

Alexandria Transit Company Board of Directors Meeting



Wednesday, October 18, 2017 5:30 p.m. City Hall, Sister Cities Conference Room 1100

Meeting Agenda

| #1 | Public Comment | |
|----|---|-------------------------------|
| #2 | Consideration of Meeting Minutes Approval September 13, 2017 | All |
| #3 | Chairman's Report | Paul Abramson Chairman |
| #4 | T&ES Director's Report | Yon Lambert Director, T&ES |
| #5 | DASH General Manager's Report a) Management Report b) Performance Reports c) Operating Report d) Fiscal Report e) General Manager's Summary | Josh Baker General Manager |
| #6 | New Business a) Ridership to date and projected revenue impacts related to ACPS & DOT MetroAccess programs b) Board Resolution, Hybrid vs. Clean Diesel proposal by General Manager c) New Budget Schedule & TDP Process proposal by General Manager | All |
| #7 | Old Business a) DOT & MetroAccess Ride Free Program – Launched October 1, 2017 b) OT Report and Analysis by General Manager | All |
| #8 | Consideration of Convening an Executive Session for the Purpose of Discussing Legal and Personnel Matters, pursuant to Section 2.2-3711 (A1) of the Code of Virginia | Paul Abramson Chairman |
| #9 | Next Meeting Date & Adjournment The Next Regular Board Meeting will be Wednesday, November 8, 2017 Consider Adjournment | All |



ATC Board Agenda Detail

Agenda Item #: 2

Item Title: September 13, 2017 Minutes

Contacts: Fatima Ahmed

Attachments: None Customer Impact: None

Board Action: Consideration of Approval



Minutes

Alexandria Transit Company (ATC) **BOARD OF DIRECTORS MEETING** September 13, 2017 – 5:30 p.m.

A meeting of the Board of Directors of the Alexandria Transit Company was held on Wednesday, September 13, 2017 at Alexandria Transit Company (DASH) Board Room, 3000 Business Center Dr, Alexandria, VA 22314.

Board members attending were: Paul Abramson, Chieko Clarke, Kerry Donley, David Kaplan, Richard Lawrence and Meredith MacNab.

Staff members attending were: Josh Baker, Raymond Mui, Marvin Johnson, Rick Baldwin, Martin Barna, John Lanocha, Lorenza Myers, Fatima Ahmed, Joni Calmbacher, Mark Curry, Rita Dillard, Allan Fye, Justin Isbell, Allyson Teevan and Alicia Wright.

Visitors to the meeting included City of Alexandria resident Bob MacNab, City of Alexandria resident Steve Yasick and Larry Morris of First Transit, Inc.

The board holds meetings every second Wednesday and all are welcome to attend.

Board Meeting

Agenda Item #1 - Public Comment

Mr. Abramson called the meeting to order at 5:32~p.m. and welcomed the board members, staff, and guests. There was no public comment.

Agenda Item #2 - Consideration of Meeting Minutes Approval

Mr. Abramson asked for consideration of approval of the minutes of June 14, 2017. Mr. Donley made a motion to accept the minutes as presented with Mr. Lawrence seconding the motion and the vote was carried in approval.

Agenda Item #3 – Chairman's Report

Mr. Abramson updated the Board that along with Ms. Triggs and Mr. Baker, three proposals were reviewed for the DASH Board Retreat. Mr. Abramson reported that Michael Noel of Noel Training & Consulting, Inc. has been selected to facilitate the retreat. A calendar will be sent to the Board to determine the retreat date.

The Chairman thanked the Board for their input in assisting with the General Manager's six-month evaluation. Mr. Abramson is working with Mr. Lambert to finalize the evaluation and will report back to the Board next month.

Agenda Item #4 - T&ES Directors Report

Mr. Lambert provided the Directors Report in advance. The Chairman mentioned to the Board that the General Manager is setting up a workgroup with City Staff to review the internal budget as we move forward with the budget process.



Staff Reports

Agenda Item #5 – General Manager's Report

Mr. Baker recognized guests present for the meeting including Mr. Larry Morris of First Transit, Inc., Mr. Mark Curry the new Marketing & Design Specialist and Mr. Martin Barna the new Director of Planning for DASH. Mr. Baker recapped some of the highlights in the reports for the month of July and August as presented in the board packet.

Mr. Baker updated the Board on the new format of the management reports provided. He stated that these are the beginnings of the work to improve the reports for the Board, to provide more information as it relates to trends related to the industry in a snapshot format. Mr. Baker stated that the decrease of ridership is a priority in helping the Board understand the possible sources and the long term solutions. Mr. Baker reported that the new fiscal year first quarter data will be provided at a later date.

Ms. MacNab commented on the improved visual presentation of the ridership and operations reports in the new format. Mr. Kaplan requested the information be expanded and reported on a more detailed level for the ACPS & DOT MetroAcess Programs outlining the revenue impact for fares and DASH pass sales. Mr. Kaplan asked that the board consider preparing an update to the policies and procedure manual that would include any mid-year permanent fare changes relating to programs that require a public hearing prior to Board action.

Mr. Donley moved to approve the ACPS and DOT Programs and requested that staff bring back to the October meeting the information Mr. Kaplan asked for, to understand the revenue implications and possible policy amendments that would be necessary. Ms. MacNab seconded the motion and the vote was carried in approval. Mr. Baker stated he will provide the information requested to the Board in the October meeting.

Agenda Item #6 - New Business

Item #6a – Mr. Baker summarized the Presentation of the Final TCRAB Report. He stated that the recommendations in the report will be advocated to the General Assembly in an effort to maintain DASH's state of good repair.

Item #6b – Ms. Joni Calmbacher of T&ES presented the DASH Flood Mitigation Study Results.

Item #6c – Mr. Baker presented the First Transit Report, staff responses and elected implementations. Mr. Larry Morris commented that the First Transit representatives were very impressed with the organization.

Item #6d – Mr. Baker presented the OT Report & Analysis with a summary of work being completed to resolve the overtime issue.

Agenda Item #7 - Old Business

Item #7a – Mr. Baker provided an update on the Hybrid vs. Clean Diesel Bus discussions with EPC.

Item #7b – Board Retreat Planning (Noted in the Chairman's Report)

Item #7c – DOT & MetroAcess Ride Free Program (Board Action noted in the General Manager's Report)

Item #7d – Student Ride Free Pilot (Board Action noted in the General Manager's Report)

Agenda Item #8 - Next Meeting Date & Adjournment

As there was no further business, the Chairman asked for a motion to adjourn. On a motion by Mr. Donley, seconded by Ms. MacNab, the meeting adjourned at 7:04 p.m.

The next meeting is October 18, 2017 at 5:30 p.m.

Minutes submitted by the Secretary



ATC Board Agenda Detail
Agenda Item #: 3

Item Title:Chairman's ReportContacts:Paul Abramson

Attachments: None
Customer Impact: None
Board Action: None/FYI



Report by the Chairman of the ATC Board

ATC Board Agenda Detail
Agenda Item #: 4

Item Title: T&ES Directors Report

Contacts: You Lambert, Director of Alexandria City T&ES

Attachments: None
Customer Impact: None
Board Action: None/FYI





ATC Board Agenda Detail

Agenda I tem #: 5

Item Title:DASH General Manager's ReportContacts:Josh Baker, General Manager

Attachments: None
Customer Impact: None
Board Action: None/FYI

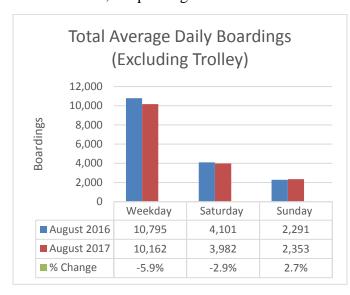


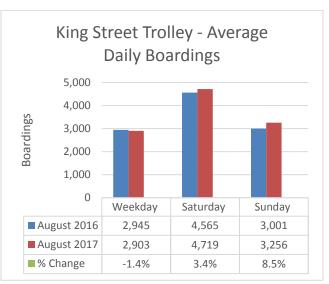
5a Summary: Management Report

FOR THE MONTH OF AUGUST 2017

A. RIDERSHIP:

Total system ridership for the month decreased by 3.8% from last August, with 357,728 total riders boarding. Without the King Street Trolley, total ridership decreased by 5.4% from last August, with 259,058 passengers.





B. SAFETY:

DASH experienced one non-preventable vehicle accident during the month of August. No injuries were reported.

