



# 2024 EMS Revenue Analysis

## HALLANDALE BEACH

 1-800-757-3724

 [info@esci.us](mailto:info@esci.us)

 [www.esci.us](http://www.esci.us)



**Emergency Services Consulting International**  
*Providing Expertise and Guidance that Enhances Community Safety*



## Table of Contents

**Executive Summary.....3**

    Key Findings: .....4

    Recommendations:.....5

    Implementation Steps: .....6

**Ambulance Billing.....9**

    Department Overview .....9

    Revenues Analysis .....33

    Expenditures Analysis .....39

    Fund Balance.....39

    Millage Rate Analysis .....42

**Financial Forecast.....43**

    Revenue Assumptions.....43

    Expenditure Assumptions.....44



## Executive Summary

The 2024 Emergency Medical Services (EMS) Revenue Analysis aims to assess the financial performance and cost-effectiveness of the Fire Rescue services contract between the City of Hallandale Beach, FL, and the Broward Sheriff's Office (BSO), which began on January 4, 2020. Initially, in FY2020, the City conducted an extensive evaluation of this contract, noting in a June 2021 BSO Cost Analysis that EMS revenue generation had remained relatively stable before and after transitioning to BSO. Recognizing the need for sustainable funding strategies, the review recommended initiating a fire assessment study to indirectly support EMS funding by covering a greater portion of Fire Suppression costs.

Following these recommendations, the City directed a Community Risk Assessment (CRA) and Standards of Cover (SOC) study to ensure alignment with best practices in EMS and fire services. To enhance these efforts, the City proposed an EMS Revenue Analysis to evaluate critical revenue factors, including patient transport volume, payer mix, fee structures, and billing practices. This analysis is designed to identify actionable strategies to boost revenue collection, reduce bad debt, and set benchmarks with comparable municipalities, strengthening the City's financial performance in EMS delivery.

The merger of Hallandale Beach Fire Rescue into the Broward Sheriff's Office marked a significant shift in operational structure, transferring three fire stations and seven apparatus to BSO's portfolio. It also resulted in the transfer of 73 personnel to support the scope of services. As outlined in the Proposed Budget for FY 21, the estimated cost for contracted fire and rescue services was \$14,761,001, with \$13,541,442 allocated for personnel services, \$901,048 for operating expenses, and \$318,514 reserved for contingencies.

The services provided under this contract encompass a wide range of emergency response capabilities, including air rescue, hazardous materials (hazmat) operations, and technical rescue services. These essential services, along with the transferred personnel and infrastructure, necessitated a comprehensive financial assessment to evaluate their long-term sustainability and operational efficiency.



In 2024, Emergency Services Consulting International (ESCI) was engaged to perform a comprehensive financial review. This study primarily aimed to assess the EMS costs and analyze the ambulance transport and billing processes, with particular focus on historical and projected patient transport volumes, revenue received by payor mix, and the efficiency of the current billing practices. ESCI's analysis is critical in identifying areas for improvement, particularly in optimizing revenue collection and ensuring billing practices are aligned with industry standards.

#### Key areas of focus include:

- Historical and projected patient transport volumes, categorized by call severity.
- Billing and revenue trends, segmented by payor mix (such as private insurance, Medicare, Medicaid, and self-pay patients).
- A review of current billing practices, rates, and applicable policies to ensure efficient revenue capture.

This analysis also considers the financial class and level of service, which will help establish a historical trend for ambulance fee billing processes. While the study incorporates various qualitative and quantitative factors, its primary basis is on the financial data available. Understanding these trends is essential for identifying gaps, ensuring cost recovery, and making informed decisions to enhance EMS financial operations.

By conducting this detailed analysis, the City of Hallandale Beach and Broward Sheriff's Office can identify opportunities to optimize EMS billing, improve overall revenue streams, and enhance service delivery to the community in a financially sustainable manner. The recommendations will guide future decision-making processes to refine operational and billing practices in the years ahead.

#### Key Findings:

1. **Billable Incidents and Payor Mix:** The majority of billable incidents consisted of patients with Medicare, which accounted for 45.17% of the total figures from 2020 to 2023. Advanced Life Support (ALS1) Emergencies made up the largest portion of gross charges and adjustments. ALS emergencies require a higher level of training, equipment and interventions to manage complex medical situations, including but not limited to advanced airway management, IV access, medication administration and advanced cardiac life support.



2. **Revenue and Collections:** Medicare charges comprised 66.21% of the total amounts collected, while Medicaid accounted for 6.64% in FY 23. Insurance accounted for 21.90% of the total amounts collected in FY 23.
3. **Adjustments and Write-offs:** The largest adjustments were made to ALS1 Emergency charges, indicating either incorrect charges or non-acceptance by various insurances. Patient self-pays had the highest percentage of write-offs, comprising 82.23% of the total period.
4. **Financial Forecast:** The study projects an increase in ambulance fee collections, with a proposed budget for FY 25 estimating \$1,356,785 in collections. The outstanding balance owed is projected to decrease from 47% in FY 21 to 30% in FY 25.

### Recommendations:

1. **Review ALS1 Claims (BSO):** Conduct a thorough examination of patient care narratives for ALS1 claims that were adjusted. This will help provide better justification for billing codes and increase acceptance rates with insurance payers. Additionally, training sessions for EMS personnel on accurate and detailed documentation can be beneficial.
2. **Standardize Patient Care Narratives (BSO):** Develop and implement a standardized policy for patient care narratives. This ensures detailed accounts that justify billing codes, which can improve the acceptance rate with insurance payers. Regular audits and feedback sessions can help maintain the quality of documentation.
3. **Revise Transport Fee Waiver Policy (City):** Review the current Transport Fee Waiver policy, which attributed to 25.95% of self-pay adjustments for FY 23. Consider alternative payment methods such as payment plans or discounted rates to provide options for those without insurance. Implementing a sliding scale based on income could also be considered.
4. **Contracting for Insurance Collections (BSO):** Evaluate the cost-benefit of contracting with a company to increase private insurance allowable amounts. This could potentially improve revenue collections from insurance claims. Additionally,



exploring partnerships with multiple collection agencies might yield better results.

5. **Implement Millage Rate or Special Taxing Unit (City):** Explore the possibility of implementing a millage rate or special Emergency Medical Services taxing unit to supplement Fire Rescue and EMS services. This could provide additional funding to support these services. Engaging with the community through public forums to explain the benefits and garner support could be crucial.
6. **Internal Analysis and Review (BSO):** Conduct further internal analysis to determine the cost-benefit of seeking additional information to increase revenue collections. This includes reviewing the timeline for sending accounts to collections and considering whether extending the timeline could reduce the number of accounts sent to collections. Additionally, implementing a robust follow-up system for unpaid bills before sending them to collections could improve recovery rates.

Overall, the report underscores the need for improvements in the ambulance fees billing process and suggests further internal analysis to determine the cost-benefit of seeking additional information to increase revenue collections

### Implementation Steps:

- **Review ALS1 Claims:**
  - Conduct training sessions for EMS personnel on accurate and detailed documentation.
  - Examine patient care narratives for ALS1 claims that were adjusted.
  - Provide feedback to EMS personnel on documentation quality.
  - Implement regular audits to ensure compliance with documentation standards.

### Standardize Patient Care Narratives:



- Develop a standardized policy for patient care narratives.
- Train EMS personnel on the new standardized policy.
- Conduct regular audits and feedback sessions to maintain documentation quality. Implement a system for continuous improvement based on audit results.
  
- **Revise Transport Fee Waiver Policy:**
  - Review the current Transport Fee Waiver policy.
  - Develop alternative payment methods such as payment plans or discounted rates.
  - Implement a sliding scale based on income for fee waivers.
  - Communicate the revised policy to EMS personnel and the public.
  
- **Contracting for Insurance Collections:**
  - Evaluate the cost-benefit of contracting with a company for insurance collections.
  - Explore partnerships with multiple collection agencies.
  - Negotiate contracts with selected collection agencies.
  - Monitor the performance of contracted agencies and adjust as needed.
  
- **Implement Millage Rate or Special Taxing Unit:**
  - Explore the feasibility of implementing a millage rate or special taxing unit.
  - Engage with the community through public forums to explain the benefits.
  - Garner support from the community and local government.
  - Implement the millage rate or special taxing unit based on community feedback.



- **Internal Analysis and Review:**

- Conduct further internal analysis to determine the cost-benefit of seeking additional information.
- Review the timeline for sending accounts to collections.
- Implement a robust follow-up system for unpaid bills before sending them to collections.
- Monitor the effectiveness of the new follow-up system and adjust as needed.

By following these steps, the recommendations can be effectively implemented to improve the ambulance fees billing process and increase revenue collections for Hallandale Beach EMS.





## Ambulance Billing

### Department Overview

The Hallandale Beach Fire Rescue services were merged into the Broward Sheriff's Office officially on January 4, 2020. This integration included adding three fire stations and seven apparatus. The fiscal year starts October 1 and ends September 30.

Upon the acquisition of the Fire Rescue services by the Broward Sheriff's Office, as provided by the Proposed Budget for FY 21, it was anticipated that total costs for the contracted services would be \$14,761,001 (page 25). The services provided include air rescue services, hazmat, technical rescue, etc. The costs include the addition of 73 new positions. For these changes, \$13,541,442 was allocated for personnel services; \$901,048 for operating expenses and \$318,514 for reserves.

Emergency Services Consulting International (ESCI) analyzed the financial impact of this agreement. Within that study, one of the recommendations included a review of the ambulance transport and associated billing process by examining historical and projected patient transport volume by call severity, billing, and revenue received by payor mix. This would include reviewing the current billing practices, rates, and applicable policies and procedures to make recommendations for future improvements.

The information provided regarding the financial class and level of service will help to create a historical trend regarding the status of the ambulance fees billing process. While there are many factors that will contribute to the analysis and the effectiveness of the procedures in place, the analysis is based on numerical data that is available.



The billable incidents for the financial class are represented in the following figure.

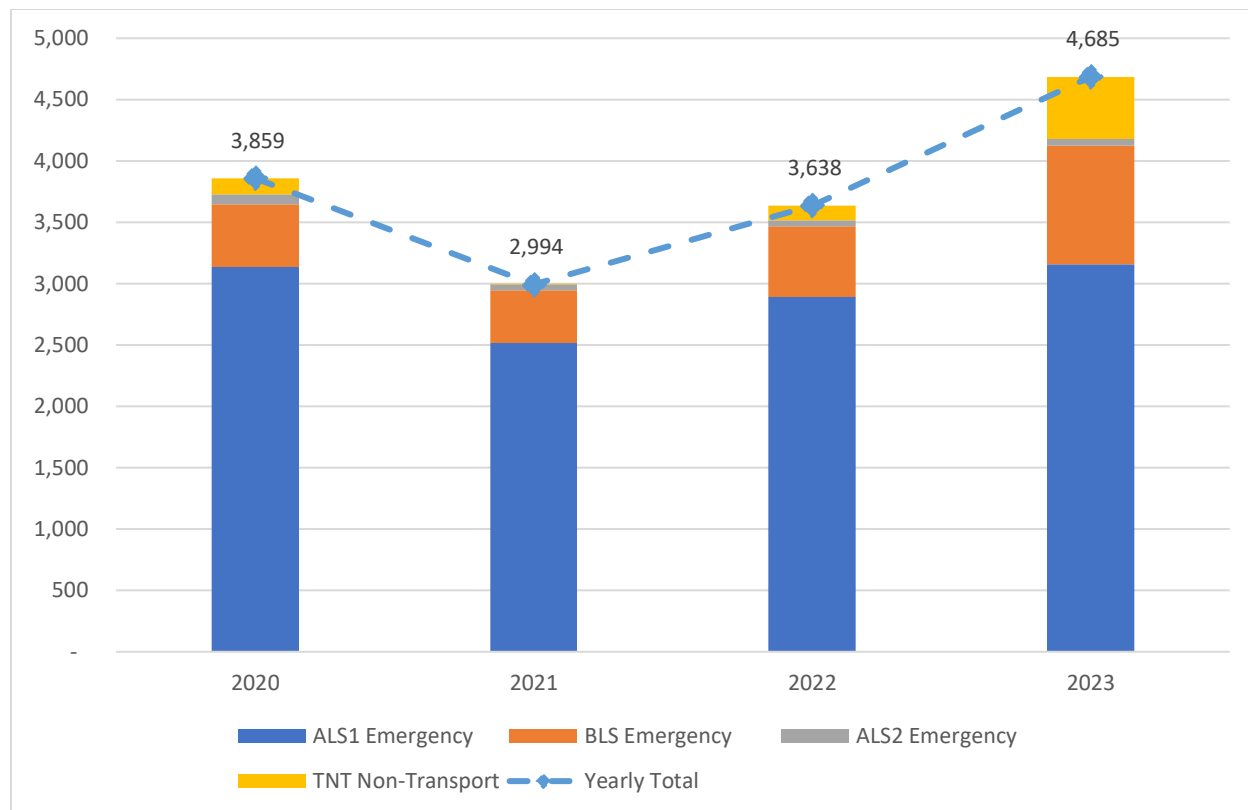


Figure 1 Billable Incidents by Level of Service, FY 2020-23

The number of transports that occurred fluctuate, based on many factors that can contribute to the need for medical transports, including growth, age factors, health factors, living conditions, areas of transport, miles of transport, etc. However, most transports were ALS1 Emergencies, which remain around 3,000 incidents per year. Basic Life Support (BLS) Emergencies were the second largest type of billable incident. BLS services is the first line of response, such as providing immediate care at the scene to stabilize and support functions through basic techniques like cardiopulmonary resuscitation (CPR), rescue breaths and/or the use of an automated external defibrillator (AED) until help arrives. BLS providers cannot perform invasive procedures and may only administer a few select medications.



The following figure indicates the different payor mix for the types of billable incidents for each financial class (FC).

