



National Capital Region
Transportation Planning Board

MEMORANDUM

TO: TPB Technical Committee
FROM: Jane Posey, DTP Transportation Engineer
SUBJECT: Future Year Transit Assumptions in Visualize 2045
DATE: September 1, 2017

In order to maintain future-year transit networks with the most up-to-date assumptions, we are requesting that you review the attached document, which lists all future transit projects that are included in the current Long Range Plan and Transportation Improvement Program (TIP) networks, and inform us, in writing, of any changes that should be made. Please only list assumptions for projects currently in the Long Range Plan, or for projects that will be included in your submissions for Visualize 2045. For the purposes of transit network coding, the following information is needed: detailed routes (road to road tracing of bus paths including stop location information), headways, runtimes, and fare assumptions for each bus or train. We need information for both peak and off-peak weekday service. Please submit all changes, in writing, by January 5, 2018.

The attached information does not include parking lot information and does not list studies. If you need more detailed information to facilitate your review, please contact me at (202) 962-3331 or at jposey@mwkog.org. Thank you for your assistance.

Future Transit Service Coding Assumptions from the 2016 CLRP:

METRORAIL:

1. Metrorail Service Changes (Allison Davis email 1/21/2015, confirmed no changes, email 2/3/16)
(No expansion railcars)

O-Station	D-Station	2010 network		2013 Rush Plus		2014 (Silver Phase I)		2017 Remove Rush Plus		2020 & beyond (Silver Phase II)		Network	Route Name
		am	op	am	op	am	op	am	op	am	op		
		headway											
Shady Grove	Glenmont	6	12	6	12	6	12	6	12	6	12	WMREDA	
Grosvenor	Silver Spring	6	12	6	12	6	12	6	12	6	12	WMREDB	
Greenbelt	Branch	6	12	6	12	6	12	6	12	6	12	WMGRNA	
Mt. Vn Sq.-UDC (peak only)	Huntington	6	--	6	--	6	--	6	--	6	--	WMYELA (PK)	
Ft. Totten (off peak only)	Huntington	--	12	--	12	--	12	--	12	--	12	WMYELA (OP)	
FranSpgfld	Largo	6	12	9	12	12	12			12	12	WMBLUA	
FranSpgfld	Greenbelt	--	--	20	--	12	--			12	--	WMYELB (PK)	
Vienna	New Carrollton	6	12	6	12	6	12	6	12	6	12	WMORNA	
Vienna	Largo	--	--	20	--	--	--	--	--	--	--	WMORNB	
Dulles GrnWay	Largo	--	--	--	--	--	--	--	--	6	12	WMSILV	
Wiehle Ave	Largo	--	--	--	--	6	12	6	12	--	--	WMSILV	

2. Dulles Corridor Metrorail (WMSILV):
Wiehle-Reston East to VA 772/Greenway (2020) (scenario: SILVER2)

- ⇒ Stations (network node):
- VA 772/Dulles Greenway (8097)
 - VA 606 (8096)
 - Dulles Airport (8095)
 - Innovation Center (8094)
 - Herndon/Monroe (8093)
 - Reston Town Center (8092)
 - Wiehle-Reston East (8091)

3. Potomac Yards Metrorail Station (2021) (scenario: POTYDS)

- ⇒ Modified US 1 bus routes to stop at the station

4. Silver Spring Transit Center Phase II (with MARC) (2017) (scenario: SSTCTR)
 - ⇒ Modified headways of the bus routes serving facility during the peak period to 10 minutes
 - ⇒ Added walk link between Metrorail and MARC

OTHER RAIL:

1. Purple Line Transitway from Bethesda to New Carrollton (2020) (scenario: PURPLE)
 (assumptions from Rick Kiegel via Lyn Erickson, email 1/16/2014)
 Service frequency: peak 6 minutes, off-peak 12 minutes

- ⇒ Stations (network node):
 - Bethesda (10015)
 - Chevy Chase Lake /Connecticut Ave. (10016)
 - Lyttonsville (10017)
 - Woodside/ 16th St. (10073)
 - Silver Spring Transit Center (10018)
 - Silver Spring Library (10019)
 - Dale Dr. (10023)
 - Manchester Rd. (10020)
 - Long Branch (10021)
 - Piney Branch Rd./University Blvd (10022)
 - Takoma/Langley Transit Center (10024)
 - Riggs Rd. (10025)
 - Adelphi/ West Campus (10028)
 - UM Campus Center (10036)
 - UM Campus East (10029)
 - College Park UMD Metro(10030)
 - M-Square (10031)
 - Riverdale Park (10032)
 - Beacon Heights (10035)
 - Annapolis Rd./Glenridge (10034)
 - New Carrollton (10037)

