



Ambulance Purchase

CITY COUNCIL PRESENTATION

FEBRUARY 3, 2025



Ambulance Transport: *First-Year Overview*

Key Achievements:

- Successful Fire Crew Transition
- *Operational Impact:* Responded to 6,921 medical calls; high Unit Hour Utilization (Slide 9)
- *Improved Outcomes:* Faster response times, better patient care continuity
- *Efficiency:* Dual-role firefighter/paramedics increased operational effectiveness

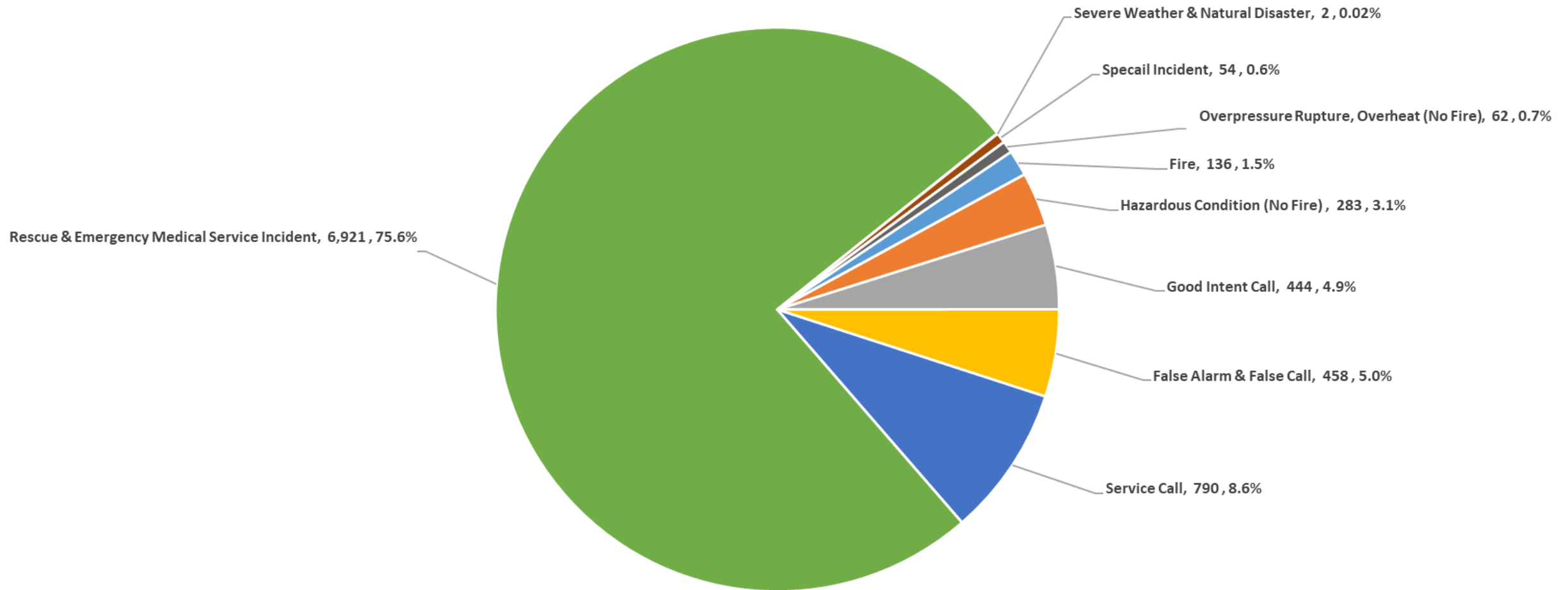
Challenges:

- Call Volume continues to out-pace our population growth, and annual call volume has more than doubled over the last 5 years
- Currently dependent upon partnership with CareLite for interfacility transfers and backup 911 responses
- Fleet Capacity: Only 3 frontline ambulances; reliance on mutual aid during peak periods
- Increased call volume translating into more frequent schedule service and unscheduled maintenance resulting in additional fleet down time
- Conclusion: Our first year highlights the *success* of the service but underscores the *need* for additional ambulances to maintain service quality and meet growing demand

Annual Call Volume

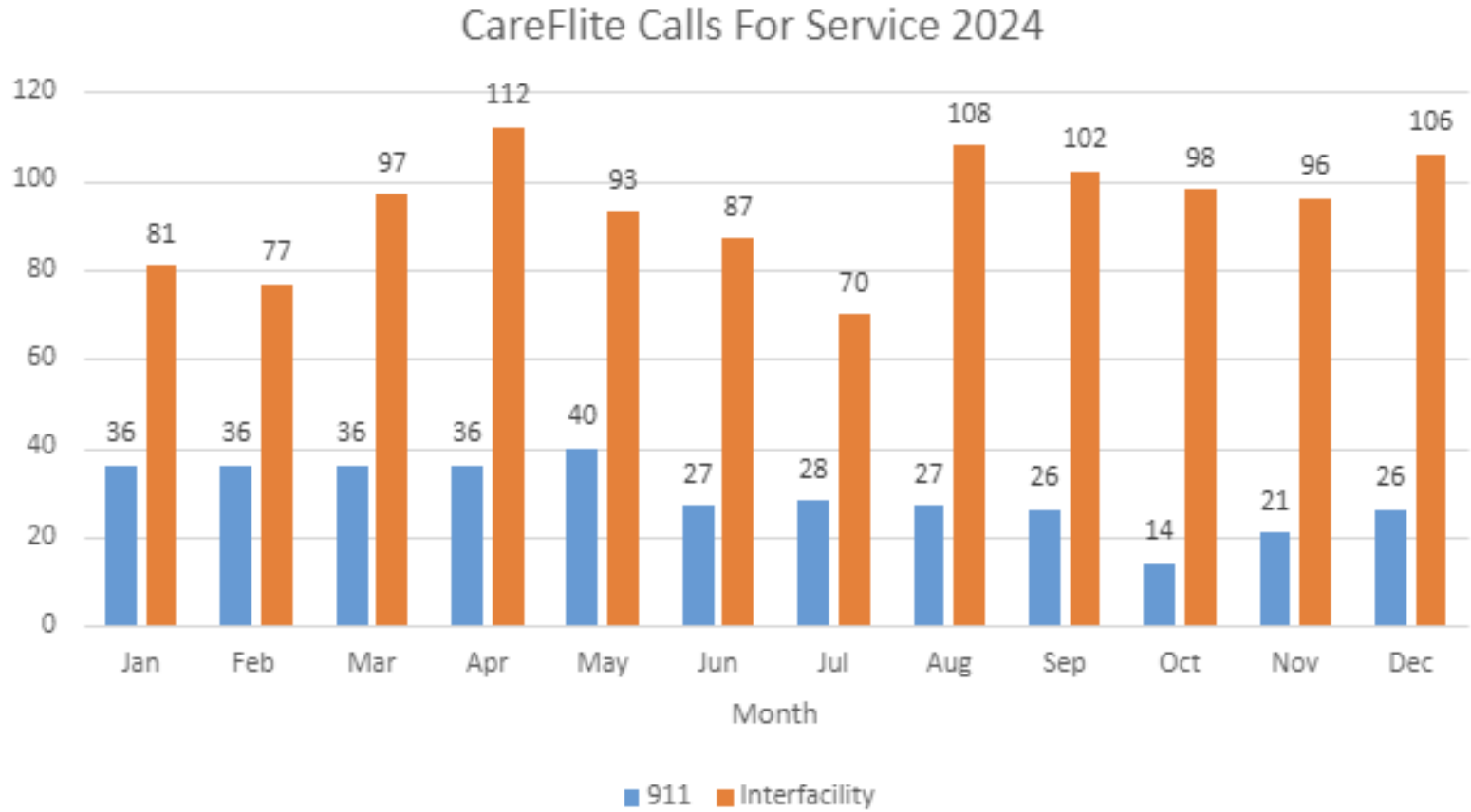


Calls by Type, Count and Percentage



CareFlite Automatic Aid (2024)

