CARTA BOARD MEETING

September 20, 2023
1:00 PM

Barrett Lawrimore Conference Room
5790 Casper Padgett Way
North Charleston, SC 29406

AGENDA

1. Call to Order
2. Consideration of Board Minutes –August 16, 2023 Meeting
3. Executive Session – Legal Advice
4. Financial Status Report – Robin Mitchum
5. FY24 Budget – Request for Approval
6. FY25 – FY26 Financial Audit Services RFP – Request for Approval
7. 2023 Public Transportation Agency Safety Plan (PTASP) – Request for Approval
8. Project Updates – Ron Mitchum/Staff
9. Ridership Report – Megan Ross
10. Executive Director's Report – Ron Mitchum
11. Other Business, If Any
12. Public Comments, If Any
13. Board Comments, If Any

The next CARTA Board Meeting will be held on October 18, 2023

CHARLESTON AREA REGIONAL TRANSPORTATION AUTHORITY (CARTA)
BOARD OF DIRECTORS MEETING
August 16, 2023
Meeting Notes

A Charleston Area Regional Transportation Authority (CARTA) Board of Directors meeting was held at the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) in the Barrett Lawrimore Conference Room located at 5790 Casper Padgett Way in North Charleston, SC at 1:00 p.m. on Wednesday, August 16, 2023.

MEMBERSHIP: MaryBeth Berry; Joe Boykin; Ron Brinson; Mike Brown; Dwayne Green; Will Haynie; John Iacofano; John Labriola; James Lewis; Pat O'Neil; Christie Rainwater; Herb Sass; Michael Seekings; Keith Summey; Ed Sutton; John Tecklenburg; Jimmy Ward; Robert Wehrman

MEMBERS PRESENT: MaryBeth Berry; Joe Boykin; Ron Brinson; Will Haynie; John Iacofano; James Lewis; Pat O'Neil; Michael Seekings; Ed Sutton; Jimmy Ward

PROXIES: Craig Harris for John Labriola; Jerry Lahm for Herb Sass; Megan Clark for Keith Summey; Robert Somerville for John Tecklenburg

OTHERS PRESENT: Rachel Angelos (BGRM); Daniel Monroe (BGRM); Scott Donahue (SCDOT); Stephanie Maher (National Express Transit); Jeff Carty (National Express Transit); Sean Huonker (National Express Transit); Sharon Broderick (National Express Transit/Local Union #610); Leisa Barleston (National Express Transit/Local Union #610); Sharon Mitchell (National Express Transit/Driver); Keisha Jamison (National Express Transit/Driver); Pamela Thomas (National Express Transit/Driver); Antwan Poole (National Express Transit/Driver); Elissa Smith (HDR); Abraham Champagne (WSP); William Hamilton (Best Friends of Lowcountry Transit)

STAFF PRESENT: Ron Mitchum; Andrea Kozloski; Robin Mitchum; Megan Ross; Kim Coleman

1. **Call to Order**
   Chairman Seekings called the CARTA Board of Directors Meeting to order at 1:05 p.m. followed by a moment of silence and a quorum determination. He announced that today is Board Member MaryBeth Berry's birthday and thanked her for her service. Chairman Seekings announced the slight revision made to the agenda for today's meeting. He requested that a motion be made for approval of the amended agenda which places Executive Session earlier in the meeting.

   Mr. Boykin made a motion to approve the August 16, 2023 agenda as amended.
   Mr. Sutton seconded the motion. The motion was unanimously approved.

2. **Consideration of Board Minutes: June 14, 2023 Meeting**

   Mr. Boykin made a motion to approve the June 14, 2023 Meeting Minutes as presented.
   Mr. Iacofano seconded the motion. The motion was unanimously approved.

3. **Executive Session – Contractual Matters**

   Mayor O'Neil made a motion that the Board of Directors convene into Executive Session.
   Mayor Haynie seconded the motion. The motion was unanimously approved.
   Non-Board Members, Guests and Non-Essential Staff Members were excused.
   Mr. Lahm made a motion to reconvene the Board of Directors meeting.
   Mr. Brinson seconded the motion. The motion was unanimously approved.
   Chairman Seekings reconvened the Board Meeting noting that no action was taken related to contractual matters discussed during Executive Session.

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4. Financial Status Report – Robin Mitchum

Robin Mitchum, Deputy Director of Finance and Administration, presented the financial status report for the period ending June 30, 2023. She noted that, overall, the agency remains in good shape and ended the month with an excess of revenues of $2,331,251. Ms. Mitchum reviewed the following activities for FY23 thus far:

Revenues:

- Farebox is the fares collected on the revenue vehicles.
- Passes & Mobile Ticketing are bus pass fares sold to customers.
- Local Contributions are funds received for shelter and bench construction.
- The Federal revenue includes operating for the year-to-date. Federal revenue is recorded as eligible expenditures are incurred.
- Insurance proceeds are a result of accidents.
- Sale of Assets are the proceeds from the sale of a 2010 New Flyer and ten 1996 New Flyers.

Expenditures:

- Staff Salaries & Benefits include the cost of retiree insurance.
- Supplies include office and facility maintenance supplies.
- Printing includes costs of printing route brochures and labels. The overage is reprinting of map brochures and passes for the rebrand.
- Automotive is the cost to service the 2018 Ford F-150.
- Dues/Membership is CARTA's membership with Transportation Association of South Carolina (TASC) and the Charleston Metro Chamber of Commerce.
- Office Equipment Rental includes the monthly battery lease for the electric buses and the postage meter.
- Office Equipment Maintenance (OEM) includes the Genfare software support, GMV Sycromatics, the Swiftly Transit Time and Insights, Cradlepoint NetCloud Essentials for mobile routers and Zscaler internet security, in addition to IT services.
- Rent includes the Ashley Phosphate Park & Ride lot, Dorchester Village Shopping Center Park & Ride lot, Leeds Avenue lot lease from Dominion and document storage.
- Communications is the cost of phone, internet and radio services at the facilities and on the buses.
- Utilities include electric and water at the SuperStop, Melnick Park & Ride, the Radio Shop at Leeds Avenue and the charging stations at Leeds Avenue.
- Advertising is promotional items related to the rebrand.
- Auditing is the cost of the annual audit.
- Custodial Services is the cost of janitorial services at the Melnick Park & Ride location.
- Pilot Ride Program is customer transportation cost for same-day service through independent rideshare.
- Electric Bus Master Plan is to transition CARTA's diesel bus fleet to all-electric buses.
- Other Professional Services include the Genfare report training, appraisal services, bus wash inspection services and the utility search for the Leeds Avenue infrastructure project service.
- Shared Contract Services (IGA & Management) is the extensive services the BCDCOG provides to CARTA.
- Fixed-Route Service is the cost of fixed and commuter service provided by Transdev.
- Money Transport is the cost of the armored guard service to transport cash deposits to the bank.
- Security Services is contracted security service provided at the SuperStop by the City of North Charleston Police Department.
- Rebranding is services provided to comprehensively review and rebrand agency logos and images.
- Vehicle Maintenance is the cost to maintain the fleet.
- Facility Repair & Maintenance is the cost to maintain facilities.
- Operating Fees & Licenses include credit card transaction fees, storm water fees, solid waste user fees and vehicle title and registration fees.
- Insurance includes the cost of liability insurance provided by the Insurance Reserve Fund. The policy renews January 1 and this is the majority of the expenditures for FY23.

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- Paratransit is the cost of paratransit transportation.
- Interest is the interest accrued on the Melnick Park & Ride Loan.
- Non-Capitalized Assets include the purchase of shelter trash cans and office computer equipment.

Capital Expenditures:

- Rolling Stock is the purchase of a New Flyer Electric Bus.
- Bus Facilities/Charging Stations are the purchase of two charging depots.
- Bus Shelter Construction/Bench Install is the installation of shelters and benches.
- Security/Cameras & Equipment is the purchase of cameras at the Melnick Park & Ride lot, lighting and access control systems at Leeds Avenue, bus stop solar lighting and AVL equipment.
- Capital (IT, Facility Repairs/Maint) is the purchase of a submersible pump at the Leeds Avenue Facility and Genfare equipment.

Ms. Mitchum then reviewed the activity of the Pilot Ride Program. It was noted that the agency is at 67% of expended funds for the program. In addition, Ron Mitchum, Executive Director, stated that all member governments approved the proposed budget at their respective Council meetings. Mr. Mitchum and Ms. Mitchum addressed questions and comments. The Board of Directors received the Financial Status Report as information.

5. **LCRT Operations and Maintenance Facility Sewer Easement – Request for Approval**

Ron Mitchum, Executive Director, discussed the LCRT Operations and Maintenance Facility Sewer Easement. He delivered a presentation with slides depicting the sewer easement area of the property. Mr. Mitchum noted that staff is requesting approval to purchase a 10,250 sq/ft sewer easement at 186 Acres Drive in Ladson for $200,000. If approved, the proposed easement will be used to run utilities to the future Lowcountry Rapid Transit Operations and Maintenance Facility located at 175 Acres Drive. Mr. Mitchum addressed questions and comments.

Mayor Haynie made a motion to approve the LCRT Operations and Maintenance Facility Sewer Easement as presented with the stipulation that all options are explored and reported to the Board of Directors. Mr. Brinson seconded the motion. The motion was approved.

6. **Leeds Avenue Maintenance Facility Repairs – Presentation**

Mr. Mitchum delivered a presentation regarding Leeds Avenue Maintenance Facility Repairs. He presented slides depicting areas that are in need of repair and discussed the challenges of several areas of the lot. Mr. Mitchum noted that the cost of the repairs is not in the capital plan and may be in the range of $500,000 for the necessary repairs to be made. He stated that, if there is no objection from the Board of Directors, staff will move forward with the bidding process to present to the Board for approval. Mr. Mitchum addressed questions and comments. The Board of Directors received the Leeds Avenue Maintenance Facility Repairs presentation as information and did not object to staff proceeding with Leeds Avenue Maintenance Facility Repairs plans.

7. **Project Updates – Ron Mitchum/Staff**

Mr. Mitchum delivered an update on the following projects, noting that progress is being made on all projects: Service Planning Initiatives; Downtown Route Study; US 52 BRT Study; CARTA OnDemand; Shelter Improvement Program; Shipwatch Square Transit Center; Vanpool Program; Transit Oriented Development Study; LCRT. He discussed the following projects in detail:

- Downtown Route Study- It was noted that staff continues to participate in public engagement regarding the study with the second TAG meeting and first open-house as well as organizing one-on-one meetings. In addition, the survey ended with 1,400 people participating expressing the following concerns: reliability; increased frequency; extended service hours. Bi-weekly meetings continue with Nelson/Nygaard.
- LCRT Project- It was noted that 30% design review is complete and 60% design NTP is pending contract negotiations. Public involvement/NEPA for station location adjustments and Park & Ride are underway. Design for the Maintenance Facility is scheduled to begin in the Fall of 2023.

Mr. Mitchum noted that a detailed report regarding Project Updates was distributed in the Board Meeting Agenda Packet in advance of the meeting. He encouraged Board Members to contact him or the respective project manager regarding any specific concerns or questions. Mr. Mitchum addressed questions and comments. The Board of Directors received the Project Updates Report as information.

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8. Ridership Report – Megan Ross

Megan Ross, Transit Planner, presented the Ridership Reports as of June and July 2023. Ridership Trends for June 2023 are as follows: 180,099 total passenger trips; 11.2 customers per service hour (11.5 in May); 82% on-time across all timepoints. Also in June 2023, she noted that overall ridership comparing May 2023 to June 2023 decreased by 4.9%; overall ridership comparing June 2022 to June 2023 decreased by 5.5%; overall ridership comparing 2022 YTD to 2023 YTD decreased by .93%. Ms. Ross noted that Tel-A-Ride ridership for June 2023 was 4,822 (a decrease of 9.3% when comparing 2022 YTD to 2023 YTD). She noted that the total missed service for the month of June 2023 was 1,096.23. Ms. Ross then discussed July 2023 Ridership Trends noting that passenger trips totaled 174,544 and there were 10.5 customers per service hour. On-time, across all timepoints, was 76%. Ms. Ross stated that overall ridership comparing June 2023 to July 2023 decreased by 3.1%, overall ridership comparing July 2022 to July 2023 increased by 1.0%, and overall ridership comparing 2022 YTD to 2023 YTD decreased by .67%. She noted that Tel-A-Ride ridership for the month of July was 4,723, which was a decrease of 10.2% when comparing 2022 YTD to 2023 YTD. Ms. Ross discussed the missed service comparing the first 8 months of calendar year 2022 to the first 8 months of calendar year 2023. She noted that the total missed service for the month of August (as of August 8, 2023) was 106.55. Ms. Ross noted the OnDemand trips for June and July 2023. For June, there were 926 passenger trips at an average cost per trip of $9.83. For July 2023, there were 840 passenger trips at an average cost per trip of $8.72. The subsidy changes went into effect on June 19, 2023 for paratransit passengers. Ms. Ross addressed questions and comments. The Board of Directors received the Ridership Report as information.

9. Executive Director's Report – Ron Mitchum

Mr. Mitchum updated the Board of Directors on paratransit vans noting five have been received and the remaining ten should be in within the next 90-120 days. He stated that the LCRT design phase continues to move forward and work continues with the Fairgrounds Board on property acquisition for the Park & Ride. The environmental process is underway and staff is working the SCDOT to identify curb cuts/access points so discussions can be finalized with the Fairgrounds Board. Mr. Mitchum discussed the Mt. Pleasant Street parcel noting that the process of procuring an engineering firm to complete the design of the Park & Ride is underway. He stated that the BCDCOG received a competitive discretionary planning grant under the areas of a persistent poverty program to look into developing a rural on-demand transit plan for Summerville and TriCounty Link that will be coordinated with CARTA. Mr. Mitchum announced CARTA Family & Friends Night at the Charleston Riverdogs on August 29th when Chairman Seekings will throw the first pitch. He encouraged everyone to attend. Mr. Mitchum addressed questions and comments. The Board of Directors received the Executive Director's Report as information. Mr. Mitchum then introduced National Express Transit personnel in attendance at today's meeting: Stephanie Maher (Regional Vice President), Jeff Carty (General Manager), Sean Huonker (Director of Customer Success), each addressing the Board of Directors. On behalf of the Board of Directors, Chairman Seekings welcomed them and noted that the Board, Management and Staff are looking forward to the partnership with National Express Transit.

10. Other Business, If Any

National Express Transit Drivers who were present at today's meeting were recognized and thanked for their service.

11. Public Comments, If Any

There were three public comments:

- William Hamilton, Best Friends of Lowcountry Transit: thanked the Board for continuing the Beach Reach Shuttle Service and for the additional promotional efforts; he noted that Route 41 is primarily employees traveling to & from work and tourists; he expressed his concerns regarding homelessness at Mary Street and at the SuperStop; he expressed his concerns regarding missed service and the transit app; he thanked the Board for their service and welcomed National Express Transit personnel.
- Sharon Broderick, National Express Transit Local Union #610 President: expressed her concerns regarding employee morale, benefits, pay and recruitment noting that there have been many challenges employees have faced throughout the transition.
- Pamela Thomas, National Express Transit Driver: expressed her concerns regarding drivers' issues, primarily the drivers on Route 10 needing bathroom breaks and lack of COVID pay during the pandemic.

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12. Board Comments, If Any

- Ms. Berry commended the rebrand project and the Park & Ride signage on James Island.
- Mr. Iacofano commented on the transition with National Express Transit and is looking forward to seeing improvements.
- Mr. Lewis stated he enjoyed hearing from the drivers and encouraged them to bring any concerns to the Board's attention.

13. Adjourn

Chairman Seekings noted election season and recognized Mr. Ward and Mr. Brinson. He wished Mr. Ward luck in the upcoming election and commended Mr. Brinson and thanked him for his dedicated service to the Board of Directors and the community. There being no further business before the Board, Chairman Seekings adjourned the meeting at 2:20 p.m.

Respectfully submitted,
Kim Coleman

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MEMORANDUM

TO: Board of Directors

FROM: Robin W. Mitchum, Deputy Director of Finance & Administration

SUBJECT: July 31, 2023 Financial Report Overview

DATE: September 11, 2023

Please find attached the July 31, 2023 Financial Report. Below is a brief overview of the activities for FY23.

Revenues

- Farebox is the fares collected on the revenue vehicles.
- Passes & Mobile Ticketing is bus pass fares sold to customers.
- Local contributions are funds received for shelter and bench construction.
- The Federal revenue includes operating for the year to date. Federal revenue is recorded as eligible expenditures are incurred.
- State Mass Transit Funds is operating funds available as match to federal 5307 operating funds.
- Insurance proceeds are a result of accidents.
- Sale of Assets is the proceeds from the sale a 2010 New Flyer and ten 1996 New Flyers.

Expenditures

- Staff Salaries & Benefits includes the cost of retiree insurance.
- Supplies includes office, facility maintenance, and rebranding supplies.
- Printing includes costs of printing route brochures and labels. The overage is reprinting of map brochures and passes for the rebrand.
- Automotive is the cost to service the 2018 Ford F150.
- Dues/Memberships is CARTA's membership with Transportation Association of South Carolina (TASC) and the Charleston Metro Chamber of Commerce.
- Office Equipment Rental includes the monthly battery lease for the electric buses and the postage meter.
- Office Equipment Maintenance (OEM) includes Genfare software support, GMV Syncromatics, the Swiftly Transit Time and Insights, Cradlepoint NetCloud Essentials for mobile routers and Zscaler internet security, in addition to IT services.
- Rent includes the Ashley Phosphate Park & Ride Lot, Dorchester Village Shopping Center Park & Ride Lot, Leeds Avenue lot lease from Dominion, and document storage.
- Communications is the cost of phone, internet, and radio services at the facilities and on the buses.

- Utilities includes electric and water at the Superstop, Melnick Park and Ride, the Radio Shop at Leeds Avenue, and the charging stations at Leeds Avenue.
- Advertising is promotional items related to the rebrand.
- Auditing is the cost of the annual audit.
- Custodial services are the cost of janitorial services at the Melnick Park and Ride.
- Pilot Ride Program is customer transportation cost for same day service through independent rideshare.
- Electric Bus Master Plan is to transition CARTA's diesel bus fleet to all-electric buses.
- Other Professional Services includes Genfare report training, appraisal services, bus wash inspection services, and the utility search for Leeds Avenue infrastructure project service.
- Shared Contract Services (IGA & Management) is the extensive services BCDCOG provides to CARTA.
- Fixed Route service is the cost of fixed and commuter service provided by Transdev and National Express Shuttle and Transit.
- Money Transport is the cost of the armored guard service to transport cash deposits to the bank.
- Security Services are contracted security service provided at the Super Stop by the City of North Charleston Police Dept.
- Rebranding is services provided to comprehensively review and rebrand agency logos and images.
- Vehicle Maintenance is the cost to maintain the fleet.
- Facility Repair & Maintenance is the cost to maintain facilities.
- Operating Fees & Licenses include credit card transaction fees, storm water fees, solid waste user fees and vehicle title & registration fees.
- Insurance includes the cost of liability insurance provided by the Insurance Reserve Fund. The policy renews January 1 and this is the majority of the expenditures for FY23.
- Paratransit is the cost of paratransit transportation.
- Interest is the interest accrued on the Melnick Park and Ride Loan.
- Non-Capitalized assets include the purchase of shelter trash cans and office computer equipment.

<u>Capital Expenditures</u>

- Rolling Stock is the purchase of a New Flyer Electric Bus and five (5) 2023 Voyager Vans.
- Bus Facilities/Charging Stations is the purchase of two charging depots.
- Bus Shelter Construction /Bench Install is the installation of shelters and benches.
- Security/Cameras & Equipment is the purchase of cameras at Melnick park and ride, lighting and access control systems at Leeds Avenue, bus stop solar lighting, and AVL equipment.
- Capital (IT, Facility Repairs/Maint) is the purchase of a submersible pump at the Leeds Avenue facility and Genfare equipment.

Overall, the agency ended the month with excess of revenues of $2,956,808.

If you have any questions, please contact me at 843-529-2126 or robinm@bcdcog.com.

Amount owed to Transdev as of 7/31/2023 was $0.00.
Amount owed to National Express Shuttle & Transit as of 7/31/23 was $1,342,032.75.

CARTA
Statement of Revenues & Expenditures
For the Month Ending July 31, 2023

Time elapsed: **83%**

	FY23 Original Budget	FY23 Revised Budget	Actual	% of Budget
Operating Revenues				
Farebox	1,264,265	1,325,675	1,115,763	84%
Passes & Mobile Ticketing	451,134	516,130	441,648	86%
COC Shuttle	417,104	417,104	335,511	80%
MUSC	753,157	753,157	623,695	83%
City of Charleston - DASH	640,492	665,000	560,430	84%
Local Contributions	-	64,715	160,429	248%
Federal	7,846,622	7,762,136	6,519,399	84%
State Mass Transit Funds	563,757	464,907	312,779	67%
Sales Tax - Charleston County	12,632,345	12,354,301	10,538,742	85%
Advertising	700,000	800,000	740,956	93%
Interest	-	-	110	N/A
Insurance Proceeds	100,000	100,000	125,572	126%
Sale of Assets	-	7,157	19,013	266%
Miscellaneous	-	378	378	100%
TOTAL OPERATING REVENUES	25,368,876	25,230,660	21,494,425	**85%**
Operating Expenditures				
Staff Salaries & Benefits	8,334	8,848	7,328	83%
Supplies	190,000	300,000	57,514	19%
Printing	25,000	25,000	52,204	209%
Automotive	1,000	1,000	709	71%
Postage	2,085	500	50	10%
Dues/Memberships	2,500	2,500	2,500	100%
Office Equipment Rental	105,687	105,336	96,598	92%
Office Equipment Maintenance	599,953	223,527	163,012	73%
Rent	33,350	33,100	27,626	83%
Communications	166,847	166,847	127,813	77%
Utilities	313,674	313,674	219,579	70%
Advertising	17,500	7,500	15,993	213%
Professional Services				
Auditing	24,800	25,000	25,000	100%
Legal	7,500	1,000	-	0%
Custodial	25,542	25,542	19,350	76%
Pilot Ride Program	25,000	112,850	78,231	69%
Electric Bus Master Plan	-	58,353	37,541	64%
Other	110,000	45,000	12,776	28%
Contract Services				
Shared Services - IGA	3,717,619	3,627,902	3,009,459	83%
Fixed Route	14,266,085	14,066,085	9,954,444	71%
Money Transport	7,500	7,500	7,181	96%
Security Services	116,066	105,560	83,660	79%
Rebranding	-	32,903	32,903	100%
Vehicle Maintenance	170,000	170,000	252,774	149%
Facility Repair & Maintenance	33,805	52,285	36,824	70%

CARTA

Statement of Revenues & Expenditures

For the Month Ending July 31, 2023

	FY23 Original Budget	FY23 Revised Budget	Actual	Time elapsed: 83% % of Budget
Operating Fees & Licenses	37,000	45,300	38,153	84%
Insurance	1,198,340	1,052,064	1,044,073	99%
Fuel	1,217,827	1,785,648	1,223,104	68%
Paratransit	2,723,873	2,723,873	1,858,739	68%
Miscellaneous	5,500	3,500	1,526	44%
Interest	50,550	52,463	43,650	83%
Non-Capitalized Assets	165,939	50,000	7,303	15%
TOTAL OPERATING EXPENDITURES	25,368,876	25,230,660	18,537,617	**73%**
Excess (Deficit) of Revenues Over (Under) Expenditures			2,956,808	
Capital Revenues				
Rolling Stock	383,482	1,658,772	1,085,851	
Bus Facilities/Charging Stations	354,570	1,132,402	965,330	
Bus Shelter Construction/Bench Install	-	55,855	-	
Security/ Cameras & Equipment	204,411	242,398	231,238	
Facilities Construction	7,675,353	-	-	
Sales Tax - Charleston County	704,655	982,449	516,841	
TOTAL CAPITAL REVENUES	9,322,471	4,071,876	2,799,260	**69%**
Capital Expenditures				
Rolling Stock	479,353	2,073,465	1,357,315	
Bus Facilities/Charging Stations	380,754	1,422,880	1,072,913	
Bus Shelter Construction/Bench Install	500,000	230,000	87,937	
Security/ Cameras & Equipment	262,011	300,591	273,294	
Facilities Construction	7,675,353	-	-	
Capital (IT, Facility Repairs/Maint)	25,000	44,940	7,801	
TOTAL CAPITAL EXPENDITURES	9,322,471	4,071,876	2,799,260	**69%**

CARTA
BALANCE SHEET
7/31/2023

ASSETS

ASSETS	
GENERAL OPERATING (BB&T)	12,217,138.98
PETTY CASH	180.00
ACCOUNTS RECEIVABLE	4,110,157.56
PREPAID EXPENSES	295,226.50
INVENTORY - FUEL	39,979.24
DEFERRED OUTFLOWS: ER CONTR	905.00
LAND	5,563,204.76
CONSTRUCTION IN PROGRESS	2,215,526.23
VEHICLES	54,213,635.34
EQUIPMENT	3,251,990.32
FAREBOXES	1,170,017.00
SHELTERS	4,387,019.59
BUS SIGNAGE	246,800.32
FACILITIES	9,413,944.34
PARK & RIDE FACILITY	155,251.20
ACCUMULATED DEPRECIATION	(35,531,944.89)
TOTAL ASSETS	61,749,031.49

LIABILITIES & EQUITY

LIABILITIES	
ACCOUNTS PAYABLE	1,804,916.19
NOTE PAYABLE - BB&T	1,444,179.61
ACCRUED INTEREST	23,265.13
OPEB LIABILITY	134,964.00
DEFERRED INFLOWS: OPEB ASSUMP	9,235.00
TOTAL LIABILITIES	3,416,559.93
EQUITY	
CURRENT YEAR FUND BALANCE	2,956,807.81
INVEST IN CAPITAL ASSETS	41,251,065.61
FUND BALANCE	14,124,598.14
TOTAL EQUITY	58,332,471.56
TOTAL LIABILITIES & FUND EQUITY	61,749,031.49

CARTA
Pilot Ride Program
7/31/2023

Activity	BUDGET	FY 21 Total Costs	FY 22 Total Costs	FY 23 Total Costs	Total	Balance	% Complete
Pilot Ride Program (80/20)	140,000	1,421	20,778	78,231	100,430	39,570	72%
Total	140,000	1,421	20,778	78,231	100,430	39,570	72%
						-	
Federal *FTA 5310*	112,000	1,137	16,622	59,356	77,115	34,885	69%
Local	28,000	284	4,156	18,875	23,315	4,685	
Total	140,000	1,421	20,778	78,231	100,430	39,570	72%

MEMORANDUM

TO: Board of Directors

FROM: Robin W. Mitchum, Deputy Director of Finance and Administration

SUBJECT: FY23/24 Proposed Budget

DATE: June 7, 2023

Please find attached the Proposed FY23/24 Budget for your consideration.

Revenues

A detailed explanation of line-item changes are as follows:

- Farebox and Passes & Mobile Ticketing revenues have been increased based on average and estimated receipts.
- Contract Service revenues for City of Charleston-DASH have increased based on the contract agreement.
- Local contributions are funds received for shelter construction. These contributions are recorded as incurred.
- Federal revenue includes estimated 5307 Urban funds, 5310 Enhanced Mobility for Seniors & Individuals with Disabilities, 5307 CARES Act and ARP Act funds. CARTA receives funds as a direct recipient from FTA and Pass-Through funds from the BCDCOG. Capital funds are reflected in the capital revenues budget. The increase in Federal funding is a projection of federal grant awards.
- State Mass Transit Funds (SMTF) are funds received as matching contributions to 5307 operating. We do not anticipate receiving funds for FY24.
- Sales Tax – Charleston County is the operating funds. The matching requirements for capital are reflected the capital revenues budget line item.
- Insurance proceeds is policy proceeds that are the result of accidents. Insurance proceeds are recorded as received.
- Sale of Assets is the proceeds from the sale of vehicles. These funds are recorded as received.

Expenditures

A detailed explanation of line-item changes are as follows:

- Retiree Benefits is increased for the cost of SCPEBA employer portion of Retiree Insurance.
- Supplies includes office and facility maintenance supplies. The decrease is due to anticipated cost of rebranding materials and signage that we budgeted for FY23.

- Postage decreased due to change in procedure for mailing passes. Most of postage needs are expensed through the IGA with BCDCOG.
- Office Equipment Rental decreased due to cancellation of the postage meter rental agreement.
- Office Equipment Maintenance includes IT services (managed server services, email hosting, and other general IT services), Camera system maintenance, and AVL software maintenance. The increase is anticipated expenditures for CAD/ITS/AVL service agreements.
- Rent includes the Ashley Phosphate Park & Ride Lot, Dorchester Village Shopping Center Park & Ride Lot, Leeds Avenue lot lease from Dominion Energy, SC Works Trident lease space, and document storage. The decrease is due to average and anticipated expenditures for SCWorks MOU space.
- Professional services are being increased for demand response pilot program and auditing services. Professional services is being decreased for the completion of the Electric Bus Master plan and the other-misc services.
- Contract Services is increased for Shared IGA services that includes management, administrative, financial, customer service, cash counting, marketing, advertising, maintenance costs, engineering, and professional services. The overall decrease is inclusive of reducing the estimate for supplemental project contracts such as the Route study, APC Recommendations, and Mt. Pleasant Street Feasibility projects.
- Fixed route is increased for anticipated costs under the new contractor.
- Rebranding services has been reduced. We anticipate these costs occurring during FY23.
- Facility Repair & Maintenance increase for bus wash repairs and maintenance.
- Operating Fees increased due to mobile ticketing processing fees.
- Insurance increased based on the projected cost for the fiscal year.
- Fuel decreased based on operation of electric vehicles.
- Paratransit service increased for anticipated operator costs.
- Non-Capitalized assets include security equipment, cameras, lighting, shelter panels/parts, driver safety barriers, COVID-19 PPE, and radio equipment.

Capital Expenditures (Balance Sheet)

- Rolling Stock includes the purchase of 10 vans.
- Bus Facilities/Charging stations is increased due to the timing of expenditures between fiscal years, which is the purchase of on route charging equipment.
- Facilities Construction is estimated cost for Mt. Pleasant Street park and ride construction.
- Security Cameras and Equipment is funds available and anticipated expenditures to purchase security equipment at our facilities and on rolling stock.
- Capital (IT, Facility Repairs/Maint) is for the facility upgrades or repairs.

We will monitor the budget to ensure revenues and expenditure remain aligned and we will make recommended revisions as necessary.

If you have any questions, please contact me at 843-529-2126 or robinm@bcdcog.com.

CARTA
Proposed FY2024 Budget Revision

	Approved Budget FY 2023	Proposed Budget FY 2024	Variance
Revenues			
Farebox	1,325,675	1,345,886	20,211
Passes & Mobile Ticketing	516,130	527,051	10,921
COC Shuttle	417,104	417,104	-
MUSC	753,157	753,157	-
City of Charleston - DASH	665,000	706,143	41,143
Local Contributions	64,715	-	(64,715)
Federal	7,762,136	8,289,057	526,921
State Mass Transit Funds (SMTF)	464,907	-	(464,907)
Sales Tax - Charleston County	12,354,301	12,759,453	405,152
Advertising	800,000	800,000	-
Insurance Proceeds	100,000	-	(100,000)
Sale of Asset	7,157	-	(7,157)
Miscellaneous	378	-	(378)
TOTAL REVENUES	25,230,660	25,597,851	367,191
Expenditures			
Retiree Benefits	8,848	9,288	440
Supplies	300,000	100,000	(200,000)
Printing	25,000	25,000	-
Automotive	1,000	1,000	-
Postage	500	250	(250)
Dues/Memberships	2,500	2,500	-
Office Equipment Rental	105,336	105,012	(324)
Office Equipment Maintenance	223,527	239,241	15,714
Rent	33,100	32,650	(450)
Communications	166,847	166,847	-
Utilities	313,674	313,674	-
Advertising	7,500	7,500	-
Professional Services			
Auditing	25,000	30,000	5,000
Legal	1,000	1,000	-
Custodial	25,542	25,542	-
Pilot Ride Program	112,850	131,575	18,725
Electric Bus Master Plan	58,353	-	(58,353)
Other	45,000	25,000	(20,000)
Contract Services			
Shared Services - IGA	3,627,902	3,188,074	(439,828)
Fixed Route	14,066,085	14,676,071	609,986
Money Transport	7,500	7,500	-
Security Services	105,560	105,560	-

CARTA
Proposed FY2024 Budget Revision

	Approved Budget FY 2023	Proposed Budget FY 2024	Variance
Rebranding	32,903	-	(32,903)
Vehicle Maintenance	170,000	170,000	-
Facility Repair & Maintenance	52,285	52,835	550
Operating Fees & Licenses	45,300	50,000	4,700
Insurance	1,052,064	1,083,626	31,562
Fuel	1,785,648	1,638,187	(147,461)
Paratransit	2,723,873	3,308,576	584,703
Miscellaneous	3,500	3,500	-
Interest	52,463	47,843	(4,620)
Non-Capitalized Assets	50,000	50,000	-
TOTAL EXPENDITURES	25,230,660	25,597,851	367,191
Excess (Deficit) of Revenues Over (Under) Expenditures	-	-	-
Capital Revenues			
Rolling Stock	1,658,772	613,428	(1,045,344)
Bus Facilities/Charging Stations	1,132,402	289,189	(843,213)
Bus Shelter Construction/Bench Install	55,855	18,618	(37,237)
Security Cameras/Equipment	242,398	240,997	(1,401)
Capital (IT, Facility Repairs/Maint)	-	-	-
Facilities Construction	-	5,040,000	5,040,000
Sales Tax - Charleston County	982,449	1,047,297	64,848
TOTAL CAPITAL EXPENDITURES	4,071,876	7,249,529	3,177,653
Capital Expenditures			
Rolling Stock	2,073,465	766,785	(1,306,680)
Bus Facilities/Charging Stations	1,422,880	350,000	(1,072,880)
Bus Shelter Construction/Bench Install	230,000	192,763	(37,237)
Land	-	-	-
Security Cameras/Equipment	300,591	295,041	(5,550)
Facilities Construction	-	5,600,000	5,600,000
Capital (IT, Facility Repairs/Maint)	44,940	44,940	-
TOTAL CAPITAL EXPENDITURES	4,071,876	7,249,529	3,177,653

CARTA

Proposed **Detailed Budgeted Expenditures**
FY 2023/2024

		Approved Budget FY 2023	*Proposed* Budget FY 2024	Increase (Decrease)
RETIREE BENEFITS	Retiree Insurance	8,848	9,288	440
		8,848	9,288	440
SUPPLIES	Admin/Operations	100,000	50,000	(50,000)
	Rebranding	200,000	50,000	(150,000)
	Total	300,000	100,000	(200,000)
PRINTING	Printing	20,000	20,000	-
	Rebranding	5,000	5,000	-
		25,000	25,000	-
AUTOMOTIVE	Parking/Mileage/Service	1,000	1,000	-
	Total	1,000	1,000	-
POSTAGE		500	250	(250)
		500	250	(250)
DUES & MEMBERSHIPS	Metro Chamber	500	500	-
	TASC (SCAMI)	2,000	2,000	-
	Total	2,500	2,500	-
EQUIPMENT RENTAL	Electric Bus Battery Lease	105,012	105,012	-
	Miscellaneous Equipment	324	-	(324)
	Total	105,336	105,012	(324)
OFFICE EQUIPMENT MAINTENANCE	IT / Camera Maint.	55,000	55,000	-
	Money Counting Equipment	2,000	2,000	-
	AVL Cloud Manager	19,762	35,476	15,714
	CAD/ITS/AVL	146,765	146,765	-
		223,527	239,241	15,714
RENT	Land	6,000	6,000	-
	Park & Ride	19,850	20,150	300
	Document Storage	1,250	1,250	-
	SC Works Charleston Center	6,000	5,250	(750)
		33,100	32,650	(450)
COMMUNICATIONS	Telephone/Internet	44,384	44,384	-
	Tablets - Buses	47,463	47,463	-
	Radios	75,000	75,000	-
	Total	166,847	166,847	-

CARTA

Proposed **Detailed Budgeted Expenditures**
FY 2023/2024

		Approved Budget FY 2023	*Proposed* Budget FY 2024	Increase (Decrease)
UTILITIES	Electricity	12,849	12,849	-
	Electricity -Charging Stations	297,000	297,000	-
	Water	3,825	3,825	-
		313,674	313,674	-
ADVERTISING	ALL	-	-	-
	BUS WRAPS	7,500	7,500	-
		7,500	7,500	-
PROFESSIONAL SERVICES	Audit	25,000	30,000	5,000
	Legal	1,000	1,000	-
	Custodial	25,542	25,542	-
	Pilot Ride Program/On Demand	112,850	131,575	18,725
	Electric Bus Master Plan	58,353	-	(58,353)
	Other	45,000	25,000	(20,000)
		267,745	213,117	(54,628)
CONTRACT SERVICES	Management Services	75,000	75,000	-
	Shared Services (IGA)	2,914,142	2,948,184	34,042
	Shelter/Bench Engineering (IGA)	50,000	50,000	-
	APC Recommendations	64,227	-	(64,227)
	Mt. Pleasant St. Feasibility (IGA)	50,913	-	(50,913)
	ITS System (IGA)	97,268	25,000	(72,268)
	Mobile Ticketing (IGA)	13,500	13,500	-
	Route Study (IGA)	362,852	76,390	(286,462)
	Fixed Route	14,066,085	14,676,071	609,986
	Money Transport	7,500	7,500	-
	Super Stop Security Services	105,560	105,560	-
	Rebranding	32,903	-	(32,903)
		17,839,950	17,977,205	137,255
VEHICLE MAINTENANCE		170,000	170,000	-
		170,000	170,000	-
FACILITY REPAIR & MAINTENANCE	Facility Repair Misc	47,335	47,335	-
	Bus Wash Inspection	4,950	5,500	550
		52,285	52,835	550

CARTA

Proposed **Detailed Budgeted Expenditures**
FY 2023/2024

		Approved Budget FY 2023	*Proposed* Budget FY 2024	Increase (Decrease)
OPERATING FEES & LICENSES		45,300	50,000	4,700
		45,300	50,000	4,700
INSURANCE	Administration	16,203	16,689	486
	Operating	1,035,861	1,066,937	31,076
		1,052,064	1,083,626	31,562
FUEL	Fuel	1,785,648	1,638,187	(147,461)
		1,785,648	1,638,187	(147,461)
PARATRANSIT	Transdev	2,723,873	3,308,576	584,703
		2,723,873	3,308,576	584,703
MISCELLANEOUS	Misc	3,500	3,500	-
		3,500	3,500	-
INTEREST	BB&T - Melnick Property	52,463	47,843	(4,620)
		52,463	47,843	(4,620)
NON-CAPITALIZED ASSETS	Non-Capitalized Assets	50,000	50,000	-
		50,000	50,000	-
TOTAL OPERATING		**25,230,660**	**25,597,851**	**367,191**
CAPITAL				
	Rolling Stock/Fleet Repair	2,073,465	766,785	(1,306,680)
	Bus Facilities/Charging Stations	1,422,880	350,000	(1,072,880)
	Bus Shelter Construction/Bench	230,000	192,763	(37,237)
	Facilities Construction	-	5,600,000	5,600,000
	Security/Cameras	300,591	295,041	(5,550)
	Capital (IT, Facility Repairs/Maint)	44,940	44,940	-
TOTAL CAPITAL		**4,071,876**	**7,249,529**	**3,177,653**

Charleston Area Regional Transportation Authority

MEMORANDUM

To:	CARTA Board of Directors
From:	Ronald Mitchum, Executive Director
Subject:	Request for Approval – Financial Audit Services
Date:	September 12, 2023

The selection committee (Jeff Burns, Robin Mitchum, Katie Paschall) reviewed three proposals for the CARTA Financial Audit Services project. Proposals were received from:

- Love Bailey & Associates, LLC
- Mauldin & Jenkins, LLC
- Robert E. Milhous, C.P.A., P.A.