C. RELIABILITY & MAINTENANCE:

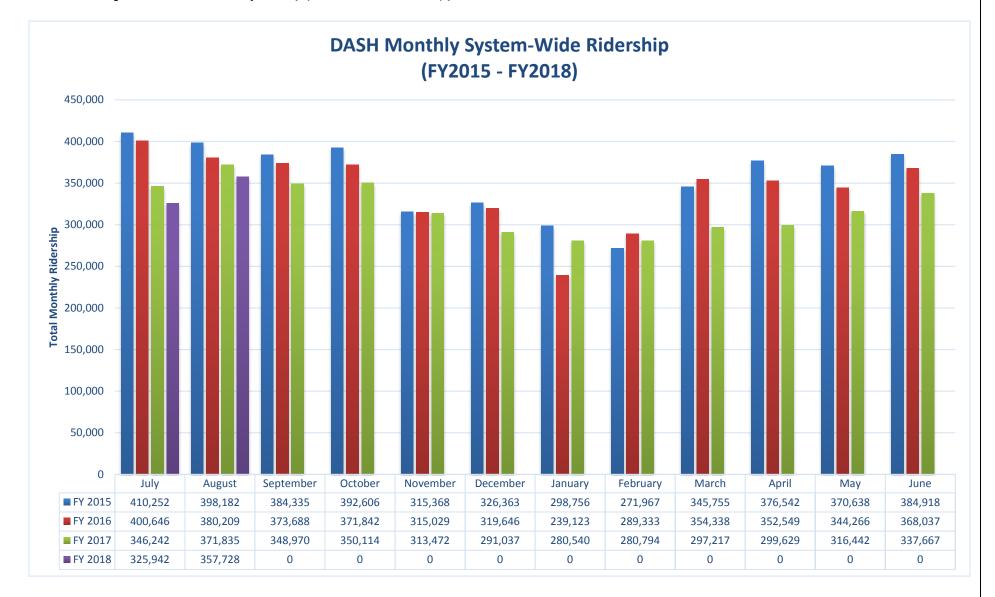
| | August | August | | |
|--------------------------|--------|--------|----------|--------------|
| | 2016 | 2017 | % Change | Industry Avg |
| On-Time Performance | 94.9% | 98.2% | 3.4% | 83.6% |
| Missed Trip Percent | 0.01% | 0.01% | 0.0% | N/A |
| Avg. Miles Per Road Call | 14,573 | 22,876 | 57.0% | 11,439 |

D. SPECIAL EVENTS:

No special events or incidents to report for this month.

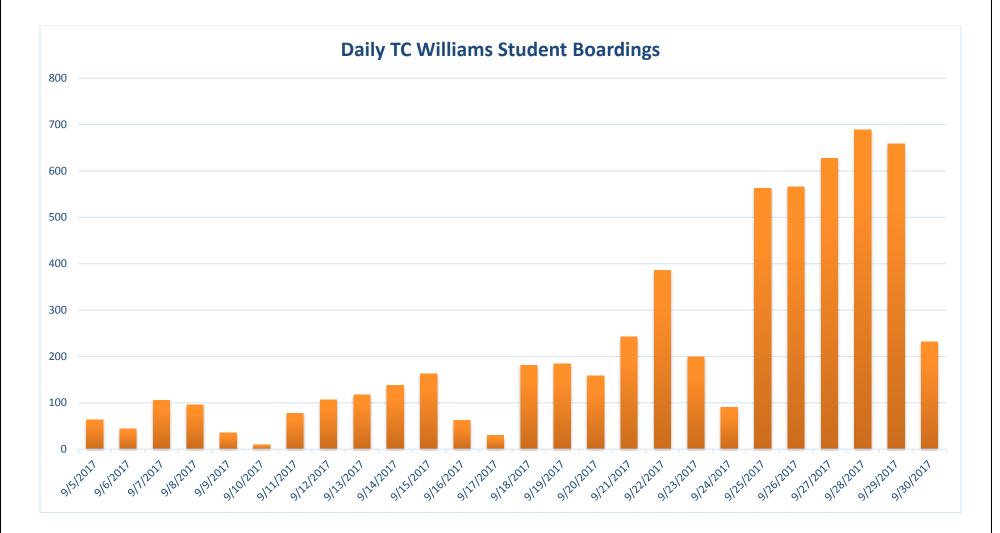


5b Summary: Performance Reports (System-Wide Ridership)





5b Summary: Performance Reports (TC Williams Daily Ridership)





5c Summary: Operating Report

FOR THE MONTH OF AUGUST 2017

| | PREVIOUS YEAR (AUGUST 2016) | CURRENT YEAR (AUGUST 2017) | PERCENT CHANGE |
|--|-----------------------------|----------------------------|-------------------|
| RIDERSHIP | (AUGUST 2016) | (AUGUST 2017) | CHANGE |
| Total Monthly Passengers | 371,835 | 357,728 | -3.8% |
| Total Monthly Passengers (Excluding Trolley) | 273,846 | 259,058 | -5.4% |
| Passengers / Revenue Mile | 2.3 | 2.2 | -5.9% |
| Passengers / Revenue Hour | 26.5 | 24.3 | -8.5% |
| SERVICE LEVELS | | | |
| Total Miles | 174,873 | 183,009 | 4.7% |
| Revenue Miles | 158,745 | 165,361 | 4.2% |
| SAFETY | | | |
| Accidents - Total | 1 | 1 | 0.0% |
| Accidents - Preventable | 1 | 0 | -100.0% |
| <u>FARES</u> | | | |
| Average Fare | 1.16 | 1.21 | 4.3% |
| ATC DASH Pass | 21,478 | 22,170 | 3.2% |
| Regional Bus Transfers | 23,218 | 22,148 | -4.6% |
| Rail-Bus Transfers | 40,765 | 38,307 | -6.0% |
| % Paid by SmartTrip | 81.2% | 80.3% | -1.1% |
| FINANCIAL PERFORMANCE | | | |
| Operating Expense / Total Mile | \$7.43 | \$7.94 | 6.8% |
| Operating Expense / Total Platform Hour | \$67.51 | \$69.20 | 2.5% |
| Total Revenue / Operating Expense Ratio | 34.9% | 31.7% | -9.2% |

5d Summary: Fiscal Reports (Summary Income Statement)

FOR THE MONTH OF AUGUST 2017

| Account Description | <u>Actual</u> | <u>Budget</u> | <u>Variance</u> | Year to Date Actual | Year to Date Budget | <u>Variance</u> | Annual Budget |
|---|---|--|--|--|---|--|--|
| OPERATING REVENUE PASSENGER REVENUE KING STREET TROLLEY REVENUE CHARTER REVENUE MISCELLANEOUS REVENUE | \$306,079 79,412 70,898 4,335 | \$302,667 79,412 70,583 | \$3,412 315 4,335 | \$562,477 158,823 130,815 4,335 | \$605,334 158,824 141,166 | (\$42,857) (1) (10,351) 4,335 | \$3,632,000 952,938 847,000 |
| TOTAL OPERATING REVENUE | 460,724 | 452,662 | 8,062 | 856,450 | 905,324 | (48,874) | 5,431,938 |
| WAGES FRINGE BENEFITS | 668,174 194,459 | 623,882 142,417 | (44,292) (52,042) | 1,332,144 381,690 | 1,247,764 284,834 | (84,380) (96,856) | 7,486,575 1,709,000 |
| TOTAL TRANSPORTATION LABOR | 862,633 | 766,299 | (96,334) | 1,713,834 | 1,532,598 | (181,236) | 9,195,575 |
| MAINTENANCE LABOR WAGES FRINGE BENEFITS | 120,659 <u>43,114</u> | 140,475 36,525 | 19,816 (6,589) | 243,887 82,888 | 280,950 73,050 | 37,063 (9,838) | 1,685,700 438,300 |
| TOTAL MAINTENANCE LABOR | 163,773 | 177,000 | 13,227 | 326,775 | 354,000 | 27,225 | 2,124,000 |
| ADMINISTRATIVE LABOR WAGES FRINGE BENEFITS | 71,129 19,777 | 95,849 19,317 | 24,720 (460) | 144,083 41,735 | 191,698 38,634 | 47,615 (3,101) | 1,150,200 231,800 |
| TOTAL ADMINISTRATIVE LABOR | 90,906 | 115,166 | 24,260 | 185,818 | 230,332 | 44,514 | 1,382,000 |
| MARKETING LABOR WAGES AND FRINGE BENEFITS | 7,669 | 9,585 | 1,916 | 15,525 | 19,170 | 3,645 | 115,000 |
| OPERATING EXPENSE TRANSPORTATION LABOR | | | | | | | |
| SERVICES PROFESSIONAL & TECHNICAL EMPLOYEE PHYSICALS REPAIRS - BLDG. & EQUIP. REPAIRS - VEHICLES PRINTING LAUNDRY SERVICES COPYING & REPRODUCTION | 46,613 3,125 23,033 1,734 1,340 51 | 21,334 1,917 11,084 12,083 6,667 1,500 500 | (25,279) (1,208) (11,949) 10,349 6,667 160 449 | 72,840 5,230 29,051 5,306 402 3,439 51 | 42,668 3,834 22,168 24,166 13,334 3,000 1,000 | (30,172) (1,396) (6,883) 18,860 12,932 (439) 949 | 256,000 23,000 133,000 145,000 80,000 18,000 6,000 |
| TOTAL SERVICES | 75,896 | 55,085 | (20,811) | 116,319 | 110,170 | (6,149) | 661,000 |

