

Quarter 4 Report

Fiscal Year

2023–2024

July - September



We proudly protect life and property with honor, compassion and respect.



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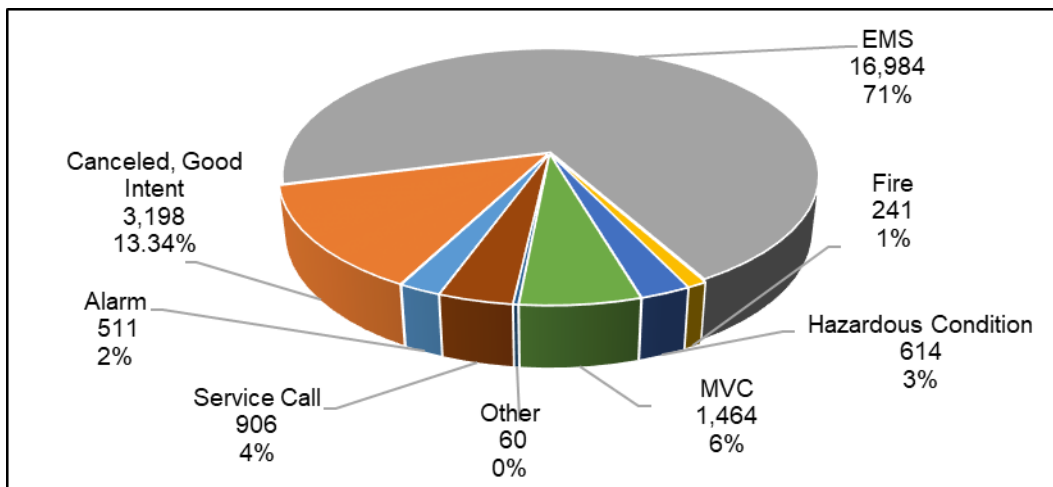


OPERATIONS

Service Demand

MCFR crews responded to 23,978 calls for service during this quarter—an increase of 0.8% over the same quarter during the prior fiscal year. The greatest demand for service was for emergency medical service incidents, accounting for 71% of overall service demand. The following figure illustrates the percentages of service demand based upon the categories within the National Fire Incident Reporting System (NFIRS).

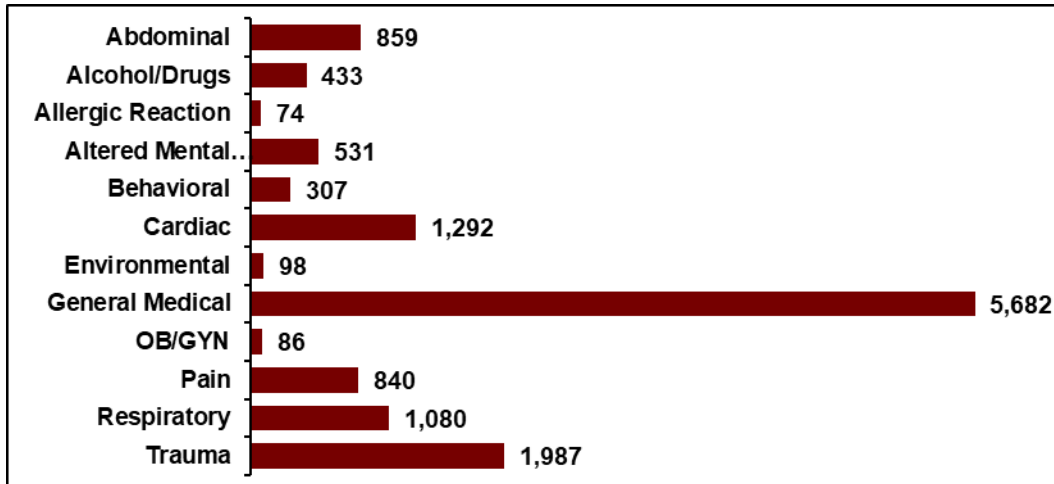
Figure 1 MCFR Service Demand by NFIRS Incident Type





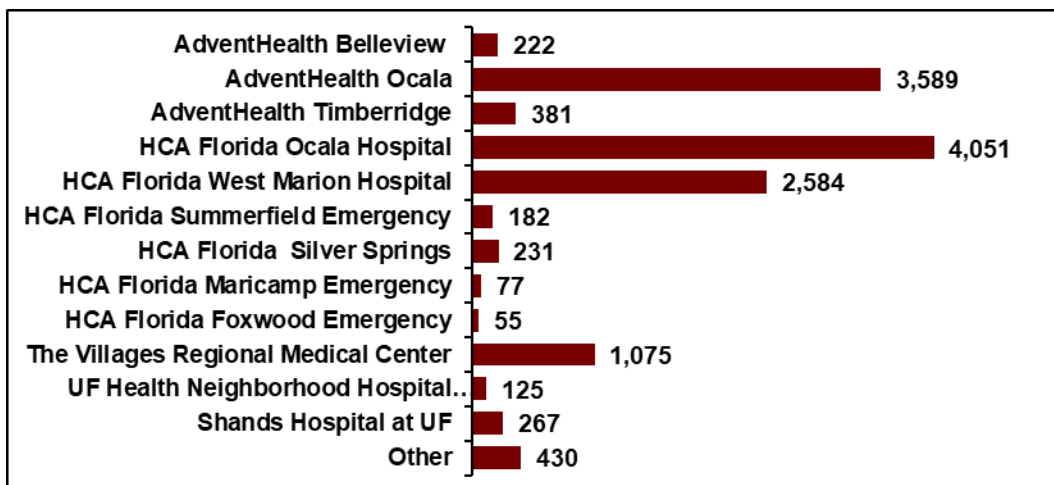
For purposes of a more in-depth view of the patients that are classified within the broader categories of medical calls and inter-facility transfers, the focus is primarily on those being transported. The following figure illustrates the categories of primary impression (the paramedic’s determination of complaint based on gathering patient information and assessing the patient) for all patients transported within the quarter.

Figure 2 Patient Transports by Primary Impression



Marion County Fire Rescue works hand-in-hand with the local hospital organizations. The following figure illustrates the locations where patients were transported, with a combined total of 13,269 transports during the quarter.

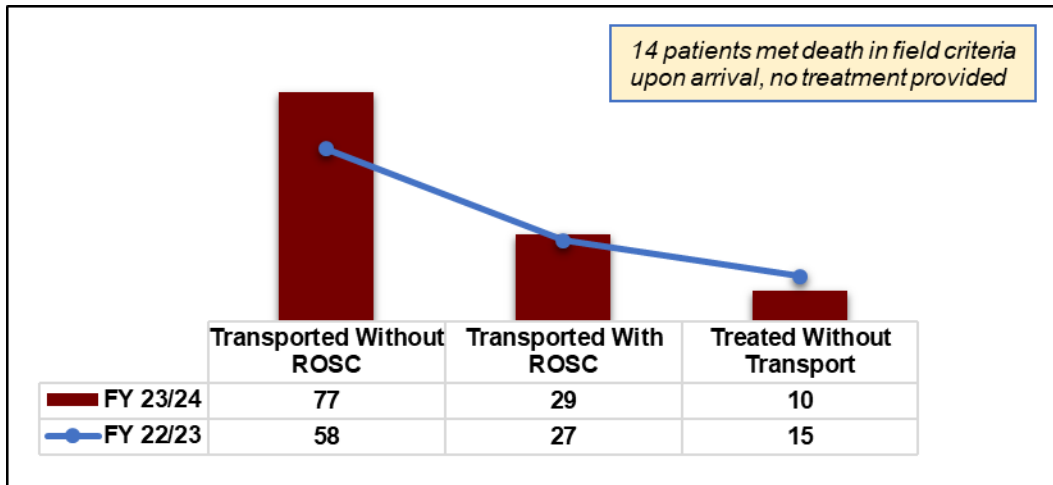
Figure 3 Patient Transports by Destination





One of the most significant goals for providing emergency medical services within the community is the ability to reduce illness and death wherever possible. The metric that illustrates this well is the ability to obtain return of spontaneous circulation (ROSC) in cardiac arrest patients. ROSC means that the patient’s heart began working at a level sufficient to produce a pulse.