The selection committee is recommending that CARTA award a contract to Robert E. Milhous, C.P.A., P.A. & Associates for Financial Audit Services.

MEMORANDUM

TO: CARTA Board of Directors
FROM: Ronald E. Mitchum, Executive Director
VIA: Jeff Hughes, BCDCOG Safety Manager
DATE: Aug 17, 2023
SUBJECT: Public Transportation Agency Safety Plan Annual Certification (PTASP)

Safety is a core value of CARTA, and managing safety is a core business function of the agency. CARTA is committed to developing, implementing, maintaining, and continuously improving processes to ensure the safety of its customers, employees, and the community. The CARTA Safety Committee annually reviews the PTASP as required under the 2021 Bipartisan Infrastructure Law (BIL) to ensure transit safety, to remain in compliance with FTA requirements.

Safety management as a systematic and comprehensive approach to identifying safety hazards & risks associated with transit system operations & related maintenance activities is active. A Safety Management Systems (SMS) framework, as an explicit element of the agency's responsibility, has been adopted by establishing safety policy, procedures and quarterly Safety Committee meetings; identifying hazards and controlling risks; goal setting, and measuring performance. Performance is measured IAW the 2021 BIL. The SMS fosters agency-wide support for transit safety by maintaining & continuously improving a culture of safety. Every employee is responsible for safety, where management is held accountable, for the safety of all employees in the organization with an active role in securing transit safety.

This plan complies with FTA regulations established by Section 5329(d) of the 2012 Moving Ahead for Progress Act & the 2021 BIL. On February 23, 2023, FTA finalized changes to the National Transit Database (NTD) safety and security reporting requirements. FTA has adopted two significant changes to data collected on transit worker assaults and bus impact fatalities. All assaults will be promptly reported to the NDT via the CARTA CSO to the Accountable Executive. Every employee directly responsible for safety (operators, supervisors, managers), must complete Assault Awareness & De-escalation training.

The PTASP Accountable Executive, the Board of Directors, the local Union representative & the CARTA Safety Committee, in cooperation with FTA, have reviewed the current PTASP. This is IAW 49 U.S.C. § 5329 & assures the requirements through the establishment of a comprehensive SMS framework. CARTA is in compliance with 49 C.F.R. Part 673 and all applicable FTA requirements.

CARTA Public Transportation Agency Safety Plan Self Certification and Approval

_____ _____
Ronald E. Mitchum, PTASP Accountable Executive Date

_____ _____
CARTA Board of Directors, Chairman Date

CARTA

Charleston Area Regional Transportation Authority

PUBLIC TRANSPORTATION AGENCY SAFETY PLAN (PTASP)

FTA Recipient ID# 1115,

CARTA
5790 Casper Padgett Way
North Charleston, SC 29406
Telephone (843) 769-1022
Contact Person: Jeff Hughes BCDCOG Safety Manager

Adopted: Aug 16, 2023

PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

CARTA

TRANSIT AGENCY INFORMATION

Transit Agency	**Name**		**Address**
	Charleston Area Regional Transportation Authority		5790 Casper Padgett Way North Charleston, SC 29406
Accountable Executive	**Name**		**Title**
	Ronald E. Mitchum		Executive Director
Chief Safety Officer	**Name**		**Title**
	Jeff Carty		General Manager
Mode(s) of Service Covered by This Plan:		**List All FTA Funding Types (e.g., 5307, 5337, 5339):**	
Fixed-Route Bus Service		Section 5307, 5310, 5324, 5339, 5340	
Demand-Response Bus Service			
Mode(s) of Service Provided by the Transit Agency (Directly operated or contracted service)			
Fixed-Route Bus Service			
Demand-Response Bus Service			
Does the agency provide transit services on behalf of another transit agency or entity?	**Yes**	**No**	**Description of Arrangement(s)**
		✓	
Transit Agency(ies) or Entity(ies) for Which Service Is Provided	**Name**		**Address**

PLAN DEVELOPMENT, APPROVAL, & UPDATES

BCDCOG	**NAME**	**Date Signed**
Safety Manager	Jeff W. Hughes	
Signature		
CARTA AE	Ronald E. Mitchum	
Signature		
Approval by Board of Directors (or equivalent)	CARTA Board of Directors	**Approval**
Signature(s)		

ACTIVITY LOG

Version Number & Updates *Complete history of successive versions of this plan*			
Version No.	**Section/Pages Affected**	**Reason for Change**	**Date Issued**
1	All	Original Draft	June 17, 2020
2	All	BCDCOG hired a Safety Manager & added PTASP requirements to meet new compliance of the Bipartisan Infrastructure Law.	July 19, 2022
3	All	Change of contractors to National Express/Annual update. February 23, 2023, FTA finalized changes to the National Transit Database (NTD) safety and security reporting requirements. Included 3 years of performance monitoring. Additional performance measures added. Added required SMS training for managers.	Aug. 16, 2023

2023 CARTA PUBLIC SAFETY TRANSPORTATION AGENCY PLAN

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Appendix B – Safety Assessment & System Review

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Appendix F – Prioritized Safety Risk Log

Appendix G – Safety Performance Matrix

DEFINITIONS & ACRONYMS

The following definitions may be used throughout this document, & correspond to the definitions provided in 49 CFR 673.5.

Accident is an "event", as defined below, that involves any of the following:

1. A loss of life,
2. A report of a serious injury to a person,
3. A collision of public transportation vehicles,
4. An evacuation for life safety reasons,

Accountable Executive (AE) is a single, identifiable individual who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan (PTASP), defined below, of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan (as defined below), & control or direction over the human & capital resources needed to develop & maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), & the agency's Transit Asset Management Plan in accordance with 49 U.S.C. 5326.

Assault is defined as a violent physical or verbal attack; A threat or attempt to inflict offensive physical contact or bodily harm on a person that puts the person in immediate danger of or in apprehension of such harm or contact.

Chief Safety Officer (CSO) is an adequately trained individual who has responsibility for safety & reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. A CSO may not serve in other operational or maintenance capacities, unless the CSO is employed by a transit agency that is a small public transportation provider as defined in this part, or a public transportation provider that does not operate a rail fixed guideway public transportation system.

Event is an "accident", as defined above, or "incident" or "occurrence" (each as defined below).

FTA is Federal Transit Administration, an agency within the U.S. D.O.T.

Hazard means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment (as defined below).

Incident is an "event" (as defined above), that involves any of the following:

1. A personal injury that is not a serious injury,
2. One or more injuries requiring medical transport, or
3. Damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

Investigation is the process of determining the causal & contributing factors of an "accident", "incident", or "hazard" (each as defined here), for the purpose of preventing recurrence & mitigating risk.

National Public Transportation Safety Plan is the plan to improve the safety of all public transportation systems that receive federal financial assistance under 49 U.S.C. Chapter 53.

Occurrence is an "event" (as defined above), without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.

Operator of a public transportation system means a provider of public transportation as defined under 49 U.S.C. 5302(14).

Performance measure is an expression based on a quantifiable indicator of performance or condition that is used to establish targets & to assess progress toward meeting the established targets.

Performance target is a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the FTA.

Public Transportation Agency Safety Plan (PTASP) is the documented comprehensive agency safety plan for a transit agency that is required by 49 U.S.C. 5329 & this part.

Risk is the composite of predicted severity & likelihood of the potential effect of a hazard.

Risk mitigation is a method or methods to eliminate or reduce the effects of hazards.

Safety Assurance is processes within a transit agency's Safety Management System that functions to ensure the implementation & effectiveness of safety risk mitigation, & to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, & assessment of information.

Safety Committee is a group of employer/employee representatives, including front line employees who collaborate to identify & recommend solutions to health & safety issues in the workplace required per Title 49 U.S.C. 5329(d).

Safety Management Policy is the transit agency's documented commitment to safety, which defines the transit agency's safety objectives, accountabilities & responsibilities of its employees in regard to safety.

Safety Management System (SMS) is the formal, top-down, organization-wide approach to managing safety risk & assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, & policies for managing risks & hazards.

Safety Manager (SM) is the BCD COG safety professional responsible for developing safe work practices, crafting written safety programs, leading safety training, conducting workplace inspections & audits.

Safety performance target is a Performance Target related to safety management activities.

Safety Promotion is a combination of training & communication of safety information to support SMS as applied to the transit agency's public transportation system.

Safety risk assessment is the formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.

Safety Risk Management is a process within a transit agency's Public Transportation Agency Safety Plan for identifying hazards & analyzing, assessing, & mitigating safety risk.

Serious injury is any injury which:

1. Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received;
2. Results in a fracture of any bone (except simple fractures of fingers, toes, or noses);
3. Causes severe hemorrhages, nerve, muscle, or tendon damage;
4. Involves any internal organ; or
5. Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Small public transportation provider is a recipient or subrecipient of Federal financial assistance under 49 U.S.C. 5307 that has one hundred (100) or fewer vehicles in peak revenue service & does not operate a rail fixed guideway public transportation system.

State of good repair means the condition in which a capital asset is able to operate at a full level of performance.

Transit agency means an operator of a public transportation system.

Transit Asset Management Plan is the strategic & systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, & replacing transit capital assets to manage their performance, risks, & costs over their life cycles, for the purpose of providing safe, cost-effective, & reliable public transportation, as required by 49 U.S.C. 5326 & 49 CFR part 625.

CDC	-	Center for Disease Control
CFR	-	Code of Federal Regulations
CSO	-	Chief safety officer
FTA	-	Federal Transit Administration
MAP-21	-	Moving Ahead for Progress in the 21st Century
NTD	-	National Transit Database
PTASP	-	Public transportation agency safety plan
SGR	-	State of good repair
SMS	-	Safety management system
SOP	-	Standard operating procedure
SRM	-	Safety Risk Management
TAM	-	Transit asset management
U.S.C.	-	United States Code

BACKGROUND

The Moving Ahead for Progress in the 21st Century (MAP-21) Act grants the Federal Transit Administration (FTA) the authority to establish & enforce a comprehensive regulatory framework to oversee the safety of public transportation throughout the United States. As a component of this safety oversight framework, MAP-21 requires certain recipients of FTA Chapter 53 funding to develop & implement a Public Transportation Agency Safety Plan (PTASP). CARTA has established this comprehensive safety plan per Title 49 U.S.C. 5329 (d) and the Bipartisan Infrastructure Law (BIL) signed November 15, 2021.

In addition to greater safety oversight responsibilities, MAP-21's & BIL grant of expanded regulatory authority to put FTA in a position providing guidance to transit agencies. The use of strengthened safety data supports management decisions, improves the commitment of transit leadership to safety & fosters a culture of safety that promotes awareness & responsiveness to safety risks. The framework to this approach is called a safety management system (SMS), which moves the transit industry towards a more holistic, performance-based approach to safety. The SMS framework has been adopted by FTA in its National Public Transportation Safety Plan (NTSP).

The PTASP for CARTA supports & is consistent with an SMS approach to safety risk management. SMS is an integrated collection of policies, processes, & behaviors meant to ensure a formalized, proactive & data-driven approach to safety risk management. The aim of an SMS is to increase the safety performance of transit systems by proactively identifying, assessing, & controlling safety risks.

An SMS supports management decisions on how to prioritize the allocation of resources (money, time, etc.) to address safety concerns. The approach is meant to be flexible & scalable, so that transit agencies of all types & sizes can efficiently meet the regulatory requirements of MAP-21 & BIL. The PTASP for CARTA addresses the following elements, outlined in **Table 1** (below):

☑	**Safety Management Policy Statement:**	A policy statement establishing senior management commitment to continual safety improvement, signed by the executive accountable for the operation of the agency & the board of directors.
☑	**Document Control:**	A description of the regular annual process used to review & update the plan including a timeline for implementation of the process.
☑	**Core Safety Responsibilities:**	A description of the responsibilities, accountabilities, & authority of the AE, the key safety officers, & key members of the safety management team.
☑	**Safety Training Program:**	A description of the comprehensive safety training program for agency staff that ensures that staff are trained & competent to perform their safety duties.
☑	**Safety Risk Management:**	A description of the formal processes the agency uses to identify hazards, analyze & assess safety risks, & develop, implement & evaluate risk controls.
☑	**Safety Risks:**	A description the most serious safety risks to the public, personnel & property.
☑	**Risk Control:**	A description of the risk control strategies & actions that the agency will undertake to minimize exposure of the public, personnel & property to hazards, including a schedule for implementing the risk control strategies & the primary entity responsible for each strategy.
☑	**Safety Assurance:**	A list of defined safety performance indicators for reach priority risk & associated targets the agency will use to determine if it is achieving the specified safety goals.
☑	**Desired Safety Outcomes:**	A description of desired safety outcomes for each risk using the measurable safety performance indicators established.

Table 1: Elements of a Public Transportation Agency Safety Plan (PTASP)

1 SAFETY POLICIES & PROCEDURES CFR 673.23

1.1 COMMITMENT TO SAFETY

Safety is a core value of CARTA, & managing safety is a core business function of the authority/agency. CARTA is committed to developing, implementing, maintaining, & continuously improving processes to ensure the safety of its customers, employees, & the public. CARTA will use safety management processes to direct the prioritization of safety & allocate its organizational resources-people, processes, & technology-in balance with its other core business functions. CARTA aims to support a robust safety culture, & achieve the highest level of safety performance, meeting all established safety standards.

All levels of management & all frontline employees are accountable for the delivery of the highest level of safety performance, starting with the General Manager of CARTA, National Express Transit, property #723. BCD COG is committed to safety, by building and maintaining a positive culture of safety.

CARTA is committed to:

Executive Commitment to Safety: Executive Management will lead the development of an organizational culture that promotes safe operations & provides appropriate resources to supporting this core management function. Executive leadership, supported by the BCDCOG Safety Manager, promote safety culture through fostering and ensuring safe practices, improving safety when needed, and encouraging effective employee safety reporting and communication. CARTA will hold executives, managers, & employees accountable for safety performance with oversight from BCDCOG Safety Manager. The Safety Committee includes management, as well as front line employees, to further our commitment to safety.

Communication & Training: Employee engagement is crucial to a functioning safety management system (SMS). Communication systems will be put in place to enable greater awareness of CARTA safety objectives & safety performance targets as well as to provide on- going safety communication up, down, & across the organization. All levels of management must proactively engage employees & working keep open lines of safety communication. All employees will be made aware of the importance of CARTA's SMS and trained in safety reporting procedures with assistance from the BCDCOG Safety Manager. Mandatory Assault Awareness De-escalation training is conducted through the National Transit Institute to all employees directly responsible for safety (operators, supervisors, maintenance, dispatch). CARTA's GM & Safety Managers are required to have SMS training through the FTA, under TSI training website.

Responsibility & Accountability: All levels of management will be responsible for delivering safe & quality transit services that represent CARTA's performance of its SMS. Managers will take an active role in the Safety Risk Management (SRM) process & ensure that Safety Assurance (SA) functions are supported. Managers are responsible for ensuring that SRM is being performed in their operational areas of control to assure that the safety risk associated with safety hazards is assessed & mitigated. Safety performance will be an important part of performance evaluations for CARTA managers & employees. The BCDCOG Safety Manager ensures that there is responsibility & accountability through the continuous awareness of the culture of safety within the organization.

Responsibility of Employees & Contractors: All employees & contractors will support safety management by ensuring that hazards are identified & reported.

Employee Reporting: Executive management has established a safety reporting program as a viable tool for employees to voice their safety concerns, as well as directly to the BCD COG Safety Manager. All frontline employees will be responsible for utilizing this program as part of the SMS. No action will be taken against

any employee who communicates a safety condition through the CARTA safety reporting program, unless such disclosure indicates the following: an illegal act, gross misconduct or negligence, or a deliberate or willful disregard of CARTA rules, policies, & procedures.

Performance Monitoring & Measuring: CARTA has established realistic measures of safety performance & establish safety performance targets to ensure continual improvement in safety performance. Managers will verify that the safety risk mitigations put in place are appropriate & effective.

Review & Evaluation: CARTA measures SMS performance by analyzing key safety performance indicators, reviewing inspections, investigations & corrective action reports, & auditing the processes that support the SMS. These activities become the basis for revising or developing safety objectives, safety performance targets & plans with the goal of continuous safety improvement.

1.2 Annual PTASP Review & Update

CARTA management (including Union representative) will review the PTASP annually, update the document as necessary, & implement the changes within a timeframe that will allow the agency to timely submit for annual review. This includes annual self-certification of compliance by the AE & Board of Directors.

Annual review of the PTASP will be conducted by the BCDCOG Safety Manager in July of each calendar year. Necessary updates outside the annual update window may be handled as PTASP addenda. Reviews of the PTASP & any subsequent updates, addenda, adoption, & distribution activities will be documented in the Activity Log at the beginning of this document.

1.3 Organization Structure & System Safety Responsibilities

While the AE has the ultimate responsibility for CARTA's implementation of its PTASP, CARTA's executive management has the overall responsibility of safe & secure operations of CARTA & contract service operators. Each employee is required to carry out specific system safety responsibilities, depending on the employee's position, in compliance with the PTASP.

The information provided in the Staff Safety Roles & Responsibilities table (Appendix A) describes each position & general system safety responsibilities, & the agency's reporting structure.

2 SAFETY RISK MANAGEMENT CFR 673.25

The number of near-misses, known as accident precursor data, is significantly greater than the number of accidents for comparable types of events. The practice of reporting & learning from accident precursor data is a valuable complement to other hazard identification practices. To be successful, hazard identification must take place within a non-punitive & a just safety culture. CARTA employs systematic safety improvements by discovering & learning of potential weaknesses through every day reporting & awareness.

SRM is a process within a transit agency's PTASP for identifying hazards & analyzing, assessing, & mitigating safety risk. The 49 C.F.R. Part 673 defines safety risk as "the composite of predicted severity & likelihood of the potential effect of a hazard." In other words, we need to know how often (likelihood) & how badly (severity) a safety concern might impact people, our systems, or our environment.

The potential effect of a hazard is a consequence. When a transit agency becomes aware of a safety concern, it is important to correctly identify the origin of the safety concern – that's the hazard. If we mistake a

consequence for the hazard, we might not fully understand the actual safety concern & its true potential (safety risk) & the condition could worsen. In the allocation of resources, we aim to mitigate the safety risk of the potential consequence or consequences of a hazard. If the consequence is mistaken for the hazard, we also might allocate resources to address only the single consequence & miss other consequences that could cause equal or greater harm or damage to property.

When we look at safety risk, we want to allocate resources to address what could happen & events that have already happened. The SRM helps us look into the future to consider all possibilities of what could happen as a consequence, such as injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock; or damage to the environment. For example, the hazard is heavy fog on a bus route & the consequence could be a collision with a pedestrian in the crosswalk or the hazard is an incomplete procedure for handling hazardous waste has a potential consequence of a major oil spill. It should be noted that the example identifies just one consequence for each hazard, but most hazards can generate more than one consequence or indicate a system defect. An example of a system defect is a tire blowout that seems like an isolated event, however a safety risk investigation following the procedure described herein revealed a recent uptick in tire failures. This analysis discovered the cause that has the high likelihood to reoccur that could lead to severe result.

The CSO leads CARTA's SRM process, working with the Safety Team & Safety Committee to identify hazards & consequences, assess safety risk of potential consequences, & mitigate safety risk with oversight and assistance from the BCDCOG Safety Manager. The results of SRM process are documented in our Hazard Assessment Log & referenced materials.

CARTA's SRM process applies to all elements of our system including our operations & maintenance; facilities & vehicles; & personnel recruitment, training, & supervision.

2.1 Safety Hazard Identification

The safety hazard identification process offers CARTA the ability to identify hazards & potential consequences in the operation & maintenance of our system. Hazards can be identified through a variety of sources, including:

- Employee Safety Report Forms (ESRs);
- Review of DriveCam/vehicle camera footage;
- Review of monthly performance data & safety performance targets;
- Observations from supervisors;
- Maintenance reports;
- Comments from customers, passengers, & third parties, including insurance claims & vendors;
- Drivers' Safety Committee, & staff meetings;
- Results of audits & inspections of vehicles & facilities;
- Results of training assessments;
- Investigations into safety events, incidents, & occurrences; &
- Federal Transit Administration (FTA) & other oversight authorities (mandatory information source).

When a safety concern is observed by CARTA management or supervisory personnel, whatever the source, it is reported to the CSO. Procedures for reporting hazards to CSO are reviewed during staff meetings, the quarterly Safety Committee meetings & in the Drivers' Safety meetings. CARTA's CSO also receives employee reports from the ESRs, customer comments related to safety, & the SmartDrive incident log. The CSO reviews these sources for hazards & documents them in the Hazard Assessment Log.

CARTA's CSO also may enter hazards into the Hazard Assessment Log based on their review of operations & maintenance, the results of audits & observations, & information received from FTA & other oversight authorities, as well as the National Transportation Safety Board.

The CSO may conduct further analyses of hazards & consequences entered into the Log to collect information & identify additional consequences & to inform which hazards should be prioritized for safety risk assessment. In following up on identified hazards, the Chief
Safety Officer may:

- Reach out to the reporting party, if available, to gather all known information about the reported hazard;
- Conduct a walkthrough of the affected area, assessing the possible hazardous condition, generating visual documentation (photographs &/or video), & taking any measurements deemed necessary;
- Conduct interviews with employees in the area to gather potentially relevant information on the reported hazard;
- Review any documentation associated with the hazard (records, reports, procedures, inspections, technical documents, etc.);
- Contact other departments that may have association with or technical knowledge relevant to the reported hazard;
- Review any past reported hazards of a similar nature; &
- Evaluate tasks &/or processes associated with the reported hazard.

The CSO will then prepare an agenda to discuss identified hazards & consequences with the Safety Committee during quarterly meetings. This agenda may include additional background on the hazards & consequences, such as the results of trend analyses, vehicle camera footage, vendor documentation, reports & observations, or information supplied by FTA or other oversight authorities, to include lessons learned.

Any identified hazard that poses a real & immediate threat to life, property, or the environment must immediately be brought to the attention of the AE & the BCD COG Safety Manager, then addressed through the SRM process (with or without the full Safety Committee) for safety risk assessment & mitigation. This means that the CSO believes immediate intervention is necessary to preserve life, prevent major property destruction, or avoid harm to the environment that would constitute a violation of Environmental Protection Agency or any State environmental protection standards. Otherwise, the Safety Committee will prioritize hazards for further SRM activity.

2.1.1 Non-Punitive Reporting Policy

CARTA is committed to the safest transit operating standards practicable. To achieve this, it is imperative that CARTA have uninhibited reporting of all safety events that may compromise safe operations. To this end, every employee is responsible for the communication of any information that may affect the integrity of transit safety. Such communication must be completely free of any form of reprisal.

CARTA will not take disciplinary action against any employee who discloses a safety event. This policy shall not apply to information received by CARTA from a source other than the employee, or that involves an illegal act, or a deliberate or willful disregard of rules, regulations, or agency policies or procedures.

CARTA's method of collection, recording, & disseminating information obtained from transit safety reports has been developed to protect, to the extent permissible by law, the identity of any employee who provides transit safety information.

2.1.2 Safety Risk Assessment

Once a hazard has been identified, CARTA will conduct an assessment to determine the potential consequences. Factors to be considered are the likelihood of occurrence, the severity of the consequences (should there be an occurrence), & the level of exposure to the hazard. CARTA will assess risks subjectively by experienced personnel using a risk assessment matrix. Results of the risk assessment process will help determine whether the risk is being appropriately managed or controlled. If the risks are acceptable, the hazard will continue to be monitored. If the risks are unacceptable, steps will be taken by CARTA to lower the risk to an acceptable or tolerable level, or to remove, avoid, or otherwise eliminate the hazard.

The CSO & Safety Team assess prioritized hazards using CARTA's Safety Risk Matrix. This matrix expresses assessed risk as a combination of one severity category & one likelihood level, also referred to as a hazard rating. For example, a risk may be assessed as "1A" or the combination of a Catastrophic (1) severity category & a Frequent (A) probability level.

This matrix also categorizes combined risks into levels, High, Medium, or Low, based on the likelihood of occurrence & severity of the outcome. For purposes of accepting risk:

- "High" hazard ratings will be considered unacceptable & require action from CARTA to mitigate the safety risk,
- "Medium" hazard ratings will be considered undesirable & require CARTA's Safety Team to make a decision regarding their acceptability, &
- "Low" hazard ratings may be accepted by the CSO without additional review.

Using a categorization of High, Medium, or Low allows for hazards to be prioritized for mitigation based on their associated safety risk, taking existing mitigations into account.

The CSO schedules safety risk assessment activities on the Safety Team's agenda & prepares a Safety Risk Assessment Package. This package is distributed in advance of the Safety Team meeting. During the meeting, the CSO reviews the hazard & its consequence(s) & reviews available information distributed in the Safety Risk Assessment Package on severity & likelihood. The CSO may request support from members of the Safety Team in obtaining additional information to support the safety risk assessment.

Once sufficient information has been obtained, the CSO will facilitate completion of relevant sections of the Hazard Assessment Log, using the Safety Risk Assessment Matrix, with the Safety Team. The CSO will document the Safety Team's safety risk assessment, including hazard rating & mitigation options for each assessed safety hazard in the Hazard Assessment Log. The CSO will maintain on file Safety Team agendas, Safety Risk Assessment Packages, additional information collection, & completed Hazard Assessment Log sections for a period of three years from the date of generation.

2.1.3 Safety Risk Mitigation

On February 23, 2023, FTA finalized changes to the National Transit Database (NTD) safety and security reporting requirements. FTA has adopted two significant changes to data collected on transit worker assaults and bus impact fatalities. All assaults will be promptly reported to the NDT via the CARTA CSO to the AE, and every employee receives de-escalation training to reduce any possible assaults on operators.

CARTA has established a safety risk reduction program for transit operations to improve safety performance by reducing the number and rates of safety events, injuries, and assaults on transit workers. The safety risk reduction program must, at a minimum, address:

- Reduction of vehicular and pedestrian safety events involving transit vehicles that includes consideration of safety risk mitigations consistent with § 673.20(a);
- Reduce exposure from infectious diseases with training, PPE, and physical barriers;
- Minimizing exposure to infectious diseases with guidance on strategies from the CDC and SC DHEC;
- Reduction and mitigation of assaults on transit workers that includes consideration of safety risk mitigations consistent with § 673.20(a);
- Implementation of safety risk mitigations consistent with § 673.20(a)(4);
- Assaults are promptly reported to the supervisor, CSO, and BCDCOG Safety Manager. The assault is recorded on internal tracking records and reported to the NTD per the 2021 Bipartisan Infrastructure Law.
- And mandatory Assault Awareness & De-escalation training is given to all new employees initially, then annually for all operators, maintenance personnel and supervisors directly responsible for safety. The National Transit Institute has a direct delivery course located here: https://www.ntionline.com/assault-awareness-and-prevention-for-transit-operators-direct-delivery/

In general, CARTA will take the following safety actions to mitigate risk – these actions can be categorized into three broad categories, including:

1. Physical Barriers:
   These include objects and technologies that are engineered to discourage, or warn against, or prevent inappropriate action or mitigate the consequences of events (e.g., traffic control devices, fences, safety restraining systems, transit controls/signals, transit monitoring systems, etc.).
2. Administrative:
   These include procedures and practices that mitigate the likelihood of accident/incident (e.g., safety regulations, standard operating procedures, personnel proficiency, supervision inspection, training, etc.).
3. Training & Awareness:
   These include behavioral interventions through education and public awareness campaigns aimed at reducing risky and reckless behavior of motorists, passengers and pedestrians, safety training and de-escalation training.

CARTA's AE & CSO review current methods of safety risk mitigation & establish methods or procedures to mitigate or eliminate safety risk associated with specific hazards based on recommendations from the Safety Team and the Safety Committee per Title 49 U.S.C. 5329(d).

CARTA can reduce safety risk by reducing the likelihood &/or severity of potential consequences of hazards. The assessment process may indicate that certain hazards have an acceptable level of risk, while others require mitigation to an acceptable or tolerable level. CARTA will further manage risk by completing a Hazard Assessment Log (Appendix E) that can help prioritize safety risks. The level of risk can be lowered by reducing the severity of the potential consequences, likelihood of occurrence, exposure to that risk, or by some combination.

2.1.4 Safety Risk Prioritization

Once a hazard has been identified & the risk level assessed, CARTA will prioritize safety risks. A Prioritized Safety Risk Log is included in Appendix F organizes & prioritizes the system's safety risks. It identifies the priority level for safety risks, provides a description of the risk, the planned mitigation strategies to address the risk, the outcome of the planned mitigation strategies, staff responsible for implementation, the timeline of the planned mitigation strategies, & the status of the prioritized safety risk. The Prioritized Safety Risk Log will be updated during the quarterly meetings of the Safety Committee, ensuring continual progress towards risk reduction.

3 SAFETY ASSURANCE CFR 673.27

Safety assurance provides the necessary feedback to ensure that the SMS is functioning effectively & that CARTA is meeting or exceeding its safety objectives. Safety assurance requires a clear understanding of how safety performance will be evaluated, or in other words, what metrics will be used to assess system safety & determine whether the SMS is working properly. Having decided on the metrics by which success will be measured; safety management requires embedding these metrics in the organizational culture & encouraging their use for ongoing performance improvement.

Through our Safety Assurance process, CARTA:

1. Evaluates our compliance with operations & maintenance procedures to determine whether our existing rules & procedures are sufficient to control our safety risk;
2. Assesses the effectiveness of safety risk mitigations to make sure the mitigations are appropriate & are implemented as intended;
3. Investigates safety events to identify causal factors; &
4. Analyzes information from safety reporting, including data about safety failures, defects, or conditions.

CARTA has many processes in place to monitor its entire transit system for compliance with operations & maintenance procedures, including:

- Safety audits,
- Informal inspections,
- Regular review of on-board camera footage to assess drivers & specific incidents,
- Safety surveys,
- Employee Safety Reporting Program,
- Problem Area Reporting Program,
- Investigation of safety occurrences,
- Safety review prior to the launch or modification of any facet of service,
- Daily data gathering & monitoring of data related to the delivery of service, &
- Regular vehicle inspections & preventative maintenance.

Results from the above processes are compared against recent performance trends quarterly & annually by the CSO to determine where action needs to be taken. The CSO enters any identified non-compliant or ineffective activities, including mitigations, back into the SRM process for reevaluation by the Safety Committee.

CARTA monitors safety risk mitigations to determine if they have been implemented & are effective, appropriate, & working as intended. The CSO maintains a list of safety risk mitigations in the Safety Risk Log. The mechanism for monitoring safety risk mitigations varies depending on the mitigation.

The CSO establishes one or more mechanisms for monitoring safety risk mitigations as part of the mitigation implementation process & assigns monitoring activities to the appropriate director, manager, or supervisor. These monitoring mechanisms may include tracking a specific metric on daily, weekly, or monthly logs or reports; conducting job performance observations; or other activities. The CSO will endeavor to make use of existing CARTA processes & activities before assigning new information collection activities.

CARTA CSO & the Safety Committee review the performance of individual safety risk mitigations during quarterly Safety Committee meetings, based on the reporting schedule determined for each mitigation, & determine if a specific safety risk mitigation is not implemented or performing as intended. If the mitigation is not implemented or performing as intended, the Safety Committee will propose a course of action to modify the mitigation or take other action to manage the safety risk. The CSO will approve or modify this proposed course of action & oversee its execution.

CARTA's CSO & the Safety Committee also monitor daily transit operations on a large scale to identify mitigations that may be ineffective, inappropriate, or not implemented as intended by:

- Reviewing results from accident, incident, & occurrence investigations;
- Monitoring employee safety reporting;
- Reviewing results of internal safety audits & inspections; &
- Analyzing operational & safety data to identify emerging safety concerns.

The CSO works with the Safety Committee & AE to carry out & document all monitoring activities.

CARTA maintains documented procedures for conducting safety investigations of events (accidents, incidents, & occurrences, as defined by FTA) to find causal & contributing factors & review the existing mitigations in place at the time of the event (see CARTA/National Express Transit Safety Policies & Procedures Manual for specific procedures for conducting safety investigations). These procedures also reflect all traffic safety reporting & investigation requirements & sources of documentation include accident/incident data collections forms, report checklists & supporting materials for conducting investigations, such as driver & witness statements, supervisor reports, police reports, camera footage, electronic device recordings, photographs, & analysis reports.

