



CITY GATE
ASSOCIATES

Fire Department Deployment and Organizational Analysis

CITY COUNCIL BRIEFING

CITY OF REDONDO BEACH

April 16, 2024

Capstone Observations

- Impressed with the quality of services
- Many programs operating to best practices
- Focus is on safety for the public and the responders
- Response times are *excellent*
- The City is committed to the right services at the right cost
- The City has positive, but different choices regarding the provision of fire services:
 - Maintain, and evolve as needed, a City-operated department
 - Contract for fire services from the Los Angeles County Fire District

How the Study Was Conducted

- Review of relevant City and Fire District **documentation**
- Stakeholder **listening interviews**
- Comprehensive **incident data statistical analysis**
- Mapping of **service demand / travel time analysis**
- **Cost and Services** Analysis of Fire District Proposal
- The study offers
 - **33** specific **findings**
 - **7** actionable **recommendations**

Policy Choices

- No federal or state laws or regulations in the U.S. mandating fire service **staffing levels**, **response performance**, or **outcomes**
 - If fire services are provided, state and federal safety regulations apply
- Level of fire service provided is a **local policy decision**
 - Communities have the level of service they can **afford** or which they **choose to fund**
 - Level of service provided **may not be** the level of service desired

Outcome Goals Drive Fire Service Deployment

- The **goal** of fire service deployment is to deliver **desired outcomes**
- Typical **urban** community desired outcomes:
 - **Prevent death and/or permanent impairment** from medical emergencies where possible
 - Confine building fires to the **room or compartment of origin**
- Delivering desired outcomes depends on **adequate staffing, apparatus type, and response time**

Deployment Strategies

- Fire service deployment is essentially about the **speed** and **weight** of response
 - **Speed** refers to *single* neighborhood-based first responders to mitigate routine-to-moderate emergencies for the outcome desired
 - **Weight** refers to *multiple-unit* responses (First Alarm) needed to control more serious emergencies for the outcome desired
- **Specialty units** are deployed in addition to / in lieu of engines, ambulances, and ladder trucks to mitigate special hazards, such as
 - Hazardous material release/spill
 - Technical rescue
 - Marine fire rescue EMS

Risk Assessment / Standard of Cover

Risk Assessment Summary

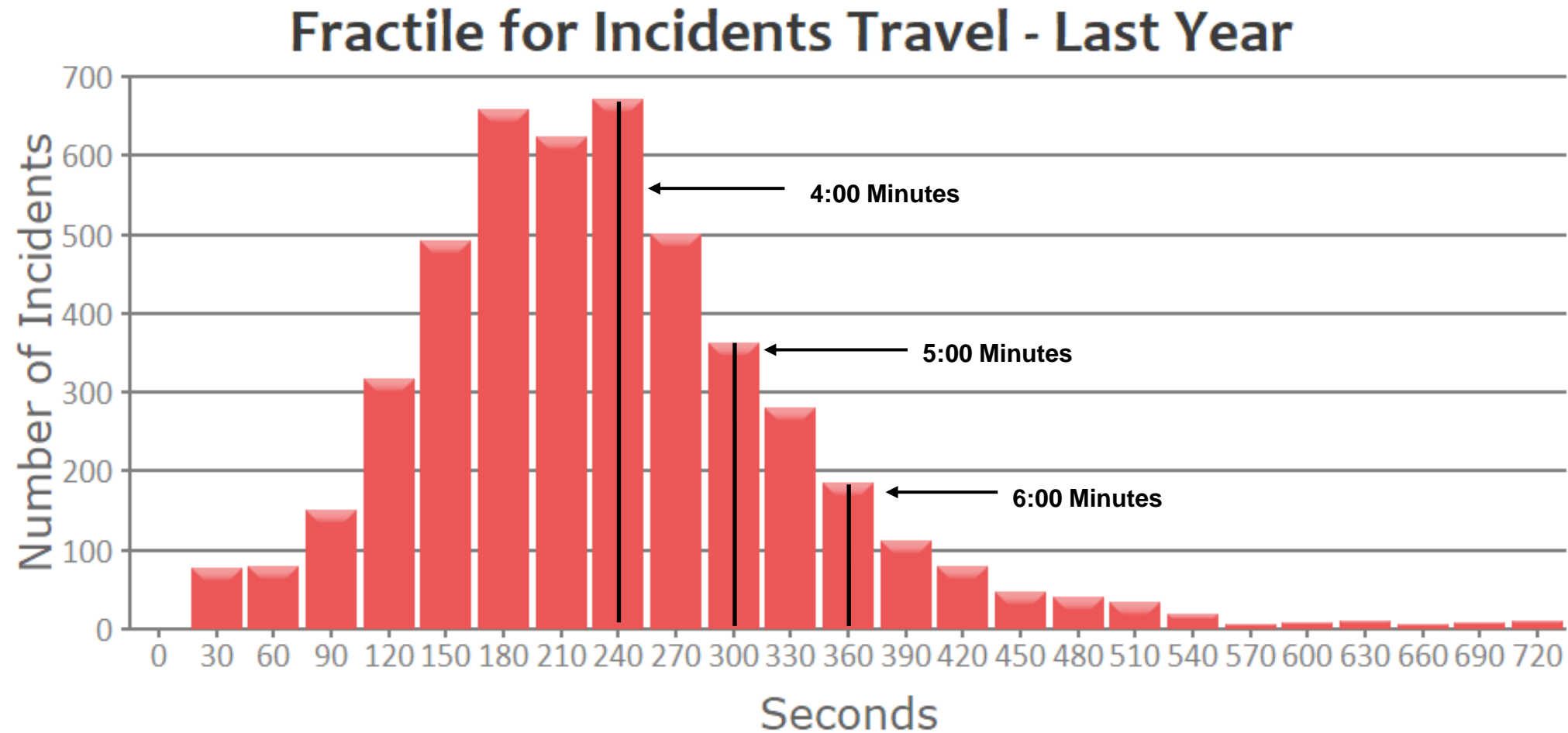
- Identify/quantify key **values at risk**
- Evaluate **hazards**
- Determine **probability** of a hazard occurrence
- Identify probable **impact severity** of a hazard occurrence
- Determine **overall risk** by hazard and station district
 - Based on **probability of occurrence** and **probable impact severity**

