



THE CITY OF SAN DIEGO

OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

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Fire-Rescue Standards of Response Cover Review: Fiscal Impacts & Implementation Scenarios

OVERVIEW

On March 8, 2017, Citygate Associates, LLC, presented its report entitled “San Diego Fire-Rescue Department Standards of Response Cover Review” (Citygate Report) to the City Council’s Public Safety and Livable Neighborhoods Committee. The report served as a comprehensive update to a similar study, also conducted by Citygate, from 2010. The new 2017 Citygate Report evaluated the ability of the Fire-Rescue Department to meet response time standards using the City’s current network of 47 active fire stations and 70 primary response apparatus.

Specifically, the report analyzed Fire-Rescue’s performance goal of responding to emergency calls with a first-due unit within 7:30 minutes, 90% of the time. During the report’s measurement period (May 2015 to April 2016), the Department met the 7:30-minute standard 74.7% of the time. Based on its evaluation, the Citygate Report identified several geographic service gap areas contributing to performance challenges and offered the following three recommendations to close those gaps and improve response times:

- 1) Add a total of 12 new fire stations, including six stations currently in the City’s Capital Improvement Program (CIP) budget and six additional infill stations.
- 2) Add three geographic area Battalions, for a total of 10 Battalions.
- 3) Add peak-hour fire engines, squads, or other flexibly-deployed units to serve the busiest areas of the City at the busiest times of day.

The Committee requested that our office analyze the fiscal impacts of implementing the Citygate recommendations prior to the City Council’s consideration of the FY 2018 Proposed Budget in May 2017. In response, this report provides information on the cost of constructing new fire stations, the gap between identified capital needs and existing capital funding, ongoing costs to the

General Fund for fire station operations, and costs for additional Battalions and peak-hour units. Finally, our report offers implementation scenarios for the City Council to consider during the annual Budget process including potential effects on the Department’s operating budget, the CIP budget, the Five-Year Financial Outlook, and the Five-Year Capital Infrastructure Planning Outlook.

FISCAL/POLICY DISCUSSION

Comparison of the 2010 and 2017 Citygate Reports

As stated earlier, the 2017 Citygate Report updated the findings of a previous study of response times conducted by Citygate in 2010. The 2010 study identified 19 sites in need of additional fire service and ranked them in priority order. Since that time, the City of San Diego has made significant investments in the Fire-Rescue Department, including the completion of one new fire station in East Mission Valley, one temporary fire station in Skyline Hills, and the implementation of three Fast Response Squad (FRS)¹ units in Encanto, South University City, and San Pasqual Valley. The 2017 study used a variety of new analytical tools to improve response time modeling, including accounting for traffic congestion and peak-hour call demand. The updated methodology, combined with population changes and added Fire-Rescue resources over the past seven years, produced recommendations in 2017 that differed significantly from those made in 2010.

Notably, the 2017 Citygate report recommended 12 new fire stations rather than 19. The 12 recommended stations include six stations currently in the City’s Capital Improvement Program (CIP) budget and six additional infill stations in newly identified gap areas. Table 1 summarizes the 12 recommended new fire stations and their current status. Table 2, on the following page, provides a crosswalk comparison of the 2010 and 2017 Citygate priority sites.

Table 1: Recommended New Fire Stations, 2017 Citygate Report

Type	Name/Location	Status
CIP 1	Home Avenue	Partially funded; negotiating land purchase
CIP 2	UCSD	Fully funded; anticipated opening FY 2022
CIP 3	Bayside	Fully funded & under construction; opening FY2018
CIP 4	Black Mountain Ranch	Fully funded; anticipated opening FY 2020
CIP 5	Otay Mesa	Funding TBD; planned as a developer agreement
CIP 6	North University City	Fully funded; anticipated opening FY 2020
Gap 1	Pacific Beach	New fire station recommended
Gap 2	University City	New fire station recommended
Gap 3	Torrey Pines	New fire station recommended
Gap 4	Southeast	New fire station recommended
Gap 5	Rancho Bernardo	New fire station recommended
Gap 6	Sabre Springs	New fire station recommended

¹ An FRS is a specialized unit deployed for 12 hours per day using a modified truck staffed by a two-person crew.