5d Summary: Fiscal Reports (Summary Income Statement)

FOR THE MONTH OF AUGUST 2017

| Account Description | Actual | Budget | Variance | Year to Date Actual | Year to Date Budget | Variance | Annual Budget |
|---|--|--|---|---|--|--|---|
| | Actual | <u> </u> | <u>variance</u> | Actual | <u> </u> | <u>variance</u> | Annual Buuget |
| MATERIALS & SUPPLIES OFFICE SUPPLIES REPAIR PARTS FUEL & LUBRICANTS OPERATING SUPPLIES TOOLS TIRES & TUBES | \$246 28,138 129,140 6,962 843 4,845 | \$1,167 31,667 89,917 7,750 3,750 10,584 | \$921 3,529 (39,223) 788 2,907 5,739 | \$396 47,794 181,920 15,816 5,290 19,973 | \$2,334 63,334 179,834 15,500 7,500 21,168 | \$1,938 15,540 (2,086) (316) 2,210 1,195 | \$14,000 380,000 1,079,000 93,000 45,000 127,000 |
| TOTAL MATERIALS & SUPPLIES | 170,174 | 144,835 | (25,339) | 271,189 | 289,670 | 18,481 | 1,738,000 |
| INSURANCE | 41,706 | 41,859 | 153 | 84,156 | 83,718 | (438) | 502,304 |
| MISCELLANEOUS EXPENSES TRAVEL POSTAGE TELEPHONE UTILITIES DUES & SUBSCRIPTIONS EDUCATION & TRAINING MISCELLANEOUS CONTINGENCY MARKETING & ADVERTISEMENT | 6,514 1,189 3,990 20,437 6,169 1,071 867 | 2,666 333 6,250 26,417 1,666 4,500 3,416 8,333 1,667 | (3,848) (856) 2,260 5,980 (4,503) 3,429 2,549 8,333 1,528 | 7,503 1,204 8,153 38,461 35,609 3,170 1,318 | 5,332 666 12,500 52,834 3,332 9,000 6,832 16,666 3,334 | (2,171) (538) 4,347 14,373 (32,277) 5,830 5,514 16,666 (5,518) | 32,000 4,000 75,000 317,000 20,000 54,000 41,000 100,000 20,000 |
| TOTAL MISCELLANEOUS EXPENSES | 40,376 | 55,248 | 14,872 | 104,270 | 110,496 | 6,226 | 663,000 |
| | | | | | | | |
| TOTAL OPERATING EXPENSES | 1,453,133 | 1,365,077 | (88,056) | 2,817,886 | 2,730,154 | (87,732) | 16,380,879 |
| NET OPERATING EXPENSES | 992,409 | 912,415 | (79,994) | 1,961,436 | 1,824,830 | (136,606) | 10,948,941 |
| DEPARTMENTAL EXPENSE BREAK | KDOWN | | | | | | |
| ADMINISTRATION | 141,695 | 174,541 | 32,846 | 303,124 | 349,082 | 45,958 | 2,094,500 |
| TRANSPORTATION | 894,160 | 777,240 | (116,920) | 1,755,305 | 1,554,480 | (200,825) | 9,326,875 |
| MAINTENANCE | 367,132 | 343,434 | (23,698) | 639,888 | 686,868 | 46,980 | 4,121,200 |
| MARKETING | 8,439 | 19,920 | 11,481 | 35,412 | 39,840 | 4,428 | 239,000 |
| INSURANCE | 41,706 | 41,859 | 153 | 84,156 | 83,718 | (438) | 502,304 |
| CONTINGENCY | | 8,333 | 8,333 | | 16,666 | 16,666 | 100,000 |
| TOTAL OPERATING EXPENSES | 1,453,132 | 1,365,327 | (87,805) | 2,817,885 | 2,730,654 | (87,231) | 16,383,879 |

5d Summary: Fiscal Reports (DASH Grants)

DASH Grants (August 2017)

| Description | State | Local | Local % | Budget | Tota | al Expended | Balar | nce | Start Date | End Date | Status |
|----------------|------------|------------|---------|-----------|------|-------------|-------|-----|------------|------------|--------|
| Intern | \$ 33,600 | \$ 8,400 | 20% | \$ 42,000 | \$ | 42,000 | \$ | - | 7/1/2015 | 12/31/2016 | Closed |
| DASH AVL-1 | \$ 158,400 | \$ 129,600 | 45% | \$288,000 | \$ | 288,000 | \$ | - | 7/1/2012 | 9/30/2016 | Closed |
| DASH AVL-2 | \$ 268,000 | \$ 67,000 | 20% | \$335,000 | \$ | 335,000 | \$ | 1 | 7/1/2014 | 9/30/2016 | Closed |
| Computer Aided | \$ 300,000 | \$ 75,000 | 20% | \$375,000 | \$ | 374,799 | \$ | 201 | 7/1/2016 | 6/30/2018 | Closed |
| Dispatch (CAD) | ŕ | , | | ŕ | | · | | | | | |

| Description | State | Local | Local % | Budget | Total Expended | Balance | Start Date | End Date | Status |
|---------------------|------------|------------|---------|-----------|----------------|-----------|------------|------------|--------|
| Transit Fleet | | | | | | | | | |
| Management System | \$ 300,000 | \$ 75,000 | 20% | \$375,000 | \$ 97,568 | \$277,433 | 3/16/2016 | 6/30/2018 | Open |
| (Smartyard) | | | | | | | | | |
| Digital Displays | \$ 190,000 | \$ 10,000 | 5% | \$200,000 | \$ 33,673 | \$166,327 | 7/1/2010 | 12/31/2017 | Open |
| Intern | \$ 42,096 | \$ 10,524 | 20% | \$ 52,620 | \$ 27,652 | \$ 24,968 | 7/1/2016 | 6/30/2018 | Open |
| Transit Signal | ¢ 06.000 | ¢ 24.000 | 200/ | ¢ 120 000 | خ | ¢120,000 | 7/1/2017 | 6/20/2019 | Onan |
| Priortization (TSP) | \$ 96,000 | \$ 24,000 | 20% | \$120,000 | , - | \$120,000 | 7/1/2017 | 6/30/2018 | Open |
| FY17 SafeTrack | \$ 83,546 | \$ 83,546 | 50% | \$167,092 | \$ 167,092 | \$ - | 6/14/2016 | 12/31/2017 | Open |
| | | | | | | | | | |
| Total | \$ 711,642 | \$ 203,070 | | \$914,712 | \$ 325,985 | \$588,727 | | | |

ATC Board Agenda Detail

Agenda Item #: 5

Item Title:DASH General Manager's ReportContacts:Josh Baker, General Manager

Attachments: None
Customer Impact: None
Board Action: None/FYI

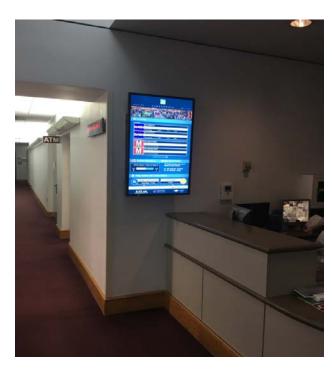


5e Summary: General Manager's Summary

DASH has been focused on the implementation of programs and initiatives which are highlighted here for your consideration.