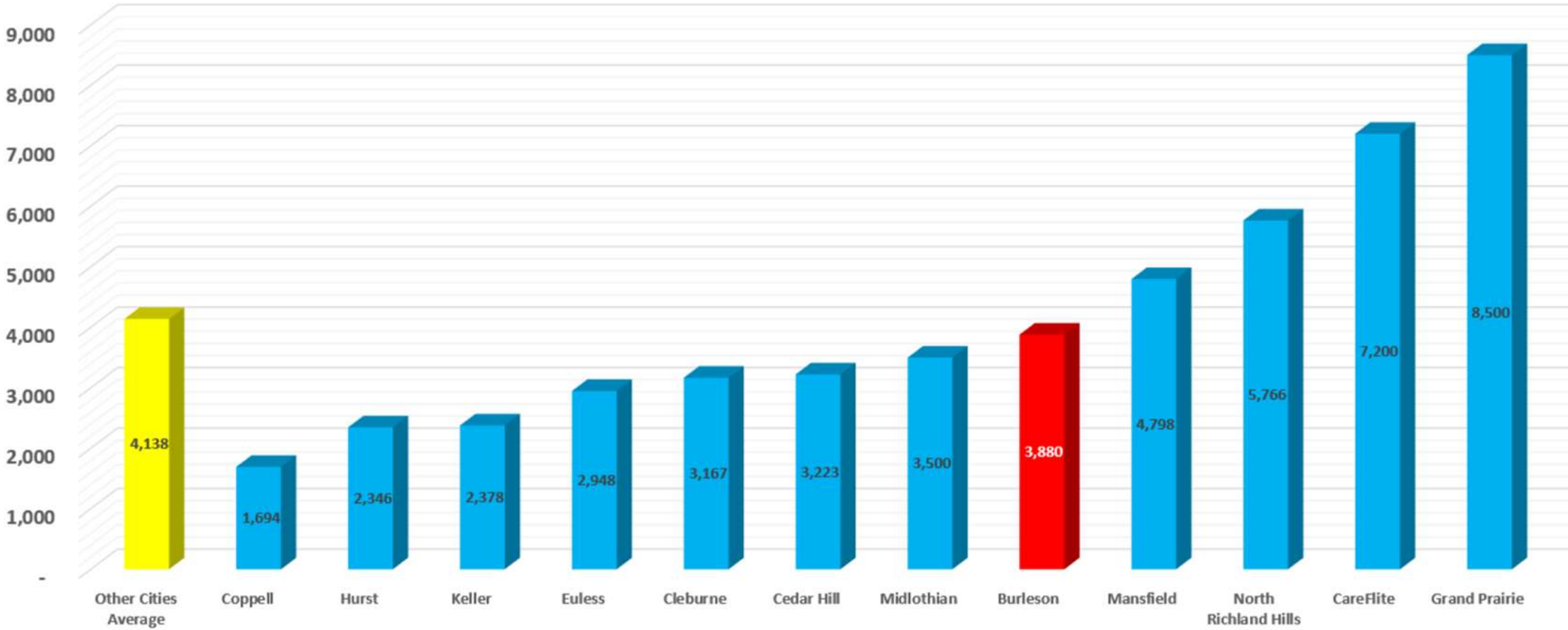
- 911 Emergency Calls: 353
- Interfacility Transports: 1,127
- Total Calls: 1,480



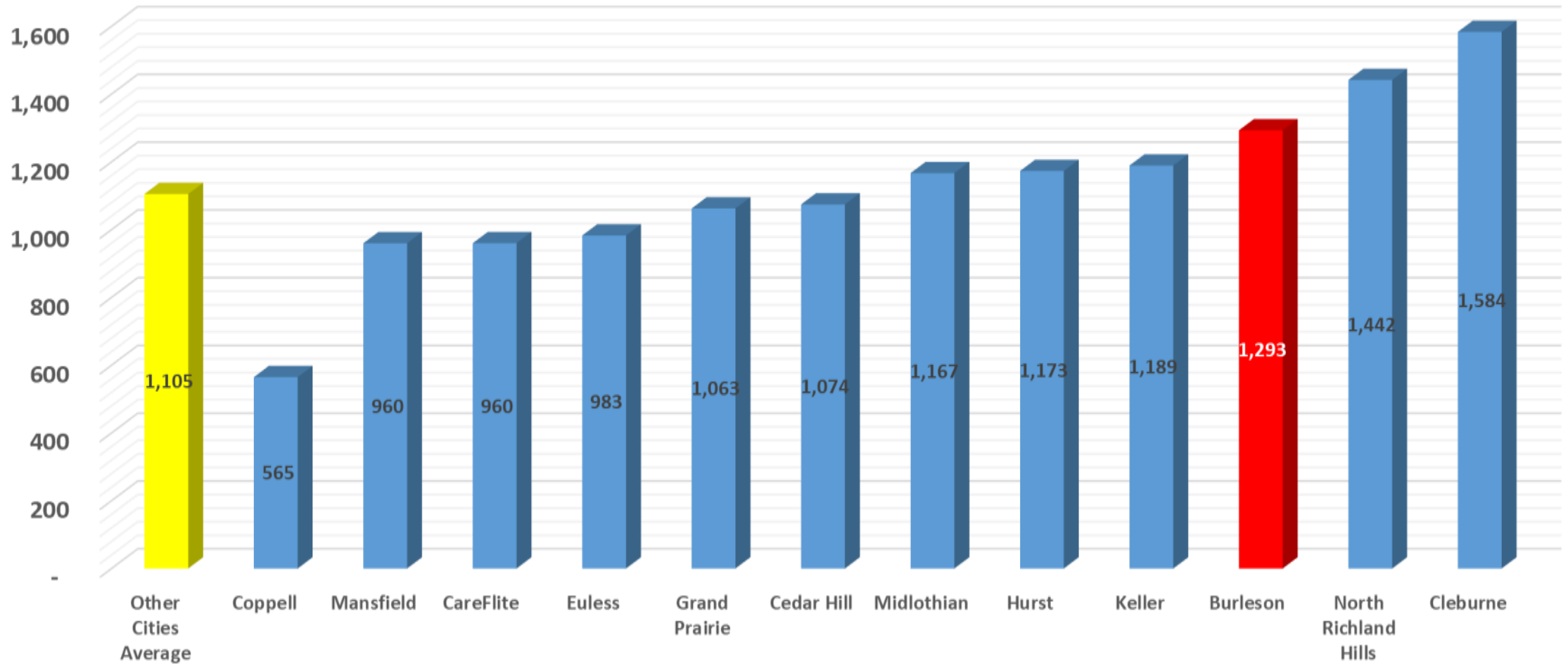
City	# Front-line Amb.	# of Reserve Amb.	Transport Volume	Transport Volume per Amb	# of Station Posting Locations
Cedar Hill	3.0	1.0	3,223	1,074	4.0
Cleburne	2.0	3.0	3,167	1,584	3.0
Coppell	3.0	1.0	1,694	555	4.0
Eules	3.0	2.0	2,948	982	3.0
Grand Prairie	8.0	4.0	8,500	1,062	10.0
Hurst	2.0	2.0	2,346	1,173	3.0
Keller	2.0	1.0	2,378	1,189	3.0
Mansfield	5.0	3.0	4,798	960	5.0
Midlothian	3.0	2.0	3,500	1,167	3.0
North Richland Hills	4.0	3.0	5,766	1,441	5.0
The Colony	3.0	NOT REPORTED	NOT REPORTED	NOT REPORTED	5.0
CareFlite	7.5	7.5	7,200	960	8.0
Burleson	3.0	1.0	3,880	1,293	3.0
Average	3.7	2.3	4,124	1,122	4.5

