

MSFAC November 2020



TRANSPORTATION CORE SERVICES

STINGER ROUTES

Gold, Red, Blue, Green, NARA/TEP, Tech Square, Emory, Rambler, & Grocery.

STINGERETTE

After-hours campus safety ride-service 7 days/week.

STUDENT PARATRANSIT

Day-time, point-to-point accessible van service for students.

CHARTER SERVICES

Chartered transit for special events provide additional revenue.

CARPPOOL PROGRAM

Program management and discounts for carpool permits.

TRANSIT PASS PROGRAM

Program management and discounts for MARTA and regional transit passes.

CAR-SHARING PROGRAM

Zipcar vehicles around campus that can be rented by the hour or day.

COMMUTE SURVEY

Annual commute mode survey conducted by PTS.

BIKE HELMETS & LOCKS

PTS sells low cost bike helmets and locks to campus to encourage safety.

BIKE SAFETY CLASSES

PTS, CRC, & GTPD provide bike safety classes multiple times a year.

ABANDONED BIKES

After GTPD tags abandoned bicycles, PTS cuts locks and removes bikes.

BIKE FIX-IT STATIONS

PTS repairs and maintains fix-it station good state of repair.

2019 Commute Breakdown



14.7%

TRANSIT



11.8%

WALKING



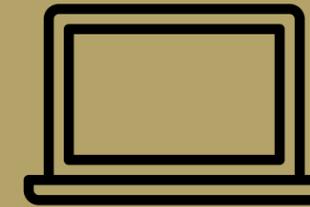
7.6%

CARPPOOLING



6.5%

BICYCLING



3.9%

TELECOMMUTE
AND ALT SCHEDULE



52.7%

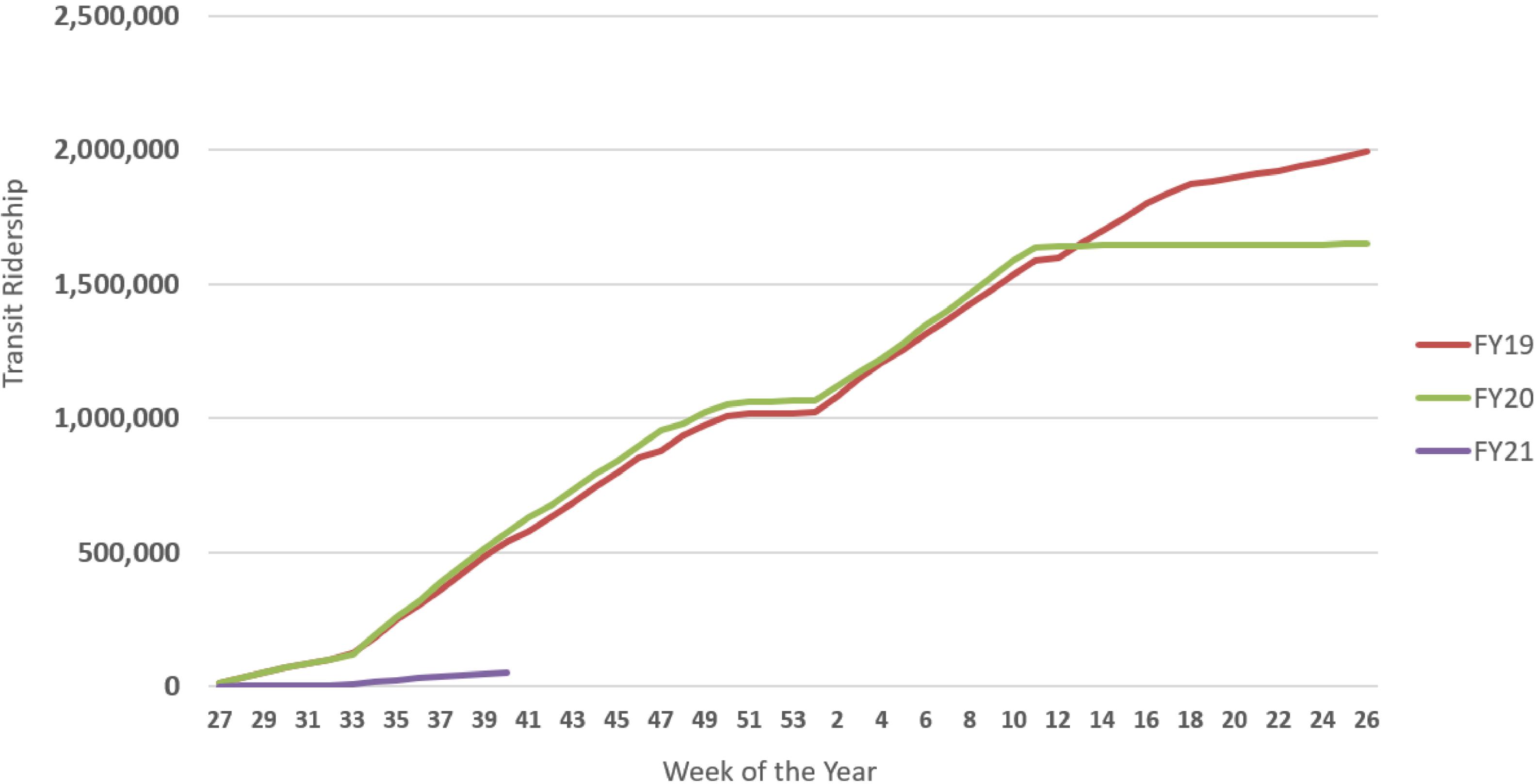
DRIVE
ALONE

2.8%

OTHER

1,885 SURVEYED STUDENTS AND EMPLOYEES

Fiscal Year Cumulative Ridership by Week



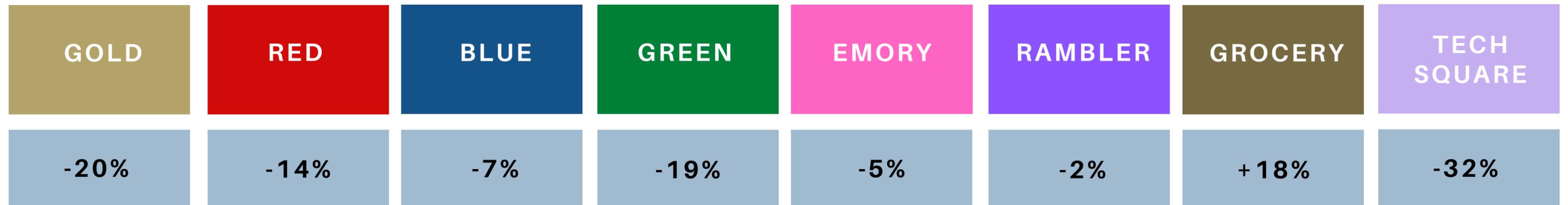
FY2020 Ridership Change

Prior to March 2020

GOLD	RED	BLUE	GREEN	EMORY	RAMBLER	GROCERY	TECH SQUARE
