



Fairfax Connector Silver Line Phase 2 Bus Service Plan Recommendations

Board Transportation Committee Meeting
December 8, 2020

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Fairfax County Department of Transportation

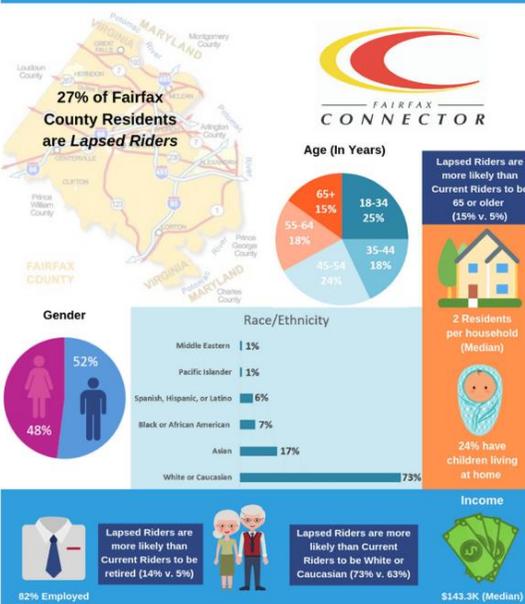
Planning Process



Why are we here:

- To brief the Board on the recommended Silver Line Phase 2 Bus Service Plan
- Receive Board input, so a final recommendation can be prepared for formal Board consideration in March 2021

We are here.



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 planning to increase ridership and improve the customer experience

Online Survey and Public Meetings:

Specific to Reston – Herndon Effort (Silver Phase 2)

- Conducted three rounds of online surveys: 1,700 responses
- Conducted 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
- Streamline bus routes

Greater Span of Service

Adjust hours of service:

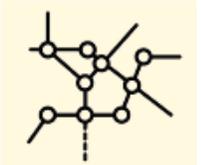
- Increase service hours on key routes to improve access and mobility

Increased Frequency

Adjust service:

- Add additional buses to key routes to increase mobility

Alternative Comparison

	Existing Service	Alternative 1: Existing Service Plus	Alternative 2: Streamlined Service	Alternative 3: Transformation
Key Locations 	 Rank: 4 of 4	 Rank: 3 of 4	 Rank: 2 of 4	 Rank: 1 of 4
Travel Time 	 Rank: 4 of 4	 Rank: 3 of 4	 Rank: 2 of 4	 Rank: 1 of 4
Transit Propensity 	 Rank: 4 of 4	 Rank: 2 of 4	 Rank: 3 of 4	 Rank: 1 of 4

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
- Metrorail Stations
- Recreation Centers