Comparable Cities

Comparative Cities Annual Transport Volume

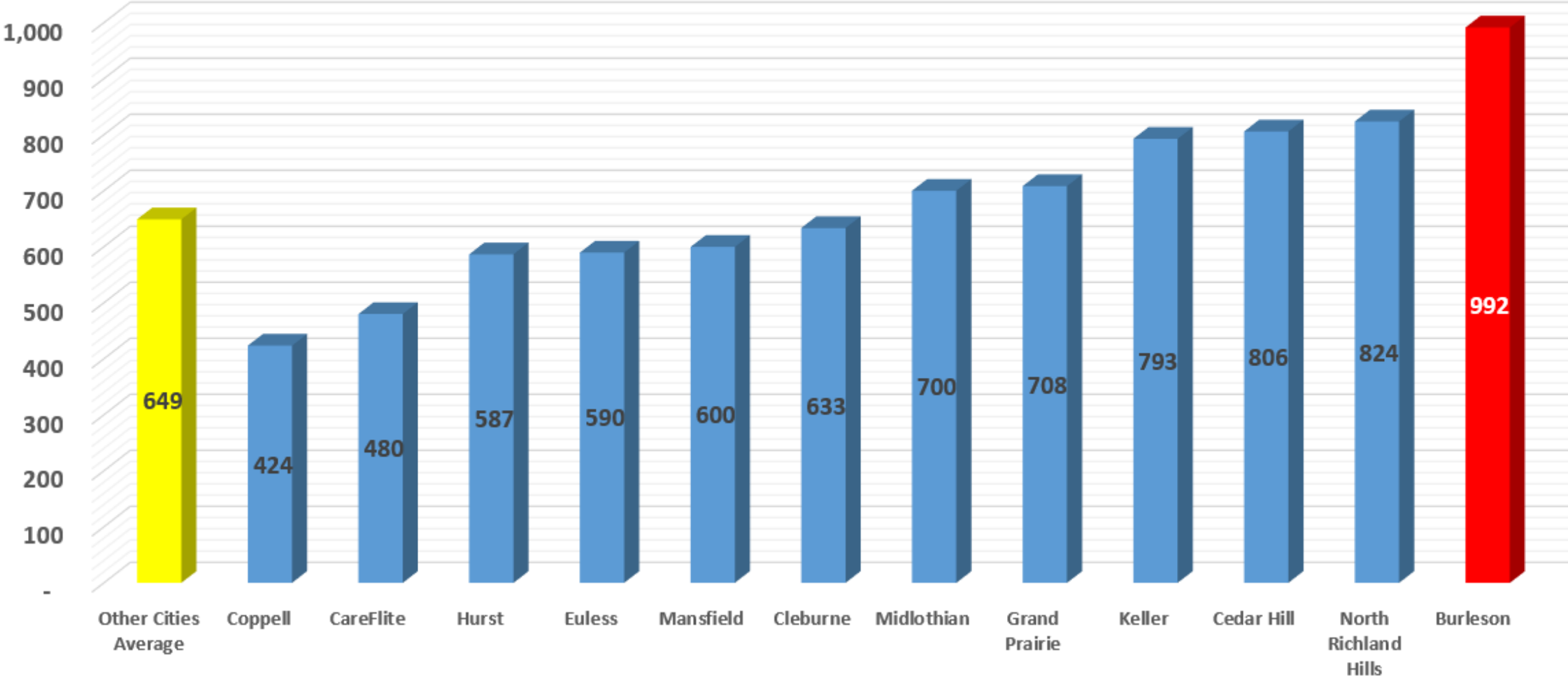


Comparative Cities Transports with Front Line Unit Count



Comparative Cities

Transports with Front Line and Reserve Unit Count





Reserve Capacity

- **Current Ambulance Capacity is 1 Reserve for 3 Front Line**
- **Addition Capacity is Required to Ensure Uninterrupted Service**

Increased Capacity Improves Service

- **Maintenance & Repairs:** Ensures ambulances can undergo routine maintenance without disrupting service
- **Mechanical Failures or Damage:** Provides backup in case front-line ambulances break down or are damaged
- **Surge in Call Volume:** Handles increased demand during major incidents, disasters, or public health emergencies
- **Special Events or Standby Coverage:** Allows standby coverage for events without impacting emergency readiness
- **Training & Equipment Testing:** Enables training and testing without taking primary ambulances out of service
- **Redundancy for Emergency Preparedness:** Ensures uninterrupted service during unpredictable events or crises
- **Backup Equipment:** Reserve ambulances carry essential equipment, providing immediate replacements if first-out units experience equipment failure

Key Ambulance System Indicators

Average per Unit Transport Volume < 1,500

- Current Transports Calendar 2024 - 3,880 Average 1,293 per Unit

Unit Hour Utilization (UHU) < 30%

Current UHU

- Medic 1 23%
- Careflite 22%
- Medic 16 18%
- Medic 3 16%

Unit Hour Utilization (UHU) without Careflite (3 Units)