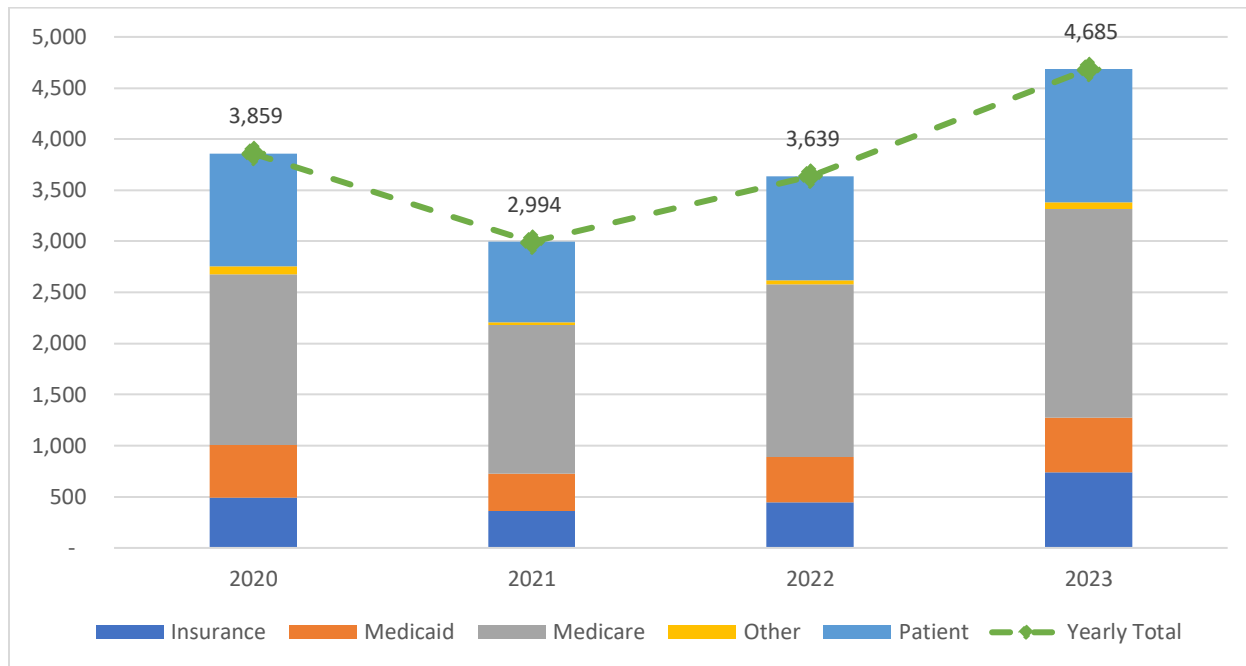


Figure 2 Billable Incidents by Financial Class, FY 2020-23

Most billable incidents consisted of patients with Medicare, which pays 80% of covered medical transportation costs after the Part B deductible has been met. The remaining 20% is the patient’s responsibility. In FY 23, Medicare patients accounted for 43.52% of the billable incidents. For the entire period being analyzed, the years of 2020–2023, Medicare patients consisted of 45.17% of the total figures for all four years combined.



The following figure indicates the gross charges invoiced per level of service.

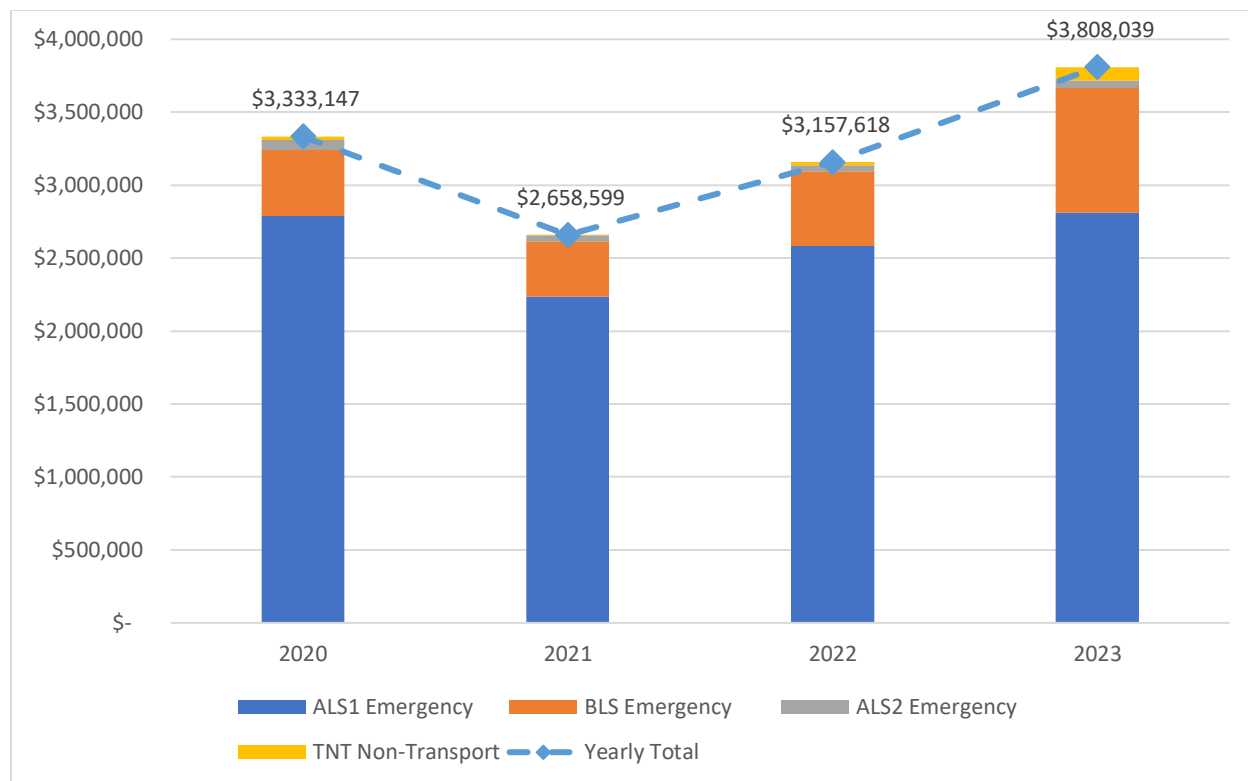


Figure 3 Gross Charges by Level of Service, FY 2020-23

ALS1 Emergencies consisted of the large majority of the gross charges, which directly correlates to the number of billable incidents. In FY 23, the amounts invoiced comprised 73.81% of the total toward ALS1 Emergencies. Of the total period analyzed, between the years 2020–2023, ALS1 Emergencies equated to 80.42% of the total gross amounts invoiced.



The following figure depicts the payor mix for the gross charges that are first invoiced for each billable incident.

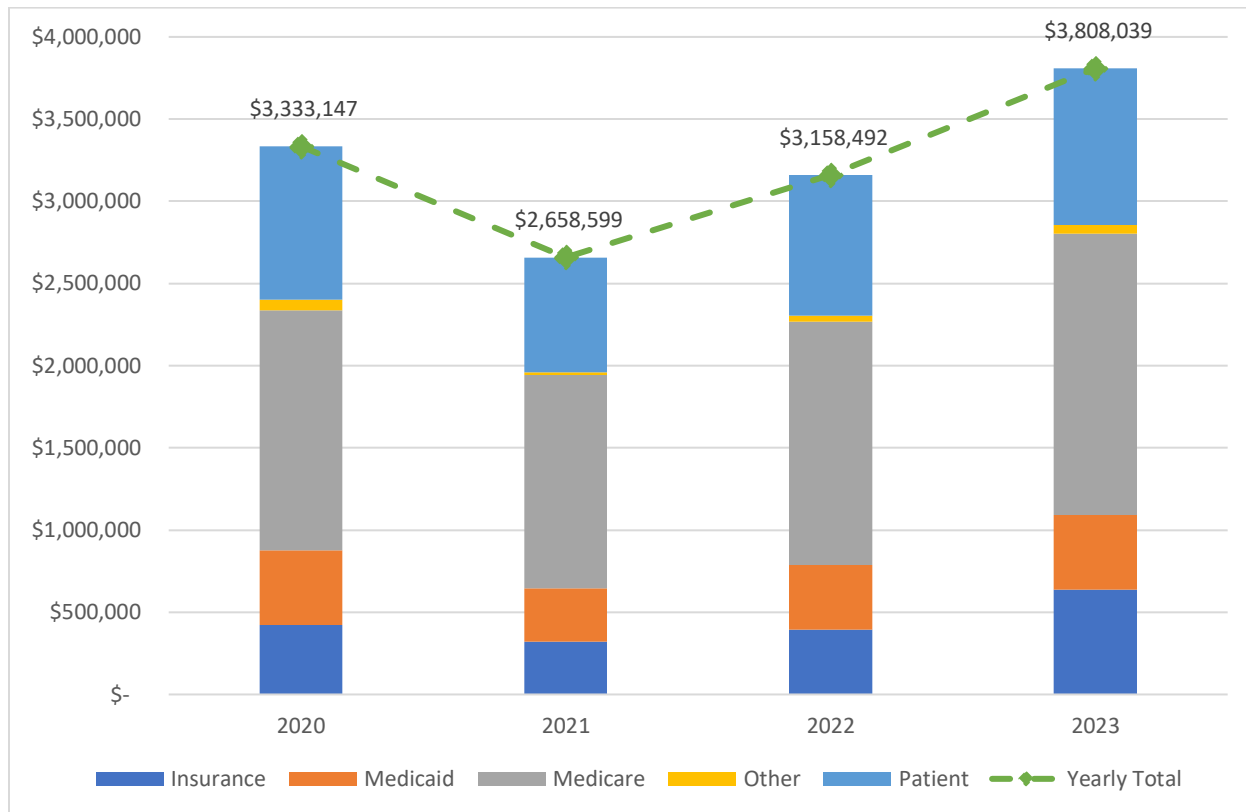


Figure 4 Gross Charges by Financial Class, FY 2020-23

Medicare charges consist of 45.92% of the total period being analyzed. In FY 23 specifically, 44.94% of the gross charges can be attributed to Medicare. Patient self-pays account for 24.96% of the charges for the same FY, indicating either insurances not covering the transports or patients not having insurance. Throughout the years, patient self-pays consist of about 26.52% of the charges, while the percentage of individuals with insurance increased and Medicaid and Medicare patients decreased slightly. Normally, insured patients helped to increase the collection rates of the amounts charged.



The following graph indicates the financial adjustments made for each level of service.

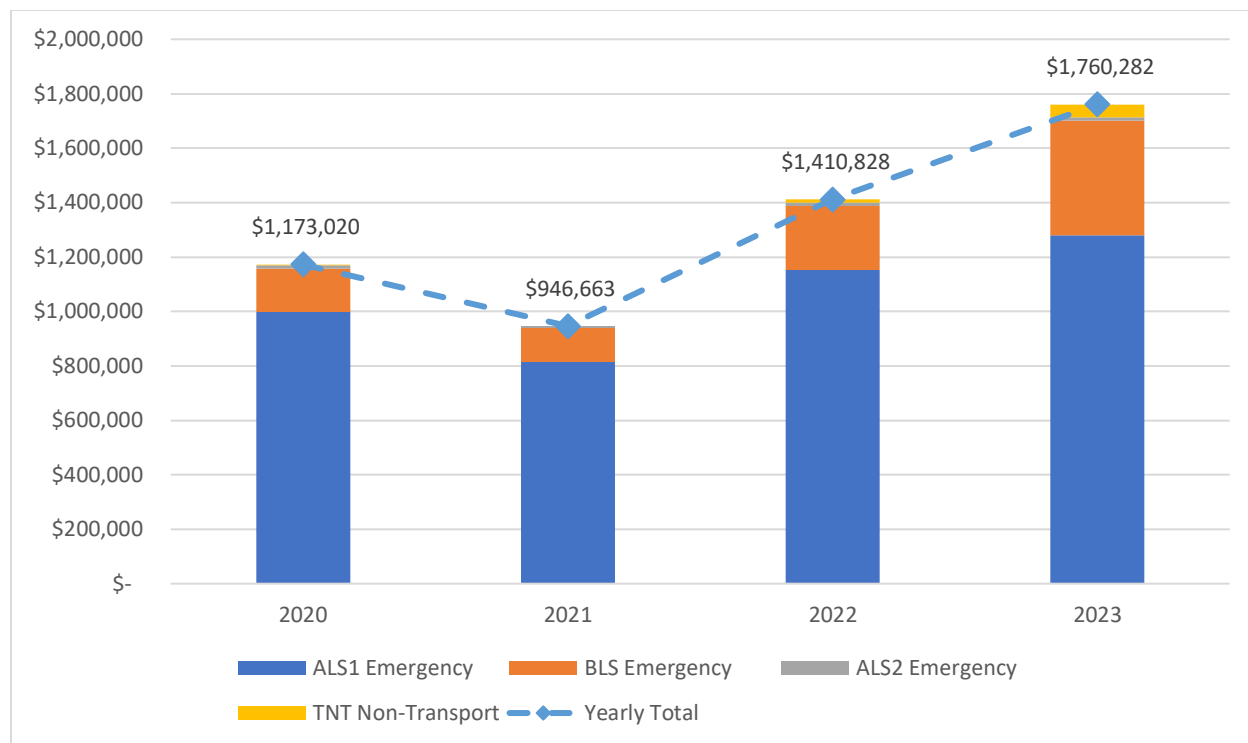


Figure 5 Adjustments per Level of Service, FY 2020-23

The largest adjustments were made to ALS1 Emergency charges, indicating either charges were incorrect or not accepted by the various insurances. According to findings, 80.25% of the total number of adjustments were made to ALS1 Emergencies over the 4-year period of data provided. The percentage of adjustments made to BLS Emergencies increased from FY 22 at 16.64% to 23.90% of adjustments made in FY 23. In FY 21, ALS1 Emergency adjustments comprised 86.04% and decreased to 72.67% in FY 23. These findings from the numerical data would suggest that closer inspection could be made as to the billing codes used for the different insurance companies. Insurance companies could deny some of the codes used, or the transport documentation and descriptions may not be enough to warrant the level of service being billed.



The following figure shows the breakdown of adjustments made per financial class.

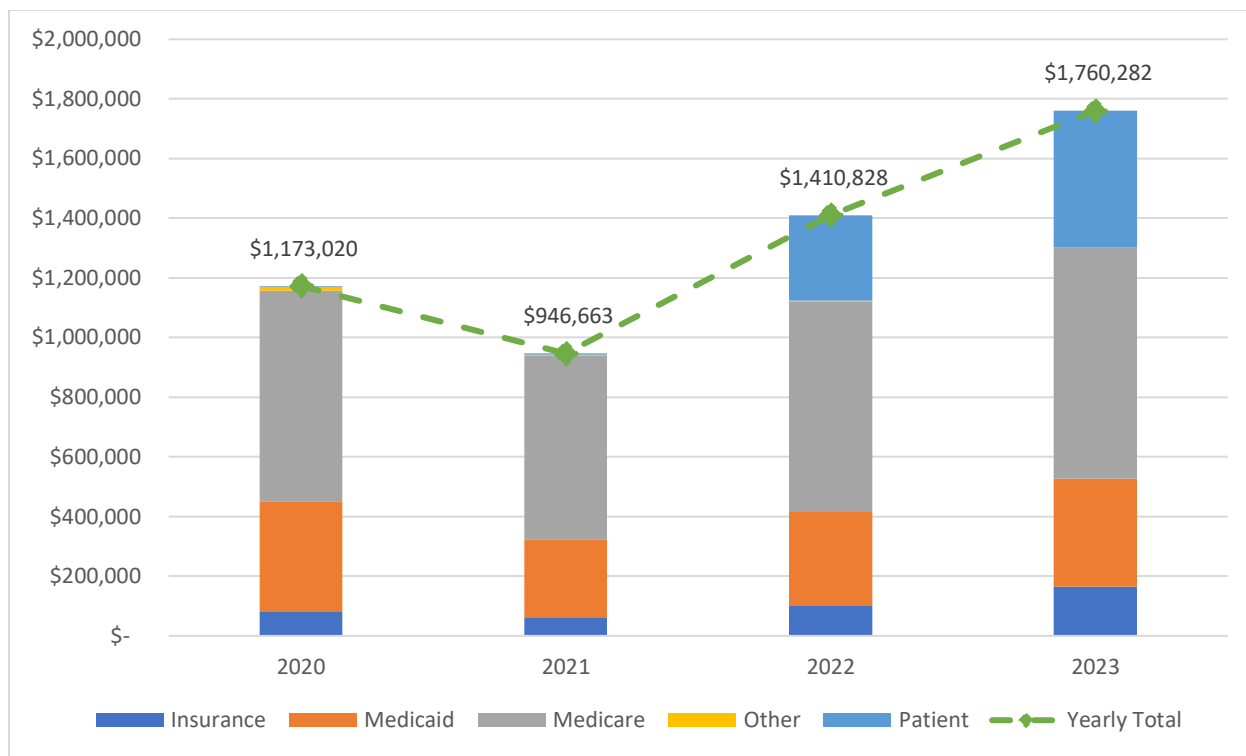


Figure 6 Adjustments by Financial Class, FY 2020-23

The breakdown indicates that most adjustments were made for Medicaid and Medicare patients throughout the years. These typically are based on the Ambulance Fee schedules of allowable rates. Therefore, most charges cannot be collected based on the payor mix. However, FY 22 and 23 show most patients' self-pays being adjusted from what was originally billed. While these may not end up being what is collected, the costs can be attributed to the Transport Fee Waiver, allowed by the city, to waive the ambulance transport fees for residents who do not have insurance coverage. For FY 22, patient self-pay adjustments consist of 20.32% of the amounts, and 25.95% for FY 23.



