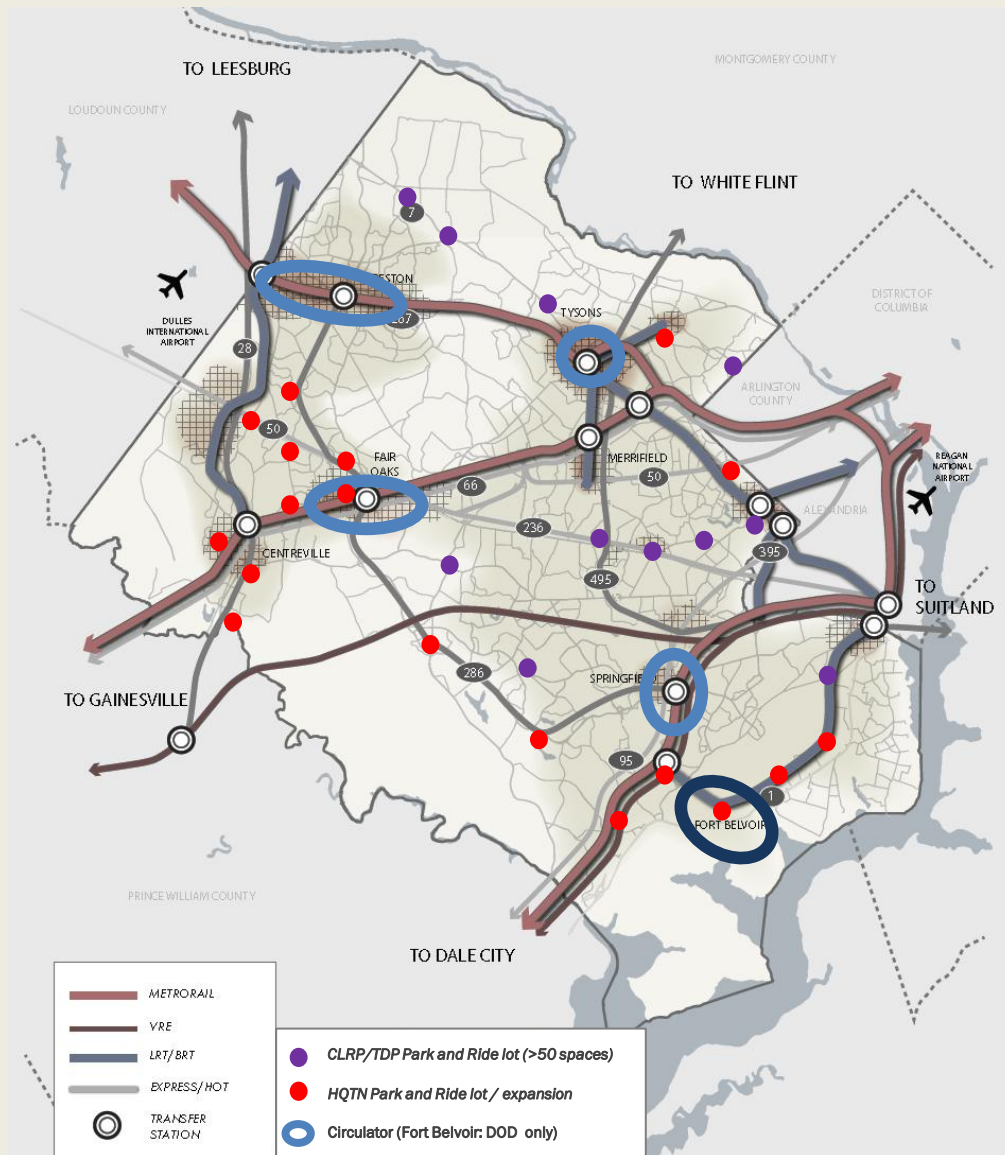
Measures of effectiveness

Proposed HQTN corridors are consistent with current planning-level cost-effectiveness experience.



