

Chapter 5 Operations Plan

1.0 Introduction

The first four chapters of this document provide background information on the public transportation providers within the City of Alexandria, including an overview of each provider, each provider's goals and objectives and service standards, and each provider's desired expansion projects.

The purpose of this chapter is to outline operations plans for each provider over the next six years, the time frame of this TDP. These operations plans reflect current operations as well as future expansion plans, and are presented within the context of the revenues and subsidies available to support each provider's operations (as presented in Chapter 7).

The operations plan for each provider is outlined in the following sections.

2.0 DASH Operations Plan – Conservative Subsidy Growth Scenario

As outlined in Chapter 7, two financial plans to cover DASH operations were developed, one based on conservative subsidy growth assumptions and one assuming more robust subsidy growth. The two plans were developed to reflect different assumptions regarding subsidy growth rates for the different sources of subsidy funding. The level of available funding to support operations will, in turn, impact the ability to maintain current operations as well as the amount of service expansion that is possible.

Table 5.1 outlines the incremental funds that will be available to support operations over the six-year time frame of this TDP under the conservative subsidy growth scenario. The data in this table shows the incremental changes in DASH revenues and different funding sources compared to the estimated increase in operating expenses resulting from general inflation. The "Available Funds for Service Expansion" line in the Table shows the amount of funds available to support additional service expansion beyond current operations. The data in this line of the table shows that there is actually a small deficit between the increase in subsidies and revenues versus the estimated increase in operating cost. These small deficits can be addressed through tweaks in DASH operations or small increases in funding but will not support service expansion as outlined in the DASH Comprehensive Operational Analysis (COA) and the ATC FY 2016 Transit Development Program.

Table 5.1 – Additional Funding Available for DASH Service Expansion – Conservative Subsidy Growth Scenario

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Incremental Increase DRPT Subsidy		\$67,266	\$68,988	\$70,754	\$72,565	\$74,423	\$76,328
Incremental Increase City Subsidy		\$68,820	\$69,370	\$69,925	\$132,158	\$134,141	\$136,153
Incremental Increase in DASH Revenues		\$60,050	\$60,801	\$61,561	\$62,330	\$63,109	\$63,898
Total Increase in Available Funds		\$196,135	\$199,158	\$202,239	\$267,053	\$271,673	\$276,379
Increase in Operating Subsidy Requirement		\$296,472	\$304,299	\$312,332	\$320,578	\$329,041	\$337,728
Available Funds for Service Expansion		-\$100,337	-\$105,141	-\$110,093	-\$53,525	-\$57,369	-\$61,349

Based on limited funding available to support service expansion, the DASH operations plan over the six-year time frame of this TDP under a fiscally constrained financial plan will consist of maintaining current service levels, as summarized in Table 5.2.

Table 5.2 – DASH Operations Plan under Fiscally Constrained Financial Plan

Route	Weekday		Saturday		Sunday	
	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency
AT1	5:05 AM to 10:42 PM	Peak - 30 Mid-day - 30	6:44 AM to 10:43 PM	All Day - 30	8:20 AM to 7:21 PM	All Day - 60
AT2	5:38 am to 11:04 PM	Peak - 30 Mid-day - 30	7:12 AM to 11:10 PM	All Day - 60	7:59 AM to 7:03 PM	All Day - 60
AT2X	6:13 AM to 9:13 AM 3:00 PM – 6:00 PM	Peak – 15 No mid-day service	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT3*	5:32 AM to 9:57 AM; 3:30 PM to 7:44 PM	Peak – 20 No mid-day service	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT4*	5:50 AM to 9:40 AM; 3:07 PM to 7:25 PM	Peak – 20 No mid-day service	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT3/4	10:26 AM to 2:26 PM; 8:18 PM to 10:07 PM	No peak service Mid-day – 60	8:28 AM to 7:38 PM	All day - 60	9:07 AM to 6:16 PM	All day - 60
AT5	5:16 AM to 10:17 PM	Peak – 20 Mid-day - 30	6:43 AM to 10:52 PM	All day - 30	7:48 AM to 7:17 PM	All day - 60
AT6	5:35 AM to 10:43 PM	Peak – 15 Mid-day - 30	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT7	5:09 AM to 7:43 PM	Peak – 30 Mid-day - 60	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT8	4:54 AM to 12:15 AM	Peak – 10 Mid-day – 30	6:25 AM to 11:29 PM	All day - 30	6:52 AM to 11:05 PM	All day - 30
AT9	6:37 AM to 9:10 PM	Peak – 30 Mid-day - 30	6:52 AM to 9:52 PM	All day - 60	No Sunday service	No Sunday service
AT10	6:33 AM to 10:33 PM	Peak – 30 Mid-day - 30	7:00 AM to 10:30 PM	All day - 30	9:10 AM to 6:34 PM	All day - 60