- ⇒ Modified buses as per Rick Kiegel via Lyn Erickson email 1/16/2014
 (J1, J2, J3, J4, C2, C4, F4, F6, RO15, The Bus 17, UM Shuttles 104 & 111)

2. Potomac Shores (formerly Cherry Hill) VRE station (2017) (scenario: POTSHRS)
3. VRE service frequency (2020) (email from Sonali Soneji, VRE- 11/30/15)
 (scenario: VREFREQ)

- ⇒Fredericksburg local- increase peak period headway to 20 minutes

- ⇒ Manassas local- increase peak period headway to 20 minutes
- 4. MARC service improvements (email from Rick Kiegel 1/15/2014) (2029)
(scenario: MARCFREQ)
 - ⇒ Camden Line: add 1 peak train in reverse direction
 - ⇒ Brunswick: add 1 peak train in peak direction and 1 peak train in reverse peak direction
 - ⇒ Penn Line: add 1 peak express train in peak direction
 - ⇒ walk connection between Metropolitan Grove MARC & CCT stations
- 5. VRE Extension- Gainesville to Haymarket (2022) (email from Sonali Soneji, VRE 3/5/16 & 3/8/16 (scenario: VREGHX)
 - ⇒ 20 minute headways (1 train per hour serving Broad Run, and 2 per hour serving new stations)
 - ⇒ 3 new stations with parking:
 - Innovation (9068)
 - Gainesville (9069)
 - Haymarket (9070)

OTHER TRANSIT:

- 1. Crystal City / Potomac Yards Busway (email from Dan Malouff 2/26/16)
(scenario: MWAYBRT)
Arlington- dedicated lane extension from Crystal City Metro to Pentagon City Metro (2023)
 - ⇒ Added buses to serve facility (service frequency: every 12 minutes, with every 6 minute supplement during peak times between Reed Ave. and Crystal City Metro)
 - ⇒ Improved runtimes of routes that run on facility
 - ⇒ After 2023 extension to Pentagon City, headways will remain 6 minutes at peak north of Reed Ave, and 12 minutes at other times, and south of Reed Ave.
- 2. DC Streetcar – Anacostia (AIL)- from Defense/ S. Capitol St. to Howard & Firth Sterling Ave. (2017)

DC Streetcar – Anacostia Ext.- from Howard & Firth Sterling to Good Hope & MLK Ave. (2017)
(scenario: DCSTCARA)

Service frequency: peak 15 minutes, off-peak 30 minutes, fares similar to bus
 - ⇒ Stations (network node):
 - Defense Blvd & S. Capitol St. (10800)
 - Howard and Firth Sterling (Anacostia Metro Station) (10801)
 - Chicago St & MLK Ave. (10802)
 - Good Hope & MLK Ave. (10803)

3. DC Streetcar – H St. / Benning Rd.- from Union Station to Oklahoma Ave. (2016)
(scenario: DCSTHST1)

Service frequency: peak 15 minutes, off-peak 30 minutes, by 2020 peak & off-peak headways 10 minutes (from Faisal Hameed email 6/25/14), fares similar to bus

⇒ Stations (network node):

- H & 1st NE (10821)
- H & 5th NE (10820)
- H & 8th NE (10819)
- H & 13th NE (10818)
- H & Maryland Ave (10817)
- Benning and 19th NE (10816)
- Benning and Oklahoma Ave. (10815)

4. DC Streetcar – Benning Rd.- from Oklahoma Ave. to Benning Rd. Metro (2020)
(scenario: DCSTHST2 when combined with Union Station to Oklahoma Ave segment)

Service frequency: peak & off-peak headways 10 minutes (from Faisal Hameed email 6/25/14), fares similar to bus

⇒ Stations (network node):

- Kingman Island (10814)
- Benning and 34th NE (10813)
- Benning and Minnesota Ave. (10812)
- Benning and 42nd NE (10811)
- Benning Rd. METRO (10810)

