

Downtown-Uptown-Oakland-East End Bus Rapid Transit Project

Transit Operating Plan Memo

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Section 1

Introduction

This memo describes the transit operating plan for the proposed Downtown-Uptown-Oakland-East End Bus Rapid Transit (BRT) Project, including route alignment, station locations, operating assumptions, operating costs, and fare revenue. The project is currently in the project development phase.

Information presented in this memorandum is based on planning-level analysis that was performed during ongoing studies of the potential Downtown-Uptown-Oakland-East End BRT system. It is anticipated that the Transit Operating Plan will evolve as the project is advanced into more detailed design phases. All costs are presented in 2016 dollars.

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Section 2

Proposed Service

The Port Authority of Allegheny County's (Port Authority or PAAC) Downtown-Uptown-Oakland-East End BRT Project includes a BRT Core corridor plus three branches: East Busway BRT, Highland Park BRT, and Squirrel Hill BRT. A total of 40 stations with 80 platforms will be served by one or more of these alignments operating 22 and 21 hours per weekday and weekend day, respectively. Service will be provided 365 days per year with effective headways between 2 and 7 minutes in the Core BRT corridor.

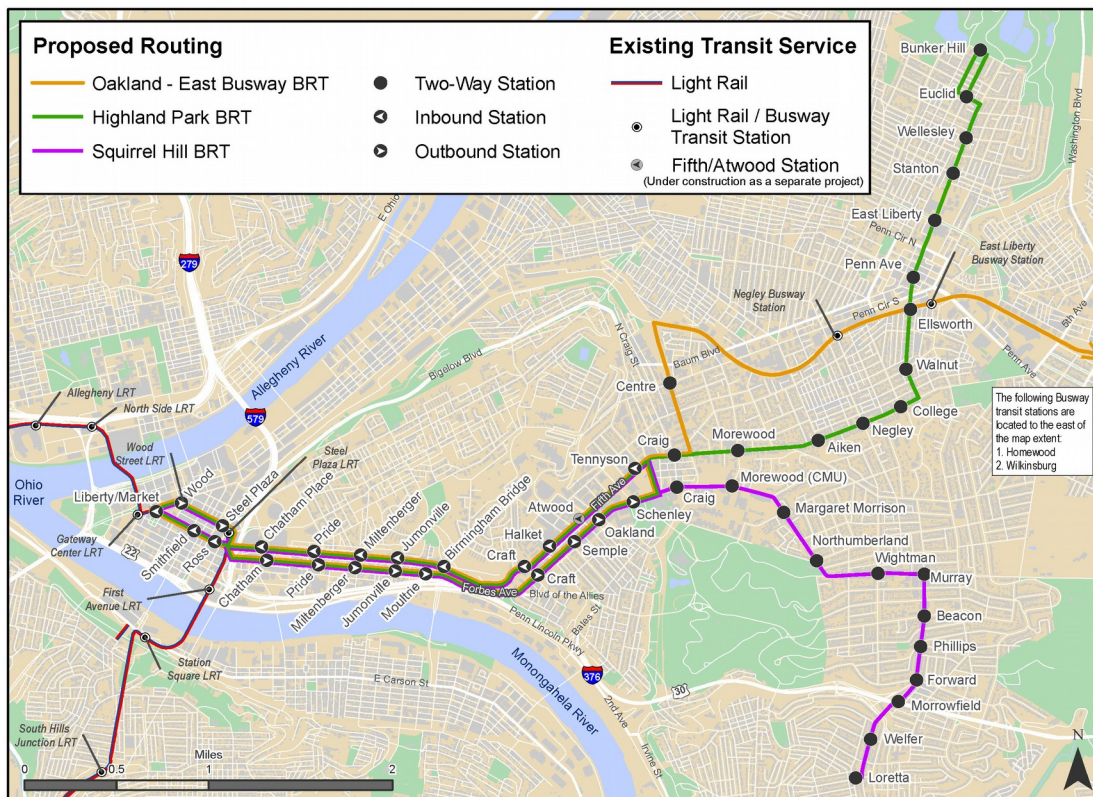
2.1 Route Alignments

As detailed in the Project Description, the Downtown-Uptown-Oakland-East End BRT Project includes a BRT Core corridor plus three branches, as shown in **Figure 1-1**. The three branches include:

- East Busway BRT (alignment along existing P3 route)
- Highland Park BRT (alignment along existing 71B route)
- Squirrel Hill BRT (alignment along existing 61D route)

The proposed BRT operations will modify existing services for the 61 series (Routes 61A, 61B, 61C, and 61D), 71 series (Routes 71A, 71B, 71C, and 71D), and P3 routes, and enhance amenities at a limited number of stops.