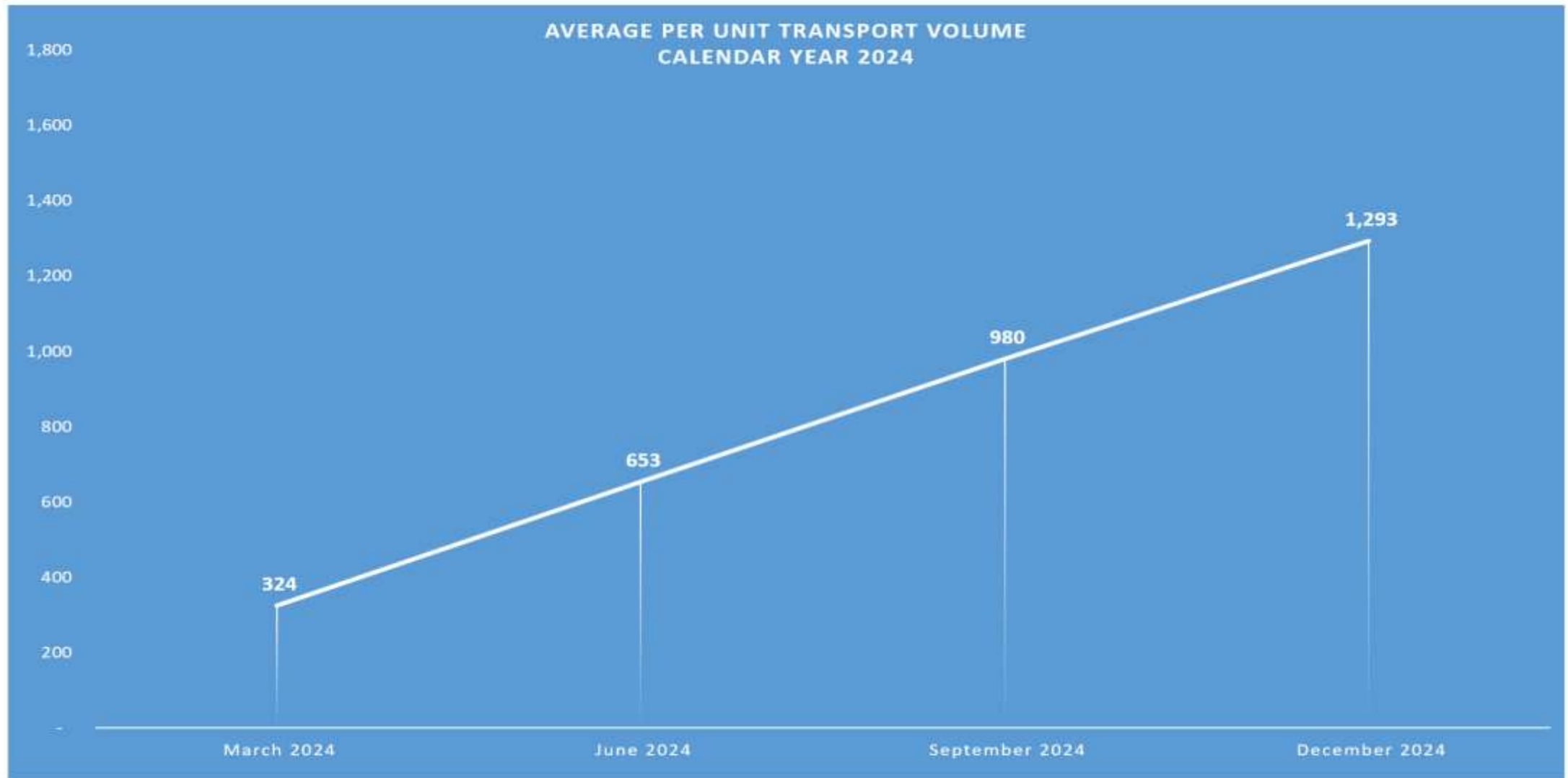
- Medic 1, 3, 16 - 26%

Average Unit Dispatched to In-Service < 60

- Current Calendar 2024 Average = 51 Minutes 24 Seconds

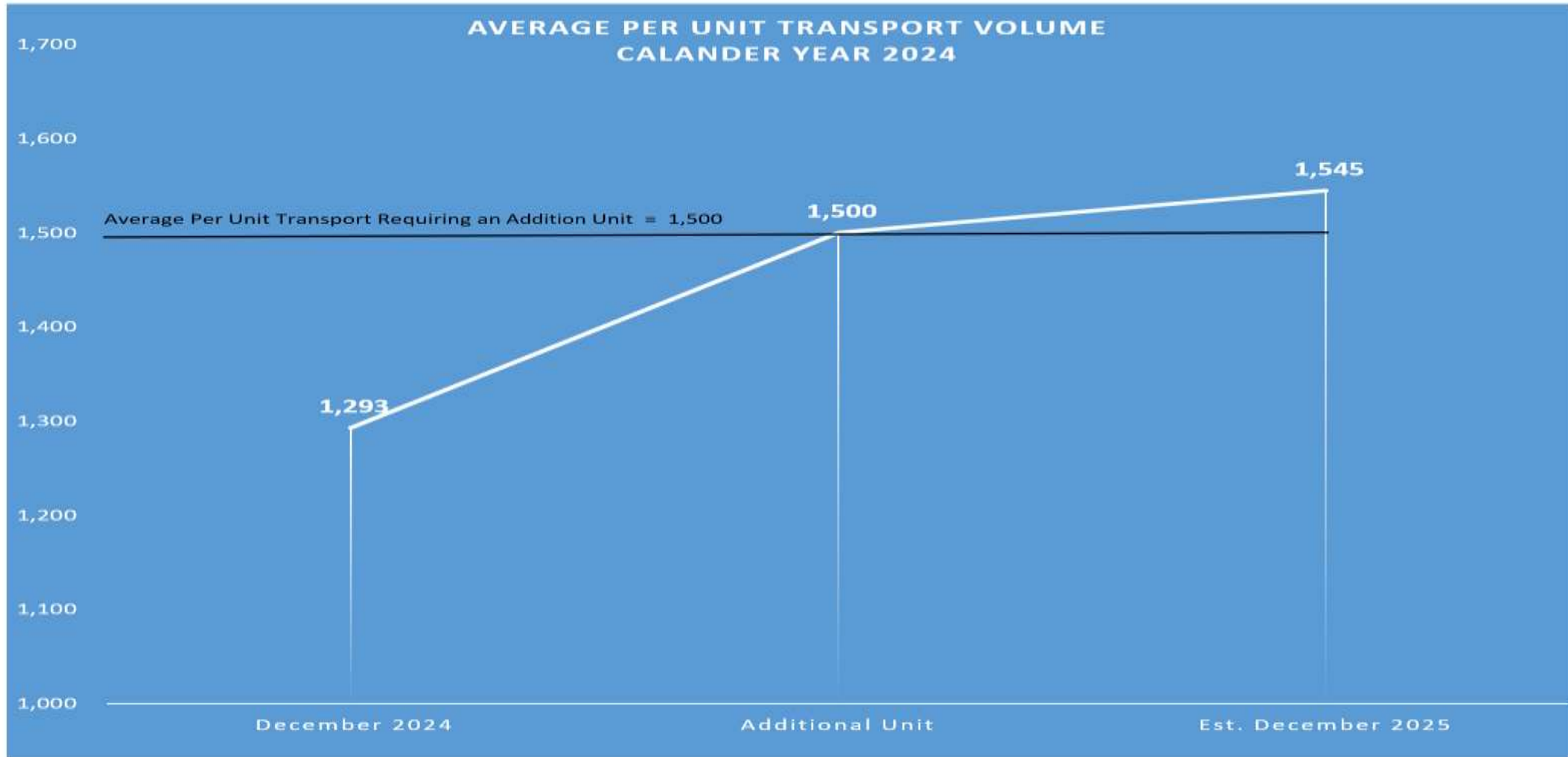
Source: Fitch and Associates UHU < 30% industry standard

UHU: Unit Hour Utilization, percentage of time during a shift that firefighters are assigned to an incident



Notes:

- Program growth 1Q24 324 to 4Q24 1,293
- Volume covered with 3 front line units



Notes:

- Year one Unit Transport Volume at 1,293
- Threshold for an additional front line unit is 1,500
- 16% increase (1,500) with transport volume will trigger the requirement for an additional front line unit
- **Total call volume** has experienced 19% year over year growth - Transport Volume estimated at 1,545

Recap: Need for Additional Ambulances

Long Lead Time for Delivery:

- If ordered in February 2025, delivery will take over a year.
- Delaying the order or choosing another vendor would extend the wait to two years plus.

Growing Demand for Ambulance Services:

- Call volume increased by 22% over the past year and has more than doubled in five years.
- Demand is outpacing population growth, creating an urgent need for additional resources.