Hazard	Planning Zone		
	Station 1	Station 2	Station 3
Building Fire	Moderate	Moderate	Low
Medical Emergency	Moderate	Moderate	Moderate
Hazardous Material	Low	Low	Low
Technical Rescue	Moderate	Moderate	Moderate
Marine Incident	Low	Low	Moderate

Response Performance to Fire/EMS Incidents (RY 22/23)

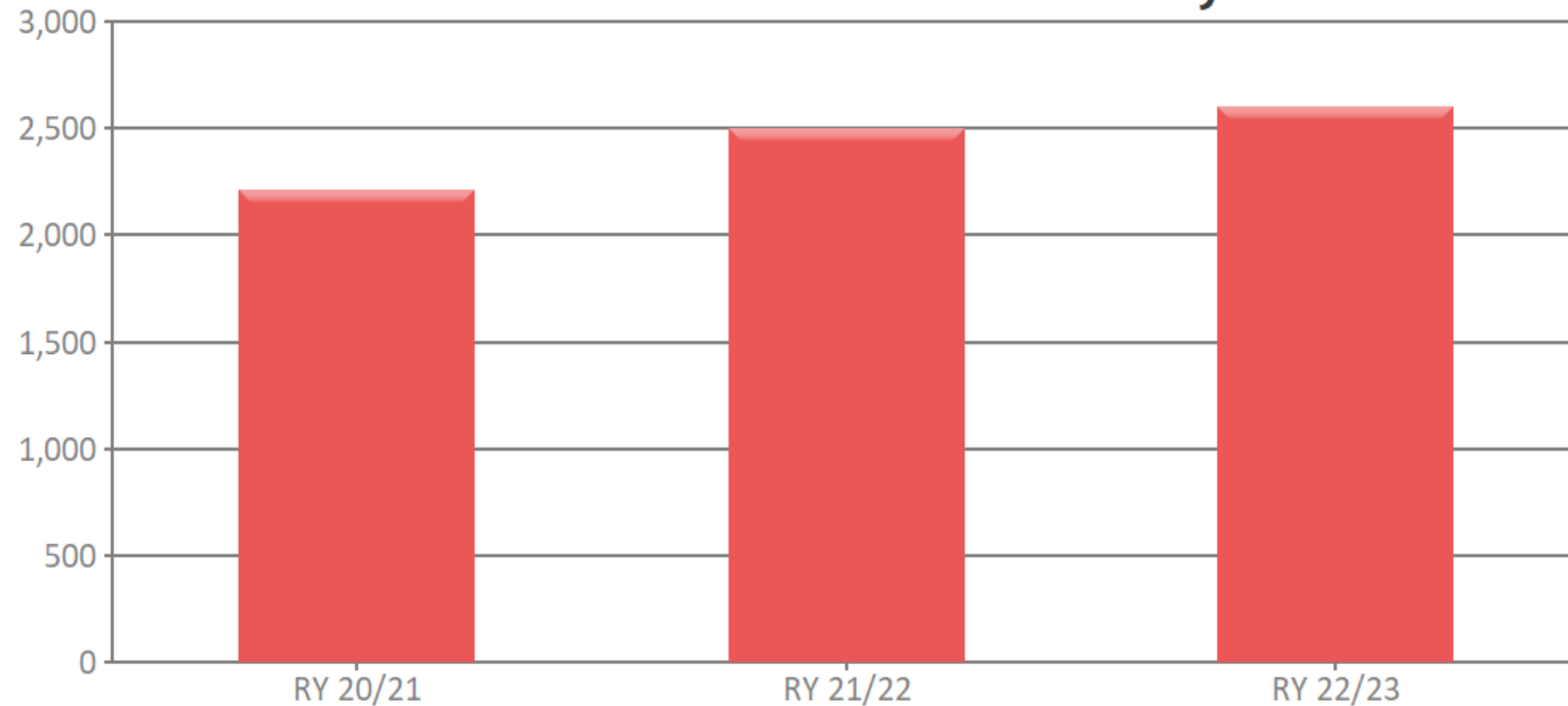
Response Component	Best Practice		90 th Percentile Performance	Performance Versus Best Practice and Citygate
	Time	Reference		
Call Processing / Dispatch	1:30 0:64 Critical	Citygate NFPA	1:25	- 0:05 sec
Crew Turnout	2:00 1:00	Citygate NFPA	2:01	+ 0:01 sec
First unit <u>Travel</u>	4:00	NFPA Citygate	5:46	+ 1:46 min
First unit Call-to-Arrival	7:30	Citygate	7:47	+ 0:17 sec
Effective Response Force <u>Travel</u>	11:30	NFPA	11:42	+ 0:12 sec