Figure 1-1: Proposed BRT Branch Alignments and Stations



2.2 Station Locations

Table 2-1 presents the station locations included in this transit operating plan. Stations 1 through 14 are located within the BRT Core and will be used by all BRT services. Stations 15 and 16 are also located within the BRT Core, but will only be used by the East Busway BRT and Highland Park BRT Branches. Stations 17 through 20 will only be used by the East Busway BRT Branch. Stations 21 through 32 and 33 through 44 are located exclusively along the Squirrel Hill BRT and Highland Park BRT Branches, respectively.

Table 2-1: Proposed Station Locations

	Station/Pair	Inbound Service	Outbound Service
1	Liberty/Market	Liberty/Market	
2	Wood	Wood	
3	Steel Plaza	Steel Plaza	
4	Smithfield	Smithfield	
5	Ross	Ross	
6	Fifth/Chatham & Forbes/Chatham	Fifth/Chatham	Forbes/Chatham
7	Fifth/Pride & Forbes/Pride	Fifth/Pride	Forbes/Pride
8	Fifth/Miltenberger & Forbes/Miltenberger	Fifth/Miltenberger	Forbes/Miltenberger
9	Fifth/Jumonville & Forbes/Jumonville	Fifth/Jumonville	Forbes/Jumonville
10	Fifth/Birmingham Bridge & Forbes/Moultrie	Fifth/Birmingham Bridge	Forbes/Moultrie
11	Fifth/Craft & Forbes/Craft	Fifth/Craft	Forbes/Craft
12	Fifth/Halket & Forbes/Semple	Fifth/Halket	Forbes/Semple
13	Forbes/Oakland	Fifth/Atwood (Existing Station)	Forbes/Oakland
14	Fifth/Tennyson & Forbes/Schenley	Fifth/Tennyson	Forbes/Schenley
15	Fifth/Craig	Fifth/Craig	
16	Centre/Neville	Centre/Neville	
17	Negley Busway Station	Negley Busway Station	
18	East Liberty Busway Station	East Liberty Busway Station	
19	Homewood Busway Station	Homewood Busway Station	
20	Wilkinsburg Busway Station	Wilkinsburg Buway Staation	
21	Forbes/Craig	Forbes/Craig	

Station/Pair		Inbound Service	Outbound Service
2 2	Forbes/Morewood (CMU)	Forbes/Morewood (CMU)	
2 3	Margaret Morrison	Margaret Morrison	
2 4	Northumberland	Northumberland	
2 5	Wightman	Wightman	
2 6	Murray	Murray	
2 7	Beacon	Beacon	
2 8	Phillips	Phillips	
2 9	Forward	Forward	
3 0	Morrowfield	Morrowfield	
3 1	Welfer	Welfer	
3 2	Loretta	Loretta	
3 3	Fifth/Morewood	Fifth/Morewood	
3 4	Aiken	Aiken	
3 5	Negley	Negley	
3 6	College	College	
3 7	Walnut	Walnut	
3 8	Ellsworth	Ellsworth	
3 9	Penn Ave	Penn Ave	
4 0	East Liberty	East Liberty	
4 1	Stanton	Stanton	
4 2	Wellesley	Wellesley	
4 3	Euclid	Euclid	
4 4	Bunker Hill	Bunker Hill	

2.3 Operating Assumptions

The proposed Downtown-Uptown-Oakland-East End BRT Project will open for service in 2021 and include the following service plan components, as detailed below:

2.3.1 Proposed Span of Service

- Weekday: Between 4:00 AM and 2:00 AM; 22 hours
- Weekend: Between 5:00 AM and 2:00 AM; 21 hours

2.3.2 Annual Service Days

- Weekdays: 255
- Saturdays: 52
- Sundays/Holidays: 58

2.3.3 Proposed Headways

The proposed BRT service within the BRT Core corridor will operate with an effective 2- to 3-minute headway for buses during weekday peak periods and an effective 4- to 7-minute headway for buses during weekday off-peak periods, as shown in **Table 2-2**. Weekend service within the BRT Core corridor will operate with 5- to 7-minute headways. These effective headways will be achieved by overlapping and coordinating the Highland Park BRT, Squirrel Hill BRT, and East Busway BRT Branch services within the BRT Core area, as shown in **Table 2-3**.

