



Ambulance Purchase

CITY COUNCIL PRESENTATION

NOVEMBER 18, 2024



Ambulance Transport: *First-Year Overview*

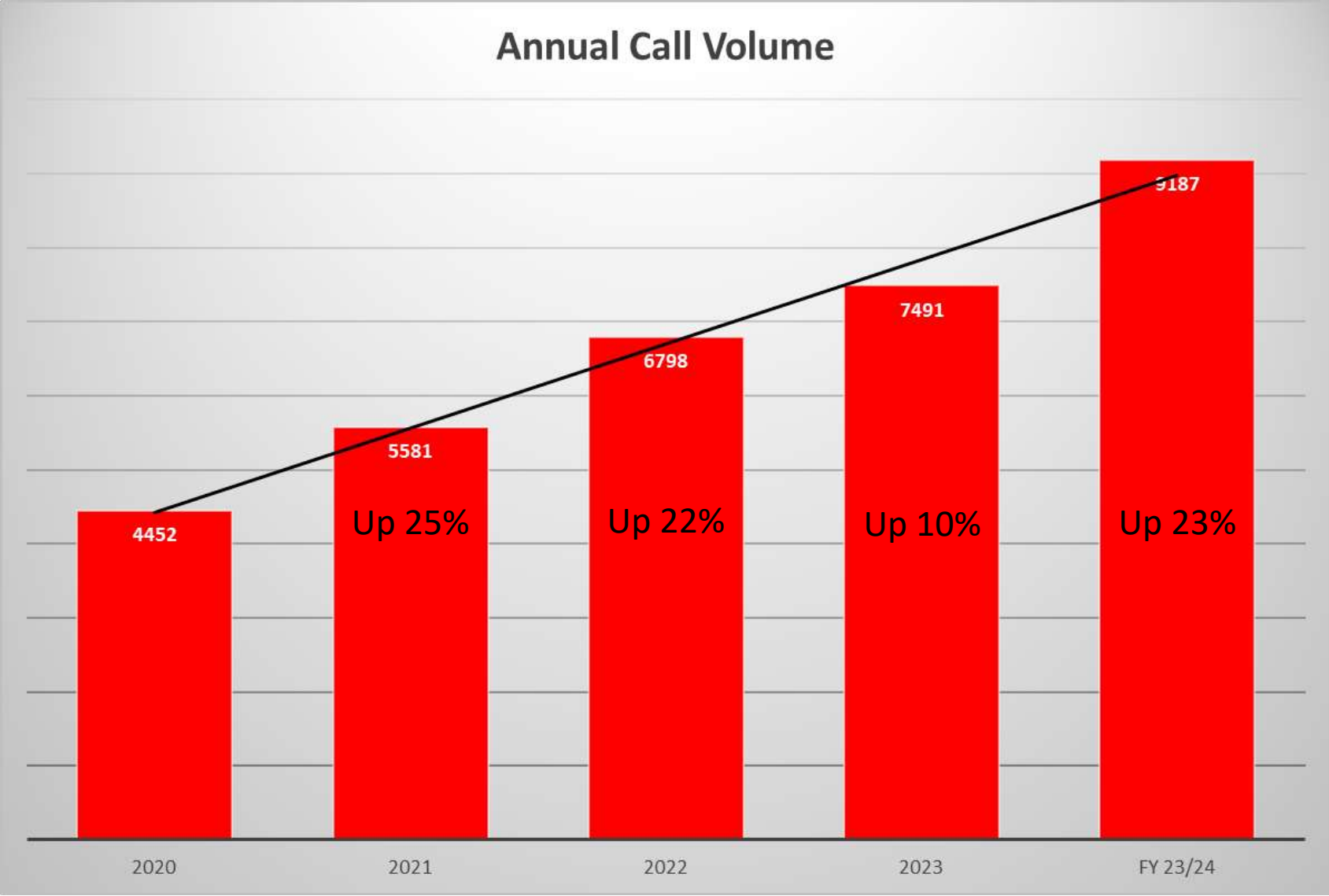
Key Achievements:

- Successful Fire Crew Transition
- *Operational Impact:* Responded to 6,881 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

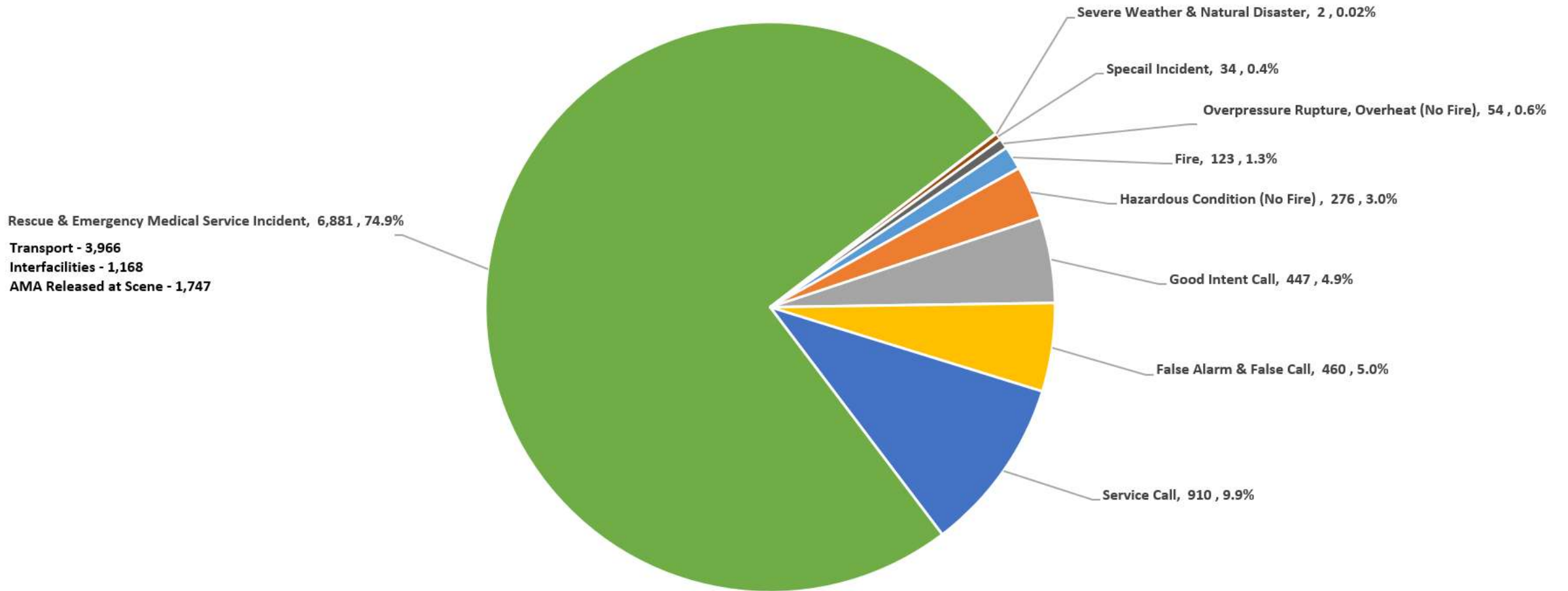
Challenges:

- Call Volume Continues to Out Pace our Population Growth, annual call volume has doubled over the last 5 years
- Currently dependent upon partnership with CareFLite 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