Travel Time to Fire/EMS Calls (RY 22/23)



Simultaneous Incidents

Number of Simultaneous Incidents by Year



Number of Simultaneous Incidents	Percent of Occurrence
1 or more	34.13%
2 or more	7.22%
3 or more	1.08%
4 or more	0.20%

REDONDO BEACH FIRE DEPARTMENT
MAP #2A - POPULATION DENSITY

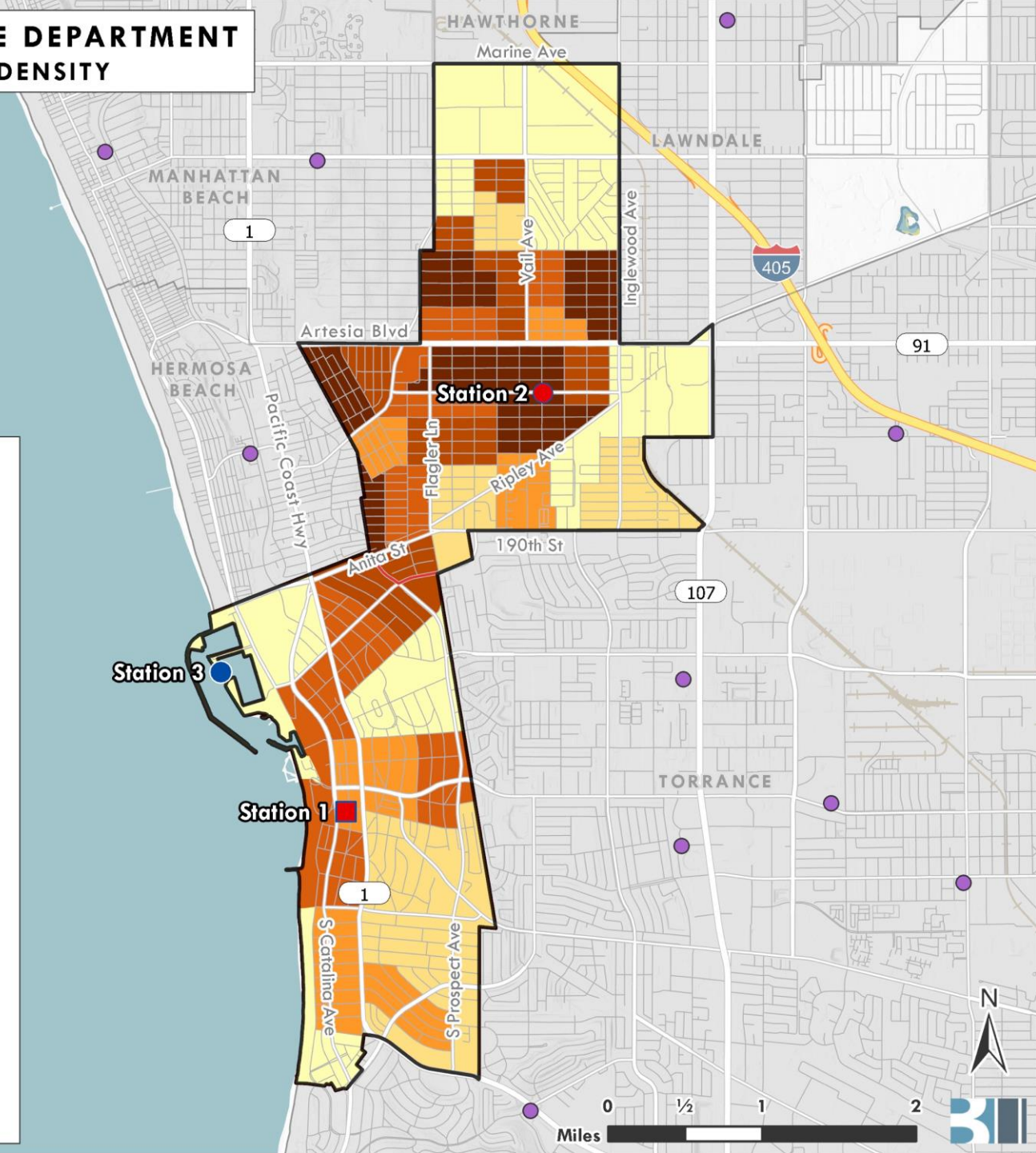
LEGEND

Station Type:

- Engine, Truck, Rescue, BC
- Engine, Rescue
- Squad, Boat
- Other Stations
- Redondo Beach FD
- Other Cities

Population Density (per square mile):

- 8,200 or Less
- 8,201 to 1,000
- 11,001 to 15,300
- 15,301 to 16,900
- 16,901 to 18,000
- Over 18,000



REDONDO BEACH FIRE DEPARTMENT
MAP #3 - 4:00-MINUTE & 5:00-MINUTE
FIRST DUE ENGINE TRAVEL TIME FROM
STATION 1 AND STATION 2

LEGEND

— 4-min First Due

— 5-min First Due

Station Type:

■ Engine, Truck, Rescue, BC

● Engine, Rescue

● Squad, Boat

● Other Stations

■ Redondo Beach FD

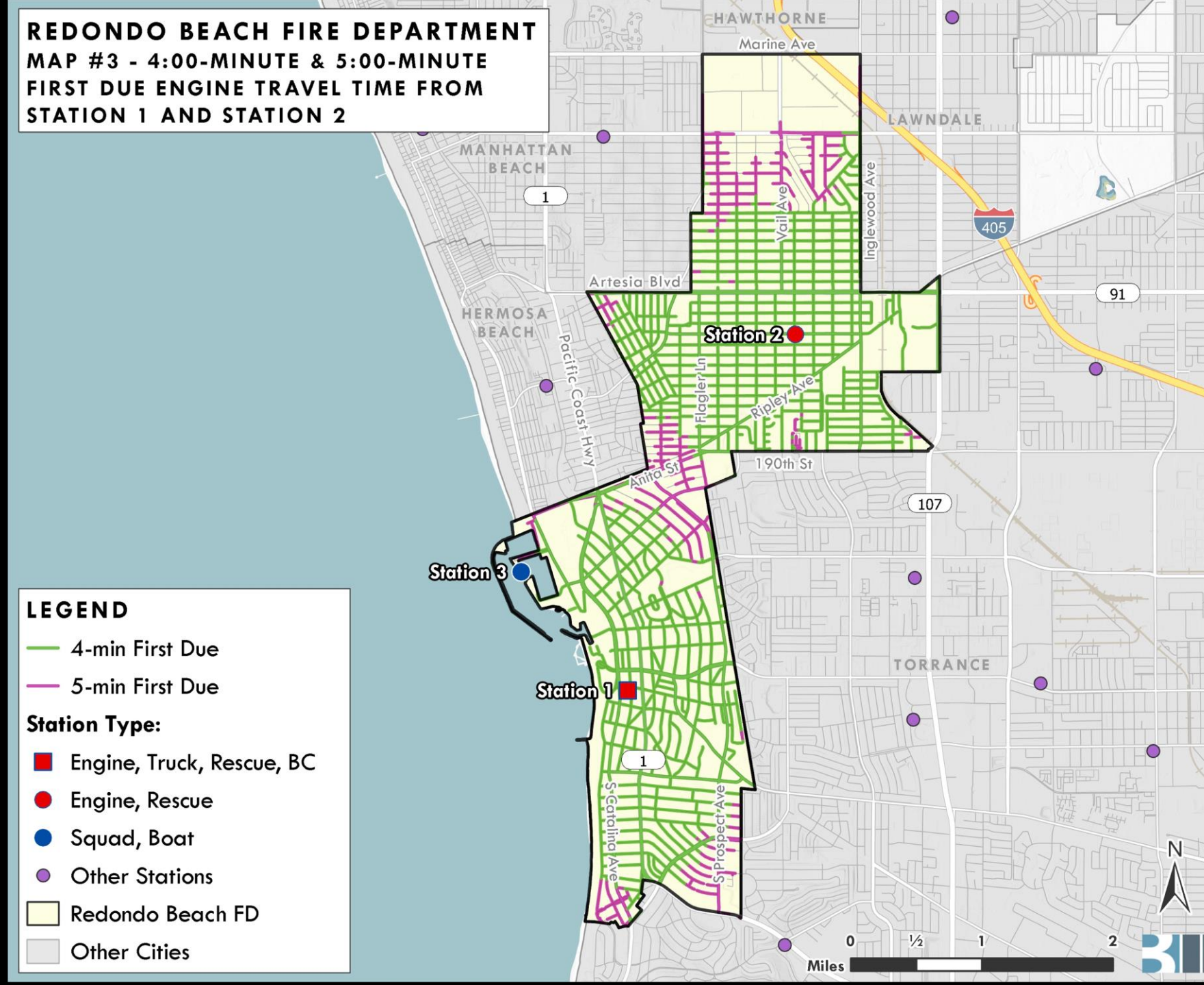
■ Other Cities

Station 3

Station 1

Station 2

0 1/2 1 2