Table 2-2: Proposed BRT Headways by Day and Time Period

Headway by Time Period	Squirrel Hill BRT Branch	Highland Park BRT Branch	East Busway BRT Branch	BRT in Core Area (Effective)
Weekday Peak	5 minutes	10 minutes	10 minutes	2-3 minutes
Weekday Off Peak	8-20 minutes	16-20 minutes	16-20 minutes	4-7 minutes
Weekend	10-20 minutes	20 minutes	20 minutes	5-7 minutes

Table 2-3: Proposed BRT Weekday Headways by Hour

Time Period	Squirrel Hill BRT Branch	Highland Park BRT Branch	East Busway BRT Branch	BRT in Core Area
4 AM	20	20	20	7
5 AM	10	20	20	5
6 AM	8	16	16	4
7 AM	5	10	10	3
8 AM	5	10	10	3
9 AM	5	10	10	3
10 AM	5	10	10	3
11 AM	8	16	16	4
12 Noon	8	16	16	4
1 PM	8	16	16	4
2 PM	8	16	16	4
3 PM	5	10	10	3
4 PM	5	10	10	3
5 PM	5	10	10	3
6 PM	8	16	16	4
7 PM	8	16	16	4
8 PM	8	16	16	4
9 PM	10	20	20	5
10 PM	10	20	20	5
11 PM	10	20	20	5
12 Midnight	20	20	20	7
1 AM	20	20	20	7
2 AM	20	20	20	7
Trips Per Day	180	96	96	372

Section 3

Operating Cost Model

Anticipated BRT operating costs were calculated based on the observed operating costs of the existing bus fleet and the expected costs of the electric battery bus fleet.

3.1 Existing Fleet Operating Costs

The existing operating costs for the current bus fleet were based on the PAAC FY 2016 total bus costs, as shown in **Table 3-1**.

Table 3-1: PAAC FY 2016 Total Bus Costs

Expense Object Class	Cost Type	Vehicle Operations	Vehicle Maintenance	Non-Vehicle Maintenance	General Administration	Total
Operators Salaries & Wages	Revenue Hour	\$59,540,978				\$59,540,978
Other Salaries & Wages	Revenue Hour	\$11,788,104	\$29,876,322	\$6,694,329	\$14,950,260	\$63,309,015
Fringe Benefits	Revenue Hour	\$66,757,338	\$27,990,081	\$6,177,039	\$14,670,678	\$115,595,136
Services	Revenue Hour	\$104,268	\$459,368	\$3,288,280	\$11,452,266	\$15,304,182
Fuels & Lubricants	Revenue Mile	\$15,545,551	\$505,357			\$16,050,908
Tires & Tubes	Revenue Mile	\$1,803,843	\$40,401			\$1,844,244
Other Materials & Supplies	Revenue Hour	\$2,958	\$17,247,254	\$967,709	\$964,187	\$19,182,108
Utilities	Revenue Hour				\$3,284,962	\$3,284,962
Casualty & Liability Costs	Revenue Hour		\$(222,000)	\$(29,868)	\$3,222,703	\$2,970,835
Miscellaneous Expenses	Revenue Hour	\$10,103	\$64,446	\$15,238	\$4,213,227	\$4,303,014
Total		\$155,553,143	\$75,961,229	\$17,112,727	\$52,758,283	\$301,385,382

Source: PAAC FY 2016 Capital Budget

The PAAC FY 2016 total costs (buses only) divided by the FY 2016 operating statistics, shown in **Table 3-2**, resulted in an average cost of \$178.43/vehicle hour and \$0.86/vehicle mile, as shown in **Table 3-3**.