*Weekday mid-day service provided by Route AT3/4. Saturday and Sunday service also provided by AT3/4

3.0 DASH Operations Plan – Moderate Subsidy Growth Scenario

This section outlines the DASH operations plan under a moderate subsidy growth scenario, as outlined in Chapter 7. Table 5.3 outlines the incremental funds that will be available to support DASH operations over the six-year time frame of this TDP under this moderate subsidy growth scenario. The data in the table shows the incremental changes in DASH subsidies from different funding sources and revenues compared to the estimated increase in operating expenses resulting from general inflation. The “Available Funds for Service Expansion” line in the table shows the amount of funds available to support service expansion beyond current operations. The data in Table 5.3 show that in the out years of the moderate growth financial plan, funds would be available for service expansion based on increases in DRPT operating assistance and the availability of funds from the City’s Transportation Improvement Program.

Table 5.3 – Additional Funding for DASH Service Expansion – Moderate Subsidy Growth Scenario

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Incremental Increase DRPT Subsidy		\$67,266	\$155,546	\$46,697	\$155,368	\$429,355	\$82,824
Incremental Increase City Subsidy		\$68,820	\$69,370	\$69,925	\$132,158	\$134,141	\$136,153
Incremental Increase in DASH Revenues		\$60,050	\$60,801	\$61,561	\$62,330	\$63,109	\$63,898
Expansion Funds from TIP		\$0	\$0	\$319,921	\$324,720	\$676,365	\$686,510
Total Increase in Available Funds		\$196,135	\$285,717	\$498,103	\$674,576	\$1,302,970	\$969,385
Increase in Operating Subsidy Requirement		\$296,472	\$304,299	\$312,332	\$320,578	\$329,041	\$337,728
Available Funds for Service Expansion		-\$100,337	-\$18,582	\$185,771	\$353,998	\$973,929	\$631,657

Note: Under the assumptions of this financial plan, there would be a spike in DRPT operating assistance in FY 2021. This spike is a one-time occurrence and therefore the total amount available in FY 2021 was not assumed to be available on a long-term basis to support expanded DASH service. The service expansion recommendations below reflect this assumption.

Based on the additional available funding under the fiscally unconstrained financial plan, the following service expansion projects identified in the Alexandria Transit FY 2016 Transit Development Program would be implemented.

- FY 2020 – AT 1 Weekday Peak Headway Improvement - This service expansion project would involve an improvement in headways on the AT 1 service during weekday peak periods. Currently weekday peak period headways are between 20 and 30 minutes on the AT1 depending on the direction of the service. Under this service improvement, weekday peak period headways would be a consistent 15 minutes in both directions. The estimated subsidy requirement for this service change is approximately \$320,000 annually. This service improvement would also require four additional vehicles in the DASH fleet. The estimated annual increase in ridership associated with this service change is 107,700 (based on estimates from the DASH COA).

- FY 2021 – AT1 Weekend All Day Headway Improvement – This service expansion project would involve an improvement in headways on the AT 1 service on weekends. Currently Saturday AT1 frequencies are 60 minutes in the early morning and evening and 60 minutes all day on Sunday. This service change would result in consistent 30 minute headways throughout the weekend. The estimated subsidy requirement for this service change is approximately \$152,000 annually. No additional vehicles would be required to support this service change. The estimated annual increase in ridership associated with this service change is approximately 88,800 (based on estimates from the DASH COA).