+4%	+3%	+13%	+6%	+38%	+31%	+49%	-22%

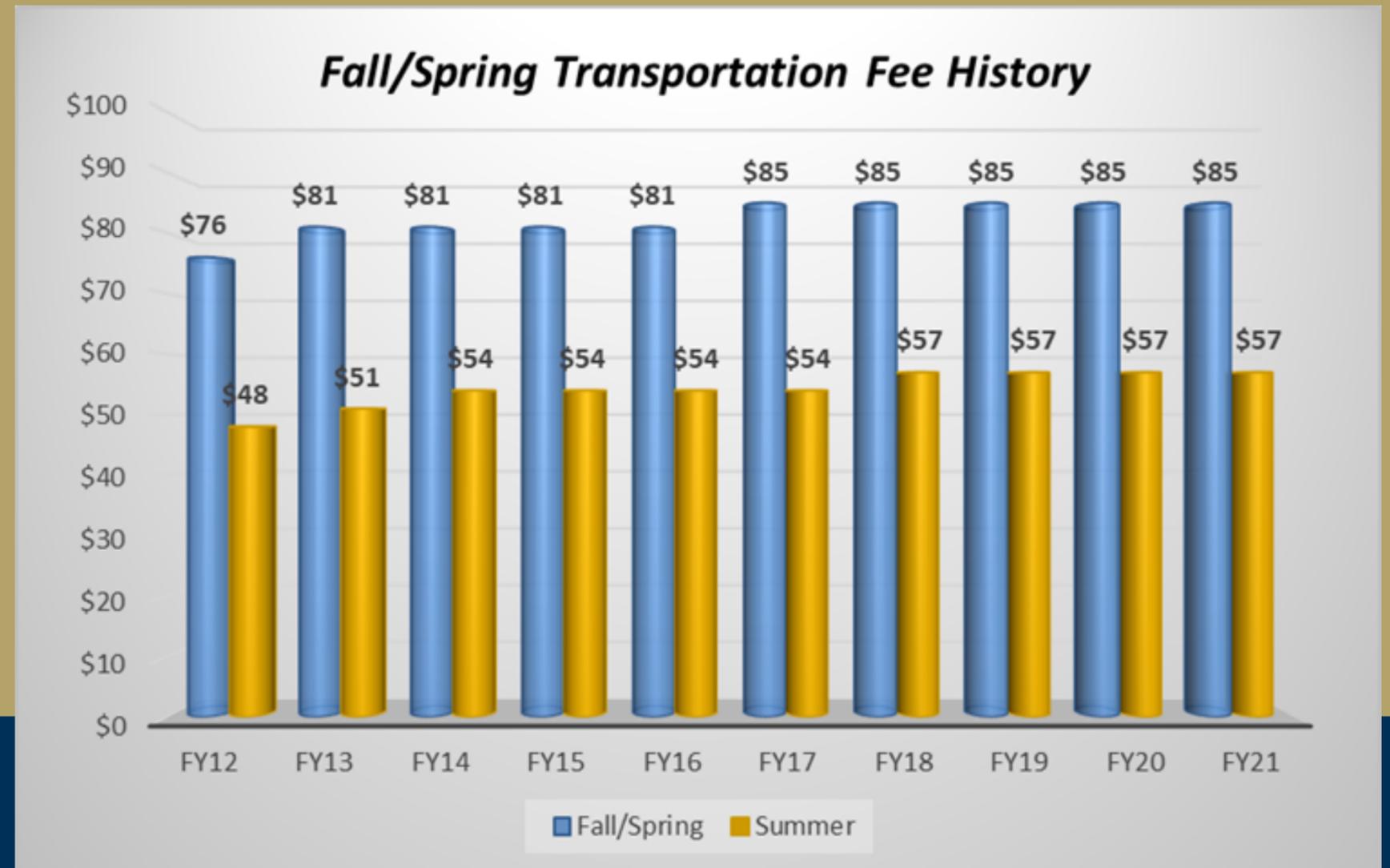
FY2020 Ridership Change

Entire Year



Transportation Historical Fee Levels

\$85 / Semester - Fall and Spring
\$57 / Semester - Summer



1.3%

**AVERAGE ANNUAL INCREASE IN
THE MANDATORY FEE OVER
THE PAST 10 YEARS.**

2.98%

**AVERAGE ANNUAL INCREASE IN
THE GROOME CONTRACT COSTS
OVER PAST 10 YEARS.**

Historical Budget Impacts

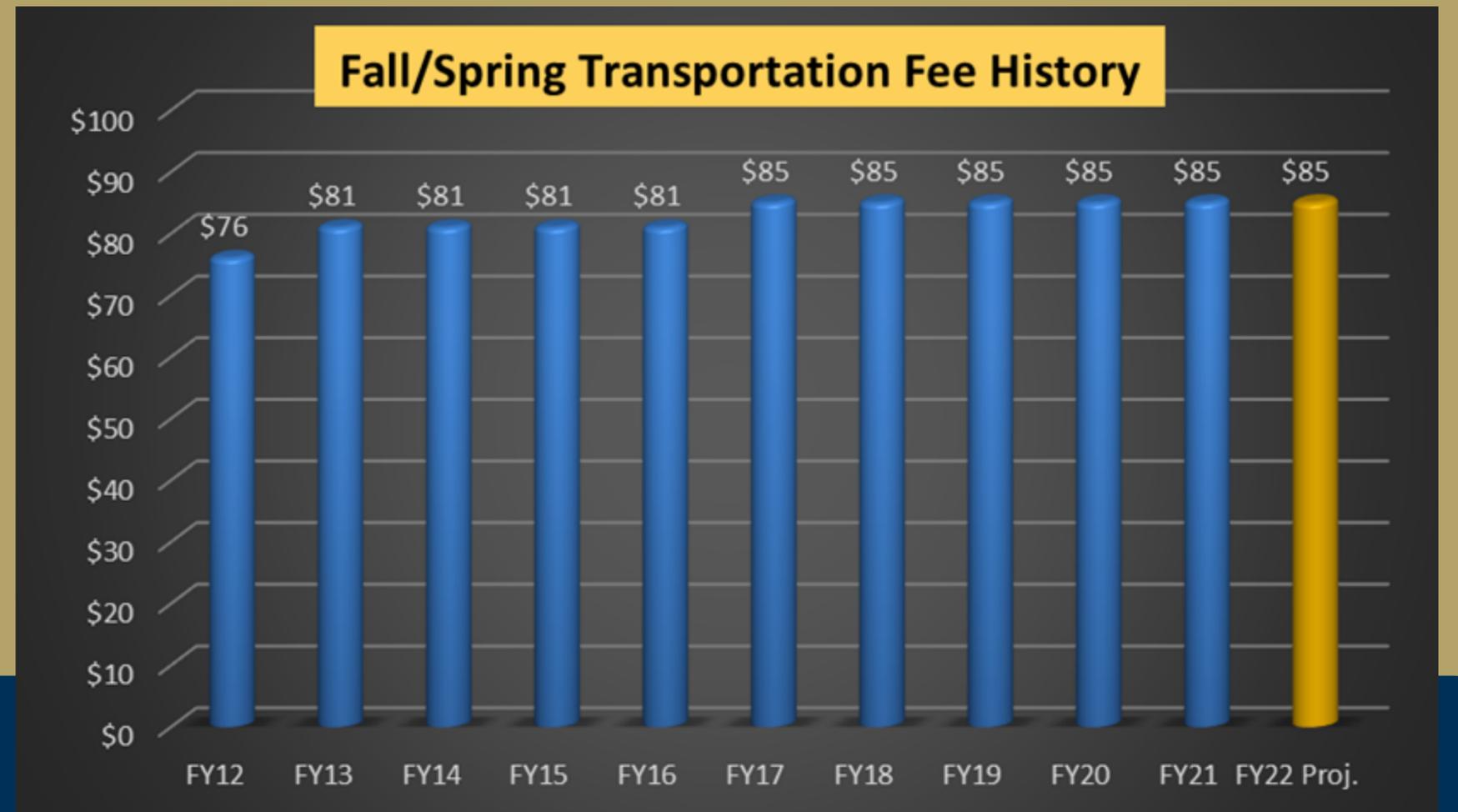
Revenue Impacts

- INCREASED STUDENT ENROLLMENT
- CONSISTENT HISTORICAL CHARTER SERVICE USAGE

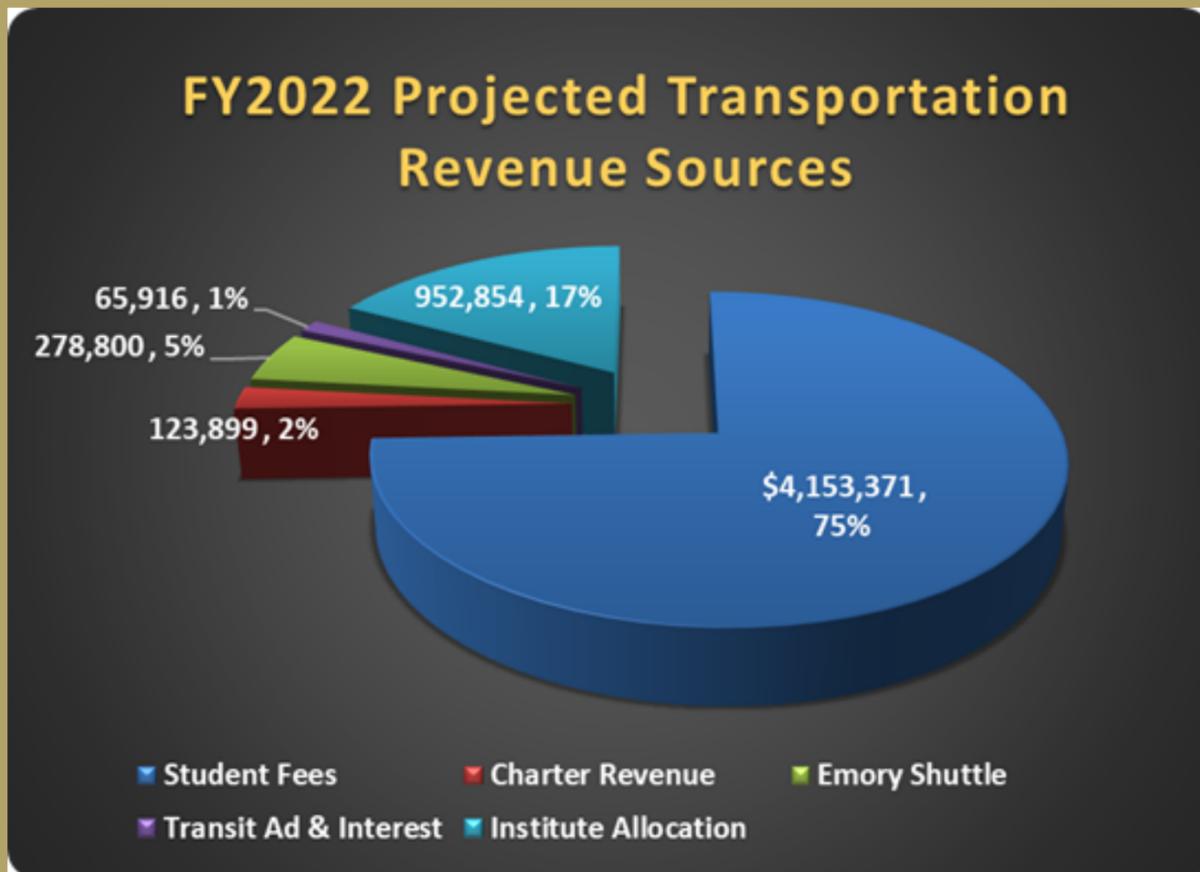
Cost Containment Efforts

- SUCCESSFULLY NEGOTIATING LESS THAN MAX 5% CONTRACT INCREASE - FY21 INCREASE WAS 5%
- DEFERRED VACANCIES
- OPERATIONAL CHANGES TO STINGERETTE SERVICE
- VEHICLE CHANGES ON ROUTES