The ACPS and DOT/MetroAccess programs are receiving positive feedback and have shown early signs of great success. DASH has received numerous comments supporting the programs and letters of gratitude for their implementation City Leadership have touted the programs as great examples of community collaboration. Initial feedback on the DOT Ride Free program has also been positive.

On September 29, we began installation of several new DASH Digital Transit Information Displays. Shown below is a display in City Hall near the information desk. This digital screen displays real-time information for nearby transit and bike share services. This is part of a larger demonstration project to install displays in key locations around the city to make transit more convenient and attractive. This specific location was selected due to its high visibility, convenience as a reference for information desk patrons, and proximity to the bus routes and bike shares on King Street.







Additional notable activities and accomplishments for the past several months are as follows:

- In July, the General Manger conducted a first round of "Coffee, Chocolates & Chat" sessions. These sessions are open times for staff to get to know the GM and for him to hear their thoughts and ideas about how to improve DASH, as well as discuss any concerns they might have. These sessions were well attended. Staff shared valuable ideas for improvements and information was communicated through an open dialogue.
- The Senior Management Team kicked off the preliminary work with a half day retreat looking at DASH
 Policies and Procedures. An outline was developed which will guide the development and implementation
 of new policy manuals and standard operating procedures throughout all departments of the
 organization.
- In August, DASH staff attended the 2017 Community Transportation Association of Virginia (CTAV) annual conference and training. This was the first time DASH staff attended this conference which provides quintessential trainings and new opportunities to connect with other transit systems in Virginia.
- In September, the Senior Management Team held a day long training retreat focused on collaboration, communication and effective problem solving. The team has been working hard to continue fostering communication, productivity and teamwork as part of an ongoing process of professional development.

ATC Board Agenda Detail

Agenda Item #: 6

Item Title: New Business

Contacts: Josh Baker, General Manager

Attachments: None

Customer Impact: a) Minimal ● b) Minimal ● c) Minimal ●

Board Action: None/FYI



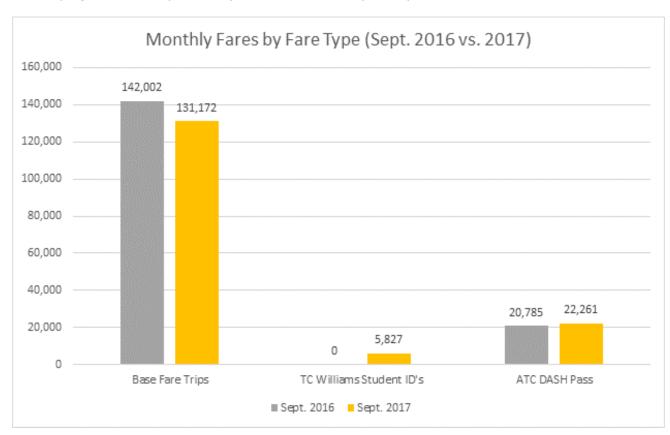
6a Summary – Ridership to Date and Revenue Impact Projections for ACPS & DOT MetroAccess Programs

Outlined below is the revenue impact analysis requested by the Board for the TC Williams Pilot program:

1. **Fare Revenues**: The tables below compare monthly fare usage trends by fare type both before and after T.C.W pilot start date.

Here are the highlights:

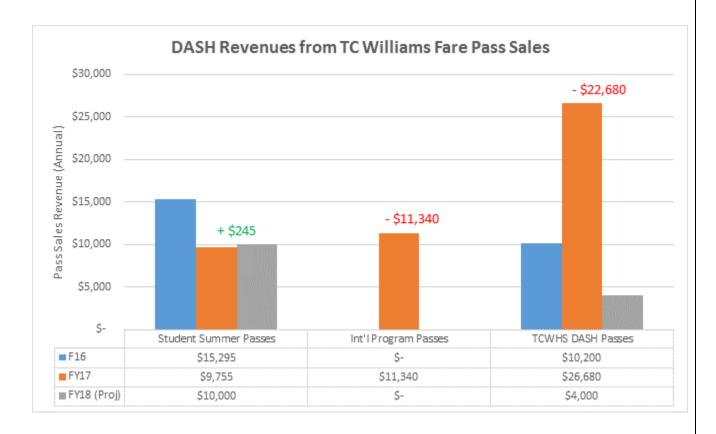
- Total system ridership (excluding Trolley) seems to be consistently down by 5 percent both before and after program implementation.
- Total DASH Pass trips in September were still up 3% even though some students no longer needed a DASH Pass since they could use their ID's
- Base Fare trips for the month of September were down 8% from last year; in August, prior to program start, they were only down 5%. There may or may not be a correlation here.





2. DASH Pass Sales: The graph below shows the trends for DASH Pass sales that may be impacted by the pilot program. This assumes a worst case scenario, in which all of the passes that were purchased by the school and its affiliates in years past will no longer be purchased. The adult education program, which includes some individuals that will not receive student ID's will continue to purchase a reduced amount (estimated at 10 passes per month during school year).

This <u>worst case</u> scenario reduced DASH Pass sales to these groups due to the new TC Williams Pilot would result in a projected revenue loss of roughly \$34,000 during FY18.



This should all be weighed against the long-term benefits for DASH ridership growth. DASH staff spoke with the Assistant Principal of TC Williams and she commented that a significant number of students are riding DASH buses instead of school buses. The Assistant Principal of TC Williams will be providing DASH with any data available on student ridership trends. An analysis of that data could mean fewer resources required for ACPS bus operations.

DASH staff will continue this analysis as more information becomes available. Impacts of the DOT/MetroAccess programs are forthcoming as well. Smartrip (*Hummingbird*) did not previously record MetroAccess riders as a separate fare category for DASH. There is no data available for the MetroAccess cardholders who were riding DASH prior to this program. We have reached out to Robert Fulk (Alexandria Paratransit Coordinator) to get the approximate number of DOT cardholders and for MetroAccess participants in our area.

6b Summary – Board Resolution for Hybrid vs. Clean Diesel Proposal by General Manager

DASH staff have been working to secure a letter of support for the transition to a Fleet Replacement Policy of Clean Diesels in lieu of Hybrid-Electric. The Environmental Policy Comission (EPC) Report outlines this change, and the basis of it is attached for the Board's consideration on a resolution regarding this recommended change supporting the General Manager's recommendation. This resolution will be sent to the Alexandria City Council for consideration in changing the Council position on bus propulsion technology.

Resolution Supporting the Recommendations of the Alexandria Transit Company General Manager for Purchase of Clean Diesel Buses

BE IT RESOLVED by the Alexandria Transit Company Board of Directors (Board) that the Board hereby supports the General Manager's **recommendation to adopt a policy of purchasing Clean Diesel Buses for all bus replacement procurements on the basis that Hybrid-Electric Technology** is no longer economically responsible and Clean Diesel technology meets the goals of Eco-City Alexandria. Further, BE IT RESOLVED that the Board endorses a gradual transition to all electric (Battery Powered) buses as soon as it is technically and financially possible. As the Alexandria Transit Company recognizes its role as a part of Alexandria's Eco City Charter, it endorses all efforts previously made and conducted in the future towards a goal of Environmental Sustainability.

BE IT RESOLVE that the Alexandria Transit Company certifies that it will make every effort to adopt electric bus technology as soon as possible, while maintaining a focus on service quality and being a good steward of public funds. It is the request of the Alexandria Transit Company Board of Directors that The Alexandria City Council prioritize funding wherever possible towards the Alexandria Transit Company bus fleet replacement program and expansion programs with electric bus technology as a priority.

The undersigned duly qualified and acting Chairman of the **Alexandria Transit Company** certifies that the foregoing is a true and correct copy of a Resolution of the Board of Directors has adopted at a legally convened meeting of the Alexandria Transit Company held on the Eighteenth day of October, 2017.

| (Signature of Recording Officer) |
|----------------------------------|
| |
| (Title of Recording Officer) |
| |
| October 18, 2017 |
| (Date) |



6c Summary – New Budget Schedule/Calendar and TDP (*Transit Development Plan*) Process as proposed by the General Manager

DASH and City of Alexandria Staff have formed a set of regular collaboration meetings in order to help ensure DASH and City processes are more effectively aligned. One of these Coordination groups is focused on Financial elements inclusive of the budget development process.

In late spring the ATC Board approved a "transitional TDP" as a part of an endorsement of the General Manager's recommendation that the TDP be redesigned to become a more effective, streamlined and relevant document going forward.

Throughout the course of the work establishing an internal timeline for budget development, the following renewed approach and purpose for both the DASH Budget process and the DASH TDP was developed. This new, more comprehensive timeline is designed to inform the Board, City and DASH staff of how the process is to be conducted.