Table 5.4 outlines the impact of these new service expansions on available funding.

Table 5.4 – Service Expansion Impacts on Available Funding

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Incremental Increase DRPT Subsidy		\$66,621	\$181,386	\$46,697	\$155,368	\$429,355	\$82,824
Incremental Increase City Subsidy		\$69,021	\$69,573	\$70,130	\$132,545	\$134,534	\$136,552
Incremental Increase in DASH Revenues		\$70,266	\$71,250	\$72,247	\$73,259	\$74,284	\$75,324
Expansion Funds from TIP		\$0	\$0	\$319,921	\$324,720	\$676,365	\$686,510
Total Increase in Available Funds		\$205,908	\$322,209	\$508,995	\$685,892	\$1,314,538	\$981,210
Increase in Operating Subsidy Requirement		\$296,472	\$304,299	\$312,332	\$320,578	\$329,041	\$337,728
Available Funds for Service Expansion		-\$90,564	\$17,911	\$196,662	\$365,314	\$985,497	\$643,482
AT-1 Weekday Peak Headway Improvement					\$319,921	\$328,367	\$337,036
AT-1 Weekend All Day Hdwy Improve						\$152,189	\$156,207
Surplus/Deficit after Expansion					\$45,393	\$504,941	\$150,239

Note: Service expansion subsidy requirements are assumed to grow by 2.64% annually to reflect increase in operating expenses associated with general inflation.

A new summary of the DASH operating plan with these service expansions is shown in Table 5.5. The changes due to the service expansions are highlighted in blue.

Table 5.5 – DASH Operations Plan under Moderate Subsidy Growth Scenario

Route	Weekday		Saturday		Sunday	
	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency
AT1	5:05 AM to 10:42 PM	Peak - 15 Mid-day - 30	6:44 AM to 10:43 PM	All Day - 30	8:20 AM to 7:21 PM	All Day - 30
AT2	5:38 am to 11:04 PM	Peak - 30 Mid-day - 30	7:12 AM to 11:10 PM	All Day - 60	7:59 AM to 7:03 PM	All Day - 60
AT2X	6:13 AM to 9:13 AM 3:00 PM – 6:00 PM	Peak – 15 No mid-day service	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT3*	5:32 AM to 9:57 AM; 3:30 PM to 7:44 PM	Peak – 20 No mid-day service	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT4*	5:50 AM to 9:40 AM; 3:07 PM to 7:25 PM	Peak – 20 No mid-day service	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT3/4	10:26 AM to 2:26 PM; 8:18 PM to 10:07 PM	No peak service Mid-day – 60	8:28 AM to 7:38 PM	All day - 60	9:07 AM to 6:16 PM	All day - 60
AT5	5:16 AM to 10:17 PM	Peak – 20 Mid-day - 30	6:43 AM to 10:52 PM	All day - 30	7:48 AM to 7:17 PM	All day - 60
AT6	5:35 AM to 10:43 PM	Peak – 15 Mid-day - 30	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT7	5:09 AM to 7:43 PM	Peak – 30 Mid-day - 60	No Saturday service	No Saturday service	No Sunday service	No Sunday service
AT8	4:54 AM to 12:15 AM	Peak – 10 Mid-day – 30	6:25 AM to 11:29 PM	All day - 30	6:52 AM to 11:05 PM	All day - 30
AT9	6:37 AM to 9:10 PM	Peak – 30 Mid-day - 30	6:52 AM to 9:52 PM	All day - 60	No Sunday service	No Sunday service
AT10	6:33 AM to 10:33 PM	Peak – 30 Mid-day - 30	7:00 AM to 10:30 PM	All day - 30	9:10 AM to 6:34 PM	All day - 60

*Weekday mid-day service provided by Route AT3/4. Saturday and Sunday service also provided by AT3/4