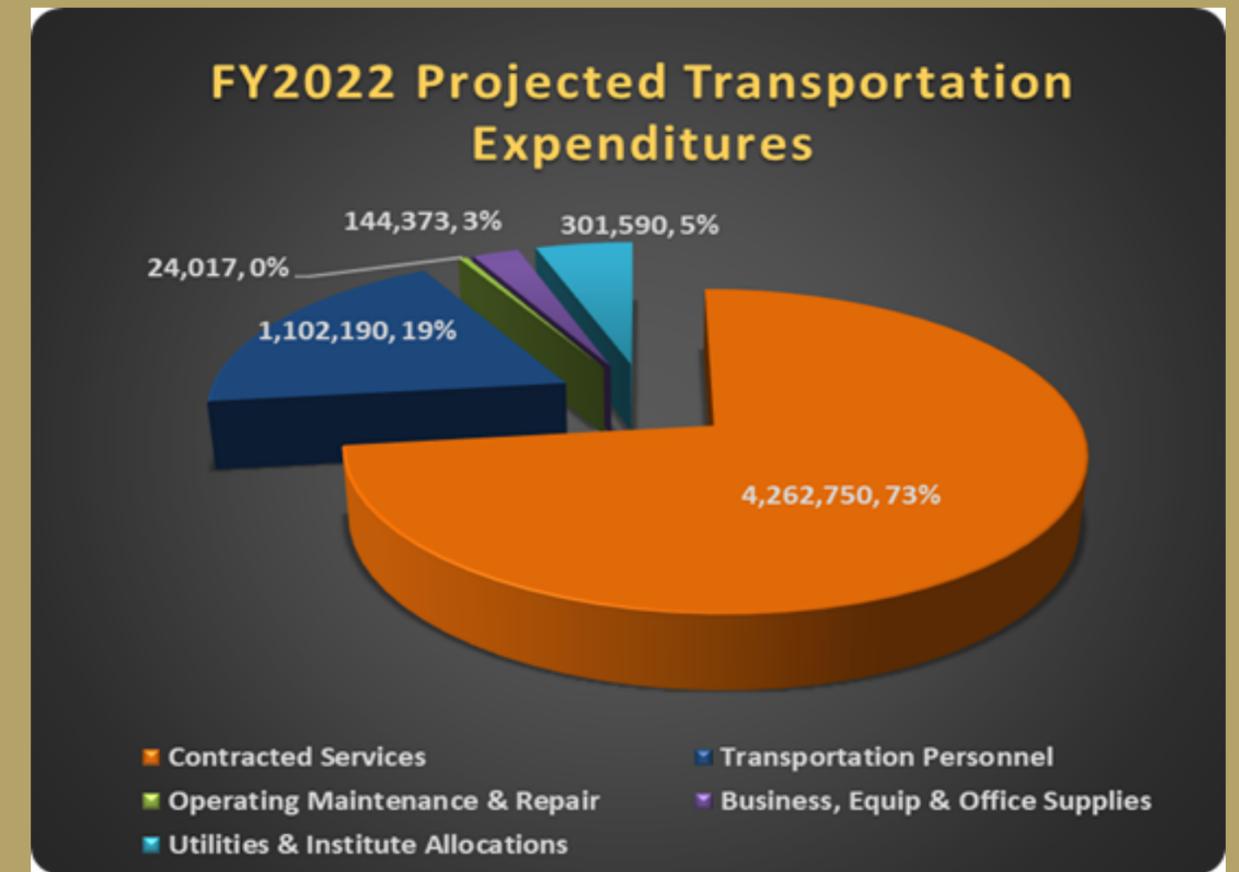
**Not Requesting
FY2022 Fee
Increase**



Transportation's FY2022 Projection



Revenue: \$5,574,840



Expenses: \$5,834,920*

*Expenditures exclude depreciation

FY2022 Budget Projection

	FY 2019 Actuals	FY 2020 Actuals	FY 2021 Projected	FY22 Projection without increase	FY22 Incremental Fee Increase	FY22 Projection with increase
REVENUE						
<i>Student Fees</i>						
Mandatory Fee Revenue	4,009,576	3,495,350	3,957,716	4,153,371	0	4,153,371
Less: Allowances, Waivers, Etc.						0
Non-Mandatory Student Fees						0
<i>Sales & Services</i>						
Fines						0
Non-Student Parking & Transportation	1,423,907	1,387,560	1,319,624	1,421,469		1,421,469
Other Sales & Services						0
<i>Miscellaneous Revenues</i>						
Gifts						0
Other Miscellaneous Revenues						0
Total Revenue	\$5,433,483	\$4,882,911	\$5,277,340	\$5,574,840	\$0	\$5,574,840
EXPENDITURES						
<i>Personal Services</i>						
Salaries - Faculty/Staff	572,134	626,873	665,989	820,710		820,710
Salaries - Students	16,928	3,506	24,010	24,010		24,010
Fringe Benefits	182,638	199,973	219,776	257,469		257,469
Allocated Personal Services						0
<i>Travel</i>						
Travel - Employee	4,862	2,893	0	5,000		5,000
Travel - Non-Employee						0
<i>Operating Supplies and Expenses</i>						
Purchases for Resale/Cost of Goods Sold						0
Supplies & Materials	34,444	28,447	59,900	54,980		54,980
Repairs and Maintenance	18,233	9,308	22,517	24,017		24,017
Utilities	4,334	4,386	6,414	5,043		5,043
Rental Payments (Non-Real Estate)	30,000	30,413	32,678	24,000		24,000
Insurance						0
Software	22,110	39,898	24,000	24,960		24,960
Equipment (Small Value)			21,088	23,938		23,938
Real Estate/Authority Lease Rental						0
Per Diems & Fees	11,590					0
Contracted Services	3,611,564	3,261,234	3,736,161	4,262,750		4,262,750
Telecommunications	7,284	7,396	8,328	8,495		8,495
Scholarships						0
Other Operating Expenses	215,132	-40,348	284,918	299,547		299,547
Allocated Operating Expenses						0
<i>Equipment/Capital Outlay</i>						
Lease/Purchase - Principal						0
Lease/Purchase - Interest						0
R&R Reserve Contribution						0
Motor Vehicle Purchase						0
Equipment Purchase						0
Building and Facilities Improvements						0
Total Expenditures	\$4,731,255	\$4,173,980	\$5,105,779	\$5,834,920	\$0	\$5,834,920
Beginning Net Assets and Reserves (July 1)		3,121,644	3,830,574	3,522,126		3,522,126
Surplus/(Deficit) from above schedule		708,931	171,561	-260,080	0	-260,080
Transfer to or from other sources		0	-480,009	-730,000		-730,000
Final Net Assets and Reserves (June 30)		\$3,830,574	\$3,522,126	\$2,532,046	\$0	\$2,532,046

FY2022 Budget Projection

To Balance the Budget:

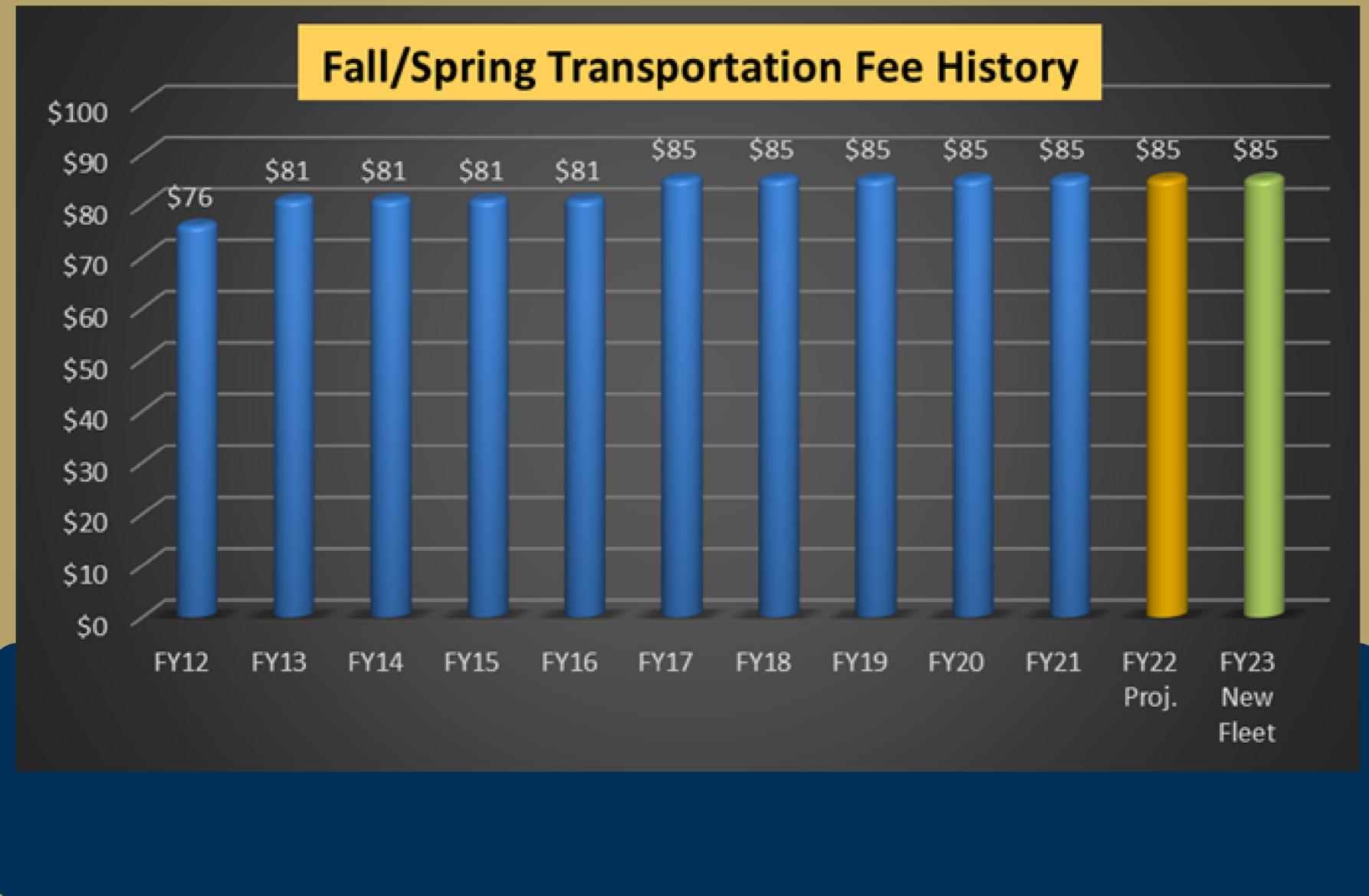
- CONSIDER COST REDUCTION STRATEGIES (DEFER FILLING OPEN POSITIONS, REDUCE SERVICE HOURS)
- USE RESERVE FUNDS TO MEET CONTRACTUAL OBLIGATIONS

