Improving performance to better serve our county residents

Countywide operational performance review – Santa Barbara County Fire Department

September 2021

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Contents

Executive summary

Scope and methodology

The County of Santa Barbara (the County) contracted with KPMG in May 2019 to conduct an operational and performance review of all County Departments. The Fire Department (Department) review commenced in November 2020. The purpose of this review is to provide a high-level assessment of the Department, to identify strengths and opportunities, and to benchmark financial and operational areas with similar jurisdictions with the focus on improving the overall operational efficiency, effectiveness, and service delivery provided by the Department.

Over a 15-week period, the KPMG team conducted the following activities:

— **More than 30 interviews** with Department leadership and staff to understand the organizational structure, roles and responsibilities, operations, and processes of the Department.

— **Analysis of data available, reports, and policy documents** to understand the demands upon and the operations of the Department.

— **A benchmarking and leading practice review** was conducted of the County with three benchmark fire districts and one benchmark fire authority, drawing on fire protection services in Contra Costa County, San Bernardino County, Ventura County, and Orange County.

This report outlines the findings of the operations and performance review and details recommendations for the management of the Fire Department.

Over the past year, the COVID-19 pandemic disrupted the provision of services and the financial planning of county governments across the United States, resulting in significant changes to the way that county departments conduct operations. As federal funding becomes available to counties through the American Rescue Plan, the recommendations proposed in this report can be used as a roadmap to identify strategic uses of federal dollars to invest in enhanced technological, physical, and service delivery capacity. This report outlines recommendations to identify efficiencies and help maximize the impact of the Fire Department's available resources through demand-driven deployment, call response triage tactics, and performance management, as well as technology and process improvements. If implemented, these changes will allow the infusion of flexible federal dollars to be directed to forward-looking strategic investments to improve the speed, access, and quality of services to the community.

Department orientation

Mission statement: The Fire Department's mission is to serve and safeguard the community from the impacts of fires, medical emergencies, environmental emergencies, and natural disasters through leadership, planning, education, prevention, code enforcement, and all-hazard emergency response.

Focus areas within the scope of this review:

1 Staffing and deployment policies related to emergency operations and response, including staffing productivity, utilization and crewing, schedule management and optimization, demand management and service levels

2 Fire prevention services, including a process review and inspections execution to include review of use of technology/automation

3 Cost recovery for services delivered, including Cost and demand for service within incorporated cities to include review of long-term budget/financial planning for property tax utilization

4 Aviation financial management, including the budgeting process within aviation to include maintenance funds allocations and utilization

Adopted budget (2020/21):

$89.2M

Operating Expenses

$3.3M

Capital Expenses

274

Full-time Equivalents (FTE)

County benchmarks:

The county benchmarks of Contra Costa County, Orange, San Bernardino County, and Ventura County were chosen based on Fire Districts which had the same structure as the Santa Barbara Fire Department in terms of contracts with incorporated cities. Please refer to Appendix B for detailed information.

	Santa Barbara	Average
2020 Fire Dept FTE	274	910
Percent of Enterprise (FTEs)	6%	6%
2020 Fire Dept Budget	$102,153,500	$346,849,236
Percent of Enterprise (budget)	9%	9%

Organizational structure

Fire Chief
Mark Hartwig

Administration & Support

Fire Prevention

Emergency Operations
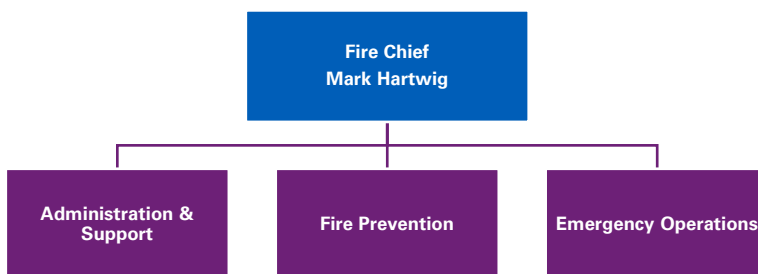
Commendations

Investments in technology enablement

The Department has outfitted fire apparatus with mobile data computers (MDCs) and iPads, which allow the Department to access CAD data, view maps and routes to an incident, and record incident notes. Firefighting in California has become more challenging than ever, as departments grapple with an expanded "fire season" and extreme weather. Investing in leading practice technological tools will allow the Department to manage this increased workload most efficiently. This report includes recommendations to further support the Department's efforts to utilize technology to fulfill its mission most efficiently.

Initial implementation of data-driven deployment and call triage strategies

The Department deploys data tracking, response time analysis, and call triage to guide its strategy to respond to emergency calls. For example, in rural areas with higher travel times for fire apparatus, the Department has implemented 4-0 staffing to better protect community and firefighter safety. Additionally, the Department sends an ambulance alone, rather than an ambulance and an engine, to medical incidents in nursing homes where there is a nurse on staff who has assessed the incident and determined it to be low acuity. This proportional response helps ensure that Fire Department staff capacity is not disproportionately consumed by low-acuity medical calls.

Use of engine companies for inspections

The Department's inspections program is designed to help ensure that businesses and buildings adhere to local fire ordinances and the provisions of the California Fire Code (CFC). Lower-risk and less complex inspections are delegated to the Department's engine companies, while high-occupancy, high-hazard, and complex inspections are delivered by specialized Inspections Services staff. This delegation of labor allows the Department to efficiently manage inspections workload and to distribute this workload across the Department. Engine company staff also noted that these inspections provide an opportunity for them to gain a basic familiarity with structures in their jurisdiction in a nonemergency situation. This report includes recommendations to further streamline inspections-related workload.