On the next page, the outline of this schedule is provided and Board input is requested by the General Manager.

--- Continued on Next Page ---

NEW DASH Budget & TDP Process

Major Changes:

- 1. The Budget detail is removed from the TDP document. The TDP becomes a redesigned guidance/development/goals document and no longer serves as the budget. Further the TDP is revised to be a six (6) year document with each year an update provided, and at the end of the six (6) year period an entirely new TDP is developed and approved.
- 2. The TDP now serves as a feeder to the budget process. In the first year (this year) it is constrained but for future years it informs the budget process for DASH development and expansion.
- 3. The budget details are now maintained separately, the current Section 2 of the TDP is removed.

Budget and TDP Process Timeline is outlined below:

| Month | AT.C./DASH Activity | City Activity |
|-----------|--|--|
| July | No Actions | No Actions |
| August | No Actions | No Actions |
| September | DASH Finance Department Develops and Distributes Budget Process to internal staff | (TYP) City Develops Budget Process |
| October | Budget and TDP Assumptions developed by DASH Staff | (TYP) City Manager releases Priorities and Instructions Memorandum |
| November | Budget Assumptions and Scenarios presented to DASH Board inclusive of Council Priorities and City Manager's Instructions | DASH Assumptions and Reduction Actions (if required) submitted to City Manager |
| December | Preliminary Budget submitted to DASH Board for Approval | Budget Request submitted to City Manager using Preliminary Budget |
| January | DASH Staff begin draft TDP (in years 2-6 this is the TDP update) – No Board Action this Month | City Manager Develops Budget and holds meetings with Department Heads |
| February | Draft TDP (in years 2-6 TDP update) is presented to DASH Board | City Manager Releases Budget and presents to Council |
| March | DASH Board holds Draft TDP Public Hearing (in years 2-6 updates are provided for public comment) | City Budget Hearings |
| April | No Actions | City Budget Hearings ongoing |
| Мау | DASH Board Reviews revised Final Budget as presented by GM, public hearing held as necessary | City Adopts Budget |
| June | DASH Board Adopts Final Budget and TDP | No Actions |

ATC Board Agenda Detail

Agenda Item #: 7

Item Title: Old Business

Contacts: Josh Baker, General Manager

Attachments: None

Customer Impact a) Moderate • b) Moderate •

Board Action: None/FYI



7a Summary - DOT & Metro Access Ride Free Program

As a reminder, this program began October 1, 2017 and the ridership for this program will be reported at the next Board meeting in November. Early signs indicate the program will be successful as riders become accustom to it. Following the DASH Board Meeting on September 13, 2017, the General Manager provided a presentation of the program at the Alexandria Commission on persons with Disabilities Meeting. The announcement was met with applause and excitement due to the freedom it will provide for residents with disabilities.

7b Summary – OT Report and Analysis by General Manager

This is a continuing item which you will receive regular updates as additional information is collected. There are no further updates beyond continued staffing efforts which included a DASH Career Fair held on September 30th, 2017. The career fair was an overwhelming success with approximately 60 applicants interviewed for 20 open positions throughout the organization.

Updates will continue to be provided on this important subject as work progresses in resolving the staffing challenges and related contributing factors.

ATC Board Agenda Detail

Agenda Item #: 9

Item Title: Next Meeting and Adjournment

Contacts: All
Attachments: None
Customer Impact None

Board Action: Motion and Approval of Adjournment



Opportunity for any final Board Member Comments or Remarks.

The next ATC Board of Directors Meeting will take place on **Wednesday**, **November 8**th, **2017 at 5:30 p.m**.

Please note, all future meetings will take place at the City Council Workroom 2410.

Consider Adjournment

-- Board Attendance Log on Next Page -



Alexandria Transit Company Board of Directors ATTENDANCE LOG

2017 - 2018 REGULAR (and special) BOARD MEETINGS

("P" present - "A" absent)

| Meeting | Paul | Chieko | David | Kerry | Stephen | Yon | Richard | Meredith | Laura | | | | |
|------------|----------|------------|--------|--------|------------|---------|----------|----------|--------|--|--|--|--|
| Date | Abramson | Clarke | Kaplan | Donley | Klejst | Lambert | Lawrence | MacNab | Triggs | | | | |
| 07/2017 | | | | | No Meeting | g | | | | | | | |
| 08/2017 | | No Meeting | | | | | | | | | | | |
| 09/13/2017 | Р | Р | Р | Р | А | А | Р | Р | Α | | | | |
| 10/18/2017 | | | | | | | | | | | | | |
| 11/08/2017 | | | | | | | | | | | | | |
| 12/13/2017 | | | | | | | | | | | | | |
| 01/10/2018 | | | | | | | | | | | | | |
| 02/14/2018 | | | | | | | | | | | | | |
| 03/14/2018 | | | | | | | | | | | | | |
| 04/11/2018 | | | | | | | | | | | | | |
| 05/09/2018 | | | | | | | | | | | | | |
| 06/13/2018 | | | | | | | | | | | | | |



Meeting Agenda Detail #6b Attachments:

Environmental Policy Commission (EPC) Report

&

WMATA 2017 Metrobus Fleet Management Plan

2017

EPC Report: ATC (DASH) Clean Diesel Fleet Transition Analysis Supplemental Q&A



Raymond Mui, Assistant General Manager Alexandria Transit Company (DASH) 9/8/2017

1. What is the big picture scenario comparison for Clean Diesel vs. Hybrid purchasing policy?

Due to expedited retirement of old diesel buses made possible by purchasing clean diesel buses, DASH will be able to entirely eliminate old diesel buses from its fleet 2 years sooner, in 2020 as opposed to 2022.

As DASH is currently behind its fleet replacement schedule, State of Good Repair will be achieved starting in 2019, and can be sustained until 2027 with clean diesel purchasing policy. During this, there would be no buses to remain in service beyond their useful lifespan of 12 years. If hybrids are continued to be purchased, State of Good Repair will largely unattainable over the same 10 year period.

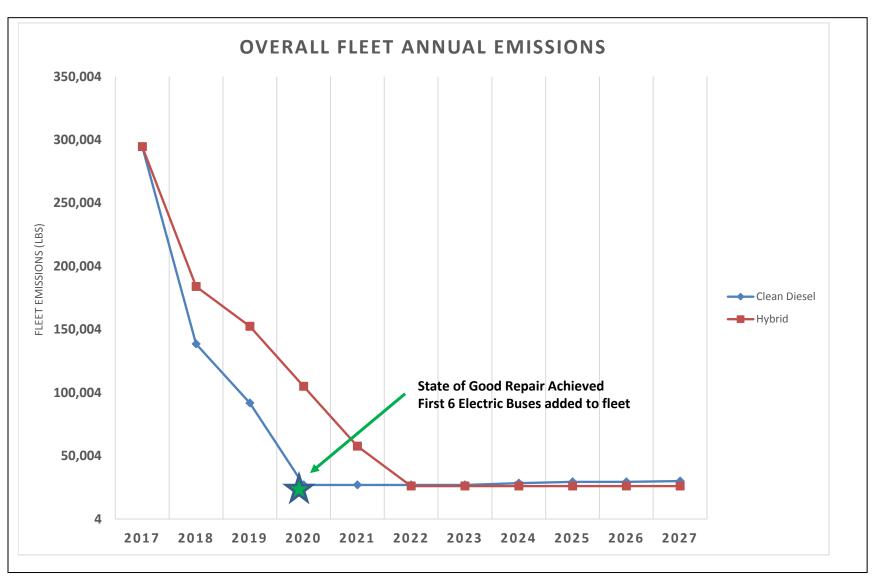
The total amount of particulate pollutants (lbs) for the entire fleet will be 21% lower over a 10 year period from 2018 to 2027 by purchasing Clean Diesel instead of Hybrids. This is due to the expedited retirement of old diesel buses, which are unregulated and have particulate emissions 20 times higher than of Hybrids or Clean Diesel engines. See attached chart for projection.