Miles



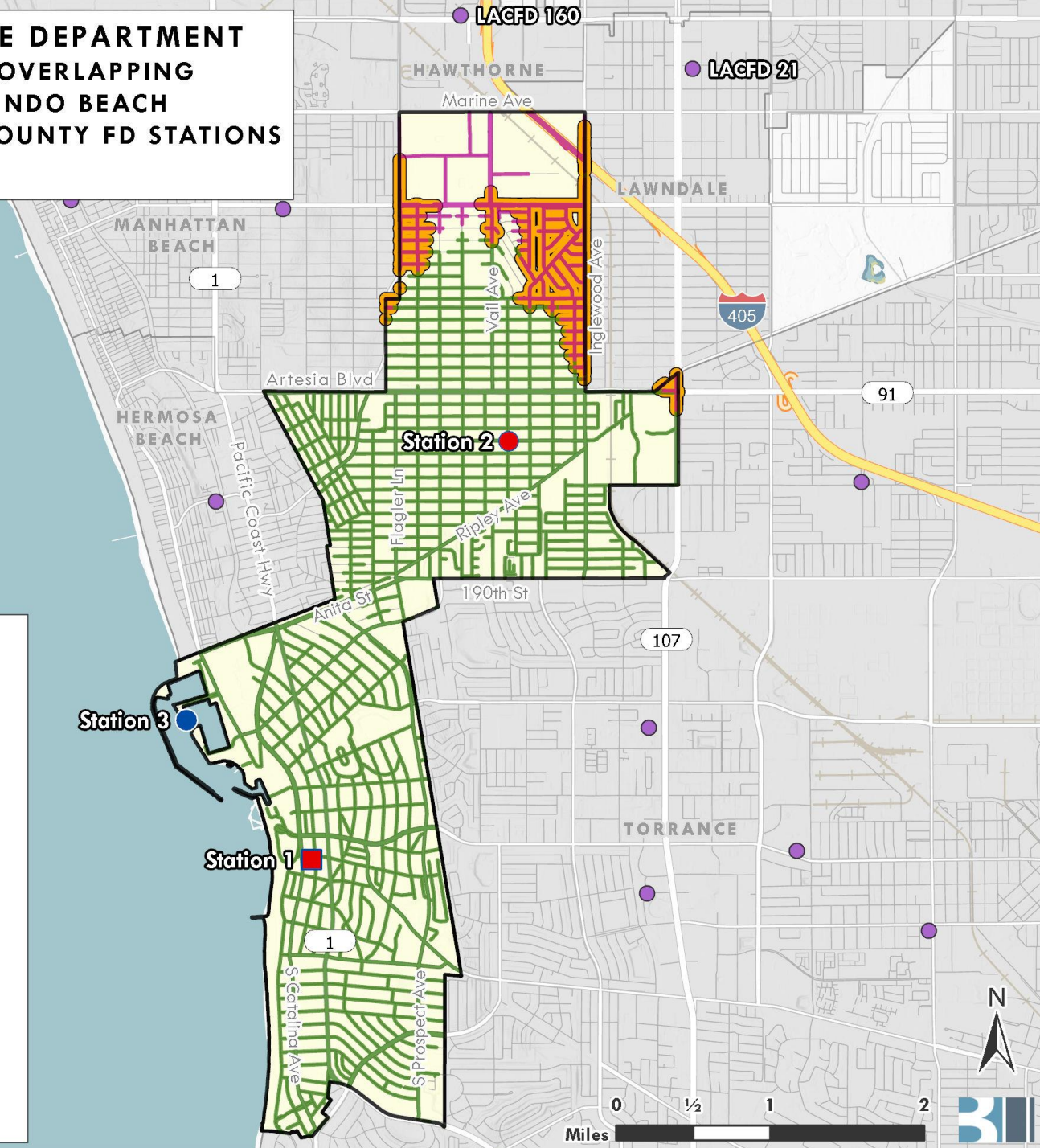
**REDONDO BEACH FIRE DEPARTMENT
MAP #3B - 5:00-MINUTE OVERLAPPING
TRAVEL TIME FROM REDONDO BEACH
STATIONS 1 AND 2, LA COUNTY FD STATIONS
21 AND 160**