Commitment to effective internal communication

Across interviews, it was noted that department staff members feel they receive clear direction and communication from leadership under the current fire chief and administration, and that they are encouraged to provide feedback in the spirit of an open-door policy throughout the Department.

Demonstrated commitment and strong morale

At all levels, there was demonstrated commitment to the mission of the Department—whether it be responding to medical incidents, to fires within the County and across the state, or to other community needs. Additionally, high morale was a consistent theme throughout interviews and focus groups. There have been many unprecedented circumstances within the last year—most notably the COVID-19 pandemic and the increased fires across the state. Despite these difficult situations, it was apparent that personnel remain deeply committed to the department's mission, think highly of their colleagues, and demonstrate a high degree of resiliency.

Renew '22 Mapping

The recommendations made within the operational and performance review have been aligned to the Renew '22 Transformation Behaviors to help ensure that the recommendations are driving toward the Renew '22 strategic vision, as seen in Figure 1 below. The blue tiles identify the Renew '22 Transformation Behaviors that align to each recommendation.

			Transformation Behaviors				
			Alignment with Vision	Data-Driven Decision-Making	Strategic Thinking	Risk Taking	Collaborative Problem-Solving
Department Recommendations	1.1	Expand data-driven, demand-based staffing, leveraging geographic and temporal trends in calls for service	■	■	■	■	■
	1.2	Revise emergency medical protocols to more efficiently and effectively triage and manage demand	■	■	■	■	■
	1.3	Better define CAD problem and incident types to accurately capture incident and response data	■	■	■	■	
	2.1	Enhance processes for tracking the cost of services delivered and revenue generated by Tax Rate Area (TRA) within the County, as well as cost recovery for Mutual Aid provided to jurisdictions outside of the County, to better track the costs and reimbursements of the Department's services	■	■	■	■	■
	2.2	Develop more transparent and equitable cost-sharing processes for Air Support Unit between Sheriff and Fire to support fair allocation of costs and increased transparency	■	■	■		■
	2.3	Better forecast and prioritize capital planning in conjunction with General Services, to undertake a strategic prioritization of projects	■	■	■		
	2.4	Create an inventory management strategy to accurately account for assets and help minimize risk	■	■	■		■
	3.1	Implement processes to enhance consistency, streamline workload, and measure performance of inspections program	■		■	■	■
	4.1	Strengthen performance measurement processes to enable continuous improvement and regular evaluation of progress toward established targets	■		■		■
	5.1	Better enable the training of new staff and establish pipelines for recruiting talent to enhance workforce development, succession planning, and Department resiliency.	■	■	■		■
	6.1	Digitalize paper processes to alleviate workload on engine companies, dispatch, and administration	■	■			■
	6.2	Develop information technology plan and process to assess and establish current and future technology needs	■	■		■	■

Figure 1: Source: KPMG

Prioritized Timeline

The following report consists of 12 recommendations in six focus areas. Recommended timing and prioritization for each recommendation are depicted below. Please note that these recommendations are likely to be updated, and many initiatives may extend beyond the target timelines as defined below.