5. DC Streetcar – M St. SE/SW (2020) – from Maine Ave. to Good Hope & MLK Ave.
(scenario: DCSTMST)

Service frequency: peak 15 minutes, off-peak 30 minutes, fares similar to bus

⇒ Stations (network node):

- Maine Ave. & 7th St. SW (10839)
- M & 6th St. SW (10838)
- M & 3rd St. SW (10837)
- M & 1st St. SW (10836)
- M & Half St. SE (10835)
- M & New Jersey Ave. SE (10834)
- M & 4th St. SE (10833)
- M & Isaac Hull Ave. SE (10832)
- M & 8th St. SE (10831)
- M & 10th St. SE (10830)
- Good Hope & MLK Ave. (10803)

6. DC Streetcar – Union Station to Georgetown (2022)
(scenario: DCSTGTWN)

Service frequency: peak & off-peak 10 minutes (from Faisal Hameed email 6/25/14),
fares similar to bus

⇒ Stations (network node):

H & 1st NE (10821)
K St. between 3rd and 4th Streets NW (10822)
Mount Vernon Square (10823)
K St. & McPherson Square (10824)
K St. & Farragut Square (10825)
K St. & 19th and 20th Streets (10826)
K St. & 25th and 26th Streets (10827)
K St. & Wisconsin Ave (10828)

7. DC Circulator Georgetown to Union Station route extension to National Cathedral (2017)
(scenario: CATHEXT)

Info from Circe Torruellas 2/10/2015 email link to *DC Circulator 2014 Transit
Development Plan Update* December, 2014

Service frequency: 10 minutes at all times

(see Attachment A)

8. DC Circulator Union Station to Navy Yard extension to Waterfront (2017)
(scenario: WATEREXT)

Info from Circe Torruellas 2/10/2015 email link to *DC Circulator 2014 Transit
Development Plan Update* December, 2014

Service frequency: 10 minutes at all times

(see Attachment A)

9. DC Circulator Rosslyn to Dupont Circle extension to U St./Howard University (2017)
(scenario: UHOWEXT)

Info from Circe Torruellas 2/10/2015 email link to *DC Circulator 2014 Transit
Development Plan Update* December, 2014

Service frequency: 10 minutes at all times

(see Attachment A)

10. 16th St. Bus Priority Improvements (2021)

⇒ Improved run times by 10 % for all buses serving facility

11. Corridor Cities BRT (2020) (info from Dudley Whitney, PB and Lorenzo Bryant- 2003- updated by Rick Kiegel via Lyn Erickson email 1/16/2014 & Lyn Erickson 12/17/14 email) (scenario: CCTBRT)

Service frequency: peak 4 minutes, off-peak 8 minutes

⇒ Stations (network node):

Shady Grove (10513)
East Gaither (10512)
West Gaither (10511)
Crown Farm (10510)
DANAC (10509)
LSC Central (10518)
Universities at Shady Grove (10517)
USC Central (10516)
LSC West (10515)
LSC Belward (10508)
Kentlands (10507)
Firstfield (10506)
MetroGrove (10505)

⇒ Added or modified the following bus routes (to stop at BRT stations):

RO43, RO54, RO56, RO61, RO66, RO67, RO71, RO74, RO76, RO78, RO90

12. Veirs Mill Rd. Bus Improvements (TIGER Grant) (2020) (scenario: TIGERVIER)

⇒ Improved run times by 10 % for all buses serving facility

13. Beltway HOT lanes transit service (2020, 2030) (scenario: BELTHOT)

(See Attachment B)

14. I-66 HOT lane bus service- outside the Beltway (2022, 2030, & 2040) (email from Valerie Pardo VDOT 2/24/2016 with details from Lucas Muller, Kimley-Horn consultants 2/23/16 email) (scenario: I66HOTO)

(See Attachment C)

15. I-66 HOT lane bus service- inside the Beltway (2025 & 2040) (scenario: I66HOTI)
email from Valerie Pardo VDOT 2/24/2016

(See Attachment D)

16. US 1 (VA) BRT (2030) (scenario: US1BRT)

Email from Mike Lake (Fairfax DOT) 3/26/2015

Service frequency: peak 6 minutes, off-peak 12 minutes, fares similar to Metrobus
Route: From Huntington Metro, BRT will run south along Kings Highway, then south down US 1 to the Woodbridge VRE station

⇒ Stations (network node):

