



County of Fairfax, Virginia

Franconia – Springfield Bus Service Plan

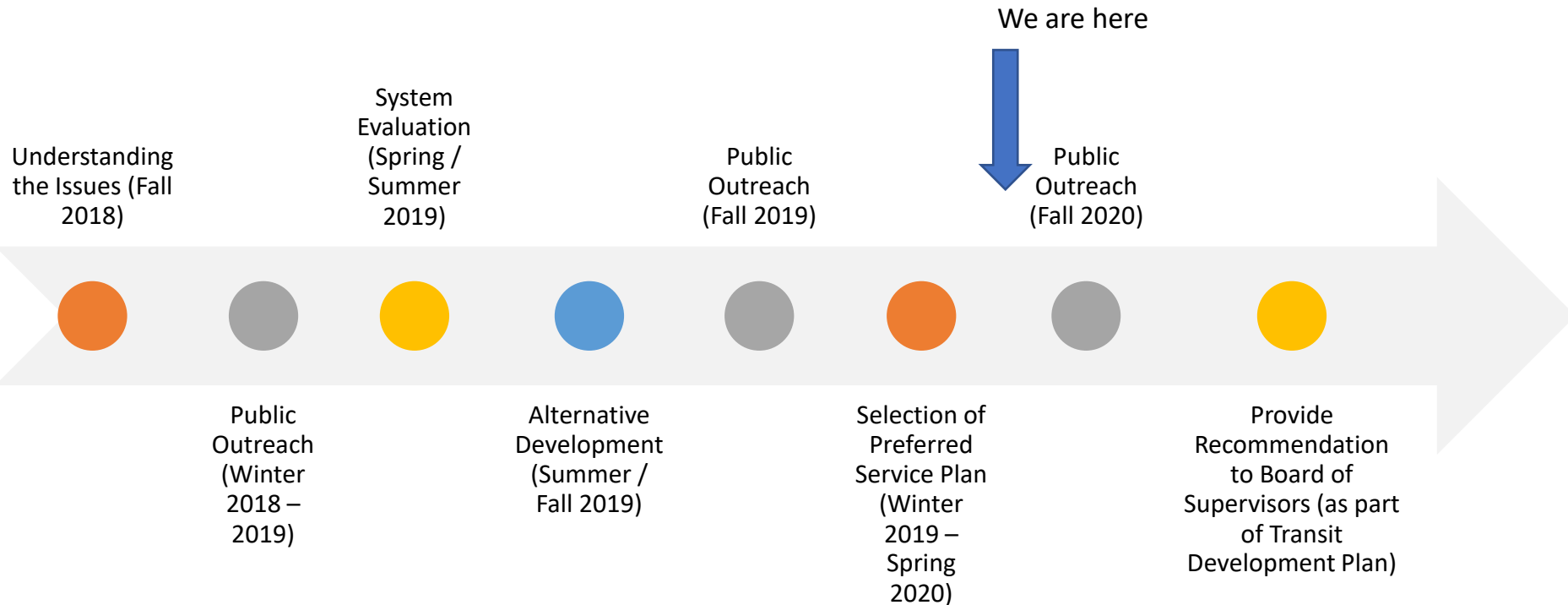


Michael Felschow / Hejun Kang
Fairfax County Department of Transportation

Virtual Public Meetings
September 28, 2020



Planning Process





Outreach

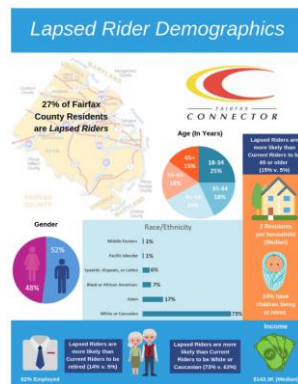


Market Survey

- 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

- Conducted two rounds of online surveys: 1,300 responses
- Will conduct three 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



Service Alternatives



Three service alternatives are being studied:

Alternative 1 – Existing Service Plus

Alternative 2 – Streamlined Service

Alternative 3 – Area Wide Transformation



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



Develop Preferred Service Plan






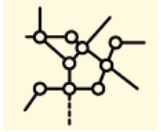









May include elements of all alternatives

Micro-transit options (Alternative Transit Study)