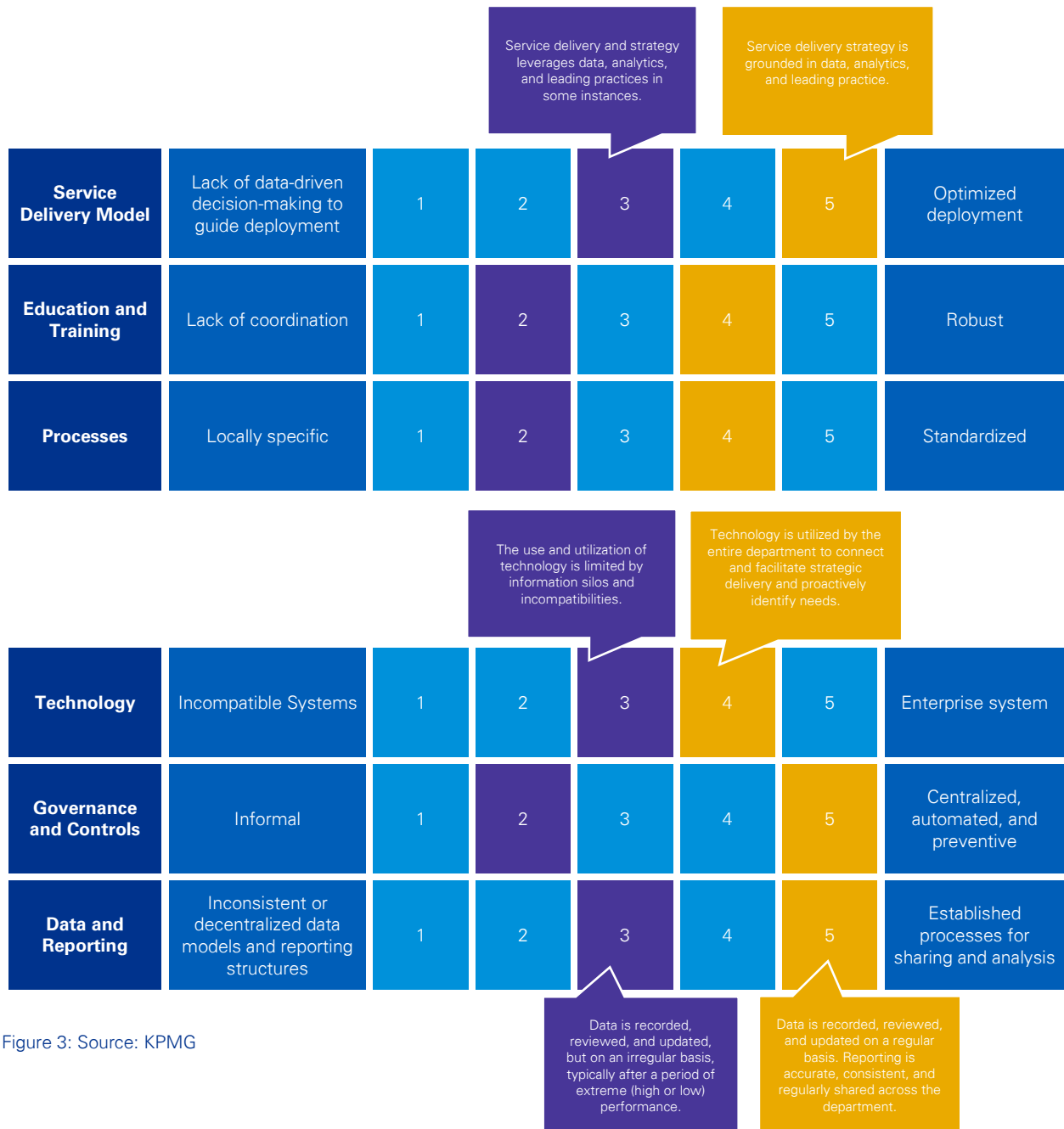| High Level Timeline																
		Recommendations	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Data-driven deployment	1.1	Expand data-driven, demand-based staffing, leveraging geographic & temporal trends in calls for service				■	■	■	■	■				
	1.2	Revise emergency medical protocols to more efficiently and effectively triage and manage demand	■	■	■	■	■							
	1.3	Better define CAD problem and incident types to accurately capture incident and response data	■	■	■	■								
Financial management	2.1	Enhance processes for tracking the cost of services delivered and revenue generated by Tax Rate Area (TRA) within the County, as well as cost recovery for Mutual Aid provided to jurisdictions outside of the County.						■	■	■	■	■	■	■
	2.2	Develop more transparent and equitable cost sharing processes for Air Support Unit between Sheriff and Fire to support fair allocation of costs and increased transparency						■	■	■				
	2.3	Better forecast and prioritize capital planning, in conjunction with General Services, to undertake a strategic prioritization of projects						■	■	■				
	2.4	Create an inventory management strategy to accurately account for assets and minimize risk						■	■	■				
Inspections process	3.1	Implement processes to enhance consistency, streamline workload, and measure performance of inspections program									■	■	■	
Performance management	4.1	Strengthen performance measurement processes to enable continuous improvement and regular evaluation of progress towards established targets	■	■	■	■	■							
Workforce development	5.1	Better enable the training of new staff and establish pipelines for recruiting talent to enhance workforce development, succession planning, and Department resiliency.										■	■	■
Technology enhancement	6.1	Digitalize paper processes to alleviate workload on engine companies, dispatch, and administration	■	■	■	■	■							
	6.2	Develop information technology plan and process to assess and establish current and future technology needs										■	■	■

Figure 2: Source: KPMG

Department recommendations

Department recommendations relate to the systems and processes needed for the Department to more efficiently manage its operations in delivering public safety services to County residents.

#	Department recommendations
Data-driven deployment	
1.1	Expand data-driven, demand-based staffing, leveraging geographic and temporal trends in calls for service
1.2	Revise emergency medical protocols to more efficiently and effectively triage and manage demand
1.3	Better define CAD problem and incident types to accurately capture incident and response data
Financial management	
2.1	Enhance processes for tracking the cost of services delivered and revenue generated by Tax Rate Area (TRA) within the County, as well as cost recovery for Mutual Aid provided to jurisdictions outside of the County, to better track the costs and reimbursements of the Department's services
2.2	Develop more transparent and equitable cost-sharing processes for Air Support Unit between Sheriff and Fire to support fair allocation of costs and increased transparency
2.3	Better forecast and prioritize capital planning, in conjunction with General Services, to undertake a strategic prioritization of projects
2.4	Create an inventory management strategy to accurately account for assets and help minimize risk
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3.1	Implement processes to enhance consistency, streamline workload, and measure performance of inspections program
Performance management	
4.1	Strengthen performance measurement processes to enable continuous improvement and regular evaluation of progress toward established targets
Workforce development	
5.1	Better enable the training of new staff and establish pipelines for recruiting talent to enhance workforce development, succession planning, and Department resiliency.
Technology enhancement	
6.1	Digitalize paper processes to alleviate workload on engine companies, dispatch, and administration
6.2	Develop information technology plan and process to assess and establish current and future technology needs

Operating model maturity scale

Figure 3 below summarizes the Fire Department's current-state operating model across six design layers, as well as the target state that can be achieved by implementing the recommendations in the following sections. Each operating model layer describes a continuum of maturity that articulates how the Fire Department can be designed to deliver services optimally. While the highest priority opportunity areas are detailed in call-out boxes in the diagram below, full descriptions of the six design layers can be found in Appendix G and Appendix H.