| | | | | | CLEAN D | IESEL PUR | CHASING P | OLICY | | | | | |
|--------------|------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|---------|
| <u>Fleet</u> | | | | | | | | | | | | | |
| Composition | | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> | <u>2024</u> | <u> 2025</u> | <u> 2026</u> | <u>2027</u> | |
| Old Diesels | | 34 | 14 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Hybrids | | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 37 | 27 | 27 | 20 | |
| Clean | | | | | | | | | | | | | |
| Diesels | | 0 | 20 | 26 | 28 | 28 | 28 | 28 | 43 | 53 | 53 | 60 | |
| Electric | | 0 | 0 | 0 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | <u>Lbs</u> | | | | | | | | | | | | TOTAL |
| Annual | per | | | | | | | | | | | | (10 |
| Emissions | Bus | <u>2017</u> | <u>2018</u> | <u> 2019</u> | <u>2020</u> | <u>2021</u> | 2022 | <u>2023</u> | <u>2024</u> | <u> 2025</u> | <u> 2026</u> | <u> 2027</u> | YEAR) |
| Old Diesel | 8,200 | 278,800 | 114,800 | 65,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 459,200 |
| Hybrid | 303 | 15,756 | 15,756 | 15,756 | 15,756 | 15,756 | 15,756 | 15,756 | 11,211 | 8,181 | 8,181 | 6,060 | 143,925 |
| Clean Diesel | 400 | 0 | 8,000 | 10,400 | 11,200 | 11,200 | 11,200 | 11,200 | 17,200 | 21,200 | 21,200 | 24,000 | 146,800 |
| Electric | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 294,556 | 138,556 | 91,756 | 26,956 | 26,956 | 26,956 | 26,956 | 28,411 | 29,381 | 29,381 | 30,060 | 749,925 |

| | | | | | <u>HYBR</u> | ID PURCH | ASING POL | <u>ICY</u> | | | | | |
|------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|---------------------|
| <u>Fleet</u> | | | | | | | | | | | | | |
| Composition | | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> | <u>2024</u> | <u>2025</u> | <u> 2026</u> | <u>2027</u> | |
| Old Diesels | | 34 | 20 | 16 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Hybrids | | 52 | 66 | 70 | 76 | 82 | 86 | 86 | 86 | 86 | 86 | 86 | |
| Clean | | | | | | | | | | | | | |
| Diesels | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Electric | | 0 | 0 | 0 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| <u>Annual</u> | <u>Lbs</u> per | | | | | | | | | | | | <u>TOTAL</u> (10 |
| Emissions | <u>Bus</u> | <u>2017</u> | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | <u>2023</u> | <u>2024</u> | <u> 2025</u> | <u> 2026</u> | <u>2027</u> | YEAR) |
| Old Diesel | 8,200 | 278,800 | 164,000 | 131,200 | 82,000 | 32,800 | 0 | 0 | 0 | 0 | 0 | 0 | 688,800 |
| Hybrid | 303 | 15,756 | 19,998 | 21,210 | 23,028 | 24,846 | 26,058 | 26,058 | 26,058 | 26,058 | 26,058 | 26,058 | 261,186 |
| Clean Diesel | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Electric | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | | 294,556 | 183,998 | 152,410 | 105,028 | 57,646 | 26,058 | 26,058 | 26,058 | 26,058 | 26,058 | 26,058 | 949,986 |

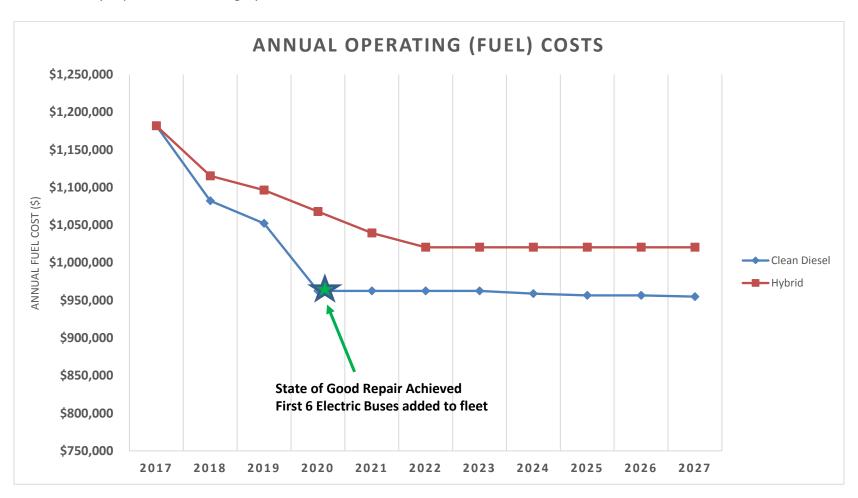
2. Provide a comparison of fleet-wide average MPG prior to and after full implementation of Clean Diesels and Existing Hybrids.

The current average fleet MPG is approximately 4.23 mpg. With the adoption of Clean Diesel purchasing policy, this will increase to 5.24 mpg by 2027.



3. Provide an analysis of fleet-wide fuel economy if Clean Diesel purchase policy is followed, vs. Hybrid purchase policy.

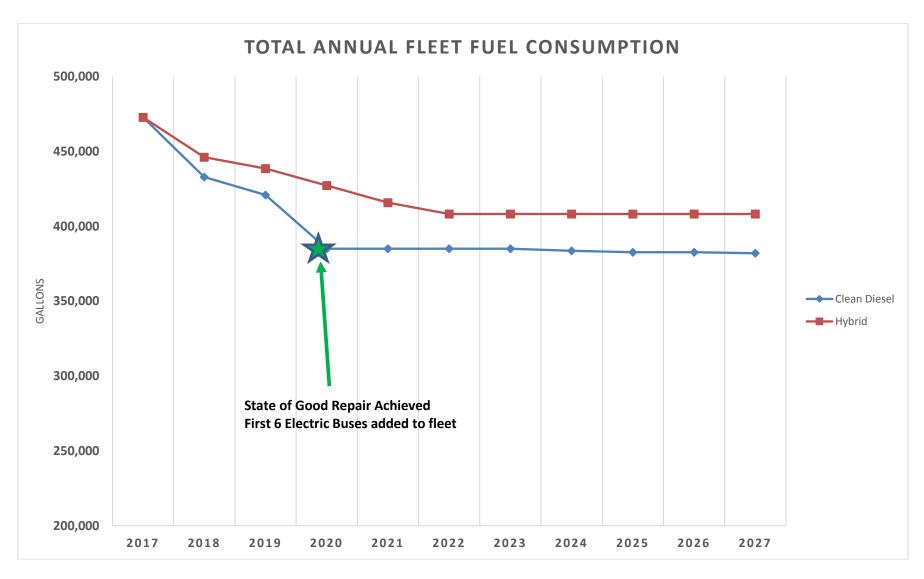
Under the Clean Diesel policy, the overall fleet MPG will increase to 5.24 by 2027, while it will only increase to 4.90 under the Hybrid policy. This is based on actual observed fuel economy from current hybrids, and best available data for comparable clean diesel buses. The Clean Diesel policy also assumes the achievement of State of Good Repair (SGR) and subsequently the addition of 6 fully electric buses by 2020*. The Hybrid policy does not achieve SGR during this same period. A 10 year summary is presented in the graph below:



| * The 2020 electric bus assumption is based on the availability and use of VW Mitigation funds that is being awarded through the Virginia DEQ. DASH has submitted a project proposal for this under the initial RFI stage of this funding. It does not imply an additional burden on the City's CIP, so there will be no additional request in funding from the City's CIP. Rather, the projection is based on the current approved 10-year CIP and uses cost savings of going to clean diesel as a local match to VW Mitigation funds to fund these 6 electric buses. The project proposal also includes charging stations required to provide infrastructure support for these electric buses. |
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4. Total projected gallons of fuel purchased over the next 10 years across the entire fleet for each purchasing policy.