The CSO, supported by the Safety Manager, maintains all documentation of CARTA's investigation policies, processes, forms, checklists, activities, & results. As detailed in the procedures, an investigation report is prepared & sent to the Accident/Incident Review Board for integration into their analysis of the event.

CARTA's Accident/Incident Review Board consists of members that represent management, the union, operations, & maintenance. The CSO chairs the board. CARTA's Accident/Incident Review Board confirms whether:

- The accident was preventable or non-preventable;
- The required discipline or retraining of Personnel was reasonable;
- The causal factor(s) indicate(s) that a safety hazard contributed to or was present during the event; &
- The accident appears to involve underlying organizational causal factors beyond just individual employee behavior.

The CSO, Safety Committee & the BCD COG Safety Manager routinely review safety data captured in employee safety reports, safety meeting minutes, customer complaints, & other safety communication channels. When necessary, the CSO & Safety Committee ensure that the concerns are investigated or analyzed through the SRM process.

The CSO, Safety Committee & the BCD COG Safety Manager also review internal & external reviews, including audits & assessments, with findings concerning CARTA's safety performance, compliance with operations & maintenance procedures, or the effectiveness of safety risk mitigations currently in use.

3.1 Defining Safety Goals & Objectives/Outcomes

Setting safety goals & objectives is part of strategic planning & establishing safety policy for CARTA. Clearly defining safety goals is the first part in creating a safety performance measurement system. Safety goals are general descriptions of desirable long-term impacts. The overarching goal of the PTASP is to:

> *To make transit safer for all customers, employees, & the local community through policy development, hazard investigation, data collection, risk analysis, effective oversight programs, & information sharing*

The Safety objective of the PTASP is to:

- *Foster agency-wide support for transit safety by establishing a culture where everyone in the organization takes an active role in securing transit safety*
- *Establish regular transit safety meetings comprised of staff at varying levels, including executives, officers, managers, operators & maintenance personnel*
- *Coordinate with local jurisdictions, the CHATS MPO & SCDOT to improve safety for transit access & transit facilities*

The safety objective will be measured by defining specific performance metrics, including a baseline & targets consistent with the National Public Transportation Safety Plan.

3.2 Defining Safety Performance Measures

Performance measurement is the regular systematic collection, analysis, & reporting of data that track resources used, work produced, & whether specific outcomes were achieved. In other words, it is a tool to quantify & improve performance, & engage & communicate with CARTA staff & external stakeholders.

The two core functions of performance measurement include monitoring & evaluating progress. Performance can be measured in terms of inputs, outputs, outcomes, & efficiency, among other criteria.

CARTA will utilize these basic principles of performance measurement, including:

- Stakeholder involvement & acceptance
- Focus on agency goals & activities
- Clarity & precision

- Creditability & robustness
- Variety of measures, number of measures & hierarchy of measures
- Forward-looking measures
- Integration into agency decision-making
- Timely reporting
- Understand agency specifics, including context & scale of operations
- Realism of goals & targets

3.2.1 Metrics

System safety data can be collected through a variety of sources, including:

- Near miss information
- Accident investigation reports (with causal factor analysis)
- Internal safety audits (or reviews)
- Safety committee meetings
- Injury reports (including occupational injury)
- Safety event reports (including assaults, accidents, incidents, & occurrences)
- System monitoring (including testing & inspection records)
- Hazard management program

This safety data will be analyzed & used for development of key safety performance indicators & targets.

CARTA will initially focus on areas based on data delivered to the National Transit Database (NTD), as the following:

- **Fatalities**
    1. Total number of reportable fatalities
    2. Rate of reportable fatalities per total vehicle revenue miles
- **Injuries**
    3. Total number of reportable injuries
    4. Rate of reportable injuries per total vehicle revenue miles
- **Safety Events**
    5. Total number of reportable safety events (including assaults)
    6. Rate of reportable safety events per total vehicle revenue miles (VRM)
- **System Reliability**
    7. Mean distance between major mechanical failures

These safety performance measures are used to select improvement targets for these four measures & for each mode of transit, in order to encourage improvements & monitor the safety performance of delivering transit services. In addition, CARTA will select additional performance measures & targets, both leading & lagging, to insure continual improvement of our SMS IAW CFR § 673.20(b).

CARTA will make its safety performance measures improvement targets available to applicable state agencies & metropolitan planning organizations (MPOs), & to the maximum extent practicable, will coordinate with both in the selection of safety performance targets. Targets will be adopted into local CHATS Metropolitan Transportation Improvement Plans (MTIP) & amendments of this Plan.

CARTA's AE, or designee, shares our PTASP, including safety performance targets, with the Charleston Area Regional Transportation Study (CHATS) MPO each year after its formal adoption by the Board of Directors. CARTA's AE also provides a copy of our formally adopted plan to the SCDOT. CARTA staff is available to coordinate with SCDOT & the CHATS MPO in the selection of State & CHATS MPO safety performance targets upon request.

The safety data collected from the above sources will be analyzed for potential safety impacts. Identified areas of concern are reported to appropriate staff personnel in the form of specific project reports, memos, & recommendations from the safety committee.

Records of system safety data are maintained for a minimum of three years. Certain information, such as safety certification backup documentation is maintained by CARTA's document control process. In addition to safety data, CARTA maintains other data & documentation of activities required by the PTASP. Distribution of safety-related reports & data is accomplished through the Safety Committee and the BCDCOG Safety Manager. These records will be available to the FTA or other oversight entity upon request.

2023 Safety Performance CARTA								
	Mode of Transit Service	**Fatalities** (Total)	**Fatalities** (Rate)	**Injuries** (Total)	**Injuries** (Rate)	**Major Safety Events** (Total)	**Major Safety Events** (Rate)	**System Reliability** (Average distance between major mechanical failures)
Target	All Bus Services	0	0/1,000,000 VRM	5	1.4/1,000,000 VRM	15	4.3/1,000,000 VRM	35,000 VRM

2023 Risk Reduction Performance CARTA								
	Collision (Total)	**Collision** Collision/VRM (Rate)	**Pedestrian Collision** Collision/VRM (Total & Rate)	**Vehicular Collision** Collision/VRM (Total & Rate)	**Transit Worker Fatality** (Rate)	**Transit Worker Injury** (Rate)	**Assaults on Transit Workers** (Total)	**Rate of Assaults on Transit Workers** Total/VRM (Rate)
Target	25	7.2	0-Total 0/1,000,000 VRM	25-Total 7.2/1,000,000 VRM	0/1,000,000 VRM	1.4	2	.57/1,000,000 VRM

Target SPT injuries (5)/ by annual expected VRM (3,474,666) X 1,000,000 =1.4 per 1,000,000 VRM
Target SPT safety events (10)/ by annual expected VRM (3,474,666) X 1,000,000=4.3
Actual SPT system reliability 3,474,666/112= 31,024

2022 Safety Performance CARTA								
	Mode of Transit Service	**Fatalities** (Total)	**Fatalities** (Rate)	**Injuries** (Total)	**Injuries** (Rate)	**Safety Events** (Total)	**Safety Events** (Rate)	**System Reliability** (Average distance between major mechanical failures)
Target	All Bus Services	0	0/1,000,000 VRM	5	.5/1,000,000 VRM	30	3/1,000,000 VRM	25,000 VRM
Actual	All Bus Services	0	0/1,000,000 VRM	20	.2/1,000,000 VRM	54	5.4/1,000,000 VRM	31,024 VRM

2021 Safety Performance CARTA								
	Mode of Transit Service	**Fatalities** (Total)	**Fatalities** (Rate)	**Injuries** (Total)	**Injuries** (Rate)	**Safety Events** (Total)	**Safety Events** (Rate)	**System Reliability** (Average distance between major mechanical failures)
Target	All Bus Services	0	0/1,000,000 passenger trips	6	.6/1,000,000 passenger trips	50	5/1,000,000 passenger trips	Ave. Distance between 18,000 miles
Actual	All Bus Services	0	0/1,000,000 passenger trips	2	.2/1,000,000 passenger trips	54	5.4/1,000,000 passenger trips	Ave. Distance between 26,840 miles

3.3 Monitoring Performance & Evaluating Results

The safety goals, objectives/outcomes, & measures are organized into a Safety Performance Matrix (Appendix G), along with the Prioritized Safety Risk Log (Appendix F) that demonstrates continual progress towards risk reduction through mitigation strategies. Having this information organized, particularly in matrixes, allows CARTA to continuously monitor safety performance & evaluate results. Evaluations of safety performance will be conducted & documentation will be update at least semi-annually. The CSO enters any identified non-compliant or ineffective activities, including mitigations, back into the SRM process for reevaluation by the Safety Committee.

CARTA will monitor performance with its progress toward these goals & compliance with operations & maintenance procedures through announced compliance reviews, unannounced compliance reviews, ride-along evaluations, internal audits, & peer reviews. The PTASP Administrator will be responsible for evaluation progress toward meeting the safety goals, objectives/outcomes, & measures.

3.4 Integrating Results into Agency Decision-Making Processes

CARTA is committed to using the data collected & information learned to inform decision-making & instill positive change. The main objective is the continuous improvement of transit system safety. When performance goals are not met, CARTA will work to identify why such goals were not met & what actions

can be taken to minimize the gap in achieving defined goals. However, when goals are easily achieved, action will be taken to exceed expectations & re-establish a reasonable baseline.

Uses of performance results include:

- Focus attention on performance gaps & trigger in-depth investigations of what performance problems exist
- Help make informed resource allocation decisions
- Identify needs for staff training or technical assistance
- Help motivate employees to continue making program improvements
- Support strategic planning efforts by providing baseline information for tracking progress
- Identify best practices through benchmarking
- Respond to elected officials & the public's demand for accountability

3.5 Sustaining a Safety Management System

In order to sustain the SMS, CARTA will ensure that particular processes are employed to instill an organizational foundation. Examples of actions taken to sustain the SMS include:

- **Create measurement-friendly culture**:
  All staff, including senior managers, should be actively engaged in creating measurement-friendly culture by promoting performance measurement as a means of continuous improvement. Senior managers will also lead by example & utilize performance metrics in decision-making processes.

- **Build organization capacity**:
  Investment in developing skilled human resources capacity is essential to sustaining an SMS. Both technical & managerial skills will be needed for data collection & analysis, & setting goals. Managing staff & the governing board will commit the financial resources required for organizational capacity & maintaining an SMS on a continuous basis.

- **Reliability & transparency of performance results**:
  The SMS will be able to produce & report its results, both good & bad. Performance information should be transparent & made available to all stakeholders. Messengers should be protected to preserve the integrity of the measurement system. The focus should be on opportunities for improvement rather than allocating blame.

- **Demonstrate continuous commitment to measurement**:
  Visible commitment to using metrics is a long-term initiative. CARTA demonstrates a commitment to performance measurement by establishing a formal process of reporting performance results, such as including transit safety & performance measurement as a standing agenda item at staff meetings.

4 SAFETY PROMOTION CFR 673.29

4.1 Safety Promotion, Culture, & Training

CARTA believes safety promotion is critical to the success of an SMS by ensuring that the entire organization fully understands & trusts its safety policies, procedures, & structure. Further, safety promotion involves establishing an organizational & workplace culture that recognizes safety as a core value, training employees in safety principles, & allowing open communications of safety issues.

4.1.1 Safety Culture

A positive & strong safety culture must be generated from the top. The actions, attitudes, & decisions at the policy-making level must demonstrate a genuine commitment to safety. Safety must be recognized as the responsibility of each employee, with the ultimate responsibility for safety resting with the AE. Employees must trust that they will have management support for decisions made in the interest of safety, while also recognizing that intentional breaches of safety will not be tolerated.

The primary goal of safety promotion at CARTA is to develop and maintain a positive safety culture that allows the SMS to succeed. A positive safety culture is defined as one which is:

A. **An Informed Culture**
- Employees understand the hazards & risks involved in their areas of operation
- Employees are provided with the necessary knowledge, training & resources
- Employees work continuously to identify & overcome threats to safety

B. **A Just Culture**
- Employees know & agree on what is acceptable & unacceptable behavior
- Human errors must be understood, but negligence & willful violations cannot be tolerated

C. **A Reporting Culture**
- Employees are encouraged to voice safety concerns & to share critical safety information without the threat of punitive action
- When safety concerns are reported, they are analyzed, & appropriate action is taken

D. **A Learning Culture**
- Learning is valued as a lifetime process beyond basic-skills training
- Employees are encouraged to develop & apply their own skills & knowledge to enhance safety
- Employees are updated on safety issues by management, & safety reports are fed back to staff so that everyone learns the pertinent lessons
- The Safety Committee ensures wide dissemination of valuable safety-related information throughout the organization

4.1.2 Training

During the initial implementation of an SMS, specific training will be required for all employees & contract staff, to reiterate the agency's safety culture & describe how CARTA's SMS works. The CSO is the resource person for providing a corporate perspective on CARTA's approach to safety management, as well as the BCDCOG Safety Manager. Safety training needs will depend on the safety responsibilities of the individual staff members & the nature of tasks performed. Mandatory de-escalation training is given to all new employees initially, then annually for all operators, maintenance personnel and supervisors directly responsible for safety. The National Transit Institute has a direct delivery course located here: https://www.ntionline.com/assault-awareness-and-prevention-for-transit-operators-direct-delivery/

CARTA's comprehensive safety training program applies to all employees directly responsible for safety, including:

- Revenue vehicle operators
- Dispatchers

- Maintenance technicians
- Managers & supervisor,
- Agency Leadership & Executive Management
- Chief Safety Officer
- Accountable Executive

CARTA dedicates resources to conduct a comprehensive safety training program, as well as training on SMS roles & responsibilities. The scope of the safety training, including annual refresher training, is appropriate to each employee's individual safety-related job responsibilities & their role in the SMS. Basic training requirements for employees, including frequencies & refresher training, are documented in the employee's file & outlined in the Employee Handbook. Operations safety-related skill training includes the following:

- New-hire bus vehicle operator classroom & hands-on skill training, including behind-the-wheel training
- Bus vehicle operator refresher training
- Bus vehicle operator retraining (recertification or return to work)
- Assault awareness de-escalation training
- Classroom & on-the-job training for dispatchers
- Classroom & on-the-job training for operations supervisors & managers
- Accident investigation training for operations supervisors & managers

Vehicle maintenance safety-related skill training includes the following:

- Ongoing vehicle maintenance technician skill training
- Ongoing skill training for vehicle maintenance supervisors
- Occupational safety training
- Assault awareness de-escalation training
- Formal certification from accredited institutions
- Ongoing hazardous material training for vehicle maintenance technicians & supervisors
- Training provided by vendors

Safety Management training topics may include:

A. Initial Safety Training for All Staff

1. Basic principles of safety management including the integrated nature of SMS, risk management, safety culture, etc.
2. Corporate safety philosophy, safety goals & objectives, safety policy, & safety standards
3. Importance of complying with the safety policy & SMS procedures, & the approach to disciplinary actions for different safety issues
4. Organizational structure, roles & responsibilities of staff in relation to safety
5. Transit agency's safety record, including areas of systemic weakness
6. Requirement for ongoing internal assessment of organization safety performance (e.g., employee surveys, safety audits, & assessments)
7. Reporting accidents, incidents, & perceived hazards
8. Lines of communication for safety managers
9. Feedback & communication methods for the dissemination of safety information
10. Safety promotion & information dissemination
11. Assault awareness & de-escalation training

B. Safety Training for Operations Personnel

1. Unique hazards facing operational personnel
2. Seasonal safety hazards & procedures (e.g., evacuation operations)
3. Procedures for hazard reporting
4. Procedures for reporting safety events (accidents & incidents)
5. Emergency procedures
6. Assault awareness & de-escalation training

C. Safety Training for Management

1. *Principles of SMS & SMS Awareness*- Free of cost, FTA sponsored training online courses located: https://tsi-dot.csod.com/ to maintain & build a stronger culture of safety
2. Management responsibilities & accountabilities for safety
3. Legal issues (e.g., liability)
4. Assault awareness & de-escalation training

D. Training for the Safety Officer

1. Familiarization with different transit modes, types of operation, routes, etc.
2. *Principles of SMS & SMS Awareness*- Free of cost, FTA sponsored online training courses located: https://tsi-dot.csod.com/ to maintain & build a stronger culture of safety
3. Understanding the role of human performance in safety event causation & prevention
4. Operation of the SMS
5. Investigating safety events
6. Crisis management & emergency response planning
7. Safety promotion
8. Communication skills
9. Performing safety audits & assessments
10. Monitoring safety performance
11. National Transit Database (NTD) safety event (including assaults) reporting requirements
12. *Assault awareness & de-escalation training*

4.1.3 Safety Communication

CARTA's CSO, CARTA Safety Manager & the BCDCOG Safety Manager coordinate safety communication activities for the SMS. Activities will focus on the three categories of communication activity established in 49 CFR Part 673:

- Communicating safety & safety performance information throughout the agency: Communicate information on safety & safety performance during monthly staff meetings. CARTA also has a permanent agenda item in all monthly Drivers' Meetings dedicated to safety. Information typically conveyed during these meetings includes safety performance statistics, lessons learned from recent occurrences, upcoming events that may impact service or safety performance, & updates regarding SMS implementation. CARTA also requests information from drivers during these meetings, which is recorded in meeting minutes. Finally, CSO posts safety bulletins & flyers on the bulletin boards located in all bus operator & maintenance technician break rooms & in the 'back hallway,' advertising safety messages & promoting awareness of safety issues.

- Communicating information on hazards & safety risks relevant to employees' roles & responsibilities throughout the agency: As part of new-hire training, CARTA distributes safety policies & procedures, included in the Employee Handbook, to all employees. CARTA provides training on these policies & procedures & discusses them during safety talks between supervisors & bus operators to vehicle technicians. All operators & supervisors will be required to complete ***Assault Awareness & D*e-escalation training** in order to reduce assaults & improve service. For newly emerging issues or safety events at the agency, CARTA CSO issues bulletins or messages to employees that are reinforced by supervisors in one-on-one or group discussions with employees. All new hazards are also communicated within the Safety Committee who collaborate to mitigate those hazards and recorded.

- Informing employees of safety actions taken in response to reports submitted through the ESRs: CARTA provides targeted communications to inform employees of safety actions taken in response to reports submitted through the ESRs, including handouts & flyers, safety talks, updates to bulletin boards & one-on-one discussions between employees & supervisors.

APPENDICES

APPENDIX A

CARTA
STAFF SAFETY ROLES & RESPONSIBILITIES

Completed by: Jeff Hughes, BCD COG Safety Manager	**Date:** August, 2023

Position Title	Staff Member	Position Description	Safety Responsibilities
Accountable Executive	**Ronald E. Mitchum, Executive Director**	49 CFR § 673.5 – Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the PTASP; responsibility for carrying out the agency's TAM Plan; & control or direction over the human & capital resources needed to develop & maintain both the agency's PTASP, in accordance with 49 U.S.C. § 5329(d), & the agency's TAM Plan in accordance with 49 U.S.C. § 5326.	• Ultimate responsibility for carrying out the PTASP • Responsibility for carrying out the TAM Plan • Control or direction over the human & capital resources needed to develop & maintain both plans • Ensuring the agency's SMS is effectively implemented throughout the system • Ensuring action is taken, as necessary, to address substandard performance in the agency's SMS • May delegate specific responsibilities, except ultimate accountability for the agency's safety performance, which always rests with the Accountable Executive
Chief Safety Officer	**Jeff Carty, General Manager**	49 CFR § 673.5 – Chief Safety Officer means an adequately trained individual who has responsibility for safety & reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. A Chief Safety Officer (CSO) for a small public transportation provider (as defined in Part 673) may serve in capacities (operational or maintenance) unless the agency ceases to be a small public transportation provider or operates a rail transit system.	• Is adequately trained • Completes Principles of SMS & SMS Awareness training- Free of cost, FTA sponsored training online courses located: https://tsi-dot.csod.com • Responsibility for safety • Reports directly to agency's Accountable Executive • Authority & responsibility for day-to-day implementation & operation of agency's SMS
Deputy Director of Finance & Administration	**Robin Mitchum, Executive Director of Finance**	Oversees staff & incident reporting & recordkeeping. Manages insurance claim & coordinates with the legal team.	• Coordinates Human Resource functions • Manages incident reporting • Adheres to all safety policies & procedures • Promotes safety awareness throughout the organization • Ensures safety documentation is current & accessible to all employees • Coordinates with outside agencies, including insurance providers & legal representatives

Position Title	Staff Member	Position Description	Safety Responsibilities
Safety Manager	**Tiffany Hopkins, Safety & Training Manager**	Ensure coordinated development & implementation of the SMS & implementing the transit agency's safety policies to all employees.	• Promotes safety awareness throughout the organization • Ensures safety documentation is current & accessible to all employees • Completes Principles of SMS & SMS Awareness training- Free of cost, FTA sponsored training online courses located: https://tsi-dot.csod.com • Maintains a safe working environment • Adheres to all safety policies & procedures • Communicates changes in safety documents to all personnel • Monitors effectiveness of corrective actions • Provides periodic reports on safety performance • Renders independent advice to the CEO, senior managers, & other personnel on safety-related matters • Ensures that safety management has a high priority
Operations Managers / Supervisors	**Denis Komakech, Operations Manager**	Responsible for communicating & overseeing the transit agency's safety policies to all employees.	• Maintains a safe working environment • Adheres to all safety policies & procedures • Full knowledge of all standard & safety operating procedures • Ensures that drivers make safety a primary concern when on the job • Listens & acts upon any safety concerns raised • Immediately reports safety concerns to the CSO/SM • Provides leadership & direction to employees during security incidents • Handles minor non-threatening rule violations • Defuses minor arguments • Determines when to call for assistance • Responds to fare disputes & service complaints • Responds to security related calls with police officers when required, rendering assistance with crowd control, victim/witness information gathering, & general on-scene assistance • Completes necessary security related reports • Takes photographs of damage & injuries • Coordinates with all outside agencies at incident scenes

Position Title	Staff Member	Position Description	Safety Responsibilities
Bus Operator	**Each Team Member**	Drivers are responsible for exercising maximum care & good judgment in identifying & reporting suspicious activities, in managing security incidents, & in responding to emergencies.	• Adheres to all safety policies & procedures • Takes charge of a hazard incident scene until the arrival of supervisory or emergency personnel • Collects fares in accordance with agency policy • Familiar with CARTA / Transdev Employee Manual & Procedures • Attempts to handle minor non-threatening rule violations • Responds verbally to complaints • Attempts to defuse minor arguments • Determines when to call for assistance • Maintains control of the vehicle • Reports all safety incidents to Supervisor on duty • Completes all necessary safety related reports
Maintenance Manager	**Jason Woznac, Maintenance Manager**	Oversees mechanics that perform major running repairs of buses. Fully qualified & completely capable of repairing, maintaining, & rebuilding all parts of all equipment.	• Maintains a safe working environment • Adheres to all safety policies & procedures • Responsible for repair of vehicle components, including engine & transmission rebuilds • Conducts all levels of inspections • Assists in all aspects of repair & maintenance work • Makes bus assignments (if needed) • Maintains a safe working environment & adheres to all safety policies & procedures • Makes road calls, tire changes & repairs, brake relines • Driver reported defects • Supervises bus-washing activities
PTASP Administrator	**Jeff Hughes, BCD COG Safety Manager**	Oversight of the Safety Program to include OSHA EPA & SC DHEC compliance at CARTA facility. Ensure coordinated development/implementation of the PTASP, as well as the annual update. Leads & models a culture of safety & safe practices throughout the organization.	• Promotes safety awareness throughout the organization • Ensures safety documentation is current & accessible to all employees • Conducts periodic safety inspections & audits • Facilitates Safety Committee meetings • Monitors effectiveness of corrective actions • Provides periodic reports on safety performance • Renders independent advice to the CEO, senior managers, & other personnel on safety-related matters • Ensures that safety management has a high priority throughout the organization

APPENDIX B

CARTA
SAFETY ASSESSMENT AND SYSTEM REVIEW

Complete this form semi-annually to identify potential safety hazards. It is imperative that completion of this review includes only accurate and correct information – data collected from this assessment will guide agency resource allocation and focus priority needs appropriately. Not all questions will apply.

Completed by: Jeff Hughes	**Date: July 31, 2023**

SECTION	REVIEW QUESTIONS	YES	NO	N/A
Safety Policies:	• Are all safety policies up to date and reviewed?	☑	☐	☐
	• Is a Public Transit Agency Safety Plan (PTASP) or any other System Safety Plan written for the transit system?	☑	☐	☐
	• Is the Drug and Alcohol Policy current and up to date?	☑	☐	☐
New Hire Employee Files:	• Was there a structured interview conducted and documented?	☑	☐	☐
	• Is the applicant asked the questions relating to previous experience with drug and alcohol testing?	☑	☐	☐
	• Is the offer of employment documented in writing?	☑	☐	☐
	• Is there a pre-employment drug screen?	☑	☐	☐
	• Is there a pre-employment physical exam?	☑	☐	☐
	• Are safety sensitive responsibilities outlined in the job description?	☑	☐	☐
	• Is there a completed Substance Abuse Policy and Drug Free Workplace Policy Acknowledgement form?	☑	☐	☐
	• Is there a Current Policies and Procedures Acknowledgement Form?	☑	☐	☐
Post Hire Employee Files:	• Is a current employee roster available?	☑	☐	☐
	• Are the employee files maintained by the transit system? *As maintained by our Operating Contractor*	☑	☐	☐
	• Do existing employee files contain:			
	➢ Background check?	☑	☐	☐
	➢ Previous employer request form?	☑	☐	☐
	➢ Verification of current driver's license and CDL?	☑	☐	☐
	➢ Current MVR?	☑	☐	☐
	➢ PARS Reports?	☐	☐	☑
	➢ Current copy of physical exam certificate?	☑	☐	☐
	➢ Signed Substance Abuse Policy Acknowledgement?	☑	☐	☐
	➢ Drug and Alcohol Testing Record with COC and authorization forms?	☑	☐	☐
	➢ Record of annual supervisor ride checks and evaluations?	☑	☐	☐
Education and Training:	• Are operator certifications current and up to date?	☑	☐	☐

	• Have managers completed Safety Management Systems (SMS) training?	☐	☐	☒
	• Are employees familiar with OSHA topics, including:			
	➢ Hazard Communication?	☑	☐	☐
	➢ Emergency Action Planning?	☑	☐	☐
	➢ Bloodborne Pathogens?	☑	☐	☐
	➢ Lockout/Tagout?	☑	☐	☐
	➢ Personal Protective Equipment (PPE)?	☑	☐	☐
	➢ Injury Prevention Planning?	☑	☐	☐
	• Have all safety sensitive employees received Drug and Alcohol Training?	☑	☐	☐
	• Do new mechanics receive classroom training?	☑	☐	☐
	• Do existing mechanics receive ongoing training?	☑	☐	☐
Safety Meetings:	• Is there an active Safety Committee at the transit agency?	☑	☐	☐
	• Are safety meetings held on a regular basis?	☑	☐	☐
	• Are safety meetings and sign in sheets documented, with available agendas and minutes?	☑	☐	☐
	• Do senior managers attend safety meetings? **General Manager is Chair of Safety Committee**	☑	☐	☐
	• Do vehicle operators attend safety meetings? **(2-3) Frontline employees**	☑	☐	☐
	• Do mechanics attend safety meetings? **Maintenance Manager**	☑	☐	☐
Incident and Accident Investigation Procedures:	• Are policies in place dictating which incidents are reported and which are not?	☑	☐	☐
	• Are incident report forms kept on board the vehicle?	☑	☐	☐
	• Are accident reports completed for all situations?	☑	☐	☐
	• Are incident/accident reports used as pre-accident training material?	☑	☐	☐
	• Are incident/accident reports used as post-accident training material?	☑	☐	☐
	• Are incident/accident reports used to identify potential hazards and analyzed in a Risk Assessment Matrix (RAM)?	☑	☐	☐
	• Are complaint forms kept on all vehicles?	☐	☑	☐
	• Are all operators provided with safety vests on their vehicles?	☑	☐	☐
	• Are incident/accident photos taken?	☑	☐	☐
Substance Abuse:	• Is there a current and updated Drug and Alcohol Policy?	☑	☐	☐
	• Do all staff members understand the Drug and Alcohol Policy?	☑	☐	☐
	• Is random testing being completed?	☑	☐	☐
	• Is reasonable suspicion testing being completed?	☑	☐	☐
Facility and Shop Inspections:	• Are monthly facility inspections conducted as scheduled?	☑	☐	☐
	• Are facility inspection forms completed properly?	☑	☐	☐
	• Are unsafe conditions or acts, regarding the facility corrected and documented?	☑	☐	☐
	• Are fire extinguishers up to date with annual servicing requirements?	☑	☐	☐

	• Are fire extinguishers inspected on a monthly basis?	☑	☐	☐
	• Are routing inspections of the fire extinguishers documented?	☑	☐	☐
	• Are eye wash stations available with unobstructed access?	☑	☐	☐
	• Are eye wash stations inspected on a scheduled basis?	☑	☐	☐
	• Is machine guarding in place?	☑	☐	☐
	• Are batteries stored safely?	☑	☐	☐
	• Are all containers marked with the contents clearly identified?	☑	☐	☐
	• Are floors clear of tripping hazards?	☑	☐	☐
	• Are hazardous materials stored safely?	☑	☐	☐
	• Are emergency exits clearly marked?	☑	☐	☐
	• Are lights out?	☑	☐	☐
	• Are jack stands available for use?	☑	☐	☐
	• Are jack stands used whenever a vehicle is elevated on a lift?	☑	☐	☐
	• Is a lock out tag out program in place?	☑	☐	☐
Asset Management (Vehicles):	• Is a current and updated list of vehicles readily available?	☑	☐	☐
	• Is all maintenance activity completed on vehicles tracked?	☑	☐	☐
	• Is a regular maintenance schedule written and followed?	☑	☐	☐
	• Are work order forms, service order forms and parts requested documented?	☑	☐	☐
	• Are vehicle inspection forms completed on a regular basis and available?	☑	☐	☐
	• Are habitual maintenance issues reported to SCDOT?	☑	☐	☐
	• Are maintenance issues analyzed and used to forecast future vehicle needs?	☑	☐	☐
	• Are maintenance issues analyzed and used to identify potential hazards and evaluated in a Risk Assessment Matrix (RAM)?	☑	☐	☐
	• Are pre-trip inspection forms completed daily?	☑	☐	☐
	• Are post-trip inspection forms completed daily?	☑	☐	☐

Comments: *Switched contractors from TransDev to National Transit Express in July, 2023*

APPENDIX C

CARTA
FACILITY SAFETY and SECURITY ASSESSMENT

Complete this form semi-annually to identify potential safety hazards. It is imperative that the completion of this review includes only accurate and correct information – data collected from this assessment will guide agency resource allocation and focus priority needs appropriately. Not all questions will apply.

Completed by: Jeff Hughes, BCD COG Safety Manager	**Date:** July 31, 2023

SECTION	REVIEW QUESTIONS	YES	NO	N/A
Buildings and Facility Grounds:	• Are facility grounds randomly and frequently patrolled?	☑	☐	☐
	• Are daily security sweeps conducted?	☐	☑	☐
	• Are smoke/fire/carbon monoxide detectors provided and working?	☑	☐	☐
	• Are distribution and number of keys known and controlled?	☑	☐	☐
	• Are all keys labeled as "DO NOT DUPLICATE"?	☑	☐	☐
	• Are all unoccupied areas locked and secured?	☑	☐	☐
Lighting:	• Is entire perimeter of facility properly illuminated?	☑	☐	☐
	• Is lighting mounted at approximately second story level?	☑	☐	☐
	• Are lights provided over all entrance doors?	☑	☐	☐
	• Is lighting provided in staff parking areas?	☑	☐	☐
Entrance Doors and Windows:	• Are all doors:			
	➢ Built of commercial grade with metal framing?	☑	☐	☐
	➢ Outside hinges hidden and protected from vandalism?	☑	☐	☐
	➢ Provided with a commercial grade, one-sided lock?	☑	☐	☐
	➢ Provided with push "panic" bar releases?	☑	☐	☐
	➢ In case of breakage or opening are all windows and doors connected to a central station alarm?	☐	☐	☑
Electronic Surveillance:	• Is the entire perimeter of facility protected by a CCTV system?	☑	☐	☐
	• Is this system monitored by management and/or a security company?	☑	☐	☐
	• Is this system always on or activated by motion sensors?	☑	☐	☐
Non-Employee Access:	• Is access restricted to persons without proper credentials and clearance?	☑	☐	☐
	• Are supply deliverers required to show proper I.D. and sign-in a log book?	☑	☐	☐
	• Are all non-employees accompanied and/or observable at all times?	☑	☐	☐

Surrounding Environment:	• Are there other non-City/County buildings connected to the facility that may be vulnerable to unauthorized entry to City/County property?	☐	☐	☑
	• Are all utility components (power transformers, back-up generators) protected and secured from vandalism or attack?	☑	☐	☐
	• Are all outdoor storage areas adequately lighted and secured?	☑	☐	☐
Material Storage:	• Are all hazardous and flammable materials properly identified?	☑	☐	☐
	• Are all materials properly labeled, stored, and secured?	☑	☐	☐
Forms and Written Plans:	• Are emergency numbers (police, fire, ambulance, FBI) current and prominently displayed at each phone?	☐	☑	☐
	• Is a Chain of Command and emergency call list prominently displayed?	☐	☑	☐
	• Are employees trained and checklists provided on how to handle a physical threat or incident called in on the phone?	☐	☑	☐
Evacuation Plan/Procedures	• Are there evacuation plans for this facility?	☑	☐	☐
	• Are staff members trained on this plan?	☑	☐	☐
	• Are assembly areas and alternate assembly areas identified, validated and coordinated with the County Emergency Management Office?	☐	☑	☐
	• Have the primary and alternate assembly areas, evacuation sites, and evacuation routes been verified and coordinated with all appropriate agencies?	☑	☐	☐
	• Has the Emergency Evacuation Plan been reviewed, coordinated, and briefed to staff as appropriate?	☑	☐	☐
Training:	• Is an orientation program in place for each new staff member?	☑	☐	☐
	• Do all staff members receive safety and security training appropriate to their position and level of responsibility?	☑	☐	☐
	• Are periodic safety and security training and briefings completed with staff?	☑	☐	☐
	• Do all new staff members receive briefings on the City/County Evacuation Plan, the Disaster Preparedness Plan, and other security policies and procedures?	☐	☑	☐
Administrative Procedures:	• Is a record of emergency data on file for each staff?	☑	☐	☐
	• Have incident reporting format and procedures been established and staff briefed on them?	☑	☐	☐
	• Are all incident reports treated with confidentiality and transmitted by secure means to the appropriate City/County department?	☑	☐	☐
	• Are background checks conducted and verified on all prospective new hires?	☑	☐	☐
Cash Handling and Transfer:	• Has a secure method for receipt, transfer and storage of cash been established and have appropriate staff members been trained on them?	☑	☐	☐
	• Is cash transported by at least two individuals with cash divided between them?	☐	☐	☑
	• Do all staff members understand that in the event of a robbery they should never risk their lives to protect cash or other valuables?	☑	☐	☐

Fire and Electrical Safety:	• Are fire extinguishers installed in all appropriate locations?	☑	☐	☐
	• Are smoke and heat detectors installed, at least one on each floor?	☑	☐	☐
	• Is a first aid kit present and maintained?	☑	☐	☐
	• Are all electrical devices, outlets, circuit breakers and cords free of damage that may pose a shock hazard?	☑	☐	☐
	• Are all electrical circuit, gas, and telephone boxes, if accessible from the outside, locked to prevent tampering?	☑	☐	☐
	• Do any non-employees have access from outside the building to any fire escapes, stairways, and/or the roof?	☑	☐	☐
	• Are all outdoor trash containers and storage bins located away from the building in the event of a fire?	☑	☐	☐

APPENDIX D - SRM MATRIX and WORKBOOK

The tabs in this workbook relate to Section 2.3 – Risk Mitigation. The workbook contains the following:

SRM-SA Terms

Terms used in SRM and SA processes.