Capacity Concerns:

- With current growth trends, a 4th ambulance will soon be essential to meet service demand.
- Having adequate fleet size will allow us to keep pace with unpredictable call volume increases.
- If CareFlite were to exit the current system, UHU would rise to 26%. According to Fitch & Associates, additional capacity should be considered before UHU reaches 30%.

Insufficient Reserve Capacity:

- Currently, only one reserve ambulance is available, which risks service reliability.
- Additional reserves reduce the risk of service gaps due to accidents, breakdowns, or maintenance needs.

Reserve Equipment Availability:

- Increasing fleet size provides a necessary buffer to ensure continuous service even when equipment goes out of service.

Flexible Payment Timing:

- No payment required until ambulances are delivered, easing immediate financial impact.



Proposal Consideration

Consider purchase of 2 Ford F550 4X4 Horton 603 Type I Ambulances

1-Unit to serve as a future front line MICU transportation vehicle, timeline to be guided by UHU %

1- Unit to provide redundancy for reserve capacity

Purchase from: Southern Emergency & Rescue Vehicle Sales through a cooperative purchasing agreement with Buyboard in the amount of \$832,660

Fire/EMS will collaborate with Fleet, Technology and third party with the acquisition and installation of equipment. The total estimated cost of two fully equipped unit is \$1,325,292

Key Features/Specifications

Spacious 14-Foot Patient Compartment: Thoughtfully designed to provide medical staff with ample room for effective maneuvering and critical patient care.

Advanced Rear Suspension System: Equipped with a LiquidSpring self-contained hydraulic suspension for enhanced safety and a smoother, more stable ride, ensuring comfort for both patients and crew.

Integrated Anti-Theft Security Features: Built-in safeguards to prevent unauthorized access and protect vital equipment.

360-Degree Camera System: Delivers full exterior visibility, enhancing safety and situational awareness during operations.

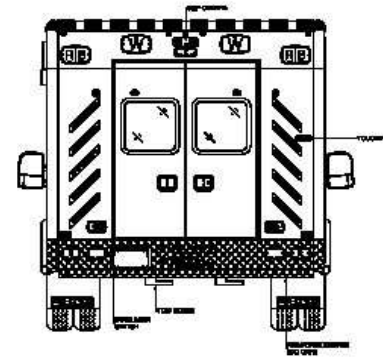
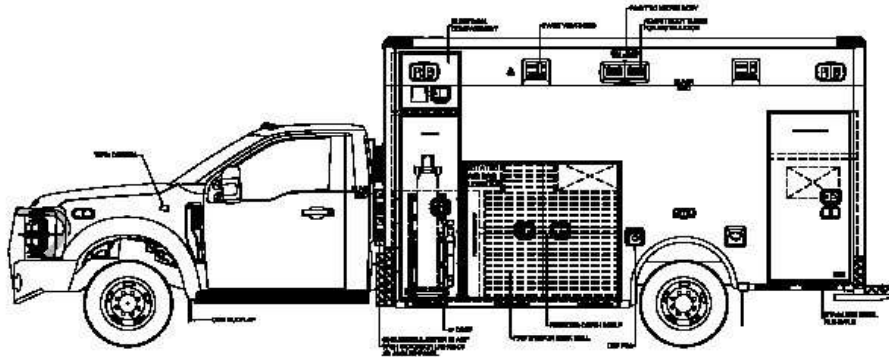
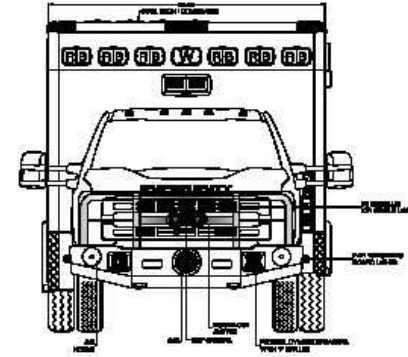
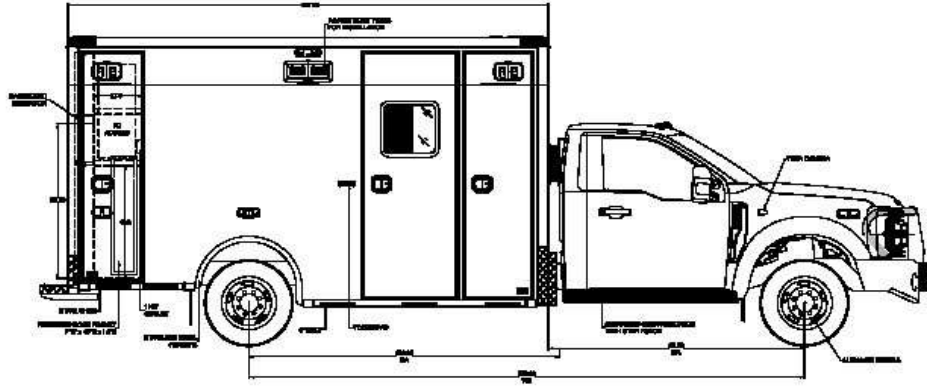
High-Performance Climate Control: The combination of a CoolTech Roof A/C, Danhard A/C system, and advanced insulation ensures superior temperature regulation, even in extreme heat.

Oxygen Bottle Lift Assistance: Ergonomically designed lift system improves safety by reducing the physical strain of loading heavy oxygen cylinders.

Dedicated Storage Solutions: Provides organized and secure storage for essential firefighting tools, SCBA, and personal protective equipment (PPE).

Future-Ready Remountable Module Design: Built with remounting capability in mind, allowing for long-term cost savings and operational efficiency.