Huntington (at metro station) (10550)
Penn Daw (10551)
Beacon Hill (10552)
Lockheed Blvd. (10553)
Hybla Valley (10554)
Gum Springs (10555)
South County Center (10556)
Ft. Belvoir (Accotink Village) (10557)
Pohick Rd. North (10558)
Lorton Station Blvd. (Armistead Rd.) (10559)
Gunston Rd. (10560)
Woodbridge (at VRE station) (10561)

17. US 1 (VA) buses (2035) from VA235 N. to Beltway/Alex. SCL (scenario: US1VABUS)

⇒ Improved run times by 10 % for all buses serving facility

18. Fairfax Connector Bus Expansion (2020) (scenario: FFXBUS)

email from Malcolm Watson (Fairfax DOT) 2/2/2016

⇒ new and expanded bus service

(see Attachment E)

19. West End Transitway (2020) (scenario: VANDBRT)

email from Pierre Holloman 2/26/16

⇒ Alexandria Alternative D

⇒ 10 min peak, 15 min off-peak headways

(see Attachment F)

20. Alexandria DASH Expansion (2019) (scenario: ALEXBUS)

Email from Pierre Holloman 2/26/2016

⇒ Increased Frequency for AT1 (from 30 min to 15 min peak headways in 2020)

⇒ Increased Frequency for AT8,(from 30 min to 15 min peak headways in 2020)

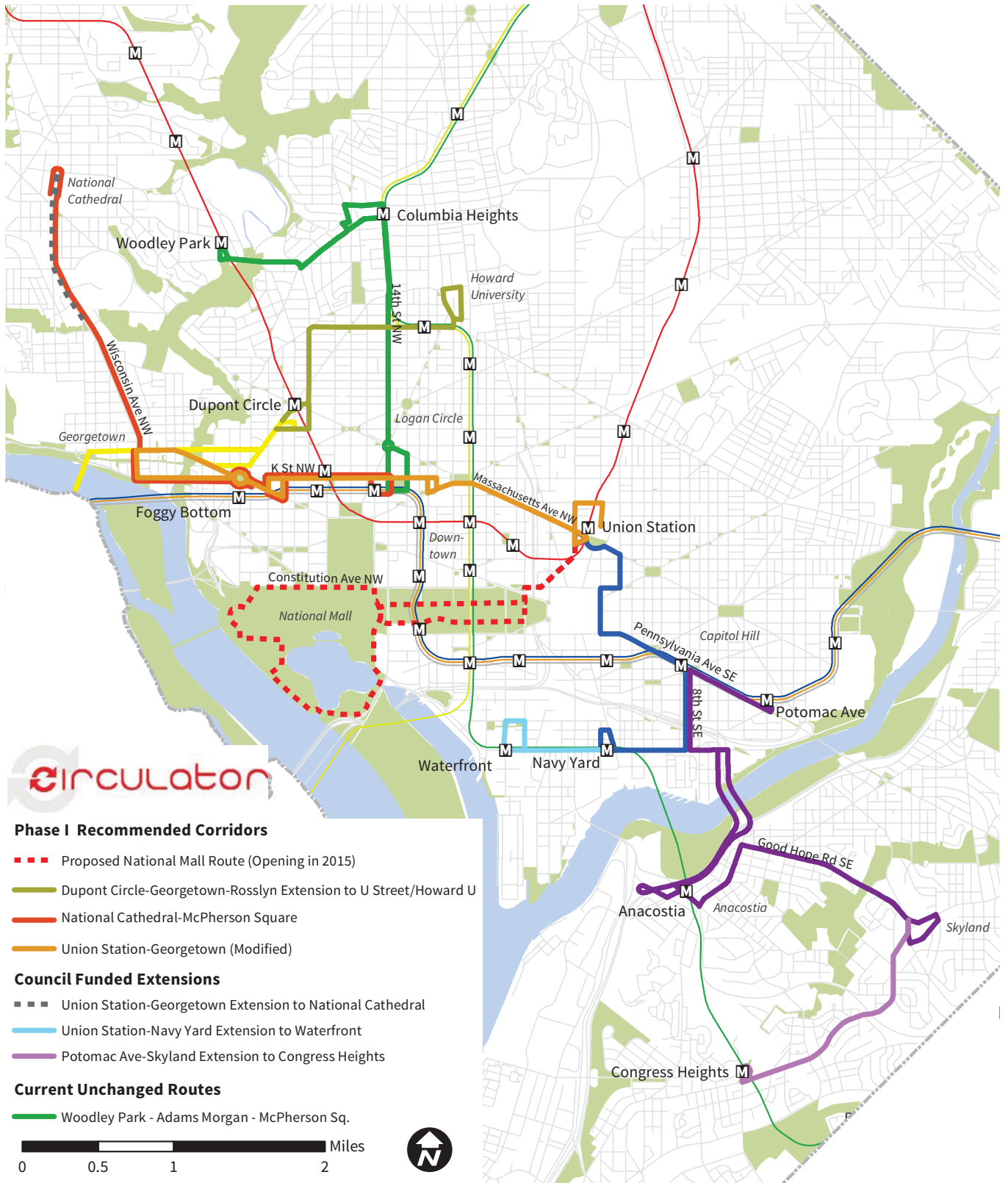
21. Duke St. Transitway (2024) (scenario: DUKEBUS)