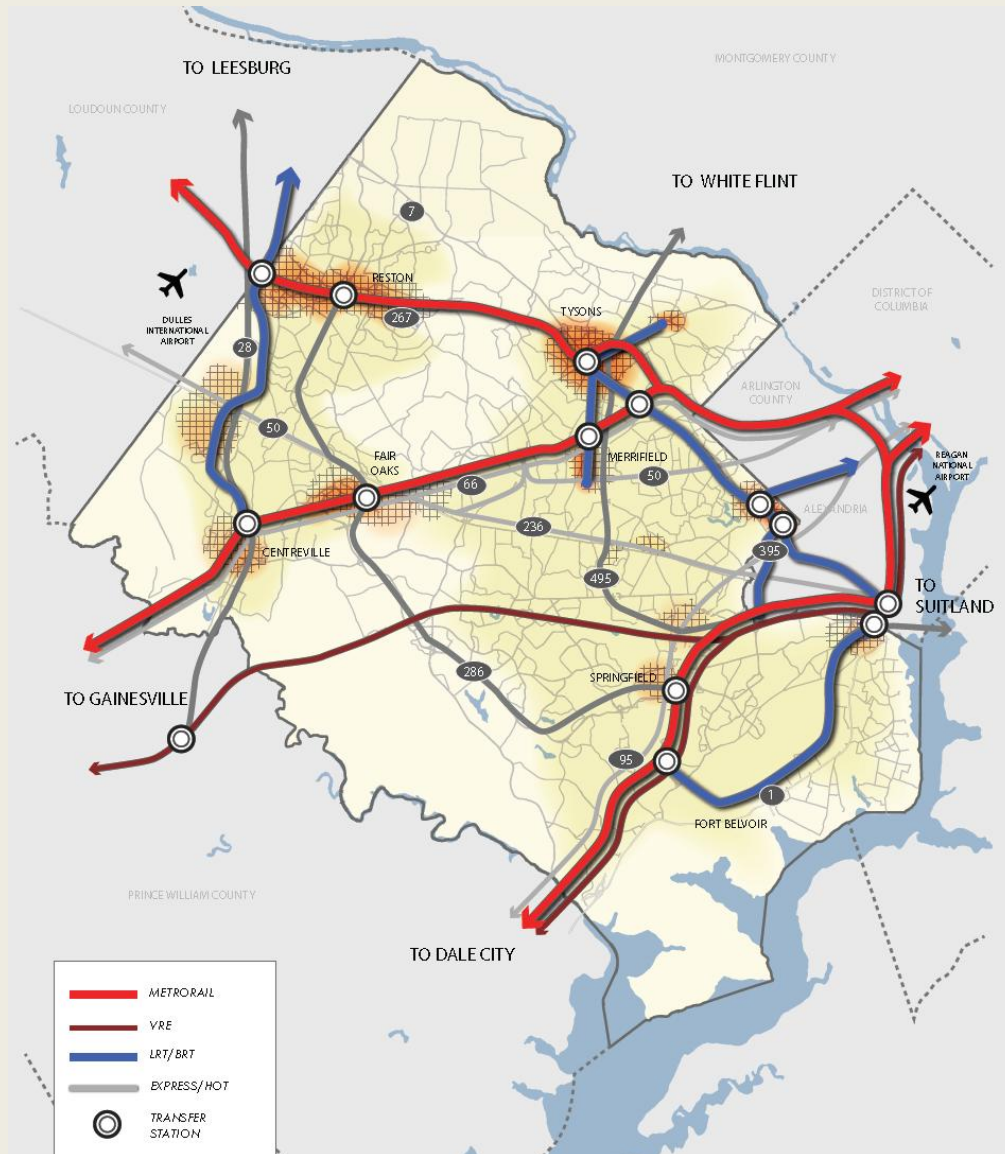


Supporting policies



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





Next steps

- July 10 public meeting
- Response to comments and further stakeholder coordination
- Intermodal transfer station details
- Mode, ROW and typical section requirements
- Phasing and timing