Please see projection below. The ATC fleet would consume a total of approximately 4,400,000 gallons of fuel in the next 10 years under the Clean Diesel plan, versus 4,650,000 gallons of fuel under the Hybrid plan. This is a decrease of approximately 5%.



| CLEAN DIESEL PURCHASING POLICY | | | | | | | | | | | |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Fleet Composition | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
| Old Diesels | 34 | 14 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hybrids | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 37 | 27 | 27 | 20 |
| Clean Diesels | 0 | 20 | 26 | 28 | 28 | 28 | 28 | 43 | 53 | 53 | 60 |
| Electric | 0 | 0 | 0 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Overall Fleet MPG | 4.23 | 4.62 | 4.75 | 5.19 | 5.19 | 5.19 | 5.19 | 5.21 | 5.23 | 5.23 | 5.24 |
| Fuel Consumption | | | | | | | | | | | |
| (gal) | 472,710 | 432,843 | 420,883 | 385,002 | 385,002 | 385,002 | 385,002 | 383,579 | 382,629 | 382,629 | 381,965 |

| HYBRID PURCHASING POLICY | | | | | | | | | | | |
|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Fleet Composition | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
| Old Diesels | 34 | 20 | 16 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hybrids | 52 | 66 | 70 | 76 | 82 | 86 | 86 | 86 | 86 | 86 | 86 |
| Clean Diesels | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Electric | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Overall Fleet MPG | 4.23 | 4.48 | 4.56 | 4.68 | 4.81 | 4.90 | 4.90 | 4.90 | 4.90 | 4.90 | 4.90 |
| Fuel Consumption | | | | | | | | | | | |
| (gal) | 472,710 | 446,132 | 438,538 | 427,148 | 415,757 | 408,163 | 408,163 | 408,163 | 408,163 | 408,163 | 408,163 |

5. How does adopting a Clean Diesel purchasing policy help us to get to electrification sooner?

The first and foremost DASH fleet priority is State of Good Repair, ensuring that buses are retired by the end of their useful lifespan. Due to current funding levels of the CIP and rising costs of Hybrid technology, DASH would not be able to achieve and sustain SGR in the next 10 years, which would shift focus and resources away from electrification during this period. By purchasing Clean Diesels, DASH will be able to achieve SGR by 2019 and maintain it for the next 10 years. This will allow DASH Leadership and Governance to be better able to focus attention and funding away from SGR and towards fully electric buses, which is the next step and long range goal for the DASH fleet.

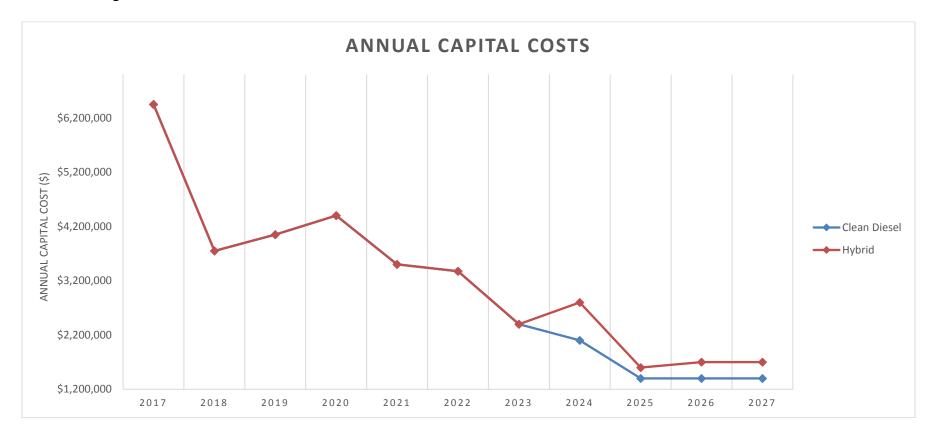
This also includes the reduction of burden on the CIP to maintain Hybrids in the DASH fleet, as each Hybrid bus requires a \$50,000 battery replacement mid-life to maintain operability. With DASH's current fleet of 52 hybrid buses, this requires \$2,600,000 of CIP funding. This maintenance funding requirement is subject to increase if more hybrid buses are added to the DASH fleet.

Under the Clean Diesel plan, the ATC fleet is able to achieve State of Good Repair (SGR) by 2019, at which point ATC is able to explore and pilot battery electric buses for a pilot implementation by 2020. This is based on current day constrained funding levels as outlined in the City's Capital Improvement Program (CIP), this provides opportunity for 6 electric buses in 2020* and not again until beyond 2027 in order to maintain SGR.

* The 2020 electric bus assumption is based on the availability and use of VW Mitigation funds that is being awarded through the Virginia DEQ. DASH has submitted a project proposal for this under the initial RFI stage of this funding. It does not imply an additional burden on the City's CIP, so there will be no additional request in funding from the City's CIP. Rather, the projection is based on the current approved 10-year CIP and uses cost savings of going to clean diesel as a local match to VW Mitigation funds to fund these 6 electric buses. The project proposal also includes charging stations required to provide infrastructure support for these electric buses.

6. What are the comparable impacts on return on investment (ROI), with respect to operating and capital costs?

Over the 10 year period, the City and DASH would save approximately \$1,500,000 under the Clean Diesel policy due to the reduction of replacement batteries required for each Hybrid bus. While the Clean Diesel plan does not reduce the total amount of Bus Replacement funds required in the CIP, it does achieve fleet SGR sooner than the Hybrid plan under the same funding levels.



With respect to operating expense savings, the Clean Diesel policy would reduce fuel consumption by 5% over the 10 year period, and annual fuel consumption by 6.5% by 2027.

The Clean Diesel policy would reduce total average cost per mile from \$8.53 to \$8.50, and total average cost per revenue hour from \$74.57 to \$74.17 by 2027.

2017

EPC Report: ATC (DASH) Clean Diesel Fleet
Transition Analysis Supplemental Q&A

Part 2 – Supplemental Q&A



Raymond Mui, Assistant General Manager Alexandria Transit Company (DASH) 10/6/2017 1. (P. Kathpal) "On the first question, I see that you have taken a stab at it in item #5. You have restated your position from June that achieving SGR allows you to explore electric options. But the fleet plans you have shown in the analysis show DASH obtaining 6 electric buses in 2020 and then no more within the projected time frame. In fact, you show a fleet composition in 2027 of 60 diesel buses and 6 electric buses."

The fleet projection scenario are both under the assumption of fiscal constraints of funding that is approved as part of the FY18-27 CIP. The purpose of the analysis is to demonstrate that ATC is able to be in a position to achieve SGR under Clean Diesel purchase policy, assuming all other variables (fleet requirement, capital funding, service levels, etc.) remain fixed. The 6 pilot electric buses is made possible due to achievement of SGR under Clean Diesel purchasing, but will more importantly serve as a demonstration to revisit CIP in future years to advocate for partial or full funding for Electric buses as part of the regular bus replacement project.

2. (P. Kathpal) "On the second question, I was trying to use the capital/opex tradeoff to challenge the scenario assumptions that by opting for hybrids we would necessarily be constrained to 14 (vs 20 diesel) buses. Essentially that if you account for lifetime costs it may make sense to buy more, or go electric sooner -- in either case still achieving the objective of retiring old diesels sooner. I recognize that you defined those scenarios in a manner that was constrained by the CIP allocation to new buses, but I wanted a view of the difference in lifecycle costs for hybrid (and electric) buses that would show the overall cost difference to the city once fuel, operating, and maintenance costs were taken into effect. For example, in an article about an electric bus trial in Houston: "Each of the Proterra buses costs about \$800,000, or \$200,000 more than a normal diesel bus. Over the lifetime of the bus, however, Proterra estimates the bus costs \$400,000 less to operate based on fuel costs compared to electric power." What is the equivalent total cost of ownership comparison between diesel, hybrid, and electric buses?"

ATC staff currently does not have the technical capacity and data available to conduct a detailed life cycle cost analysis between Clean Diesel, Hybrid, and Electric buses. However, WMATA recently conducted such an evaluation so this is the best benchmark for us to use. They have significantly more staff resources and capabilities than DASH, so their research is far more accurate than ours. Note that WMATA is conducting testing of Fully Electric Buses however they do not have the data compiled on them yet from a lifecycle cost. Further, Proterra is the manufacturer of electric buses – we cannot use Proterra's estimates as they have a partiality to their product and its value. We support electric buses and see them as our future, however actual data on their lifecycle cost just isn't available yet from an end user's perspective.

Table 4-4: Bus Lifecycle Cost Estimate (In '000, June 2015)

| | | Low Fuel Cost Estimate (\$1.55/gal, \$0.75/DGE) | | | Medium Fuel Cost Estimate (\$2.87/gal, \$0.82/DGE) | | | High Fuel Cost Estimate (\$3.85/gal, \$1.00/DGE) | | |
|----------------------|-----------|--|-----------|-----------|---|-----------|-----------|---|-----------|--|
| Fuel Technology | Diesel | Hybrid | CNG | Diesel | Hybrid | CNG | Diesel | Hybrid | CNG | |
| Capital Cost | \$678.9 | \$883.4 | \$734.3 | \$678.9 | \$883.4 | \$734.3 | \$678.9 | \$883.4 | \$734.3 | |
| Operating Cost | \$580.3 | \$539.5 | \$817.5 | \$715.4 | \$662.3 | \$829.0 | \$815.8 | \$753.4 | \$993.5 | |
| Total Lifecycle Cost | \$1,259.2 | \$1,423.0 | \$1,551.8 | \$1,394.4 | \$1,545.7 | \$1,563.3 | \$1,494.7 | \$1,636.8 | \$1,727.8 | |

Source: WMATA Board Action/Information Summary item 8A - 09_28_2017

3. (J. Kapsis) "On the charts on p.3, it looks like hybrid purchasing program would lead to a steady state of 86 hybrid buses + 6 electric buses, but the chart on p. 8, makes it look like the hybrid option would only include 86 hybrids + 0 electric buses. Which is accurate? I assume the latter."