⇒ Improved run times by 10 % for all buses serving facility

NOTE: This list does not include Park-n-Ride lot information.

ATTACHMENT A

FIGURE 8-1 | PHASE I RECOMMENDED CORRIDORS (FY 2014-2017)



3/17/07 email
from Kanti Srikanth (VD)

ATTACHMENT B

Beltway HOT Lanes Bus Service

*used existing service for
2015 & 2017 networks*

No.	Origin	Destination	2006	2010	2020	2030
			Base	HOT	HOT	HOT
			Hdwy	Hdwy	Hdwy	Hdwy

EXISTING ROUTES:

NEW / MODIFIED ROUTES:*

* New routes assumed in the CLRP originally assumed for 2030.

1	14A-D	Bethesda	McLean Bible Church via Tysons	NA	NA	15	15
2	14A-D	McLean Bible Church	Bethesda via Tysons	NA	NA	15	15
3	14A-D	Lakeforest Mall	McLean Bible Church via Tysons	NA	NA	15	15
4	14A-D	McLean Bible Church	Lake Forest Mall via Tysons	NA	NA	15	15
5	17FO	Pentagon	Kings Park West	20	20	20	15
6	17GI	George Mason University	Pentagon	30	20	20	15
7	17HI	Kings Park West	Pentagon	20	20	20	15
8	17KI	Kings Park West	Pentagon	30	20	20	15
9	17LI	Kings Park West	Pentagon	30	20	20	15
10	OmniRide	Dale City PNR	Tysons Central	NA	30	15	10
11	Martz	Stafford (US 1 & VA 630)	Tysons Central	NA	20	10	8
12	B2	Franconia Springfield Metro	Tysons Central	NA	NA	15	15
13	B3	Huntington Metro	Tysons Central	NA	NA	15	15
14	B4	Fair Oaks	Landmark Shopping Center	NA	NA	20	15
15	B5	Fair Oaks	Franconia Springfield Metro	NA	NA	20	15
16	B6	Annandale	Tysons Central	NA	NA	15	15
17	B7	Chantilly	Tysons Central	NA	NA	15	15
18	M1	Fredericksburg	Tysons Central	NA	NA	15	15