4.0 DOT Paratransit Operations

As noted in Chapter 1 of this document, DOT paratransit service is the City of Alexandria’s specialized transportation service for Alexandria residents who cannot use regular fixed route transit due to a disability. DOT will provide service to eligible city residents with destinations in the City of Alexandria, the City of Falls Church, Arlington County, Fairfax City, and Fairfax County. Trips for Alexandria residents wishing to make a trip outside these jurisdictions would be required to use WMATA MetroAccess service. The number of trips DOT has made over the last seven years has remained quite steady at about 55,000 trips per year and there is no sign of unmet demand for DOT service. Therefore, there is no anticipated change in DOT service levels or trips provided. The current hours of service for DOT, which would remain the same moving forward, are shown below.

- Monday – Thursday 5:30 AM to Midnight
- Friday 5:30 AM to 3:00 AM
- Saturday 5:30 AM to 3:00 AM
- Sunday 7:00 AM to Midnight

5.0 King Street Trolley Operations

The current operating plan for the King Street Trolley is summarized below:

- Hours of Service:
 - Sunday – Wednesday: 10:00 AM – 10:15 PM
 - Thursday – Saturday: 10:00 AM – 12 midnight
- Service Frequency: 15 minutes during all service hours (currently running 10 minutes during summer months)

The King Street Trolley is now running at a 10 minute service frequency during the summer months but this is being done with no increase in its annual budget. Longer term, there is a desire to run 10 minutes year-round but this initiative has not been formalized.

There is also concern about King Street Trolley operations, specifically long layovers that hurt the service’s productivity. A review of King Street Trolley operations is proposed to determine if layovers can be modified or the extra slack time in the schedule can be used to serve other portions of Old Town.

6.0 WMATA Metrobus and Metrorail Operations within Alexandria

As shown in Chapter 7, Alexandria is striving to hold steady City operating support to WMATA, given the City’s minimal growth in tax revenues. This need to hold steady City support means that any service changes would need to be cost neutral. This cost-neutral requirement is in line with WMATA’s overall State-of Good-Operations strategy (SOGO), which is focused on maximizing the benefit of resources expended on WMATA bus operations. WMATA staff is continually evaluating WMATA bus service to determine where there are issues such as crowding or poor reliability as well as identifying poorly performing routes that could be modified to free up funds to address issues on more productive routes. Potential changes to WMATA service within Alexandria as described below have been developed within this SOGO framework.

One additional initiative that is focused on cost savings that is in its early stages is the idea of DASH taking over some WMATA routes within the City. This initiative would focus on routes within the City that are not truly regional in nature and therefore may be more appropriately operated by DASH. The primary benefit of this switch would be significant cost savings due to DASH's much lower operating cost.

One set of cost neutral service changes have been recently implemented during the June 2015 schedule change. These include:

- 7A, F, Y: Minor changes in trip start times and trip destinations
- 11Y: Additional bus stops were added in Old Town Alexandria
- 22A, C, F 22 Line service was rerouted to cover former 25 Line routing
- 25A, C, D, E: Service replaced with 22 re-routes
- 25B: Changes in service frequency

A second potential service change is being evaluated and will be presented at the September 2015 service change public hearings, though if and when this service change is implemented is still unknown. This potential change would involve the following elements:

- Elimination of 9A service and restructuring of 10A service to cover most portions of the eliminated 9A. 10A service would terminate at the Huntington Metrorail station rather than Hunting Point in order to cover this eliminated portion of the 9A.
- Elimination of 10R and 10S trips, which are trips that run to Rosslyn to supplement Blue Line service.

These service reductions would result in a net savings of \$1,450,000. These net savings would be used for two service improvements, proposed for potential implementation, though the final implementation schedule is still unknown.

- Sunday 10B service frequency would be improved from 60 minutes to 30 minutes. The estimated annual increase in riders due to this service change is 20,500 (based on estimates from the WMATA Service Evaluation Study for the 10A, E Hunting Point – Pentagon Line, 10B – Hunting Point – Ballston Line).
- Saturday and Sunday 29N service would be improved from 60 minutes to 30 minutes. The estimated annual increase in ridership due to these service changes is 18,170 (based on estimates from the WMATA Priority Corridor Network Study for 29 Lines).