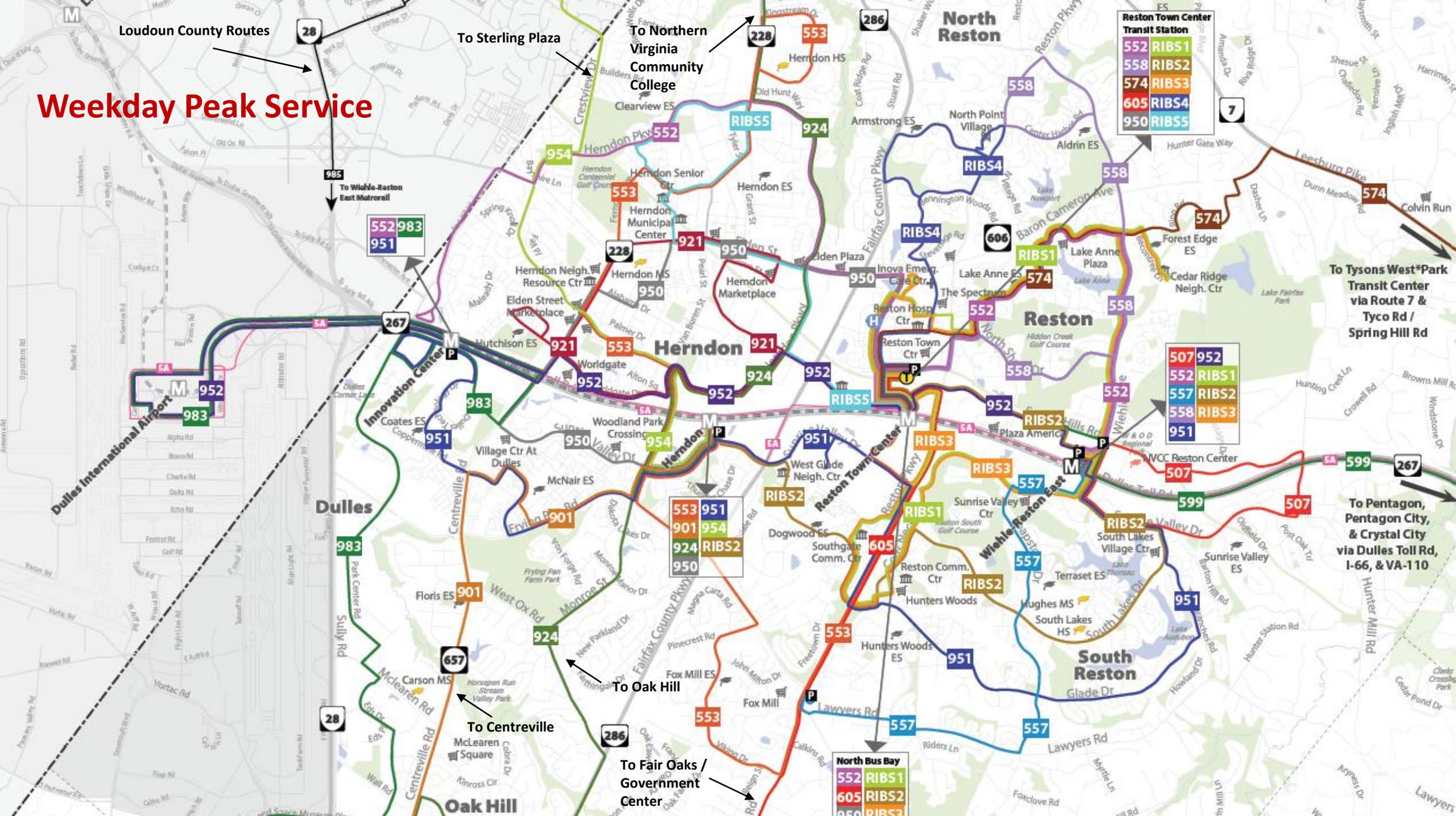
Span of Service Factor

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

Frequency Factor

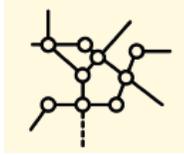
- Assess service frequency by route in each alternative
- Higher score for greater frequency
- Used as a weight

Weekday Peak Service





TRAVEL TIME BETWEEN KEY ORIGINS AND DESTINATIONS



	EXISTING SERVICE	PREFERRED PLAN	PERCENT CHANGE
Average Travel Time	57.3 Minutes	49.4 Minutes	-14%

POPULATION AND HOUSEHOLDS SERVED WITHIN A QUARTER-MILE OF SYSTEM



	EXISTING SERVICE	PREFERRED PLAN	PERCENT CHANGE
Population	157,400	189,600	+20%
Minority Population	79,000	98,200	+24%
Households	59,300	70,100	+18%
Low-Income Households (At or Below \$50,000)	9,100	11,200	+23%