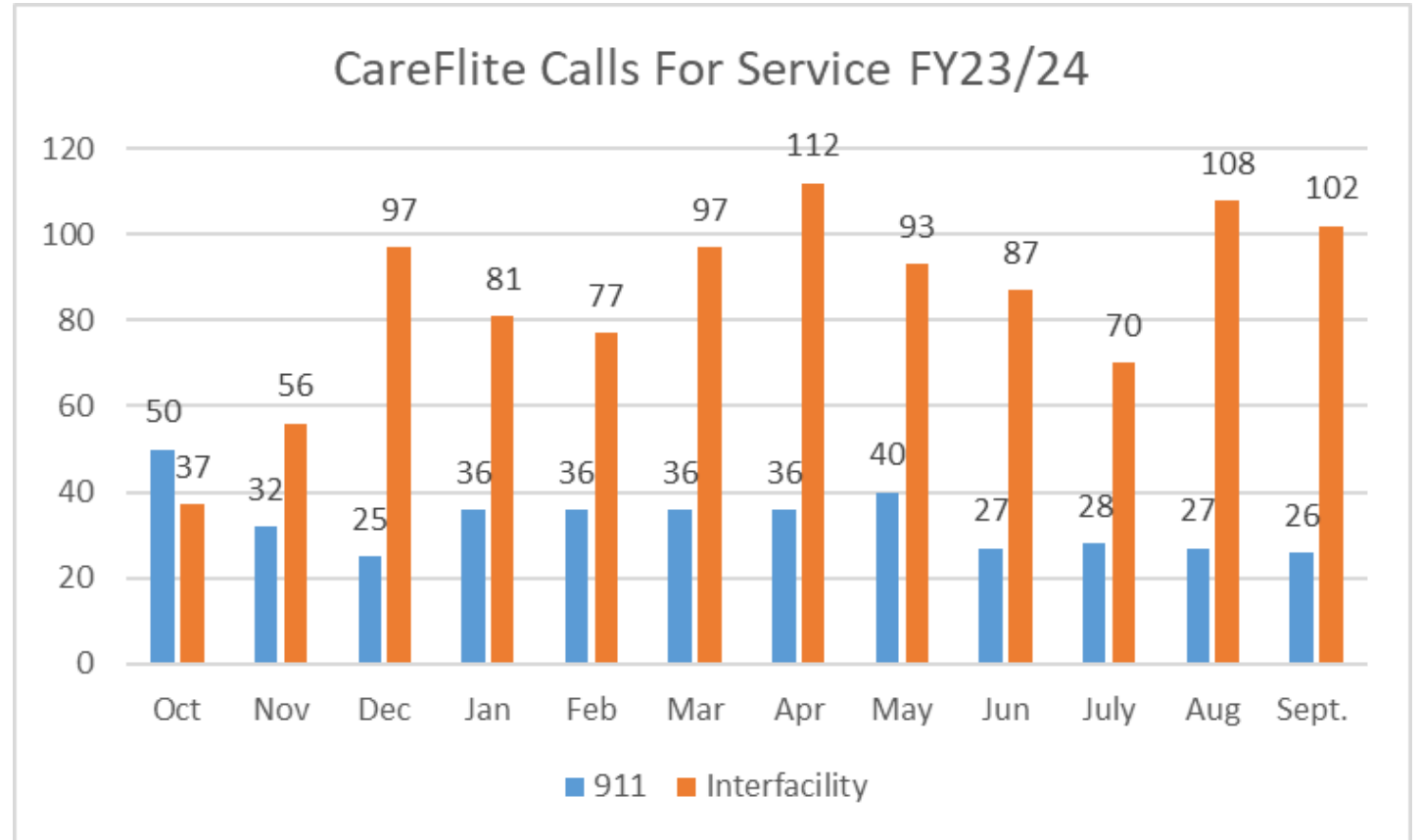


Calls by Type, Count and Percentage



CareFlite Automatic Aid (FY23/24)