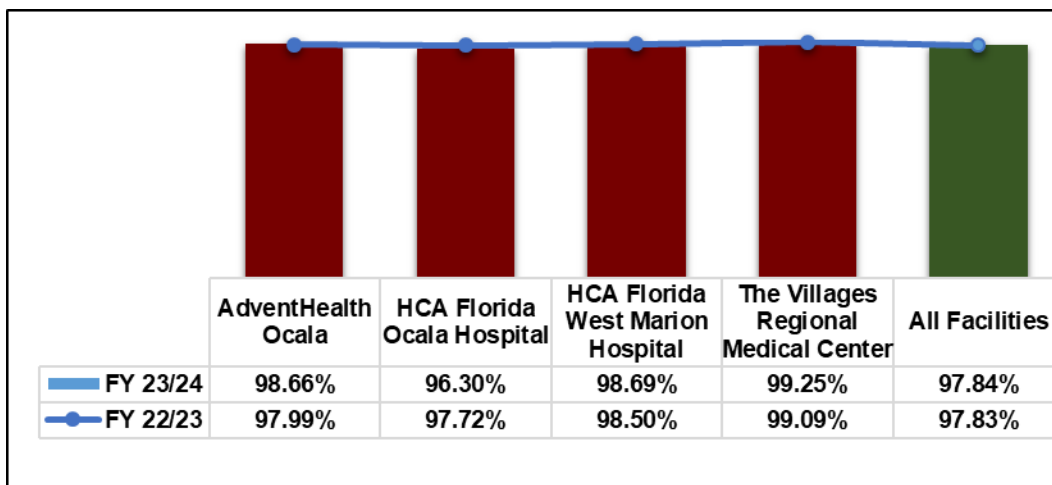
Figure 4 Cardiac Arrest



Hospital Interface

The ability for Marion County Fire Rescue units to be available to respond to additional calls for service is impacted by the time spent at the receiving hospital. Working with the local hospitals, the first performance measure illustrated below is the transfer of patient care to hospital staff within 30 minutes of transport unit arrival at the hospital—with a target of 30 minutes or less for 90% of patients.

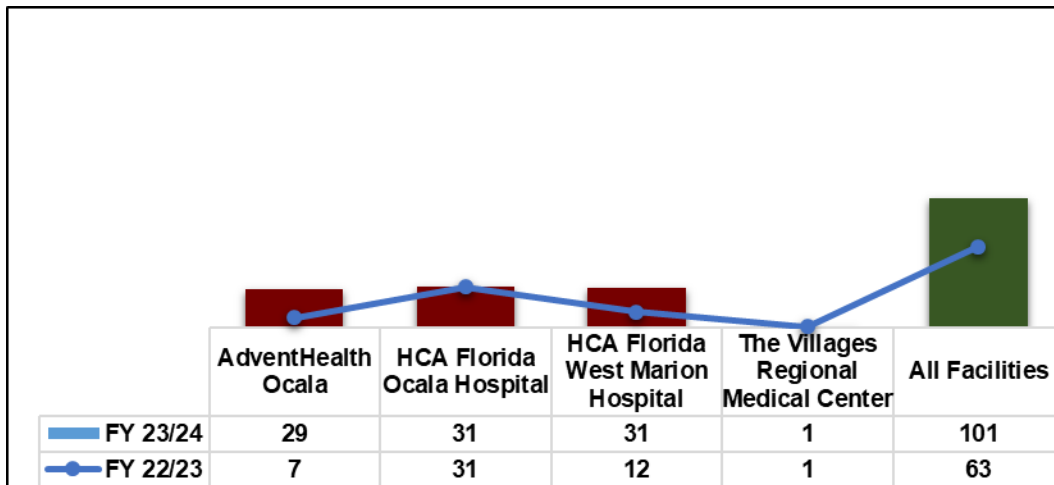
Figure 5 Transfer of Care Less Than 30 Minutes





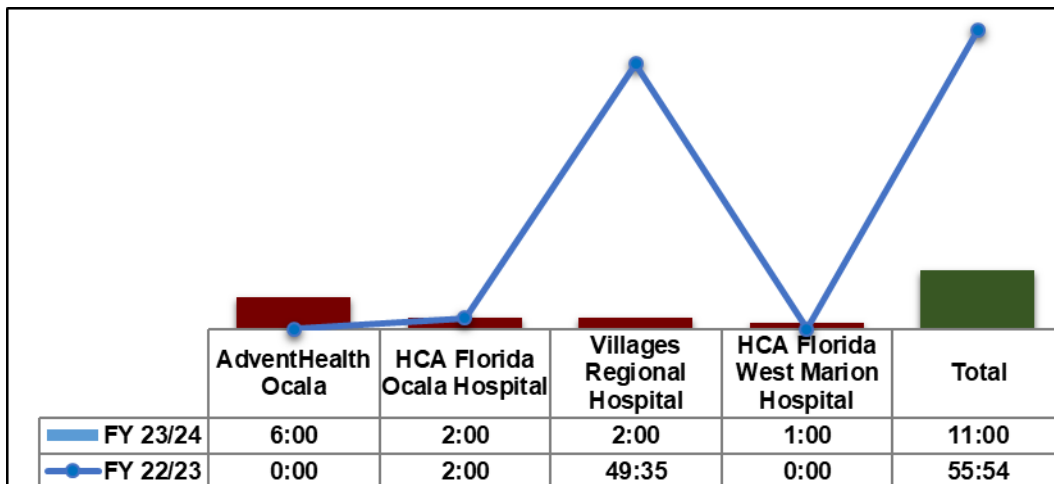
The second performance measure illustrated below provides a total count of hours Marion County Fire Rescue transport units were on bed delay at the hospital (time beyond the target measure of 30 minutes).

Figure 6 Bed Delay Hours



The final performance measure illustrated below provides a total count of hours where receiving hospitals requested transport unit diversion. Diversion occurs when a particular receiving facility encounters a patient surge and they request that patients be transported to other facilities. The destination decision is still up to the patient so it does not completely stop additional patients from being transported to the on-divert facility.