The following figure illustrates the net charges for each level of service.

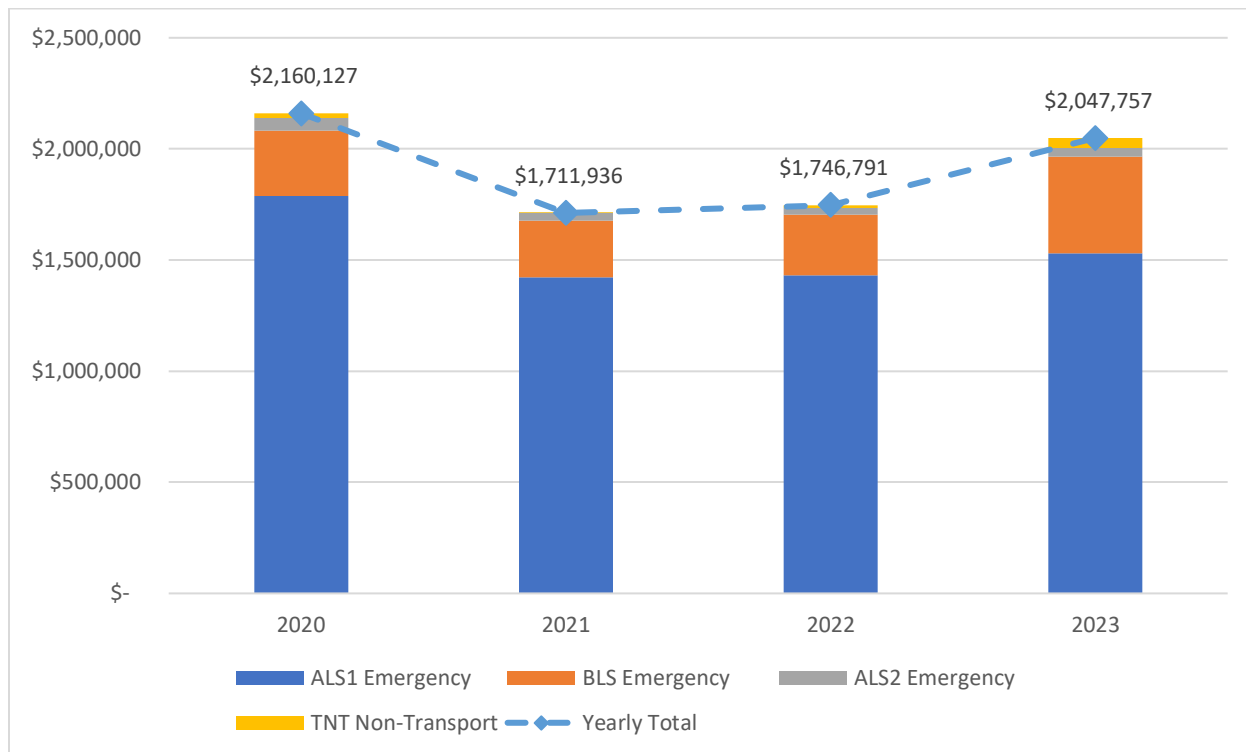


Figure 7 Net Charges by Level of Service, FY 2020-23

The net charges are the amounts that remain after adjustments and are normally the final provider’s accepted rates. ALS1 Emergencies consist of 80.54% of the total period’s net charges. In FY 23, the ALS1 Emergency charges consisted of 74.79%, while BLS Emergencies consisted of 21.24% of the charges that were invoiced.





The following graph shows the net charges per financial class.

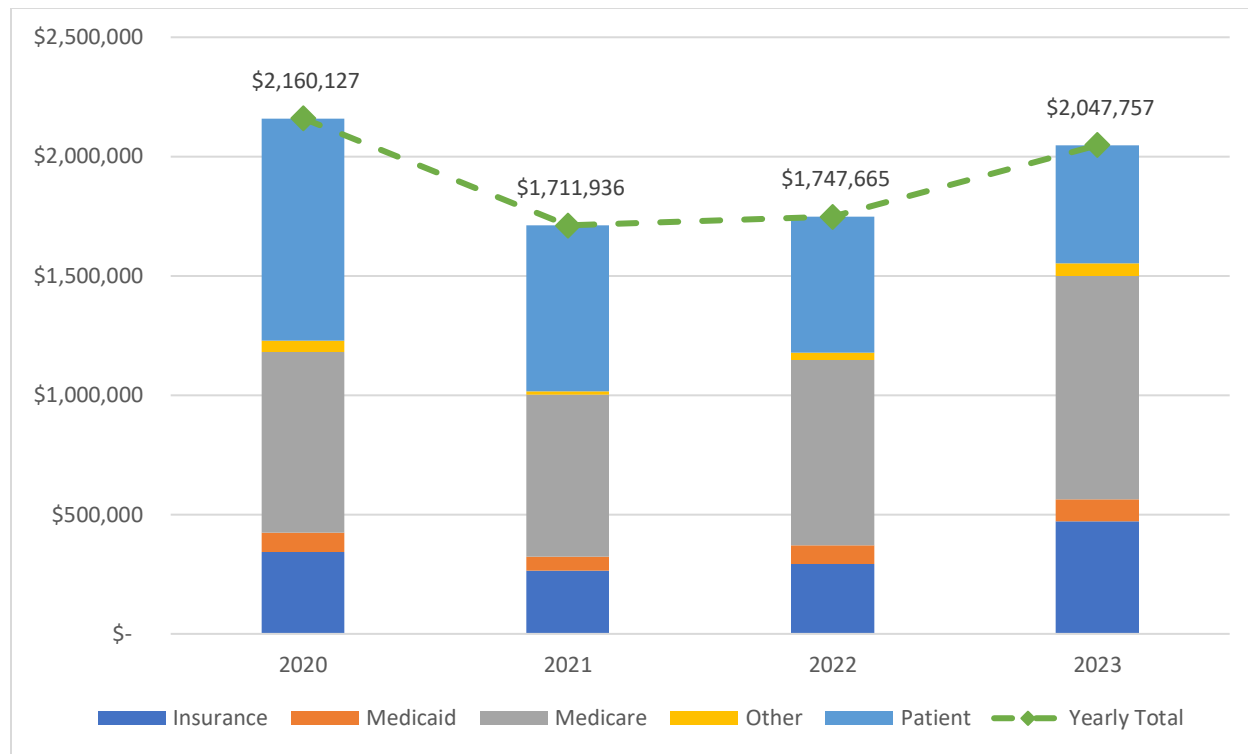


Figure 8 Net Charges by Financial Class, FY 2020-23

The patient self-pays indicate the amounts either directly billed to those without insurance or the amounts billed after all other forms of insurance and adjustments were made toward the patient’s transport costs. For FY 23, Medicare costs comprised most transport costs, whether patients lived further away or had more emergency needs during transport. It also appears that fewer patients' self-pays were paid in FY 23, which correlates with the large number of adjustments made in previous figures.



The following table shows the write-offs made per level of service.

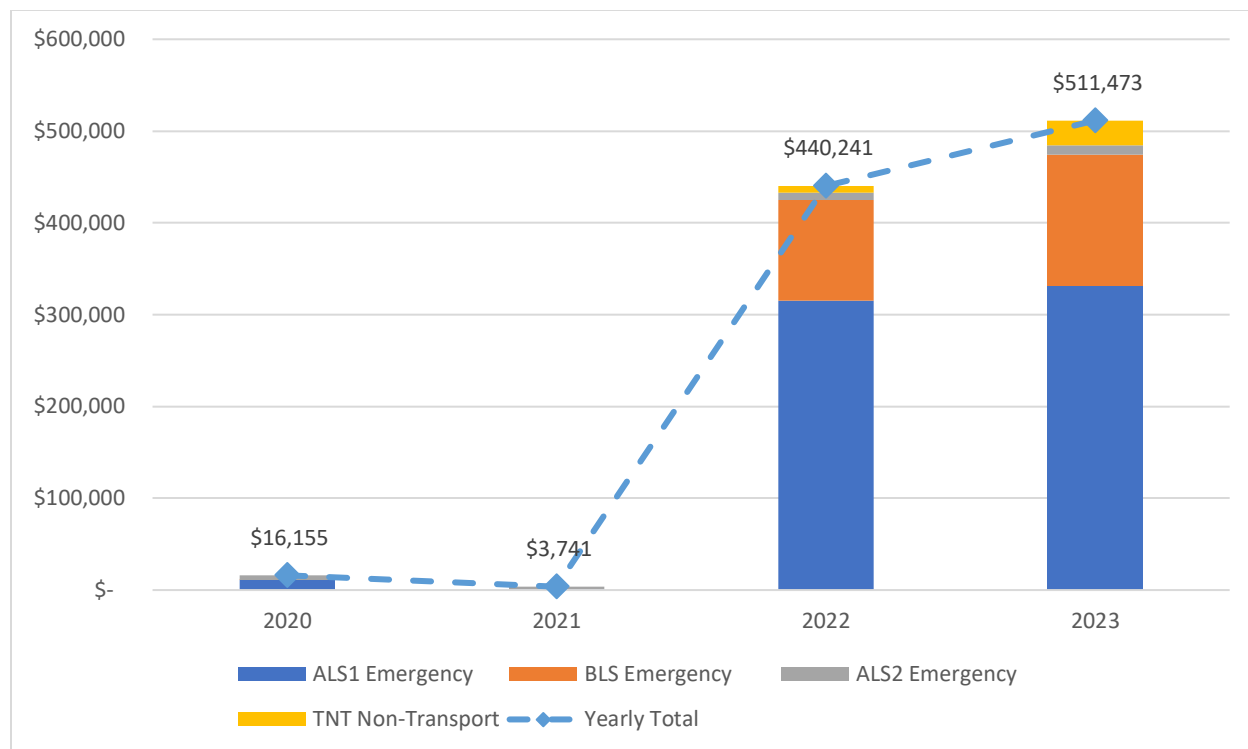


Figure 9 Write Offs by Level of Service, FY 2020-23

There were very few amounts written off for FY 2020 and 2021, which can be attributed to the economic relief funds provided for COVID-19. Many of the insurance companies were provided relief funds to pay for transports that had COVID related symptoms. Also, agencies that accepted federal funds were not to balance bill patients if there were any COVID-related symptoms. Balance billing is where an invoice is sent to the insurance(s) to pay for the allowable portions and the final amounts due that were not covered by insurance were then invoiced to the patients as self-pay. Write-offs can be made for the following reasons: contractual allowances, such as the amounts allowed by Medicare or Medicaid, Transport Fee Waivers allowed by City of Hallandale Beach residents, bad debt for those that do not pay any portion of their bill for a certain period of time, other charity programs, or any negotiated discounts.



The following figure shows the amounts written off per financial class.

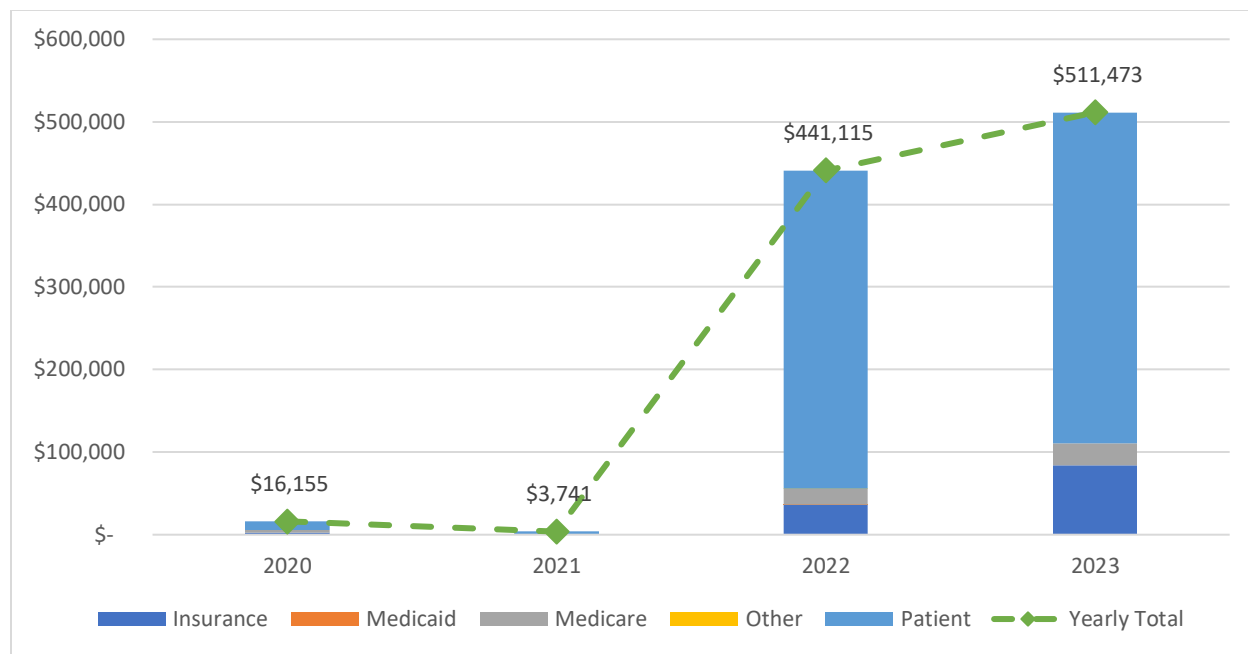


Figure 10 Write Offs by Financial Class, FY 2020-23

The majority of the write-offs were made for patient self-pays, which comprised of 82.23% of the total period. While self-pays are normally harder to collect, the large increase shown on the graph indicate that many are either taking advantage of the Transport Fee Waiver or the population is not making payments on their transport invoices. In FY 22, 67.81% of the net charges were written off for patients. In FY 23, 81.24% of the net charges for patients were written off.