Table 3-2: PAAC FY 2016 Total Bus Operating Statistics

Operating Statistic	FY 2016
Revenue Hours	1,588,792
Revenue Miles	20,848,011

Source: PAAC FY 2016 Capital Budget

Table 3-3: PAAC FY 2016 Total Bus Operating Per Hour Costs

Expense Object Class	Vehicle Operations	Vehicle Maintenance	Non-Vehicle Maintenance	General Administration	Total
Operators Salaries & Wages	\$37.48	\$0.00	\$0.00	\$0.00	
Other Salaries & Wages	\$7.42	\$18.80	\$4.21	\$9.41	
Fringe Benefits	\$42.02	\$17.62	\$3.89	\$9.23	
Services	\$0.07	\$0.29	\$2.07	\$7.21	
Other Materials & Supplies	\$0.00	\$10.86	\$0.61	\$0.61	
Utilities	\$0.00	\$0.00	\$0.00	\$2.07	
Casualty & Liability Costs	\$0.00	\$(0.14)	\$(0.02)	\$2.03	
Miscellaneous Expenses	\$0.01	\$0.04	\$0.01	\$2.65	
Total	\$86.99	\$47.47	\$10.77	\$33.21	\$178.43

Source: PAAC FY 2016 Capital Budget

Table 3-4: PAAC FY 2016 Total Bus Operating Per Mile Costs

Expense Object Class	Vehicle Operations	Vehicle Maintenance	Non-Vehicle Maintenance	General Administration	Total
Fuels & Lubricants	\$0.75	\$0.02	\$0.00	\$0.00	
Tires & Tubes	\$0.09	\$0.00	\$0.00	\$0.00	
Total	\$0.83	\$0.03	\$0.00	\$0.00	\$0.86

Source: PAAC FY 2016 Capital Budget

3.2 Battery Electric Operating Costs

Currently, the Port Authority does not operate any battery electric buses. However, the proposed project will include a fleet of approximately 25 battery electric buses to operate along the Oakland-East Busway route, with any extra electric buses beyond what is required for this route to be used on the Highland Park BRT Branch route. The estimate for operating and maintenance costs for the battery electric buses were determined by utilizing information from the Federal Transit Administration's National Transit Database (NTD). NTD data shows that the utilization of electric buses decreased maintenance costs by 18 percent as compared to a conventional diesel bus fleet. Applying this 18 percent to the average maintenance cost of \$178.59 gives an average maintenance cost of approximately **\$167.95** per hour. Additionally, electric vehicle operations today show an average of approximately 17 miles per gallon equivalent, which would represent a 76 percent reduction in equivalent fuel cost. The breakdown of operating costs per hour and per mile for electric vehicles are shown in **Table 3-5** and **Table 3-6**.

Table 3-5: Estimated PAAC FY 2016 Electric Bus Operating Per Hour Costs

Expense Object Class	Vehicle Operations	Vehicle Maintenance	Non-Vehicle Maintenance	General Administration	Total
Operators Salaries & Wages	\$37.48	\$0.00	\$0.00	\$0.00	
Other Salaries & Wages	\$7.42	\$15.42	\$3.46	\$9.41	
Fringe Benefits	\$42.02	\$14.45	\$3.19	\$9.23	
Services	\$0.07	\$0.24	\$1.70	\$7.21	
Other Materials & Supplies	\$0.00	\$8.90	\$0.50	\$0.61	
Utilities	\$0.00	\$0.00	\$0.00	\$2.07	
Casualty & Liability Costs	\$0.00	\$(0.11)	\$(0.02)	\$2.03	
Miscellaneous Expenses	\$0.01	\$0.03	\$0.01	\$2.65	
Total	\$86.99	\$38.92	\$8.83	\$33.21	\$167.95

Source: PAAC FY 2016 Capital Budget

Table 3-6: Estimated PAAC FY 2016 Electric Bus Operating Per Mile Costs

Expense Object Class	Vehicle Operations	Vehicle Maintenance	Non-Vehicle Maintenance	General Administration	Total
Fuels & Lubricants	\$0.18	\$0.02	\$0.00	\$0.00	
Tires & Tubes	\$0.09	\$0.00	\$0.00	\$0.00	
Total	\$0.27	\$0.03	\$0.00	\$0.00	\$0.30

Source: PAAC FY 2016 Capital Budget

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Section 4

Service Hours and Miles

4.1 Existing Service

4.1.1 Average Weekday Service Hours and Miles

Table 4-1 presents the existing average weekday service hours and miles for the existing 61 series (Routes 61A, 61B, 61C, and 61D), the 71 series (Routes 71A, 71B, 71C, and 71D), and P3 routes.