Develop optional additional service recommendations



Alternative Comparison

	Existing Service	Alternative 1	Alternative 2	Alternative 3
Facilities (Coverage) 	 Rank: 4 of 4	 Rank: 3 of 4	 Rank: 2 of 4	 Rank: 1 of 4
Transit Travel Times 	 Rank: 4 of 4	 Rank: 3 of 4	 Rank: 1 of 4	 Rank: 2 of 4
Ridership Potential 	 Rank: 4 of 4	 Rank: 3 of 4	 Rank: 2 of 4	 Rank: 1 of 4



Alternative Evaluation



Transit Propensity

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



Frequency Factor

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



Span of Service

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

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
- Metrorail Stations
- Recreation Centers



Alternative Comparison

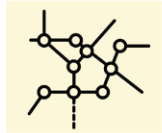
Criteria	Existing	Alternative 1	Alternative 2	Alternative 3	Preferred Plan
Transit Propensity Population (higher is better)	92,500	98,000	105,900	98,150	102,750
Frequency Factor (2.5 max; higher is better)	0.92	1.31	1.28	1.95	1.34
Span of Service Factor (2.5 max; higher is better)	1.58	1.59	1.60	1.91	1.62
Average Travel Time (in minutes; lower is better)	52	50	46	48	43
Key Locations (higher is better)	83	83	85	83	90
Bus Stop Coverage (percentage)	100	95	99	67	97



FAST FACTS: EXISTING SERVICE VS. PREFERRED PLAN



TRAVEL TIME BETWEEN KEY ORIGINS AND DESTINATIONS



	EXISTING SERVICE	PREFERRED PLAN	PERCENT CHANGE
Average Travel Time	52 Minutes	43 Minutes	-17%

POPULATION AND HOUSEHOLDS SERVED WITHIN A QUARTER-MILE OF SYSTEM



	EXISTING SERVICE	PREFERRED PLAN	PERCENT CHANGE
Population	200,334	223,910	+12%
Minority Population	111,829	122,206	+9%
Households	69,379	76,889	+11%
Low-Income Households (At or Below \$50,000)	13,409	14,835	+11%

POPULATION AND JOBS SERVED WITHIN A QUARTER-MILE OF PEAK SERVICE



	EXISTING SERVICE		PREFERRED PLAN		PERCENT CHANGE	
	Population	Jobs	Population	Jobs	Population	Jobs
0-20 Minutes	44,256	86,911	116,804	138,877	+164%	+60%
21-30 Minutes	138,395	126,522	82,069	55,440	-41%	-56%
31+ Minutes	72,000	64,516	65,332	31,803	-9%	-51%



Transit Parameters

Weekdays

- Morning peak hours: 5:00 to 9:00 A.M.
- Afternoon peak hours: 3:00 to 7:00 P.M.
- Peak frequency: 15 to 30 minutes
- Off-peak frequency: 20 to 60 minutes

Weekends

- Hours of service: 6:00 A.M. to 9:00 P.M.
- Frequency: 20 to 60 minutes



Sample Route Sheets





Route Profiles Summary

Route profiles provide detailed information on each route:

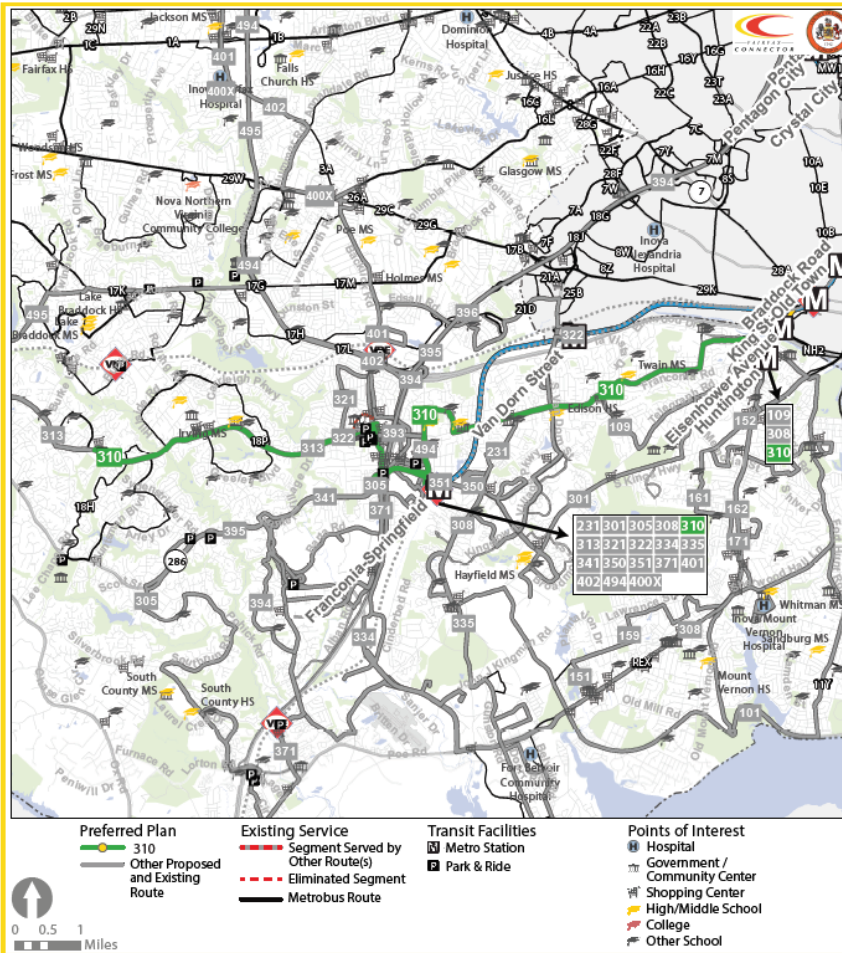
- Map
- Days of service
- Hours of service
- Frequency
- Key locations served
- Schools and hospitals served
- Transfer opportunities at Metrorail and transit stations