Figure 7 Hospital Diversion

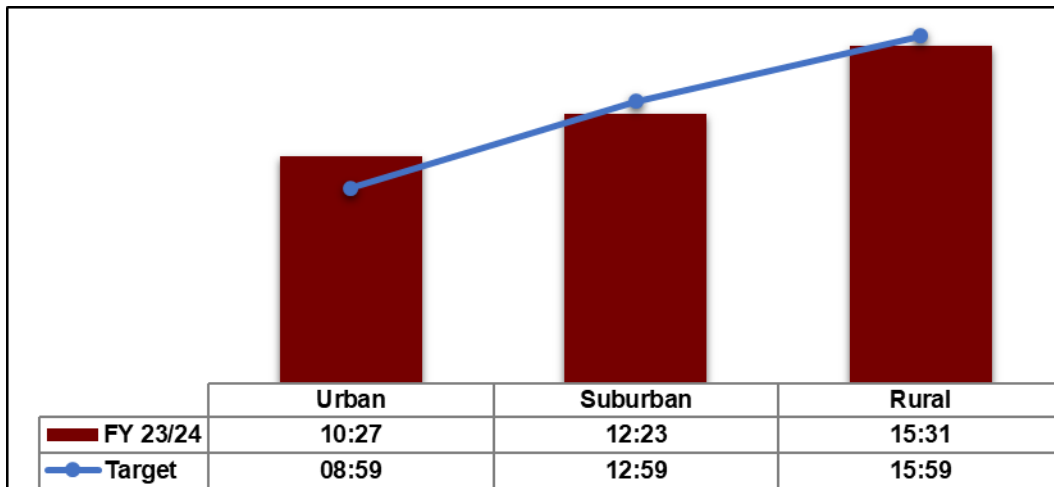




Response Time Performance

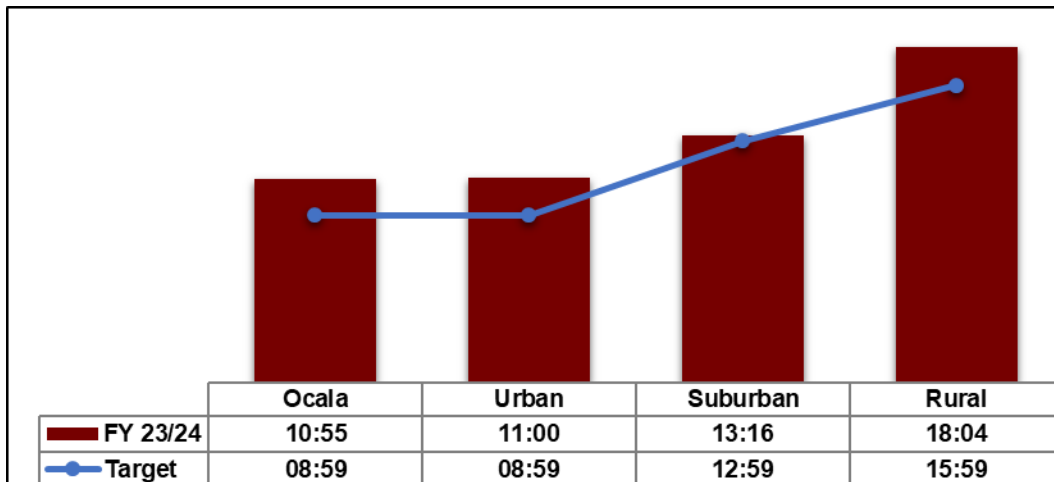
The ability to decrease damage and injury from incidents of all types is impacted by the time it takes for units to arrive. Generally, this is best calculated using only those incidents that were emergency response (lights and sirens). Performance is categorized by population density and the City of Ocala. Urban population density is greater than 1,000 persons per square mile, suburban is 500 to 1,000 persons per square mile and rural is less than 500 persons per square mile. The following figure illustrates the performance for the current quarter based on population density.

Figure 8 First Arriving Unit



For medical incidents, the first arriving unit may be a transport unit or a non-transport unit but both are staffed by paramedics and are able to provide lifesaving care. However, the ability to transport the patient to a receiving facility so that they can receive definitive treatment is the second goal. The following figure illustrates the performance for the current quarter based on population density.

Figure 9 First Arriving Transport

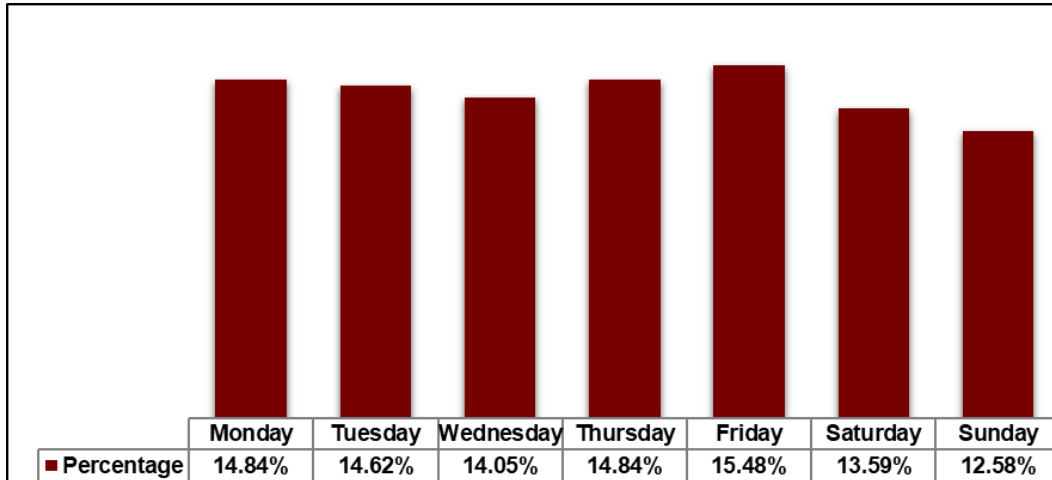




Temporal Analysis of Service Demand

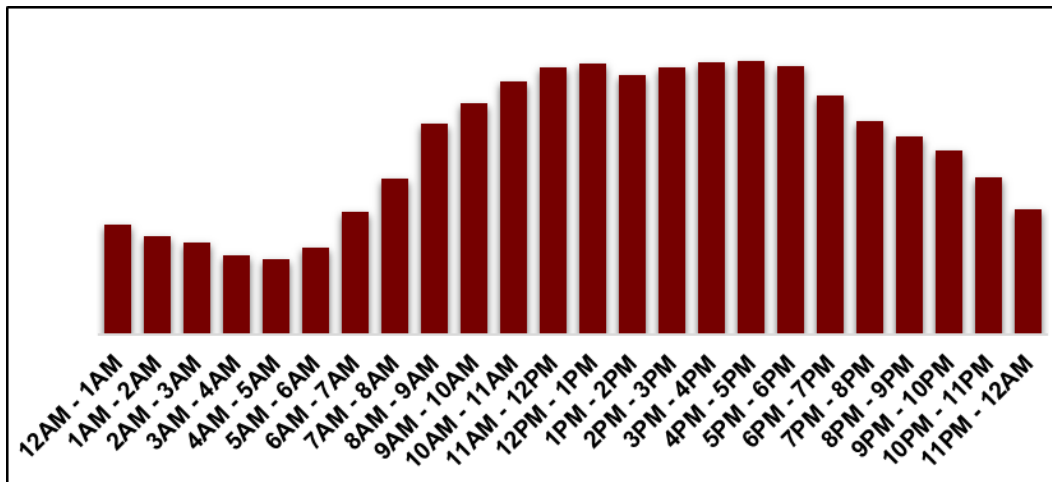
Another component in understanding the nature of service demand is the day of the week and the time of day that calls occur. For this quarter, the following figure illustrates the demand based on the day of week with the lowest demand on Sundays and the highest demand on Fridays.

Figure 10 Service Demand by Day of Week



The following figure illustrates the service demand by time of day. As illustrated, the trend for service demand coincides with the movement of the population throughout the day. As the activity of the population increases, so does the demand for service.

Figure 11 Service Demand by Time of Day





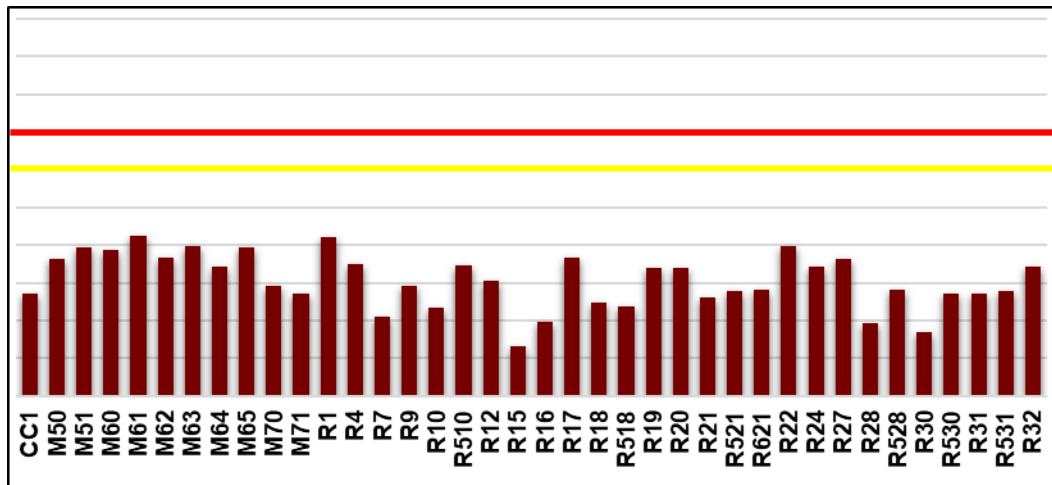
Workload and Concurrency

Workload is a measurement of the percentage of hours spent assigned to incidents as relative to the hours in service. Marion County Fire Rescue has adopted the following benchmarks as it relates to unit hour utilization.