Table 4-1: PAAC FY 2016 Existing Average Weekday Service Hours and Miles

Route	Hours	Miles
P3	105	1,388
61A, 61B, 61C, 61D	573	7,279
71A, 71B, 71C, 71D	472	4,658
Total All 9 Routes	1,150	13,325

Source: PAAC FY 2016 Capital Budget
These existing routes will be modified to account for the proposed BRT service. The PAAC is continuing to develop a detailed operational plan to

consolidate and streamline these services efficiently, and further coordinate other connecting bus service within and adjacent to the corridor.

4.1.2 Average Weekday Service Hours by Propulsion

The PAAC has a 724-vehicle fleet, comprised of 692 diesel buses and 32 hybrid diesel buses. Each day, these buses are randomly assigned to all system routes on which their operation is feasible. To estimate the existing service miles by propulsion type, as shown in **Table 4-2**, it was assumed that 4.6 percent of the vehicles servicing the existing routes currently use hybrid diesel buses, as this is the proportion that make up the entire fleet.

Table 4-2: PAAC FY 2016 Existing Average Weekday Service Miles by Propulsion Type

Route	Diesel Miles	Hybrid Diesel Miles	Total Miles
P3	1,324	64	1,388
61A, 61B, 61C, 61D	6,944	335	7,279
71A, 71B, 71C, 71D	4,444	214	4,658
Total All 9 Routes	12,712	613	13,325

Source:
PAAC FY
2016
Capital
Budget

4.2 Proposed Service

4.2.1 Average Weekday Service Hours and Miles

Table 4-3 presents the proposed average weekday service hours and miles for the East Busway BRT, Squirrel Hill BRT, and Highland Park BRT Branches, and the modified existing 61 series (Routes 61A, 61B, and 61C) and 71 series (Routes 71A, 71B, and 71C) routes. The proposed schedule will continue to change as the project progresses, especially as it relates to routes indirectly affected by the proposed project.

Table 4-3: Proposed Average Weekday Service Hours and Miles

Route	Hou	Mile
-------	-----	------

	rs	s
East Busway BRT	118	1,885
Squirrel Hill BRT	265	2,227
Highland Park BRT	143	1,447
Total BRT	526	5,559
61A, 61B, 61C	234	3,231
71A, 71C, 71D	286	2,851
Total Local Service	520	6,082
Total Corridor Service	1,047	13,325

4.2.2 Average Weekday Service Hours by Propulsion Type

The proposed Downtown-Uptown-Oakland-East End BRT Project service will require 25 battery electric buses and 34 diesel buses, as follows:

- East Busway BRT Branch: 15 battery electric buses
- Highland Park BRT Branch: 10 battery electric buses and 6 branded diesel buses
- Squirrel Hill BRT Branch: 28 branded diesel buses

The modified existing 61 series (Routes 61A, 61B, and 61C) and 71 series (Routes 71A, 71B, and 71C) routes will use the same mix of existing fleet diesel buses (95.4 percent) and hybrid diesel buses (4.6 percent).

Table 4-4 presents the proposed average weekday service miles by propulsion type.

Table 4-4: Proposed Average Weekday Service Miles by Propulsion Type

Route	Diesel Miles	Battery Electric Miles	Total Miles
East Busway BRT	0	1,885	1,885
Squirrel Hill BRT	2,227	0	2,227
Highland Park BRT	55	1,392	1,447
Total BRT	2,282	3,277	5,559
61A, 61B, 61C	3,231	0	3,231
71A, 71C, 71D	2,851	0	2,851
Total Local Service	6,082	0	6,082
Total Corridor Service	8,364	3,277	11,641

4.3 Change in Service

4.3.1 Average Weekday Service Hours and Miles

Table 4-5 presents the change in average weekday service hours and miles between the existing and proposed service. The table shows preliminary proposed service estimates. Frequencies on non-BRT routes require additional evaluation.

Table 4-5: Change in Average Weekday Service Hours and Miles

	Hours		Miles	
Existing Service	1,150		13,325	
Proposed Service	1,047		11,641	
Change from Existing to Proposed	-103	-9%	-1,685	-13%

Source: PAAC FY 2016 Capital Budget
The proposed Downtown-Uptown-Oakland-East End BRT Project service will increase efficiency by

providing higher quality service that will require fewer weekday service hours and miles than the existing service plan. The reduction in average weekday service hours and miles will be redistributed to other local services as the project progresses to further enhance transit service in the area.