Detailed information on the recommended routes is provided at the following link:

<https://www.fairfaxcounty.gov/transportation/franconia-springfield-optimization>



ROUTE 310: ROLLING VALLEY PARK & RIDE TO HUNTINGTON METRO (NORTH)



OVERVIEW	CLASS	Cross-County
	DIRECTIONS	Eastbound/Westbound
	VIA	Old Keene Mill Rd, Franconia Rd, Franconia-Springfield Metro & VRE Station, Springfield Town Center
	TRANSFERS AVAILABLE	Blue Line, Yellow Line, 231, 301, 305, 308, 313, 321, 322, 334, 335, 341, 350, 351, 371, 393, 394, 396, 400X, 401, 402, 494
	IMPROVEMENT(S)	Route Alignment Update, Serve Springfield Multi-Use Transit Center

LEVEL OF SERVICE	PROPOSED ROUTE	WEEKDAY		SATURDAY	SUNDAY
		SERVICE HOURS		4:00 AM - 12:00 AM	6:00 AM - 12:00 AM 8:00 AM - 10:00 PM
		FREQUENCY		PEAK 20 mins OFF-PEAK 35 mins	35 mins 60 mins

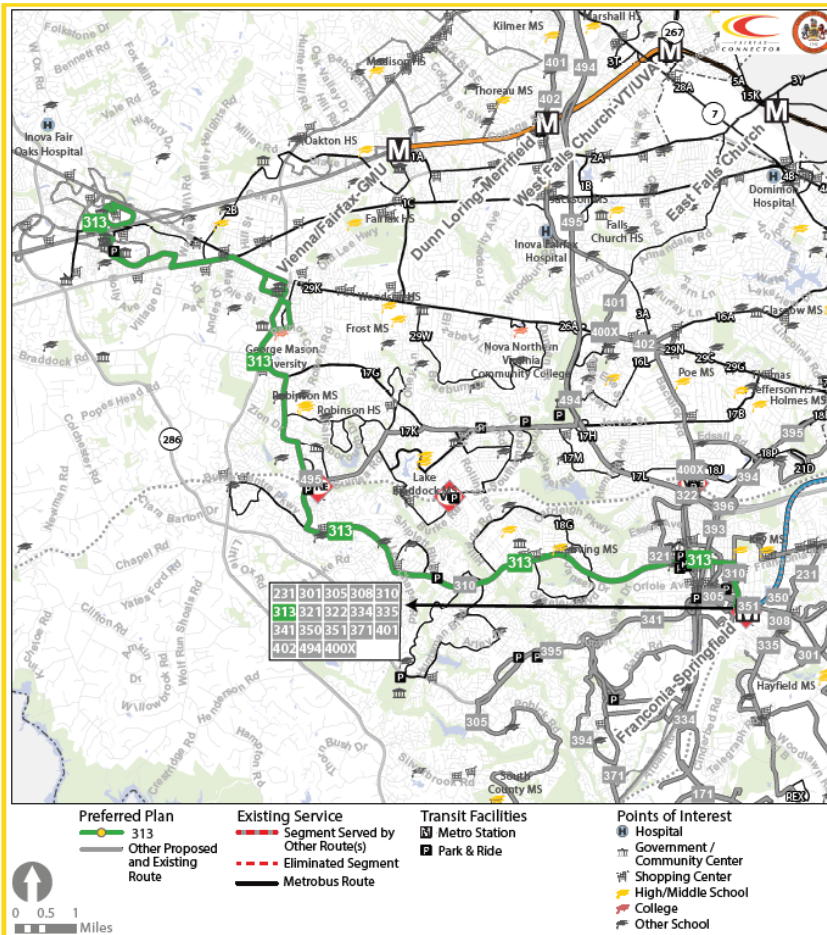
FACILITIES SERVED WITHIN A QUARTER MILE

5 HIGH/MIDDLE SCHOOLS	0 TRANSIT CENTERS	0 COLLEGES	9 PARK & RIDE LOTS
2 METRORAIL STATIONS	3 ACTIVITY CENTERS	0 HOSPITALS	4 COMMUNITY / HUMAN SERVICES CENTERS



County of Fairfax, Virginia

ROUTE 313: FRANCONIA-SPRINGFIELD METRO & VRE STATION TO FAIR OAKS MALL



OVERVIEW	CLASS	Cross-County
	DIRECTIONS	Northbound/Southbound
	VIA	Franconia-Springfield Metro and VRE Station, Old Keene Mill Rd, Fairfax City, Fair Oaks Mall, Monument Dr
	TRANSFERS AVAILABLE	Blue Line, 231, 301, 305, 308, 310, 321, 322, 334, 335, 341, 350, 351, 371, 393, 394, 396, 400X, 401, 402, 494, 495
	IMPROVEMENT(S)	New Route, Provide New Connections to Fairfax City and Fair Oaks Mall

LEVEL OF SERVICE	PROPOSED ROUTE		WEEKDAY		SATURDAY	SUNDAY
		SERVICE HOURS	6:00 AM - 7:00 PM		8:00 AM - 7:00 PM	No Service
		FREQUENCY	PEAK	30 mins	60 mins	No Service
			OFF-PEAK	60 mins		