As noted, this potential change is at this point simply being evaluated. No time frame for implementation has been set and implementation may not move forward at all.

The Alexandria Metrobus service plan for the six-year time frame of this TDP with June 2015 service changes is summarized below in Table 5.6. The changes implemented in June 2015 are highlighted in blue.

Table 5.6 – Metrobus Operating Plan – Six-Year Time Frame of TDP

Route	Weekday		Saturday		Sunday	
	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency
7A	4:45 AM to 3:30 AM	Peak – 20-30 Mid-Day - 40	6:49 AM to 3:30 AM	60	7:30 AM to 12:12 AM	40
7F	5:34 AM to 11:50 PM (no peak period, peak direction service - provided by 7Y)	Peak – 55-60 Mid-day - 40	6:17 AM to 10:27 PM	60	n/a	n/a
7Y*	5:09 AM to 8:46 AM and 3:01 PM to 6:38 PM (peak period, peak direction service)	10 (7AM – 8AM)	n/a	n/a	n/a	n/a
7B	6:12 AM to 8:31 AM and 4:32 PM to 6:57 PM (peak period, peak direction only)	30	n/a	n/a	n/a	n/a
7C	6:05 AM to 8:47 AM and 4:15 PM to 7:05 PM (peak period, peak direction only)	30	n/a	n/a	n/a	n/a
7W	6:25 AM to 8:33 AM and 3:55 PM to 6:50 PM (peak period, peak direction only)	15-20	n/a	n/a	n/a	n/a
7X	6:26 AM to 8:16 AM and 4:15 PM to 6:35 PM (peak period, peak direction only)	15-20	n/a	n/a	n/a	n/a

Route	Weekday		Saturday		Sunday	
	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency
7H	2 AM, 2 PM trips - reverse peak direction	2 trips in each peak period	n/a	n/a	n/a	n/a
7P	6:14 AM to 8:47 AM and 4:03 PM to 6:03 PM	20-30	n/a	n/a	n/a	n/a
7M	5:40 AM to 6:46 PM	Peak – 10 Mid-Day – 15	n/a	n/a	n/a	n/a
8S	6:27 AM to 8:15 AM and 4:15 PM to 6:02 PM (peak period, reverse peak direction service)	30	n/a	n/a	n/a	n/a
8W	6:09 AM to 8:54 AM and 3:55 PM to 8:24 PM (peak period, peak direction)	15-30	n/a	n/a	n/a	n/a
8Z	5:35 AM to 8:32 AM and 3:40 PM to 8:00 PM	15-30	n/a	n/a	n/a	n/a
9A	4:30 AM to 1:37 AM	Peak – 30 Mid-Day 30	5:24 am to 1:30 AM	30	5:00 AM to 12:35 AM	40
10A	4:37 AM to 12:35 AM (does not run in the peak period peak direction - service is replaced by 10E during that time and direction)	Peak – 30 Mid-Day 30	5:17 AM to 12:40 AM	30	6:15 AM to 10:50 PM	60
10B	4:52 AM to 1:00 AM	Peak – 30 Mid-Day - 30	5:37 AM to 1:00 AM	30	6:45 AM to 11:00 PM	60
10E	6:02 AM to 8:20 AM and 4:14 PM to 6:31 PM (service is peak period, peak direction service only, replacing the 10A during that time)	15	n/a	n/a	n/a	n/a