Safety Risk Management (SRM) Risk Register

Risk register, used to associate identified hazards (and existing mitigations) that are being tracked to their associated risk level, as determined by CARTA. Includes columns for planned implentation dates for proposed mitigations, department(s) responsible for mitigation implementation, and contact person(s).

Safety Assurance (SA) Tracker

Hazard tracker, used to track identified hazards and mitigations as determined CARTA. Includes columns for safety performance targets impacted, department(s) responsible for mitigation implementation, and the means by which a hazard/mitigation is being monitored.

Severity Matrix

Matrix for rating severity; includes criteria for each rating.

Likelihood Matrix

Matrix for rating likelihood/freqeuency; includes practical examples for each rating.

Risk Assessment Matrix

Combined severity/likelihood matrix, used by CARTA to assess each identified hazard for its risk to the transit system.

With respect to prioritization of safety risk mitigations, the process and criteria for determining the level of safety risk associated with each hazard is outlined on the Plan. The included matrices present the framework used to formalize the process, as suggested in FTA's Sample Safety Risk Assessment Matrices for Bus Agencies, presented at https://www.transit.dot.gov/regulations-and-guidance/safety/public-transportation-agency-safety-program/sample-safety-risk

SAFETY RISK MANAGEMENT / SAFETY ASSURANCE - GUIDE TO TERMS		
ELEMENT	**DESCRIPTION**	**EXAMPLE**
Hazard	Any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilites, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.	The hazard in FTA's participant guide scenario is the out of calibration wheel balancer.
Type of Hazard	Classification used to help organize identified hazards to support an agency's data management and hazard prioritization activities. The three (3) main types of hazards include: Organizational (shortcomings in the organizational processes), Technical (the condition of the equipment, facilities, and infrastructure), and Environmental (the natural environment).	FTA's example hazard in the scenario is a technical hazard, as it pertains to an agency's equipment, rolling stock, infrastrucure, and facilities.
Identification date	The date the hazard was identified though agency means. This information can be used for evaluating the effectiveness of safety risk management activities by providing a starting point to see how long the agency takes to analyze and mitigate the hazard.	
Identification source	How the hazard was identified. This information can provide insight into the effectiveness of the safety data sources available to the agency and can help identify items for improvement.	In FTA's scenario, the hazard was identified by a safety specialist upon reviewing the Safety Event Investigation
Date of analysis	The date the hazard was analyzed. This information can be used for evaluating the efficiency of the analysis process and determine if certain hazards are more challenging to analyze than others.	
Worst credible potential consequence(s)	The effect of a hazard involving injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.	The worst credible potential consequence for the hazard in FTA's scenario is a collision resulting in death, permanent injury, or destruction of property, with damage (losses over
Existing mitigations (hard or soft)	The controls already exisiting within the agency to mitigate the potential consequence(s) of the hazard.	**Pre-Trip Inspection:** Bus operators are required to check tires for excessive wear as part of their pre-trip inspection. **Routine Bus Maintenance and Inspections:** Tires are inspected and replaced as part of the agency's regular maintenance and inspection program. **Wheel Balancer Calibration:** SOP governs the calibration of the wheel balancer.
Severity of consequences	Quantified effect of the potential consequence(s) of the hazard in the delivery of transit services and/or supporting activities, taking into account existing mitigations.	In FTA's scenario, the severity was identified by looking at historical data from the agency.
Likelihood of consequences	Quantified probability that the potential consequence(s) of the hazard materialize, taking into account existing mitigations. Calendar days, weeks, months, years, or decades are often used as time periods to support assessments of likelihood in safety risk assessment.	
Safety risk index	Tolerability of the potential consequence(s) of the hazard, taking into account existing mitigations. It is the primary parameter for deciding priorities in the allocation of resources.	Combining the likelihood and severity of the potential consequence results in a risk rating.
Further Mitigation action	Additional controls that the agency needs to incorporate to mitigate the potential consequence(s) of the hazard if the safety risk exceeds tolerability criteria.	

Revised safety risk index	Safety risk index that meets the tolerability criteria, following incorporation of additional controls to mitigate the potential consequence(s) of the hazard.	
Revised safety risk index date	The date the revised safety index was determined. This information can be used to evaluate the efficiency of the analysis process and determine if certain hazards are more challenging to analyze than others.	
Department responsbile for mitigation	Agency department (or other subdivision) taksed with the implementation of the additional controls to mitigate the potential consequence(s) of the hazard.	
Estimated implementation date	The date the mitigation(s) are expected to be implemented. This information is used to track the completion of mitigations and identfiy any potential resources or other concerns.	
Contact person	Primary point of contact within the department responsible for mitigation with other departments involved in safety risk management.	
Consequence	Effect of the hazard in the delivery of tranist services and/or supporting activities, carried over from safety risk management section.	
Safety performance indicator (SPI)	Parameter selected to monitor and measure the effectiveness of the additional controls incorporated to mitigate the potential consequence(s) of the hazard.	
Safety performance indicator (SPI) value	Quantification of the parameter selected to monitor and measure the effectiveness of the additional controls incorporated to mitigate the potential consequence(s) of the hazard.	
Safety performance target	Projected improvement over the SPI value resulting from the additional controls incorporated to mitigate the potential consequence(s) of the hazard.	
Timeframe	Information for evaluating the effectiveness of safety performance monitoring and measurement activities.	
Monitoring means	Resources and activities to monitor and measure the effectiveness of the additional controls incorporated to mitigate the potential consequence(s) of the hazard.	
Department responsbile for monitoring mitigation effectiveness	Agency function primarily tasked with monitoring and measuring the effectiveness of the additional controls incorporated to mitigate the potential consequence(s) of the hazard.	

SAFETY RISK MANAGEMENT - RISK REGISTER for CARTA PTASP

HAZARD			IDENTIFICATION		Date of Analysis	Worst Credible Potential Consequence(s)	Existing Mitigations	CONSEQUENCES		Safety Risk Index	Further Mitigation Action	REVISED SAFETY RISK INDEX		Department Responsible for Mitigation	Est.'d Implementation Date	Contact Person
ID	Hazard	Type	Date	Source				Severity	Likelihood			Revised Index	Date			
1	Out of calibration wheel balancer	Technical (equipment)	7/20/2023	Safety Event Investigation Report		Collision resulting in death, permanent injury, or destruction of property (losses over $1,000,000)	Pre-trip inspection; routine inspection and maintenance; wheel balancer inspection and calibration	1-Catastrophic	C-Occasional	1C-High; Unacceptable - action required; must be mitigated or eliminated	Develop and implement a maintenance equipment calibration audit program; revise tire inspection procedure	1E-Low; Acceptable - acceptable with management review		Maintenance		Tiffany Hopkins
2	Fixed Object Collisions	Environmental	3/17/2021	Safety Event Investigation Report	Apr-21	Collision resulting in injury or destruction of property	Training	4-Negligible	B-Probable	4B-Medium; Undesirable and a decision is needed regarding acceptability	Training; On-site review; Supervision, Contact muncipality			Safety		Tiffany Hopkins
3	Mirror Strikes	Environmental	3/17/2021	Safety Event Investigation Report	Apr-21	Collision resulting in destruction of property (less than $10,000)	Training	4-Negligible	A-Frequent	4A-Medium; Undesirable and a decision is needed regarding acceptability	Supervision; Training; On-site review; Contact muncipality			Safety		Tiffany Hopkins
4	Assault on Operators	Environmental	7/17/2023	National Trend	Apr-21	Bodily injury, service diruption, or mental anguish	Training	3-Marginal	C-Occasional	3C-Medium; Undesirable and a decision is needed regarding acceptability	Policy change; police presence			Safety		Tiffany Hopkins
5	Following Distance	Organizational	6/17/2021	Supervisor Oversight	Jul-21	Collision resulting in injury or destruction of property	Training	3-Marginal	C-Occasional	3C-Medium; Undesirable and a decision is needed regarding acceptability	None			Safety		Tiffany Hopkins
6	Vehicle Contact on Yard	Environmental	6/17/2021	Safety Event Investigation Report	Jul-23	Collision resulting in destruction of property (less than $10,000)	Training	4-Negligible	C-Occasional	4C-Low; Accepable by the CSO without additional review	Messaging; Tranining; dismissal			Safety		Tiffany Hopkins

SAFETY ASSURANCE TRACKER for CARTA PTASP

ID	HAZARD Hazard	Type	Consequence	SAFETY PERFORMANCE Indicator	Value	Target	Timeframe	Mitigations	Monitoring Means	Department Responsible for Monitoring Mitigation
	Out of calibration wheel balancer	Technical (equipment)	Collision resulting in death, permanent injury, or destruction of property (losses over $1,000,000)	Tire failure rate	Annual rate of tire failures (in VRM)	1 tire failue in 10,800,00 VRMs per year	90 days	Develop and implement a maintenance equipment calibration audit program	Record review, workplace observation	Safety Department
							180 days	Revise tire inspection guidelines to include condemning limits for patch wear	Document review, workplace observation, inspections	
2	Fixed Object Collisions	Environmental	Collision resulting in injury or destruction of property	Incident Event	Annual rate (in VRM)		90 days	Training; On-site review; Supervision, Contact muncipality	Document review, workplace observation, inspections	Safety Department
							180 days			
3	Mirror Strikes	Environmental	Collision resulting in destruction of property (less than $10,000)	Incident Event	Annual rate (in VRM)		90 days	Supervision; Training; On-site review; Contact muncipality	Document review, workplace observation, inspections	Safety Department
							180 days			
4	Assault on Operators	Environmental	Bodily injury, service diruption, or mental anguish	Incident Event	Annual rate (in VRM)		90 days	Policy change; police presence	Document review, workplace observation, inspections	Safety Department
							180 days			
5	Following Distance	Organizational	Collision resulting in injury or destruction of property	DriveCam rate	Annual rate (in VRM)		90 days	None	Document review, workplace observation, inspections	Safety Department
							180 days			
6	Vehicle Contact on Yard	Environmental	Collision resulting in destruction of property (less than $10,000)	Incident Event	Annual rate (in VRM)		90 days	Messaging; Tranining; dismissal	Document review, workplace observation, inspections	Safety Department
							180 days			

Safety Risk Assessment Matrix		
Severity Categories		
Description	**Severity Category**	**Criteria**
Catastrophic	**1**	Could result in one or more of the following: Death Multiple serious injuries requiring hospitalization Irreversible environmental impact Monetary loss equal to or exceeding $1,000,000
Critical	**2**	Could result in one or more of the following: Serious injury requiring hospitalization Reversible significant environmental impact Monetary loss equal to or exceeding $250,000 but less than $1,000,000
Marginal	**3**	Could result in one or more of the following: Injury requiring medical treatment beyond first aid that may result in one (1) or more lost work day(s) Reversibe moderate environmental impact Monetary loss equal to or exceeding $10,000 but less than $250,000
Negligible	**4**	Could result in one or more of the following: Injury requiring first aid Minimal environmental impact Monetary loss less than $10,000

Likelihood Levels			
Description	**Level**	**Individual item**	**System or Vehicle Fleet**
Frequent	**A**	Likely to occur often in the life of an item.	Continuously experienced. Potential consequence may be experienced more than once in 40,000 vehicle revenue miles (VRM).
Probable	**B**	Will occur several times in the life of an item.	Will occur frequently. Potential consequence may be experienced once per 40,000 to 480,000 VRM.
Occasional	**C**	Likely to occur sometime in the life of an item.	Will occur several times. Potential consequence may be experienced once per 480,000 to 4,800,000 VRM.
Remote	**D**	Unlikely, but possible to occur in the life of an item.	Unlikely but can reasonably be expected to occur. Potential consequence may be experienced once per 4,800,000 to 14,400,000 VRM.
Improbable	**E**	So unlikely, it can be assumed occurrences may not be experienced in the life of an item.	Unlikely to occur, but possible. Potential consequence may be experienced less than once per 14,400,000 VRM.

Sample Safety Risk Assessment Matrix

Risk Assessment Matrix				
Severity / **Likelihood**	**Catastrophic** **1**	**Critical** **2**	**Marginal** **3**	**Negligible** **4**
Frequent - A	HIGH - 1A	HIGH - 2A	HIGH - 3A	MEDIUM - 4A
Probable - B	HIGH - 1B	HIGH - 2B	MEDIUM - 3B	MEDIUM - 4B
Occasional - C	HIGH - 1C	MEDIUM - 2C	MEDIUM - 3C	LOW - 4C
Remote - D	MEDIUM - 1D	MEDIUM - 2D	LOW - 3D	LOW - 4D
Improbable - E	LOW - 1E	LOW - 2E	LOW - 3E	LOW - 4E

APPENDIX E

CARTA HAZARD ASSESSMENT LOG

This form provides a record of identified hazards and actions taken to eliminate or mitigate the associated risks. The recommended action should be associated with a specified individual (i.e. a supervisor, manager, or front-line personnel), and must include a target date for completion. As a rolling log, entries for identified hazards and their associated mitigations should never be removed, even after required action(s) is completed. Any related forms, logs, or records should be retained permanently.

Completed by: Jeff Hughes, BCD COG Safety Manager	**Last Updated: Aug 3, 2023**

Risk Type	Risk Description/Date	Current Measures to Reduce Risk	Risk Rating Likelihood	Risk Rating Severity	Risk Rating Value (Likelihood x Severity)	Further Action Required to Reduce Risk	Staff Responsibility
Human Error	**Non-compliance with agency maintenance protocol**	• **Minimum competency requirements** • **Effective safety culture in agency (maintenance department)** • **Effective task planning** • **Availability of procedures** • **Procedure reviews and simplification into tasks** • **Recurrent training**	**C**	**4**	**20**	• **Introduce compliance monitoring** • **Effective supervision including work compliance assessment** • **Competency assessments** • **Maintenance policy to reinforce need for compliance**	• **Safety Assurance** • **Line Manager** • **Maintenance Manager**
Fixed Object Collisions	**Vehicle collision with objects**	• **Reflective tape** • **Training** • **Messaging**	**B**	**4**	**4B – Medium**	• **Effective supervision** • **Training** • **On-site Review** • **Contact Municipality**	• **Chief Safety Officer** • **Safety Manager** • **Operations Manager**
Mirror Strikes	**Vehicle collision with another vehicle**	• **Reflective tape** • **Training** • **Messaging** • **Reposition mirror**	**A**	**4**	**4A - Medium**	• **Effective supervision** • **Training** • **On-site Review** • **Contact Municipality**	• **Chief Safety Officer** • **Safety Manager** • **Operations Manager**

Assault on Operators	**Verbal or physical altercation with passengers**	• Training • De-escalation techniques • Physical barrier • Assault awareness training	**C**	**3**	**3C – Medium**	• Policy changes • Training • Awareness • Police presence	• Chief Safety Officer • Safety Manager • Operations Manager
Following Distance	**Distance between vehicles in-service**	• Training • Messaging	**C**	**3**	**3C – Medium**	• Training • Awareness	• Chief Safety Officer • Safety Manager • Operations Manager
Vehicle Contact on Yard	**Incidents on the yard between vehicles**	• Parking sequence • Analysis of layout • Circulation pattern • Vehicle assignment & Rollout sequencing	**C**	**4**	**4C – Low**	• Messaging • Training • Awareness • Dismissal	• Chief Safety Officer • Safety Manager • Maintenance Manager
Vehicle Backing	**Collisions in parking lot of service providers**	• Training • GOAL • Working with property owners	**B**	**4**	**4B - Medium**	• Messaging • Awareness • Training • Dismissal	• Chief Safety Officer • Safety Manager • Maintenance Manager
Assaults to Buses	**Physical damage done to bus by a human being**	• Training • Awareness • De-escalation techniques	**B**	**4**	**4B - Medium**	• Messaging • Awareness • Training	• Operations Manager • Safety Manager
		•				•	•

APPENDIX F

CARTA PRIORITIZED SAFETY RISK LOG

This form is used to organize identified safety risks facing CARTA. The log should be updated frequently to demonstrate continual progress towards risk reduction through mitigation strategies. A timeline is used to highlight projected completion dates.

Completed by: Jeff Hughes	**Last Updated: August 2, 2023**

Priority	Risk Description	Planned Mitigation Strategies	Outcomes of Planned Mitigation Strategies	Responsible Staff	Timeline	Status
1	Non-compliance with agency maintenance protocol	• Introduce compliance monitoring • Effective supervision including work compliance assessment • Competency assessments • Maintenance policy to reinforce need for compliance	• Full compliance	• Safety Assurance • Line Manger • Maintenance Manager	• Begin January 2020 • Complete August 2020	Complete
2	Fixed Object Collisions	• Reflective tape • Training • Messaging	• Reduction in incidents	• Safety Manager	• Begin March 2021	Ongoing
3	Mirror Strikes	• Reflective tape • Training • Messaging • Reposition mirror	• Reduction in incidents	• Safety Manager	• Begin January 2021 • On-going	Open
4	Assault on Operators	• Training • De-escalation techniques • Physical barrier	• Reduction in incidents • **Zero incidents as 8/2023**	• Safety Manager	• Begin April 2021 • Complete May 2022	Complete
5	Following Distance	• Training • Messaging • Review Drivecam events • Radio Message	• Reduction in incidents	• Safety Manager	• Begin June 2021 • Complete September 2021	Ongoing
6	Vehicle Contact in Yard	• Parking sequence • Review Layout • Circulation pattern • Training	• Reduction in incidents	• Safety Manager	• Begin September 2021 • Complete February 2022	Ongoing
7	Vehicle Backing	• Training • GOAL • Working with property owners	• Reduction in incidents	• Safety Manager	• Begin December 2021 • Complete July 2022	Complete
8		•	•	•	•	

9		•	•	•	•	
10		•	•	•	•	

APPENDIX G
CARTA
SAFETY PERFORMANCE MATRIX

This form allows CARTA to organize, monitor, and evaluate identified safety goals and objectives/outcomes.

Completed by: Jeff Hughes	**Last Updated:** August, 2023

GOAL 1: SMS TO REDUCE CASUALTIES/OCCURRENCES CARTA will utilize a safety management systems framework to identify safety hazards, mitigate risk and reduce casualties and occurrences resulting from transit operations.			
OBJECTIVE/OUTCOME	**METRICS**	**2022 SAFETY PERFORMANCE**	**2023 TARGETS**
Reduce the number of reportable fatalities	Total number of reportable fatalities	Zero	Zero
	Rate of reportable fatalities per 1,000,000 VRM	Zero/1,000,000 passenger trips	Zero/1,000,000 VRM
Reduce the number of reportable injuries	Total number of reportable injuries	5 / Year	5/ Year
	Rate of reportable injuries per 1,000,000 VRM	1.6	1.4
Reduce the number of reportable safety events	Total number of reportable safety events	30	30
	Rate of reportable safety events per 1,000,000 VRM	9.3	8.6
Reduce mean distance between major mechanical failures	Average distance between major mechanical failures	25,000 miles	30,000 VRM
Increase assessment and analysis of existing personnel, equipment and procedures to identify and mitigate any potential safety hazards	Number of safety audits, inspections, or assessments completed per specified period of time	4	12
Develop a corrective action plan and mitigation strategies to address identified hazards	Percent of corrective action strategies completed per specified period of time	90%	90%
GOAL 2: CULTURE CARTA will foster agency-wide support for transit safety by establishing a culture where management is held accountable for safety and everyone in the organization takes an active role in securing transit safety.			
OBJECTIVE/OUTCOME	**METRICS**	**2022 SAFETY PERFORMANCE**	**2023 TARGETS**
Establish regular transit safety meetings comprised of staff at varying levels, including executives, officers, managers, operators and maintenance personnel	Number of meetings per year	4 per year	4 per year
Develop and promote a Non-Punitive Reporting Policy	100 percent of staff receiving Non-Punitive Reporting Policy	100 percent	100 percent
Increase the reporting of near miss occurrences and incidents that would otherwise go unreported	Number of near miss occurrences/incidents reported per year	30 per year	50 per year
Increase safety material distributed amongst employees and the general public	Number of manuals, brochures, posters or campaigns distributed per year	12 per year	12 per year

Charleston Area Regional Transportation Authority

MEMORANDUM

Date: September 11, 2023
To: CARTA Board of Directors
From: Ronald E. Mitchum, Executive Director
Subject: Transit Planning Project Updates

Please find the progress reports for transit planning projects.

1. Service Planning Initiatives (Project Manager: Megan Ross)
2. Downtown Route Study (Project Manager: Megan Ross)
3. US 52 BRT Study (Project Manager: Sharon Hollis/Megan Ross)
4. CARTA On-Demand (TNC Pilot Project) (Project Manager: John Lambert)
5. Shelter Improvement Program (Project Manager: Belen Vitello)
6. SPARE/TCL Project (Project Manager: Belen Vitello)
7. Shipwatch Square Transit Center (Project Manager: Sharon Hollis)
8. Vanpool Program (Project Manager: Courtney Cherry)
9. Transit Oriented Development Study (Project Manager: Sharon Hollis)
10. Lowcountry Rapid Transit (Project Manager: Sharon Hollis)

Please let me know if you need additional information.

1. Service Planning Initiatives:

- Staff has the final memo from Nelson/Nygaard regarding the APC project. Staff will be working on the next steps with IT.
- Staff participated in the Palmetto Commerce Park Roundtable held by the Charleston County Economic Development. Staff provided information on route planning along the corridor, Vanpool and the LCRT.
- Staff has begun work analyzing the Rt. 10 to improve the route on-time performance and the overall productivity of the route. This involves looking at frequency, operator, and ridership feedback. The goal of this is to increase ridership along the corridor.
- Staff has started basic planning for the closure of McMillian Avenue. Staff has been talking with NBIF Construction on potential route adjustments to serve N. Hobson Ave. This would also serve Clemson University as well. Staff has adjusted the Rt. 104 to detour since the closure of McMillian Avenue to St. John's Avenue to start. Staff is making plans to survey the Rt. 11 passengers to determine where people are traveling to and from.
- Staff finalized comments on the Dorchester Rd. safety audit. Wrapping up the three audits that transit was asked to provide feedback on.
- Staff has begun working with the National Express staff to work out the relief plan for electric buses. Bus swaps are happening either midday or early evening due to low battery percentages. Currently this causes strain on on-time performance and maintenance who typically make the bus swaps in the evening.
- Staff helped with two different public outreach events, one for TOD and the other for LCRT.
- Staff ended the month with hurricane/ tropical storm preparations for the storm that came on the 30th and 31st of the month.

2. Downtown Route Study

- Staff with Nelson/Nygaard held the 2nd TAG meeting on August 14th, 2023 for the Downtown Charleston Transit Study. Staff also participated in multiple avenues of public outreach this month, including 2nd Sunday, First Day Fest, and an Open House. The week rounded out with 3 different focus groups with MUSC, the City of Charleston- Traffic and Transportation, and members of the business district.

3. US 52 BRT Study

- Procurement is underway
- Project anticipated to begin in Late Fall 2023

4. CARTA OnDemand (TNC Pilot)

Staff contracts with service providers Uber and Lyft to provide subsidized transportation. CARTA OnDemand launched on February 1, 2021. The service offers door-to-door subsidized services for seniors (55+) and Tel-A-Ride customers and covers the Tel-a-Ride service area Monday through Friday, between the hours of 7 AM and 5 PM. Senior customers pay an initial $4 with a maximum trip subsidy of $21 and any surplus amount being charged to the rider. Tel-A-Ride customers pay an initial $4 with a maximum trip subsidy of $30 and any surplus amount being charged to the rider.

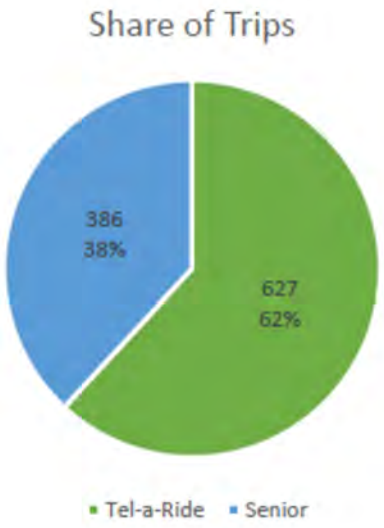
In August 2023, there were seventy-one (71) senior riders and seventy-eight (78) Tel-A-Ride customers actively using OnDemand service. Also in August, CARTA OnDemand had its highest monthly ridership yet and provided a total of 1068 trips with 61% of the trips being taken by paratransit customers and 39% being taken by senior customers. In August, the 1068 trips (Tel-A-Ride and senior) averaged $8.89 per trip which is slightly up from July's average of $8.72 per trip. Tel-A-Ride trips averaged $9.35 and senior trips averaged $8.16. To date (February 2021 – present), CARTA has spent a total of $116,715 on the CARTA OnDemand program which includes trips costs and marketing expenses.

Lyft Statistics – August 202

- 55 Trips provided
- Average Trip Cost: $10.58
- 13 Unique Riders
- Total Cost: $581.77

Uber Statistics – August 2023

- 1013 Trips provided
- Average Trip Cost: $8.80
- 97 Unique Riders
- Total Cost: $8,904.15



5. CARTA Shelter Improvement Program (SIP)

Bus stops play an important role in how our riders experience transit. CARTA is working to continuously improve our bus stops by providing the best amenities for riders as they board and depart the bus.

Shelters/Benches in development:

- Glenn McConnell Parkway- Working with engineers to resolve design issues.
- 583 Savannah Hwy / Oak Forest Dr – Shelter in progress
- 135 The Citadel- Shelter in progress
- 305 Morrison Dr / Stuart St- Shelter in progress
- 300 Morrison Dr / Stuart St – Shelter in progress
- 304 Morrison Dr / Jackson St - Bench Only in progress
- 302 Morrison Dr / Jackson St (Sanders-Clyde Elementary)- Shelter
- Savage Road: Installation of sidewalks and shelter pads scheduled to start in Fall 2023
- Dorchester Road – SCDOT Safety Audit, currently reviewing for SCDOT
- 484 King St / Mt. Pleasant St- CARTA initiated infrastructure
- 329 America St / Columbus St- CARTA initiated infrastructure
- 783 Calhoun St / Ashley Ave- CARTA initiated infrastructure

- 575 Calhoun St / Jonathan Lucas St (far side) - CARTA initiated infrastructure
- 485 Jonathan Lucas St / MUSC Quad- CARTA initiated infrastructure
- 100 Military Magnet Academy- CARTA initiated infrastructure
- 65 Rivers Ave / Rebecca St- CARTA initiated infrastructure
- 549 Waterfront Park- CARTA initiated infrastructure
- Homes of Hope Affordable Housing- HWY 61

Guidelines

Transit Design Guidelines have been adopted by CARTA Board and staff continues to work with municipalities and developers on implementing these guidelines. These guidelines are being shared with developers through development review.

Solar Lighting Project

We are ready to move forward with more solar lights. CARTA met with bus drivers during their safety meetings to discuss new locations for solar light in September. 112 locations were selected for Phase 2. We have received 50 lights. We are currently working on installing them.

Digital Signage

This project has been successfully completed. Continue to monitor digital signs. We are seeing issues with accuracy and have shared those concerns to have them updated.

Staff is currently looking for new locations for digital signage as part of the rebranding project.

Three locations have been selected for new digital signs.

- Stop ID No. 51 – Meeting St / Spring St
- Stop ID No. 783 – Calhoun St / Ashley Ave
- Stop ID No. 52 – Mary St / Meeting St

Locations:

502 Calhoun St / Jonathan Lucas St (near side)

790 Visitors Center on John St

539 Aquarium (Concord St)

461 Visitors Center / Charleston Museum

486 Spring St / Hagood Ave

114 Meeting St / Johnson St NB

565 Bee St / VA Hospital

611 Citadel Mall

787 Dorchester Village Shopping Center (Park & Ride)

17 Rivers Ave./ Remount Rd.

296 Dorchester Rd / Leeds Ave SB (at Shelter)

782 Rivers Ave Park & Ride

137 N. Charleston SuperStop

103 N. Charleston Super Stop on Rivers Ave

6. Spare/TCL On-Demand Project

The Berkeley-Charleston Dorchester Council of Governments (BCDCOG) is working with SPARE to incorporate software, hardware, and related services necessary to facilitate paratransit-friendly, demand-response transit service delivery for the TriCounty Link (TCL) transit system. Our initial kickoff meeting was held in August. We will be having a follow-up meeting with our team to discuss the current system and strategies to incorporate the new changes and system.

7. Shipwatch Square/Transit Hub

FTA Low No/Bus & Bus Facilities competitive grant was awarded for facility, workforce development and battery electric buses. Grant programming is underway. NEPA and Design are being scoped.

8. Lowcountry Go Vanpool

BCDCOG staff continues to promote the Lowcountry Go Vanpool program through employer outreach, printed marketing materials, outreach events, and virtual presentations. Outreach is still focused on large regional employers, coordinating with, and recruiting local employers with parking difficulties has been a large objective. BCDCOG staff is offering virtual and in-person presentations to provide individuals with an overview of how the vanpool service operates. The Lowcountry Go Vanpool Coordinator continues to promote the program through solicited participation and outreach events.

In August,

- 8 community outreaches to areas such as local universities, libraries, malls (Tanger and Towne Center), and large employers in Berkeley and Dorchester County.
- 8 presentations or table events, providing information on the program, how to get started, and finding ways to implement.
- 4 new inquiries for vanpool services and several follow-ups on previous inquires that were pending paperwork completion.

- Weekley promoting on social media and shared in multiple community business groups. Vanpool Flyer has been added to the September addition of the Mt. Pleasant Towne Center Newsletter.

The Vanpool Coordinator went to local universities, providing flyers to promote the Vanpool program for students, and local libraries for possible job seekers. Information was also provided to Tanger and Towne Center, as their many employees would be starting work around similar times and is localized in one large area. Presented the program in a Lunch & Learn with HR Directors to Business Services to help enhance their hiring process. Met with workforce consultants at SC Dept. of Social Services to help aid participants with transportation barriers. Presented to the US Dept of State's Green Council to provide "greener" options for their employees, in regards to commuting. Two table events where information was provided and questioned answered at Summerville Medical Center and Joint Base Charleston again for their Newcomer Orientations. An information session was done at Lighthouse for the Blind in attempt to answer questions and find a solution to their transportation situation. Presented at a roundtable event for the Palmetto Commerce businesses and Charleston Chamber of Commerce to help aid in transportation solutions for businesses where public transit is limited. Presented, along with LCRT, for the Goose Creek NAACP. Additionally, the vanpool program continues to be promoted internally throughout Summerville Medical Center and US Department of State. Lowcountry GO Vanpool continues to work with SC Works Regional Managers and Workforce Consultants to aid in outreach to large employers and potentially assist in work training opportunities.

BCDCOG Staff continues to promote the vanpool program's pilot period of a monthly fare of $30 per rider regardless of trip distance, offering the first month free to incite interest. Additionally, offering a discounted rate to the drivers to attract more volunteers. Staff continues to promote the program through social media, such as Facebook posts and community groups, and business newsletters. Lowcountry Go's fleet of 11 vehicles (four 7-passenger and seven 15-passenger) are leased on a first come, first serve basis. The vans are branded with decals containing the Lowcountry Go Vanpool logo and telephone number. The service can accommodate riders in the rural and urban areas of the region as long as one leg of the commute is in the urban area.

9. Transit Oriented Development Study

The Project team continued to hold stakeholder and coordination meetings with municipal planning, housing, and other stakeholders. Public meetings and stakeholder meetings were held in July and August. The team continues to advance technical documents and E-TOD Dashboard. The project team participated in several presentation presenting Affordable Housing Data for the corridor. Staff is working on a possible grant application for a Phase III scope focused on Affordable Housing initiatives in the corridor.

10. Lowcountry Rapid Transit

A&E Design: 60% Design Is underway under LNTP. Full NTP is anticipated in the coming months. Public involvement/NEPA for station location adjustments and Park & Ride are underway. Design for Maintenance Facility to begin in Fall.

Key Stakeholder Coordination: Key stakeholders have been reengaged with the start of design by Engineer of Record. Ongoing meetings are being held with municipalities and other stakeholders as project advances, including railroads and utilities

FTA Coordination: Bi-Monthly meetings are held with FTA and their Project Management Oversight Consultant (PMOC) throughout the Engineering phase. PMOC/FTA will be doing a site visit in November.

NEPA: Documented Categorical Exclusion was approved by FTA in July 2021. Any changes to the design moving forward will be evaluated to see if the change would result in a change to the NEPA approval that would require re-evaluation will be needed. A reevaluation was conducted and cleared for the new Park & Ride location. A public meeting for the new Park & Ride Location was held in August. Corridor re-evaluation of any changes to scope will occur at 60% design.

Maintenance Facility: BCDCOG has acquired the maintenance facility site. Design is scheduled to be advanced to 30% level in Fall 2023. Scoping is underway.

Transit Signal Prioritization: Transit signal prioritization at intersections is included of the LCRT project. A demonstration project of the TSP on Dorchester Road was initiated in March 2021 to develop the technology and infrastructure on a smaller scale corridor to advance that technology on CARTA transit buses traveling on Dorchester Road. This will provide the framework for the LCRT TSP technology which can be expanded to the remainder of the corridor. Phase 1 is complete, and scope for second phase is being Programmed with an anticipated start of Fall 2023.

Public Involvement: Stakeholder and neighborhood meetings are ongoing. LCRT's communications specialist, has been visiting businesses along the corridor and reaching out to neighborhoods and community organizations. She has had direct communications with over 1,100 businesses and community members along the corridor. LCRT has been coordinating with outreach activities for the TOD and Downtown Transit Study efforts and attended the public meetings for the TOD study and provided updates on the project.