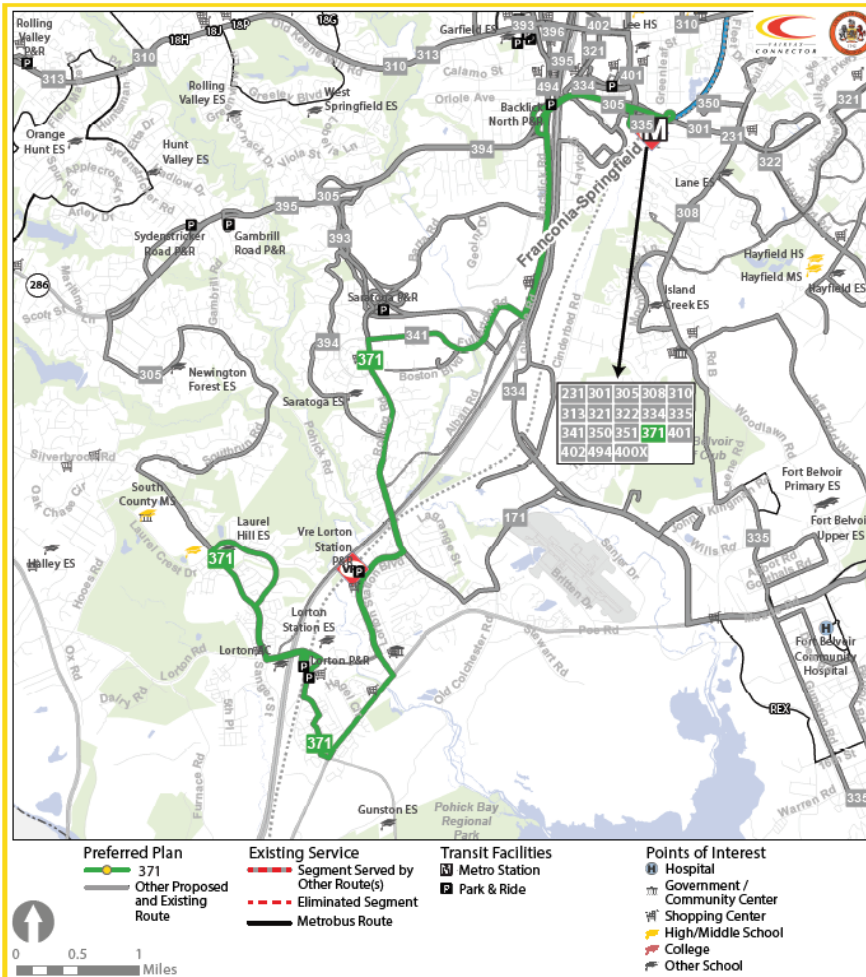
FACILITIES SERVED WITHIN A QUARTER MILE

2 HIGH/MIDDLE SCHOOLS	0 TRANSIT CENTERS	1 COLLEGES	8 PARK & RIDE LOTS
1 METRO RAIL STATIONS	4 ACTIVITY CENTERS	0 HOSPITALS	5 COMMUNITY / HUMAN SERVICES CENTERS



County of Fairfax, Virginia

ROUTE 371: LORTON PARK & RIDE TO FRANCONIA-SPRINGFIELD METRO & VRE STATION



OVERVIEW	CLASS	Local
	DIRECTIONS	Northbound/Southbound
	VIA	Rolling Rd, Lorton VRE, Backlick Rd, Lorton Station Blvd, Franconia-Springfield Pkwy/Rt 289
	TRANSFERS AVAILABLE	Blue Line, 231, 301, 305, 308, 310, 313, 321, 322, 334, 335, 341, 350, 351, 394, 400X, 401, 402, 494
	IMPROVEMENT(S)	Increase Frequency, Replace Routes 372 and 373

LEVEL OF SERVICE	PROPOSED ROUTE		WEEKDAY		SATURDAY	SUNDAY
		SERVICE HOURS	4:30 AM - 12:00 AM		5:00 AM - 1:00 AM	8:00 AM - 10:00 PM
		FREQUENCY	PEAK	15 mins	30 mins	45 mins
			OFF-PEAK	30 mins		