Route	Weekday		Saturday		Sunday	
	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency
10R	6:00 AM to 8:00 AM and 4:15 PM to 6:13 PM (service is peak period, peak direction service only)	30	n/a	n/a	n/a	n/a
10S	6:50 AM to 7:50 AM and 4:48 PM to 5:48 PM (reverse peak service between Rosslyn and Potomac Yard)	30	n/a	n/a	n/a	n/a
11Y	6:40 AM to 7:45 AM and 4:10 PM to 6:15 PM (peak period, peak direction)	12-20	n/a	n/a	n/a	n/a
21A	6:00 AM to 8:37 AM and 4:00 PM to 7:20 PM (peak period, peak direction)	20-30	n/a	n/a	n/a	n/a
21D	Three AM trips and three PM trips (peak period, peak direction)	Three AM trips and three PM trips (peak period, peak direction)	n/a	n/a	n/a	n/a
22A*	9:30 AM – 3:00 PM and 7:00 PM to 10:00 PM (off-peak service only – mid-day and evening)	30	6:30 AM to 9:30 PM	45	7:30 AM to 8:15 PM	60
22B*	5:40 AM to 8:45 AM and 2:43 PM to 6:25 PM (peak period, bi-directional service)	20	n/a	n/a	n/a	n/a
22C*	5:30 AM to 9:30 AM and 3:30 PM to 7:30 PM (peak period, bi-directional service)	20	n/a	n/a	n/a	n/a
22F*	6:15 AM to 9:28 AM and 3:15 PM to 8:15 PM (peak period, peak direction service)	20	n/a	n/a	n/a	n/a

Route	Weekday		Saturday		Sunday	
	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency	Hours of Service	Average Service Frequency
25A, C, D, E*	Service removed as part of June schedule change -					
25B*	5:48 AM to 11:17 PM	Peak – 15 Mid-day - 30	6:10 AM to 9:17 PM	30	7:38 AM to 8:10 PM	60
28A	5:09 AM to 12:40 AM	30 peak 20 – mid-day	5:50 AM to 12:45 AM	20	5:50 AM to 11:30 PM	30
28F	5:47 AM to 8:32 AM and 2:45 PM to 6:32 PM (Southbound in AM Peak and Northbound in PM peak)	20-30	n/a	n/a	n/a	n/a
28G	6:02 AM to 8:50 AM and 3:45 PM to 6:55 PM (Northbound in the AM peak and Southbound in the PM peak)	20-30	n/a	n/a	n/a	n/a
28X	5:12 AM to 8:15 AM and 3:35 PM to 6:25 PM (bi-directional peak period service only)	15	n/a	n/a	n/a	n/a
29K	5:40 AM to 10:40 PM	Peak – 60-70 Mid-Day – 60 - 70	n/a	n/a	n/a	n/a
29N	5:30 AM to 10:10 PM	Peak – 60 Mid-day - 60	6:10 AM to 9:20 PM	60	6:10 PM to 9:20 PM	60
REX	5:08 AM to 10:57 PM	Peak – 10-20 Mid-Day - 30	4:48 AM to 10:03 PM	30	4:50 AM to 9:10 PM	60
Metroway	5:30 AM to 12:00 AM	Peak – 12 Mid-Day – 20	6:30 AM to 12:00 AM	20	7:30 AM to 10:00 PM	20

* Reflects changes made in June 2015 schedule change. 22 Line service previously did not provide service in Alexandria. June service changes resulted in 22 Line now providing service in Alexandria where 25A, C, D, E previously provided service.

7.0 DASH Operations Plan Vision

DASH completed a Comprehensive Operations Analysis in 2014 that generated a wide range of recommendations covering service restructuring, new service, and service frequency expansion. The most extensive recommendations related to improving service frequencies in order to make the system more convenient and to more accurately reflect the dense urban characteristics of Alexandria. The number of recommendations from the COA in each of the three areas noted above is well beyond the current financial capability of DASH and the City to implement but they reflect the strategic vision for DASH and thus are outlined here for reference if financial resources become available. Outlined below in Table 5.7 is a summary of the additional recommendations identified in the COA and the Alexandria

Transit Development Program that have not been included in the constrained operations plan due to the lack of available financial resources. The projects identified in Table 5.7 are listed in order of priority as set by DASH staff and are further broken out by proposed implementation year.

One final note is that a proposal was made in DASH's COA regarding restructuring DASH services in the City's west end as well as along the Beauregard corridor in conjunction with the implementation of the West End Transitway. This would involve re-routes and cutting service on routes that would duplicate the new BRT service as well as implementation of a new Circulator service around the Van Dorn Metro station. This restructuring would result in a net savings to DASH. More detailed service plans and cost estimates will be completed as the West End Transitway moves closer to implementation.