Table 2: 2010 to 2017 Report Crosswalk

2010 Priority	2010 Gap Area	2017 Gap Area Status
1	Home Avenue	CIP 1 of 6
2	Paradise Hills	Gap 4 of 6 (south)
3	College	No longer a gap by new methodology
4	Skyline	Served by Skyline Temporary Station
5	Encanto	Gap 4 of 6 (north); current FRS
6	Stresemann/Governor (South University City)	Gap 2 of 6; current FRS
7	Mission Bay/Pacific Beach	Gap 1 of 6
8	UCSD	CIP 2 of 6
9	Liberty Station/Peninsula	No longer a gap by new methodology
10	North University City	CIP 6 of 6
11	Torrey Hills/South Carmel Valley	Gap 3 of 6
12	Serra Mesa	No longer a gap by new methodology
13	Mira Mesa	No longer a gap by new methodology
14	East Otay	Otay Mesa Station may fill this need
15	Scripps Miramar	No longer a gap by new methodology
16	San Pasqual	Served by current FRS
17	Linda Vista	No longer a gap by new methodology
18	Black Mountain Ranch	CIP 4 of 6
19	Mission Valley (West)	No longer a gap by new methodology
New in 2017	Bayside	CIP 3 of 6
New in 2017	Otay Mesa	CIP 5 of 6
New in 2017	Rancho Bernardo	Gap 5 of 6
New in 2017	Sabre Springs	Gap 6 of 6

Compared to the 2010 report, the 2017 Citygate report recommends that new fire stations be built in many of the same gap areas identified previously. Some old gap areas, however, were not found to be gaps using the 2017 methodology and are no longer recommended as fire station sites. For example, College Avenue Fire Station (which is a largely unfunded yet active CIP project) was identified as a priority site by Citygate in 2010 but not in 2017. Should the City Council choose to implement the 2017 report recommendations, College Avenue Fire Station should be removed from the CIP to reflect this change. Also of note is Skyline Fire Station, which was identified as a priority location in 2010 and has been served by a temporary fire station since FY 2016. Although the 2017 Citygate Report no longer identifies Skyline as a gap area due to the service being provided by the temporary station, it may still be Council’s policy position to prioritize the construction of a permanent facility at that location. These and other issues regarding CIP planning are discussed later in this report.

In addition to recommending the construction of new fire stations, the 2017 Citygate Report also made other recommendations that were new compared to 2010. These additional recommendations

were that the City add geographic area Battalions and Peak-Hour Engines (PHEs), FRS units, or other flexibly-deployed units to serve the busiest areas of the City at the busiest times of day. While the 2010 Citygate study introduced the concept of FRS units as a pilot program concept, the 2017 Citygate Report recommends expansion of the program as it has been demonstrated to significantly reduce response times since being introduced in FY 2015.

Analysis of each of the 2017 Citygate Report's three recommendations, including estimated fiscal impacts, follows.

Analysis of Recommendation 1: Add 12 New Fire Stations

Cost per Fire Station: \$13.0 million one-time capital expenditure
\$1.5 million annual operating expenditures (12.0 FTEs)

In the City of San Diego, a traditional brick-and-mortar fire station is equipped with at least one fire engine and is staffed 24 hours per day by a four-person crew working in three, eight-hour shifts. In terms of budget impact, 12.0 FTE firefighter positions are required to support each 24-hour fire station. Associated personnel and supplies costs total approximately \$1.5 million annually per station.

In addition to ongoing staffing costs, which are borne by the General Fund, new fire stations require significant capital investment, typically borne by the CIP budget. The Fire-Rescue Department has provided a general estimate of \$13.0 million in construction costs to complete a new fire station. This amount does not include costs associated with land purchase, as land prices vary widely throughout the City and some fire stations could possibly be built on existing City-owned parcels.

It is also important to note that fire station construction costs may vary significantly depending on the specifics of each recommended fire station site. As described earlier, six of the 12 new fire stations recommended in the Citygate Report are currently active CIP projects with various levels of identified funding. Cost estimates specific to those CIP fire stations are provided later in this report.

Finally, each additional fire station will require the purchase of fire apparatus (one fire engine per station, plus a ladder truck at select stations). Fire engines and ladder trucks cost approximately \$850,000 and \$1.3 million, respectively, and have an expected useful life of 12-18 years. Recently the City has not cash-funded the purchase of fire apparatus, opting instead to finance fire engines and trucks through the Equipment and Vehicle Financing Program (EVFP). It is the City's general practice to fund the purchase of fire apparatus through the EVFP using funds budgeted in the Fleet Services Division. These funds are generated by assignment fees made annually by Fire-Rescue to Fleet Services based on projected vehicle needs. Because costs for the Department's fleet are generally financed and amortized over several years, the fiscal impact of adding fire engines over time is relatively insignificant and is therefore not included in the estimate below.