FACILITIES SERVED WITHIN A QUARTER MILE



1 HIGH/MIDDLE SCHOOLS



0 TRANSIT CENTERS



0 COLLEGES



7 PARK & RIDE LOTS



1 METRO RAIL STATIONS



2 ACTIVITY CENTERS



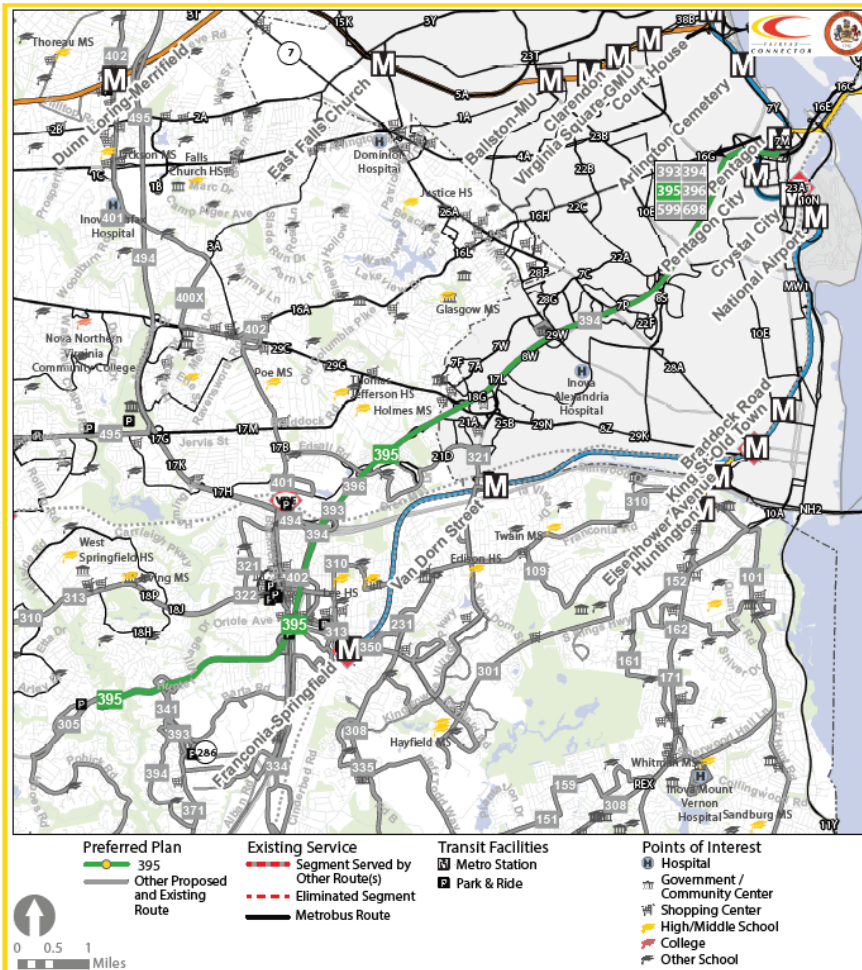
0 HOSPITALS



1 COMMUNITY / HUMAN SERVICES CENTERS



ROUTE 395: GAMBRILL ROAD PARK & RIDE TO PENTAGON METRO



OVERVIEW	CLASS	Express
	DIRECTIONS	Northbound/Southbound
	VIA	I-95, Franconia-Springfield Pkwy/Rt289, Fairfax County Pkwy/Rt 286, I-395
