

FIRE DEPARTMENT

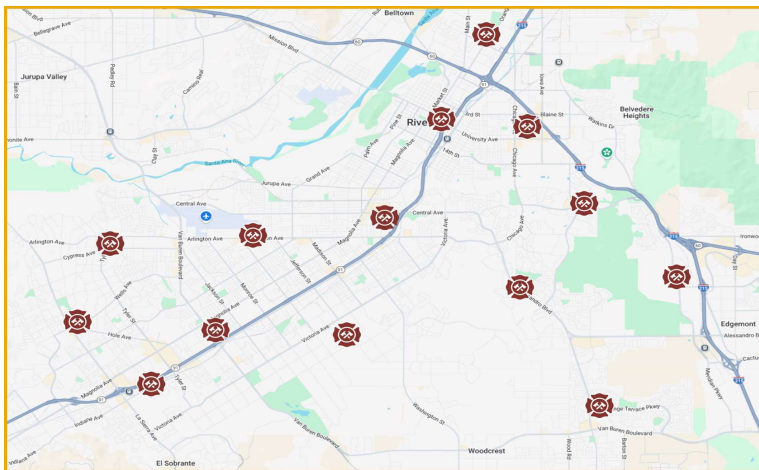
Fire Chief Steve McKinster

City Council
January 13, 2025

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CURRENT STATION COVERAGE AND SYSTEM DEMAND



Current System Baseline (2025)

- 14 Stations
- 20 Staffed Units
- 225 Firefighters
- 325,000 Residents
- 47,000 Calls for Service

**Station location alone
does not determine response
performance.**

**Unit availability and staffing
levels drive response times
and overload conditions.**



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EXPANDED CALLS FOR SERVICE



Calls for Service

2024: 44,670

2025: 47,000+

**Equals 1 Call
every 11
minutes**



**35% Increase
in Fire Calls for Service since 2015**



**New State Fire Map Adds
13,356 Riverside Parcels into High-Risk Fire Area**

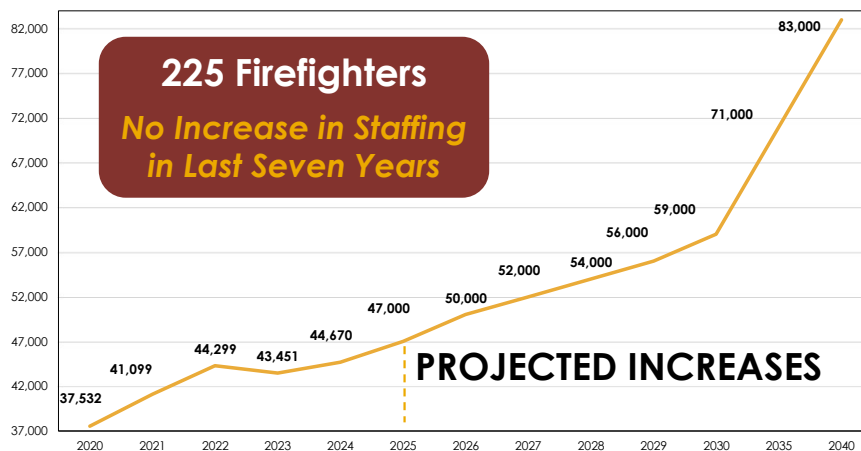


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SERVICE DEMAND IS GROWING FASTER THAN CAPACITY



Service Demand

**Since Last New
Station (2007)
+72% INCREASE**

**Since
Last Staffing
Increase (2018)
+26% INCREASE**



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AP TRITON LLC.



- **Leading Public Safety Consulting Firm**
- **Expertise across Fire Service, Emergency Medical Services (EMS), Law, and life-safety programs.**
- **Proven experience in Master Plans, Strat Plans, SOC/CRA, and EMS analysis.**



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KEY FINDINGS FROM MASTER PLAN STUDY



Response Times are Longer Than Accepted Performance Targets



Service Demand Is Growing Faster Than Capacity



High Call Concurrency Creates System Overload



Current Staffing Levels Are Insufficient to Meet Service Demand



Fire Station Infrastructure Must Expand and Modernize



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RESPONSE TIMES ARE LONGER THAN ACCEPTED PERFORMANCE TARGETS

WHY TIMING MATTERS? – STRUCTURE FIRES



0-3 MINUTES

- Fire often **confined to contents** or a **single room**
- **High likelihood of containment** with first-arriving engine



4-5 MINUTES

- **Flashover** conditions approach
- Fire transitions from contents to **structure involvement**



6-7 MINUTES

- Fire spreads **beyond the room of origin**
- Rescue survivability **drops sharply**
- Additional units are required, **increasing system strain**



7+ MINUTES

- Fire spreads throughout **multiple rooms or floors**
- Structural integrity **deteriorates**
- Additional units are required, **further increasing system strain**

Current Average Response Time

7:18

Goal Average Response Time

6:00

Fires **DOUBLE** in size every minute



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RESPONSE TIMES ARE LONGER THAN ACCEPTED PERFORMANCE TARGETS

Current Average Response Time

7:18

Goal Average Response Time

6:00

WHY 6 MINUTES MATTERS? – EMS

It aligns with the **biological limits of survivability**, not arbitrary policy goals.