Unit Hour Utilization	Reference
0.30 or Less	Unit has an acceptable workload.
0.31 to 0.34 (Yellow Line)	Unit has an increased workload.
0.35 or Greater (Red Line)	Unit has a concerning workload.

While non-transport units are active with incident responses, none of them reach an increased workload. In contrast, the majority of transport units spend many more hours assigned to incidents. The following figure illustrates the workload for the transport units for the current quarter.

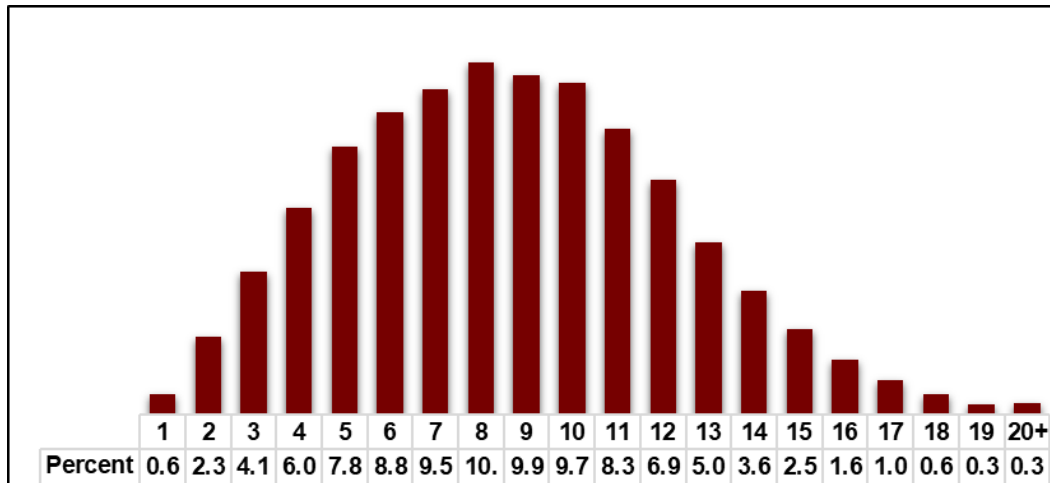
Figure 12 Unit Hour Utilization





The department’s ability to respond to incidents may be impacted by the number of incidents occurring simultaneously. This measure is referred to as call concurrency and is illustrated in the following figure. As concurrency increases, there are fewer units available to respond to additional calls for service.

Figure 13 Concurrent Incidents



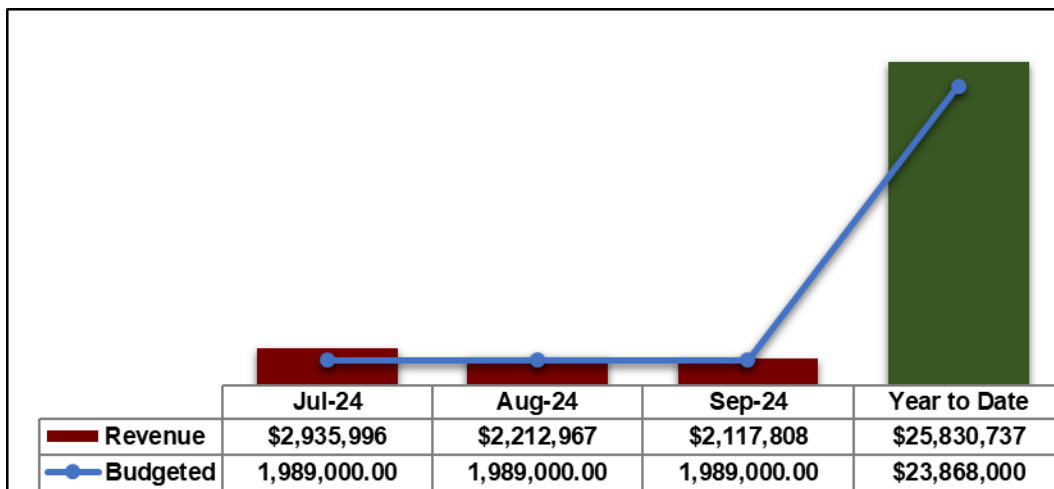


AMBULANCE BILLING

Charts

Marion County Fire Rescue transport units (equipment and staffing) are primarily funded within the General Fund of Marion County. This budget each year presumes an estimated amount of revenue that will be received through billing for transported patients. As illustrated in the following figure, the total revenues for the fourth quarter bring the year-to-date total revenues \$1,962,737 higher than the budgeted amount for the fiscal year.

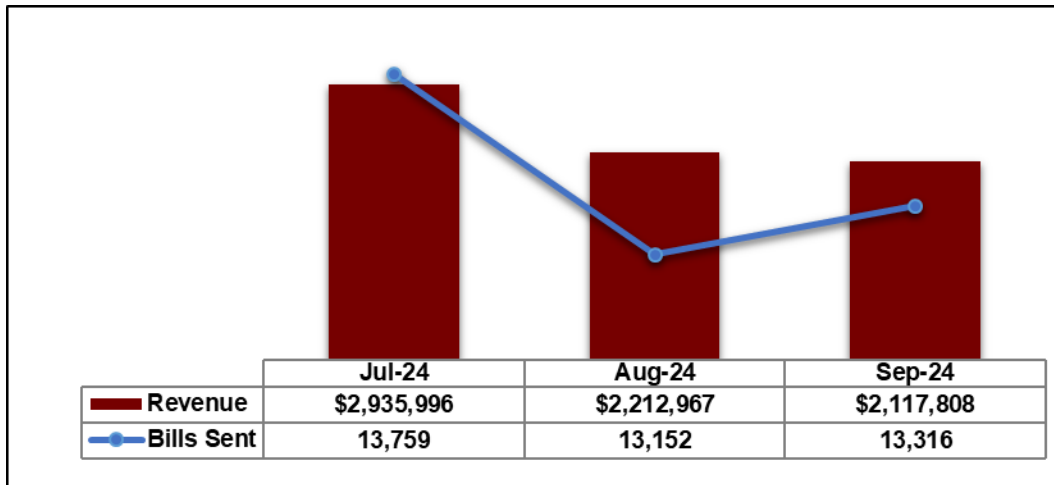
Figure 14 Revenue





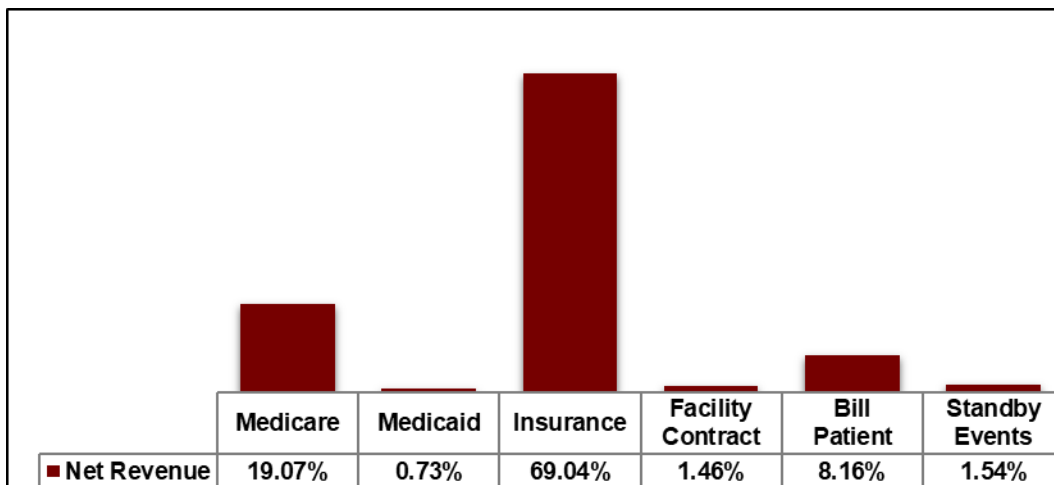
Marion County Fire Rescue Billing staff works with many insurance companies, Medicaid, Medicare, Veterans Administration and others as well as directly billing the patient. This often results in more than one bill sent for each transport until full payment is received, as illustrated in the following figure.