4.3.2 Average Weekday Service Hours by Propulsion Type

Table 4-6 presents the change in average weekday service miles by propulsion type between the existing service and proposed service. The proposed Downtown-Uptown-Oakland-East End BRT Project service will result in a decrease in overall service miles. It will also result in an increase in service miles provided by battery electric vehicles.

Table 4-6: Change in Average Weekday Service Miles by Propulsion Type

	Diesel Miles	Battery Electric Miles	Total Miles
Existing Service	13,325	0	13,325
Proposed Service	8,364	3,277	11,641
Change from Existing to Proposed	- 4,961	+ 3,277	- 1,684

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Section 5

Operating Costs

5.1 Existing Service

Table 5-1 presents the existing service's average weekday operating costs based on service hours and miles. The resulting existing service average weekday operating costs were converted to annual costs using the PAAC annualization factor for the existing routes of 300.

Table 5-1: Existing Service Weekday Operating Cost

	Hours	Miles
Average Weekday Existing Service	1,150	13,325
Existing Costs per Unit	\$178.59	\$0.86
Total Average Weekday Existing Service Cost	\$205,379	\$11,460
	\$216,838	
Annualization Factor	300	
Total Annual Existing Service Cost	\$65,051,400	

Source: PAAC FY 2016 Capital Budget

5.2 Proposed Service

Table 5-2 presents the proposed services average weekday operating costs based on service

hours and miles. The resulting proposed service average weekday operating costs were converted to annual costs using the PAAC annualization factor for the existing routes of 300.

Table 5-2: Proposed Service Average Weekday Operating Cost

	Diesel		Electric	
	Hours	Miles	Hours	Miles
Average Weekday Proposed Service	839	9,364	208	3,277
Proposed Costs per Unit	\$178.59	\$0.86	\$169.89	\$0.29
Total Average Weekday Proposed Service Cost	\$149,837	\$8,053	\$35,337	\$950
	\$157,890		\$36,287	
Annualization Factor	300			
Total Annual Proposed Service Cost	\$58,253,250			

5.3 Change in Service

Table 5-3 presents the change in annual operating cost between the existing service and proposed service.

Table 5-3: Change in Annual Operating Cost

	Annual Operating Cost	
Existing Service	\$65,051,400	
Proposed Service	\$58,253,250	
Change from Existing to Proposed	\$6,798,150	-10%

The proposed Downtown-Uptown-Oakland-East End BRT Project service will increase efficiency by providing higher quality service at a lower annual operating cost than the cost of providing existing service plan. Monies from the reduction in annual operating cost will be redistributed to other transit service within the system as the project progresses to further enhance service.

Section 6

Fare Revenue

6.1 Existing Fare Policy and Structure

Fare revenue projections assume the PAAC's current fare policy and fare structure will remain at the current levels through the implementation of the Downtown-Uptown-Oakland-East End BRT Project. The current policy includes a \$1 transfer fee for riders paying via ConnectCard smart card; customers paying cash are required to pay their usual fare for each segment. With this fare policy in place, it is expected that the annual fare revenue will increase with this project by three percent, while overall operating and maintenance will decrease due to increased efficiency in overall corridor service. This fare policy may be reviewed again by the Board prior to year of expenditure. PAAC is currently evaluating potential changes to its fare structure, including the possibility of creating free transfers for routes that connect to East Busway BRT, Squirrel Hill BRT, and Highland Park BRT Branches. The existing fare structure was used for this revenue estimate.

Table 6-1 presents the existing PAAC cash and ConnectCard (stored cash value card) fare structure. Individuals with disabilities must submit an application and be approved to reduce half-priced fares. Student fares are negotiated with each of the colleges/universities at a price of \$1.25 per fare by use of a ConnectCard. Otherwise, students pay a full fare with cash and are considered a regular rider.