	TRANSFERS AVAILABLE	Blue Line, Yellow Line, 305, 393, 394, 396
	IMPROVEMENT(S)	Increase Frequency

LEVEL OF SERVICE	PROPOSED ROUTE	WEEKDAY		SATURDAY	SUNDAY
		SERVICE HOURS		No Service	No Service
		FREQUENCY		No Service	No Service
		PEAK	15 mins		
		OFF-PEAK	No Service		

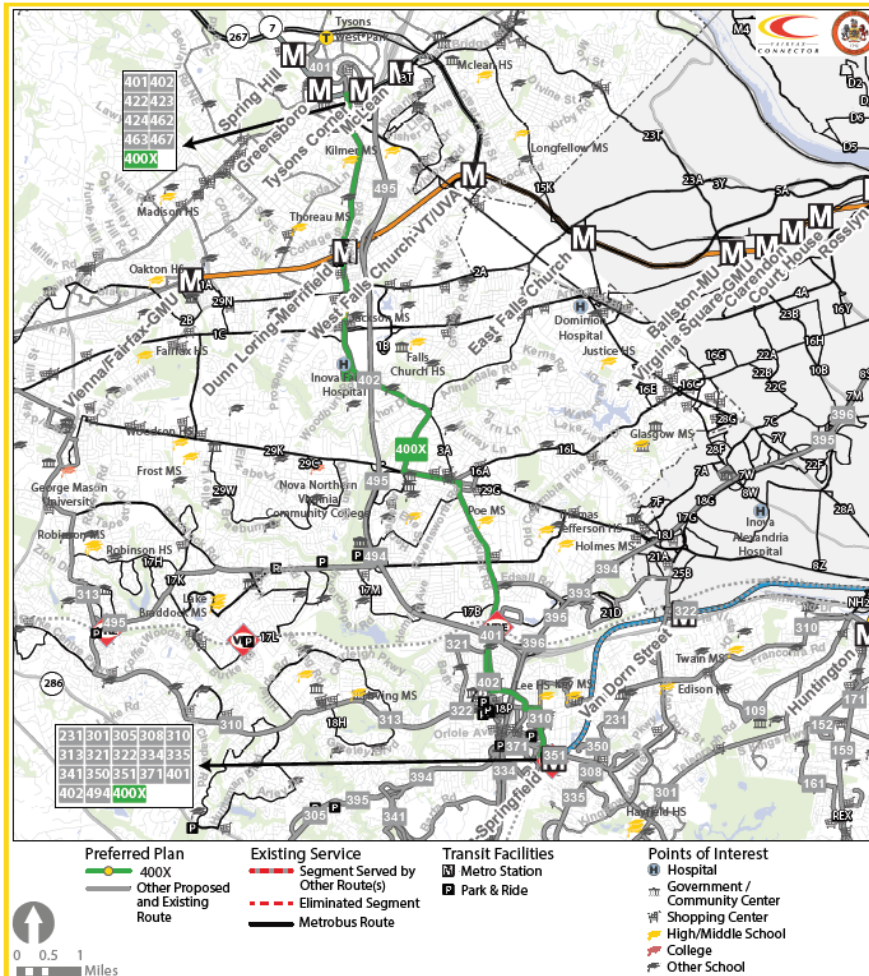
FACILITIES SERVED WITHIN A QUARTER MILE

0 HIGH/MIDDLE SCHOOLS	0 TRANSIT CENTERS	0 COLLEGES	1 PARK & RIDE LOTS
1 METRORAIL STATIONS	2 ACTIVITY CENTERS	0 HOSPITALS	0 COMMUNITY / HUMAN SERVICES CENTERS