There are also companies that can provide metropolitan service area (MSA) claims information that can help consolidate the claim amounts that insurances are paying on a regional average to increase the amount of collections made for the insurance financial class. This method is utilized to reduce the number of write-offs made for insurance claims. While there is a cost for the database to be utilized, further analysis would have to be internally determined as to whether it would be a cost benefit to gather such information to increase the amounts received from patients with insurance.



The following figure indicates the collections per level of service.

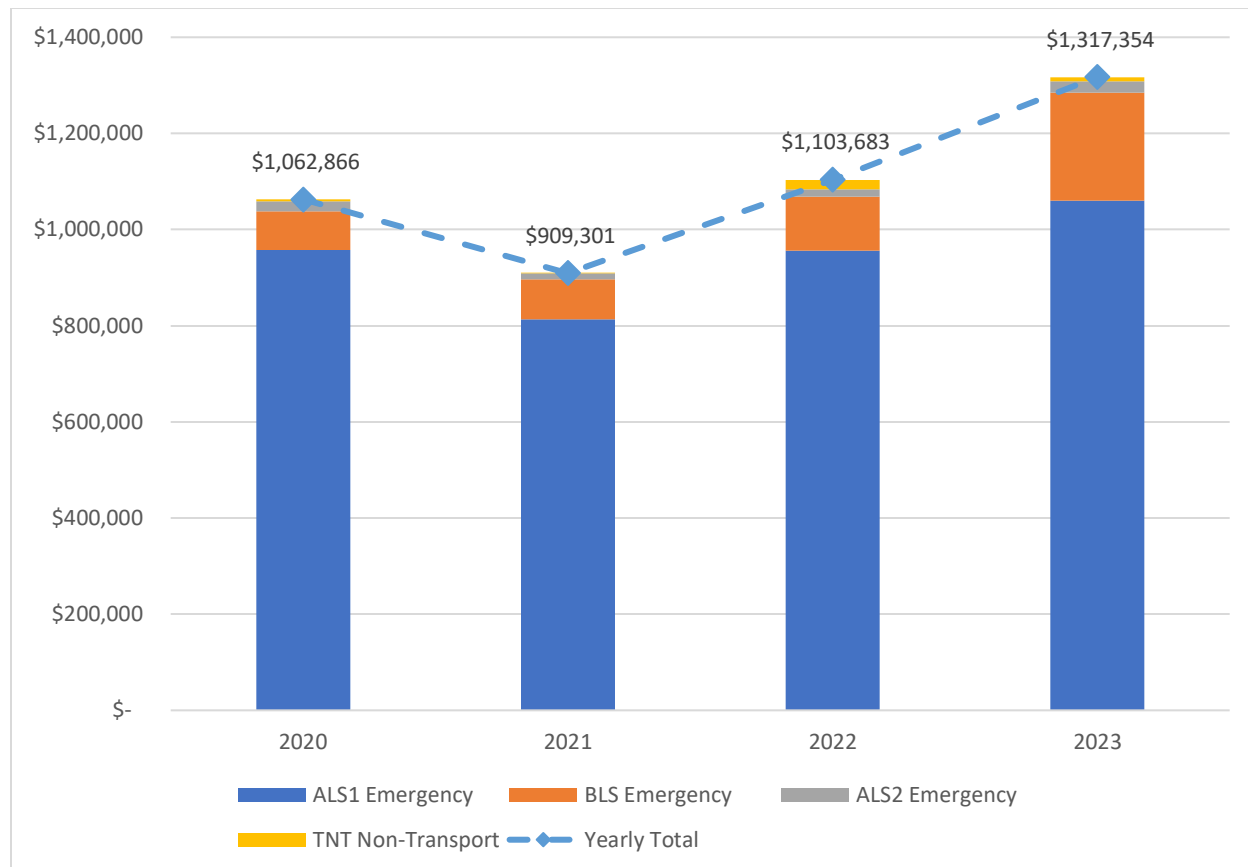


Figure 11 Collections by Level of Service, FY 2020-23

Since most billable incidents are ALS1 and BLS emergencies, the data indicates that most invoices that would be collected would consist largely of the two types of transports. For the period being analyzed, 86.20% of the amount collected is attributed to ALS1 Emergencies. Furthermore, 11.41% of the total period’s collected amounts comprise of BLS Emergencies. In FY 20, specifically, 90.08% of amounts collected are attributed to ALS1 Emergencies and 7.64% are BLS Emergencies. In FY 23, 80.52% of collected amounts were ALS1 Emergencies and 17.06% were BLS Emergencies.



The following graph indicates the financial class for the amounts collected.

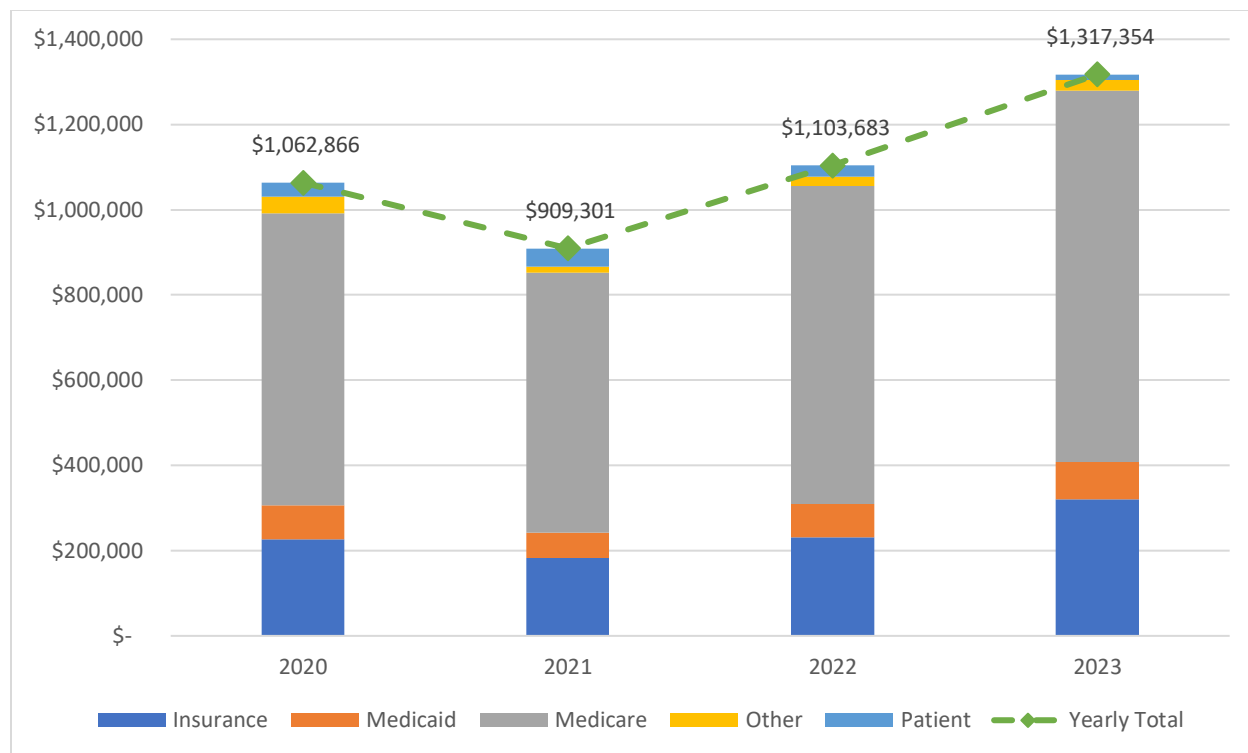


Figure 12 Collections by Financial Class, FY 2020-23

Medicare amounts account for 66.21% of the total amounts collected, while Medicaid accounts for 6.64% in FY 23. Insurance comprised 21.90% of the amount in FY 23. Based on the policies, Digitech submits the self-pay or uninsured patient claims to collections agencies when no payment has been received for more than 120 days from the first invoice date. For patients that have established payment plans, the account will go to collections if more than 180 days have passed since the payment start date or if more than 60 days have passed since the most recent payment.

The amounts that have been collected indicate the revenues captured from ambulance billings. The policy of sending accounts to collections may or may not benefit from extending the open accounts for longer without activity before sending to collections or by seeking an outside collections company to work on inactive accounts before sending the accounts to collectors.



The following graph depicts the balance due for each level of service.

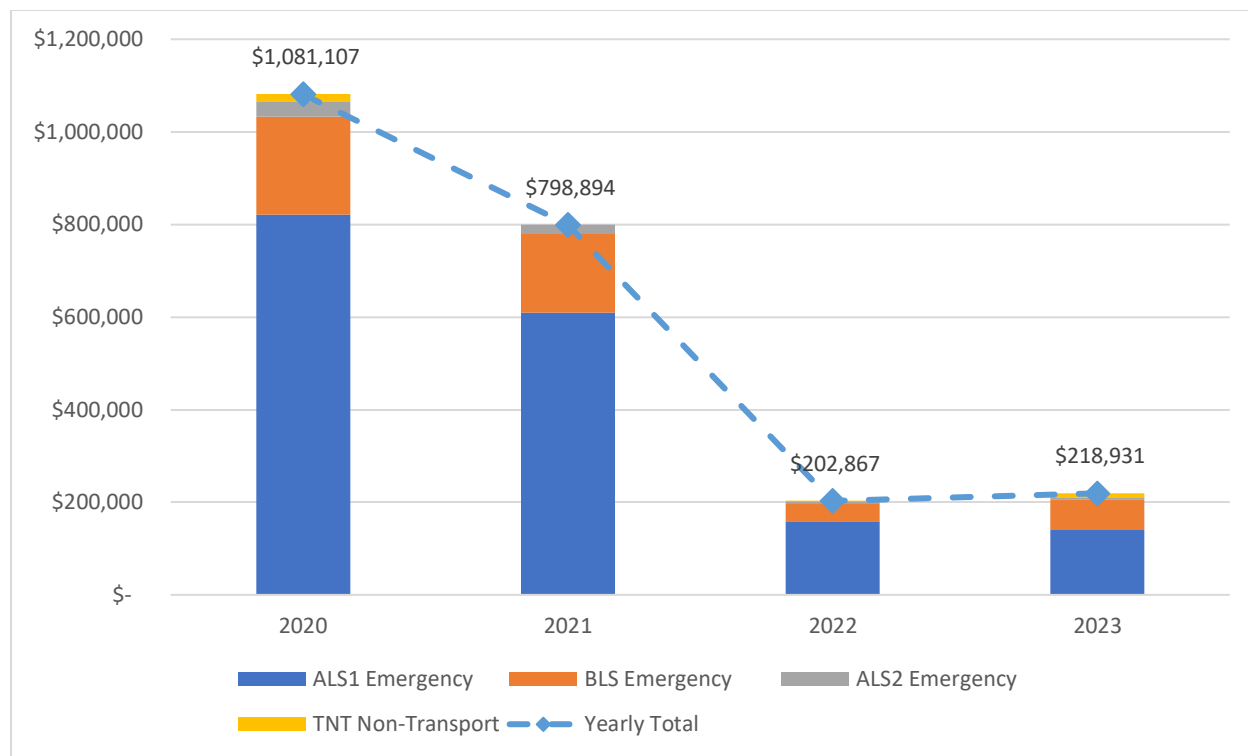


Figure 13 Balance Due by Level of Service, FY 20-23

There was a significant amount of balance due for FY 20, which could be attributed to the effects of COVID-19. It is undetermined if there were frequent utilizers that may have had to be transported more than once in that year. However, a large portion of transports throughout the period being reviewed indicates that ALS1 Emergencies have a balance due, which could be affected based on patient care report documentation translating to ICD-10 codes used that may not be accepted by the various payors. In 2020, 75.91% of the balance due can be attributed to ALS1 Emergencies. 19.65% can be attributed to BLS Emergencies, both of which were used for COVID-19 transports. According to the FAIR Health white paper<sup>1</sup> on ground ambulance services, ALS emergency ground ambulance services increased about 22.6% to \$1,277 per transport,

<sup>1</sup> FAIR Health, Ground Ambulance Services in the United States – A FAIR Health White Paper, February 23, 2022, <https://s3.amazonaws.com/media2.fairhealth.org/whitepaper/asset/Ground%20Ambulance%20Services%20in%20the%20United%20States%20-%20A%20FAIR%20Health%20White%20Paper.pdf>.



while the average allowable amount increased 56% to \$758 in 2020. This indicates the disproportionate amount of balance due for the level of service provided.

BLS emergency ground ambulance services increased 17.5% to \$940, and the average allowable amount increased 39.9% to \$522 in 2020.

The previous graphs indicate that there were larger write-offs and accounts being sent to collections for FY 22 and 23. Without having more detailed information, it is unclear if there were changes in processes during this time to account for the differences shown in the graphs.

The following figure breaks down the balance due by financial class.