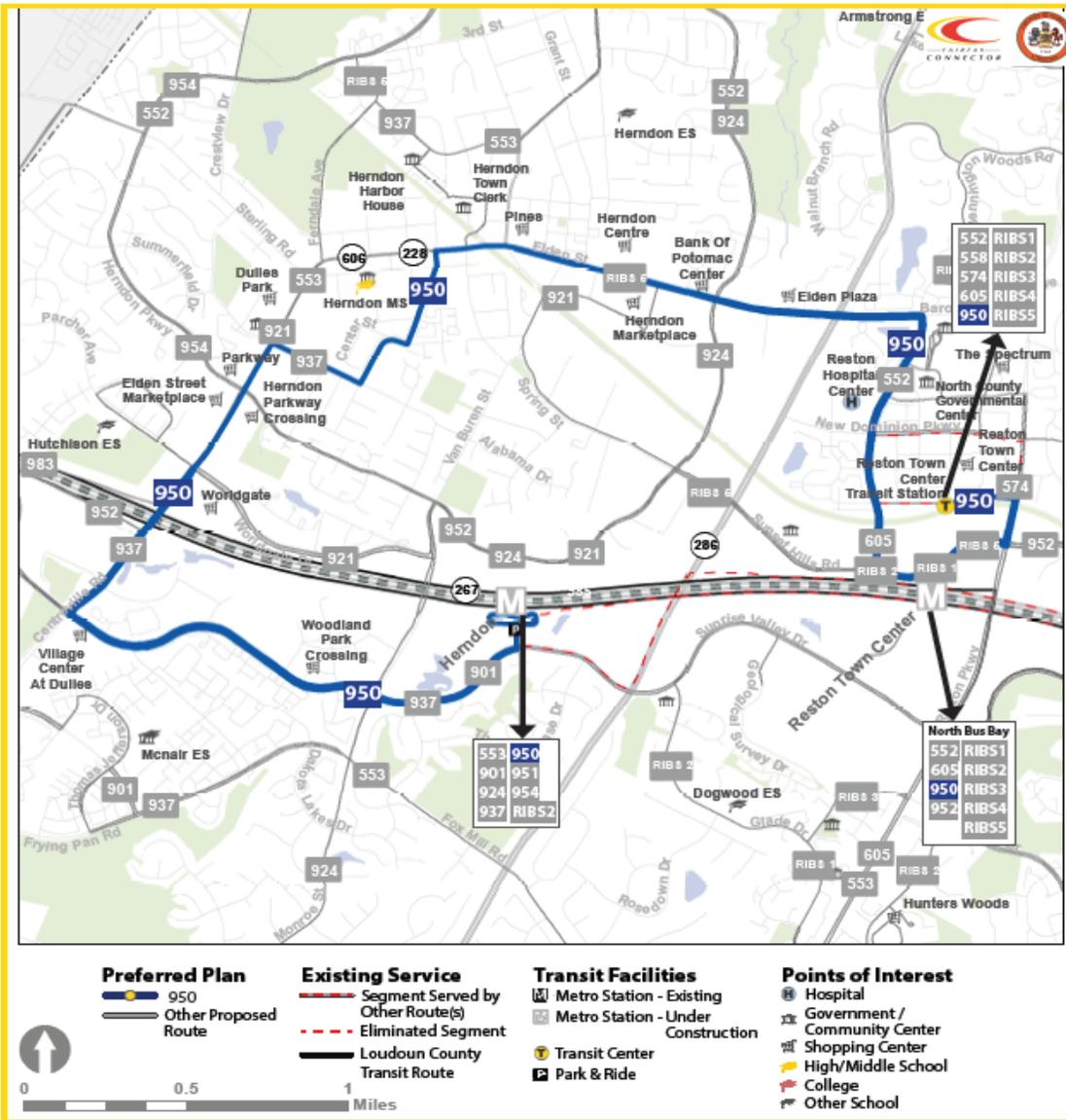
POPULATION AND JOBS SERVED WITHIN A QUARTER-MILE OF PEAK SERVICE



	EXISTING SERVICE		PREFERRED PLAN		PERCENT CHANGE	
	FREQUENCY					
	<i>Population</i>	<i>Jobs</i>	<i>Population</i>	<i>Jobs</i>	<i>Population</i>	<i>Jobs</i>
0-20 Minutes	71,900	65,600	114,100	96,700	+59%	+47%
21-30 Minutes	71,600	79,900	113,800	124,300	+59%	+56%
31+ Minutes	126,000	139,000	54,300	74,800	-57%	-46%