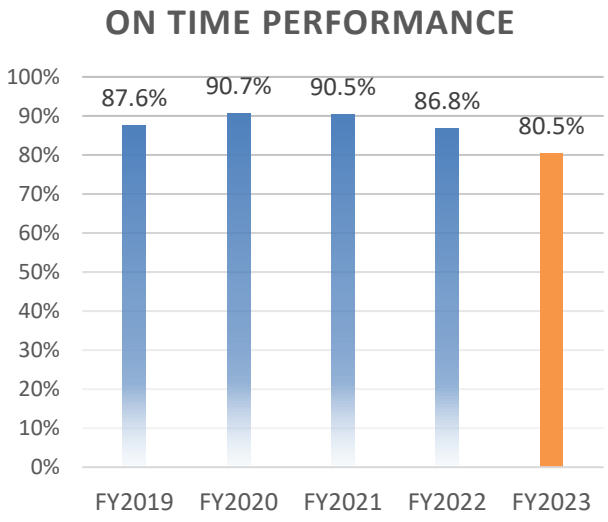
CARTA Monthly Performance August 2023

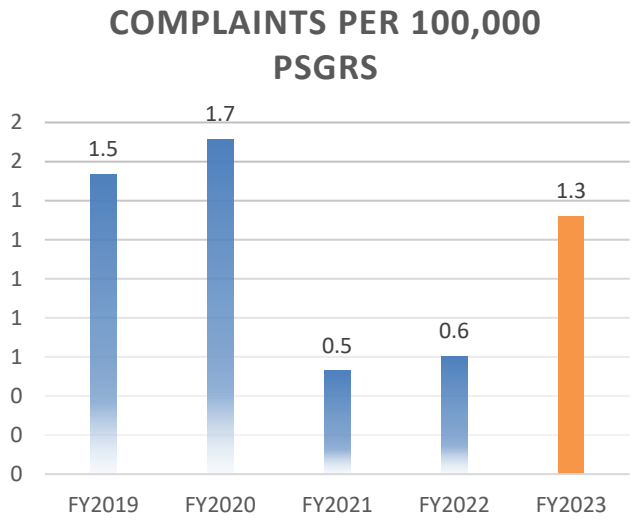
Fixed Route Performance:

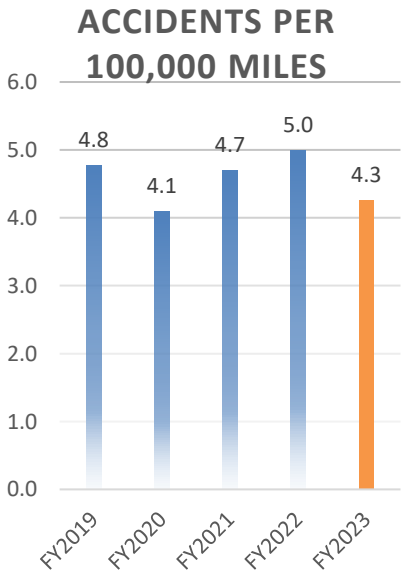
- Passengers per Hour: 10.9
- On Time Performance: 75%
- Complaints per 100,000 Passengers: 13.1
- Compliments per 100,000 Passengers: 1.0
- Miles between Road Calls: 24,040
- Revenue Vehicle Accidents per 100,000 Miles: 5.0
- Preventable Accidents per 100,00 Miles: 2.9

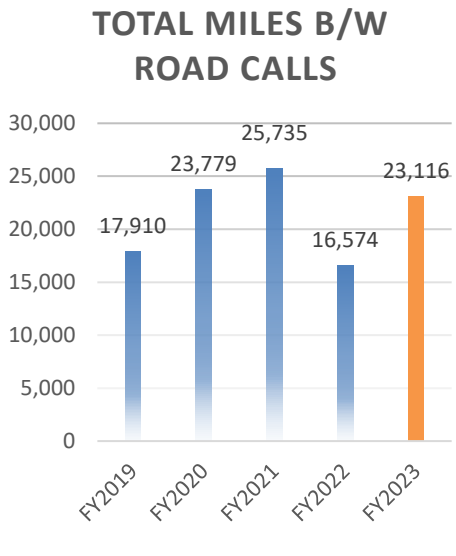
Fixed Route Annual Trends FY 2019 – FY2023

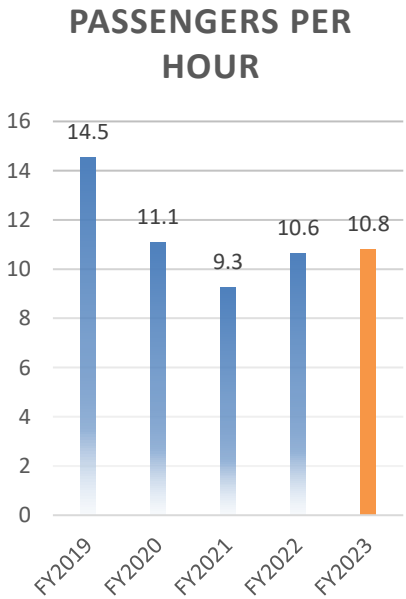
(Notes: 1 - FY2023 is partial year data)









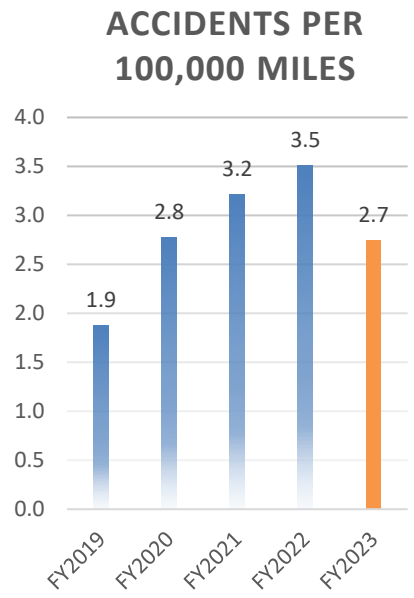


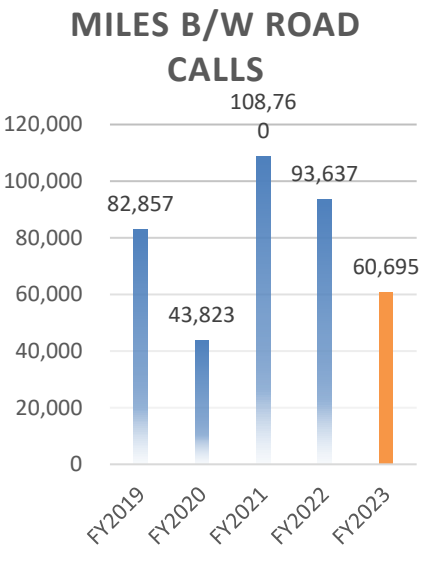
Paratransit Performance:

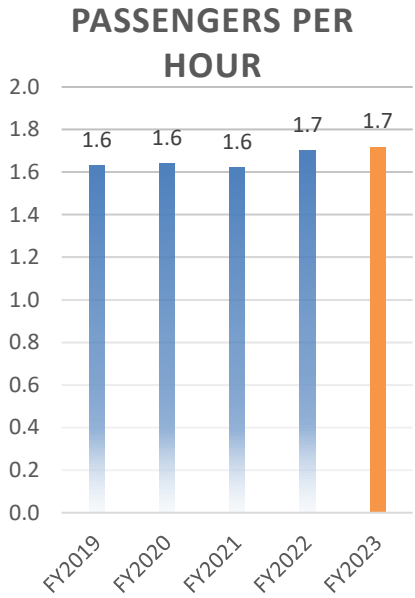
- Total Passengers: 5,110; Passengers per Hour: 1.6
- No Shows: 272
- On-Time Performance: 92%
- Complaints per 1,000 Passengers: 0.0
- Compliments per 1,000 Passengers: 0.0
- Miles between Road Calls: 26,313
- Total Revenue Accidents per 100,000 Miles: 3.8
- Preventable Accidents per 100,000 Miles: 3.8

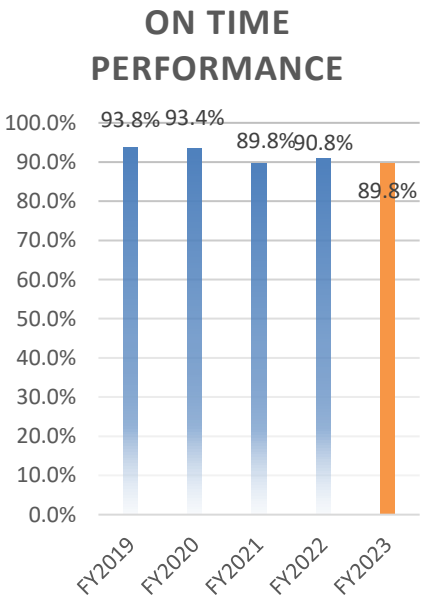
Paratransit Annual Trends - FY2019 – FY2023

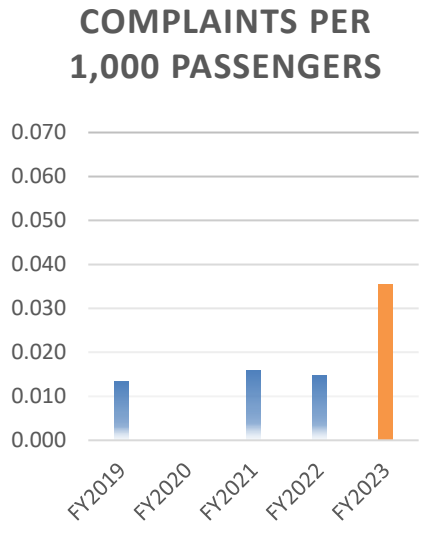
(Notes: 1 - FY2023 is partial year data; 2- Effective January 2021, cancelled at door is rolled into No Shows)

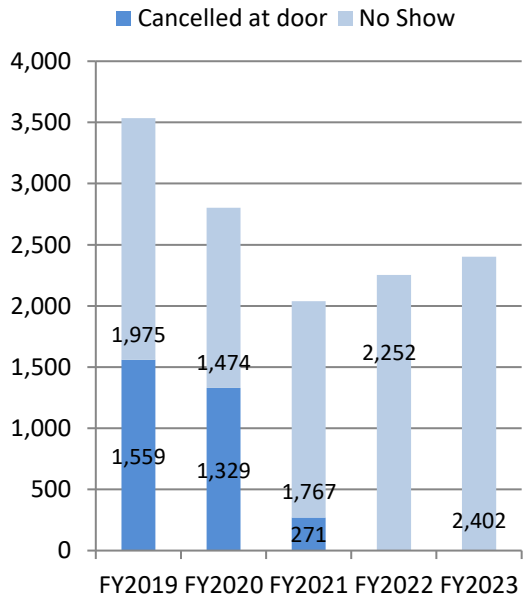












Revenue/Cost/Ridership for the Month of August 2023

Route Name	Farebox Revenue	Pass/Presale Revenue	2022 Revenue	2023 Revenue	Cost of Operation	Hours Operated	Percent Cost Recovered	Cost Per Passenger	Deviation From System Average	Allowable Deviation Under Performance Standards	2022 Passengers Per Hour	2023 Passengers Per Hour	Change from Last Year	Passenger Per Hour Target Under Performance Standards	2022 Ridership	2023 Ridership	Change from Last Year	Change from Last Year	% of Total Ridership
1 James Island-North Charleston Express	$ 440.63	$ 11,485.82	$ 11,639.51	$ 11,926.45	$ 62,948.51	748.36	18.9%	$ 9.69	-0.78%	-5.00%	8	7	-6%	15	6,633	5,267	(1,366)	-21%	2.76%
2 Mt. Pleasant-West Ashley Express	$ 708.15	$ 6,915.24	$ 7,415.68	$ 7,623.39	$ 58,928.61	700.57	12.9%	$ 12.63	-6.79%	-5.00%	6	6	-5%	15	4,396	4,063	(333)	-8%	2.13%
3 Dorchester Rd-Summerville Express	$ 752.35	$ 5,204.56	$ 5,455.87	$ 5,956.91	$ 41,678.98	495.50	14.3%	$ 10.62	-5.43%	-5.00%	7	7	3%	15	3,328	3,363	35	1%	1.76%
4 Airport Express	$ -	$ -	$ -	$ -	$ -		-	-	-	-5.00%	-	-	-	15	-	-	-	-	0.00%
7 HOP Shuttle (Hospitality on Peninsula)	$ -	$ -	$ -	$ -	$ -		-	-	-	-15.00%	-	-	-	10	-	-	-	-	0.00%
10 Rivers Avenue	$ 36,268.56	$ 12,999.04	$ 46,341.44	$ 49,267.60	$ 236,141.76	2,807.34	20.9%	$ 4.81	1.14%	-10.00%	15	14	-5%	20	38,451	38,857	406	1%	20.34%
11 Dorchester Rd/Airport	$ 11,766.89	$ 4,917.84	$ 15,639.22	$ 16,684.73	$ 104,079.05	1,237.33	16.0%	$ 5.95	-3.70%	-10.00%	12	12	2%	20	13,524	14,700	1,177	9%	7.70%
12 Upper Dorch/Ashley Phosphate Rd	$ 12,526.31	$ 4,347.36	$ 16,606.34	$ 16,873.67	$ 113,728.82	1,352.05	14.8%	$ 7.45	-4.89%	-10.00%	10	10	-5%	20	13,673	12,995	(678)	-5%	6.80%
13 Remount Road	$ 4,022.59	$ 1,614.29	$ 6,575.23	$ 5,636.88	$ 56,367.71	670.12	10.0%	$ 10.51	-9.73%	-10.00%	8	7	-12%	20	5,509	4,825	(684)	-12%	2.53%
20 King Street/Meeting St	$ -	$ 6,000.00	$ 6,054.97	$ 6,000.00	$ 57,631.13	685.14	10.4%	$ 4.58	-9.32%	-10.00%	12	16	32%	20	8,439	11,266	2,827	33%	5.90%
30 Savannah Highway	$ 3,280.52	$ 1,469.74	$ 5,699.99	$ 4,750.26	$ 56,667.16	673.68	8.4%	$ 11.82	-11.34%	-10.00%	7	7	-12%	20	5,054	4,393	(660)	-13%	2.30%
31 Folly Road	$ 3,593.11	$ 1,553.78	$ 5,570.81	$ 5,146.89	$ 73,627.43	875.31	7.0%	$ 14.74	-12.74%	-15.00%	6	5	-6%	10	4,962	4,645	(318)	-6%	2.43%
32 North Bridge	$ 5,745.38	$ 2,785.85	$ 6,916.22	$ 8,531.23	$ 73,867.16	878.16	11.5%	$ 7.85	-8.18%	-10.00%	8	9	12%	20	7,353	8,327	975	13%	4.36%
33 St. Andrews/Ashley River Rd	$ 6,492.38	$ 2,977.46	$ 8,820.01	$ 9,469.84	$ 64,372.17	765.28	14.7%	$ 6.17	-5.02%	-10.00%	10	12	13%	20	7,919	8,900	981	12%	4.66%
40 Mt. Pleasant	$ 3,466.33	$ 1,448.90	$ 5,947.22	$ 4,915.23	$ 57,435.14	682.81	8.6%	$ 12.13	-11.17%	-10.00%	7	6	-9%	20	4,780	4,331	(449)	-9%	2.27%
41 Coleman Boulevard	$ 836.79	$ 307.93	$ 1,618.34	$ 1,144.72	$ 34,516.09	410.34	3.3%	$ 36.25	-16.41%	-10.00%	4	2	-43%	20	1,608	920	(688)	-43%	0.48%
42 Wando Circulator	$ 968.84	$ 342.56	$ 916.50	$ 1,311.40	$ 31,499.70	374.48	4.2%	$ 29.48	-15.56%	-15.00%	2	3	19%	10	864	1,024	160	19%	0.54%
102 North Neck/ Rutledge Ave	$ 1,176.70	$ 742.26	$ 1,322.70	$ 1,918.96	$ 44,036.32	523.52	4.4%	$ 18.98	-15.37%	-15.00%	4	4	18%	10	1,809	2,219	410	23%	1.16%
103 Leeds Avenue	$ 654.70	$ 374.49	$ 1,536.46	$ 1,029.19	$ 15,806.21	187.91	6.5%	$ 13.20	-13.22%	-15.00%	11	6	-46%	10	1,923	1,119	(803)	-42%	0.59%
104 Montague Avenue	$ 1,777.83	$ 807.48	$ 2,611.11	$ 2,585.31	$ 43,890.80	521.79	5.9%	$ 17.11	-13.84%	-10.00%	5	5	-10%	10	2,704	2,414	(291)	-11%	1.26%
203 Medical Shuttle	$ 1.00	$ 41,426.34	$ 38,426.34	$ 41,427.34	$ 41,716.41	495.94	99.3%	$ 0.02	79.58%	-10.00%	36	28	-23%	10	17,817	13,799	(4,018)	-23%	7.22%
210 Aquarium/ CofC DASH	$ -	$ 47,414.44	$ 43,414.44	$ 47,414.44	$ 47,779.48	568.02	99.2%	$ 0.05	79.51%	-15.00%	10	12	15%	10	5,451	6,808	1,357	25%	3.56%
211 Meeting/King DASH	$ -	$ 25,791.44	$ 25,791.44	$ 25,791.44	$ 83,319.26	990.53	31.0%	$ 2.35	11.23%	-15.00%	21	25	18%	10	19,369	24,486	5,117	26%	12.82%
213 Lockwood/Calhoun DASH	$ -	$ 9,791.44	$ 9,791.44	$ 9,791.44	$ 38,046.43	452.31	25.7%	$ 2.94	6.01%	-15.00%	18	21	21%	10	7,962	9,600	1,638	21%	5.03%
301 Glenn McConnell Circulator	$ 1,884.11	$ 837.06	$ 2,222.61	$ 2,721.17	$ 33,974.39	403.90	8.0%	$ 12.49	-11.72%	-15.00%	5	6	19%	10	2,104	2,502	398	19%	1.31%
Beach Shuttle	$ -	$ 3,764.80	$0.00	$ 3,764.80	$ 6,561.04	78.00	57.4%	$ 14.12	37.65%	-15.00%	1	3	118%	10	91	198	107	118%	0.10%
TOTAL	$ 96,363.17	$ 195,320.14	$ 276,333.90	$ 291,683.31	$ 1,478,619.75	17,578.4	19.7%	$ 6.21			10.7	10.9	1%		185,722	191,023	5,301	2.9%	100.0%

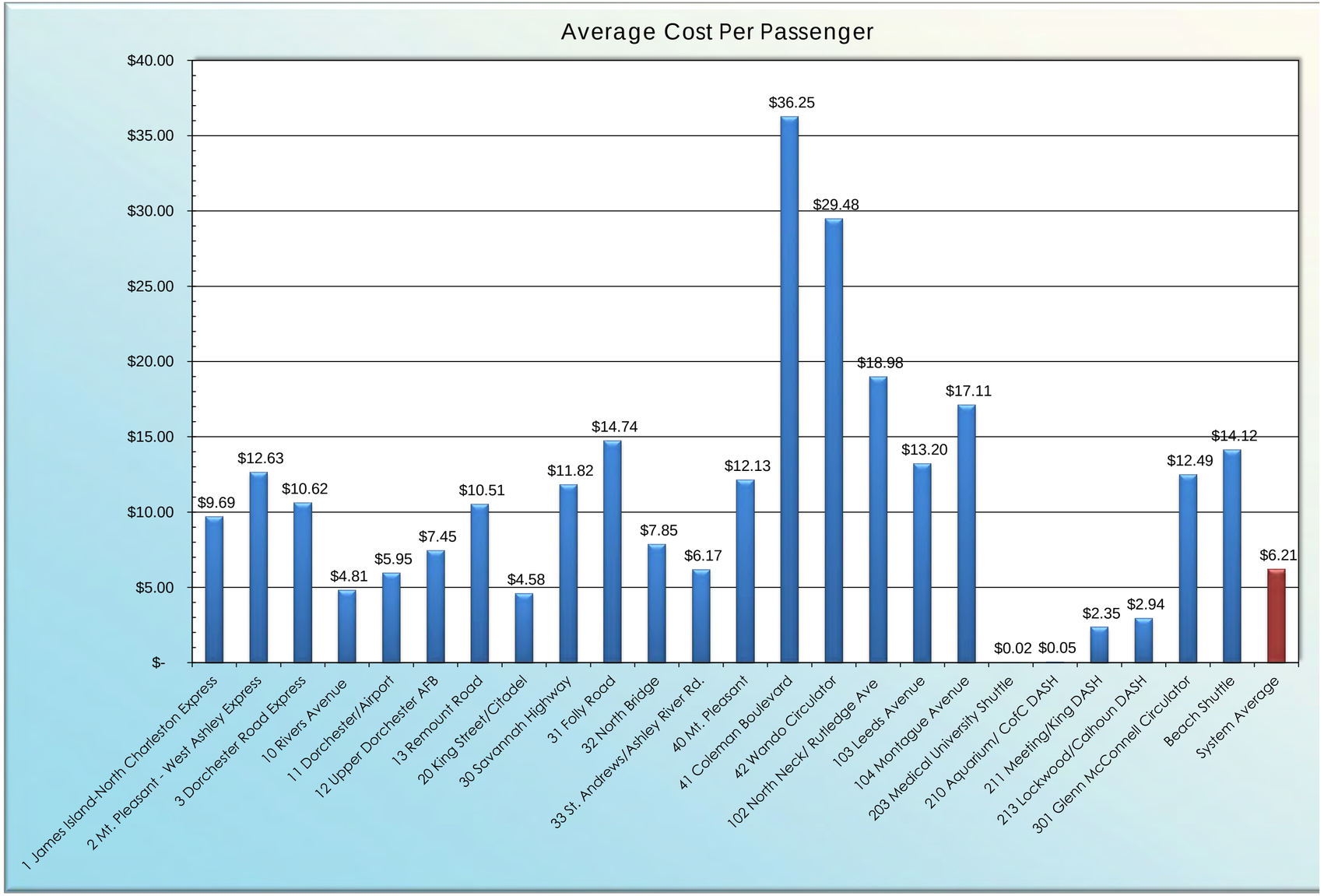
NOT meeting Revenue Recovery Standards

Meeting Passenger Per Hour Standards

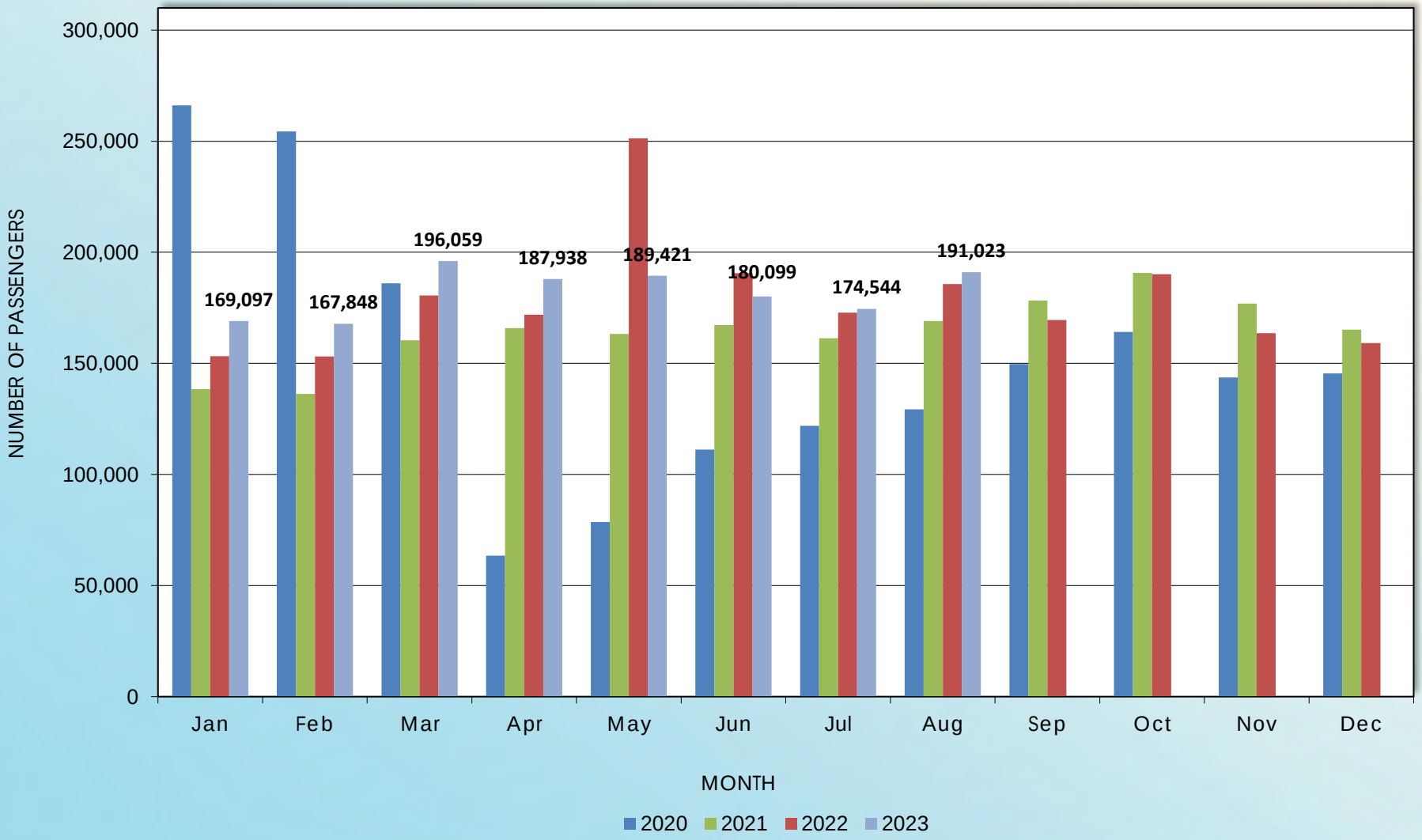
NOT Meeting Passenger Per Hour Standards

Revenue/Cost/Ridership for the Month of August 2023

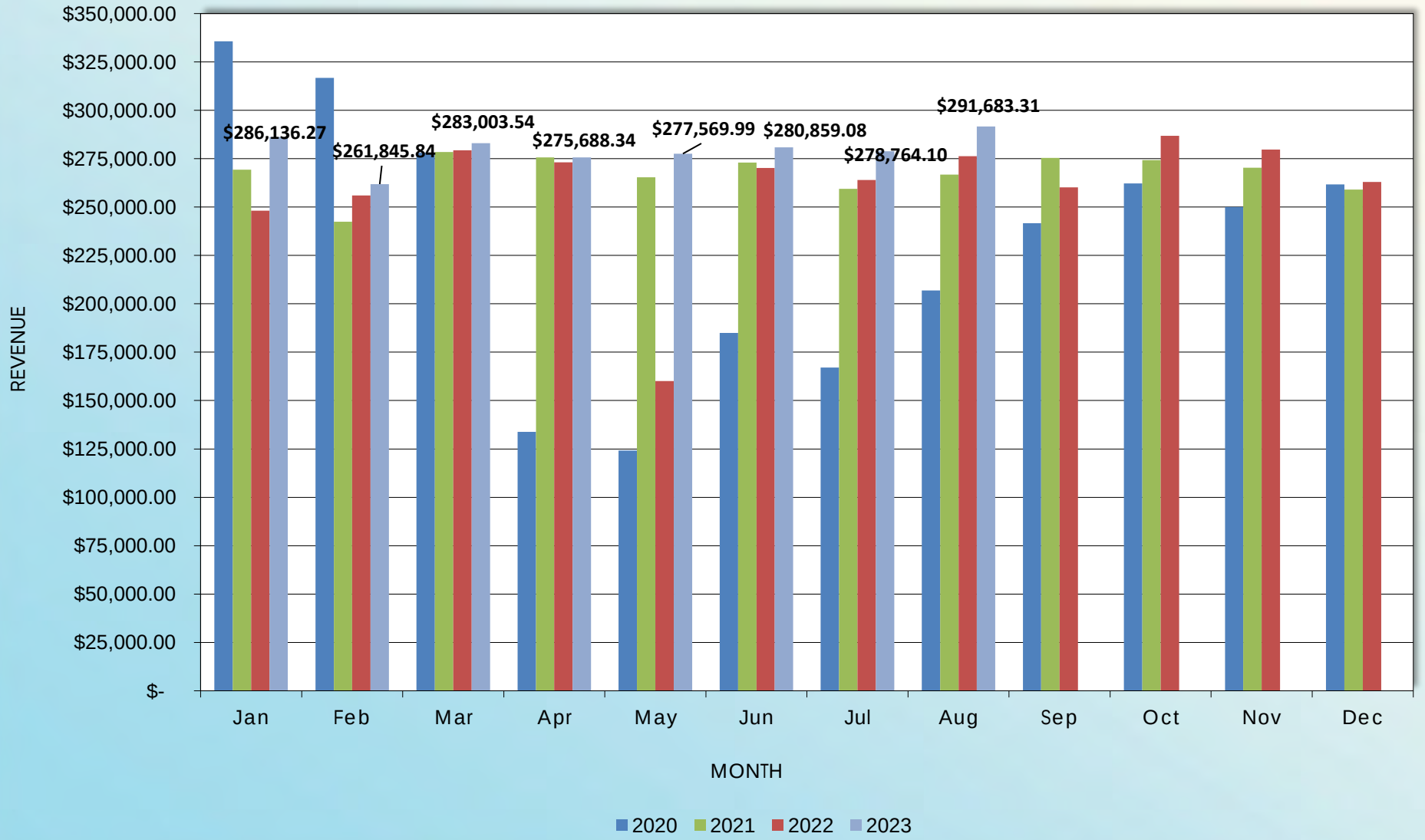
Route Name	Average Cost Per Passenger
1 James Island-North Charleston Express	$ 9.69
2 Mt. Pleasant - West Ashley Express	$ 12.63
3 Dorchester Road Express	$ 10.62
4 Airport Express	-
7 HOP Shuttle (Hospitality on Peninsula)	-
10 Rivers Avenue	$ 4.81
11 Dorchester/Airport	$ 5.95
12 Upper Dorchester AFB	$ 7.45
13 Remount Road	$ 10.51
20 King Street/Citadel	$ 4.58
30 Savannah Highway	$ 11.82
31 Folly Road	$ 14.74
32 North Bridge	$ 7.85
33 St. Andrews/Ashley River Rd.	$ 6.17
40 Mt. Pleasant	$ 12.13
41 Coleman Boulevard	$ 36.25
42 Wando Circulator	$ 29.48
102 North Neck/ Rutledge Ave	$ 18.98
103 Leeds Avenue	$ 13.20
104 Montague Avenue	$ 17.11
203 Medical University Shuttle	$ 0.02
210 Aquarium/ CofC DASH	$ 0.05
211 Meeting/King DASH	$ 2.35
213 Lockwood/Calhoun DASH	$ 2.94
301 Glenn McConnell Circulator	$ 12.49
Beach Shuttle	$ 14.12
System Average	$ 6.21