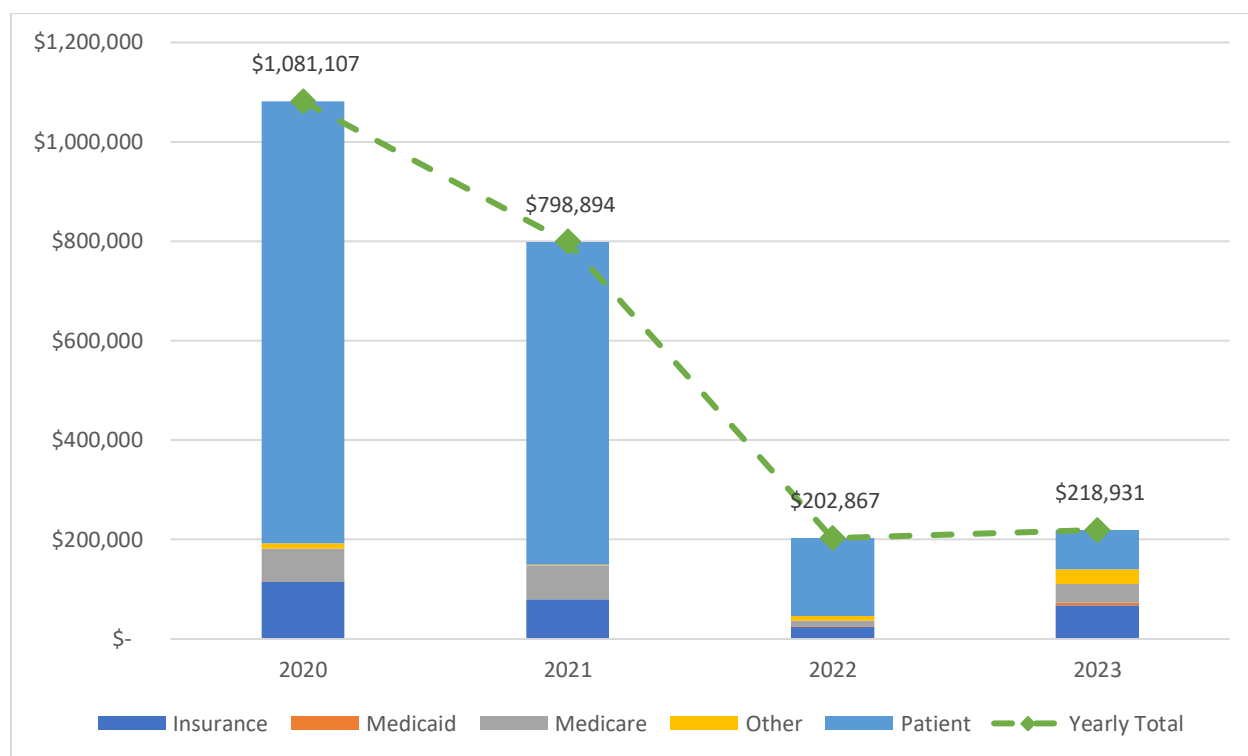


Figure 14 Balance Due by Financial Class, FY 20-23

The self-pays were most of the balance due, which can include uninsured individuals. If there was federal funding received for COVID-19 in 2020, balance billing would have been written off. The data indicates that federal funding was not received to offset the costs for COVID transports to the system. While the data doesn't indicate how much was related to the coronavirus, the analysis will focus on the effects of the balances due.



These remaining accounts are worked until paid, adjusted, or written off if the amounts cannot be collected.

The following breaks down the transport mix by level of service.

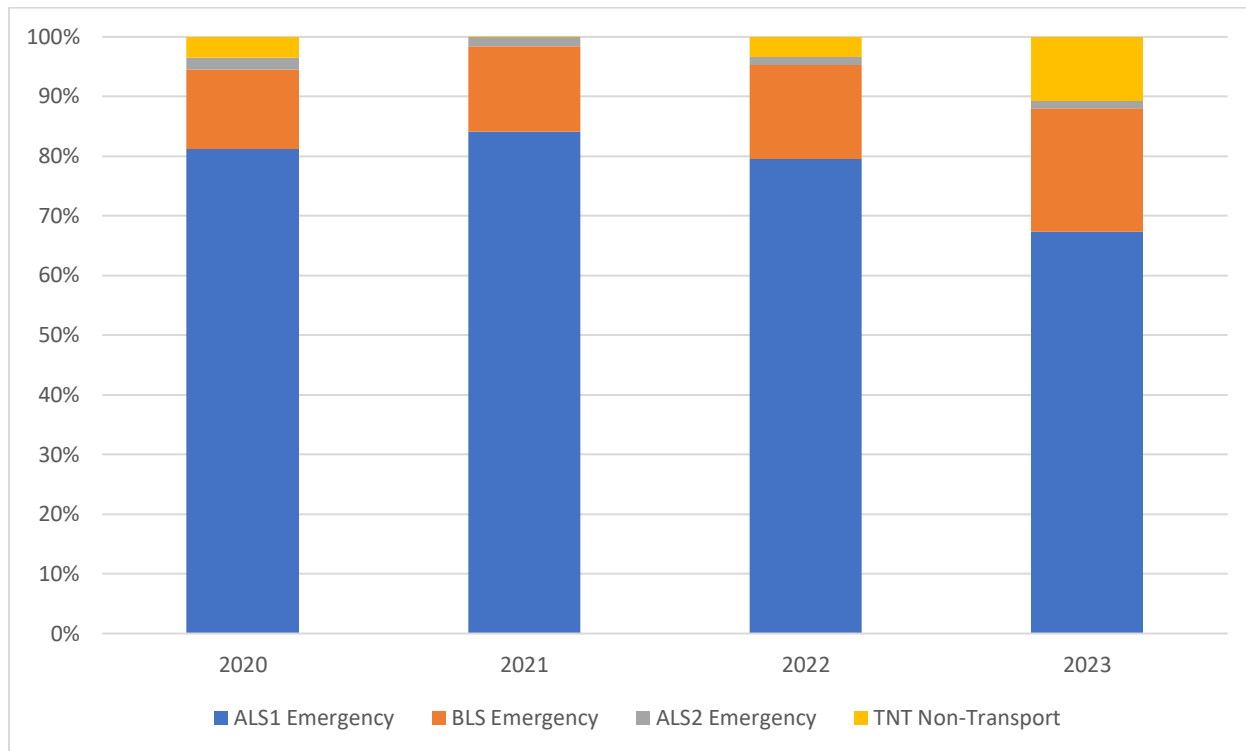


Figure 15 Transport Mix by Level of Service, FY 20-23

The percentages of the transport mix indicate that the ALS1 Emergencies account for the majority of transports, requiring a paramedic. These services require invasive procedures, injections, limited surgical procedures or administering medicine. Airway equipment, cardiac equipment and glucose devices are used for these categories. FAIR Health is an organization that is dedicated to bringing transparency to healthcare coverage, costs and insurance. They provide cost estimates that are based on medical and dental claims paid for by private insurance plans. They issued a white paper, dated February 23, 2022, that studied private healthcare claims for ground ambulance services in the United States. Based on the findings of the FAIR Health white paper, 51.5% of emergency ground ambulance claims were ALS versus 48.5% categorized as BLS in 2020. The analysis of transports over the years of 2016 to 2020 indicate that ALS transports account for a larger share. For Hallandale Beach, 78.06% of the transports in 2020 were ALS, while 16.03% were BLS.





The following figure indicate the financial class for the transport mix from FY 20 to FY 23.

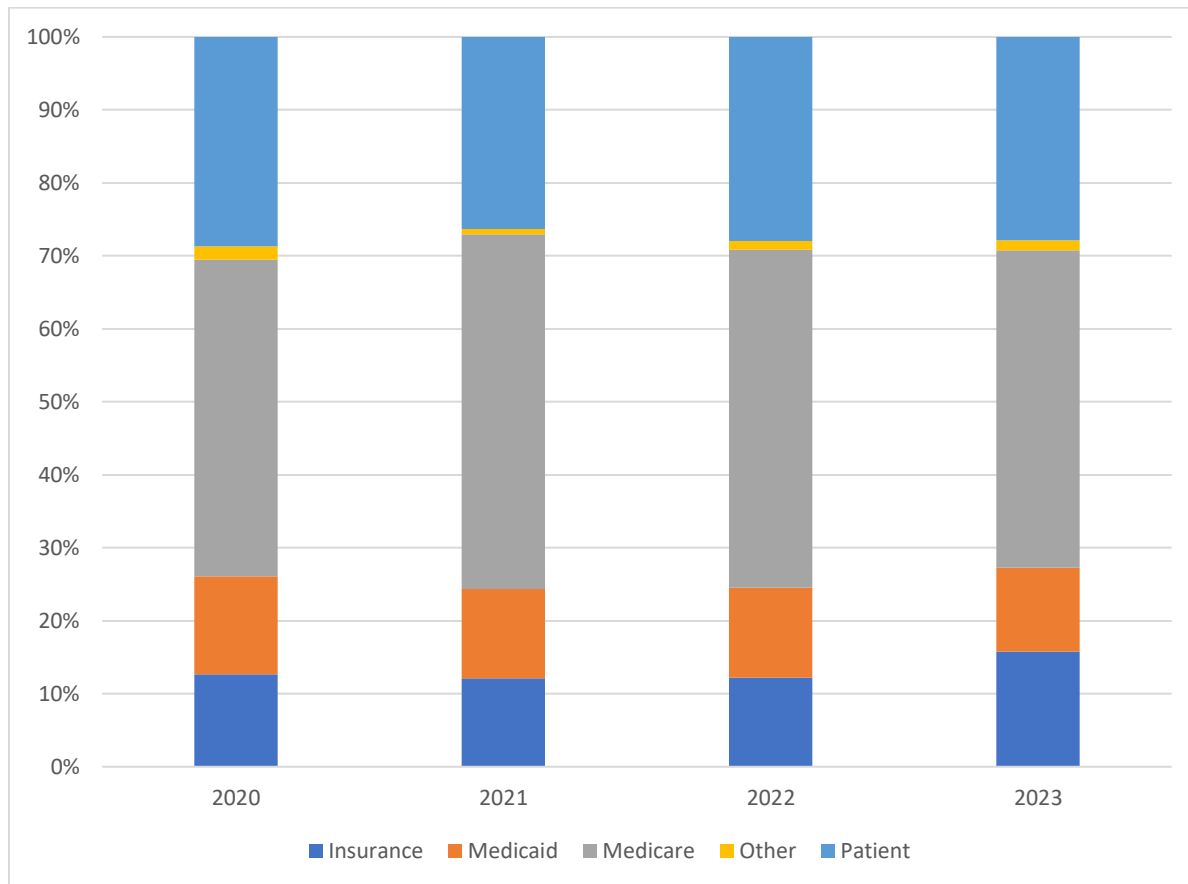


Figure 16 Transport Mix by Financial Class, FY 20-23

For the entire period, the years of 2020–2023, Medicare patients comprised 45.47% of the total transport mix while Medicaid patients accounted for 12.34%. Patients covered by insurance were 13.20% of the entire transport mix during this period. The trends indicate that there were more patients with insurance through the years. FY 20 had 12.67% of patients with insurance and FY 23 had 15.80% of patients that were covered by insurance. The percentage of Medicaid patients decreased from 13.40% in FY 20 to 11.46% in FY 23.



The following compares the average charges by level of service.

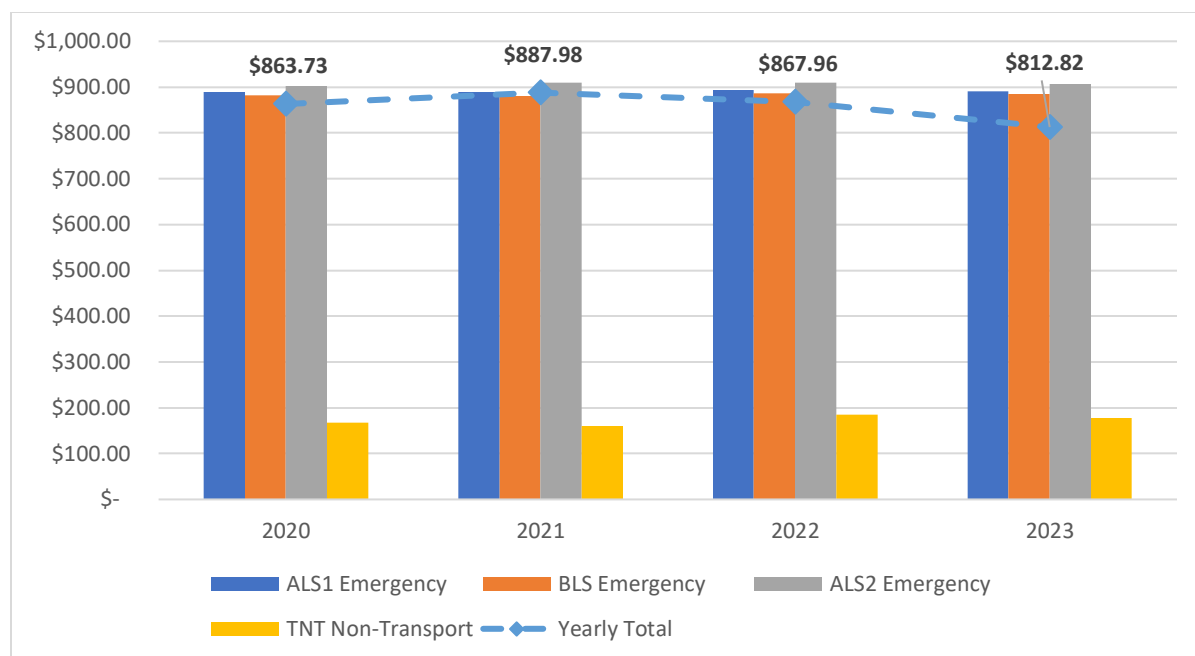


Figure 17 Average Charge by Level of Service, FY 20-23

The average charges are affected by the total number of transports and historical fee structure for each year. The fees that are provided by Broward.org’s<sup>2</sup> website show rates for 2024 and does not have historical rates. In the 2016 Agreement Between Sheriff of Broward County and Advanced Data Processing, Inc. for Medical Billings, Collections and Accounts Receivable Services for the Sheriff’s Fire Rescue, rates for Hallandale Beach were provided and both are showing in the following table.

Year	County	BLS Emergency	BLS Non-Emergency	ALS1 Emergency	ALS1 Non-Emergency	ALS2	Ground Mileage	O2
2015	Hallandale Beach	\$750	\$750	\$750	\$750	\$750	\$12.00	\$30
2024	Hallandale Beach	\$850	\$850	\$850			\$12.00	\$30

Figure 18 Transportation Rates, 2015 versus 2024

<sup>2</sup> EMS Transportation Rates for 2024:  
<https://www.broward.org/BrowardEMS/Pages/LibraryTransportRates.aspx>.



The following graph shows the billable incidents per level of service over the years.

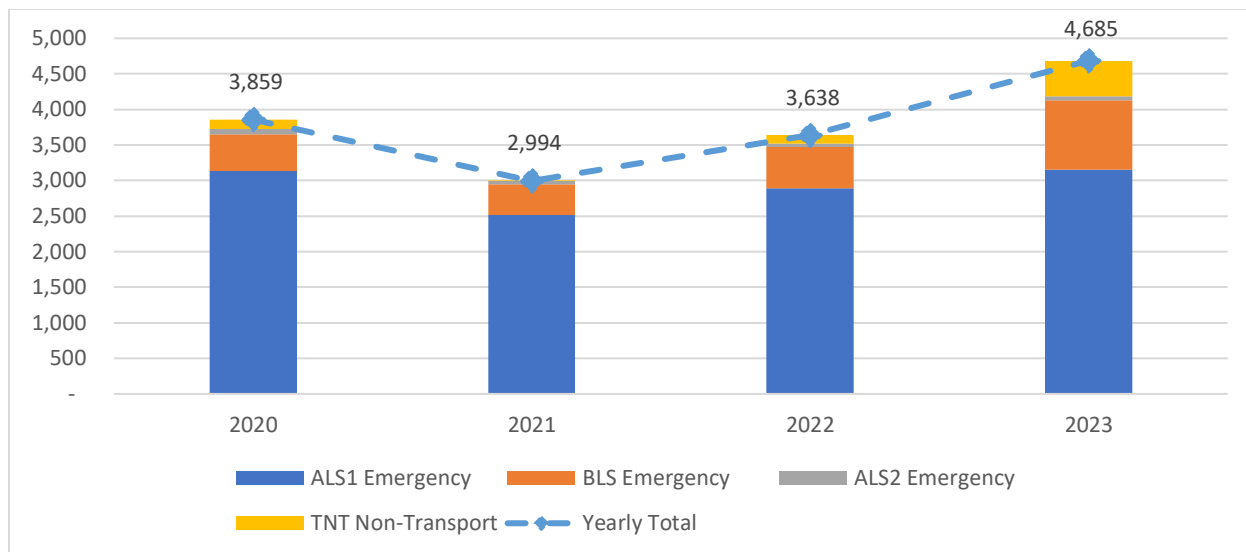


Figure 19 Billable Incidents by Level of Service, FY 20-23

Based on the previous tables and graphs, the increase in the number of transports decreases the averages. While rates affect the average slightly, the increase in base rate shown in Figure 18 from 2015 to 2024 had a small influence in collection rates, while the number of billable incidents have a large effect on what is collected. Having a larger amount of ALS1 Emergency transports correlates with the large balance amounts, collections and write offs in the previous charts that were analyzed.