Service delivery and strategy leverages data, analytics, and leading practices in some instances.

Service delivery strategy is grounded in data, analytics, and leading practice.

		1	2	3	4	5	
Service Delivery Model	Lack of data-driven decision-making to guide deployment	1	2	3	4	5	Optimized deployment
Education and Training	Lack of coordination	1	2	3	4	5	Robust
Processes	Locally specific	1	2	3	4	5	Standardized

The use and utilization of technology is limited by information silos and incompatibilities.

Technology is utilized by the entire department to connect and facilitate strategic delivery and proactively identify needs.

		1	2	3	4	5	
Technology	Incompatible Systems	1	2	3	4	5	Enterprise system
Governance and Controls	Informal	1	2	3	4	5	Centralized, automated, and preventive
Data and Reporting	Inconsistent or decentralized data models and reporting structures	1	2	3	4	5	Established processes for sharing and analysis

Data is recorded, reviewed, and updated, but on an irregular basis, typically after a period of extreme (high or low) performance.

Data is recorded, reviewed, and updated on a regular basis. Reporting is accurate, consistent, and regularly shared across the department.

Figure 3: Source: KPMG

Recommendations overview

Department recommendations relate to the systems and processes needed for the Fire Department to more efficiently manage its operations in delivering public safety services to County residents.

#	Department recommendations
Data-driven deployment	
1.1	Expand data-driven, demand-based staffing, leveraging geographic and temporal trends in calls for service
1.2	Revise emergency medical protocols to more efficiently and effectively triage and manage demand
1.3	Better define CAD problem and incident types to accurately capture incident and response data
Financial management	
2.1	Enhance processes for tracking the cost of services delivered and revenue generated by Tax Rate Area (TRA) within the County, as well as cost recovery for Mutual Aid provided to jurisdictions outside of the County, to better track the costs and reimbursements of the Department's services
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5.1	Better enable the training of new staff and establish pipelines for recruiting talent to enhance workforce development, succession planning, and Department resiliency.
Technology enhancement	
6.1	Digitalize paper processes to alleviate workload on engine companies, dispatch, and administration
6.2	Develop information technology plan and process to assess and establish current and future technology needs

Data-driven deployment

1.1	Expand data-driven, demand-based staffing, leveraging geographic and temporal trends in calls for service

The Department currently employs a 24-on/24-off four day work schedule, in which a 24-hour shift is followed by 24 hours of off-duty time for a period of four days, this is then followed by four full days off-duty time, another 24-on/24-off four day schedule and six days of off-duty time. Additionally, the Department employs a three-person ("3-0") or four-person ("4-0") staffing model on fire engines depending on the station, with these staffing variations based on response times and geography. Stations that are farther afield from backup utilize 4-0 staffing, while stations that are located in closer proximity to other stations—and can more quickly receive backup—utilize 3-0 staffing. The Department has expressed a desire to move toward universal 4-0 staffing. A performance audit by City Gate Associates recommended that the Department prioritize adopting 4-0 staffing at stations that protect high population densities or are located too far from other units for quick support.[1]

Regardless of whether engines use 3-0 or 4-0 staffing, station staffing is flat across hour of day, day of week, and month of year, with the exception of "red flag weeks"—periods in which there is a heightened fire risk due to weather. The Department should consider transitioning from this static staffing model to a demand-based, workload-driven approach that aligns staffing and overtime use to trends in demand—both by location and by time while also taking into account readiness and weight of attack issues. By aligning staffing and overtime usage to geographic and temporal trends in calls for service, the Department can increase the efficiency of its use of personnel hours and overtime. For example, the Department may consider scheduling overtime hours or additional vehicles for high-demand periods. Similarly, the Department may consider allowing engine staffing to fall from 4-0 to 3-0 during time periods or in locations that typically experience low demand.

The graphs on the following pages illustrate trends in the Department's workload by year, by month, by hour of day, by day of week, and by station.[2] With the assistance of the Department, "problem types" drawn from the County's Computer-aided Dispatch (CAD) data were grouped into five categories: fire calls, medical emergency calls, combined fire and medical calls, mutual aid, and other. This mapping can be found in Appendix C.

As shown in the graph below, Department-wide workload has fallen in recent years, from 64,631 total hours in FY15 to 54,785 in FY19, with a spike in FY17 with 109,249 total hours.[3] Across FY15-FY18, Mutual Aid was the highest percentage of workload hours: 56 percent in FY15, 52 percent in FY16, 61 percent in FY17, and 56 percent in FY18. In FY19, Mutual Aid was the second largest driver of workload hours behind Fire calls, at 29 percent and 38 percent of workload hours respectively. The

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[1] https://www.citygateassociates.com/wp-content/uploads/samples/V1-Santa_Barbara_County_Final_Report_(02-02-12).pdf
[2] Workload is not derived exclusively from tracking call volumes but reflects the sum of the minutes spent responding to a call across all responding personnel. For this analysis, workload was calculated using CAD data from the Department according to the following methodology: First, the total call count by call type was multiplied by the length of time associated with each call (including travel time and length of time on scene) and the number of responding personnel per call. This results in the total number of hours utilized on calls for service.
[3] CAD data was received for the timeframe of January 1, 2014 through September 30, 2020. There are 67,349 minutes of workload in FY19 that could not be included in the chart below as the incident was not categorized properly in the CAD data provided.