LEGEND

- 5-min First Due
- 5-min Travel: LA County
Stations 21 & 60
- 5-min First Due

Station Type:

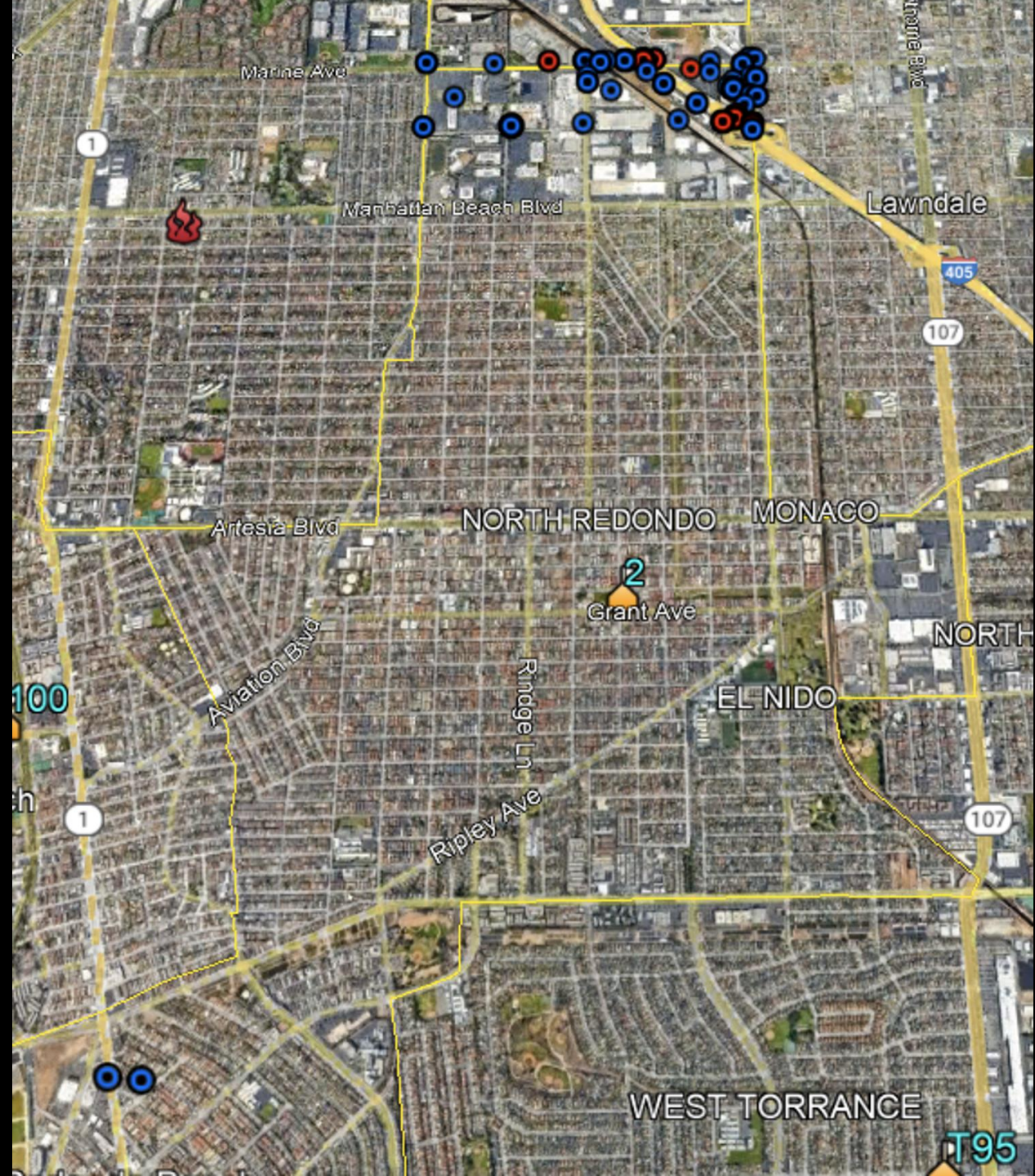
- Engine, Truck, Rescue, BC
- Engine, Rescue
- Squad, Boat
- Other Stations
- Redondo Beach FD
- Other Cities