603 PASS THROUGH
FORD CHASSIS



NOTE: DRAWINGS ARE FOR GRAPHICAL
REPRESENTATION ONLY.
DIMENSIONS ARE APPROXIMATE & MAY VARY
DURING CONSTRUCTION

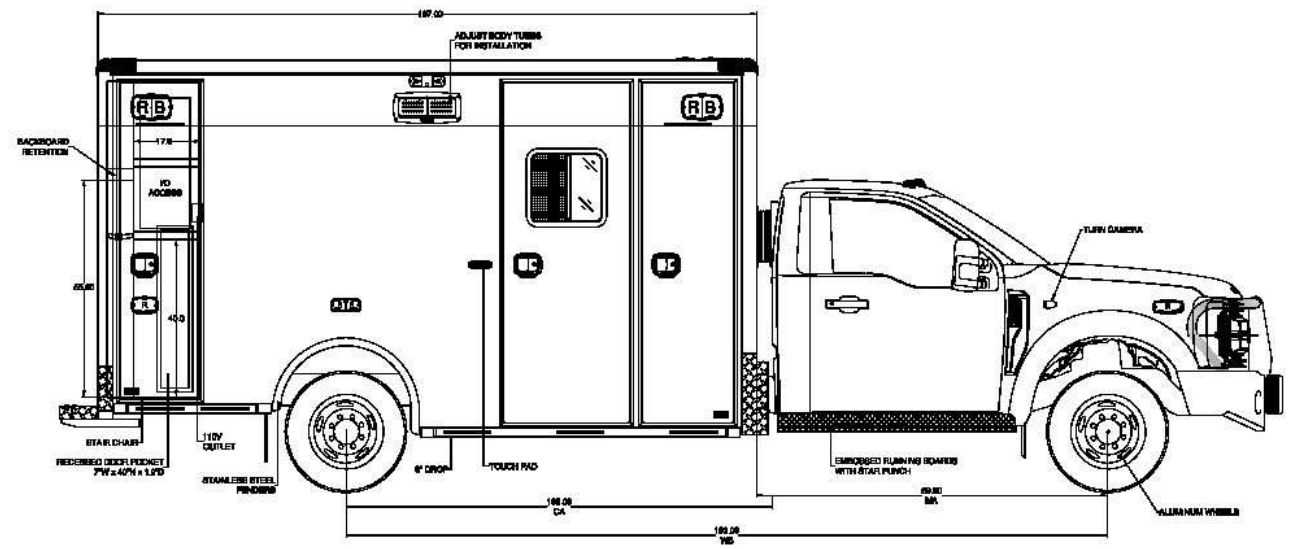
SPECIFICATION DRAWING

BURLESON FIRE/EMS

9036

	REV.
DRAWN BY: CMB	10/20

803 PASS THROUGH FORD CHASSIS

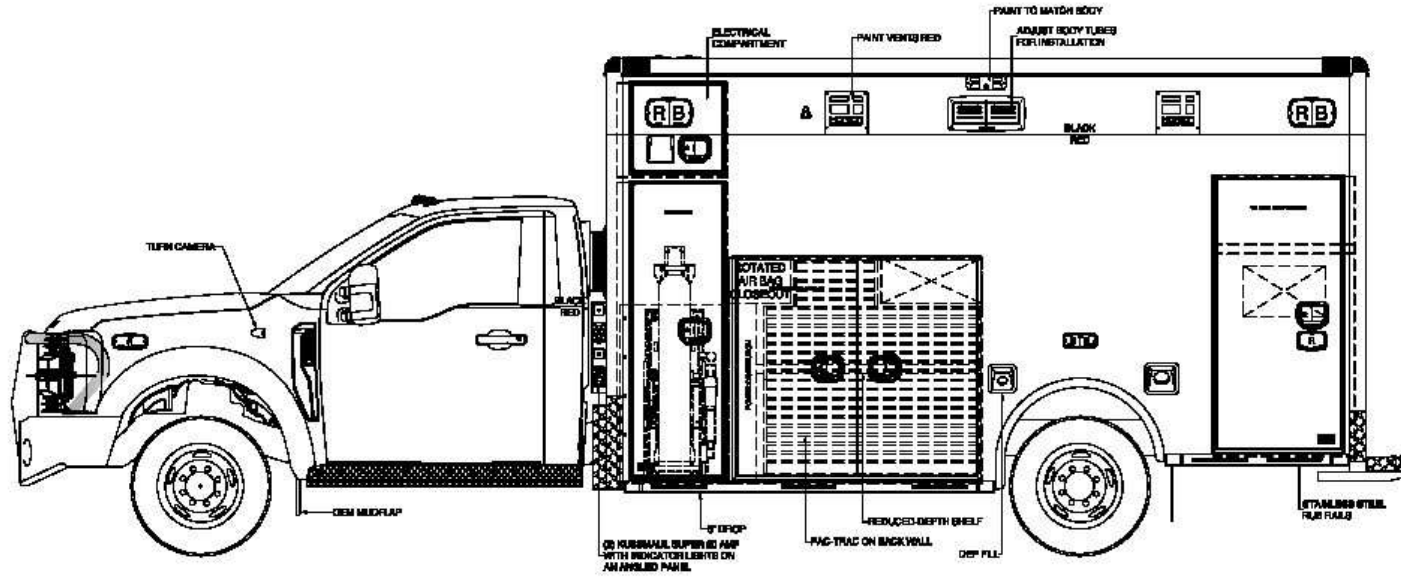


COMPT	INSIDE WIDTH	INSIDE HEIGHT	INSIDE DEPTH	CLEAR OPENING WIDTH	CLEAR OPENING HEIGHT
CB REAR	83.70	80.13	20.36	16.09	79.16
CB FWD				22.12	85.16

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SPECIFICATION DRAWING

603 PASS THROUGH FORD CHASSIS

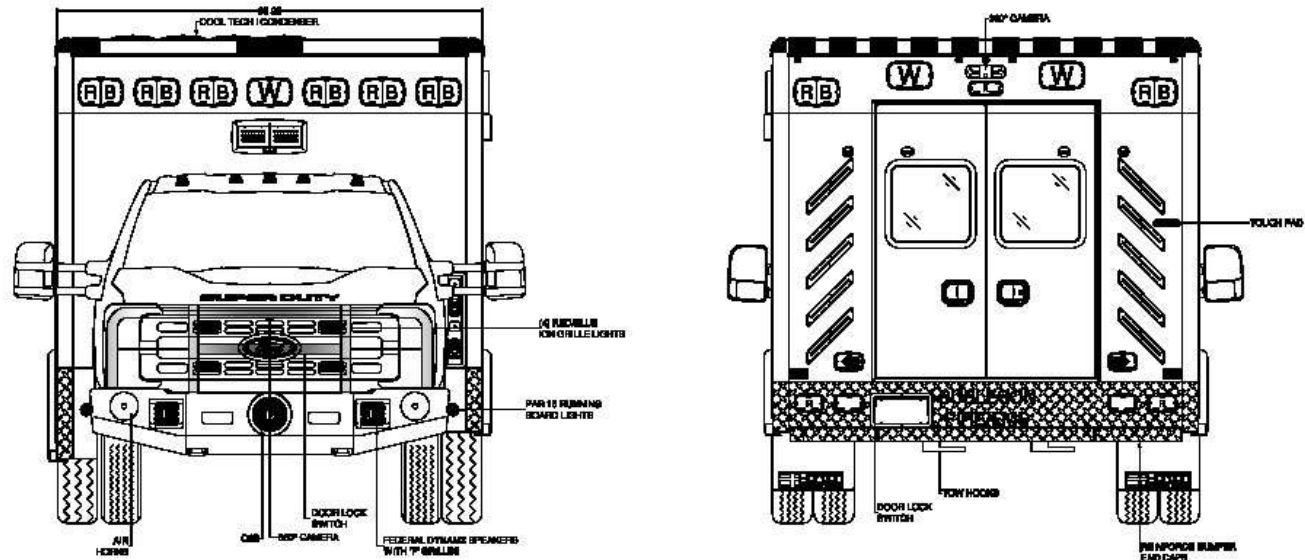


COMP.	INSIDE WIDTH	INSIDE HEIGHT	INSIDE DEPTH	CLEAR OPENING WIDTH	CLEAR OPENING HEIGHT
SS FWD	84.05	85.13	20.36	19.74	83.18
SS INT	85.00	49.60	20.36	21.00	48.37
SS REAR	80.65	81.00	20.36	20.00	68.37

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SPECIFICATION DRAWING

803 PASS THROUGH
FORD CHASSIS



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SPECIFICATION DRAWING



Ambulance Acquisition

Item	Unit	Unit Cost	Total Cost
Chassis Cab and Box	1	\$ 416,330	\$ 832,660
EQUIPMENT COST ESTIMATES			
<u>Communication Equipment</u>			
Two in-dash radios with remote heads	1	7,768	15,536
Ipads	2	2,300	4,600
Navigation RAM Mounts for charging Ipa	2	162	324
RAM charging stations	1	385	770
Cell phone	1	100	200
Magnetic phone chargers	1	75	150
Cradle Point	1	1,200	2,400
<u>Equipment - Box</u>			
Lucas Device	1	21,820	43,640
Stryker Cot	1	34,737	69,475
Stryker Load System	1	29,889	59,778
Stryker Stair Chair	1	4,717	9,434
Stryker Service Contract 5 Yr.	1	25,439	50,878
Zoll Cardiac Monitor	1	47,100	94,200
Zoll Cardiac Monitor/Svc Agreement 5 Yr.	1	11,212	22,423
			-
Installation	1	7,500	15,000
Total Cost		\$ 610,733	\$ 1,221,467
<i>Inflation Annualized 8.5%</i>		<i>51,912</i>	<i>103,825</i>
Total Cost for One Ambulance		\$ 662,646	\$ 1,325,292