County of Fairfax, Virginia

ROUTE 400X: TYSONS CORNER METRO TO FRANCONIA-SPRINGFIELD METRO & VRE STATION



OVERVIEW	CLASS	Express
	DIRECTIONS	Northbound/Southbound
	VIA	Backlick Rd VRE Station, Franconia-Springfield Metro & VRE Station, Gallows Rd, INOVA Fairfax Hospital, Dunn Loring Metro, Tysons Corner Metro
	TRANSFERS AVAILABLE	Blue Line, 231, 301, 305, 308, 310, 313, 321, 322, 334, 335, 341, 350, 351, 371, 401, 402, 494, 495
	IMPROVEMENT(S)	New Route, Reduce Travel Time

LEVEL OF SERVICE	PROPOSED ROUTE	WEEKDAY		SATURDAY	SUNDAY
		SERVICE HOURS		No Service	No Service
		6:00 AM - 9:00 AM 4:00 PM - 7:00 PM		No Service	No Service
	FREQUENCY	PEAK	20 mins	No Service	No Service
		OFF-PEAK	No Service		

FACILITIES SERVED WITHIN A QUARTER MILE					
1 HIGH/MIDDLE SCHOOLS	0 TRANSIT CENTERS	0 COLLEGES	3 PARK & RIDE LOTS	1 HOSPITALS	2 COMMUNITY / HUMAN SERVICES CENTERS
3 METRO RAIL STATIONS	4 ACTIVITY CENTERS				



Preferred Plan Route Details

Route	Existing Peak (minutes)	Peak Frequency (minutes)	Off-Peak Frequency (minutes)	Weekend Service	Weekday Span of Service	Improvement
231	31	30	-	No	Peak Hours	Reduced travel time
301	45	45	-	No	Peak Hours	Reduced travel time
305	30	45	-	No	Peak Hours	Right sizing
308	30	30	40	Yes	5:00 A.M. to 10:00 P.M.	No change
310	25	20	35	Yes	4:00 A.M. to 12:00 A.M.	Increased connectivity
313	N/A	30	60	Yes	6:00 A.M. to 7:00 P.M.	New route
321	25	20	30	Yes	4:00 A.M. to 12:00 A.M.	Improved frequency
322	24	20	30	Yes	4:00 A.M. to 12:00 A.M.	Improved frequency
334	30	30	60	Yes	6:00 A.M. to 10:00 P.M.	Increased connectivity



Preferred Plan Route Details

Route	Existing Peak (minutes)	Peak Frequency (minutes)	Off-Peak Frequency (minutes)	Weekend Service	Weekday Span of Service	Improvement
335	28	25	-	No	Peak Hours	Improved frequency
341	24	30	-	No	Peak Hours	Right sizing and improved frequency
371	30	15	30	Yes	4:30 A.M. to 12:00 A.M.	Improved frequency
393	43	40	-	No	Peak Hours	Optimized
394	43	40	-	No	Peak Hours	Optimized
395	15	15	-	No	Peak Hours	Increased connectivity
396	20	20		No	Peak Hours	Increased connectivity
400x	N/A	20		No	Peak Hours	Increased connectivity and improved frequency



Preferred Plan Route Details

Route	Existing Peak (minutes)	Peak Frequency (minutes)	Off-Peak Frequency (minutes)	Weekend Service	Weekday Span of Service	Improvement
401	20	20	20	Yes	4:00 A.M. to 1:00 A.M.	Right sizing
402	20	20	20	Yes	4:00 A.M. to 1:00 A.M.	Right sizing
494	30	15	60	No	5:00 A.M. to 8:00 P.M.	Improved frequency and reduced travel time
495	35	35	-	No	Peak Hours	Reduced travel time

Note: FCDOT will explore NVTC I-395 Commuter Choice grants to cover capital and operating costs for improvements to Routes 371, 400x, and 494.



Next Steps

1

Board input

Conduct Public
outreach

2

Refine preferred
plan

3

Board approval

Service
implementation



Providing Feedback – We Want to Hear From You!

Provide your comments by **midnight on Friday, Oct. 16, 2020.**

1. Take an online survey at www.fairfaxcounty.gov/transportation/franconia-springfield-optimization
2. E-mail us at fairfaxconnector@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