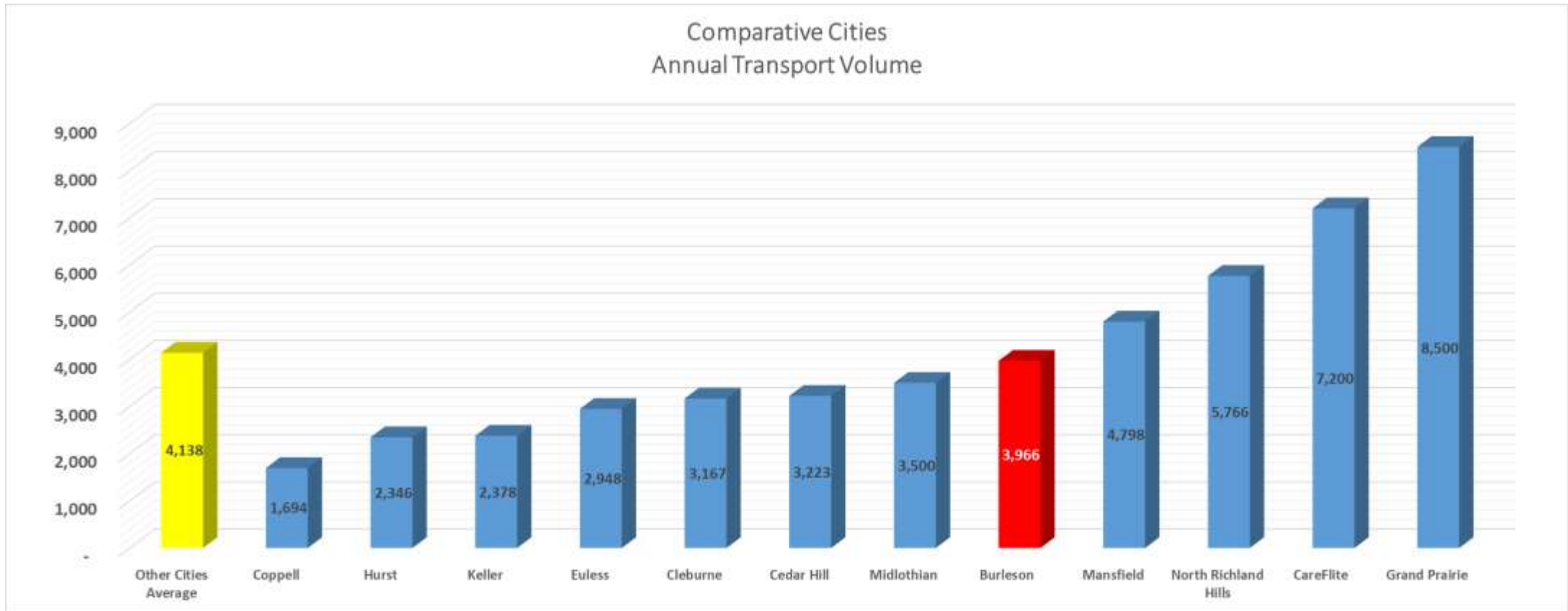
- **911 Emergency Calls: 399**
- **Interfacility Transports: 1,017**
- **Total Calls: 1,416**



Comparable Cities

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	3,966	1,322	3.0
Average	3.7	2.3	4,124	1,122	4.5

Comparative Cities Annual Transport Volume



Comparative Cities Transports per Front Line Unit Count



Key Ambulance System Indicators

Average per Unit Transport Volume < 1,500

- Current Transports FY2023/24 - 3,966 Average 1,322 per Unit

Unit Hour Utilization (UHU) < 30%

Current UHU

- Medic 1 22.20%
- Careflite 21.40%
- Medic 16 17.20%
- Medic 3 16.60%

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

- Medic 1, 16, 3 - 25.8%

Average Unit Dispatched to In-Service < 60

- Current FY2023/24 Average 52.9 Minutes

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



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

Recap: Need for Additional Ambulances

Long Lead Time for Delivery:

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

Growing Demand for Ambulance Services:

- Call volume increased by 23% 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 25.08%. 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 reserve capacity and 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 Vendor Contract #650-21 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

A 14-foot patient compartment optimized to provide staff with ample space for maneuvering while attending to critical patients.

Rear Suspension: LiquidSpring self-contained hydraulic system enhances safety and delivers a smoother ride for both patients and crew.