Route Name	Interim Stops	Similar Existing/Programmed Commuter Bus Route	GIS Id	Opening Year Headway	2023 Headway	2025 Headway	2030 Headway	2035 Headway	2040 Headway	Run Time (Minutes)	Daily Hours of Operation (AM & PM Peak Periods)	Number of Stops	Fare (assumes SmarTrip)
Haymarket to Tysons	None		2	N/A	N/A	N/A	N/A	60	45	44	8	2	\$ 2.90
Haymarket to DC	None		1	60	60	60	45	N/A	N/A	73	8	2	\$ 5.75
Haymarket to DC	None		22	N/A	N/A	N/A	N/A	45	45	73	8	2	\$ 5.75
Gainesville to Westfields	None		3		60	45	45	25	25	31	8	6	\$ 2.90
Gainesville to Chantilly/US 50	None		4	N/A	N/A	N/A	N/A	60	45	25	8	4	\$ 2.90
Gainesville to Reston	None		5	25	25	25	25	25	25	35	8	2	\$ 2.90
Gainesville to Herndon	Innovation (Fairfax County)		6	N/A	60	45	45	30	25	41	8	5	\$ 2.90
Gainesville to Chantilly/Herndon	None		7	N/A	N/A	N/A	N/A	60	45	25	8	6	\$ 2.90
Gainesville to Tysons	None	PRTC Gainesville Metro Direct	8	30	30	20	15	N/A	N/A	45	8	2	\$ 2.90
Gainesville to Tysons	None	PRTC Gainesville Metro Direct	9	N/A	N/A	N/A	N/A	15	15	39	8	2	\$ 2.90
Gainesville to DC	East Falls Church Metrorail ¹	PRTC Gainesville OmniRide (Modified)	10	20	20	15	15	15	15	76	8	3	\$ 5.75
Gainesville to Merrifield	None		11	N/A	N/A	35	35	35	35	46	8	4	\$ 2.90
Manassas to Reston	None		12	N/A	N/A	N/A	60	60	45	28	8	2	\$ 2.90
Manassas to Tysons	None	PRTC Manassas Metro Direct	13	30	30	30	30	25	25	38	8	2	\$ 2.90
Manassas to DC	Pentagon	PRTC Manassas OmniRide	14	20	20	20	15	15	15	86	8	11	\$ 5.75
Manassas to Merrifield	None		15	60	60	60	60	60	60	39	8	4	\$ 2.90
Centreville to Tysons	None		16	N/A	N/A	N/A	N/A	60	45	30	8	2	\$ 1.75
Centreville to DC	None		17	N/A	25	25	25	25	25	47	8	2	\$ 1.75
Monument to DC	None		18	N/A	N/A	N/A	N/A	35	35	43	8	2	\$ 4.00
Monument to DC	None		23	35	35	35	35	N/A	N/A	43	8	2	\$ 4.00
Westfields to Vienna	None		19	60	60	60	60	60	60	37	8	4	\$ 1.75
Stringfellow to Vienna ²	None	Fairfax Connector 600 Series (631,632,624,634)	21	N/A	N/A	N/A	N/A	7.5	7.5	21	8	2	\$ 1.75
Stringfellow to Mark Center	Pentagon		20	N/A	N/A	N/A	N/A	60	60	68	8	4	\$ 4.00

Notes:

1. East Falls Church stop dependent on available bus bay capacity

2. Stringfellow to Vienna service represents increase of service levels from existing/programmed Fairfax Connector Service. Increase in headway subject to route performance .

3. Table is intended to be used with accompanying GIS files for routes and stops

4. Fares based on current (2015) fares:
 - Commuter buses originating in Prince William, destined to Arlington or DC: PRTC OmniRide (\$5.75 SmarTrip)
 - Commuter buses originating in Prince William, destined elsewhere: PRTC MetroDirect (2.90 SmarTrip)
 - Commuter buses originating in Fairfax, destined to Arlington or DC: Fairfax Connector Express - route 394/395 (\$4.00)
 - Commuter buses originating in Fairfax, destined elsewhere - Fairfax Connector Route (\$1.75)
 If fares are inflated in the future in other modeled routes, we expect these routes would increase in a corresponding manor.

5. Stops are located in a separate shapefile and listed by the Route Name and GIS ID#

6. Routing and stops represent assumptions only current as of February 2016. Specific routing at origins and destinations will be determined by the operator closer to implementation and are subject to change

7. Routes are expected to operate in the peak direction only during the peak periods (i.e AM Eastbound and PM Westbound)

8. For routes shown that have similar existing or programmed service, headway shown for all combined service (rather than additive)

2016

Transit Service Enhancements for I-66 Inside the Beltway 2015 CLRP Submission
(placeholder subject to change)**