Table 5.7 – DASH Service Expansion Vision

Route	Improvement #	Service Change	Estimated Total Annual Cost	Estimated Required Subsidy	Additional Required Vehicles	Estimated Annual Ridership Change
Proposed in DASH Transit Development Program for Implementation in FY 2017						
AT8	#1	Improve off-peak weekday service frequency from current 30 minutes to 15 minutes	\$608,157	\$540,992	0	65,209
AT8	#2	Improve Saturday and Sunday from current 30 minutes to 15 minutes	\$333,326	\$194,585	0	134,700
Total FY 2017			\$941,483	\$735,577	0	199,909
Proposed in DASH Transit Development Program for Implementation in FY 2018						
AT5	#3	Improve weekday peak period headways from current 20-30 minutes to a consistent 15 minutes. Improve weekday off-peak headways from current 30 minutes to 20 minutes.	\$1,467,584	\$1,284,759	3	177,500
AT2	#4	Improve weekday peak period headways from current 20 minutes to 15 minutes. Improve weekday off-peak headways from current 30 minutes to 20 minutes	\$730,032	\$590,055	3	135,900
New: Eisenhower Circulator	#5	Implement circulator system to serve the Eisenhower East growth area. Service would be on weekdays only, running every 10 minutes in the peak and 15 minutes in the off-peak.	\$600,892	\$529,977	3	68,850
AT9	#6	Improve existing Saturday headways from current 60 minutes to 30 minutes	\$134,059	\$51,453	0	80,200
Total FY 2018			\$2,932,567	\$2,456,244	\$9	\$462,450

Route	Improvement #	Service Change	Estimated Total Annual Cost	Estimated Required Subsidy	Additional Required Vehicles	Estimated Annual Ridership Change
Proposed in DASH Transit Development Program for Implementation in FY 2019						
AT2	#7	Improve Saturday and Sunday headways from current 60 minutes to 30 minutes	\$157,180	\$55,416	0	98,800
AT5	#8	Improve Sunday AT5 headways from current 60 minutes to 30 minutes	\$203,055	\$139,813	0	61,400
AT3	#9	Improve weekday peak headways from current 20 minutes to 15 minutes	\$189,499	\$167,869	2	21,000
AT4	#10	Improve weekday peak headways from current 20 minutes to 15 minutes	\$191,100	\$167,822	2	22,600
AT9	#11	Implement AT9 Sunday service at a 60 minute headway	\$106,329	\$11,569	0	92,000
AT10	#12	Improve weekday peak period headways from current 30 minutes to 15 minutes	\$246,140	\$207,515	2	37,500
Total FY 2019			\$1,093,303	\$750,004	6	333,300
Proposed in DASH Transit Development Program for Implementation in FY 2020						
AT10	#13	Improve Sunday all day headways from current 60 minutes to 30 minutes	\$43,790	\$39,979	0	3,700
AT9	#14	Improve weekday peak period headways from current 30 minutes to 15 minutes	\$861,984	\$771,344	3	88,000
Total FY 2020			\$905,774	\$751,323	3	91,700

Route	Improvement #	Service Change	Estimated Total Annual Cost	Estimated Required Subsidy	Additional Required Vehicles	Estimated Annual Ridership Change
Proposed in DASH Transit Development Program for Implementation in FY 2021						
AT8	#15	Improve headways during all periods of the day to run a consistent 10 minutes throughout the day (further improvement to headways beyond recommended under improvement #1).	\$1,390,869	\$1,176,423	5	208,200
AT1	#16	Improve weekday peak period headways to 10 minutes (further headway expansion beyond headway improvement proposed as part of the fiscally unconstrained financial plan as outlined in Section 3.0 of this chapter)	\$526,524	\$428,056	3	95,600
AT5	#17	Improve weekday peak period headways to 10 minutes (further headway expansion beyond headway improvement proposed under improvement #3)	\$946,680	\$853,156	6	90,800
AT2	#18	Improve weekday peak period headways to 10 minutes (further headway expansion beyond headway improvement proposed under improvement #4)	\$438,965	\$366,041	3	70,800
AT8	#19	Improve weekend headways to 10 minutes during busiest times of day and 20 minutes the remainder of the day. minutes (further headway expansion beyond headway improvement proposed under improvement #2)	\$405,542	\$286,268	0	115,800
Total FY 2021			\$3,708,580	\$3,109,944	17	581,200