Department's staffing experienced slight growth of approximately 4 percent and overtime experienced a growth of approximately 9 percent during this same time period.[4]

Total Department Workload (in minutes) compared to FTEs

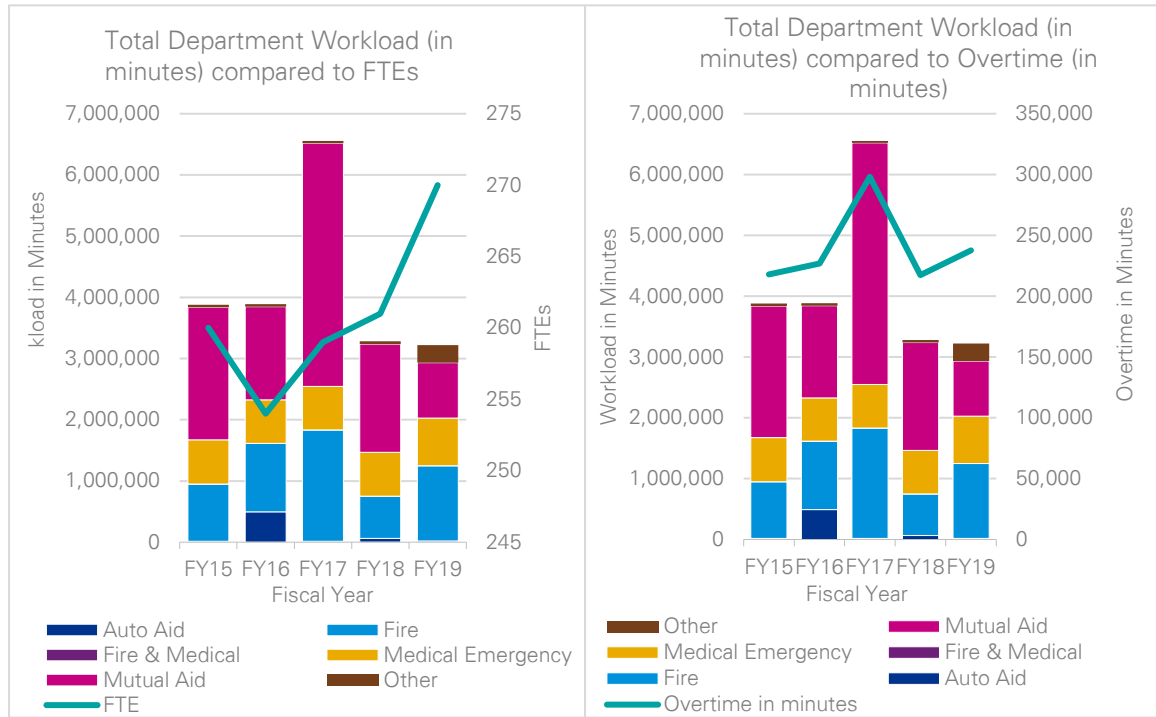## Total Department Workload (in minutes) compared to Overtime (in minutes)

Figure 4: Source: KPMG analysis of CAD data, budget data

As shown in the graph below, an analysis of the Department's call for service workload by month of year shows clear trends in demand. The winter months of January through May have significantly less workload than the summer months of June through October.

Average Department Workload (in minutes) by Month for FY15-19
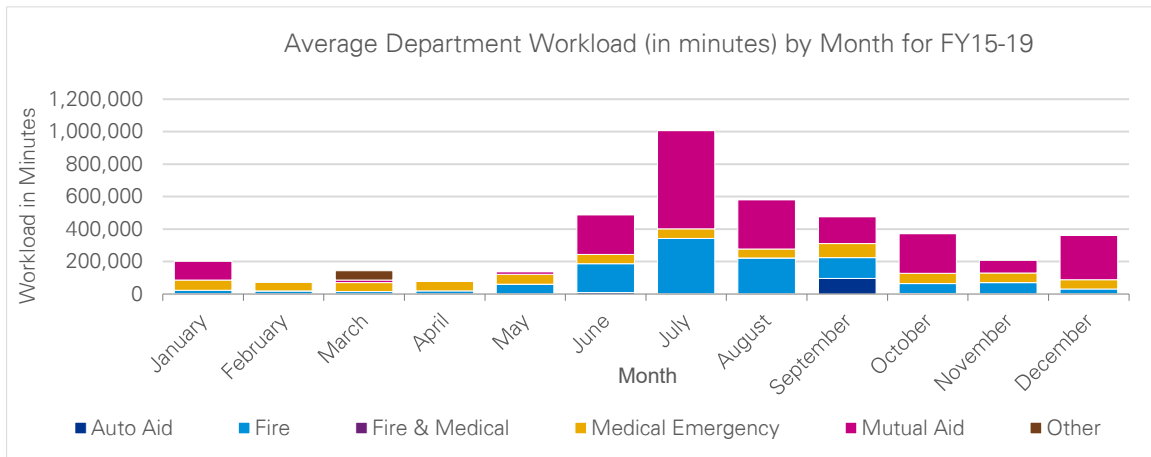
Figure 5: Source: KPMG analysis of CAD data

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[4] Overtime was calculated by the sum of Line Items Accounts 6300 Regular OT, 6301 Reimbursable OT, and 6310 Constant Staffing OT.