That is correct, this was an error with the chart. The hybrid purchase program would ultimately result in 86 hybrids + 0 electric buses at the end of the 10 year period as currently programmed in the City CIP.

4. (J. Kapsis) "Have you done a sensitivity analysis based on different assumptions around potential fuel costs both for diesel as well as for electricity? What current assumptions are in your model? The model should not be static, but should present different potential futures based on what may happen to prices, including prices of vehicles, which will likely continue to come down for electrics over time."

To maintain a clean comparison and focus on the Hybrid vs. Clean Diesel discussion, an analysis based on dynamic assumptions was not conducted. The main points of the analysis was to demonstrate the different states of State of Good Repair, Environmental Footprint, Fuel Economy, and Return on Investment between the two purchase policy under current constraints and assumptions.

5. (J. Kapsis) "Similar to Praveen's first point, I'd like to see a third scenario where the City is purchasing more than six electric vehicles, but is actually moving clearly to transition to all electric over time."

As mentioned, the current discussion and analysis is considering fuel option scenarios under current fiscal constraints. A plan that moves to all electric over time needs to be incorporated into the City's next CIP review/development, currently we are

mid-cycle in the CIP as the City only updates this program every two (2) years. These changes will be incorporated in the next year's review and revision of the CIP.

6. (J. Kapsis) "When calculating emissions from the fleet, I don't think it is accurate to claim that the electric buses are zero as they are using Dominion Power's fuel mix, which is still largely carbon based. If we are doing an apples to apples comparison on emissions between these different scenarios, then we should take into account and included emissions from electricity. Yes, the vehicles themselves have no tailpipe emissions, which is great for local air quality, but until we change Dominion's fuel mix or the City massively invests in on-site solar generation or enters into solar PPAs (something we're discussing separately with Bill Eger), then we need to count those emissions against the electric buses unless I'm missing something."

That is correct. This is a basic analysis that compares primarily local tailpipe emissions of Clean Diesel vs. Hybrid buses for the immediate purchase policy. ATC staff does not have the immediate capacity to conduct a comprehensive emissions impact to include offset emissions of Electric buses nor are we capable of taking the role of addressing energy sources from Dominion. That said, ATC staff are interested and willing in joining the EPC in championing for such changes as we believe in them. Please advise how we may take a more active role in this.

7. (J. Kapsis) Have you given any thinking to whether the 86 bus fleet is the right steady state fleet for Dash? This seems like an opportunity to reassess what our needs are going to be over the next 10 years. With all of the changes in technology and services in the transportation market, I find it hard to believe that the status quo is going to continue to make sense 5-10 years from now. For example, should the City move to some smaller vehicles for surge needs or give credits for residents in hard to serve areas to use shared rise services? Cutting the number of buses could also facilitate a faster transition to electric.

While the current discussion is to compare Clean Diesel vs. Hybrid purchase policy with all other assumptions and constraints fixed, the needs of the fleet is continually evaluated by ATC's Planning and Scheduling department. ATC and the City are embarking on a comprehensive Alexandria Transit Vision study, which is intended to provide new or revised recommendations on this topic.

8. (J. Kapsis) Similar to Praveen's second point, it would be helpful to examine your opex assumptions between hybrids, electric, and clean diesel, as well as new capital costs like charging stations. Some of these could invite creative business models where the City leases rather than buys the charging stations and thus can use a smaller annual opex payment to pay for the charging (i.e. charging as a service) rather than have to make a bunch of large one-time capital investments. This could change the economics.

| This is agreeable; there are infinitely different financing techniques and methods to fund electric buses. However, the main focus of the discussion the timeline in which State of Good Repair is achieved under each purchase plan. Only when SGR is achieved, is ATC able to begin a true electric bus program. This is most effectively and quickly achieved with the Clean Diesel plan by year FY2019. |
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Washington Metropolitan Area Transit Authority Board Action/Information Summary

Action ○ Information
 MEAD Number: Resolution:
 201897
 Yes ● No

TITLE:

Bus Fleet Plan 2017

PRESENTATION SUMMARY:

FTA mandated Metrobus Fleet Management Plan (BFMP) provides the foundation for managing replacement, rehabilitation and expansion of Metrobus fleet.

PURPOSE:

Request Board of Directors adoption of the 2017 Metrobus Fleet Management Plan.

DESCRIPTION:

The Federal Transit Administration (FTA) mandated Metrobus Fleet Management Plan (BFMP) provides the foundation for managing the replacement, rehabilitation and expansion of the Metrobus fleet.

The prior plan update (2013 BFMP) was approved by the Board in February 2015, and the FTA requested a new study of Metrobus needs in advance of the planned multi-year bus procurement contract.

The 2017 Metrobus Fleet Management Plan projects fleet needs through FY2025. It does not obligate Metro to meet projected requirements, and the plan carries no financial obligation.

Key Highlights:

The 2017 Metrobus Fleet Management Plan recommends:

- Maintain spare ratio within FTA guidelines
- Increase 60-foot buses for capacity
- Replace hybrid buses with clean diesel, when they are due for retirement,
- Retain Compressed Natural Gas fueling at Bladensburg; plan to incorporate new technologies when proven
- Plan for on time performance and crowding improvements
- Separate plan reviews maintenance, operations and customer facilities and facility improvement needs

Background and History:

The Board of Directors approved the 2010 Metrobus Fleet Management Plan, which

provided growth projections for fleet and facilities through Fiscal Year (FY) 2020. At the request of the FTA, staff refreshed the 2010 plan with the 2013 Metrobus Fleet Management Plan Update, which was approved in February 2015.

Discussion:

The 2017 Metrobus Fleet Management Plan documents WMATA's practices for operating and maintaining Metrobus fleet, and WMATA's planning process for projecting fleet needs through FY2025, taking into consideration current and future ridership growth, network expansion, fleet replacement and rehabilitation programs, and WMATA's Capital Improvement Program and Capital Needs Inventory.

The 2017 Plan is intended to guide business decisions for Metrobus fleet purchases and does not obligate WMATA to the Plan's projected recommendations and requirements. The FTA requires that WMATA submit a comprehensive bus fleet management plan in support of its application for federal capital grants for new buses.

FUNDING IMPACT:

There is no immediate impact on funding from this action.

Adoption of a fleet plan does not require any commitment of funds. Requests for funding for actions outlined in the plan will be made separately through the capital program and budget processes.

TIMELINE:

| Previous Actions | February 2015 – Board of Directors approved the 2013 Metrobus Fleet Management Plan Update. | | | | | |
|--|---|--|--|--|--|--|
| Anticipated actions after presentation | Fall 2017 – Fleet recommendations will be incorporated into Bus Procurement Actions. | | | | | |

RECOMMENDATION:

Board of Directors adoption of the 2017 Metrobus Fleet Management Plan.

SUBJECT: ADOPTION OF 2017 METROBUS FLEET MANAGEMENT PLAN

RESOLUTION OF THE BOARD OF DIRECTORS OF THE WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

WHEREAS, The Federal Transit Administration (FTA) requires that the Washington Metropolitan Area Transit Authority (WMATA) submit a comprehensive bus fleet management plan in support of its application for federal capital grants for new buses and garages; and

WHEREAS, Staff has prepared the 2017 Metrobus Fleet Management Plan, to satisfy the federal grant requirement; now, therefore be it

RESOLVED, That the Board of Directors adopts the 2017 Metrobus Fleet Management Plan, attached hereto, for planning purposes, without obligation to any of the plan's projected requirements and with the stipulation that the plan be updated routinely as part of major system development; and be it finally

RESOLVED, That in order to expedite WMATA's submission of grant applications, this Resolution shall be effective immediately.

Reviewed as to form and legal sufficiency,

Patricia Y. Lee General Counsel

File Structure No.:

6.6.7. Bus Fleet Planning & Acquisition