Future Staffing Plan Considerations

Staffing a 4th Frontline Unit During Peak Hours: Operate the 4th unit to cover high-demand periods effectively

Phased Staffing Plan: In a phased approach to hiring for Station 4, initial staff could be deployed to operate a 4th ambulance, providing immediate service benefits while building toward full station readiness

Increasing Call Volume and NFPA 1710 Compliance: As call volume rises, deploying a fourth ambulance will be essential to sustaining NFPA 1710 compliance, particularly in meeting assembly and response time standards

Assistance to Firefighters Grant (AFG) Proposal for Ambulance Purchase

Grant Opportunity Overview:

Program: Assistance to Firefighters Grant (AFG)

Purpose: Fund critical needs of fire departments for emergency response capabilities

Grant Focus: Ambulances listed as a high priority for funding

Key Details:

Funding Split: 90/10 Cost Split

- **AFG Coverage:** Up to \$1,000,000 (90%)
- **City's Responsibility:** 10% of total cost

Application Window: November 12 - December 20, 2024

AFG Additional Evaluation Criteria for Vehicle Grants:

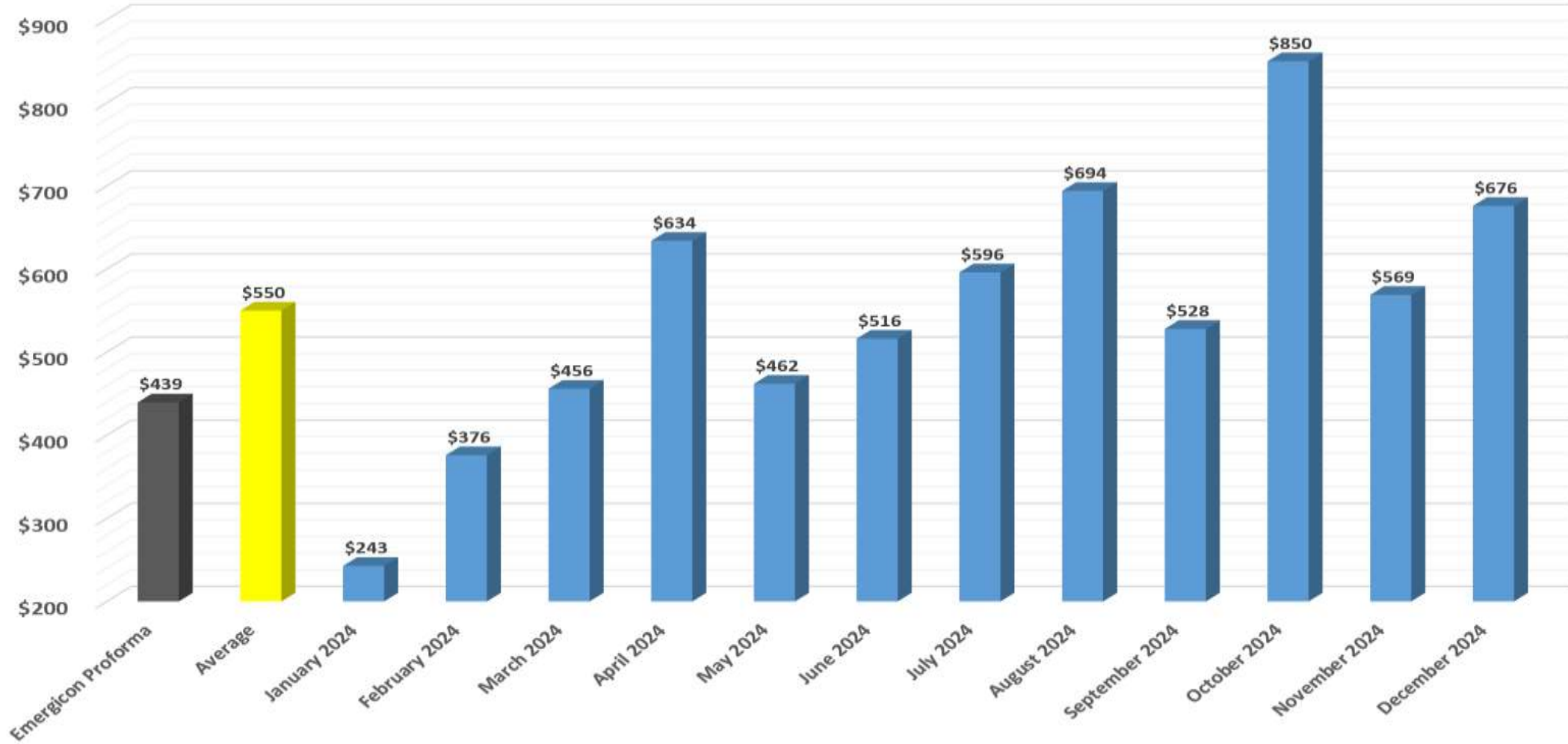
- Age and mileage of the vehicle being replaced; older equipment receives higher consideration
- Age of the newest vehicle in the department's fleet that is like the vehicle to be replaced
- Average age of the fleet; older equipment within the same class
- Call volume of primary first due response area or region
- Vehicles on loan to the organization in the application narrative but not in the organization's inventory
- Damaged vehicles and out of service vehicles in the organization's inventory
- Vehicles: Not more than 25% of available grant funds may be used by recipients for the purchase of vehicles. Of that amount, based on stakeholder recommendations, FEMA intends to allocate 10% of the total vehicle funds for ambulances.