Figure 15 Revenue Received/Bills Sent



The following figure illustrates the various sources of revenue that account for the total revenue received during the quarter.

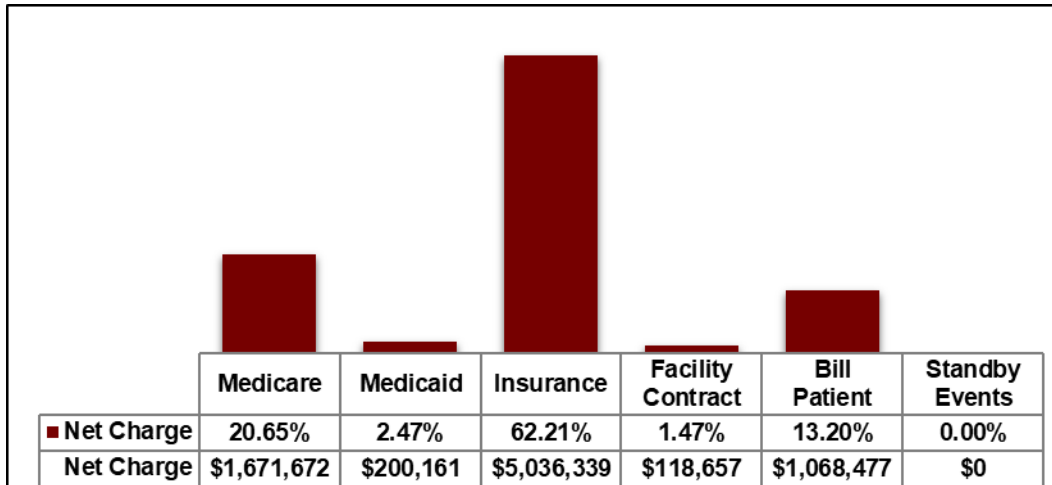
Figure 16 Revenue by Payor Type





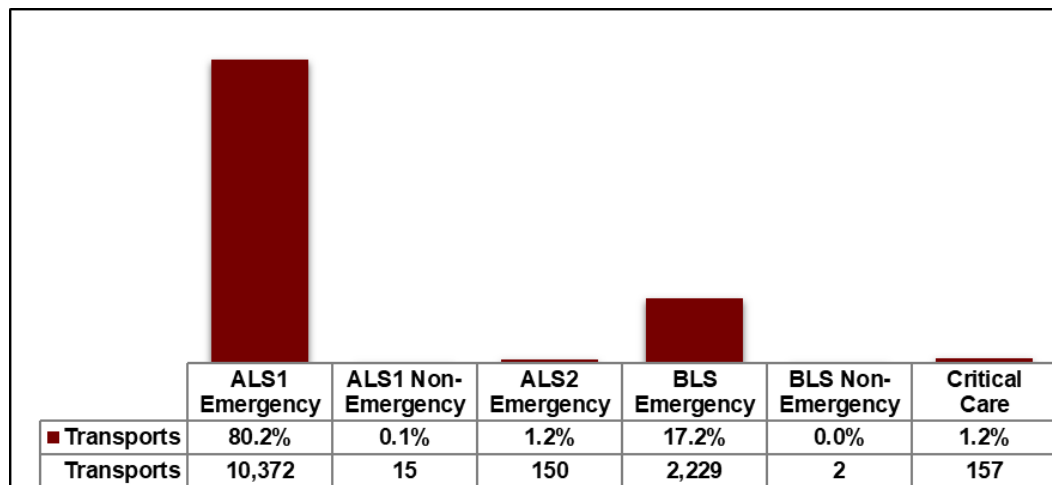
The following figure illustrates the various sources of charges that account for the total bills sent during the quarter.

Figure 17 Charges by Payor Type



Within guidelines set by the Centers for Medicare & Medicaid Services (CMS), patient bills are categorized into specific levels of service—advanced life support (ALS), basic life support (BLS) and critical care. This is illustrated below for those patients billed during the quarter.

Figure 18 Transports by Level of Care





To fully understand the overall charges/revenue, the above service levels are combined with the rates below. Marion County Fire Rescue performs an annual ambulance rate survey and provides a recommendation as to whether or not to propose a rate change. Medicare and Medicaid rates are set by CMS without any input from transport agencies.

Figure 19 Current Ambulance Rate

Level of Care	Marion County 12/20/2022 to Present	Medicare 2024	Medicaid 8/1/2013 to Present
BLS Non-Emergency	\$550.00	\$266.22	\$136.00
BLS Emergency	\$600.00	\$425.95	\$136.00
ALS1 Non-Emergency	\$650.00	\$319.46	\$190.00
ALS1 Emergency	\$700.00	\$505.81	\$190.00
ALS2 Emergency	\$850.00	\$732.10	\$250.00
SCT (Critical Care)	\$1,125.00	\$865.21	\$295.00
Standard Mileage	\$12.50	\$8.94	\$3.00
SCT Mileage	\$13.75	\$7.63	\$3.00
Notes: Medicare only pays 80% of listed rate. Medicaid only pays mileage for out-of-county transports.			

The final analysis takes into account each of the preceding data points and provides a view of the actual net revenue received based on the gross charges submitted. The following figure illustrates the average collection rate for Marion County Fire Rescue.

Figure 20 Marion County Ambulance Collection Rate

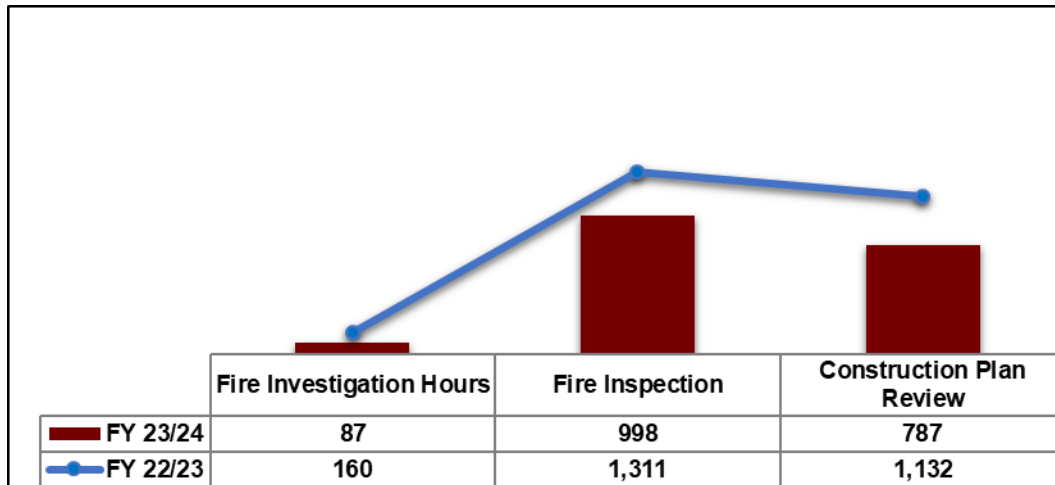
Analysis Date	Analysis Range	Amount Billed	Amount Collected	Collection Rate
07/05/2024	02/01/2023–01/31/2024	\$31,795,248	\$24,505,248	77.07%
08/15/2024	03/01/2023–02/29/2024	\$31,848,139	\$24,696,063	77.54%
09/10/2024	04/01/2023–03/31/2024	\$31,928,856	\$24,664,569	77.25%
Overall Average				77.29%
Analysis is based on revenue received specifically for the same patients billed and excludes other revenues received during the analysis range.				