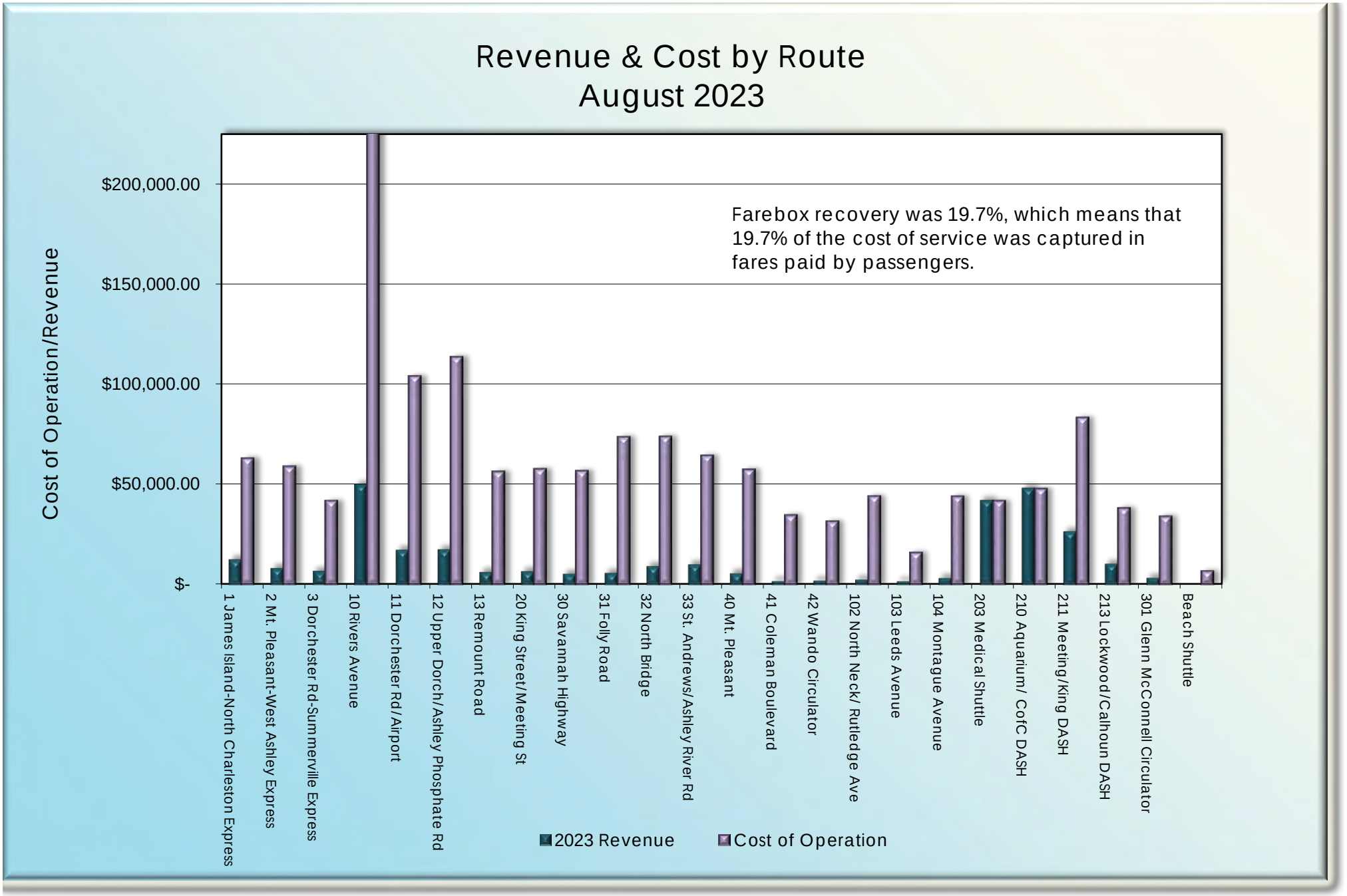


Fixed Route Ridership

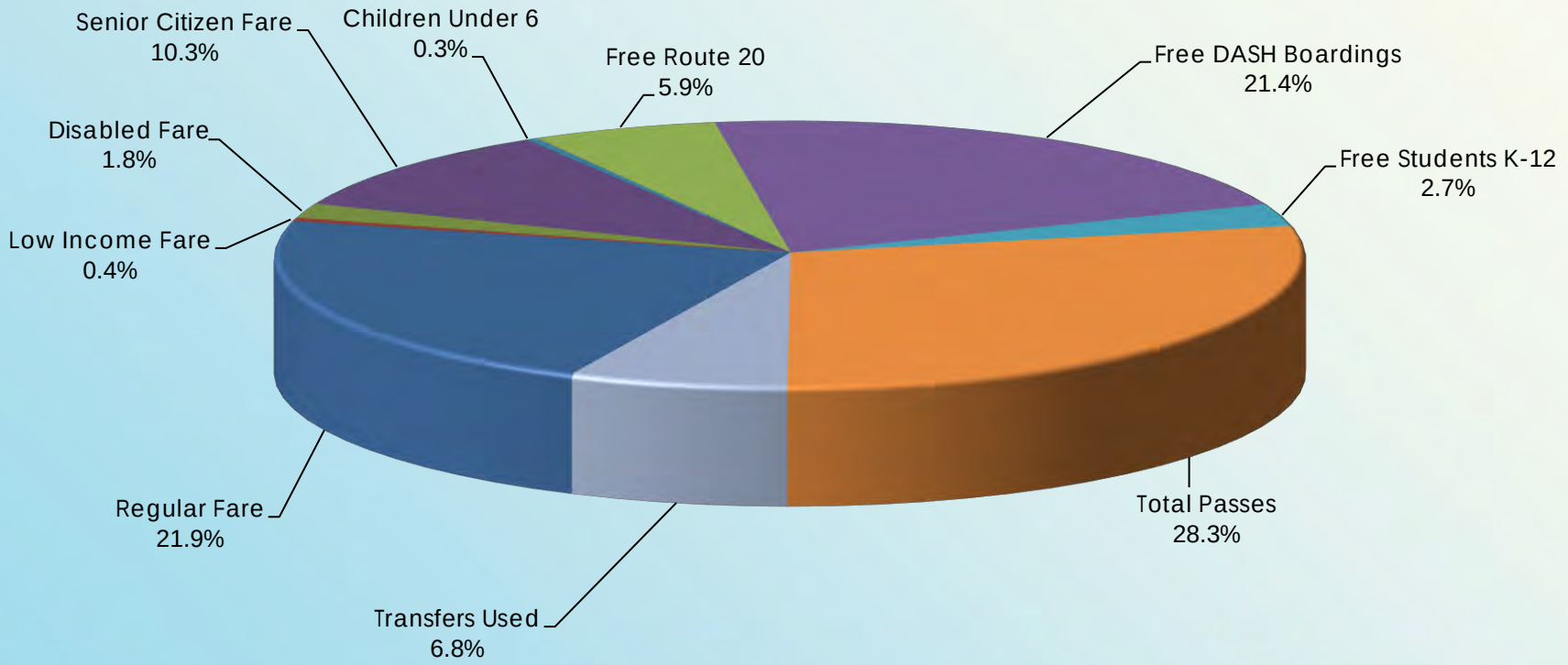


Fixed Route Revenue

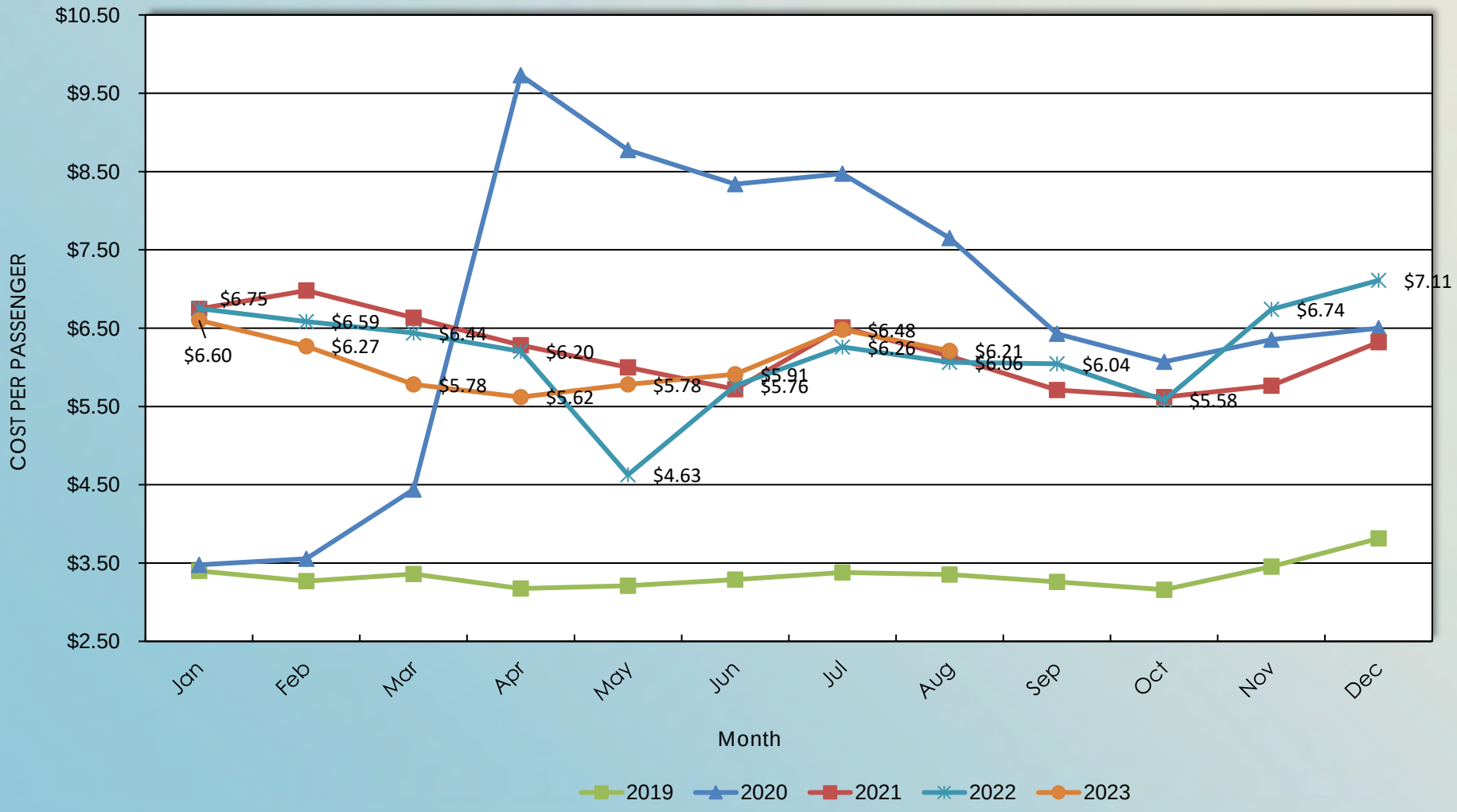


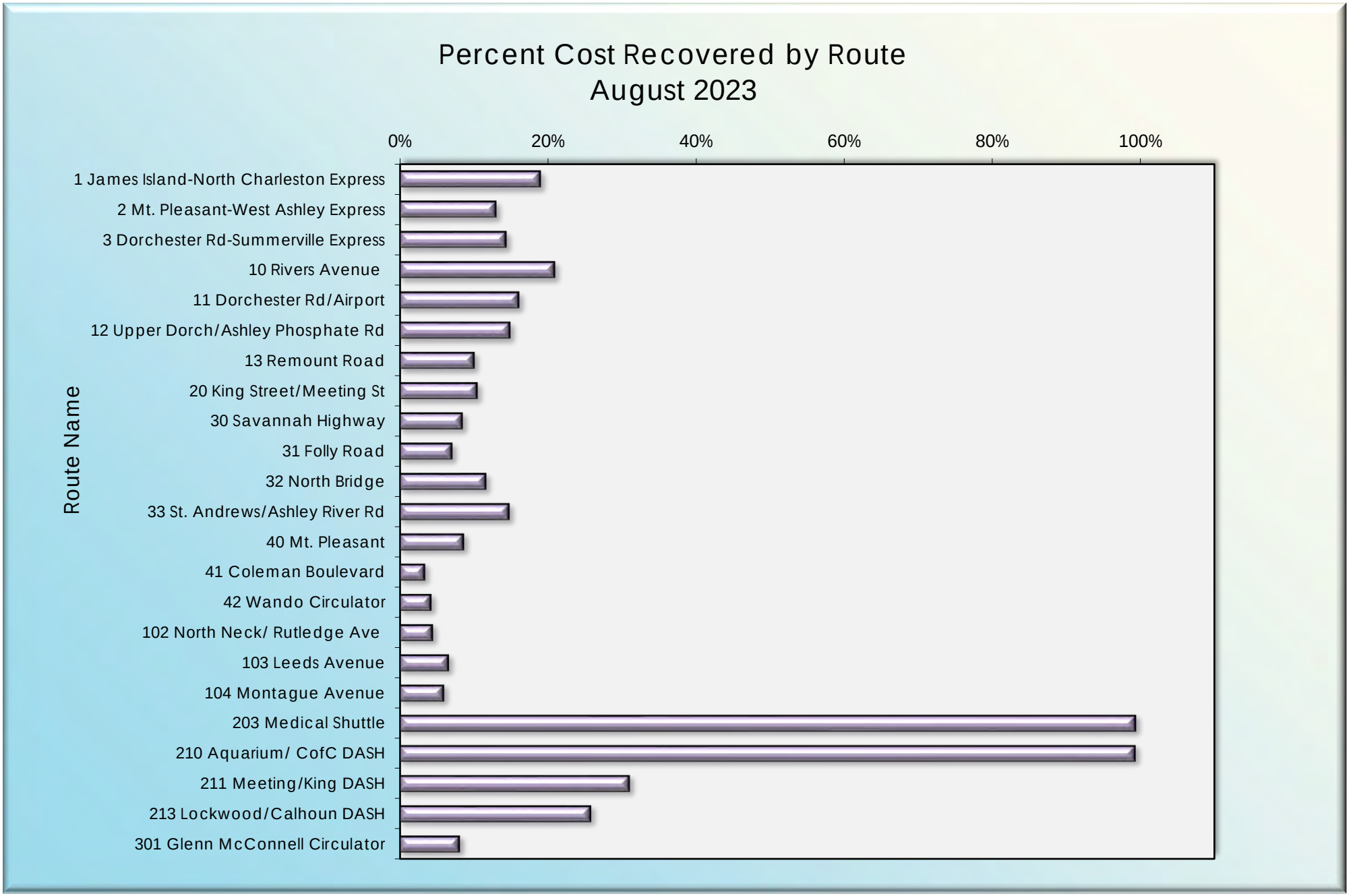

Revenue & Cost by Route
August 2023
Cost of Operation/Revenue
$200,000.00
$150,000.00
$100,000.00
$50,000.00
$-
Farebox recovery was 19.7%, which means that 19.7% of the cost of service was captured in fares paid by passengers.
1 James Island-North Charleston Express
2 Mt. Pleasant-West Ashley Express
3 Dorchester Rd-Summerville Express
10 Rivers Avenue
11 Dorchester Rd/Airport
12 Upper Dorch/Ashley Phosphate Rd
13 Remount Road
20 King Street/Meeting St
30 Savannah Highway
31 Folly Road
32 North Bridge
33 St. Andrews/Ashley River Rd
40 Mt. Pleasant
41 Coleman Boulevard
42 Wando Circulator
102 North Neck/ Rutledge Ave
103 Leeds Avenue
104 Montague Avenue
203 Medical Shuttle
210 Aquarium/ CofC DASH
211 Meeting/King DASH
213 Lockwood/Calhoun DASH
301 Glenn McConnell Circulator
Beach Shuttle
2023 Revenue
Cost of Operation

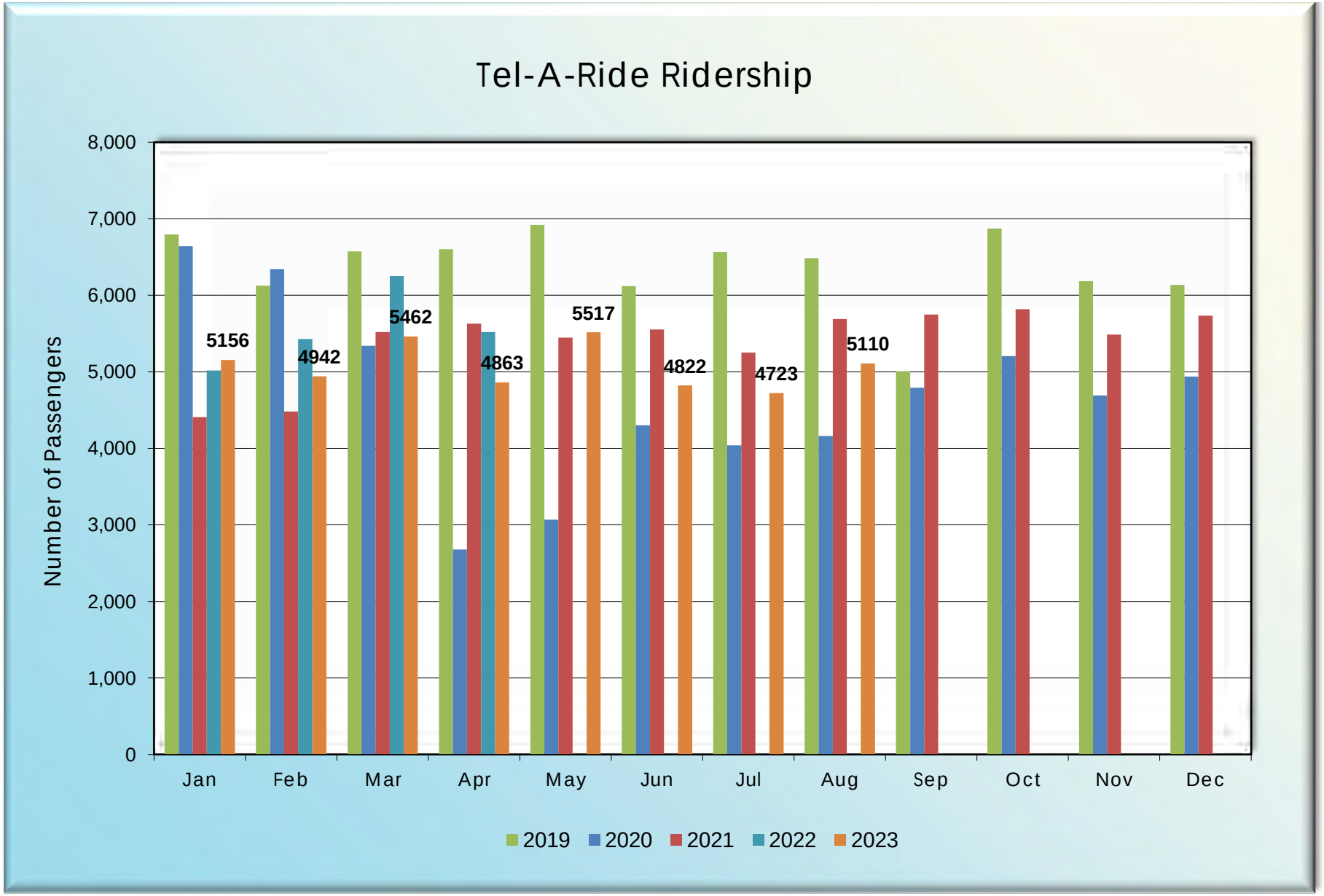
Ridership by Fare Type
August 2023

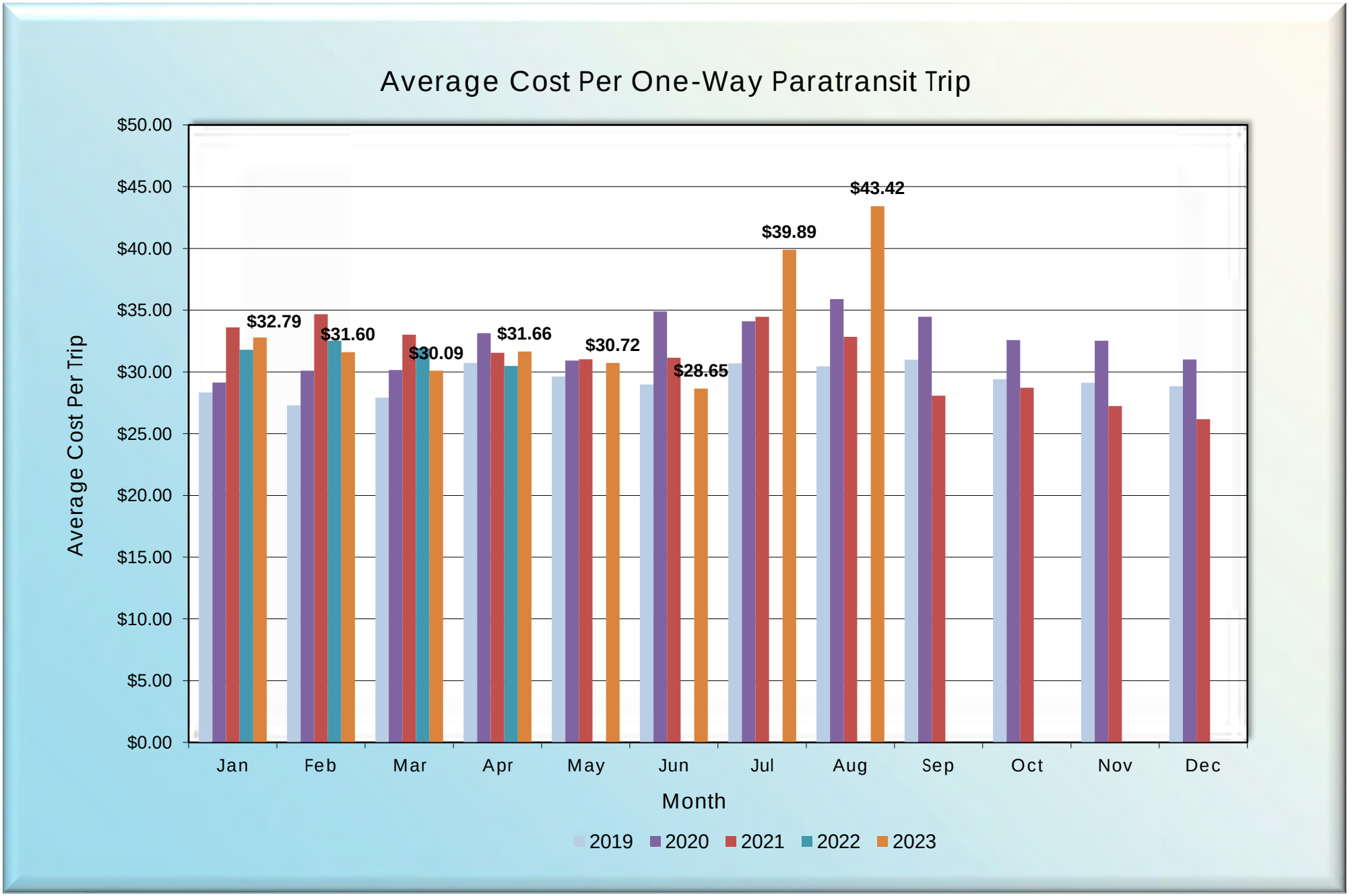


Fixed Route Cost Per Passenger

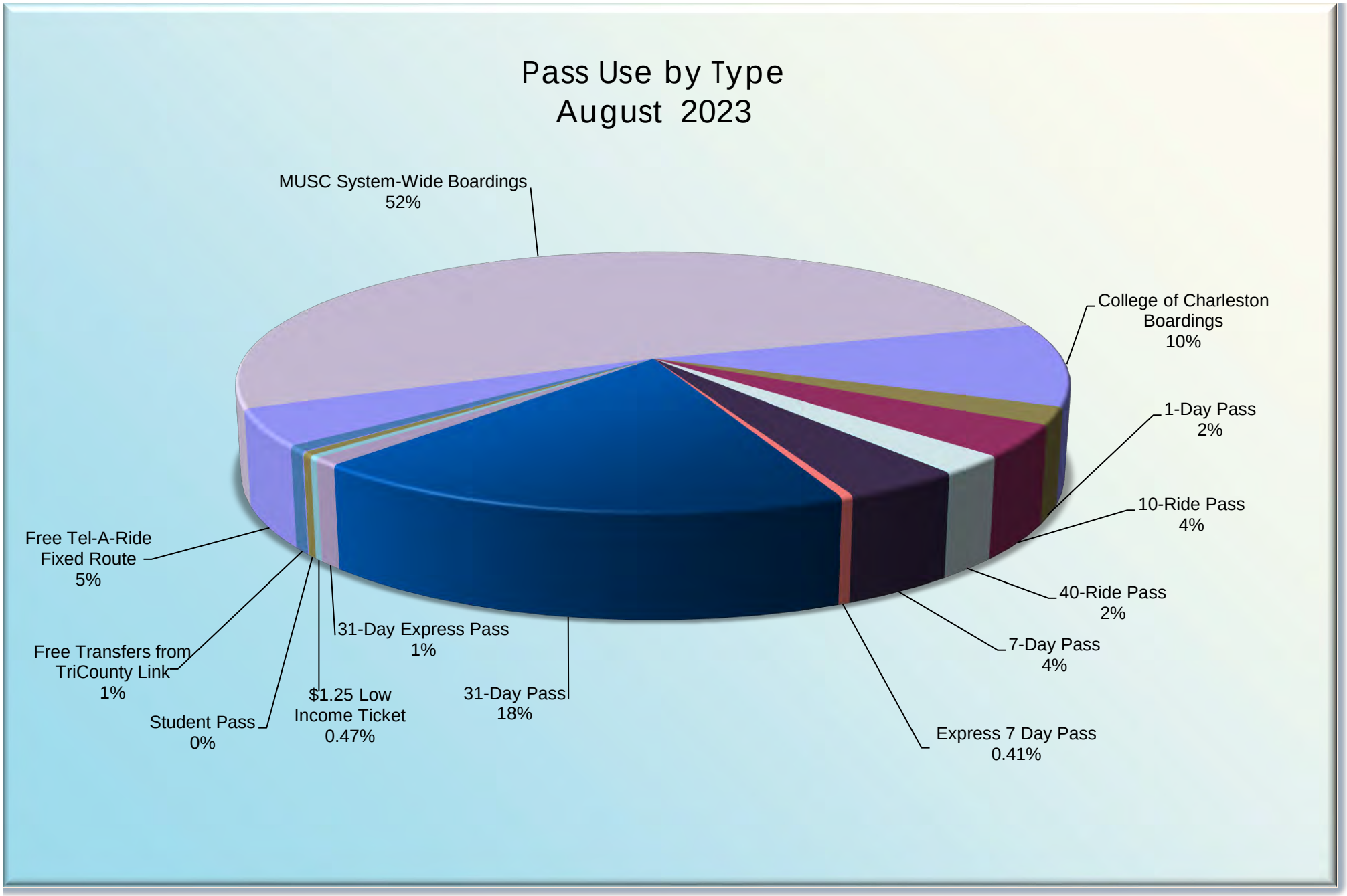



Percent Cost Recovered by Route
August 2023
0%
20%
40%
60%
80%
100%
Route Name
1 James Island-North Charleston Express
2 Mt. Pleasant-West Ashley Express
3 Dorchester Rd-Summerville Express
10 Rivers Avenue
11 Dorchester Rd/Airport
12 Upper Dorch/Ashley Phosphate Rd
13 Remount Road
20 King Street/Meeting St
30 Savannah Highway
31 Folly Road
32 North Bridge
33 St. Andrews/Ashley River Rd
40 Mt. Pleasant
41 Coleman Boulevard
42 Wando Circulator
102 North Neck/ Rutledge Ave
103 Leeds Avenue
104 Montague Avenue
203 Medical Shuttle
210 Aquarium/ CofC DASH
211 Meeting/King DASH
213 Lockwood/Calhoun DASH
301 Glenn McConnell Circulator

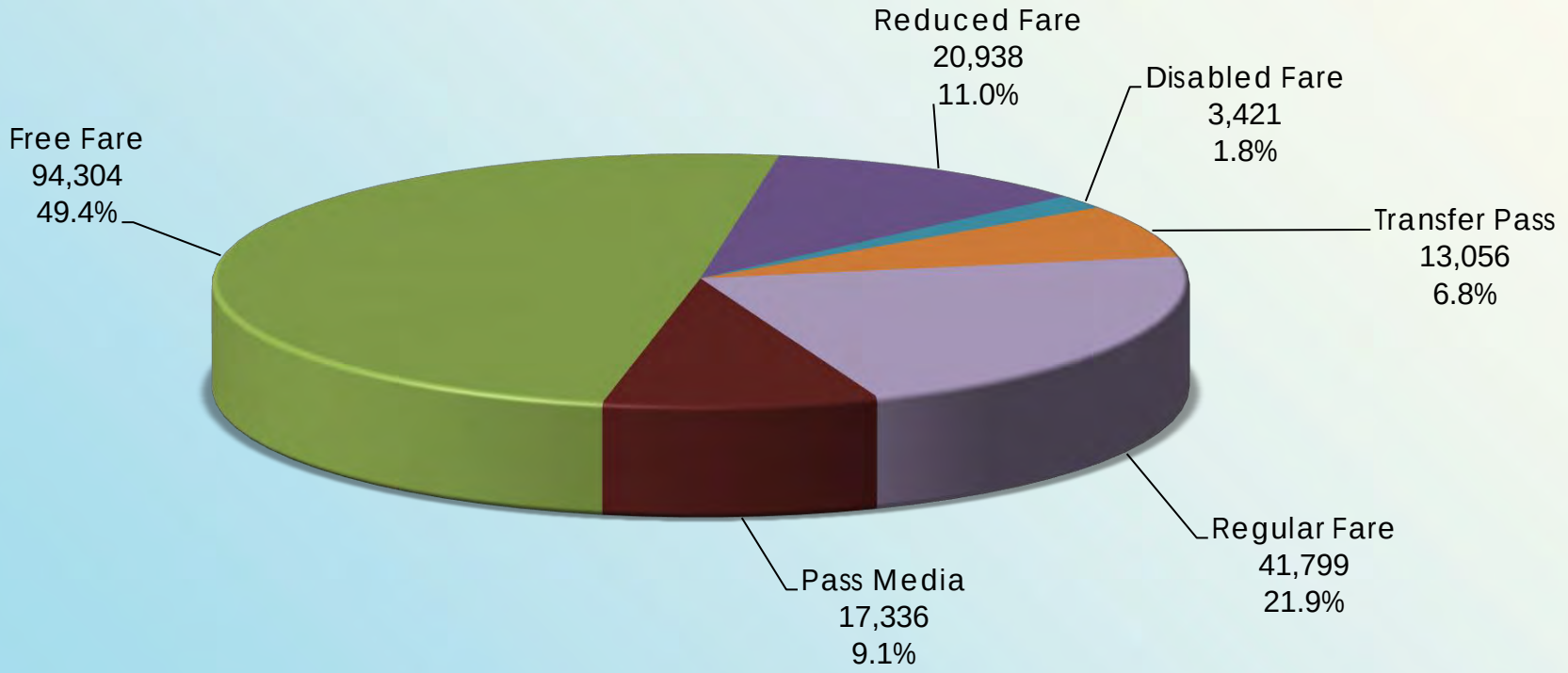

Tel-A-Ride Ridership
Number of Passengers
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
5156
4942
5462
4863
5517
4822
4723
5110
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2019
2020
2021
2022
2023


Average Cost Per One-Way Paratransit Trip
Average Cost Per Trip
$50.00
$45.00
$40.00
$35.00
$30.00
$25.00
$20.00
$15.00
$10.00
$5.00
$0.00
$32.79
$31.60
$30.09
$31.66
$30.72
$28.65
$39.89
$43.42
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Month
2019
2020
2021
2022
2023

Pass Use by Type
August 2023

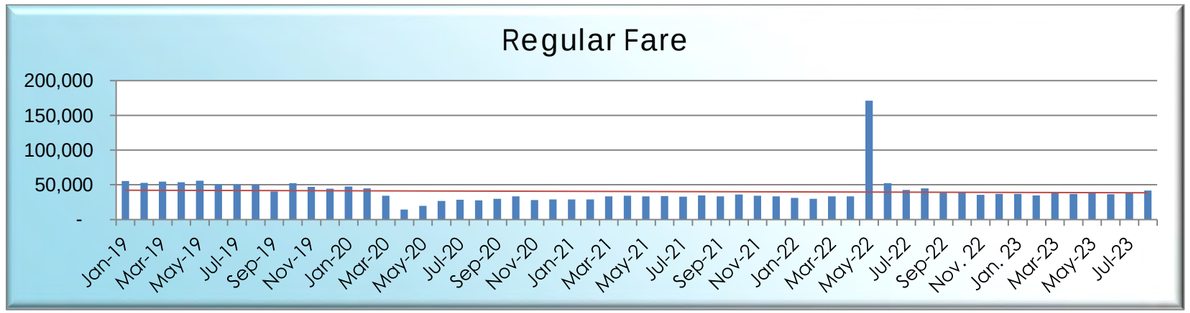


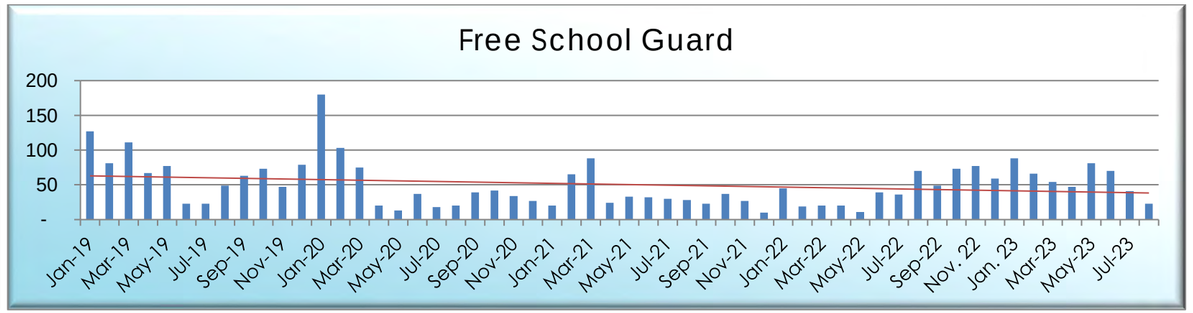
Ridership by Customer Type
August 2023

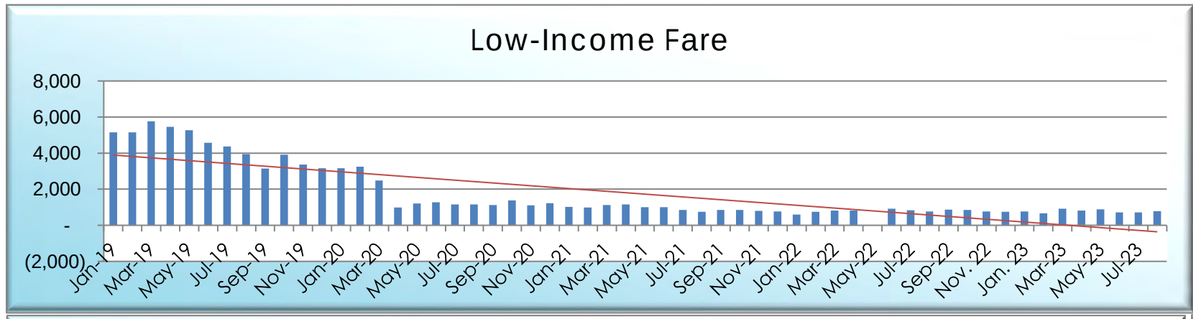


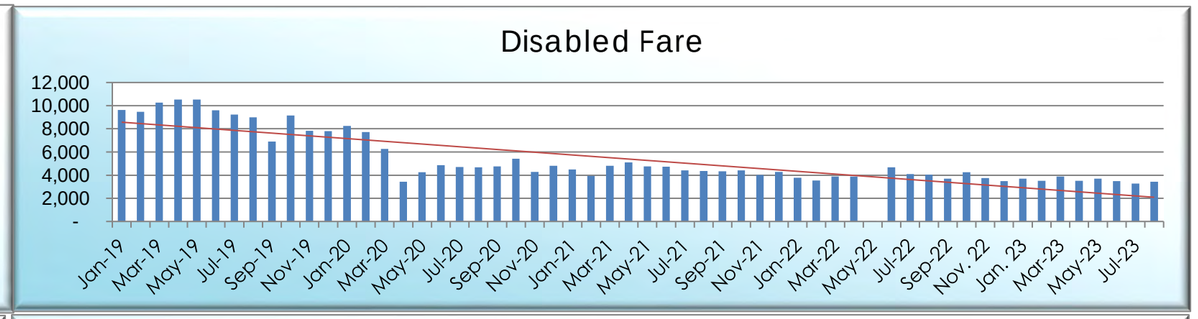
Ridership Classification forAugust 2023		
Type of Fare		
Regular Fare	41,799	21.88%
Low Income Fare	775	0.41%
Disabled Fare	3,421	1.79%
Senior Citizen Fare	19,740	10.33%
Children Under 6	488	0.26%
HOP Shuttle	0	0.00%
Beach Shuttle	169	0.00%
Free School Guard	23	0.01%
Free Route 20	11,266	5.90%
Free DASH Boardings	40,894	21.41%
Free Students K-12	5,250	2.75%
Subtotal	123,825	64.82%
Type of Pass		
1-Day Pass	1,168	0.61%
10-Ride Pass	2,135	1.12%
40-Ride Pass	1,242	0.65%
3-Day Pass	55	0.03%
7-Day Pass	2,162	1.13%
7-Day Express Pass	223	0.12%
31-Day Pass	9,792	5.13%
31-Day Express Pass	520	0.27%
$1.25 Low Income Ticket	196	0.10%
Student Pass	227	0.12%
1-Ride Courtesy Pass	2	0.00%
1-Ride Pass	39	0.02%
Free Transfers from TriCounty Link	412	0.22%
Free Tel-A-Ride Fixed Route	2,472	1.29%
MUSC System-Wide Boardings	27,914	14.61%
College of Charleston Boardings	5,583	2.92%
Total Passes	54,142	28.34%
Transfers		
Issued	25,751	
Transfers Used	13,056	6.83%
Wheelchair Count	188	
Unclassified Ridership	0	0.00%
Total Ridership	191,023	100.00%

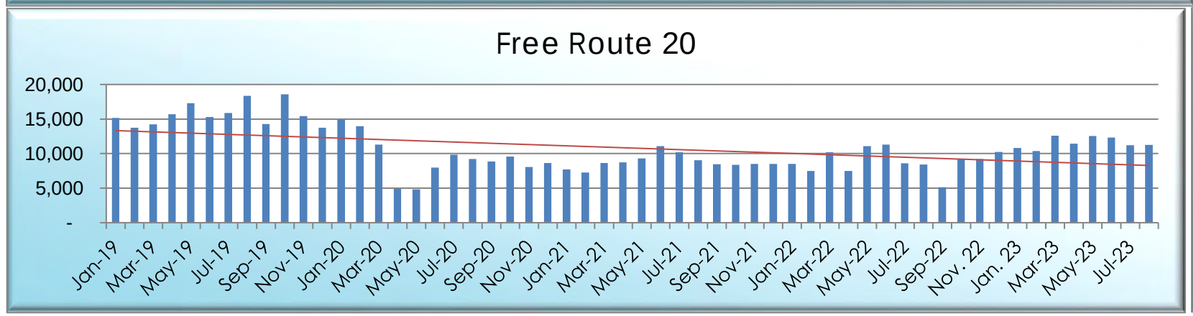
Classification History

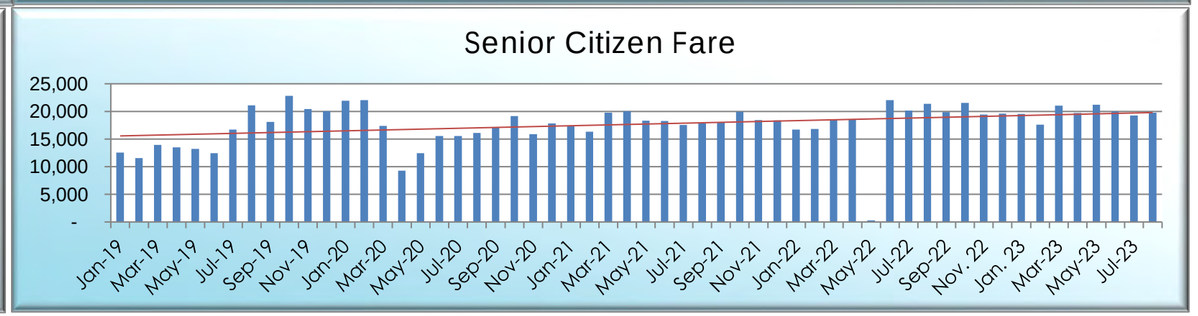


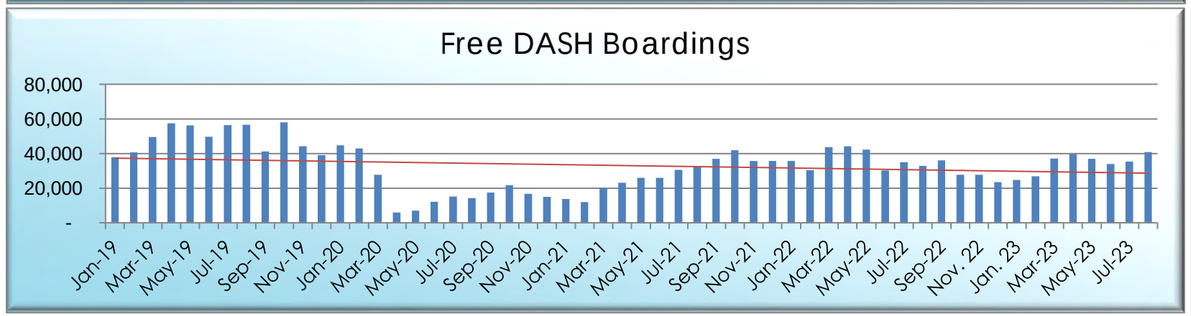


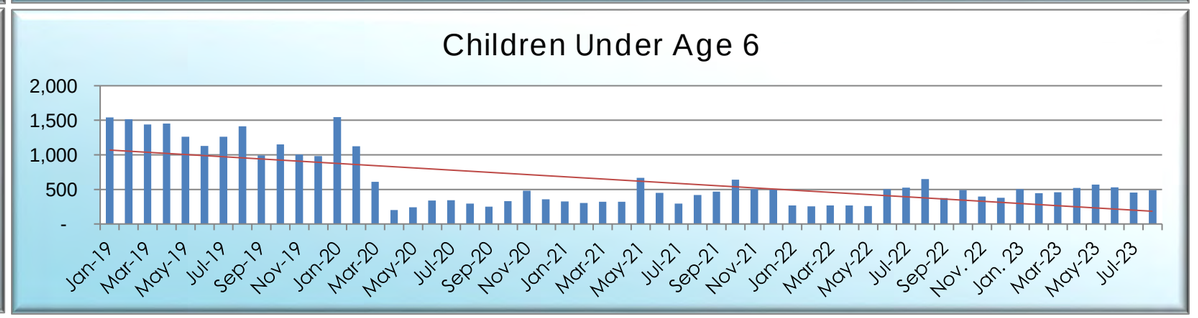












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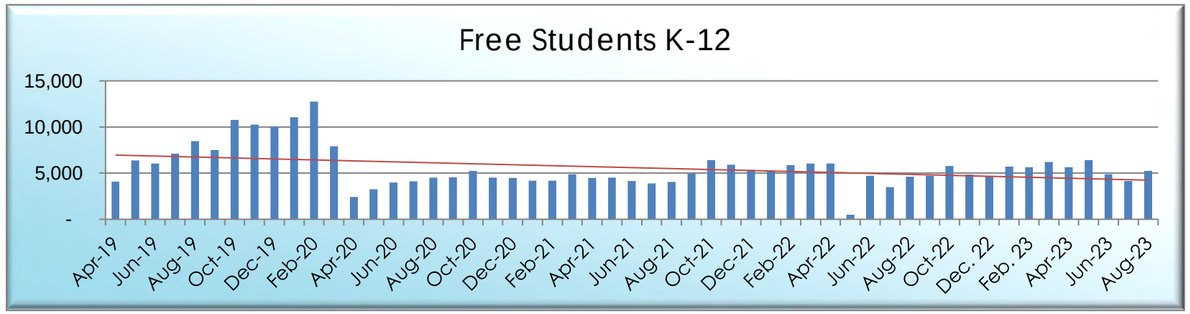