The following graph indicates the average charge by financial class.

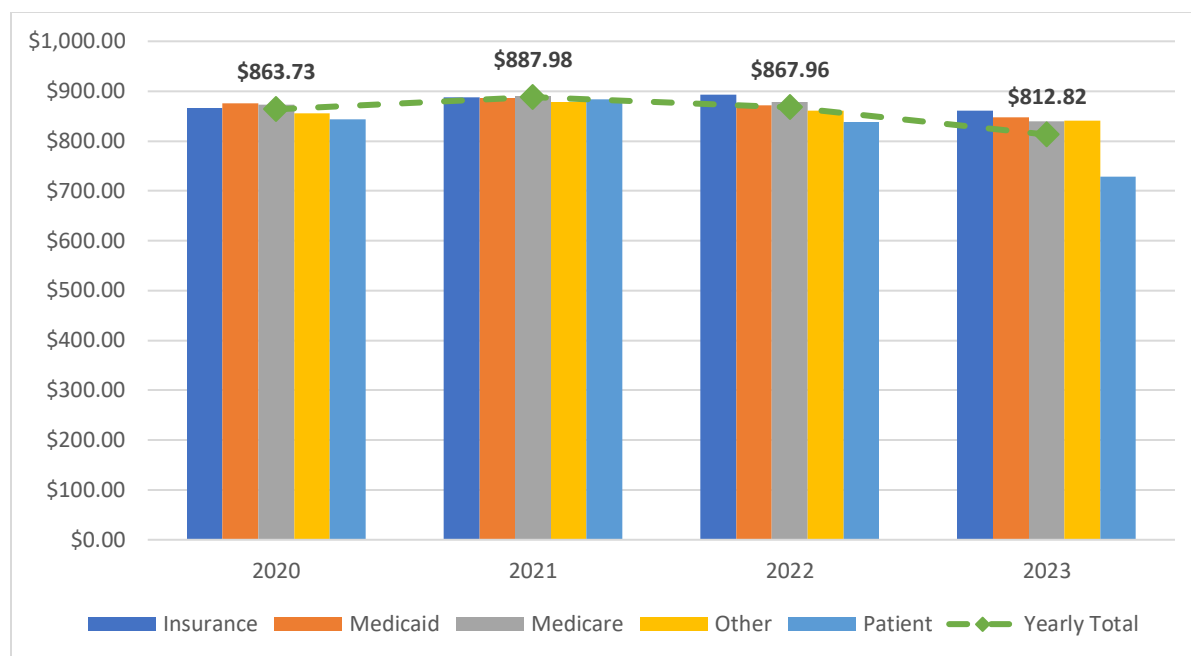


Figure 20 Average Charge by Financial Class, FY 20-23

It can be seen on the graph that the average charges do not vary dramatically based on financial class breakdown. Self-pays (or patient financial class) have a lower charge, which can be affected by having a larger number of transports. The following graph depicts the number of billable incidents by financial class.

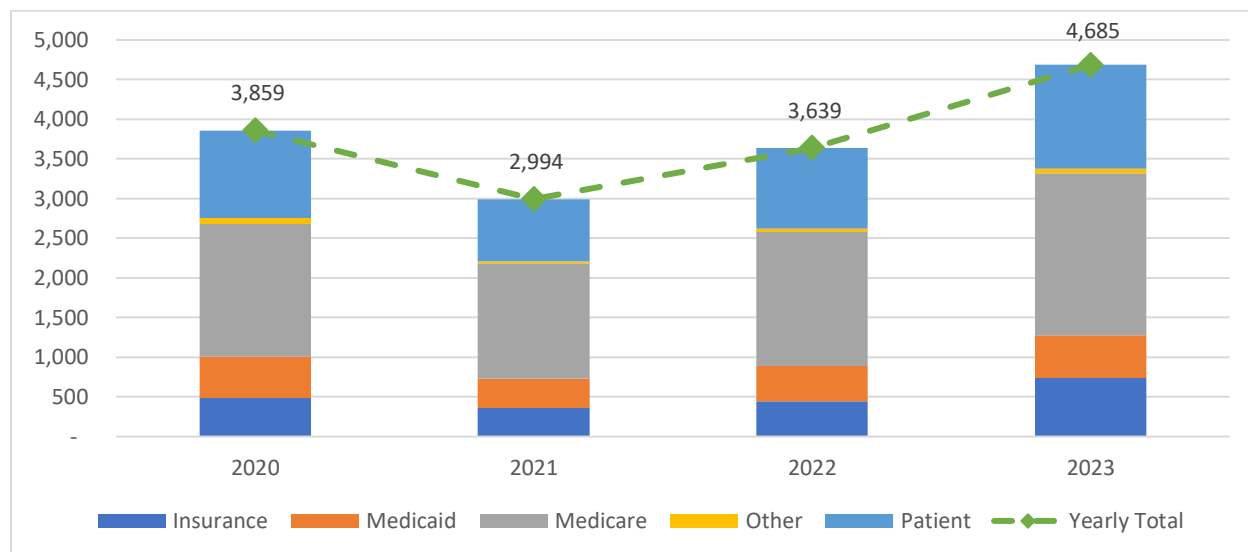


Figure 21 Billable Incidents by Financial Class, FY 20-23



Self-pay transports account for 27.79% of the total transports over the period of analysis. In FY 20, patient transports comprised 28.66% of billable incidents and increased to 33.79% in FY 23. Medicare transports accounted for 43.38% in FY 20 and increased to 52.84% in FY 23. While these percentages may not always correlate with changes in demographics, it does provide some demographic analysis for the needs of the community relative to the EMS system.

The following figure will graph the average net charge by level of service, which will provide a better review after insurance adjustments are made.

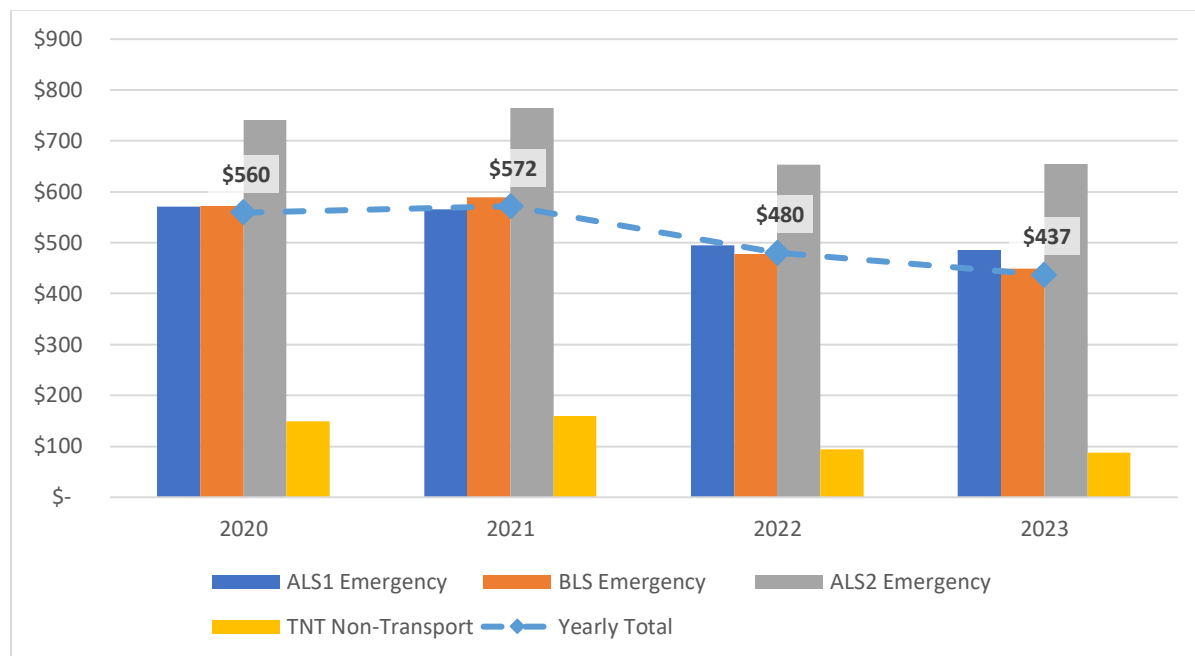


Figure 22 Average Net Charge by Level of Service, FY 20-23

ALS1 Emergencies and BLS Emergencies, while differing in costs and level of skill performed, obtain almost the same amounts through insurances. ALS2 includes at least three separate administrations of medications by IV or continuous infusion (excluding crystalloid fluids) or the provision of at least one ALS2 procedure. While documentation made on patient care reports help to define the level of service provided, the various insurance payors may require more documentation to approve ALS1 Emergencies as compared to common BLS Emergencies. It is undetermined if there are standard operating procedures/guidelines (SOPs/SOGs) related to patient documentation that have been adopted to clearly help define commonly accepted notes and descriptions for previously approved ALS1 Emergencies. Having guidelines regarding specific types of



descriptions may help standardize previously accepted charges for ALS1 Emergencies to reduce the amounts of write offs. While ALS2 Emergencies net a higher charge, the overall amount has decreased from \$741 in FY 20 to \$655 in FY 23.

The following graph depicts the average net charge based on financial classification.

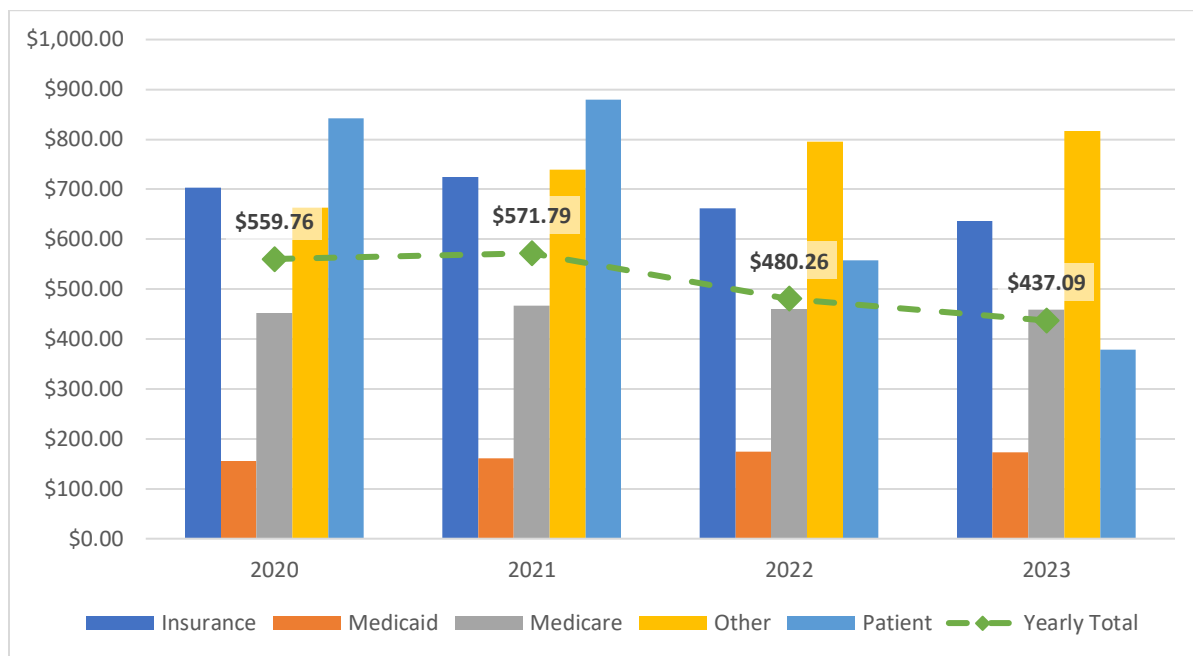


Figure 23 Average Net Charge by Financial Class, FY 20-23

The average net charge for self-payment has decreased from \$842.33 in FY 20 to \$378.63 for FY 23. The number of billable incidents may slightly affect this average based on the large number of transports that are attributing to the average rate. The “other” payor mix, while not defined in the data provided, indicates that there are higher averages. However, the number of billable incidents for the “Other” category totaled 65 for FY 23. Medicare averages are affected by the number of billable incidents, but have remained steady, as it fluctuated from \$451.54 in FY 20 to \$466.55 in FY 21 as the lowest and highest amounts in the period. Medicaid averages range from \$155.76 in FY 20 to \$173.18 in FY 23.



The average collection amounts for level of service are shown in the following figure.

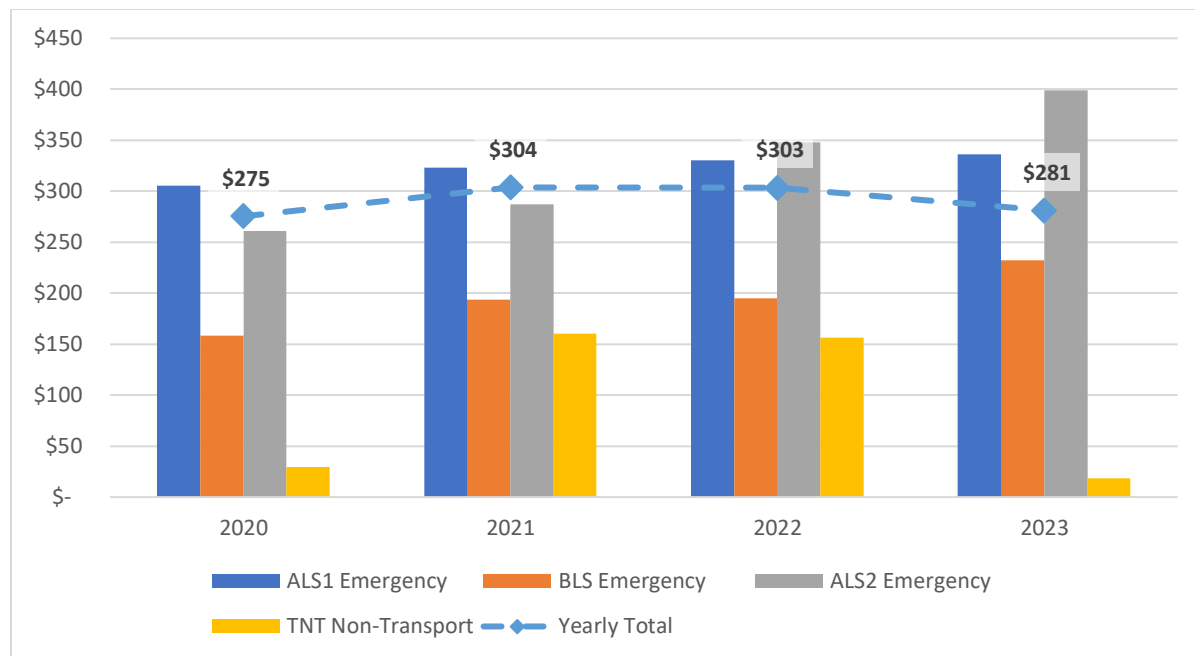


Figure 24 Average Collection Amount by Level of Service, FY 20-23

The average collection amounts indicate how much was collected, which is reduced from the average net charge. This difference may be based on the timing of payments before being written off or sent to collections, as well as any discrepancies in documentation for patient care records that reduce the level of service to a lower tier. Internal review would have to be made regarding the amounts of denials for claims, as well as how fast the various payors take to approve and submit payment on a claim as the data provided did not include these factors for analysis. The average amount collected for ALS1 Emergencies has gone from \$305 in FY 20 to \$336 in FY 23. BLS Emergencies increased from \$158 in FY 20 to \$232 in FY 23.