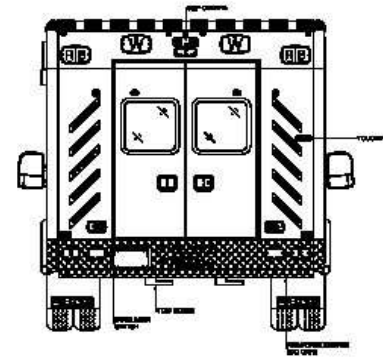
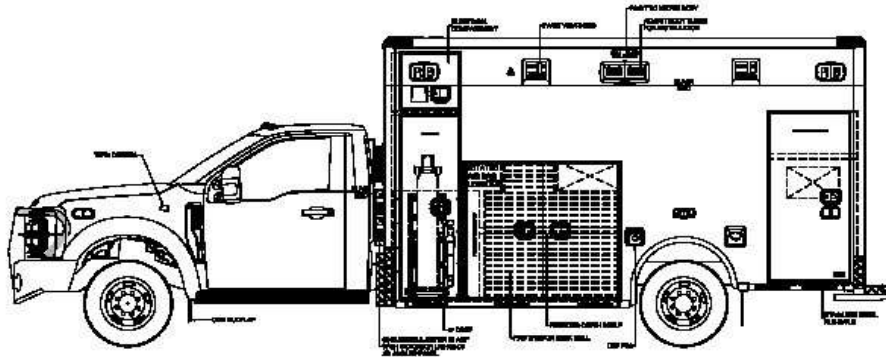
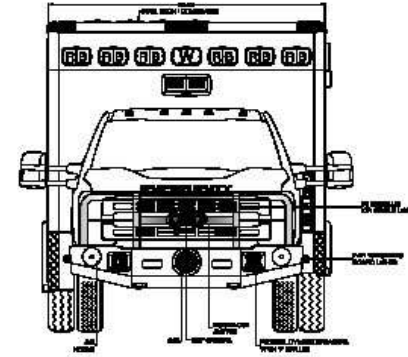
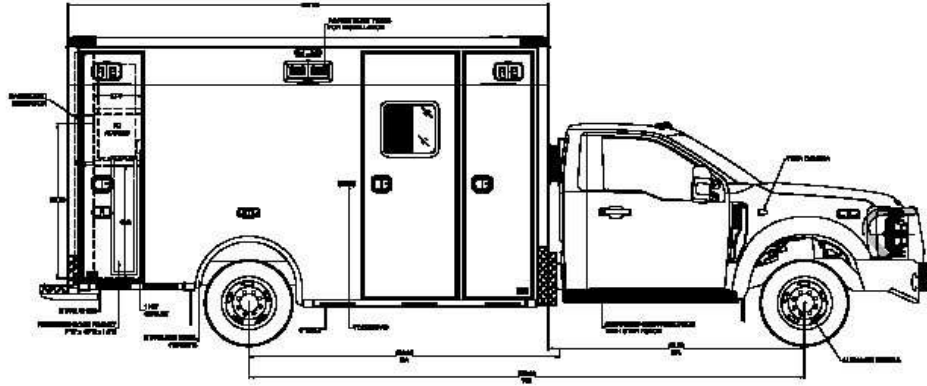
Anti-Theft System: Built-in security features to prevent unauthorized access.

360-Degree Camera System: Provides comprehensive visibility around the vehicle for improved safety and situational awareness.

CoolTech Roof A/C and Danhard A/C System: Paired with an advanced insulation package, these systems are designed to maintain optimal temperature control, particularly in hot climates.

O2 Bottle Lift System: Improves crew safety by assisting with the lifting and loading of large oxygen bottles.