When mutual aid is excluded, as shown in the graph below, the Department's busy season shifts earlier in the year, with workload peaking from May to September and largely driven by in-county fires, as opposed to medical emergency calls. The high "other" workload in March is driven by one outlier call (master incident number FSBC200003636 in the CAD data) that consumed 4,419 workload hours in March 2020.
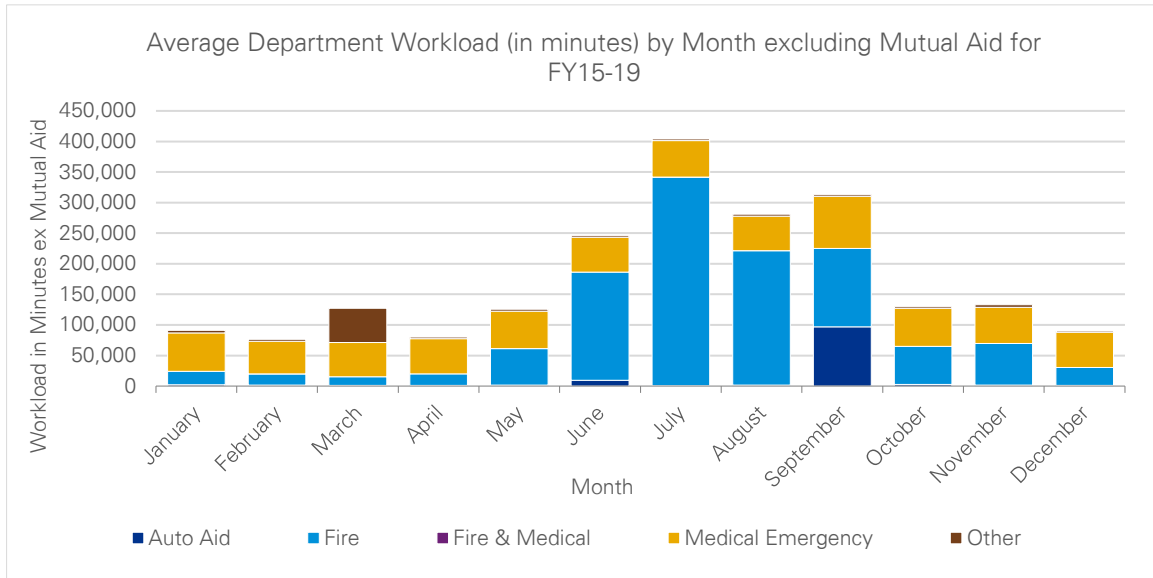
Figure 6: Source: KPMG analysis of CAD data

In addition to these monthly variations in workload, the Department experiences clear trends in demand by hour of day. The graph below utilizes a 24-hour scale, with Hour 0 representing the midnight hour. As illustrated, Department workload is typically lightest in the early morning (from to 00:00 to 7:00) and increases throughout the day with spikes at 8:00 and between 13:00 to 20:00. The high "other" workload at 8:00 appears driven by the same outlier mentioned previously, which occurred on March 3, 2020 and consumed 4,419 workload hours.
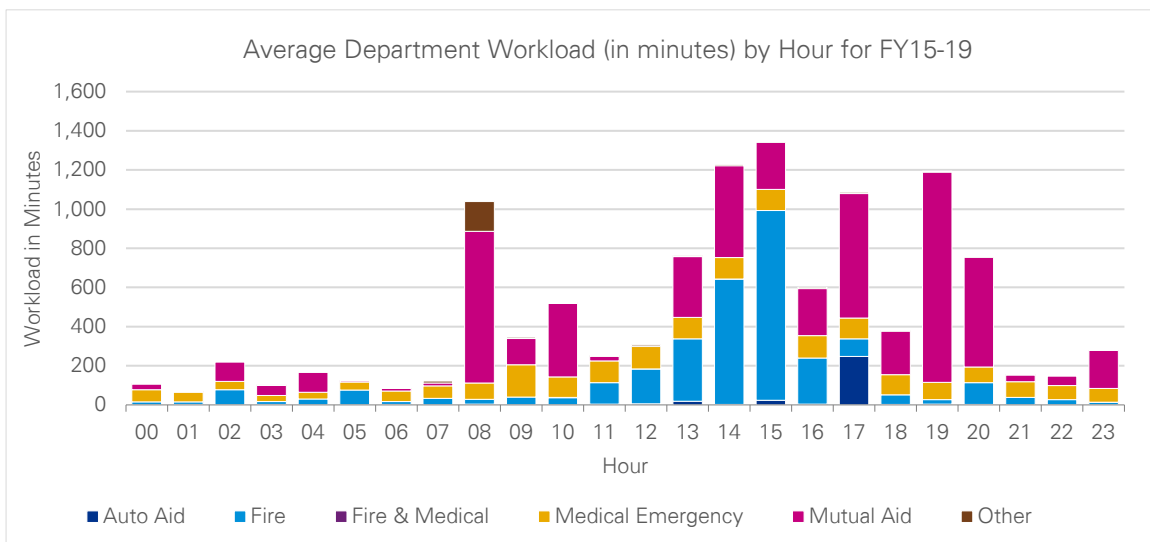
Figure 7: Source: KPMG analysis of CAD data

When mutual aid is removed from the analysis, as shown in the graph below, the Department's workload peaks in the early afternoon, with peak hours from 12:00 to 16:00. As noted previously, the high "other" workload in at 8:00 appears driven by an outlier call.