FIRE PREVENTION

Charts

Figure 21 Fire Prevention Activity



Development

The Marion County Fire Rescue (MCFR) Fire Prevention team continues to work with our community partners by managing the sustained increase in construction projects. Many projects are underway which involve a considerable amount of staff time to review plans and perform inspections in the interest of public safety.



Figure 22 Project Update

Project	Status
World Equestrian Center	<ul style="list-style-type: none"> • Construction continues on the four-story event center which will host multiple dining options and meeting rooms. • Final inspections are completed on the new maintenance facility. • Construction is underway for the outdoor mall and retail space. Many different shopping options will be available for visitors.
Ocala South Logistics	<ul style="list-style-type: none"> • Ocala South Logistics is preparing for its tenant. The facility will house a cannabis cultivation facility.
West Shire Village	<ul style="list-style-type: none"> • Phase one construction is complete. • Several buildings in phase two of the project are complete and the construction is expected to be complete by the end of the year. • Land clearing and infrastructure has begun on a new community near The Villages.
Elementary School W	<ul style="list-style-type: none"> • The Marion County School Board has started construction of a new elementary school in Marion Oaks. The first floor of the main building is complete and the school is expected to open for the 2025 school year.
Dollar Tree Distribution Center	<ul style="list-style-type: none"> • Dollar Tree Distribution Center is nearing completion of its maintenance facility. • A second 50,000 square foot recycle building is under construction.
U-Haul Storage	<ul style="list-style-type: none"> • Final inspections are underway with expected completion in the next few weeks.
Fire Station 23	<ul style="list-style-type: none"> • Final inspections are underway at the location which will add another full-time resource.
Coyote Crossings	<ul style="list-style-type: none"> • Construction will begin on three new warehouses in 2024 ranging from 250,000 to 1.2 million square feet. • Plans for several additional warehouse spaces have been received and are under review. • A residential/light commercial section has been proposed.
Residential Construction	<ul style="list-style-type: none"> • Residential construction remains active and strong. • Several infill projects have begun along the SW Highway 200 corridor. • Southeast and Southwest Marion County are currently experiencing the highest growth to meet the housing demand.
Apartment/Townhomes	<ul style="list-style-type: none"> • Pointe Grande Apartments off SW 60th Avenue is under construction with expected completion in early 2025. • Spires Apartments off Highway 27 is under construction with expected completion in early 2025. • Several other townhome and apartment communities are under construction.



Fire Investigation

The MCFR Fire Prevention Division continues to support the Fire Operations Division with a local fire investigation program. A member of the Fire Prevention Division is on-call to provide investigative services 24/7. Fire Prevention works closely with many different partners in order to accomplish investigations including the Bureau of Fire Arson and Explosive Investigation (BFAEI), the State Attorney, and other law enforcement agencies.

MCFR Fire Prevention was requested to investigate 24 fires in the fourth quarter of FY 2023/2024. A total of 87 staff hours were spent during the fourth quarter on fire investigation activities including on-scene investigations, follow ups, court testimony, and report writing.

During this quarter, MCFR's fire investigators processed five incidents involving burn injuries to citizens. Many of the fires investigated this month were determined to be accidental in nature. Based on the investigative findings, future community risk reduction messages are created to hopefully prevent future incidents. MCFR Community Risk Reduction is ready to support and provide education throughout the community.

Staffing Update

During this quarter, one fire inspector successfully completed their task book and is conducting inspections on their own. Additionally, one fire investigator completed their training and is now conducting investigations on their own. Cross training has begun with one of the inspectors in Fire Investigation which will accommodate another member on the Fire Prevention team. Cross training increases customer service and reduces plan review times, as well as allows Fire Prevention to meet the needs of our citizens.

Annual Inspection Program

The MCFR Fire Prevention Division launched the annual inspection program during this fiscal year. Annual fire inspections are critical to identify and educate businesses of any potential fire code issues prior to a fire. The annual inspection program has been assigned one inspector who is responsible for the initial inspection and any follow up items as needed. The program is designed to provide education and guidance to businesses to reduce loss in the event of a fire. The fire inspector assigned to the annual inspection program has completed 933 fire inspections this year which resulted in 378 second inspections. Of these inspections, only 29 locations have open items which are being corrected by the occupant.



Public Education/Community Risk Reduction

Marion County Fire Rescue Public Education has been very active in the community during the past quarter. During the fourth quarter, public education has reached several different community groups with fire safety topics. The Public Education division continues to strive to provide education to as many population groups as possible. October is Fire Prevention Month which spotlights an emphasis on fire safety. Many events will occur over the next few weeks which will provide the community with information and education.



PUBLIC SAFETY COMMUNICATIONS

Marion County Public Safety Communications (PSC) is a dual-Accredited Center of Excellence (ACE) and accredited by the International Academies of Emergency Dispatch (IAED) in call processing of Emergency Medical Dispatch (EMD) and Emergency Fire Dispatch (EFD). As a dual ACE, PSC is required to maintain or exceed a high level of service and compliance with protocols. The IAED ACE accreditation covers the call-taking aspect of the communications center using compliance to protocols as the primary focus.

PSC is also accredited by the Florida Telecommunications Accreditation Commission (FLA-TAC) which is a division of the Florida Police Accreditation Coalition (FLA-PAC). This is a policy driven accreditation which covers all aspects of the communications center ranging from administrative topics, to training and dispatch protocols. The accreditation has over 110 standards.

PSC is approved through the Florida Department of Health (DOH) to instruct the state required 911 Public Safety Telecommunicator (PST) training program. As an approved training center through the DOH, PSC routinely hosts other agency's Emergency Telecommunicators (ETCs) for this training. This training program is a minimum of 232 hours covering various topics of Emergency Medical, Fire, and Police dispatch and call processing.

Marion County, Florida currently operates a 7-RF-site, 12-channel, trunked simulcast ASTRO 25 (P25) system. The existing infrastructure has served the County well for many years but as the County has grown, the needs of the public service providers have also grown. The goal of this ASTRO 25 expansion project is to enhance the coverage performance of the radio system from countywide mobile radio coverage to countywide portable radio coverage. The addition of three (3) new simulcast sub-sites coupled with the conversion of the existing Dunnellon Water Tower site from a standalone ASR to a simulcast RF subsite will provide the county with 95% portable outside radio coverage countywide.

Marion County is purchasing three hundred seventy-eight (378) APX NEXT XE devices for Marion County Fire Rescue. APX NEXT XE devices are a next-generation P25 platform, purpose-built for first responders to access and act on information while maintaining their focus in critical situations. With natural and accessible touch interface, best-in-class audio optimized for high-noise environments, and extended coverage through broadband connectivity, APX NEXT XE devices deliver actionable intelligence to the point of engagement for personnel to stay connected and in control wherever the mission takes them. In addition, APX NEXT XE devices deliver all of this in a form factor designed for extreme environments.