603 PASS THROUGH
FORD CHASSIS



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

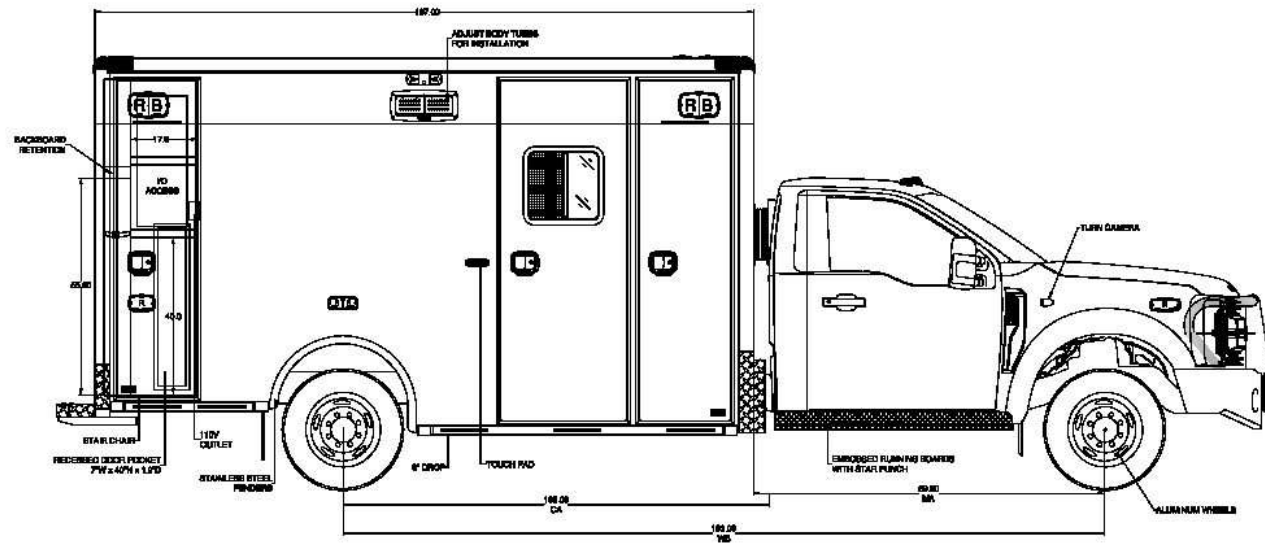
SPECIFICATION DRAWING

BURLESON FIRE/EMS

9036

	REV.
DRAWN BY: CMB	10/2018

603 PASS THROUGH
FORD CHASSIS

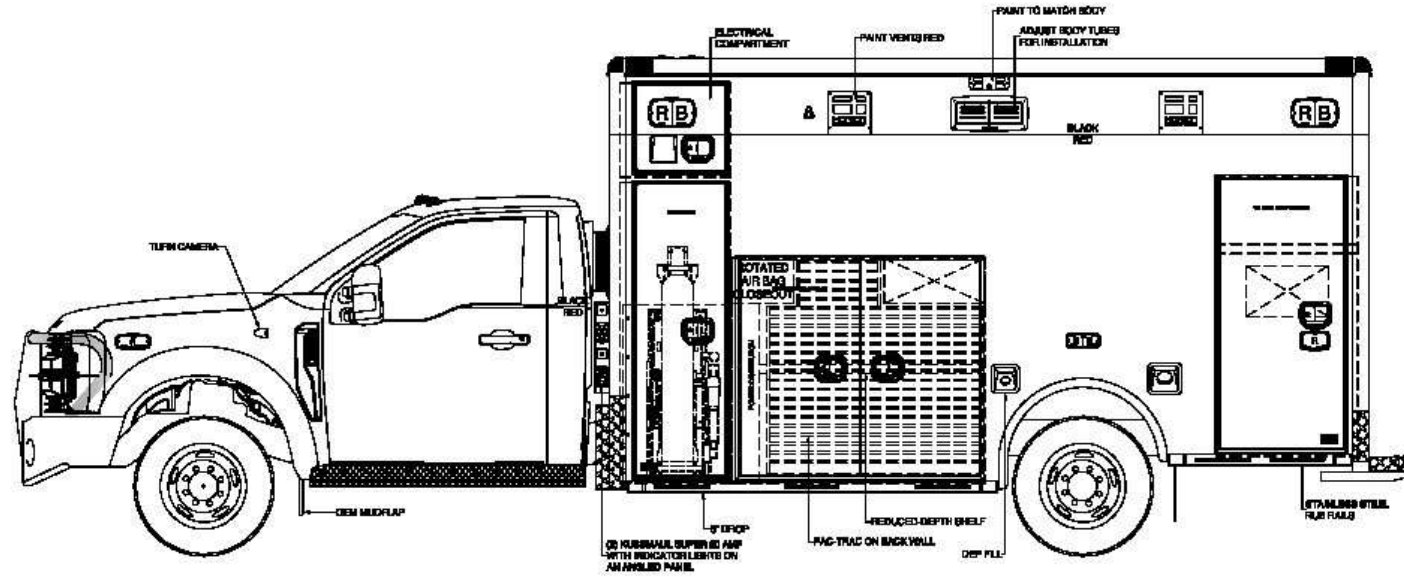


COMPT	INSIDE WIDTH	INSIDE HEIGHT	INSIDE DEPTH	CLEAR OPENING WIDTH	CLEAR OPENING HEIGHT
CB REAR	83.70	80.13	20.36	16.09	79.16