Average Department Workload (in minutes) by Hour excluding Mutual Aid for FY15-19
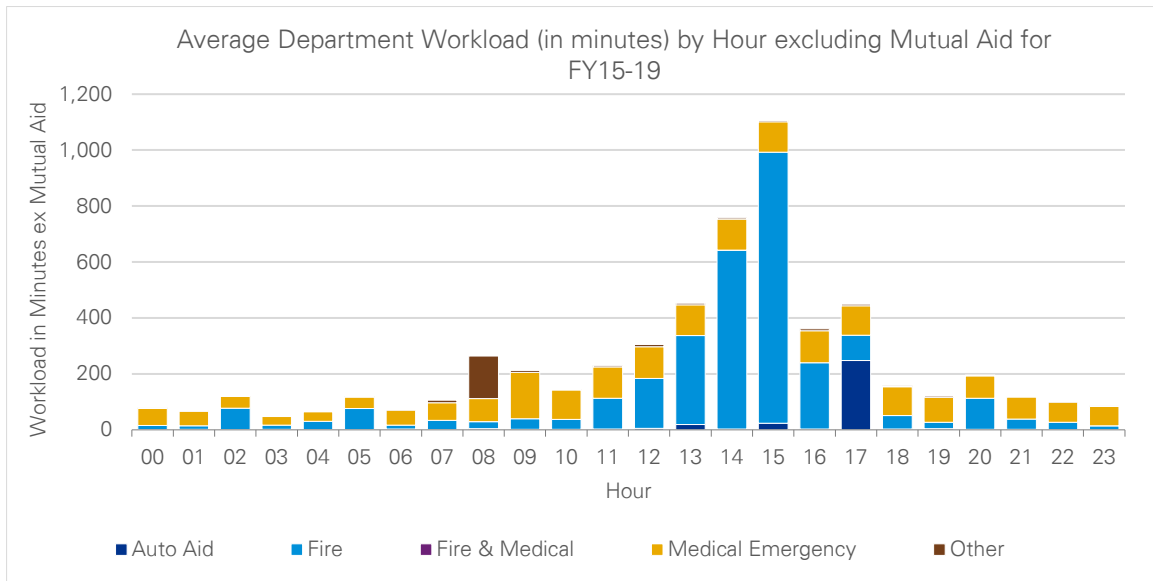
Figure 8: Source: KPMG analysis of CAD data

CAD analysis also demonstrates trends in demand by day of week. When Mutual Aid workload is considered, Mondays experience the heaviest demand. When this out-of-county workload is removed, Department workload peaks on Thursdays and Fridays.

Average Daily Department Workload (in minutes)

Average Daily Department Workload (in minutes) excluding Mutual Aid
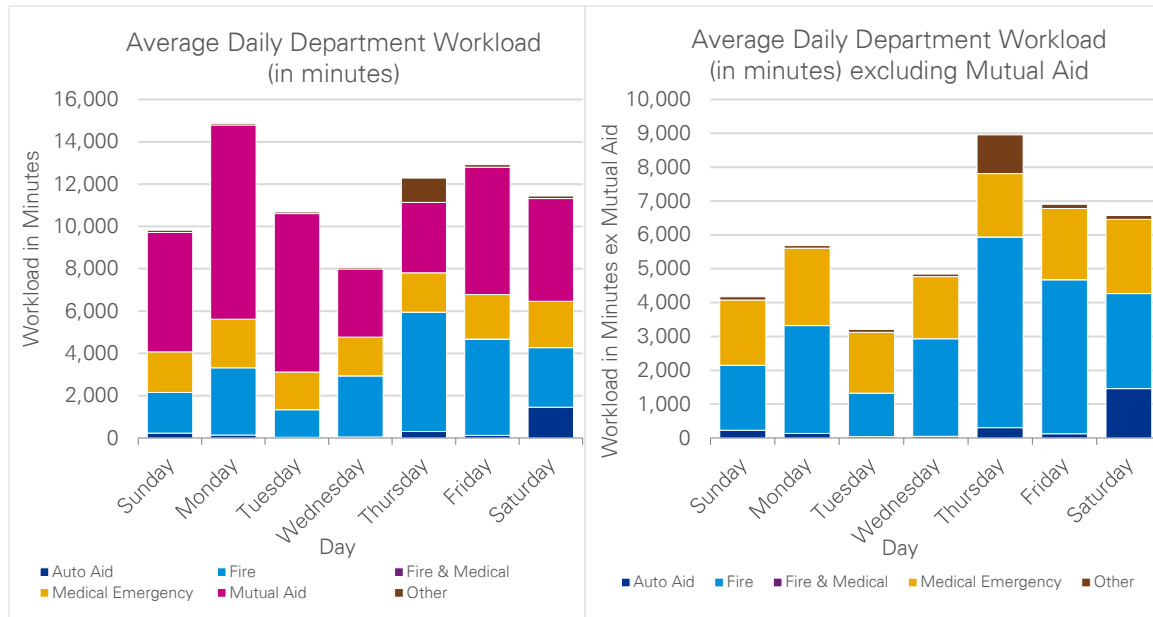
Figures 9 and 10: Source: KPMG analysis of CAD data