Marine Incident
Distribution Near
Station 3



Incident Map
within a 1.5- and
2.0-mile Radius of
Station 2



Deployment Summary

- The current two fire station locations deliver 4:00-minute first-unit travel time coverage to the most densely populated areas of the City
- The two fire stations deliver 5:00-minute first-unit travel time coverage to 93 percent of the City's public streets. In Citygate's experience, this is excellent coverage and one that many other communities can only strive for
- There is not a high enough annual incident demand with excessive travel times well north of Station 2 near the City limits to justify a fire station in the far north City. As the mapping measures show, these areas could also receive mutual aid support from either County fire station just north and northeast of the City limits
- The count of near or on-the-water incidents in King Harbor per year is low and, given the records available, an exact count and information regarding severity is not possible. City management of King operations is spread over multiple city agencies

Deployment Recommendations

- **Adopt** outcome-driven, complete response time measures
- Utilize the data in this study to decide if a fourth fire station in the far north City is the best investment, or consider moving the second engine from Fire Station 2 to Station 3 in the harbor
- If the second engine was moved from Station 2 to Station 3 in the harbor, that staffing would be combined with the two-person boat crew to provide improved on-the-water response. The combined team would also cross-staff a Paramedic squad. These two units would provide a substantial service improvement on the water and landside in the City east of the harbor
- The City would be well-served to conduct an in-depth assessment regarding using contractors to provide typical private-sector boater services in all three basins and study how to cross-staff a hybrid police and fire response team on one first responder boat

Headquarters Services Review

Key Findings

- Lack of technical **clerical support staff/capacity**
- Lack of **analytical staff/capacity** to provide data analysis and training record certifications
- Two of the three fire stations are more than **60 years old**
- All three fire stations lack conformance with current Building Code, ADA, and NFPA standards, and two of the stations were built before the Essential Services Buildings Seismic Safety Act of 1986
- Fire Stations 1 and 2 sleeping, locker room, and restroom facilities have received minor retrofitted changes for gender inclusion and privacy. They should be completely upgraded to current standards.

Headquarters Programs Recommendations

- The City and Department should consider funding one FTE Administrative Assistant to provide additional needed clerical support for the Administrative Division
- The City should find an alternative location with adequate workspace for the combined Department administrative staff
- The City should consider prioritizing the existing fire stations for substantial remodel or replacement in its Capital Improvement Plan

Contracting Fire Services Review

Key Findings

- Contracting for fire services is common and beneficial
- There is no question that the quality, depth, and type of services meets the City's needs
- There are cost and small service differences
- Either choice before the City offers best-practices-based services
- The Council can consider not only short- or long-term costs, but long-term responsibility and local choice as both the City and the District evolve
- Contracting can and does provide explicit local control via specific measurable provisions in a contract

Staffing Comparison Numbers

Station Number	Address	City Resources	City Minimum Daily Staffing	District Proposed Resources	District Minimum Staffing
1	401 South Broadway Ave.	Engine 61 Truck 61 Rescue 61 Batt. Chief 61	3 4 2 1	Engine Quint Ladder Rescue Squad Shared Batt. Chief	3 4 2 1
2	2400 Grant Ave.	Engine 62 Engine 64 Rescue 62	3 3 2	Engine Eliminated Rescue Squad	3 - 2
3	280 Marina Way	Squad 63 Harbor Boat 63	2 **	Shared PAU Squad & Baywatch	2
Total Daily Response Staffing – City Limits			20		17
Adjoining Fire Stations Outside North City				2 Engines	6
Total District In/Nearby City					22