The following graph indicates the average collection amount by financial classification.

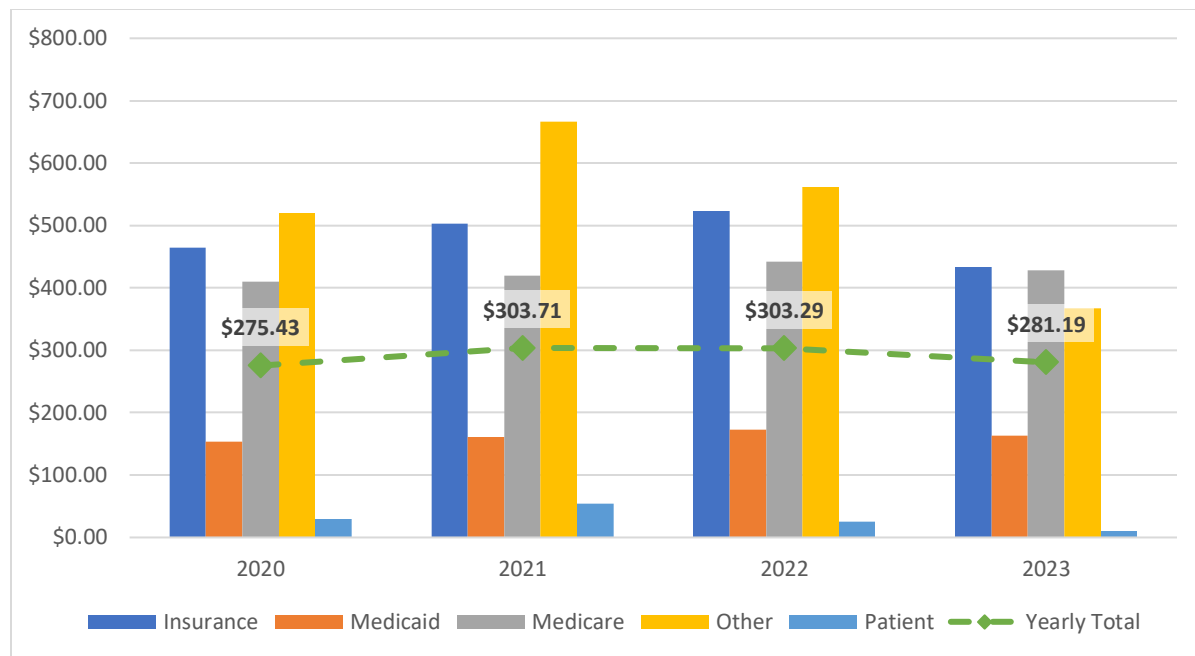


Figure 25 Average Collection Amount by Financial Class, FY 20-23

The average amounts collected by insurances range fluctuated from the lowest amount of \$432.98 in FY 23 to \$522.98 in FY 22. While the number of denied claims were not provided, it would be recommended for internal review to determine if the number of insurance claims increased in denials over the period as COVID-19 funding was depleted. Medicaid collection rates increased from \$153.99 in FY 20 to \$173.17 (the highest of the period) in FY 22. Patient collection rates fluctuated from \$10.28 in FY 23 to the highest amount in FY 21 at \$53.61 (which can also be a result of COVID-19 funding to individuals).





The following graph shows the average charge, average net charge and average collection amounts graphed together.

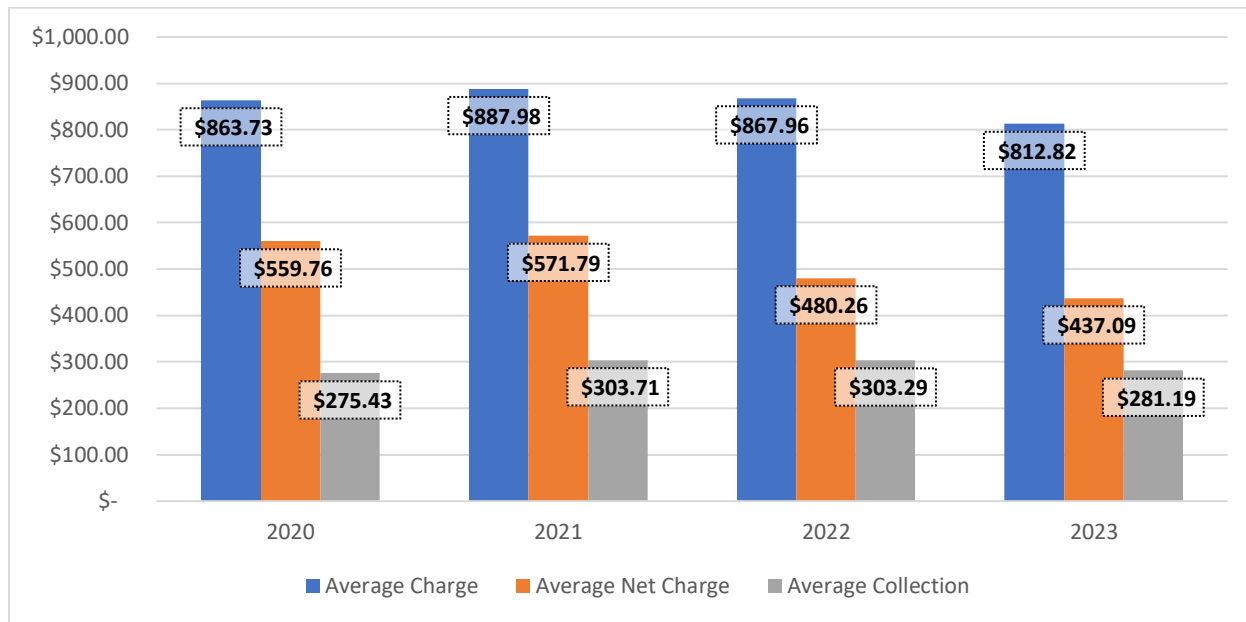


Figure 26 Average Charge, Net Charge and Collection Amounts, FY 20-23

The average collection amount in comparison with the average net charge and average charges indicate the potential for future efforts to be made with regard to reviewing trends in denials, patient care documentation that can be standardized internally for better acceptance rates by the different insurance payor mix. It can also be recommended to review the timelines and whether accounts are written off or sent to collections too quickly without other efforts to review past due accounts. It can also be recommended to review the number of transport waivers that were submitted to determine trends (as data was not provided).

### Revenues Analysis

The Broward Sheriff’s Office provided information related to the Hallandale Beach contractual payments and operational costs for fire rescue services. Information was researched as to the amount of fire assessment collections that were anticipated by the Broward County Property Appraiser for the Hallandale Beach Fire Assessment.

The Broward Sheriff’s Office also participates in the Public Emergency Medical Transportation (PEMT) and Medicaid Managed Care Organization (MCO) Program



through the Agency for Health Care Administration (AHCA). These two programs seek to recover supplemental payments for Medicaid and Medicare transport.

Information was also provided by the contracted vendor for medical billings, collections and accounts receivable services for the Broward Sheriff’s Office relating to transports, collection amounts, write-offs, etc.

The number of transports from FY 20 to FY 23 was provided and used to determine the average increases to project for FY 24 and FY 25.

The following table depicts the breakdown projected transports per financial class.

	FY 20 Actuals	FY 21 Actuals	FY 22 Actuals	FY 23 Actuals	FY 24 Adopted	FY 25 Adopted
<b>Insurance</b>	489	364	740	443	499	561
<b>Medicaid</b>	517	364	537	449	451	454
<b>Medicare</b>	1,674	1,455	2,039	1,688	1,743	1,801
<b>Other</b>	73	22	65	40	52	67
<b>Patient</b>	1,106	789	1,304	1,019	1,069	1,122
<b>Totals</b>	3,859	2,994	4,685	,3639	3,781	3,929

Figure 27 Number of Transports by Financial Class, Projected to FY 25

The average net charge was also projected to FY 25 to determine the potential revenue source that would be anticipated based on financial class.

For comparison purposes, data from other agencies were also provided as of May 2024 (while all other graphs for just Hallandale Beach was analyzed using March 2024 data) regarding the transport mix by financial class. Since transport mix by level of service is largely ALS Emergencies, analyzing data by financial class provides a better breakdown for the types of payor mix being attributed to transport. The following graph indicates the breakdown of the different types of transport.

	Insurance	Medicaid	Medicare	Other	Patient
<b>Cooper City</b>	382	123	923	38	179
<b>Dania Beach</b>	742	625	1,640	95	818
<b>Deerfield Beach</b>	1,532	1,230	5,079	143	1,820
<b>Hallandale Beach</b>	660	549	2,083	53	1,348
<b>Lauderdale Lakes</b>	693	871	1,523	49	811
<b>Pembroke Park</b>	204	227	650	43	206
<b>West Park</b>	268	282	586	33	247
<b>Weston</b>	673	120	1,327	71	282

Figure 28 Comparable Transports by Financial Class, FY 23



The percentage for each type of transport will help provide better comparisons without looking at the number of transports. The following figure provides the percentage for each type of transport.

	Insurance	Medicaid	Medicare	Other	Patient
<b>Cooper City</b>	23.65%	7.67%	55.79%	2.43%	10.45%
<b>Dania Beach</b>	19.89%	15.47%	41.36%	2.60%	20.68%
<b>Deerfield Beach</b>	15.82%	12.39%	51.71%	1.47%	18.59%
<b>Hallandale Beach</b>	14.67%	11.60%	44.17%	1.10%	28.47%
<b>Lauderdale Lakes</b>	18.17%	21.80%	38.57%	1.23%	20.23%
<b>Pembroke Park</b>	15.83%	16.99%	48.89%	3.20%	15.08%
<b>West Park</b>	19.33%	19.39%	41.33%	2.49%	17.47%
<b>Weston</b>	27.10%	4.72%	53.62%	3.00%	11.56%

Figure 29 Comparable Transport Mix Percentage by Financial Class, FY 23

While Cooper City and Weston have outlying percentages of transport, it indicates that the patients being served for the other agencies have similar percentages of Medicaid patients, Insurance and Medicare. Medicaid patients indicate that there are certain levels of household income patients in the area. Medicare patients indicate that there are certain age levels of population that are being transported. Hallandale Beach, Dania and Lauderdale Lakes have more percentages of transport whereby the patients are paying the costs themselves. While these comparisons are for transports made in FY 2023, they are only indications of the patients that have been transported, which is not an accurate representation of the population in the MSA.

Another method of analyzing data across other agencies is to use an average gross charge per transport. While there are base rates of charges and mileage associated with transport billings, it can indicate what is originally charged for transportation services. The following figure indicates the gross charges by agency for FY 23.



	Insurance	Medicaid	Medicare	Other	Patient	ALS1 Base <sup>[1]</sup>
<b>Cooper City</b>	\$945	\$921	\$917	\$914	\$923	\$850
<b>Dania Beach</b>	\$1,332	\$1,165	\$1,323	\$1,353	\$1,333	\$1,225.66
<b>Deerfield Beach</b>	\$1,071	\$1,077	\$1,064	\$1,094	\$1,077	\$1,000
<b>Hallandale Beach</b>	\$862	\$838	\$840	\$843	\$731	\$850
<b>Lauderdale Lakes</b>	\$1,066	\$1,084	\$1,059	\$1,051	\$1,062	\$1,000
<b>Pembroke Park</b>	\$822	\$849	\$814	\$814	\$813	\$850
<b>West Park</b>	\$886	\$890	\$888	\$971	\$892	\$850
<b>Weston</b>	\$910	\$963	\$885	\$900	\$939	\$760

Figure 30 Comparable Average Gross Charges per Transport, FY 23

Dania Beach, Deerfield Beach and Lauderdale Lakes have larger base charges for ALS1 rates, which increased the gross charges in comparison. Weston has a lower base rate, but higher charges, which indicates larger mileages for their transport. While these are gross charges, the next figure will compare the average net charge per transport for FY 23. These are more indicative of the cost of the transport after write-offs and adjustments are made to each billing.

	Insurance	Medicaid	Medicare	Other	Patient
<b>Cooper City</b>	\$837	\$192	\$519	\$846	\$904
<b>Dania Beach</b>	\$986	\$193	\$506	\$1,162	\$1,311
<b>Deerfield Beach</b>	\$703	\$183	\$477	\$972	\$444
<b>Hallandale Beach</b>	\$625	\$170	\$453	\$830	\$387
<b>Lauderdale Lakes</b>	\$802	\$191	\$511	\$962	\$1,054
<b>Pembroke Park</b>	\$703	\$184	\$493	\$791	\$763
<b>West Park</b>	\$733	\$185	\$511	\$867	\$852
<b>Weston</b>	\$852	\$194	\$521	\$829	\$920

Figure 31 Comparable Average Net Charge per Transport, FY 23

Medicaid and Medicare rates are set based on their allowable rate, which resonates towards the averages for each agency. However, Insurance rates paid out are based on the individual plan. These rates are higher averages for each agency and Hallandale Beach has noticeably lower averages in comparison. There are factors such as the type of insurance plans and allowable rates that would affect this lower average. The Patient average amount is also the lowest of the comparable, indicating that more amounts are



written off or adjusted before the net amounts are charged. Being able to affect these two types of payor mix net charges would affect revenues.

The last comparable measure for benchmark comparison is analyzing the average amount paid per transport. The following figure shows the amounts for each agency for FY 23.