	FY2021 Current Budget	FY2021 1st Qtr Projections	FY 2022 Projected Budget w/o Fee Incr	Revenue Generated by Rate Increase	FY 2022 Proposed Budget w/ Fee Decr
Revenue					
Fee Revenue:	3,723,064	3,719,855	3,753,345	0	3,753,345
Summer Revenue	396,435	237,861	400,026	-	400,026
Non-Fee Revenue (list):		0			
Charter Revenue	164,285	39,333	123,899		123,899
Emory Shuttle Fall/Spring - Institute Allocation	130,789	128,550	133,405		133,405
Emory Shuttle Fall/Spring - Emory Allocation	65,394	65,394	66,702		66,702
Emory Shuttle/Summer - Institute Allocation	73,844	61,732	78,693		78,693
Transit Advertising & Misc.	51,818	7,170	21,710		21,710
Interest Income	69,178	64,591	44,206	0	44,206
Institute Allocation (Stinger/Trolley)	977,286	952,854	952,854		952,854
Total Revenue:	5,652,093	5,277,340	5,574,840	0	5,574,840
Transportation Expenditures					
Personal Serv (Incl Fringes)	1,145,792	909,775	1,102,190		1,102,190
Self-Op Personal Serv (Incl Fringes)					
Direct Operating Expenses	144,906	122,406	116,475		116,475
Contracted Services	4,166,023	3,760,161	4,287,710		4,287,710
Equip <\$5K & Renov <\$100K:	21,088	21,088	23,938		23,938
Institute Overhead	144,933	144,933	152,582		152,582
Indirect Operating Expenses	89,195	147,416	152,025		152,025
Total Expenditures	5,711,938	5,105,779	5,834,920		5,834,920
Cash Flow	(59,845)	171,561	(260,080)	0	(260,080)
Depreciation Expense	74,560	69,727	69,727		69,727
Net Income After Depr	(134,405)	101,834	(329,807)		(329,807)

FY2023 Projected Fee Request

Maintain \$85 Fee Level

- CONTINUATION OF CAMPUS BUS & STINGERETTE SERVICES
- INCREASED GOLD ROUTE SERVICE
- LONG-TERM FLEET SUSTAINABILITY REPLACEMENT PLAN
- OPERATIONAL CHANGES TO TRANSIT SERVICES



In-House Operation

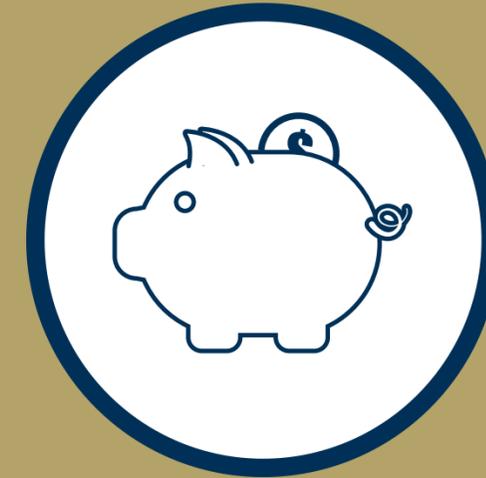
New Fleet:

- NEW FLEET PURCHASE: PROJECTED AT \$8.8 MILLION

Annual Ongoing Costs:

- ADDITIONAL STAFFING: \$2.3M
- VEHICLE MAINTENANCE & TECHNOLOGY SERVICES: \$862K
- INSURANCE & TRAINING - \$150K
- DEPRECIATION - \$910K

TOTAL ANNUAL COST - \$4.2M



FY2022 - FY2024 Budget Projection

	FY2021 Current Budget	FY2021 1st Qtr Projections	FY 2022 Projected Budget w/o Fee Incr	Revenue Generated by Rate Increase	FY 2022 Proposed Budget w/ Fee Decr	FY 2023 Proposed Budget	FY 2024 Proposed Budget
Revenue							
Fee Revenue:	3,723,064	3,719,855	3,753,345	0	3,753,345	3,787,125	3,787,125
Summer Revenue	396,435	237,861	400,026	-	400,026	403,626	403,626
Non-Fee Revenue (list):		0					
Charter Revenue	164,285	39,333	123,899		123,899	156,462	159,591
Emory Shuttle Fall/Spring - Institute Allocation	130,789	128,550	133,405		133,405	140,075	142,876
Emory Shuttle Fall/Spring - Emory Allocation	65,394	65,394	66,702		66,702	70,037	71,438
Emory Shuttle/Summer - Institute Allocation	73,844	61,732	78,693		78,693	82,628	84,281
Transit Advertising & Misc.	51,818	7,170	21,710		21,710	22,144	22,587
Interest Income	69,178	64,591	44,206	0	44,206	38,995	38,916
Institute Allocation (Stinger/Trolley)	977,286	952,854	952,854		952,854	952,854	952,854
Total Revenue:	5,652,093	5,277,340	5,574,840	0	5,574,840	5,653,947	5,663,295
Transportation Expenditures							
Personal Serv (Incl Fringes)	1,145,792	909,775	1,102,190		1,102,190	1,123,753	1,145,748
Self-Op Personal Serv (Incl Fringes)						2,270,938	2,316,356
Direct Operating Expenses	144,906	122,406	116,475		116,475	119,729	123,077
Contracted Services:	4,166,023	3,760,161	4,287,710		4,287,710	1,011,488	1,048,472
Equip <\$5K & Renov <\$100K:	21,088	21,088	23,938		23,938	14,356	14,787
Institute Overhead	144,933	144,933	152,582		152,582	160,211	168,222
Indirect Operating Expenses:	89,195	147,416	152,025		152,025	158,304	164,858
Total Expenditures	5,711,938	5,105,779	5,834,920		5,834,920	4,858,780	4,981,520
Cash Flow	(59,845)	171,561	(260,080)	0	(260,080)	795,167	681,775
Depreciation Expense	74,560	69,727	69,727		69,727	980,084	980,084
Net Income After Depr	(134,405)	101,834	(329,807)		(329,807)	(184,917)	(298,308)