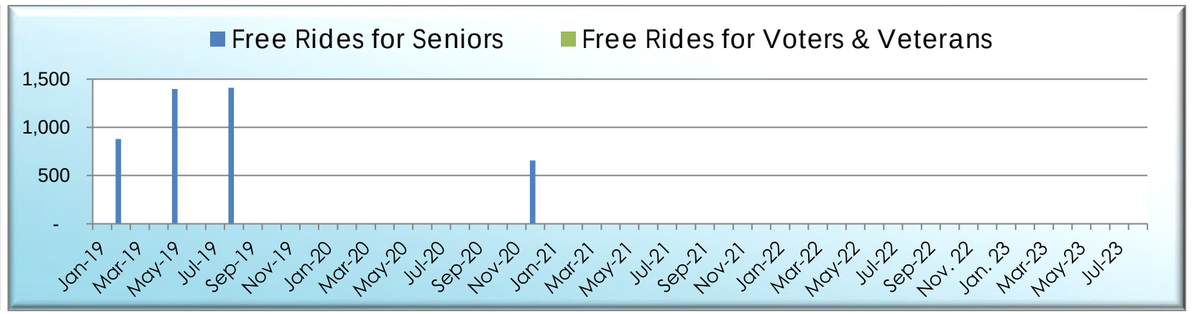

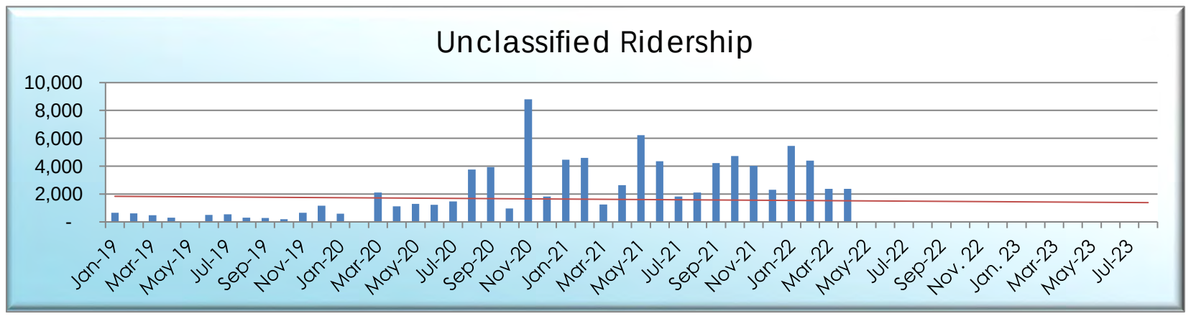

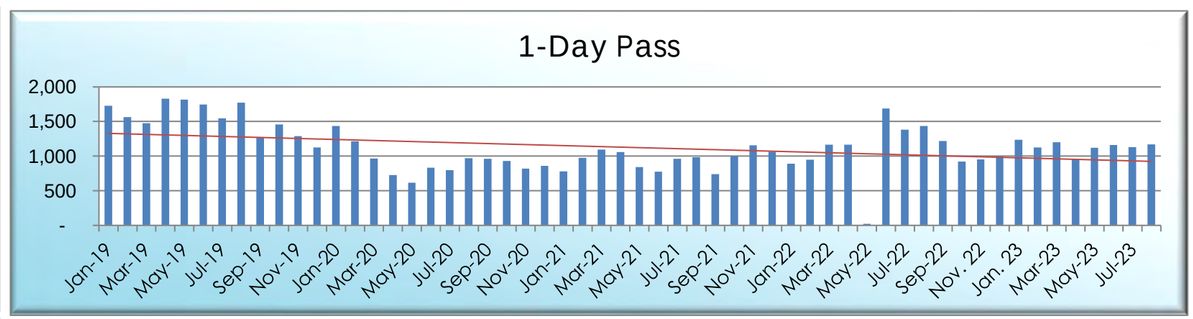

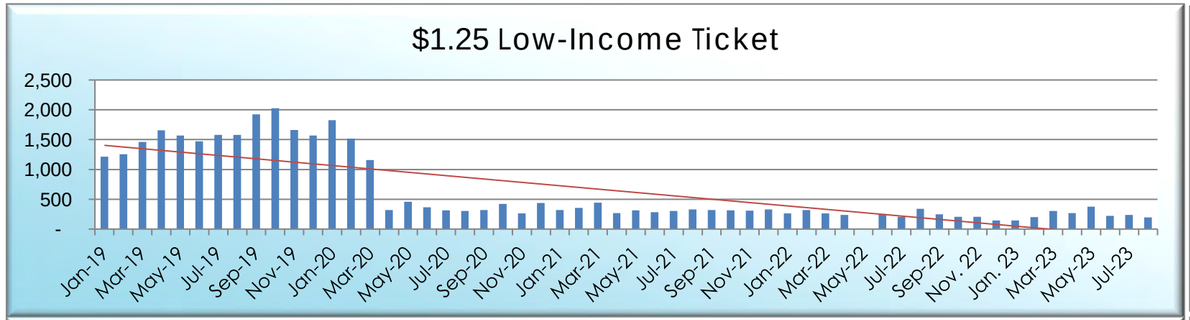

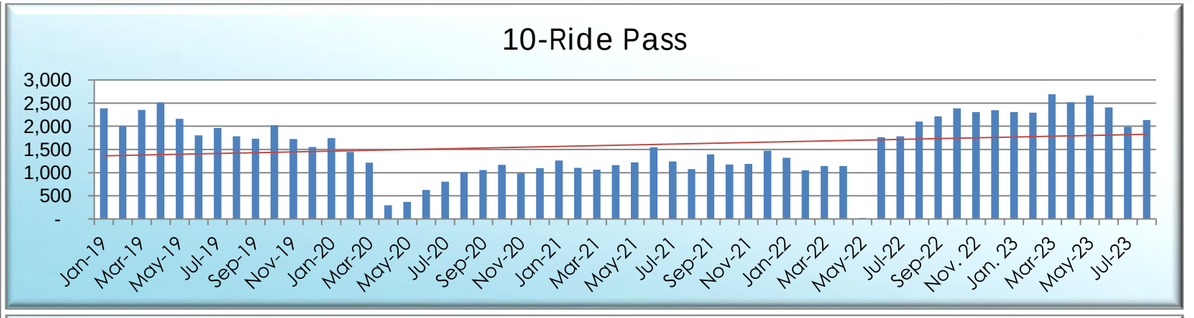

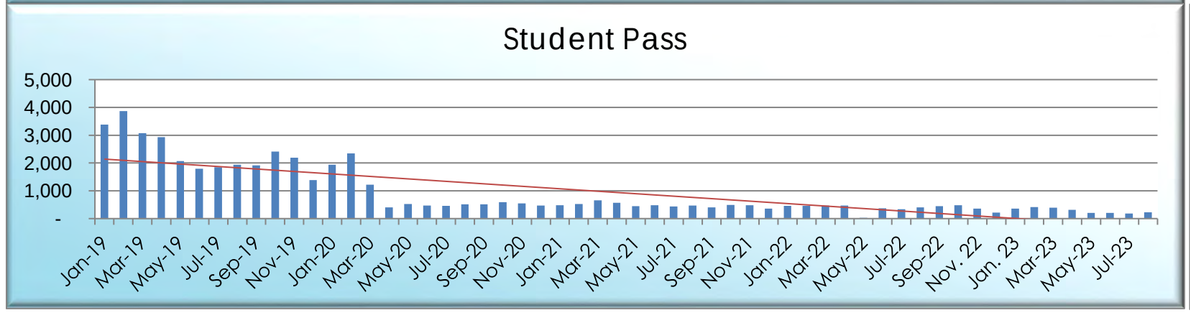

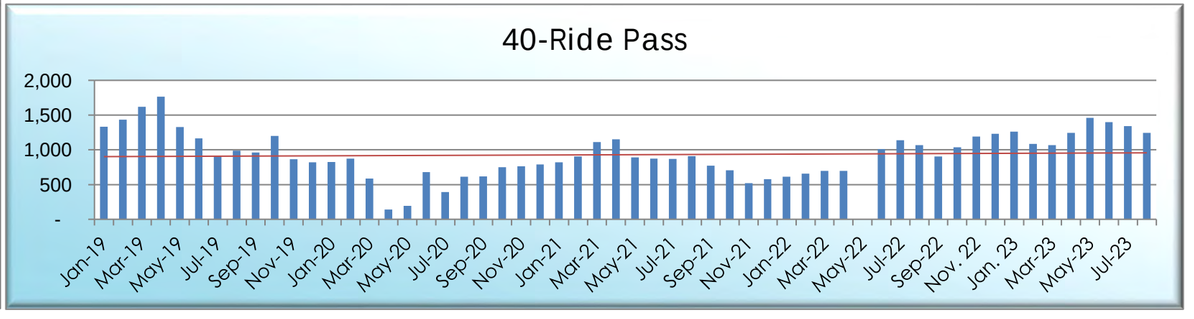

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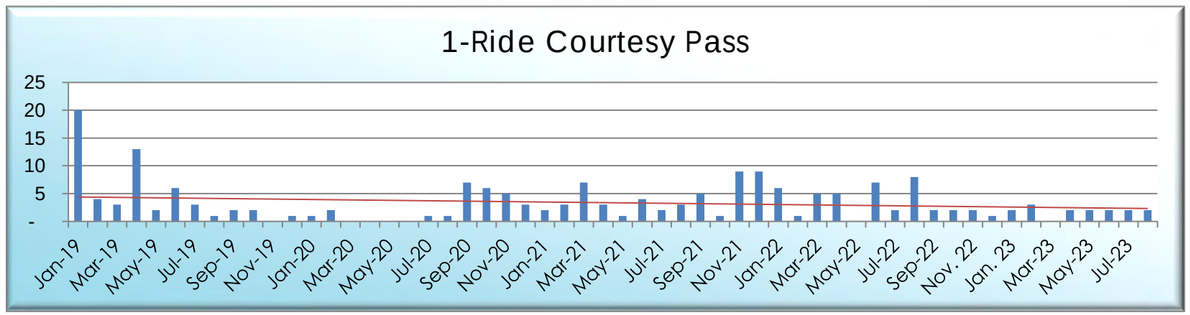

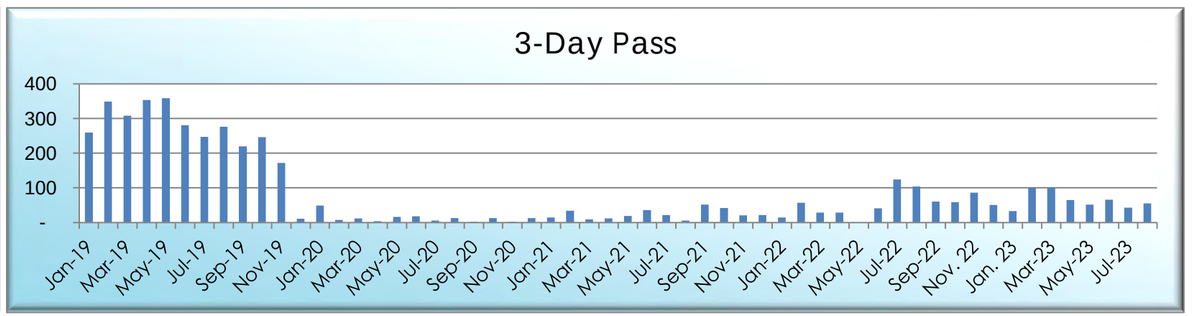

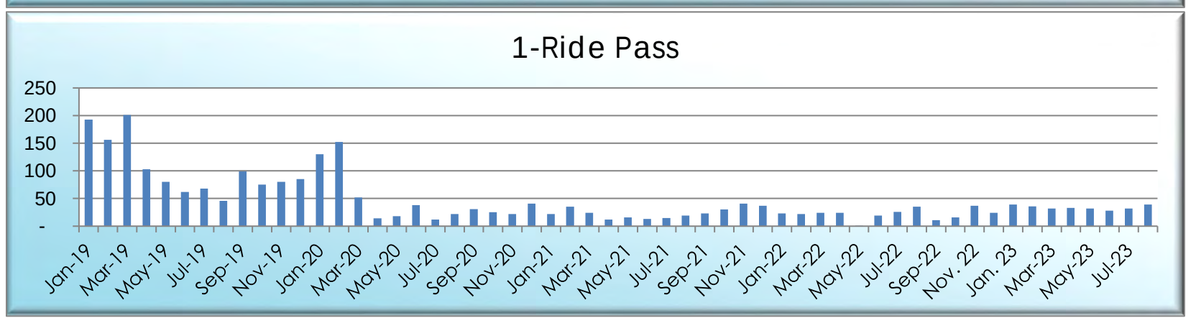

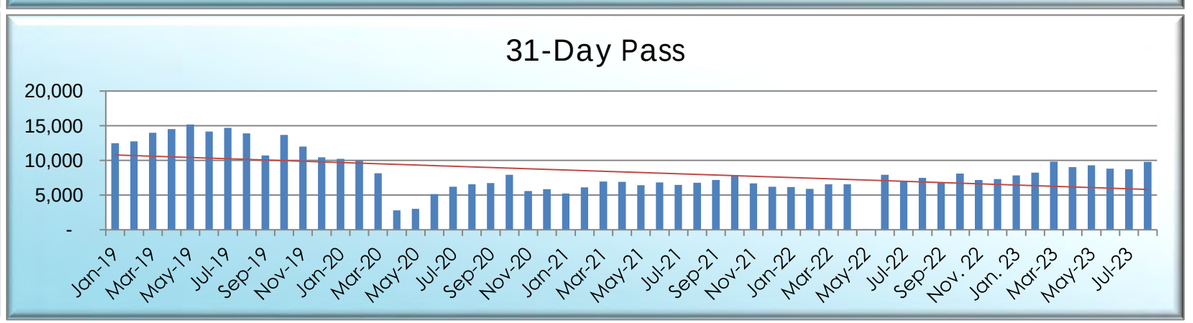

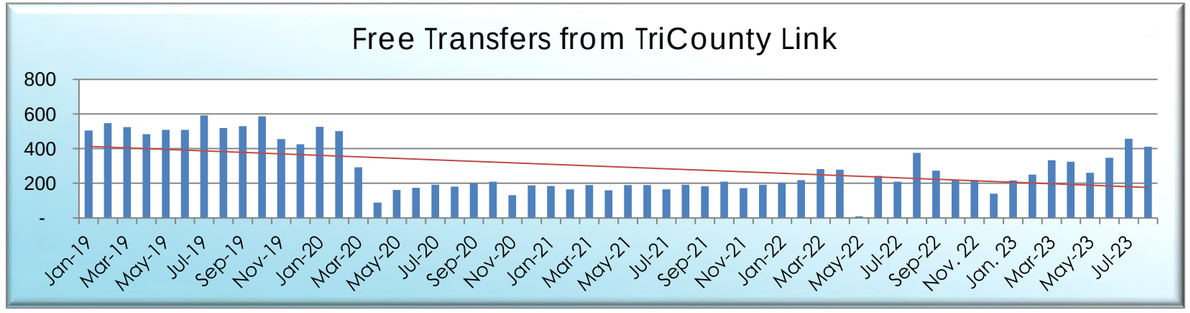

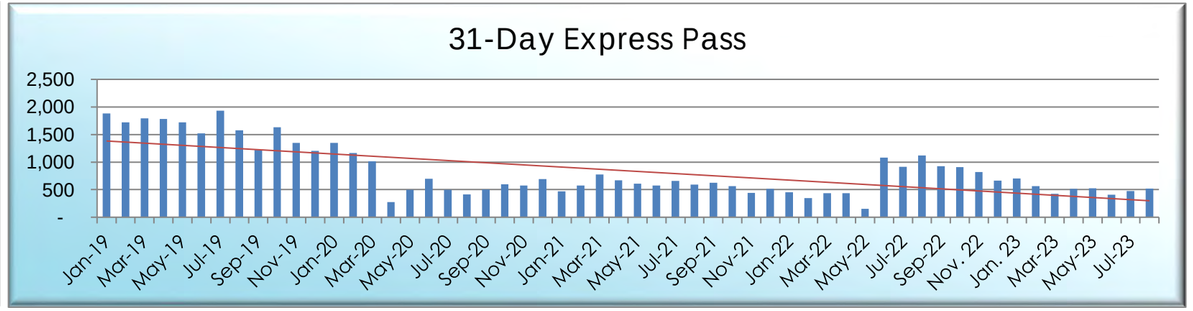

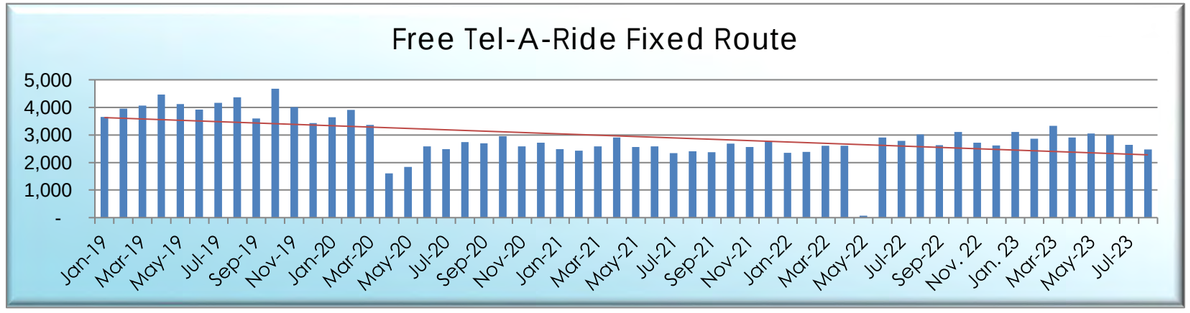

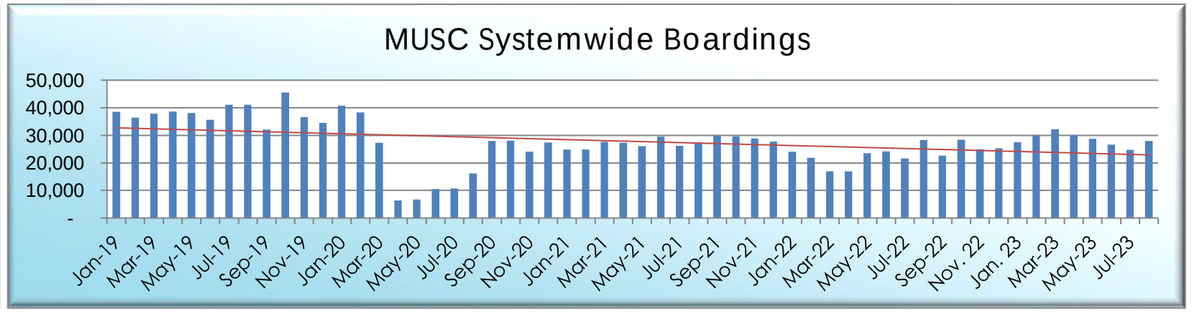

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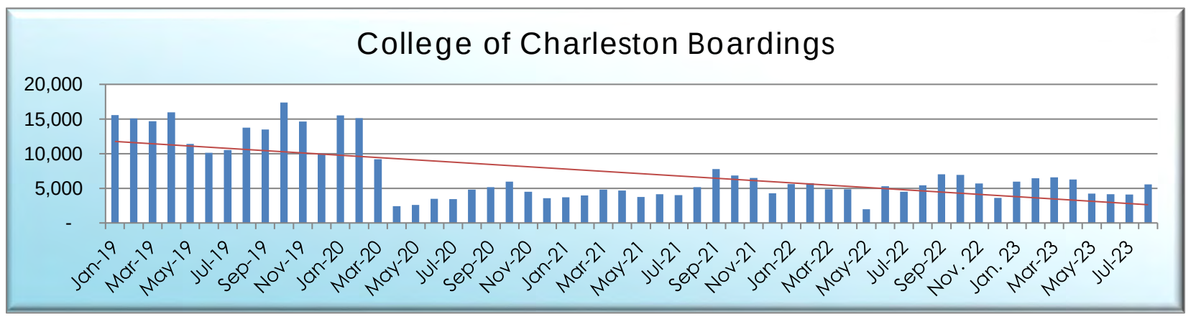
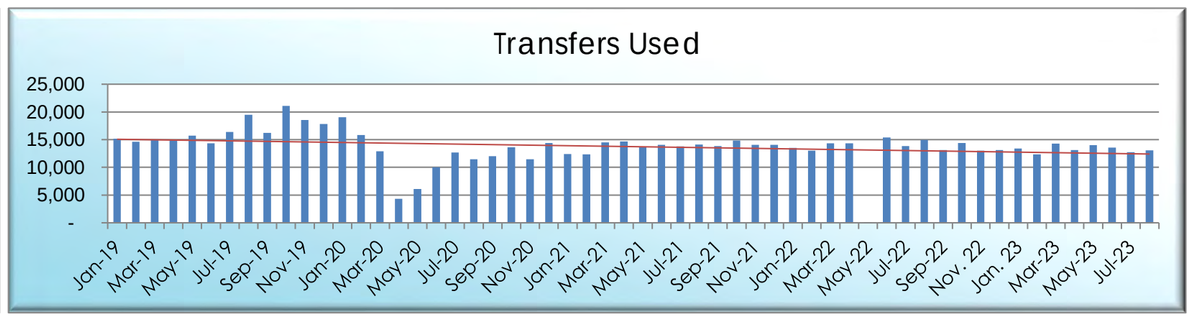
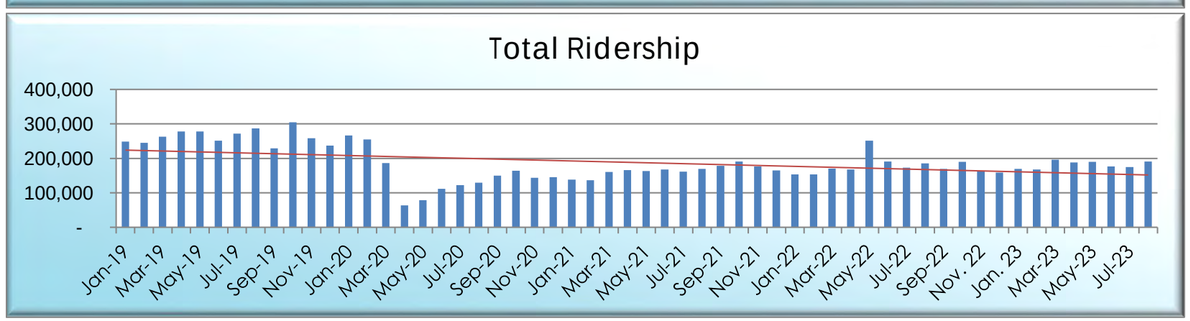
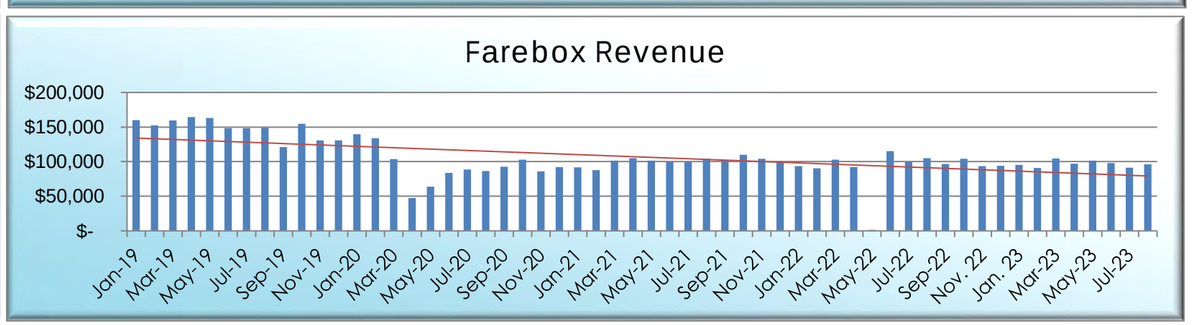
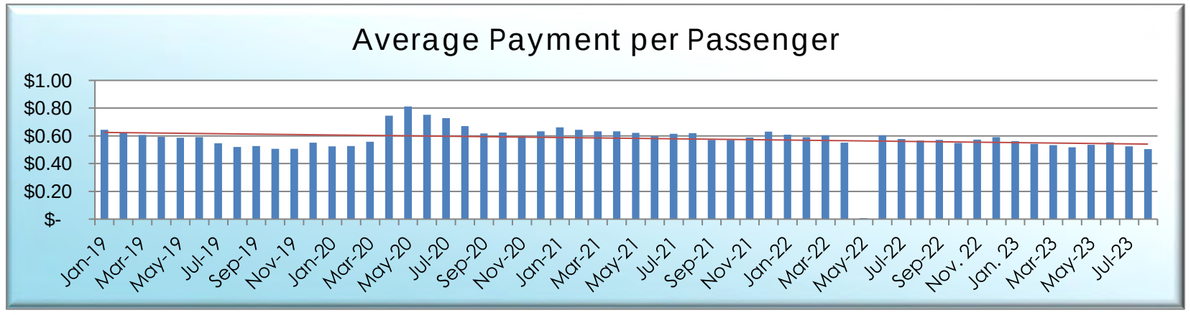
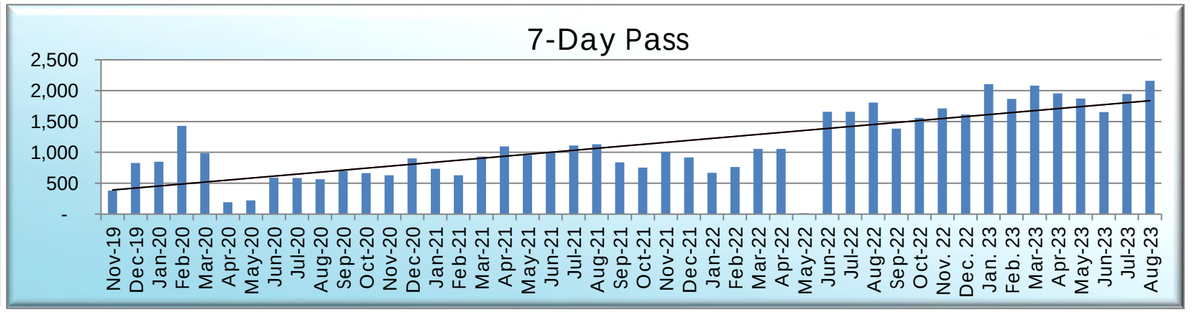