Table 6-1: Existing Cash and ConnectCard Fare Structure

Type	Cash	ConnectCard
Regular	\$2.75	\$2.50
Transfer	\$2.75	\$1.00
Children (0-5) with Fare Paying Adult	\$0.00	\$0.00
Children (6-11)	\$1.35	\$1.25
Student	N/A	\$1.25
Individuals with Disabilities	\$1.35	\$1.25
Seniors (65+)	\$0.00	\$0.00

Source: PAAC FY 2016 Capital Budget

PAAC also offers unlimited daily, weekly, monthly, and annual passes. **Table 6-2** presents the existing fare structure for Unlimited-Ride Passes, which are fully prepaid.

Table 6-2: Existing Unlimited-Ride Pass Fare Structure

Type	Regular	Individuals with Disabilities
Daily	\$7.00	n/a
Weekly	\$25.00	\$12.50
Monthly	\$97.50	\$48.75
Annual	\$1,072.50	n/a

Source: PAAC FY 2016 Capital Budget

6.2 Existing Average Revenue per Trip

Table 6-3 presents the existing average revenue per trip by fare type based on FY 2016 information for the entire system.

Table 6-3: Existing Average Revenue per Trip

Fare Type	Average Revenue per Trip
Average Non-Student Fare (54%)	\$1.41
Average Student Fare (39%)	\$1.25
Senior Fare (not included as fare revenue) (7%)	\$2.50
Average All Fare	\$1.41

Source: PAAC FY 2016 Capital Budget

While Table 6-1 shows that the Senior fare is free, the Port Authority is reimbursed by the Pennsylvania State Lottery at \$2.50 for each ride. While this cost is included in the calculation of the overall average fare, it is not included as part of fare recovery.

6.3 Average Weekday Fare Revenue

6.3.1 Existing Service

Table 6-4 presents the existing service fare revenue based on FY 2016 average weekday fare collection information and the PAAC annualization factor.

Table 6-4: Existing Fare Revenue

Fare Type	Base Fare	Actual Fare Revenue/Trip	Percent of Base Fare Collected	Trips	Annual Fare Revenue
Regular	\$2.75	\$1.41	51%	22,630	\$9,572,490
Student	\$1.25	\$1.25	100%	14,470	\$5,426,250
Transfer	\$1.00	\$1.41	51%	-	\$0
Total				37,100	\$14,998,740

Source: PAAC FY 2016 Capital Budget

6.3.2 Proposed Service

Table 6-5 presents the proposed service fare revenue based on FY 2016 average weekday fare collection information, proposed service changes, and the PAAC annualization factor. Detailed ridership estimates are still being developed; however, a 7 percent ridership growth was assumed for the purposes of this memorandum due to increases in transfers to this service from other non-BRT services. This percentage accounts for potential transfers from the 61A/B/C and 71A/C/D that would need to transfer to the Downtown-Uptown-Oakland-East End BRT service to access Uptown or Downtown if other local bus routes are not altered to mitigate these needs, and is based on existing boarding/alighting data.

Table 6-5: Proposed Fare Revenue

Fare Type	Base Fare	Actual Fare Revenue/Trip	Percent of Base Fare Collected	Trips	Annual Fare Revenue
BRT Regular	\$2.75	\$1.41	51%	17,490	\$7,398,270
Local Bus Regular	\$2.75	\$1.41	51%	5,140	\$2,174,220
BRT Student	\$1.25	\$1.25	100%	14,470	\$5,426,250
BRT Transfer	\$1.00	\$0.51	51%	2,600	\$399,927
Total				39,700	\$15,398,667

6.3.3 Change in Service

Table 6-6 presents the estimated change in annual fare revenue between the existing service and proposed service.

Table 6-6: Change in Annual Fare Revenue

Service	Annual Fare Revenue	
Existing	\$14,998,740	
Proposed	\$15,398,667	
Change from Existing to Proposed	+ \$399,927	+ 3%

Once again, the PAAC is evaluating potential changes to its fare structure, including the possibility of creating free transfers for routes that connect to East

Busway BRT, Squirrel Hill BRT, and Highland Park BRT Branches that may reduce the number of transfers created from this project, thereby reducing the change in fare revenue as stated in **Table 6-6**. Because no other fare structure for BRT has yet been determined, the existing fare structure was used for this revenue estimate, which includes the \$1 transfer fee.

The proposed Downtown-Uptown-Oakland-East End BRT Project service will increase efficiency by providing higher quality service at a lower annual operating cost than the cost of providing the existing service. Monies from the annual increased fare revenue will be redistributed to other transit services within the system as the project progresses to further enhance service.