New Fleet Costs & Depreciation

	COST	USEFUL LIFE
Diesel (high-floor)	\$185,000	7 YEARS
Hybrid (low-floor)	\$650,000	12 YEARS
Battery Electric (low-floor)	\$800,000	12 YEARS

Costs & Depr. for Original Bus Purchase			
Vehicle Type	# of Vehicles	Total Costs	Depreciation
16 Diesel	16	\$2,960,000	\$422,857
9 Hybrid	9	\$5,850,000	\$487,500
Totals:		\$8,810,000	\$910,357

Projected Vehicle and Depreciation Costs

Importance of Funding Depreciation

DEPRECIATION RESERVE ALLOWS THE DEPARTMENT TO REPLACE VEHICLES AT THE END OF ITS USEFUL LIFE OR WHEN IT BECOMES OBSOLETE.

Stakeholder Feedback

6 CORE GOALS FOR NEW SERVICE



SERVICE RELIABILITY



SERVICE CAPACITY



COST



TECHNOLOGY



SUSTAINABILITY &
AIR QUALITY



ACCESSIBILITY

TRANSIT RFP 2019

6 CORE GOALS FOR NEW SERVICE



SERVICE RELIABILITY



SERVICE CAPACITY



COST



TECHNOLOGY



SUSTAINABILITY &
AIR QUALITY



ACCESSIBILITY

Self-Op:

MORE SUSTAINABLE FLEET

Self-operation is the most financially prudent way to transition the bus fleet to more sustainable vehicles.

BUS PURCHASE ON STATE CONTRACT

The process and cost to purchase bus fleet is straight forward and time efficient. An RFP for bus purchase not required.

PROVIDES LADDERS OF OPPORTUNITY

Bus operators and supervisors will have equal access to Georgia Tech benefits, growth, and promotion opportunities within GT.

MORE OPERATIONAL CONTROL

Self-operation enables Transportation to have more control over the day-to-day operation to improve the passenger experience.

CHEAPER IN THE LONG RUN

While transitioning to self-op is expensive due to the fleet upstart costs, in the long run self-operation has the potential to increase the level of service at a lower cost per service hour.



UNIQUELY BRANDED AS HYBRID-ELECTRIC

Gold Route

Georgia Tech's premiere bus route connects the heart of campus with Technology Square and MARTA.

800,000+

PASSENGERS ANNUALLY

7 HEV Buses

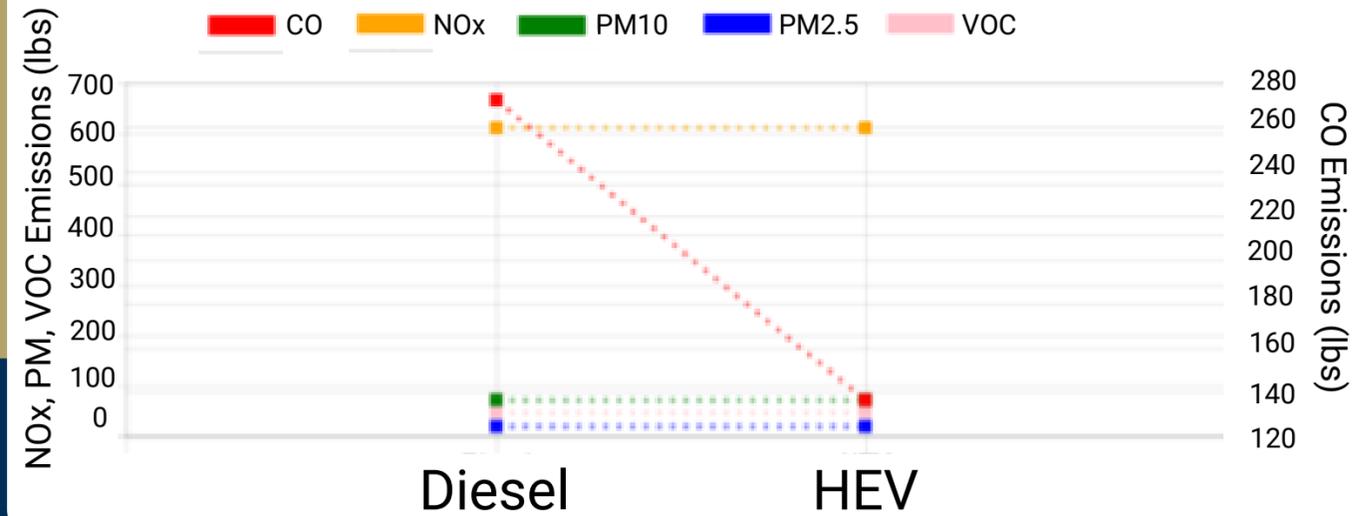
INCREASING FREQUENCY BY 2 MINUTES

Fleet Sustainability

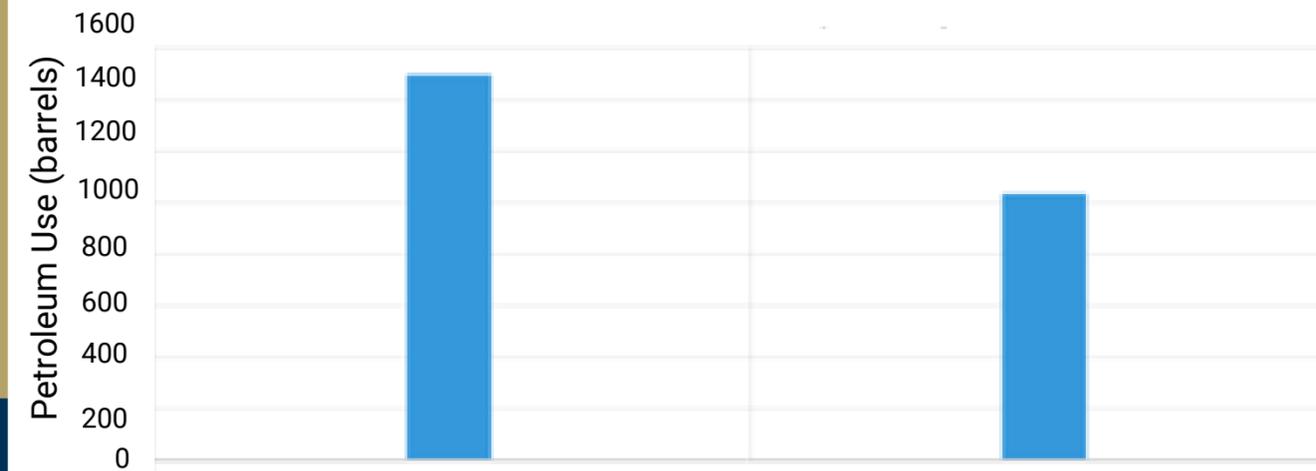
Argonne National Laboratory – AFLEET Tool