CARDIAC ARREST

- **Brain injury** begins at **4–6 minutes without oxygen**
- **Survival decreases 7–10%** per minute without intervention
- Early arrival **improves defibrillation success and neurologic outcomes**

STROKE

- Every untreated minute **destroys approximately 1.9 million neurons**
- **Earlier intervention** significantly **improves long-term function and survivability**

SEVERE TRAUMA

- **Mortality increases** by approximately **4% for every minute of delay**
- Early stabilization **reduces complications and length of hospital stay**



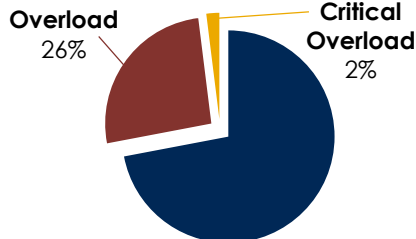
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HIGH CALL CONCURRENCY CREATES SYSTEM OVERLOAD

2024 Load Conditions



OVERLOAD

Overload occurs when simultaneous emergencies exceed normal response capacity, reducing response reliability across the city.

- Begins at 4–6 concurrent incidents
- Few units remain available for new emergencies
- Response times increase and coverage gaps emerge
- A single wildland fire or complex incident can trigger overload

CRITICAL OVERLOAD

Critical overload occurs when available emergency resources are effectively depleted, leaving little to no immediate response capability

- Occurs at **7+ concurrent incidents**
- **Most or all frontline units** are committed
- New emergencies face **significant delays or require outside assistance**
- A single structure fire can place the system into **critical overload**



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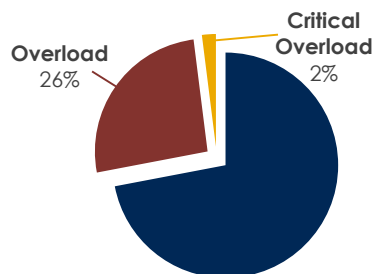
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HIGH CALL CONCURRENCY CREATES SYSTEM OVERLOAD

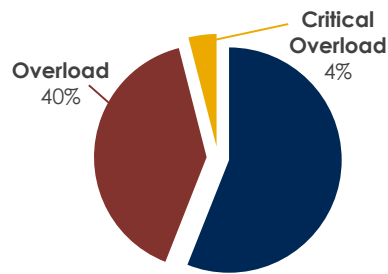
2025

47,000 Calls



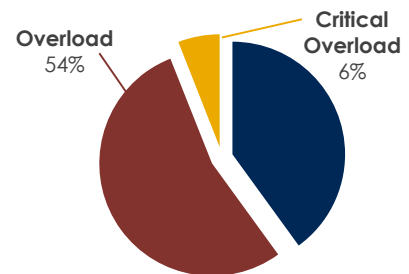
2035

71,000 Calls



2040

83,000 Calls



Without staffing increases, rising call volume will push the Fire Department into sustained overload, increasing response times and risk to residents and firefighters.



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CURRENT STAFFING LEVELS ARE INSUFFICIENT TO MEET SERVICE DEMAND

Firefighter Staffing Levels Compared to Regional Peers

City	Firefighters	Population	Ratio (per 1,000)
Glendale	267	197,000	1.35
Pasadena	160	138,000	1.16
Long Beach	400	449,000	0.89
L.A. City	2,700	4,100,000	0.89
Anaheim	270	350,000	0.77
Corona	129	170,000	0.74
Riverside	225	325,000	0.69

Maintaining approximately **0.95 firefighters per 1,000 residents** is critical to reducing overload conditions, meeting response-time standards, and preparing the Fire Department for continued growth.



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STUDY RESULTS – RIGHT SIZING STAFFING

Current Staffing Levels

Year	Population	Ratio (per 1,000)	Firefighters	Current Response Time
2025	325,000	0.69	225	7:18

Phase 1: Correct Current Response Deficit (Immediate Need)

Year	Population	Ratio (per 1,000)	Firefighters	Staffing Increase	Projected Response Time
2025	325,000	0.95	309	+84	6:00

Phase 2: Maintain Response Performance as the City Grows (Sustained Growth)

Year	Estimated Population	Ratio (per 1,000)	Firefighters	Incremental Staffing Increase	Projected Response Time
2030	345,500	0.95	328	+19	6:00
2035	366,000	0.95	348	+20	6:00
2040	386,500	0.95	367	+19	6:00



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FIRE STATION INFRASTRUCTURE MUST EXPAND AND MODERNIZE

Phase 1 (2025): Correct Current Response Deficit and Support Added Units (Immediate Need)

Stations Requiring Remodel or Relocation
Station 4 - Rebuild / Relocate to accommodate additional unit
Station 8 - Rebuild / Relocate to accommodate additional unit
Station 10 - Rebuild / Relocate due to facility condition / location
Station 12 - Rebuild / Relocate to accommodate additional unit

New Stations Required
Station 15 – New Station in Ward 4
Station 16 – New Station in Ward 1

Equipment Required
7 additional Engines, Trucks, or Squads

Phase 1 corrects existing infrastructure and equipment shortfalls, allowing the City to deploy added staffing, reduce overload conditions, and improve response times immediately.