Route		Service Change	Estimated Total Annual Cost	Estimated Required Subsidy	Additional Required Vehicles	Estimated Annual Ridership Change
Proposed in DASH Transit Development Program for Implementation in FY 2022						
AT9	#20	Improve weekday headways to 10 minutes during all times of the day (further headway expansion beyond headway improvement proposed under improvement #14)	\$1,388,101	\$1,236,897	4	146,800
AT6	#21	Improve weekday peak headways to 10 minutes from current 15 minutes	\$278,835	\$239,695	2	38,000
Total – FY 2022			\$1,666,936	\$1,416,118	6	\$184,800
Total – all years – six-year time frame of Alexandria Transit Development Plan			\$11,248,643	\$9,219,210	41	1,853,359

8.0 WMATA Operations Plan Vision

WMATA staff has identified a range of potential longer term service modifications that are on hold until funding becomes available. These are summarized in Table 5.8. These modifications come from a number of sources including WMATA staff work, the 29 Lines Priority Corridor Study, and the 10 Lines Service Evaluation, completed in 2013.

Table 5.8 - WMATA Service Expansion Vision

Route	Service Change	Total Estimated Annual Cost	Net Annual Cost After Fare Revenue	Estimated Annual Ridership Change
10B	Improve 10B peak period headways to 15 minutes from current 30 minutes	\$1,023,212	\$977,682	39,500
MetroExtra Service in 29K corridor	Implement weekday peak period MetroExtra service along the current 29K Line alignment. Service would run every 15 minutes during both peak periods.	\$2,037,626	\$1,991,181	30,270
28A	Improve Sunday Service Frequency from 30 minutes to 20 minutes	\$405,720	\$391,860	12,600
7A, 7F	Implement 7F service on Sunday, running at 60 minutes. Modify current 7A service to run at 60 minutes rather than current 40. Combined Sunday 7A, F service would be 30 minutes.	\$278,208	\$275,128	2,800
25B	Modify 25B weekday mid-day service such that all mid-day trips run to Van Dorn Metro. This would result in mid-day 30 minute service at Van Dorn compared to current 60 minutes	\$224,250	\$217,650	6,000
25B	Modify 25B Saturday service such that all trips run to Van Dorn Metro. This would result in Saturday 30 minutes service at Van Dorn compared to current 60 minutes.	\$185,472	\$182,942	2,300
25B	Modify 25B Sunday service such that service is now 30 minutes and all trips run to Van Dorn.	\$185,472	\$183,492	1,800
Total		\$4,339,960	\$4,219,935	95,270

9.0 VRE Operations

VRE is currently constrained in expanding service by its operating agreements with the freight railroads CSX and Norfolk Southern, on whose tracks VRE service runs. Capital improvements such as developing a third track on the CSX Fredericksburg Line are necessary before the operating agreements can be modified to accommodate more trains. VRE has outlined in detail the required capital improvements and the associated increases in service that would be possible due to the improvements in its “Systems Plan”, developed in 2014. The systems plan does not put a firm date on service expansion given the time variability of the capital improvements. General system expansion plans by phase are summarized below:

- Phase 1 – Longer trains on existing trips and an additional round trip on both the Manassas and Fredericksburg lines.
- Phase 2 and 3 - Up to six additional trains per hour on both lines during the peak period, reverse peak service from Washington DC to activity centers in Virginia consisting of up to two trips per hour, hourly off-peak service during the weekday mid-day and evening, and weekend service running hourly.