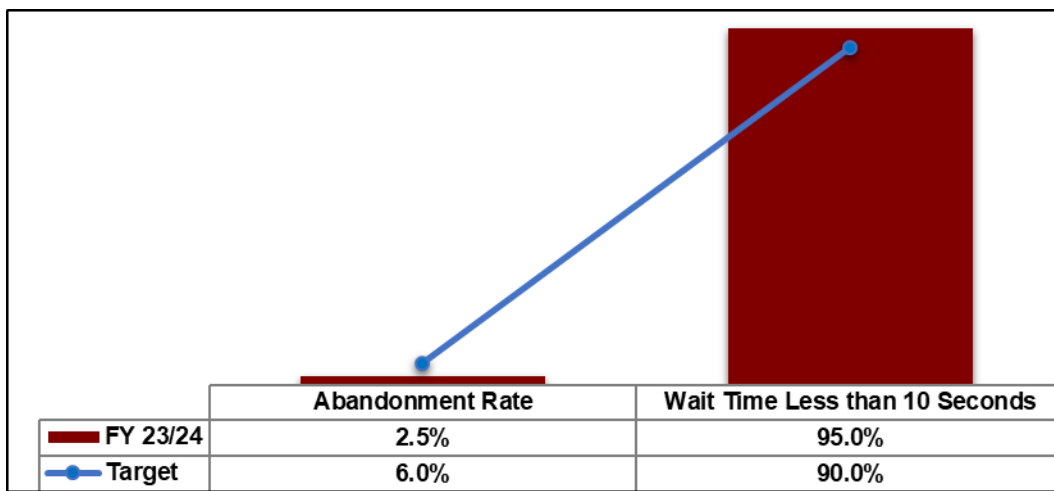


Charts

The following figure illustrates two key performance measures for the answering of 911 calls by the public safety answering point (PSAP) at PSC.

Abandonment rate describes those instances where the call is not answered within the PSC PSAP, either being transferred to another PSAP or the call disconnects prior to PSC having the ability to answer. The target for this measure is 6% or less and correlates directly with the second target measure of answering at least 90% of 911 calls in 10 seconds or less.

Figure 23 PSC Performance Benchmarks



The following figure illustrates the total incoming and outgoing call volume for PSC.

Emergency Inbound represents the number of 911 calls that are routed to the PSAP at PSC.

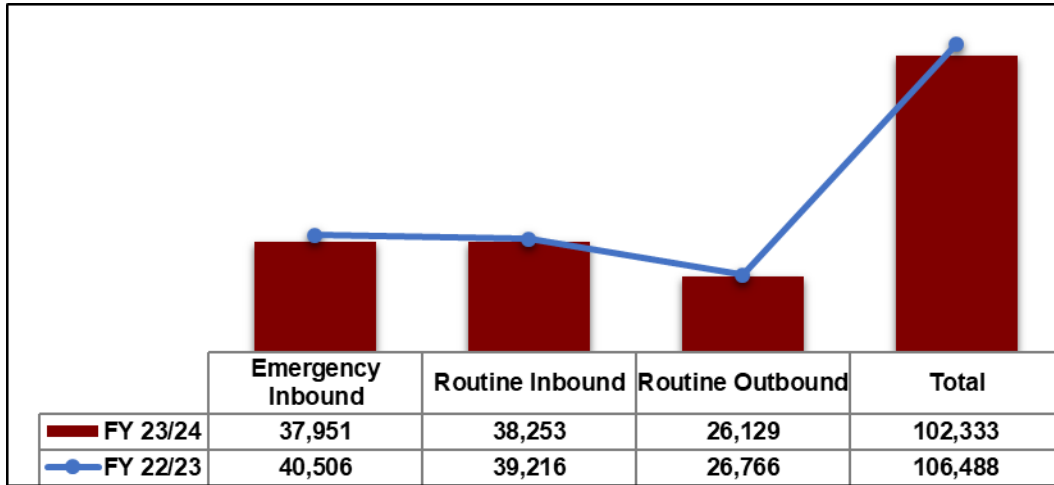
Routine Inbound represents the number of phone calls received by PSC on the non-emergency lines. These lines are used for calls from alarm companies, medical facilities, hospitals, other public safety/service agencies, MCFR personnel and the public to speak with PSC ETCs.

Routine Outbound represents the number of phone calls that originate from within the PSAP. These calls include call-backs to 911 disconnects, calling local agencies, calls to MCFR personnel, etc.

Total represents all three categories combined. This total is one of the key factors used to show the call volume workload of PSC ETCs.



Figure 24 PSC Phone Calls

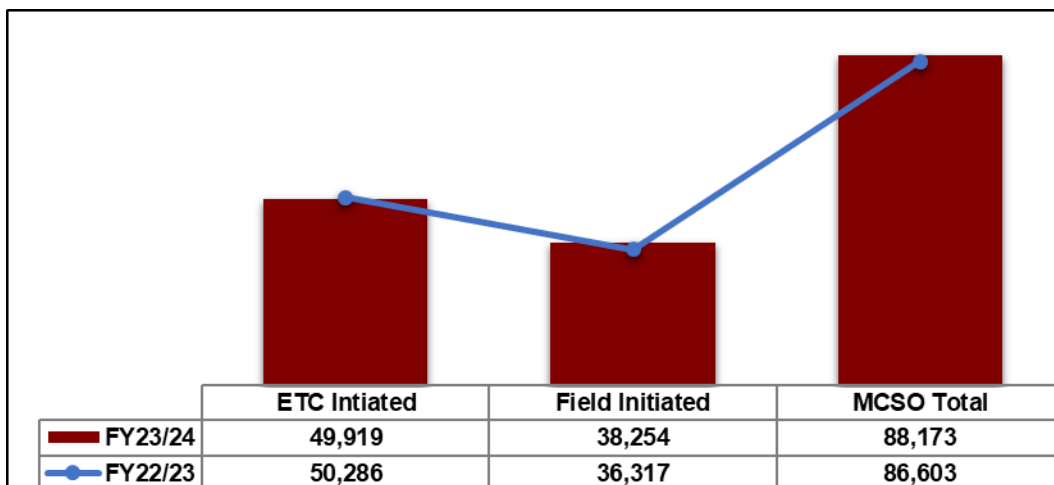


Calls for service (CFS) which are law enforcement related are grouped into two categories; ETC Initiated and Field Initiated and is illustrated in the following figure.

ETC Initiated calls for service are those calls that are created in the Computer Aided Dispatch (CAD) system and were processed by an ETC.

Field Initiated law calls for service are those that are created as a result of an action by a deputy. These are calls such as a traffic stop or any other call for service that is initiated by the deputy and not originating from within the PSAP.

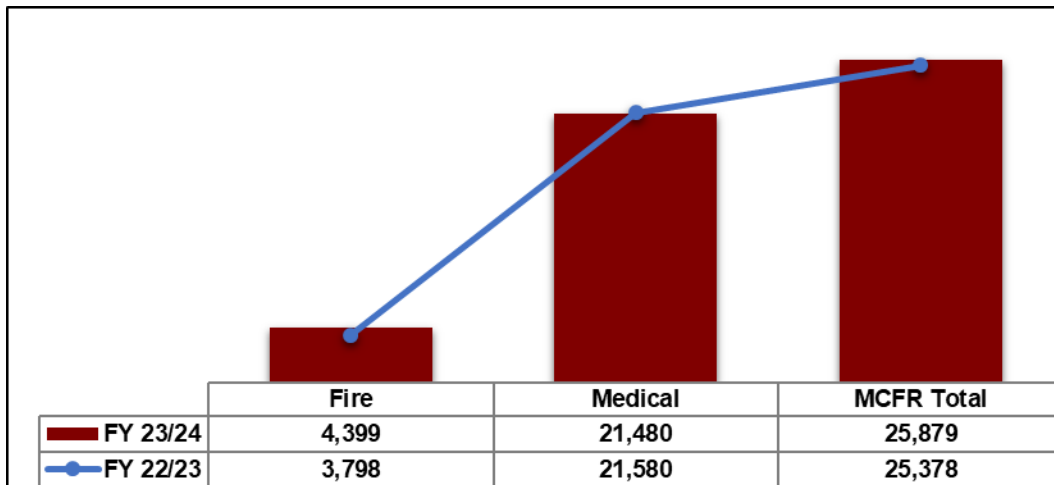
Figure 25 PSC Law Calls for Service





MCFR calls for service are broken down into two types, Fire and Medical. These are the call types within CAD and organized using the call priority, rather than the nature/problem and are illustrated in the following figure.