The Citygate Report found that constructing all 12 recommended fire stations would close the City's largest geographical response time gaps. Fire-Rescue's current performance goal is to

respond to emergency calls with a first-due unit within 7:30 minutes, 90% of the time. Citygate found that completing its recommended new fire stations would improve 7:30-minute response time coverage from 74.7% to 80.6%. For the remaining smaller geographic gap areas, Citygate found that new fire stations would be unnecessary and instead recommended adding alternative resources to further improve response times such as PHEs and FRS units, described later in this report.

Analysis of Recommendation 2: Add Battalions

Cost per Battalion: Insignificant one-time capital expenditure
 \$705,000 annual operating expenditures (3.0 FTEs)

The Fire-Rescue Department currently serves the City using seven geographic area Battalions, which form the command structure of the Department. Each Battalion is led by a Battalion Chief who oversees several fire stations. The Department’s policy is to dispatch two Battalion Chiefs to serious fires within 11:30 minutes of total response time. The Citygate Report found that the Department is not currently able to meet that response standard in many areas of the City, and recommended adding at least three new geographic area Battalions to improve service.

Fire-Rescue has indicated that each additional Battalion would require the acquisition of a Battalion Chief vehicle. Because costs for the Department’s fleet are generally financed and amortized over several years, the fiscal impact of adding a small number of vehicles over time is relatively insignificant and is therefore not included in the estimate below. Additional considerations include upgrading fire station alerting and software adjustments, the costs of which would be negligible. Ongoing costs include salary and fringe for 3.0 FTE Battalion Chief positions (one additional Battalion requires three shifts to cover a 24-hour day) totaling roughly \$705,000 per year.

Analysis of Recommendation 3: Add Peak-Hour Units (FRS and PHE)

Fast Response Squads

Cost per FRS: Insignificant one-time capital expenditure
 \$566,000 annual operating expenditures (4.0 FTEs)

A Fast Response Squad (FRS) is a specialized unit deployed for 12 hours per day using a modified truck staffed by a two-person crew. Due to the nature of firefighters’ shifts, the budgetary impact of staffing one 12-hour FRS is 4.0 FTE firefighter positions at a cost of \$566,000 annually.

Unlike PHEs, which are flexibly deployed, FRS units are generally assigned to a fixed geographic area. The City currently has three FRS units, which are located in Encanto, South University City, and San Pasqual Valley. The Encanto and South University City FRS units are deployed 12 hours per day during daytime hours, while the San Pasqual Valley FRS is a 24-hour unit. The costs described below are for 12-hour FRS units, as they are more common and more likely to be utilized in urban infill areas.

Peak-Hour Engines

<u>Cost per PHE:</u>	Insignificant one-time capital expenditure \$1.0 million annual operating expenditures (8.0 FTEs)
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Peak-Hour Engines (PHEs) are fire engines that do not operate out of a fire station but are instead flexibly deployed in various areas based on need for 12 hours per day. Like traditional fire stations, PHEs are staffed by four-person crews. Due to the nature of firefighters' shifts, the budgetary impact of staffing one 12-hour PHE is 8.0 FTE firefighter positions.

PHEs are a new deployment concept that has not yet been utilized by the San Diego Fire-Rescue Department. The Department has indicated that its intention with the PHE concept, if it were to be implemented in the future, would be to supplement rather than replace FRS units. The Department noted that FRS units work well where they have been implemented and serve a function that is different from the role of a PHE. For example, an FRS operates out of a fixed location while a PHE is intended to be mobile and adaptable. PHEs are not fixed-base resources. While they are intended to address the service gaps identified by Citygate during peak demand hours, PHEs would also serve other gaps identified using real-time data in order to serve the community efficiently.

The Fire-Rescue Department has indicated that PHEs could be implemented by deploying existing reserve fire engines and would not require any significant capital investment. The Department currently has 27 fire engines in ready reserve. On any given day, a portion of these engines will be available for use, a portion will be out of service, and the remainder will be out in the field replacing other engines that are in for service. Fire-Rescue estimates that, although the daily number could vary due to repair demand, six reserve engines could be deployed as PHEs without any adverse impact to the fleet.