ANNUAL GHG EMISSIONS (SHORT TONS)



ANNUAL AIR POLLUTANTS (POUNDS)



ANNUAL PETROLEUM USE (BARRELS)

STEPS TO ELECTRIFICATION



SECURE NEW EV
BUS & FLEET
YARD



UPGRADE SITE



INSTALL
CHARGING
EQUIPMENT



ACQUIRE BUSES

FY2023 SERVICE

6 CORE GOALS FOR NEW SERVICE



INCREASED
FREQUENCY ON
GOLD ROUTE



MORE CAPACITY ON
GOLD ROUTE



SELF-OPERATION
MODEL



NEW REAL-TIME APP
AND AUTO PASSENGER
COUNTING



30% HYBRID-
ELECTRIC BUS FLEET



LOW FLOOR BUS
ENTRY FOR HALF OF
RIDERSHIP

Sustainability Transition Plan

PATH TO FULL FLEET SUSTAINABILITY

	2020	2022	2024	2026	28/29	2030	2032	2034	2036	2038	39/40	2042	2044
1	Vendor Diesel Bus Fleet (Groome Transportation)	Bus 1 - Hybrid (12Y)						Bus 1 - Hybrid (12Y)					
2		Bus 2 - Hybrid (12Y)						Bus 2 - Hybrid (12Y)					
3		Bus 3 - Hybrid (12Y)						Bus 3 - Hybrid (12Y)					
4		Bus 4 - Hybrid (12Y)						Bus 4 - Hybrid (12Y)					
5		Bus 5 - Hybrid (12Y)						Bus 5 - Hybrid (12Y)					
6		Bus 6 - Hybrid (12Y)						Bus 6 - Hybrid (12Y)					
7		Bus 7 - Hybrid (12Y)						Bus 7 - Hybrid (12Y)					
8		Bus 8 - Hybrid (12Y)						Bus 8 - Hybrid (12Y)					
9		Bus 9 - Hybrid (12Y)						Bus 9 - Hybrid (12Y)					
10		Bus 10 - Diesel (7Y)				Bus 10 - Electric (12Y)							
11		Bus 11 - Diesel (7Y)				Bus 11 - Electric (12Y)							
12		Bus 12 - Diesel (7Y)				Bus 12 - Hybrid (12Y)							
13		Bus 13 - Diesel (7Y)				Bus 13 - Hybrid (12Y)							
14		Bus 14 - Diesel (7Y)				Bus 14 - Hybrid (12Y)							
15		Bus 15 - Diesel (7Y)				Bus 15 - Hybrid (12Y)							
16		Bus 16 - Diesel (7Y)				Bus 16 - Hybrid (12Y)							
17		Bus 17 - Diesel (7Y)				Bus 17 - Hybrid (12Y)							
18		Bus 18 - Diesel (7Y)				Bus 18 - Hybrid (12Y)							
19		Bus 19 - Diesel (7Y)				Bus 19 - Hybrid (12Y)							
20		Bus 20 - Diesel (7Y)				Bus 20 - Hybrid (12Y)							
21		Bus 21 - Diesel (7Y)				Bus 21 - Hybrid (12Y)							
22		Bus 22 - Diesel (7Y)				Bus 22 - Hybrid (12Y)							
23		Bus 23 - Diesel (7Y)				Bus 23 - Hybrid (12Y)							
24		Bus 24 - Diesel (7Y)				Bus 24 - Hybrid (12Y)							
25		Bus 25 - Diesel (7Y)				Bus 25 - Hybrid (12Y)							

Needs & Next Steps

- 1 Vendor Contract One Year Extension
- 2 Lowery Bus Yard Completion
- 3 Bus Maintenance RFP
- 4 HR Support – 10 month staff classification needed for bus operators