Route	Change
New Outside the Beltway Services	
Rapid Bus Service from outside the Beltway:	Bi-directional, all day + weekend
Baymarket to Arlington/DC	
Gamesville to Arlington/DC	
Manassas to Arlington/DC	
New Priority Bus Services	
U.S. 29 Priority Bus	Bi-directional, all day service 2025
U.S. 50 Priority Bus - via Ballston	Bi-directional, all day service 2025
U.S. 50 Priority Bus - via U.S. 50	Add route from Fair Lakes to D.C. core along U.S. 50 2040
U.S. 50 Priority Bus - Tysons	Add route from Tysons Corner along U.S. 50 and Wilson Boulevard 2040
Local Routes in Study Area:	
Metrobus 1B	Increase peak-period frequency; improve inbound runtime 2040
Metrobus 1C	Increase peak and off-peak frequencies
Metrobus 1E	Improve runtime
Metrobus 2C	Increase peak and off-peak frequencies
Metrobus 3A	Extend routing to NVCC and East Falls Church and increase frequency
Metrobus 3E	Add reverse-peak direction service and increase peak-direction service frequency; add off-peak service
Metrobus 3T	Increase off-peak-period frequency
Metrobus 4A	Reroute to end at Seven Corners; increase frequency
Metrobus 4E	Increase peak-period frequency, improve runtime
Metrobus 4H	Improve runtime
Metrobus 10B	Increase peak-period frequency
Metrobus 15L	Increase peak-period frequency
Metrobus 22A	Increase peak-period frequency
Metrobus 23A	Increase peak-period frequency
Metrobus 23C	Increase peak-period frequency
Metrobus 25A	Increase peak and off-peak frequencies
Metrobus 25B	Increase northbound off-peak frequency and peak frequencies in both directions
Metrobus 28A	Increase peak-period frequency, improve runtime
Metrobus 28E	New route between Skyline Plaza and East Falls Church
Metrobus 38B	Increase frequency
ART	
ART 42	Increase the reverse-peak direction, peak-period frequency
ART 45	Increase peak-period frequency, improve run time
ART 52	Increase peak and off-peak frequencies
ART #75	Extend routing to Shirlington and Virginia Square; add off-peak service
ART #77	Extend to Rosslyn and increase frequency
New ART1	Add route between Arlington Hall and Crystal City
New ART2	Add route between Court House and Pentagon City

see page D-2 for more details

**Services subject to change based on environmental study, public outreach, and stakeholder working group inputs.

Route	Change	Comment	Peak	Off-pk	Peak	Off-peak	Route Speed	Year	INBOUND	OUTBOUND	Map page
New Outside the Beltway Services											
Rapid Bus Service from outside the Beltway:	Bi-directional, all day + weekend										
Haymarket to Arlington/DC											
Greenbelt to Arlington/DC											
Manassas to Arlington/DC											
New Priority Bus Services											
U.S. 29 Priority Bus	Bi-directional, all day service	note: both di-directional route	new	new	10	10	18	2025	MEX29_CS_EB	MEX29_CS_WB	5
U.S. 50 Priority Bus – via Ballston	Bi-directional, all day service	note: both di-directional route. adjust headways for U.S. 50 trunk?	new	new	10	10	18	2025	MEX50_PB_EB	MEX50_PB_WB	6
U.S. 50 Priority Bus – via U.S. 50	Add route from Fair Lakes to D.C. core along U.S. 50	Assume peak only. Adjust headways for U.S. 50 trunk?	new	new	24	na	18	2040	MEX50_CS_EB	MEX50_CS_WB	n/a
U.S. 50 Priority Bus – Tysons	Add route from Tysons Corner along U.S. 50 and Wilson Boulevard	Assume peak only. Adjust headways for U.S. 50 trunk?	new	new	24	na	18	2040	MEX_TYS_EB	MEX_TYS_WB	n/a
Local Routes in Study Area:											
Metrobus 1B	Increase peak-period frequency; improve inbound runtime	no changes to off-peak headways	30	na	15	na	18	2040			
Metrobus 1C	Increase peak and off-peak frequencies	does not exist									
Metrobus 1E	Improve runtime	runtime only. No Δ headway	30	na	na	na	18	2040			
Metrobus 2C	Increase peak and off-peak frequencies	does not exist									
Metrobus 3A	Extend routing to NVCC and East Falls Church and increase frequency	some 3As already run to NVCC. Assume ALL future 3As to run to NVCC	30	60	15	30	12	2040	WM03AI	WM03AO	13
Metrobus 3E	Add reverse-peak direction service and increase peak-direction service frequency	does not exist									
Metrobus 3T	Increase off-peak-period frequency	no changes to peak headways	na	60	na	30	12	2040			
Metrobus 4A	Reroute to end at Seven Corners; increase frequency in peak only	Exist. route does not go beyond 7 Corners. Assume now combined with other 4s	30	50	15	50	12	2040	WM04AI	WM04AO	16
Metrobus 4E	Increase peak-period frequency, improve runtime	does not exist									
Metrobus 4H	Improve runtime	does not exist									
Metrobus 10B	Increase peak-period frequency	no changes to off-peak headways	30	30	15	30	12	2040			
Metrobus 15L	Increase peak-period frequency	no changes to off-peak headways	30	na	15	na	12	2040			
Metrobus 22A	Increase peak-period frequency	no changes to off-peak headways	30	na	15	na	12	2040			
Metrobus 23A	Increase peak-period frequency	23A is now non-peak only. Assume headway increase applied to 23B	25	30	15	30	12	2040			
Metrobus 23C	Increase peak-period frequency	does not exist									
Metrobus 25A	Increase peak and off-peak frequencies		40	60	15	30	12	2040			
Metrobus 25B	Increase northbound off-peak frequency and peak frequencies in both directions	no changes to peak headways	na	60	na	30	12	2040			
Metrobus 28A	Increase peak-period frequency, improve runtime	no changes to off-peak headways	30	na	15	na	12	2040			
Metrobus 28E	New route between Skyline Plaza and East Falls Church	no changes to off-peak headways	25	na	15	na	12	2040			
Metrobus 38B	Increase frequency		new	new	15	30	12	2040	WM28EI	WM28EO	12
Metrobus 38B			15	20	15	30	12	2040			
ART											
ART 42	Increase the reverse-peak direction, peak-period frequency		17	NA	15	60	12	2040			
ART 45	Increase peak-period frequency, improve run time		30	na	15	na	12	2040			
ART 52	Increase peak and off-peak frequencies		30	60	15	30	12	2040			
ART #75	Extend routing to Shirlington and Virginia Square	routing only	na	na	na	na	12	2040	ART75I	ART75O	19
ART #77	Extend to Rosslyn and increase frequency		30	30	15	15	12	2040	ART77I	ART77O	20
New ART1	Add route between Arlington Hall and Crystal City		new	new	15	30	12	2040	ARTNEW1I	ARTNEW1O	17
New ART2	Add route between Court House and Pentagon City		new	new	15	30	12	2040	ARTNEW2I	ARTNEW2O	18