Comparison of Citygate-Recommended Fire Stations and Existing City Plans

The FY 2018-2022 Five-Year Financial Outlook (for General Fund operating expenditures) and the FY 2017 Adopted CIP Budget (for capital expenditures), both include estimated expenditure needs for new fire stations. The Outlook identifies, but does not include funding for, operating expenses for four new fire stations anticipated to open by FY 2022. Table 3 lists the fire stations identified in the Outlook and their status in the Citygate Report.

Table 3: Status of Fire Stations in the FY 2018-2022 Five-Year Financial Outlook

Fiscal Year	Fire Station	Status in Citygate Report
2018	Bayside	Recommended as CIP 3 of 6
2020	Black Mountain Ranch	Recommended as CIP 4 of 6
2020	North University City	Recommended as CIP 6 of 6
2022	UCSD	Recommended as CIP 2 of 6

All four fire stations identified in the Outlook are recommended as new fire stations by Citygate. Conversely, only four out of the 12 fire stations recommended by Citygate are identified in the Outlook. The Outlook noted that it only identified operating costs for stations that have or are expected to have full capital funding for construction, which is appropriate.

The FY 2017 Adopted CIP Budget provides information on all active Fire-Rescue CIP projects, their anticipated capital costs, and current and planned funding levels. As stated earlier in this report, the Citygate Report recommends 12 new fire stations, including six stations currently in the City's CIP Budget. Table 4, in the following section of this report, provides estimated construction costs for all 12 Citygate-recommended fire stations including the 6 active CIP projects that already have varying levels of identified funding.

Additionally, we note that two planned fire stations currently in the CIP were not recommended as new fire stations by the Citygate Report. These are College Avenue Fire Station and Skyline Fire Station (both of which have no identified funding for construction). College Avenue Fire Station was identified as a priority site by Citygate in 2010 but not in 2017. Should the City Council choose to implement the 2017 report recommendations, College Avenue Fire Station should be removed from the CIP to reflect this change. Skyline Fire Station was identified as a priority location in 2010 and has been served by a temporary fire station since FY 2016. Although the 2017 Citygate Report no longer identifies Skyline as a gap area due to the service being provided by the temporary station, it may still be Council's policy position to prioritize the construction of a permanent facility at that location. Due to the fact that the Skyline Temporary Fire Station is already fully staffed, the future construction of a permanent facility at that location would not increase General Fund operating expenses for the Fire-Rescue Department.

Implementation Scenarios

Based on our analysis of the Citygate Report and information provided by the Fire-Rescue Department, our office has prepared the following implementation scenarios and estimated fiscal impacts.

Scenario 1: Full Citygate Report Implementation

Full implementation of the Citygate Report recommendations would include constructing twelve new fire stations, adding three geographic area Battalions, and adding an unspecified number of peak-hour units. Estimated capital and operating costs for implementing all three Citygate recommendations are provided in Table 4.

Table 4: Estimated Costs for Full Citygate Report Implementation

Type	Name/Location	New One-Time Capital Cost	New Annual Operating Cost
Fire Station: CIP 1	Home Avenue	\$13,000,000	\$1,500,000
Fire Station: CIP 2	UCSD	\$0	\$1,500,000
Fire Station: CIP 3	Bayside	\$0	\$1,500,000
Fire Station: CIP 4	Black Mountain Ranch	\$0	\$1,500,000
Fire Station: CIP 5	Otay Mesa	\$0	\$1,500,000
Fire Station: CIP 6	North University City	\$0	\$1,500,000
Fire Station: Gap 1	Pacific Beach	\$13,000,000	\$1,500,000
Fire Station: Gap 2	University City	\$13,000,000	\$1,500,000
Fire Station: Gap 3	Torrey Pines	\$13,000,000	\$1,500,000
Fire Station: Gap 4	Southeast	\$13,000,000	\$1,500,000
Fire Station: Gap 5	Rancho Bernardo	\$13,000,000	\$1,500,000
Fire Station: Gap 6	Sabre Springs	\$13,000,000	\$1,500,000
Subtotal: Fire Stations		\$91,000,000	\$18,000,000
Three Battalions	Locations TBD	\$0	\$705,000
Peak-Hour Units	Locations TBD	\$0	TBD ²
Total		\$91,000,000	\$18,705,000

Scenario 2: Modified Citygate Report Implementation

The Fire-Rescue Department has indicated to our office that it agrees with all three Citygate Report recommendations and that it intends to implement them over the next several years or more, as resources allow and with the approval of the Mayor and City Council. However, given the significant fiscal impacts of the Citygate recommendations and the limited funding available to implement them, the Office of the IBA has worked with Fire-Rescue to offer the following alternative implementation plan for the short- to medium-term.