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FIRE STATION INFRASTRUCTURE MUST EXPAND AND MODERNIZE

Phase 2: Maintain our Response Capability (Sustained Growth)

Year	Station	Needs
2028	7	Phase 2 - Rebuild / Relocate to accommodate additional unit
	2	Renovate
2031	9	Phase 2 - Rebuild / Relocate to accommodate additional unit
	3	Renovate
2034	11	Phase 2 - Rebuild / Relocate to accommodate additional unit
	5	Renovate
2037	6	Phase 2 - Rebuild / Relocate to accommodate additional unit
	13	Renovate
2040	14	Phase 2 - Rebuild / Relocate to accommodate additional unit
	1	Renovate



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SUMMARY OF RESOURCES REQUIRED TO MAINTAIN EMERGENCY RESPONSE STANDARDS

Year	Estimated Population	Annual Calls (Projected)	Total Firefighters	New Firefighters Added	Equipment Needs	Facilities Needs
Phase 1: Correct our Response Capability (Immediate Need)						
2025	325,000	47,000	309	+84	4 Engines 3 Squads	2 Stations 4 Rebuilds
Phase 2: Maintain our Response Capability (Sustained Growth)						
2030	345,500	59,000	328	+19	2 Engine or Truck	2 Rebuild 2 Renovate
2035	366,000	71,000	348	+20	2 Engine or Truck	2 Rebuild 2 Renovate
2040	386,500	83,000	367	+19	1 Engine or Truck	1 Rebuild 1 Renovate

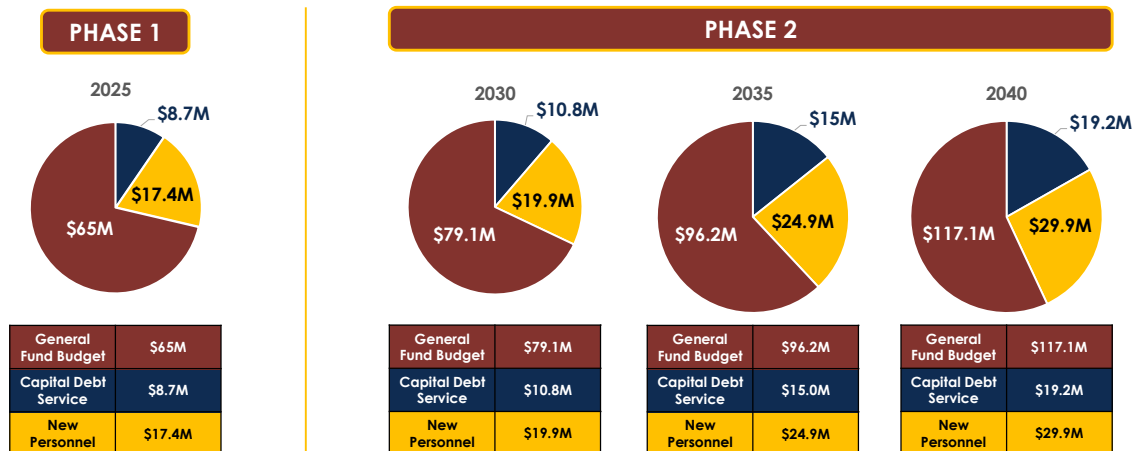


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FUNDING STRATEGY TO SUSTAIN EMERGENCY RESPONSE PERFORMANCE



Total Capital Investment - \$293.4M



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WHAT CAN BE COVERED BY MEASURE Z?

YEAR	MEASURE Z AVAILABLE	NEEDED	UNFUNDED NEED
Phase 1: Correct our Response Capability (Immediate Need)			
2025	Fully Committed	\$26.1	\$26.1
2026	Fully Committed	\$26.1	\$26.1
2027	Fully Committed	\$26.1	\$26.1
Phase 2: Maintain our Response Capability (Sustained Growth)			
2028	Fully Committed	\$30.7	\$30.7
2029	\$1.6	\$30.7	\$29.1
2030	\$3.5	\$30.7	\$27.2
2031	\$2.5	\$35.3	\$32.8
2032	\$4.0	\$35.3	\$31.3
2033	\$6.0	\$35.3	\$29.3
2034	\$8.0	\$39.9	\$31.9
2035	\$13.0	\$39.9	\$26.9
2036	\$14.0	\$39.9	\$25.9
2037	Measure Z Sunsets	\$44.2	\$44.2
2038		\$44.2	\$44.2
2039		\$44.2	\$44.2
2040		\$49.1	\$49.1



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SUMMARY

BENEFIT TO THE COMMUNITY



Lives Are Saved



**More Reliable
911 Service
Citywide**



**Keeps Pace
With City
Growth**



**Less Damage
To Homes And
Businesses**



**Protection
During Multiple
Emergencies**



**Stronger
Community
Confidence**

This investment directly improves safety, saves lives, protects property, and ensures Riverside residents receive the level of emergency service they expect and deserve today, and in the years to come.



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