Medical Transport Forecast

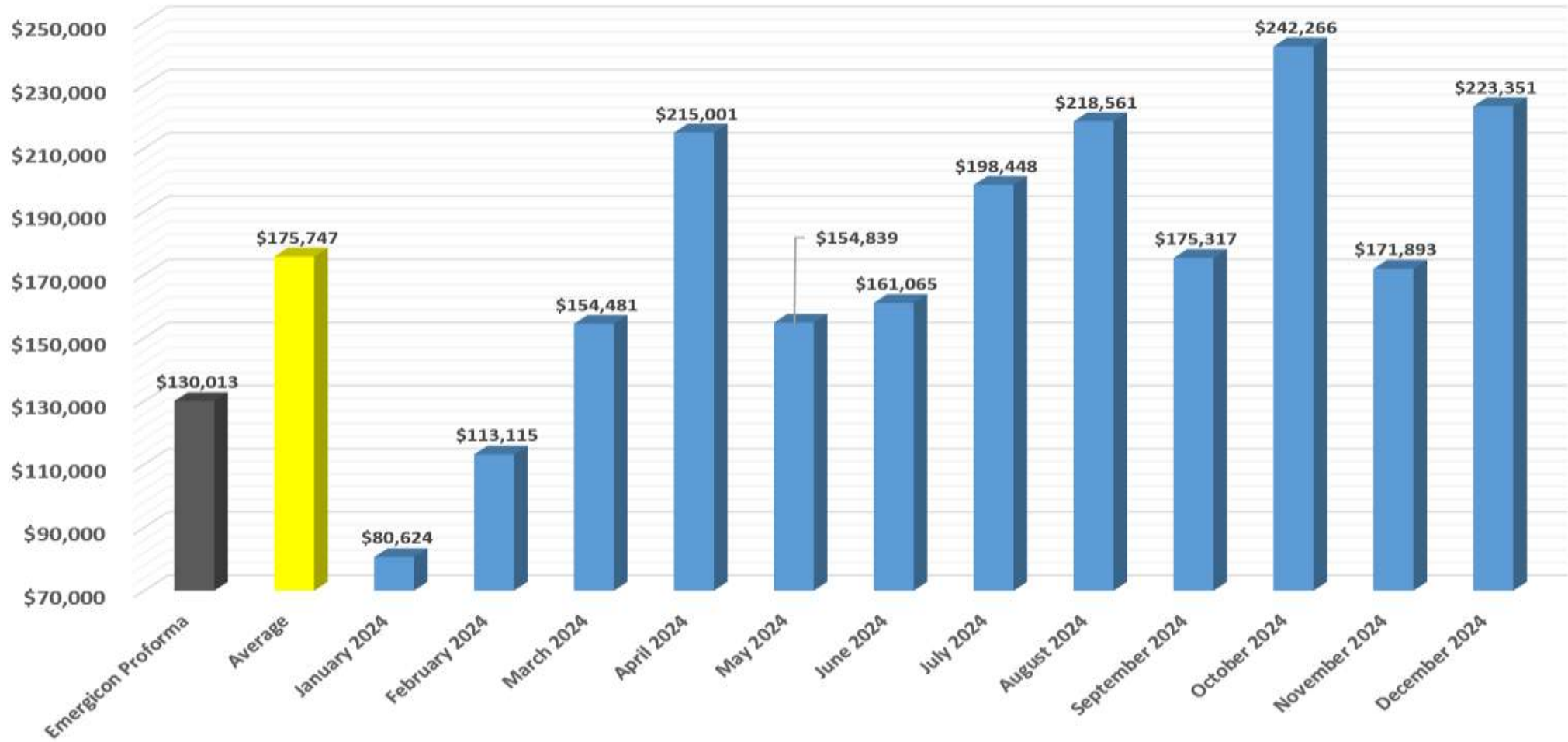
	FY 22-23 Actual	FY 23-24 Adopted	FY 23-24 Revised	FY 23-24 Year-End	FY 24-25 Projected	FY 25-26 Projected	FY 26-27 Projected	FY 27-28 Projected	FY 28-29 Projected
Beginning Fund Balance	\$ -	\$ (224,612)	\$ (224,612)	\$ (224,612)	\$ 831,157	\$ 841,551	\$ 182,007	\$ (0)	\$ -
Ambulance Transport	\$ -	\$ 1,650,000	\$ 1,650,000	\$ 1,346,155	\$ 1,960,251	\$ 1,999,456	\$ 2,039,445	\$ 2,080,234	\$ 2,121,839
Other Revenue	\$ -	\$ -	\$ -	\$ 6,500	\$ 40,000	\$ 40,000			
Transfer-In ARPA					\$ 614,476				
Transfer-In GF							\$ 575,882	\$ 819,255	\$ 883,780
Total Revenue	\$ -	\$ 1,650,000	\$ 1,650,000	\$ 1,352,655	\$ 2,614,727	\$ 2,039,456	\$ 2,615,327	\$ 2,899,489	\$ 3,005,619
Personnel	\$ 1,383,960	\$ 1,584,833	\$ 1,597,396	\$ 1,597,396	\$ 2,339,951	\$ 2,424,612	\$ 2,512,536	\$ 2,603,856	\$ 2,698,714
Reimbursement Personnel	\$ (1,256,462)	\$ (1,500,000)	\$ (1,500,000)	\$ (1,500,000)					
Other Expenditures	\$ 97,114	\$ 95,000	\$ 199,490	\$ 199,490	\$ 264,382	\$ 274,388	\$ 284,799	\$ 295,632	\$ 306,904
Total Expenditures	\$ 224,612	\$ 179,833	\$ 296,886	\$ 296,886	\$ 2,604,333	\$ 2,699,000	\$ 2,797,335	\$ 2,899,489	\$ 3,005,618
Change in Fund Balance	\$ (224,612)	\$ 1,470,167	\$ 1,353,114	\$ 1,055,769	\$ 10,394	\$ (659,544)	\$ (182,008)	\$ -	\$ -
Ending Fund Balance	\$ (224,612)	\$ 1,245,555	\$ 1,128,502	\$ 831,157	\$ 841,551	\$ 182,007	\$ (0)	\$ -	\$ -
FB % of Expenditure	-100.00%	692.62%	380.11%	279.96%	32.31%	6.74%	0.00%	0.00%	0.00%

* FY 23-24 Year End numbers are unaudited.

Emergency Medical Service Cash per Transport



Emergency Medical Service Cash Collections



Time-Line

Quarter 1 2025

- Council Approval: Approval sought for two ambulances and related equipment.

Quarter 2 2025

- Stryker Equipment Approval & Order: Upon Council approval, Fire/EMS orders Stryker cot and load system.

Quarter 3 2025

- Lucas Devices & Cardiac Monitors Approval: Council reviews and approves; Fire/EMS places the order.
- I.T. Equipment Order: Communications equipment ordered by City I.T.

Quarter 4 2025

Equipment Delivery: Fire/EMS receives Lucas devices, cardiac monitors, and I.T. equipment.

Quarter 1 2026

- Ambulance Delivery: Fire/EMS receives ambulances with installed ambulance module and Stryker equipment.
- Third-Party Installation: Fleet and I.T. coordinate third-party equipment installation.
- Final Equipment Placement: Fire/EMS installs Lucas devices and Zoll monitors in appropriate apparatus.
- Fleet Approval & Deployment: Ambulances approved and added to operations

Recommendation for Funding Ambulance Purchases

- Staff recommends utilizing debt issuance to fund equipment purchases exceeding \$300,000, including both new and replacement units such as the two proposed ambulances.
- This strategy will preserve sufficient reserves within the Equipment Replacement Fund and optimize capacity for operations and maintenance funding.
- Issuing debt for the proposed ambulances will require either a revision to the five-year General Government Capital Improvement Plan (CIP) or an increase to the Interest & Sinking (I&S) tax rate.
- Debt service payments will align with the life cycle of the equipment, ensuring responsible fiscal management.
- Offsetting costs will be determined by the annual debt service payments rather than the total dollar amount of items within the CIP. For example, if the existing CIP is reduced to include the \$1,325,292 ambulance purchase, an adjustment greater than \$1,325,292 would need to be made to avoid a tax rate increase.
- Payments for the ambulances will not be required until the units are delivered.
- To facilitate this process, staff recommends the approval of a reimbursement resolution. This will enable the city to reimburse itself for the ambulance purchases from the proceeds of a future debt issuance.

Action Item Request:

Staff recommends:

Approval of a contract with Southern Emergency & Rescue Vehicle Sales for the purchase of two Horton 603 Type I Ambulances through a cooperative purchasing agreement with BuyBoard Vendor Contract #745-24, for a total cost of \$832,659.93.

Options:

1. Approve request as presented
2. Approve request with amendments
3. Deny request