ATTACHMENT E

2016 CLRP / AQC Route Information - Fairfax Connector

Route	New/Revised/Canceled	Start	End	Via	Bi-Directional Service	Peak Headway (min)	Planned in Fiscal Year
624	New	Vienna Metro	Stringfellow Road P&R	Fair Lakes	no	20	2016
634	New	Stringfellow P&R	Vienna Metro	----	no	20	2016
313	New	Fair Oaks Mall	Franconia-Springfield Metro	Burke Centre VRE	yes	30	2017
321	Revised	Franconia-Springfield Metro	Franconia-Springfield Metro	Counter Clockwise	no	20	2017
322	Revised	Franconia-Springfield Metro	Franconia-Springfield Metro	Clockwise	no	20	2017
451	New	Dunn Loring Metro	Dunn Loring Metro	INOVA Fairfax Hospital	no	20	2017
464	New	Barkley Gate Lane	Vienna Metro	----	yes	30	2017
161	Revised	Mt. Vernon Hospital	Huntington Metro	Richmond Hwy	no	30/60	2018
162	Revised	Mt. Vernon Hospital	Huntington Metro	Harrison Lane	no	30/60	2018
585	Revised	Metrotech at Chantilly	Reston Town Ctr. Metro		no	20	2019
605	Revised	Fairfax Co. Govt. Ctr.	Reston Town Ctr. Metro	INOVA Fair Oaks Hospital	yes	20	2019
924	Revised	Town Ctr. Plaza	Herndon Metro	Herndon Pkwy.	no	20	2019
929	Revised	Centreville at Kinross Circle	Herndon Metro	----	yes	20	2019
950	Revised	Wielhe Metro	Herndon Metro	----	yes	20	2019
983	Revised	Innovation Ctr. Metro	Udvar-Hazy Center	Frying Pan Road	yes	20	2019
RIBS 1	Revised	Lake Anne	----- Metro	----	no	20	2019
RIBS 2	Revised	South Lakes	Reston Town Ctr. Metro	----	yes	20	2019
RIBS 3	Revised	Hunter Woods	----- Metro	----	no	20	2019
RIBS 4	Revised	North Point	Reston Town Ctr.	----	yes	20	2019
RIBS 5	Revised	Herndon	Reston Town Ctr.	----	yes	20	2019
308	New	Richmond Hwy.	Franconia-Springfield Metro	----	yes		
691	New	Stringfellow P&R	Pentagon	Mark Center	yes		
692	New	Fairfax Co. Govt. Ctr.	State Department	Foggy Bottom	yes		

Proposed Operations Plan