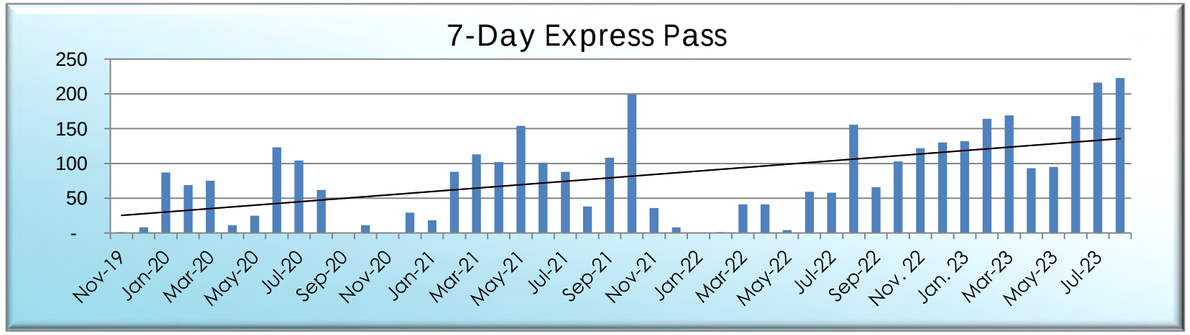


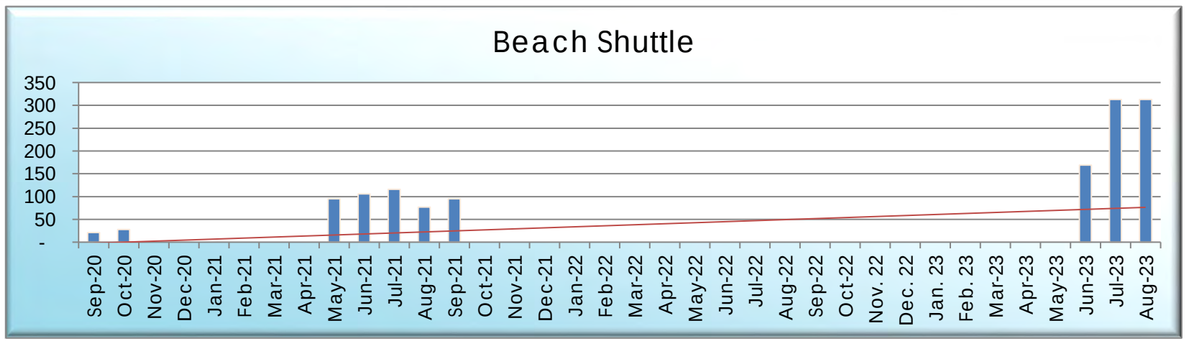




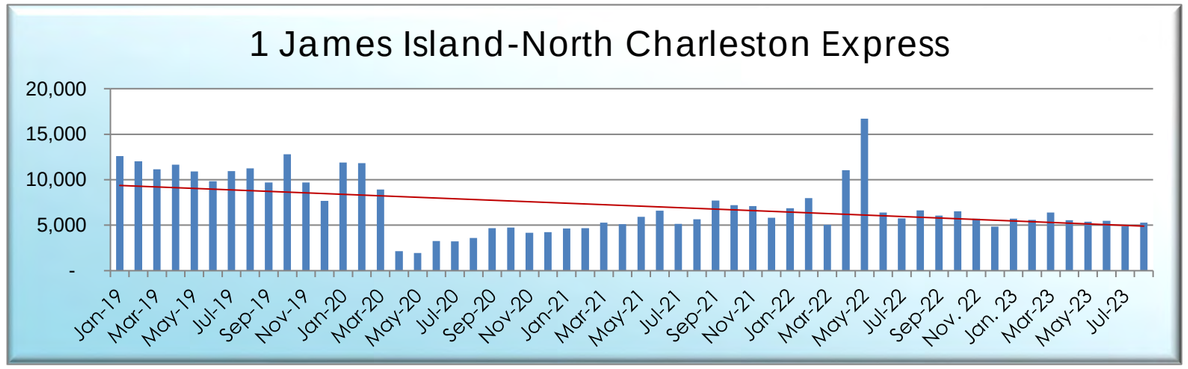


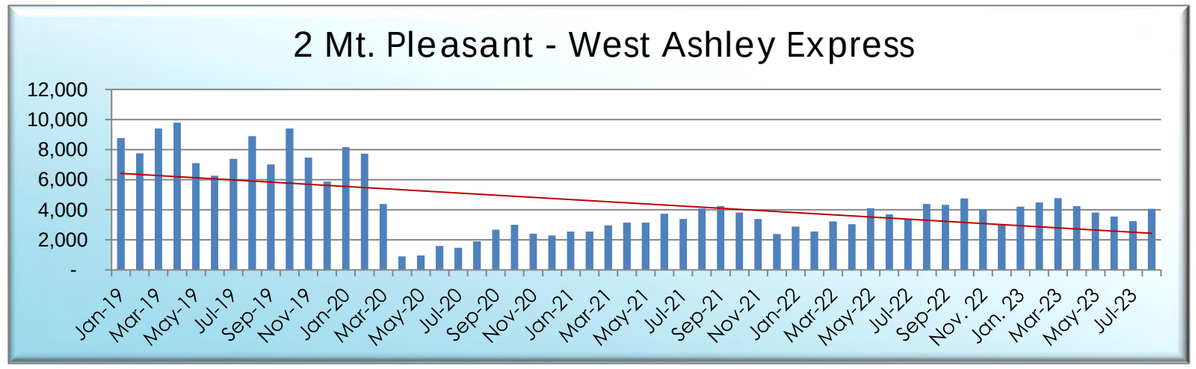


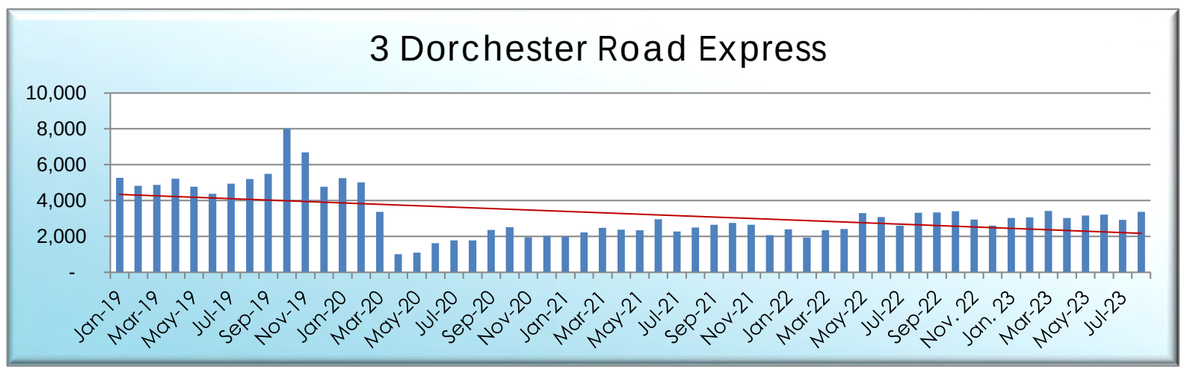


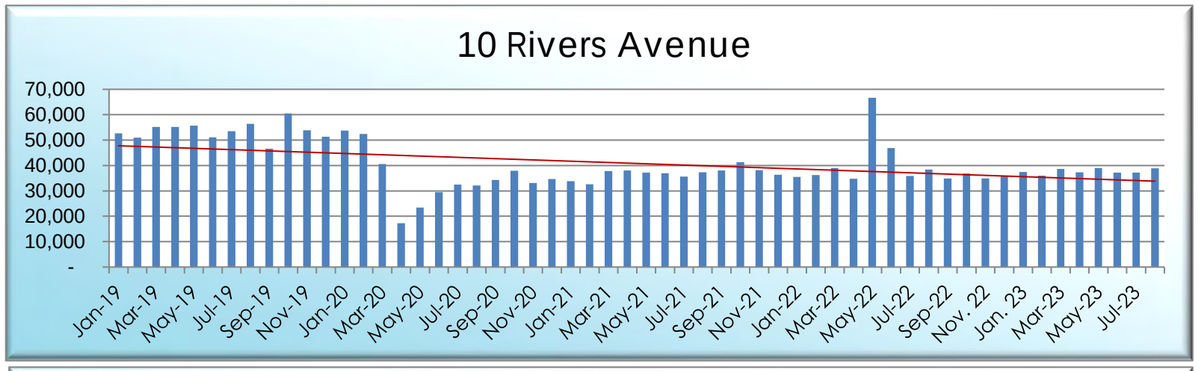


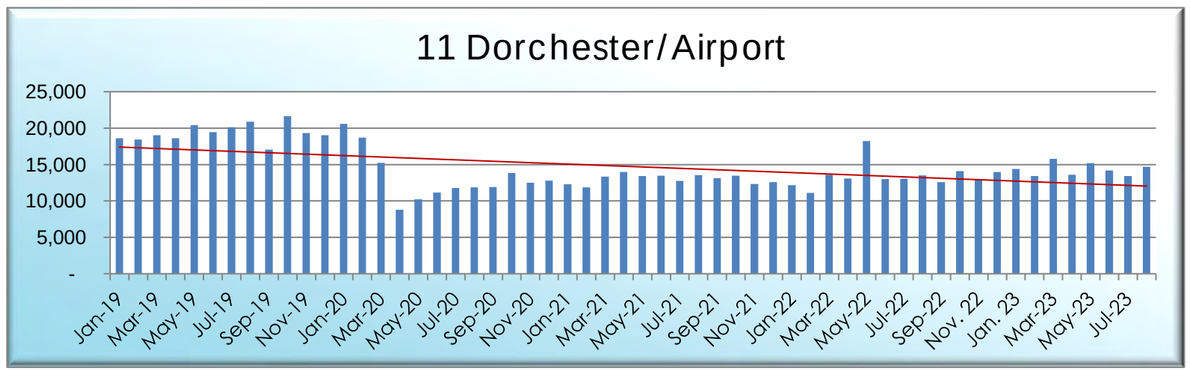
Ridership Trends by Route

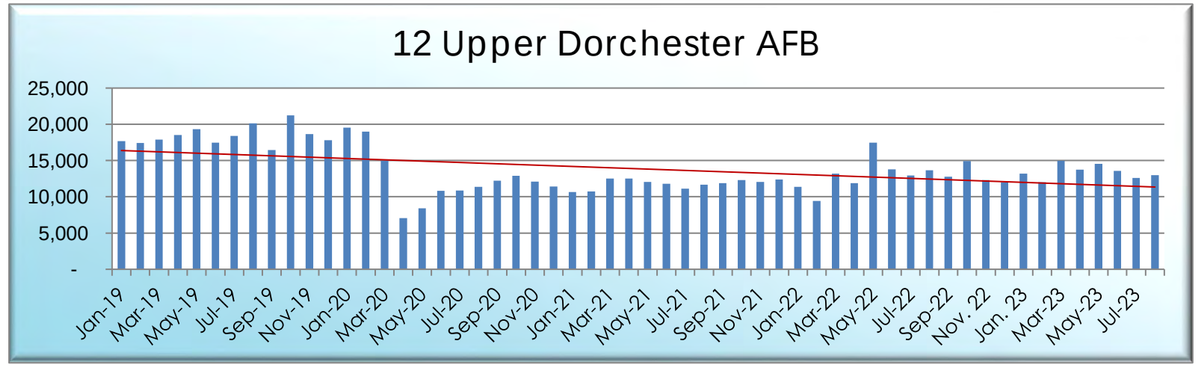




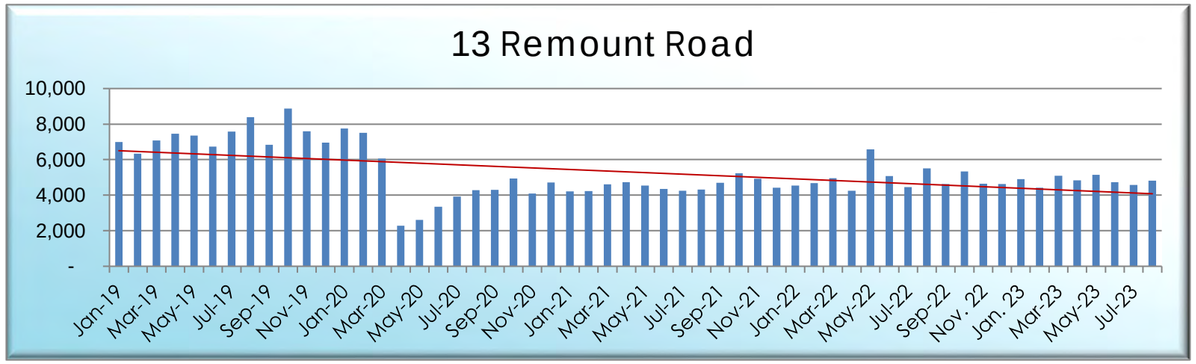


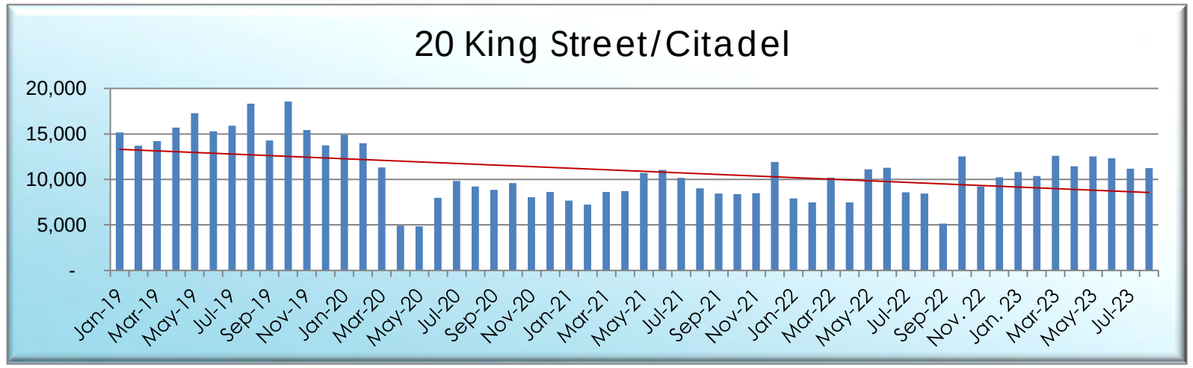


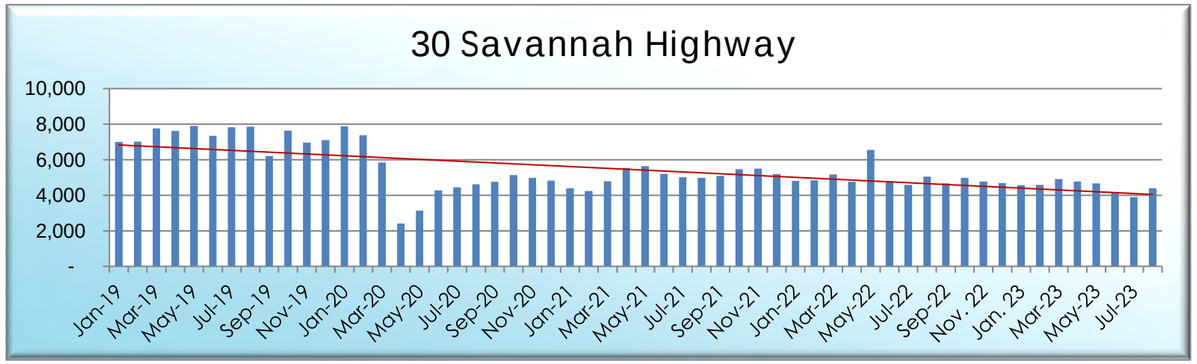


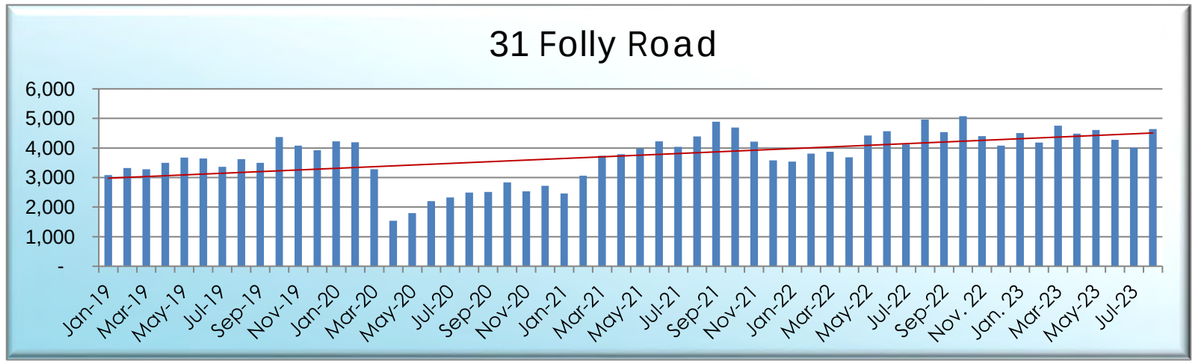


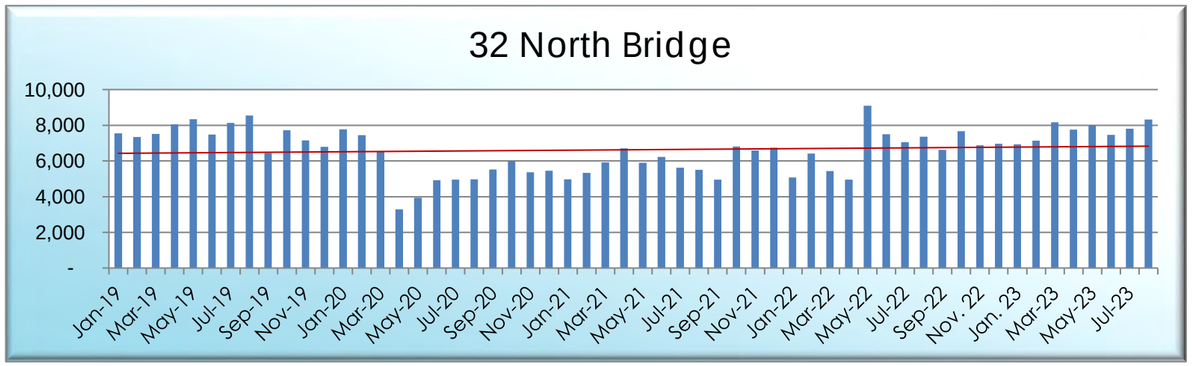
Ridership Trends by Route

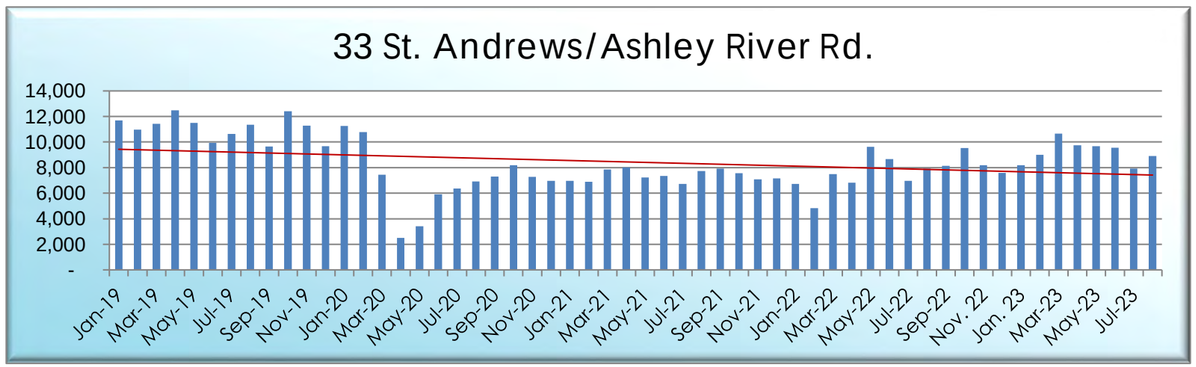




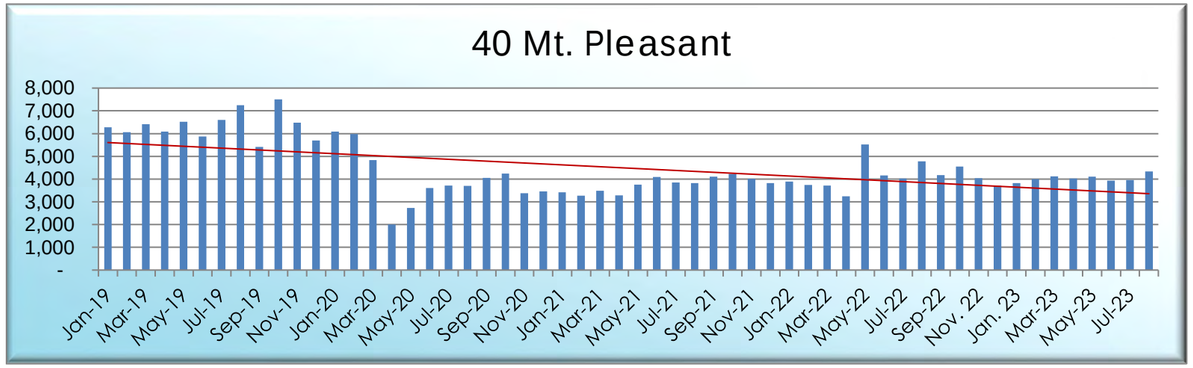


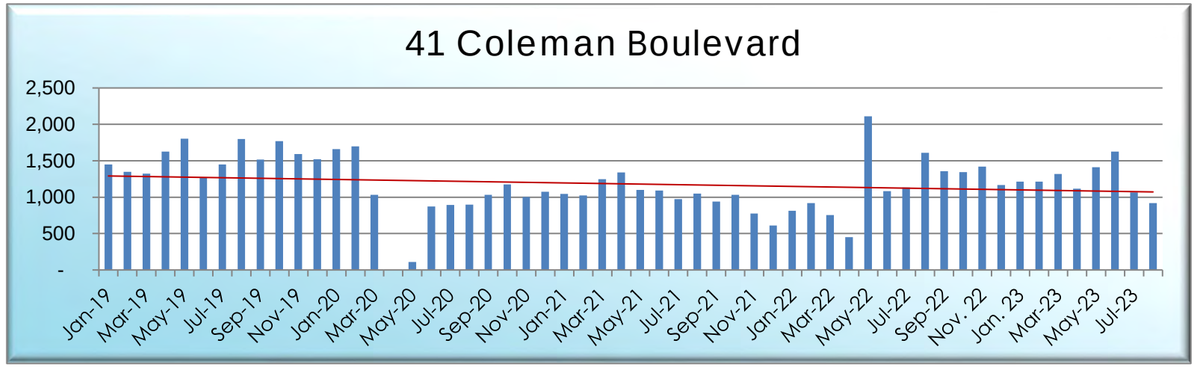


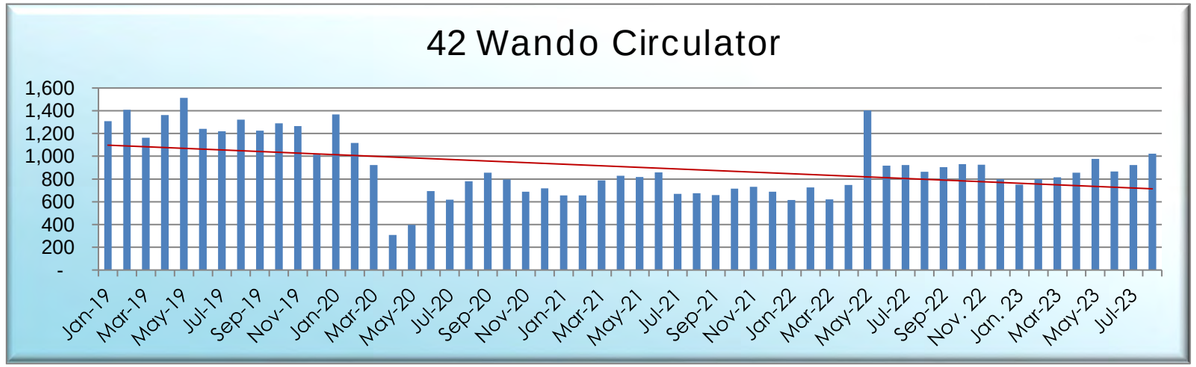


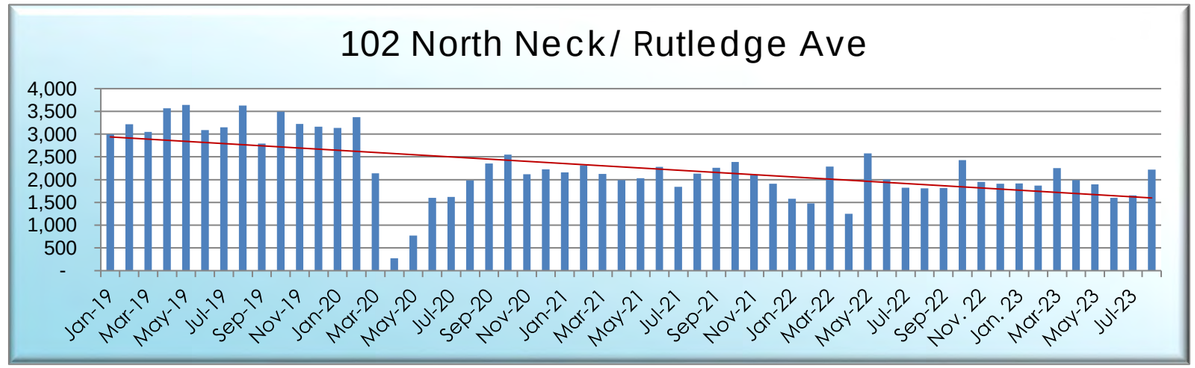


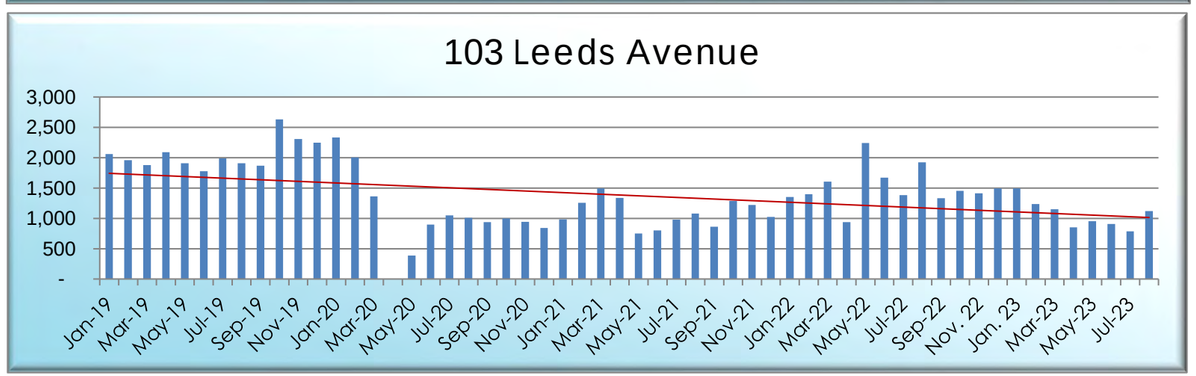
Ridership Trends by Route

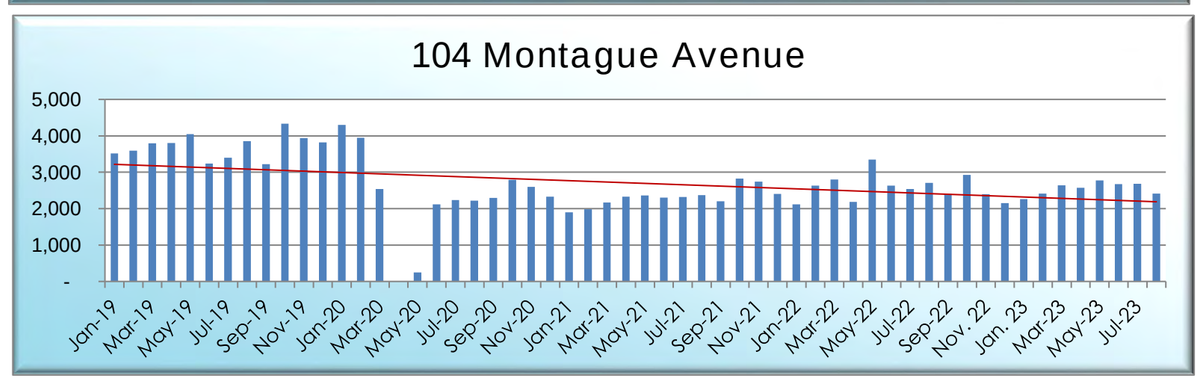




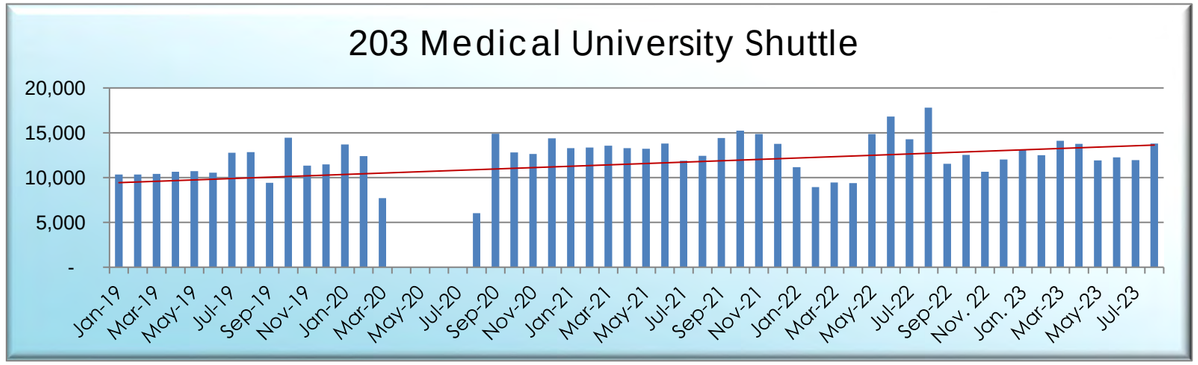


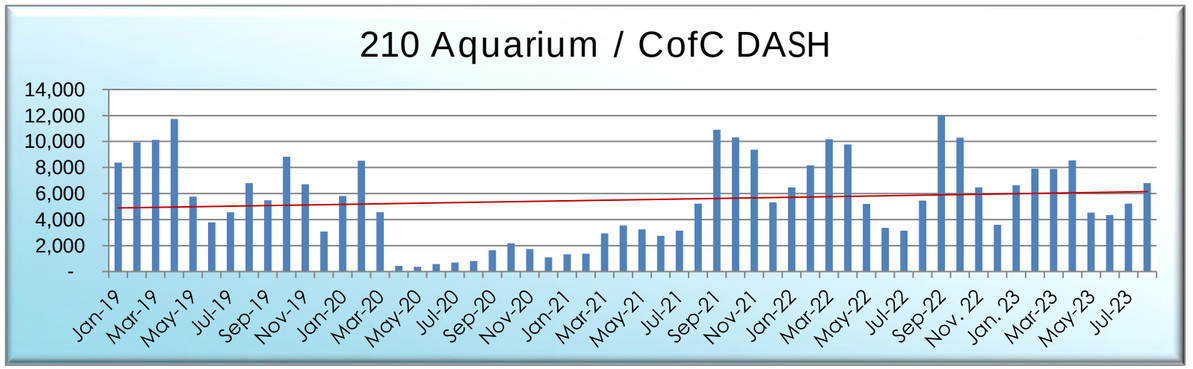


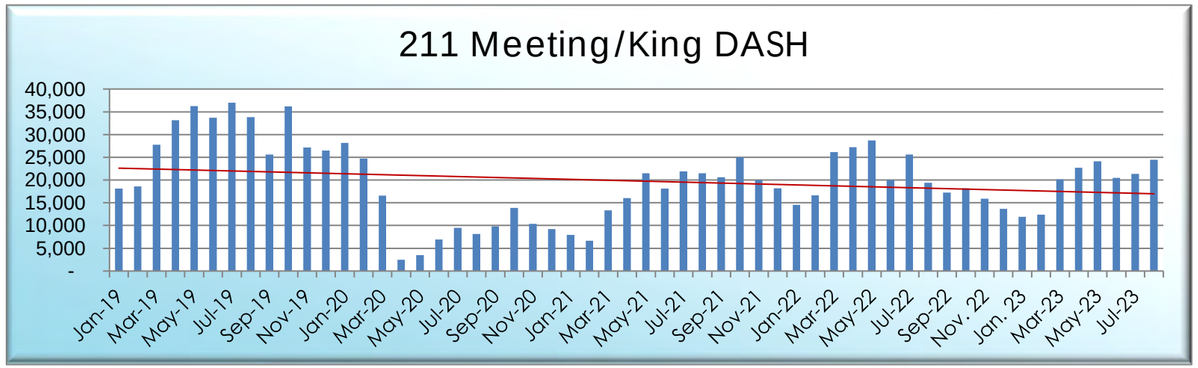


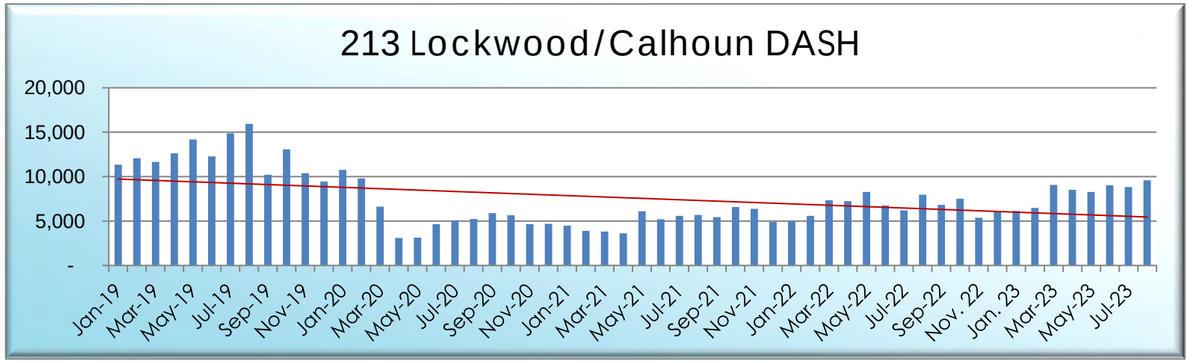


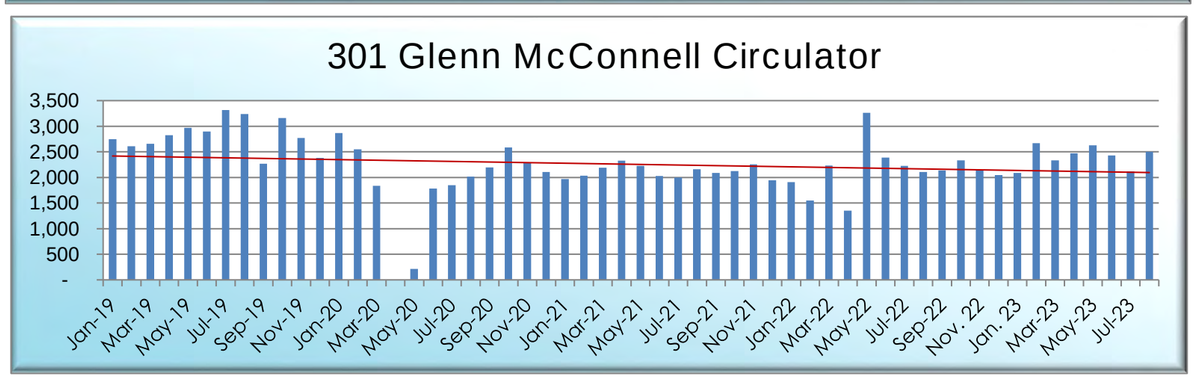
Ridership Trends by Route

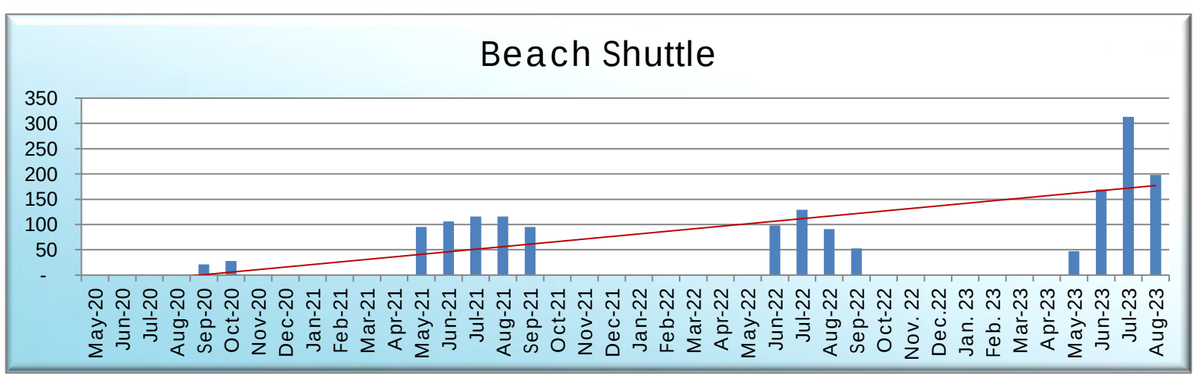




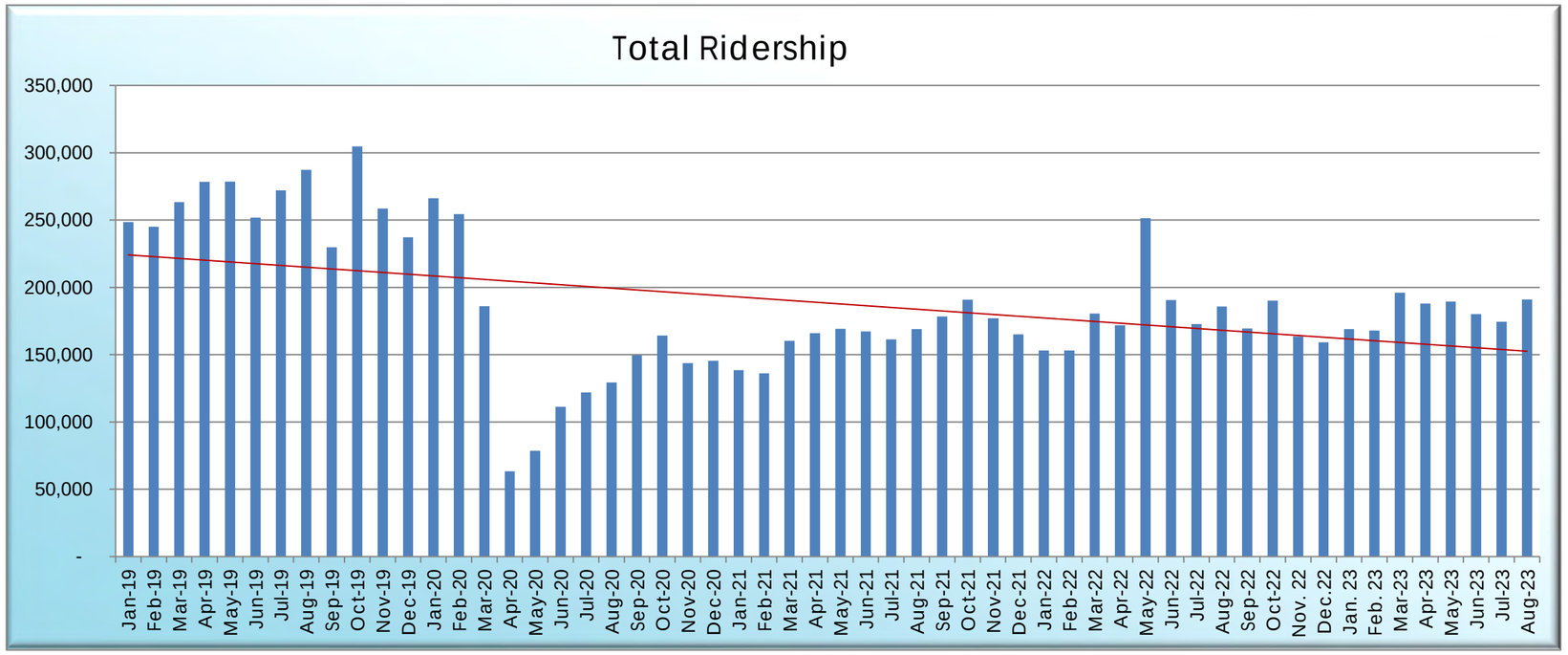


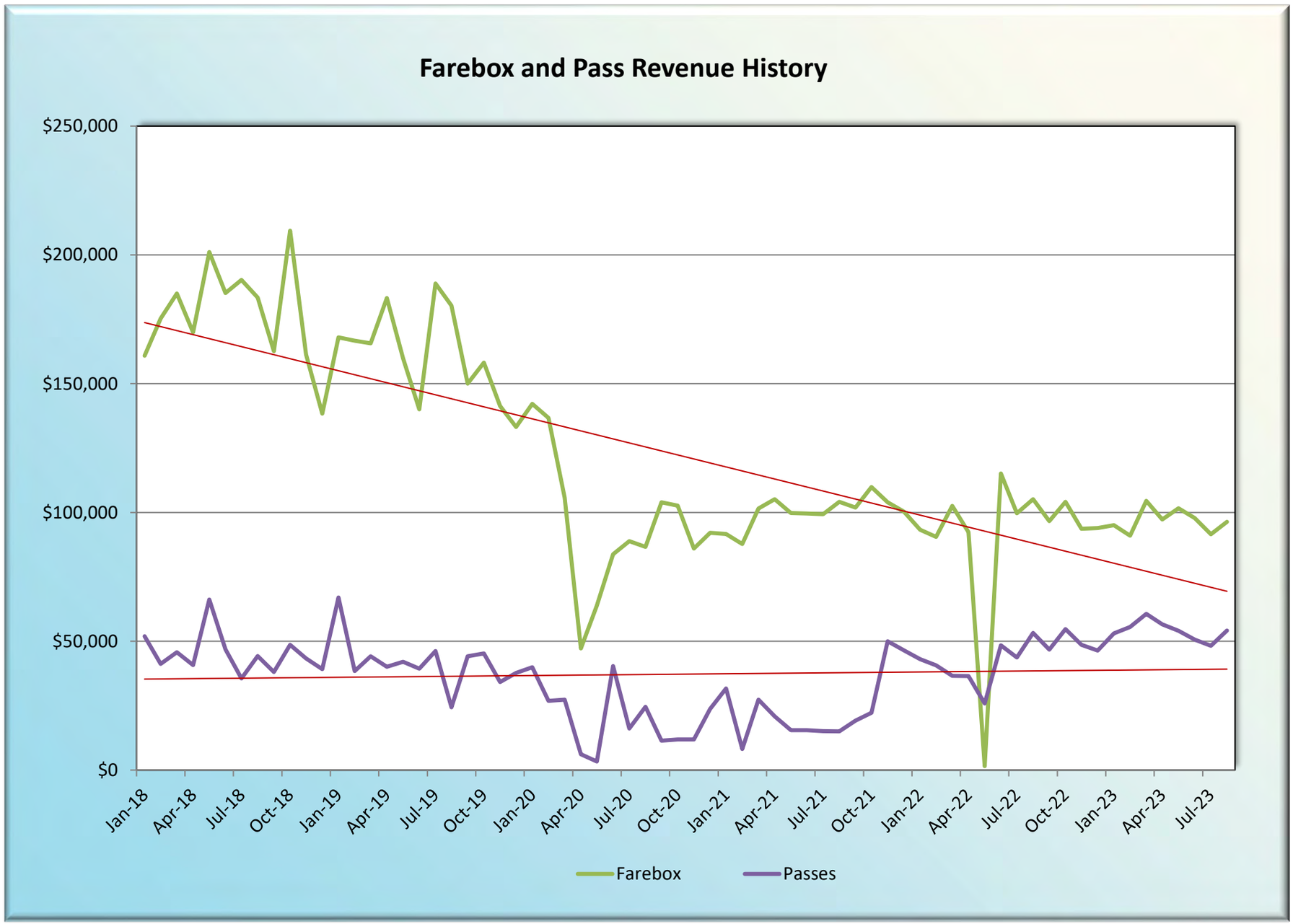






Ridership Trends by Route




Farebox and Pass Revenue History
$250,000
$200,000
$150,000
$100,000
$50,000
$0
Jan-18
Apr-18
Jul-18
Oct-18
Jan-19
Apr-19
Jul-19
Oct-19
Jan-20
Apr-20
Jul-20
Oct-20
Jan-21
Apr-21
Jul-21
Oct-21
Jan-22
Apr-22
Jul-22
Oct-22
Jan-23
Apr-23
Jul-23
Farebox
Passes