Figure 26 MCFR Calls for Service

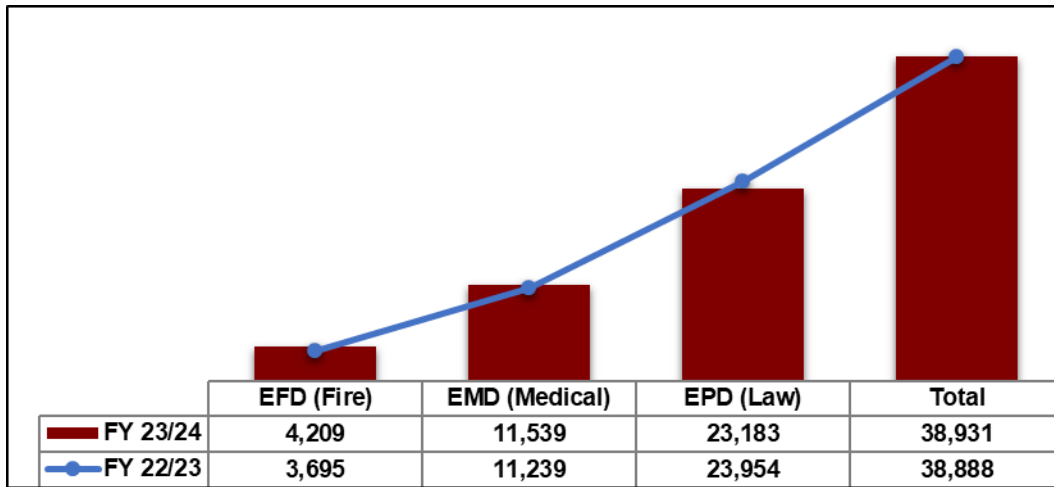


PSC utilizes ProQA software to aid in the call processing, which assists the ETC in collecting vital information for first responders and to aid in providing critical life safety and lifesaving instructions while not delaying the dispatch of first responders. This process also assists in prioritizing calls for service based upon the information gathered. For example, a caller who has fallen, is not injured, and only needs help up off the floor will be prioritized lower than someone experiencing chest pain and difficulty breathing.

Calls for service that are processed by the Ocala Police Department (OPD) PSAP, or that originate as Field Initiated MCSO calls for service are not processed through ProQA by PSC. This, along with duplicate calls for service, unit initiated calls for service, etc. contribute to the variance between total calls for service and total calls processed through ProQA as illustrated in the following figure.



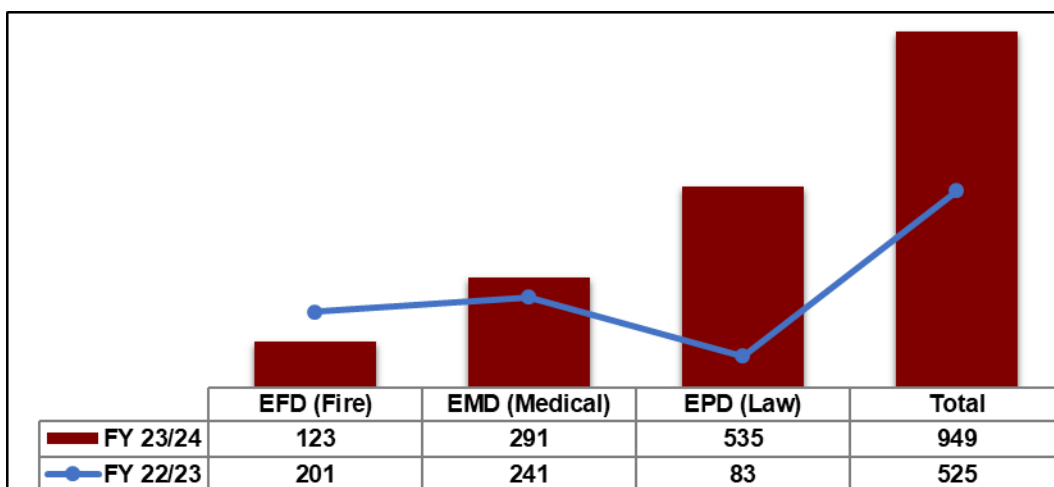
Figure 27 PSC ProQA (Priority Dispatch)



As an ACE, PSC is required to conduct a random review of calls for service processed through ProQA for EMD, EFD and EPD (emergency police dispatch). The percentage of calls reviewed for each discipline is determined by the IAED based upon total call volume for the preceding year. This ensures that PSC is maintaining or exceeding accreditation standards. These calls are selected randomly by the software program which is used for the review process.

The PSC Quality Assurance Unit also conducts focused, non-random reviews for various reasons. This can include, but is not limited to complaints received, disciplinary reasons, inquiries by other agencies or field personnel, and requests by PSC ETCs for educational purposes. The numbers are reflective of a reprioritization of our efforts during the quarter. The following figure illustrates the calls that were reviewed during the quarter.

Figure 28 PSC Quality Assurance Reviews

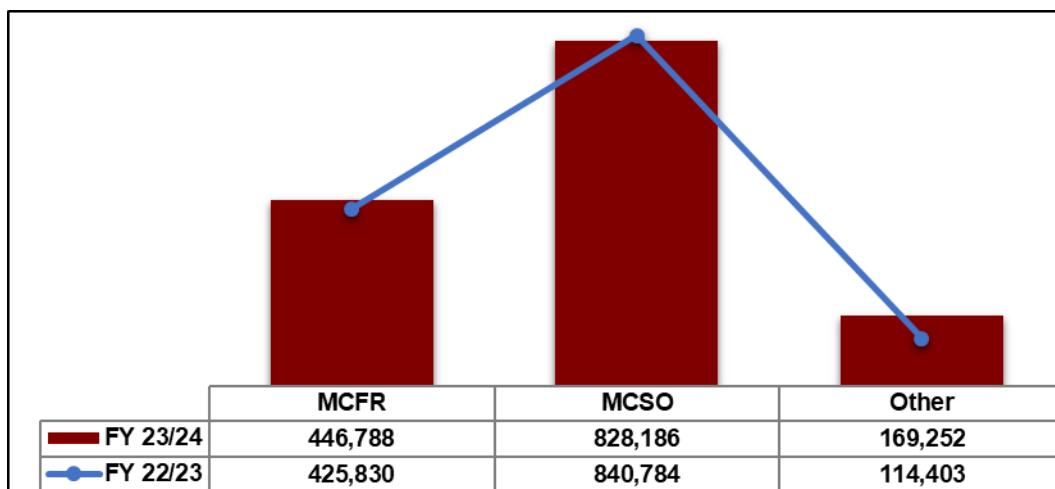




The Marion County 800 MHz Radio System is countywide and used by Marion County Fire Rescue (MCFR), Marion County Sheriff’s Office (MCSO), Belleview Police Department (BPD), Dunnellon Police Department (DPD), Marion County General Government Agencies, and Interoperability Partners, which are internal and external.

The following figure illustrates the push to talk by talkgroup each time the radio system is accessed. The talkgroups are broken down by MCFR, MCSO, which includes BPD, DPD, Marion County Jail and the Courthouse. The “Other” category includes Marion County General Government Agencies.

Figure 29 PSC Push to Talk Count (By Talkgroup)



The Marion County 800 MHz Radio Systems shows the total time the radio system is used to voice communicate over the talkgroups on the radio system as illustrated in the following figure.

Figure 30 PSC Push to Talk Hours (By Talkgroup)