CB FWD				22.12	85.16

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SPECIFICATION DRAWING

603 PASS THROUGH FORD CHASSIS

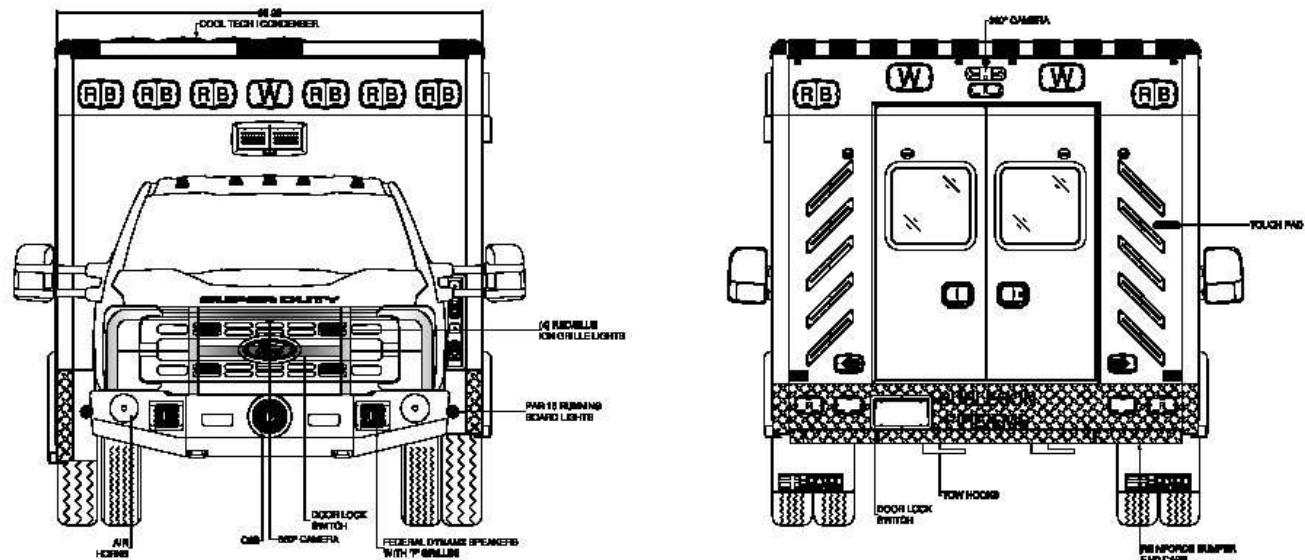


COMP.	INSIDE WIDTH	INSIDE HEIGHT	INSIDE DEPTH	CLEAR OPENING WIDTH	CLEAR OPENING HEIGHT
SS FWD	84.05	85.13	20.36	19.74	83.18
SS INT	85.00	49.60	20.36	21.00	48.37
SS REAR	80.65	81.00	20.36	20.00	80.37