** Cross-staffed as needed by on-duty personnel based on incident type

Deployment Differences

- The District's proposal eliminates an engine company and shares three positions for the Battalion Chief and Harbor Patrol function. Thus, of the 17 positions in the contract, a total of 14 are *dedicated inside* City limits
- The District has adjacent fire stations outside the City that would respond into the City
- The Battalion Chief serving the City would be provided from an adjacent District fire station
- The District's Baywatch Redondo, serving out of Fire Station 3, would be shared with the City and provide a Rescue Boat Captain and a Paramedic Ocean Lifeguard Specialist
- Fire prevention services for the City will be provided out of the District's office in nearby Carson. The City's fire prevention staff of 2.5 full-time employees *might be* transitioned into the District. The District is only charging the City for 1.75 fire prevention staff. When capacity is needed beyond that, the District can distribute the workload to its prevention staff

Cost Comparison

Component	Current Fire Department Budget	Fire Department Budget After Contract	Difference (Savings) / Cost
Base Budget	23,184,042	20,274,822	(2,909,220)
YEAR ONE			
Net cost <u>without</u> the City reducing an engine in its own services and all other leave behind adjustments that must be added to the District's contract cost	23,184,042	27,962,079	4,778,037
ONGOING TEN-YEAR COST AFTER STARTUP COSTS STOP			
Year-four cost in present value dollars after startup costs are paid	23,184,042	24,566,135	
Year-four through year-ten costs after startup	162,288,294	171,962,945	9,674,651
Three-year cost difference + remaining seven years		4,146,279	13,820,930

City Leave-Behind Cost Obligations

Component	Current Fire Department Budget	Fire Department Budget after Contract	Difference (Savings) / Cost
Debt payment tied to existing Lease Revenue Bonds (LRBs) for 2021 pension obligation payoff or other fire services debt not absorbed by County Fire through 2049	-	3,301,399	3,301,399
CalPERS pension unfunded accrued liability cost after 2021 payoff of liability with 2021 Lease Revenue Bonds (LRBs)	-	373,000	373,000
Total		3,674,399	3,674,399

- The City is to be commended for dealing with its unfunded pension liability and financing it at better terms. Further, *it is a best practice* to place these costs into each department's budget. However, many cities do not do this, and the District would not have been expected to look for it
- This possibly means that early, informal conversations with the District about a contract cost comparison were not fully informed between the parties

Cost Comparison Without Pension Obligation

Component	Current Fire Department Budget	County Fire	Difference (Savings)
Current budget	23,184,042	20,274,822	(2,909,220)
Combined Position Obligation	3,674,399	0	0
Fire Budget Without Obligation	19,509,643	20,274,822	765,179

Just setting aside the pension obligation results in the County proposal being \$765,179 *more* expensive than the City's costs while providing 3-dedicated and 2-shared *fewer* positions inside the city limits

Key Contracting Findings

- The District's staffing plan is slightly fewer inside the City limits but supported by nearby District stations and Baywatch resources
- The District's fire prevention offers comparable services
- City savings from the District's contract cost are negated by it being unable to reduce all its Fire Department budget, due mostly to legacy unfunded pension liability cost payments

Concluding Observations

- The City has received an implementable contract-for-fire-services proposal from the District
- There are other policy choices for the City Council to consider other than the bottom-line cost
- Contracting eliminates the City's entire burden of managing fire services, freeing up City Hall capacity for other civic issues. The District provides an immense, integrated team to serve the City
- The City has a strong fire department that does not need a major overhaul
- The City also has maximum control over the design and cost of its fire services
- It is impossible for any model to forecast City and District personnel costs many years into the future
- If the City's fire costs perspective were to "set aside" the pension liability payments from this analysis, the District contract costs are more expensive, for less staff inside the city
- Based on these intangibles in addition to the bottom-line, General Fund fiscal impact, the City has two capable, but different, fire service provision options before it.

Next Steps

City Operated Fire Department Next Steps

- Near-Term
 - Review and absorb the content, findings, and recommendations of this report
 - Adopt response performance goals as recommended
 - In lieu of a fourth fire station in the far north City, consider moving the second fire engine from Station 2 to Station 3 in King Harbor
- Long-Term
 - Consider streamlining King Harbor general and public safety management
 - Consider adding one FTE clerical support to the Administrative Division
 - Add fire station renewal or replacement to the City's long-term Capital Improvement Plan
 - Monitor response performance against adopted goals



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Questions and Discussion