	Insurance	Medicaid	Medicare	Other	Patient
<b>Cooper City</b>	\$614	\$177	\$483	\$654	\$74
<b>Dania Beach</b>	\$562	\$182	\$468	\$597	\$27
<b>Deerfield Beach</b>	\$554	\$178	\$464	\$638	\$8
<b>Hallandale Beach</b>	\$463	\$164	\$430	\$544	\$14
<b>Lauderdale Lakes</b>	\$465	\$187	\$482	\$555	\$9
<b>Pembroke Park</b>	\$485	\$179	\$463	\$586	\$8
<b>West Park</b>	\$509	\$181	\$484	\$593	\$13
<b>Weston</b>	\$636	\$174	\$489	\$646	\$84

Figure 32 Comparable Average Amount Paid per Transport, FY 23

All the agencies have a very low patient pay amount per transport. While the process for sending accounts to collections may differ, it can be said that the one payor mix that can affect is the insurance rate that is paid. Hallandale Beach and Lauderdale Lakes have lower amounts paid per transport than compared to surrounding cities. Utilizing a company to review the insurance amounts that are charged by MSA can help increase the average paid per transport to help affect revenue collection rates since Medicaid and Medicare rates all average around the same amounts for each municipality. While the transport charges may affect the gross charge per transport, the write-offs and adjustments affect what is collected and ultimately paid by the insurance and patient's self-pay. Since the percentages of transport that are attributed to Medicare and Medicaid patients (at a set rate) for Hallandale Beach is more than 55%, the other payor mixes would help factor into revenue collection rates. Therefore, affecting policies related to insurance and self-pays would help affect revenues.

For reference, the following table breaks down the Hallandale Beach average net charge by financial class through FY 20 to FY 25.

<sup>11</sup> EMS Transportation Rates for 2024: <https://www.broward.org/BrowardEMS/Pages/LibraryTransportRates.aspx>



	FY 20 Actuals	FY 21 Actuals	FY 22 Actuals	FY 23 Actuals	FY 24 Proposed	FY 25 Adopted
<b>Insurance</b>	\$702.81	\$724.17	\$637.14	\$661.85	\$650.60	\$639.53
<b>Medicaid</b>	\$155.76	\$161.35	\$173.18	\$174.34	\$181.08	\$188.07
<b>Medicare</b>	\$451.54	\$466.55	\$459.26	\$459.98	\$462.92	\$465.88
<b>Other</b>	\$663.31	\$739.08	\$817.18	\$795.33	\$846.54	\$901.05
<b>Patient</b>	\$842.33	\$880.25	\$378.63	\$557.33	\$547.51	\$537.86
<b>Totals</b>	\$559.76	\$571.79	\$437.09	\$480.26	\$461.80	\$444.05

Figure 33 Average Net Charge by Financial Class, Projected to FY 25

The average collected amount was also projected to FY 25 to estimate the totals that would be collected as potential revenues per financial class. The following figure breaks down the estimated projected collection amount per financial class.

	FY 20 Actuals	FY 21 Actuals	FY 22 Actuals	FY 23 Actuals	FY 24 Proposed	FY 25 Adopted
<b>Insurance</b>	\$463.92	\$502.91	\$432.98	\$522.98	\$549.62	\$577.63
<b>Medicaid</b>	\$153.99	\$161.35	\$162.77	\$173.17	\$180.13	\$187.36
<b>Medicare</b>	\$409.66	\$419.62	\$427.79	\$441.81	\$453.08	\$464.64
<b>Other</b>	\$519.80	\$666.68	\$367.19	\$561.23	\$628.91	\$704.75
<b>Patient</b>	\$29.55	\$53.61	\$10.28	\$25.54	\$38.23	\$57.21
<b>Totals</b>	\$275.43	\$303.71	\$281.19	\$303.29	\$314.13	\$325.35

Figure 34 Average Collection Amount by Financial Class, Projected to FY 25

Analyzing by individual financial class helps provide more conservative accuracy with projections based on the number of transports that were also projected by financial class. The following table provides the result of the average collection amount by the projected number of transports for FY 24 and FY 25.

	FY 20 Actuals	FY 21 Actuals	FY 22 Actuals	FY 23 Actuals	FY 24 Proposed	FY 25 Adopted
<b>Insurance</b>	\$226,856	\$183,061	\$231,679	\$320,408	\$274,000	\$324,051
<b>Medicaid</b>	\$79,612	\$58,731	\$77,753	\$87,408	\$81,293	\$84,995
<b>Medicare</b>	\$685,772	\$610,540	\$745,774	\$872,261	\$789,892	\$836,619
<b>Other</b>	\$37,945	\$14,667	\$22,449	\$23,868	\$32,463	\$46,942
<b>Patient</b>	\$32,681	\$42,302	\$26,028	\$13,410	\$40,870	\$64,177
<b>Totals</b>	\$1,062,866	\$909,301	\$1,103,683	\$1,317,354	\$1,218,518	\$1,356,785

Figure 35 Estimated Collection Amounts by Estimated Number of Transports, Projected to FY25

Compiling all the information above provides the following table for easier reference.



	FY 21 Actuals	FY 22 Actuals	FY 23 Actuals	FY 24 Adopted	FY 25 Adopted
<b>Transports Totals</b>	2,994	3,639	4,685	3,781	3,929
<b>Total Net Charges</b>	\$1,711,936	\$1,747,665	\$2,047,757	\$1,842,154	\$1,946,282
<b>Ambulance Fees (Collections)</b>	\$909,301	\$1,103,683	\$1,317,354	\$1,218,518	\$1,356,785
<b>Balance Due</b>	\$802,635	\$643,981	\$730,403	\$623,637	\$589,497
<b>% Balance Due</b>	47%	37%	36%	34%	30%

Figure 36 Projected Transports, Net Charges and Collections to FY 25

The balance due is what would have to be found to cover what is not collected in Ambulance Fee payments, therefore it is the amount that will need to be worked on until the accounts for payments becomes inactive and sent to collections. The City of Hallandale could contract out for a company to review the accounts in the balance due to provide payment plans or have an outside collections agency work on obtaining outstanding payments, it would help to increase the amounts collected for the total net charges that are due for services before being written off as an uncollectable amount.

### Expenditures Analysis

The Broward Sheriff’s Office provided information about providing fire rescue services for the City of Hallandale Beach. The following table provides the expenditure information from FY 21 actuals to the proposed FY 25 budget.

	FY 21 Actual	FY 22 Actuals	FY 23 Actuals	FY 24 Adopted	FY 25 Adopted
<b>Personnel Services</b>	\$14,564,961	\$14,361,382	\$14,732,818	\$15,974,276	\$16,792,740
<b>Operating Expenses</b>	\$797,811	\$749,302	\$964,507	\$978,157	\$1,066,322
<b>Capital Outlay</b>	\$-	\$110,000	\$1,060,585	\$819,415	\$2,266,572
<b>Transfers/Reserves</b>	\$318,514	\$288,609	\$306,360	\$312,528	\$334,709
<b>Total</b>	\$15,681,286	\$15,509,293	\$17,064,270	\$18,084,376	\$20,460,343
<b>FTEs</b>	73	73	73	73	73

Figure 37 Broward Sheriff's Office Expenditures for Hallandale Beach Fire Rescue, FY 21-25

### Fund Balance

While all proposed budgets are balanced, actuals help to determine the fund balance to help track progress. Since this financial analysis is focused on the EMS revenues, the fund balance based on the contractual city payments to the BSO, in addition to the Public Emergency Medical Transport (PEMT)/Medicaid Managed Care Organization (MCO) supplemental payment program and ambulance fee collections will be provided for analysis.



The following figure gathers all the information available for FY 26 Projected to FY 30 Projected based on the previous ESCI Fire Services Financial Analysis for the City of Hallandale Beach for the total revenues collected for fire rescue and EMS services.

	FY 26 Projected	FY 27 Projected	FY 28 Projected	FY 29 Projected	FY 30 Projected
<b>Fire Assessment</b>	12,606,653	12,682,293	12,758,386	12,834,937	12,911,946
<b>PEMT/MCO</b>	353,177	361,618	370,261	379,110	388,171
<b>Ambulance Fees (Collections)</b>	1,120,321	1,131,524	1,142,839	1,154,268	1,165,810
<b>Chapter 175 Funds</b>	250,813	240,780	231,149	221,903	213,027
<b>Supplemental Comp</b>	48,587	51,259	54,078	57,052	60,190
<b>Fire Inspection/ Plans Review</b>	589,975	625,963	664,147	704,660	747,644
<b>Hazmat Permit Fee</b>	28,807	28,951	29,096	29,241	29,387
<b>Service Charge FOS</b>	45,781	46,239	46,702	47,169	47,640
<b>Total Revenues</b>	<b>15,044,114</b>	<b>15,168,627</b>	<b>15,296,658</b>	<b>15,428,340</b>	<b>15,563,815</b>

Figure 38 Total Revenues Projected, FY 26-30

The Fire Assessment is what was anticipated as collections by the Broward County Property Appraiser. The PEMT/MCO amounts were projected to increase approximately 9.58% year over year. However, these are more dependent on the data submitted for the program used to determine the average cost per transport for the Agency for Health Care Administration’s (AHCA’s) cost report. The Ambulance Fees collections are projected based on individual projections of transports and average collection amounts.

Expenditures were then analyzed and projected based on the same information from the previous financial study and provided in the following figure.

	FY 26 Projected	FY 27 Projected	FY 28 Projected	FY 29 Projected	FY 30 Projected
<b>Personnel Services</b>	16,855,363	17,878,309	18,956,445	20,092,918	21,291,047
<b>BSO Operating</b>	1,018,750	1,038,208	1,058,038	1,078,246	1,098,841
<b>COHB Operating</b>	77,250	79,568	81,955	84,413	86,946
<b>BSO Transfer/Reserve</b>	321,710	327,855	334,117	340,499	347,002





<b>COHB Legacy Pension</b>	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
<b>COHB Debt Service</b>	611,563	610,563	608,563	610,163	610,563
<b>Total Net Recurring</b>	<b>23,884,636</b>	<b>24,934,503</b>	<b>26,039,118</b>	<b>27,206,239</b>	<b>28,434,399</b>
<b>BSO Capital</b>	258,167	102,037	757,714	788,556	116,442
<b>Total Contractual Services</b>	<b>24,142,803</b>	<b>25,036,540</b>	<b>26,796,832</b>	<b>27,994,795</b>	<b>28,550,841</b>

Figure 39 Total Expenditures Projected, FY 26-30

The remaining EMS fund balance is then determined by what is calculated as a remainder of expenditures subtracted from revenues. The following figure provides the breakdown of the fund balance, which will be what is remaining from all the revenue sources combined to cover all projected expenditures for fire rescue and EMS services for the City of Hallandale Beach (COHB).

	FY 26 Projected	FY 27 Projected	FY 28 Projected	FY 29 Projected	FY 30 Projected
<b>Total Revenues</b>	15,044,114	15,168,627	15,296,658	15,428,340	15,563,815
<b>Total Contractual Services</b>	24,142,803	25,036,540	26,796,832	27,994,795	28,550,841
<b>Amount needed for total Fire Rescue and EMS Services</b>	<b>(9,098,689)</b>	<b>(9,867,913)</b>	<b>(11,500,174)</b>	<b>(12,566,455)</b>	<b>(12,987,026)</b>
<b>% of Funds Needed for EMS Services</b>	37.7%	39.4%	42.9%	44.9%	45.5%

Figure 40 Fund Balance of Amount Needed for Fire Rescue and EMS Services, Projected FY 26-30

The City of Hallandale Beach, Florida Fire Assessment Methodology Report, April 29, 2024, determined that EMS services accounted for 45.5% of the department based on the FIRE EMS Call Categorization methodology performed by Munilytics. The assumption based on this analysis of EMS Revenues is that, with all things being equal, no changes are being made to the fire assessments.

Therefore, the remaining amount would be the shortfall for fire rescue and EMS services.



## Millage Rate Analysis

While there is currently a fire assessment on the parcels located in the City of Hallandale Beach, and fire impact fees on new growth, there is not currently a millage rate (or ad valorem tax on real and tangible property) for fire rescue and EMS services to those parcels. While this is not any suggestion, but rather just an analysis for reference as to how much of a millage rate would be needed to cover the EMS fund balance after removing all other revenue sources for fire and EMS services provided by the BSO. The Broward County Property Appraiser provides the taxable value for all the properties of Hallandale Beach, in the amount of \$8,469,296,842. The calculations for mill rates, which are determined to be one-tenth of a percent, equates to \$1 in taxes for every \$1,000 in home value.

By using the methodology for millage rate calculations and estimated taxable value of properties in the City of Hallandale Beach, the following table estimates the amount of a millage rate to make up the shortfall for EMS related services. For FY 26, it is estimated to be \$9,098,689. A mill rate of 1.074 is estimated to provide \$9,099,413.

	2024 Actuals
<b>Est. Taxable Value</b>	8,469,296,842
<b>Current Mill Levy Rate</b>	1.0744
<b>Estimated Mill Levy</b>	9,099,413
<b>Value of 1 Mill</b>	8,469,297

Figure 41 Millage Rate Calculation



## Financial Forecast

### Revenue Assumptions

- The collected amount from ambulance fees averages 2.79% year over year based on historical trends.
- Public Emergency Medical Transport (PEMT) supplemental payments from the Agency for Health Care Administration (AHCA) were paid back to the City of Hallandale Beach and should help to financially account for the costs paid to the BSO.
- The City Payments made to the BSO have increased an average of 2.30% year over year.
- Transport Fee Waivers attribute to a large percentage (25.95% for FY 23) of the charges that were written off for patients. It was unclear if waivers were used in multiple instances for the same patient.
- Many of the transports were ALS Emergencies, however adjustments were made to those charges, indicating that insurances may not have accepted the billings without proper documentation through patient care reports. Having policies or protocols with patient care documentation could help to increase payments for ALS transports.
- Medicare patients account for 45.17% of the total number of billable incidents for the four-year data provided.
- Medicare also accounts for 66.21% of the total amounts collected, while Medicaid accounts for 6.64% in FY 23.
- Insurance accounts attribute 21.90% of the total amounts collected in FY 23. Being able to collect more from insurance companies can help attribute to revenue increases.
- Inactive accounts are sent to collections when no payment has been received for more than 120 days from the first invoice date. Increasing the time to leave an account active may help reduce the amount sent to collections or written off, since payors with multiple insurances may take longer for payments to be made.
- There was no data provided for the number of accounts in which insurances denied claims and did not make payments or any process that dictated how those accounts were handled.
- The millage rate calculation allows all property owners (who also receive the ability to waive their transport fee) to pay towards the EMS and Fire Protection and Rescue related services.



## Expenditure Assumptions

- All projections and assumptions were made that 73 Full Time Employees (FTEs) were utilized for the EMS services through the BSO.
- No detailed breakdown of the expenditure line items was provided for deeper analysis since the study was focused on EMS revenue analysis. However, Capital Outlay purchases were undetermined but would need to be periodically reviewed, depending on the equipment's lifespan.