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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

Equipment Replacement Fund(s) Reanalysis

- During FY2024/25 budget development City management did not provide a five year forecast for the equipment replacement funds (general and proprietary)
- Intention was to develop a strategy to ensure adequate funding for the life cycle replacement of the cities fleet
- Strategies are to include:
 - Modifications to replacement criteria and schedule
 - Issuance of debt in lieu of cash funding for equipment beyond a certain target amount (general govt. equipment within the five year planning horizon would require modifications to existing CIP)
 - Re-evaluation of equipment on the replacement schedule
- Staff anticipates presenting an update on the equipment replacement strategy in December/January
- The presentation of large equipment purchases, including the two proposed ambulances, will be scheduled to follow the Equipment Replacement Fund presentation.

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

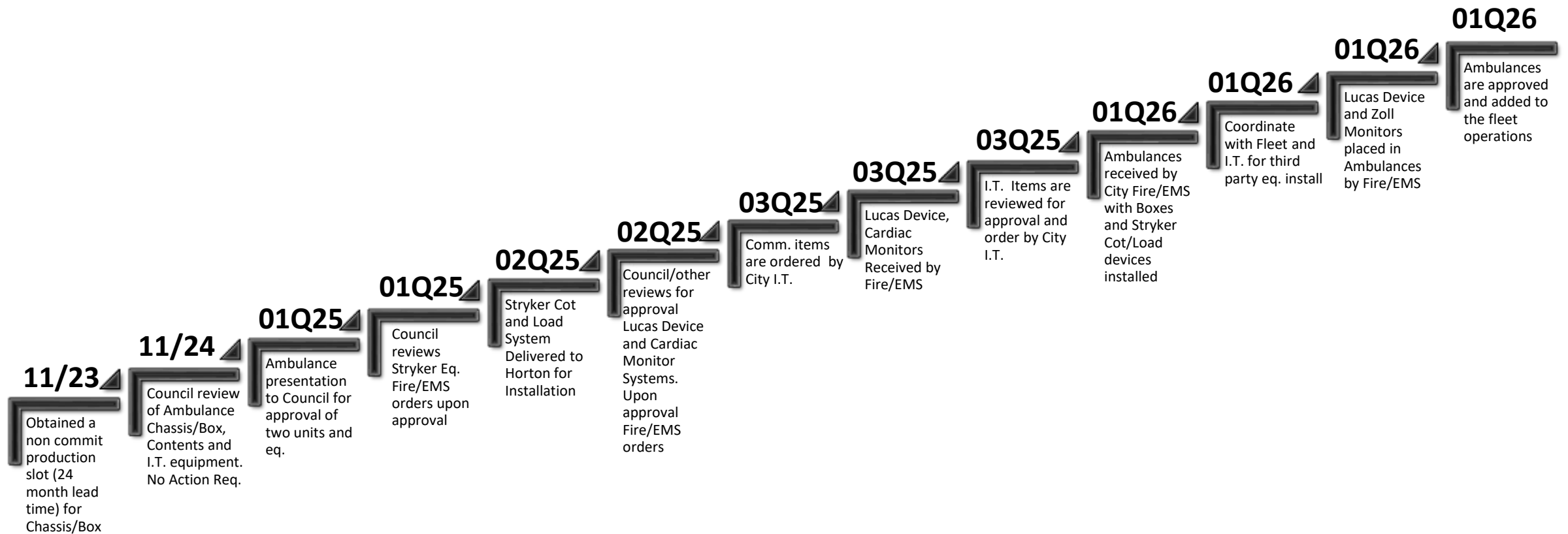
- **AFG Coverage:** Up to \$1,000,000 (90%)
- **City's Responsibility:** 10% of total cost

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.

Ambulance Order to Delivery Timeline (Calendar Basis)



No Action
Required

Staff seeks direction from the Council on the purchase of two ambulances