57,397 TRANSIT HOURS

CURRENT

62,000 TRANSIT HOURS

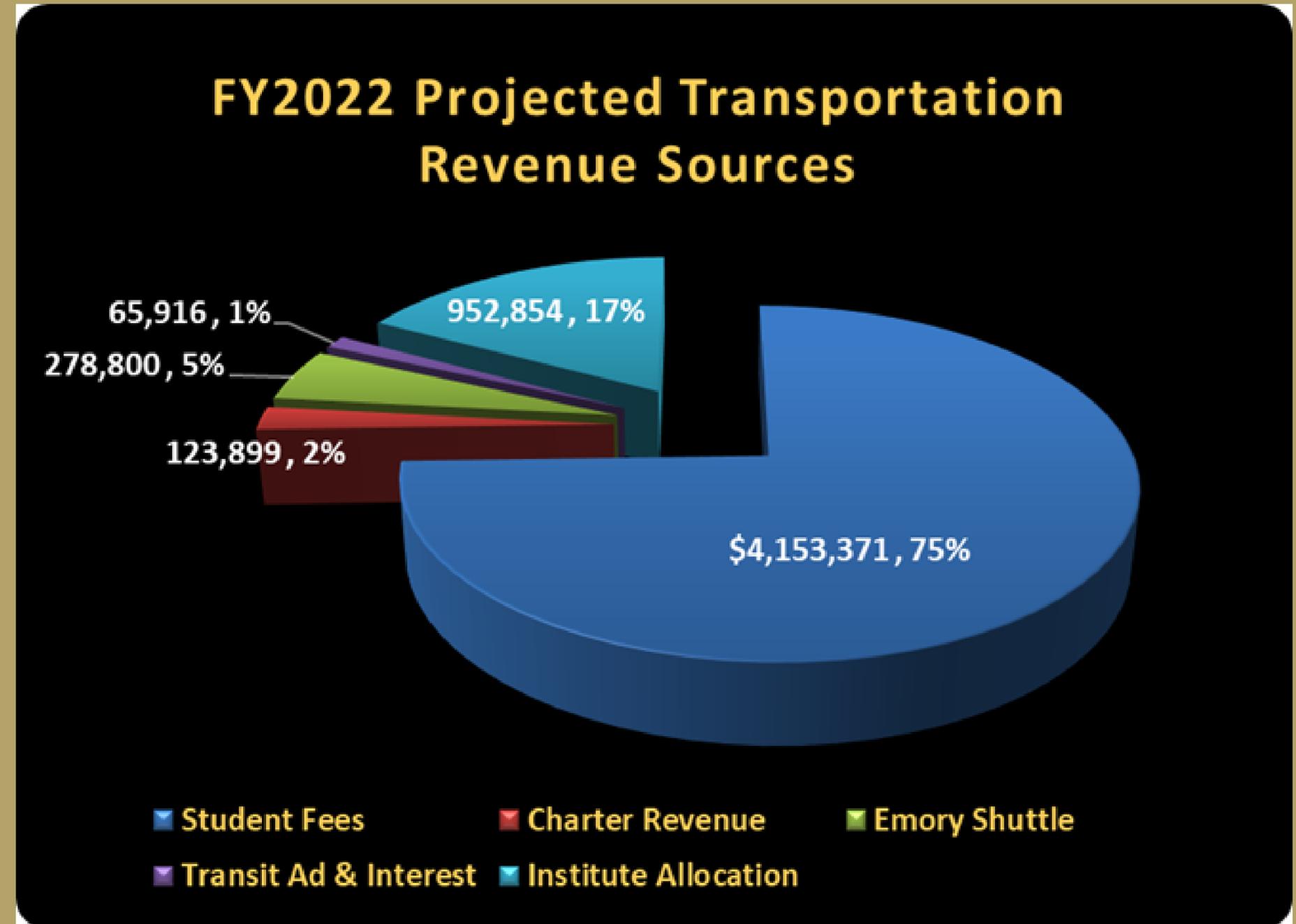
PROPOSED IN NEW SERVICE



**\$10 FEE DECREASE
CONSIDERATION**

TRANSPORTATION FUNDING OVERVIEW

- Transportation Services is a self-supported auxiliary unit primarily funded by student fees.
- Sources of Transportation revenue include:
 - Student Fees
 - (Currently: \$85 - Fall/Spring and \$57 - Summer)
 - Institute Allocation (Supporting faculty/staff transit ridership)
 - Charter Revenue
 - Emory Shuttle (Supported by the Institute and Emory)
 - Transit advertising
 - Interest revenue



FY2022 Budget w/ \$10 Fee Decrease

Fall/Spring Fee: \$75

	FY2021 Current Budget	FY2021 1st Qtr Projections	FY 2022 Projected Budget w/o Fee Incr	Revenue Generated by Rate Increase	FY 2022 Proposed Budget w/ Fee Decr
Revenue					
Fee Revenue:	3,723,064	3,719,855	3,753,345	(441,570)	3,311,775
Summer Revenue	396,435	237,861	400,026	-	400,026
Non-Fee Revenue (list):		0			
Charter Revenue	164,285	39,333	123,899		123,899
Emory Shuttle Fall/Spring - Institute Allocation	130,789	128,550	133,405		133,405
Emory Shuttle Fall/Spring - Emory Allocation	65,394	65,394	66,702		66,702
Emory Shuttle/Summer - Institute Allocation	73,844	61,732	78,693		78,693
Transit Advertising & Misc.	51,818	7,170	21,710		21,710
Interest Income	69,178	64,591	44,206	(2,649)	41,557
Institute Allocation (Stinger/Trolley)	977,286	952,854	952,854		952,854
Total Revenue:	5,652,093	5,277,340	5,574,840	(444,219)	5,130,621
Transportation Expenditures					
Personal Serv (Incl Fringes)	1,145,792	909,775	1,102,190		1,102,190
Direct Operating Expenses:	144,906	122,406	116,475		116,475
Contracted Services:	4,166,023	3,760,161	4,287,710		4,287,710
Equip <\$5K & Renov <\$100K:	21,088	21,088	23,938		23,938
Institute Overhead	144,933	144,933	152,582		152,582
Indirect Operating Expenses:	89,195	147,416	152,025		152,025
Total Expenditures	5,711,938	5,105,779	5,834,920		5,834,920
Cash Flow	(59,845)	171,561	(260,080)	(444,219)	(704,299)
Depreciation Expense	74,560	69,727	69,727		69,727
Net Income After Depr	(134,405)	101,834	(329,807)		(774,026)



**\$5 FEE DECREASE
CONSIDERATION**

FY2022 Budget w/ \$5 Fee Decrease

Fall/Spring Fee: \$80

	FY2021 Current Budget	FY2021 1st Qtr Projections	FY 2022 Projected Budget w/o Fee Incr	Revenue Generated by Rate Increase	FY 2022 Proposed Budget w/ Fee Decr
Revenue					
Fee Revenue:	3,723,064	3,719,855	3,753,345	(220,785)	3,532,560
Summer Revenue	396,435	237,861	400,026	-	400,026
Non-Fee Revenue (list):		0			
Charter Revenue	164,285	39,333	123,899		123,899
Emory Shuttle Fall/Spring - Institute Allocation	130,789	128,550	133,405		133,405
Emory Shuttle Fall/Spring - Emory Allocation	65,394	65,394	66,702		66,702
Emory Shuttle/Summer - Institute Allocation	73,844	61,732	78,693		78,693
Transit Advertising & Misc.	51,818	7,170	21,710		21,710
Interest Income	69,178	64,591	44,206	(1,325)	42,881
Institute Allocation (Stinger/Trolley)	977,286	952,854	952,854		952,854
Total Revenue:	5,652,093	5,277,340	5,574,840	(222,110)	5,352,731
Transportation Expenditures					
Personal Serv (Incl Fringes)	1,145,792	909,775	1,102,190		1,102,190
Direct Operating Expenses:	144,906	122,406	116,475		116,475
Contracted Services:	4,166,023	3,760,161	4,287,710		4,287,710
Equip <\$5K & Renov <\$100K:	21,088	21,088	23,938		23,938
Institute Overhead	144,933	144,933	152,582		152,582
Indirect Operating Expenses:	89,195	147,416	152,025		152,025
Total Expenditures	5,711,938	5,105,779	5,834,920		5,834,920
Cash Flow	(59,845)	171,561	(260,080)	(222,110)	(482,190)
Depreciation Expense	74,560	69,727	69,727		69,727
Net Income After Depr	(134,405)	101,834	(329,807)		(551,916)

Impact of Fee Reduction

SERVICE IMPACT

- Reserve funding needed if Transportation maintains service levels
 - Use of reserve funds - not a sustainable model
 - Transportation Reserves ~\$3M
- Reduction in overall transit service hours may be necessary to balance budget

IMPACT TO NEW TRANSIT MODEL

- Remodel timeline of fully sustainable fleet
 - Estimated cost of new fleet - \$8.8M
 - Estimated depreciation for new fleet - \$910K (must be funded to sustain fleet and purchase new fleet)
- Reduce number of new vehicles purchased
 - New fleet projected to include two additional vehicles on the Gold Route to improve service; may need to eliminate additional vehicles
 - And/or, reduce number of hybrid buses purchased to reduce upfront and annual depreciation costs

57,397 TRANSIT HOURS

PRE-COVID HOURS

55,000 TRANSIT HOURS

\$10 FEE DECREASE

62,000 TRANSIT HOURS

PROPOSED IN NEW SERVICE

58,500 TRANSIT HOURS

\$5 FEE DECREASE

Fee Decrease Scenarios

	SAVINGS	FEE CHANGE	TOTAL HRS
Self-Op Proposal	NEUTRAL	NO CHANGE	+4,600 HRS
Eliminate Sat. & Sun. Gold Route	\$50,000	-\$1	-800 HRS
Reduce Gold Route - 1 Bus	\$200,000	-\$4	-2,650 HRS
Elimination of Tech Square Route	\$250,000	-\$5	-3,750 HRS