ROUTE 950: RESTON TOWN CENTER METRO TO HERNDON METRO



OVERVIEW	CLASS	Local
	DIRECTIONS	Westbound/Eastbound
	VIA	Worldgate, Elden St, Reston Hospital Center
	TRANSFERS AVAILABLE	Silver Line, 552, 553, 558, 574, 605, 901, 921, 924, 937, 951, 952, 954, 983, RIBS1, RIBS2, RIBS3, RIBS4, RIBS5
	IMPROVEMENT(S)	Increase Frequency

LEVEL OF SERVICE	PROPOSED ROUTE 950	WEEKDAY		SATURDAY	SUNDAY	
		SERVICE HOURS	4:10AM - 1:00AM		6:00AM - 1:00AM	6:00AM - 1:00AM
			FREQUENCY	PEAK	15 mins	20 mins
OFF-PEAK	20 mins					

FACILITIES SERVED WITHIN A QUARTER MILE

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



Next Steps

- Board questions, comments, and discussion
- Staff incorporation of comments
- Completion of Title VI analysis: January 2021
- Board action on staff recommendation: March 9, 2021
- Implementation with Silver Line Phase 2



Appendix: Level of Service

Recommended Plan Route Details

Route	Peak Frequency (minutes)	Off-Peak Frequency (minutes)	Weekend Service	Weekday Hours of Service	Improvement
507	25	25	No	5:00 A.M. to 7:00 P.M.	No major change
552	20	-	No	Peak hours	Increase connectivity
553	20	-	No	Peak hours	Increase connectivity
557	40	-	No	Peak hours	Increase connectivity
558	20	60	Yes	5:30 A.M. to 8:30 P.M.	Increase connectivity
574	30	45	Yes	5:00 A.M. to 10:00 P.M.	Shorten travel time
599	25	-	No	Peak hours	No major change
605	30	45	Yes	6:00 A.M. to 10:00 P.M.	Increase frequency and shorten travel time
615	30	45	Yes	7:00 A.M. to 9:30 P.M.	Replace portion of 605

Recommended Plan Route Details

Route	Peak Frequency (minutes)	Off-Peak Frequency (minutes)	Weekend Service	Weekday Span of Service	Improvement
901	30	60	Yes	5:00 A.M. to 8:30 P.M.	New route, increase connectivity
921	40	40	Yes	7:20 A.M. to 7:20 P.M.	New route, improve linkage
924	20	60	Yes	5:00 A.M. to 10:00 P.M.	Extension
937	-	40	Yes	9:00 A.M. to 4:30 P.M.	Improve connectivity
950	15	20	Yes	4:00 A.M. to 1:00 A.M.	Increase frequency
951	20	-	No	Peak hours	Extension, increase frequency
952	20	60	Yes	6:00 A.M. to 11:00 P.M.	Increase connectivity and frequency
954	30	60	Yes	6:00 A.M. to 9:30 P.M.	New route, increase connectivity
983	25	60	Yes	6:00 A.M. to 7:00 P.M.	Increase connectivity

Recommended Plan Route Details

Route	Peak Frequency (minutes)	Off-Peak Frequency (minutes)	Weekend Service	Weekday Span of Service	Improvement
RIBS 1	25	25	Yes	5:00 A.M. to 12:00 A.M.	Increase connectivity
RIBS 2	20	30	Yes	4:30 A.M. to 12:00 A.M.	Increase connectivity and frequency
RIBS 3	25	25	Yes	5:00 A.M. to 12:00 A.M.	Increase connectivity
RIBS 4	20	40	Yes	5:00 A.M. to 11:00 P.M.	Increase connectivity and frequency
RIBS 5	45	45	Yes	5:30 A.M. to 11:00 P.M.	Increase connectivity