The modified Citygate implementation scenario described below assumes that the Fire-Rescue Department will pursue Citygate priorities concurrently as available funding allows. Those priorities include:

- New fire stations: Complete the 6 fire stations identified by Citygate as current active CIP projects as capital funding is available and as the General Fund is able to support operations.
- PHEs: Initiate a PHE program using 6 reserve engines to reach the remaining 6 service gap areas identified by Citygate (and other daily service gaps) until future capital funding for brick and mortar fire stations is available in the long-term.

² The Citygate Report recommended that an unspecified number of peak-hour units be added over time and in response to changes in performance data based on the completion of new fire stations. Annual operating costs for each PHE and FRS are \$1,000,000 and \$566,000, respectively, and have not been included in Table 4.

- Geographic area Battalions: Add one additional Battalion for a total of eight citywide; evaluate adding more Battalions based on result.

Estimated capital and operating costs for implementing the modified version of the Citygate recommendations described above are provided in Table 5.

Table 5: Estimated Costs for Modified Citygate Report Implementation

Type	Name/Location	New One-Time Capital Cost	New Annual Operating Cost
Fire Station: CIP 1	Home Avenue	\$13,000,000	\$1,500,000
Fire Station: CIP 2	UCSD	\$0	\$1,500,000
Fire Station: CIP 3	Bayside	\$0	\$1,500,000
Fire Station: CIP 4	Black Mountain Ranch	\$0	\$1,500,000
Fire Station: CIP 5	Otay Mesa	\$0	\$1,500,000
Fire Station: CIP 6	North University City	\$0	\$1,500,000
Subtotal: Fire Stations		\$13,000,000	\$9,000,000
PHEs for Gaps 1-6	Six flexible locations TBD	\$0	\$6,000,000
One Battalion	Location TBD	\$0	\$235,000
Total		\$13,000,000	\$15,235,000

CONCLUSION

The 2017 Citygate Report evaluated the ability of the Fire-Rescue Department to meet response time standards and identified several geographic service gap areas contributing to performance challenges. In response, the Report offered recommendations to close those gaps and improve response times using a combination of new fire stations, additional geographic area Battalions, and added peak-hour resources such as PHEs and FRS units.

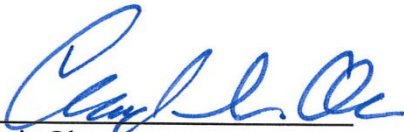
At the request of the Public Safety & Livable Neighborhoods Committee, our office analyzed the Citygate Report and worked with the Fire-Rescue Department to provide the estimated fiscal impact of each individual Citygate recommendation. Additionally, we provided two high-level implementation scenarios to give the City Council a range of options to evaluate. Finally, we offer the following recommendations for Council consideration regarding the Citygate Report:


Recommendation 1: Consider the 2017 Citygate Report and this related IBA Report during the Budget Review Committee hearings on the FY 2018 Proposed Budget. Recognizing the City is facing a budget deficit in FY 2018, our office does not recommend any significant program additions for the Fire-Rescue Department at this time, except for the planned operation of Bayside Fire Station which is expected to be complete by the end of 2017. However, the Council may still wish to prioritize funding, as it becomes available, for recommended items in either the Fire-Rescue operating budget or the CIP

budget, and to update the CIP budget to remove fire station projects no longer deemed to be priority sites.

Recommendation 2: Provide policy direction to the Mayor regarding Citygate recommendations that the City Council desires to be considered in the upcoming FY 2019-2023 Five-Year Financial Outlook and FY 2019-2023 Five-Year CIP Outlook.

Recommendation 3: Direct the Fire-Rescue Department to provide regular updates on Citygate Report implementation to the Public Safety & Livable Neighborhoods Committee or to the full City Council as appropriate.


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