Finally, the Department experiences clear trends in demand by station, as shown in the graph below. Stations are listed by number on the graph (for example, Station 11 is listed as "11" and so on). As illustrated below, Stations 12, 26, 31, 32, 34, as well as Headquarters have had historically the largest

workload when compared to other stations. Station 11, 21, 23, 24, and 27 have had comparatively low workload.[5] Stations that employ 4-0 staffing are denoted with an asterisk (*).
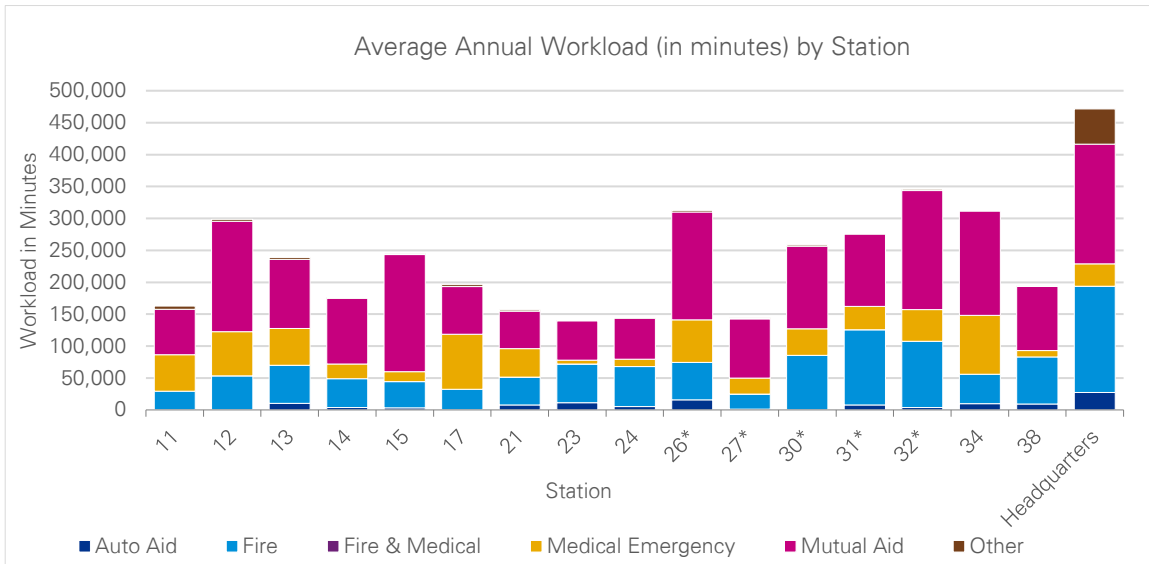
Figure 11: Source: KPMG analysis of CAD data

When mutual aid is excluded from the analysis, stations 12, 26, 31, 32, 34 and Headquarters still experience comparatively high workload, as do stations 13, 17, and 30. Of these high workload stations, medical emergencies constitute a majority of workload at stations 12, 13, 17, 26, and 34. Fire calls comprise a majority of workload at high volume stations 30, 31, 32, and Headquarters. The high "other" workload at Headquarters appears driven by the same outlier mentioned previously, which occurred on March 3, 2020 and consumed 4,419 workload hours. Stations that currently employ 4-0 staffing are denoted with an asterisk (*).
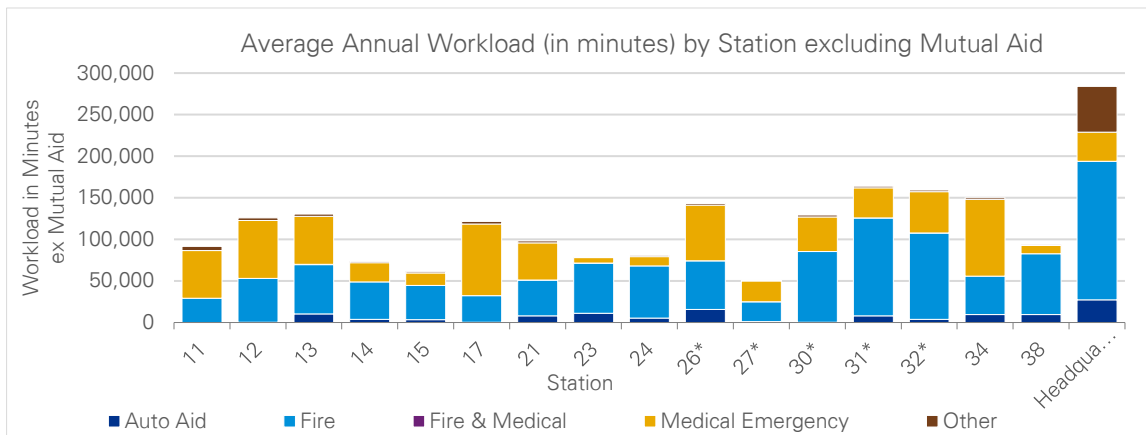
Figure 12: Source: KPMG analysis of CAD data

The heat map below illustrates the density of calls for service in Santa Barbara County, with the area around the City of Santa Barbara receiving the most calls for service, and additional hot spots located in the City of Santa Maria, City of Lompoc, and Santa Ynez Valley.[7]
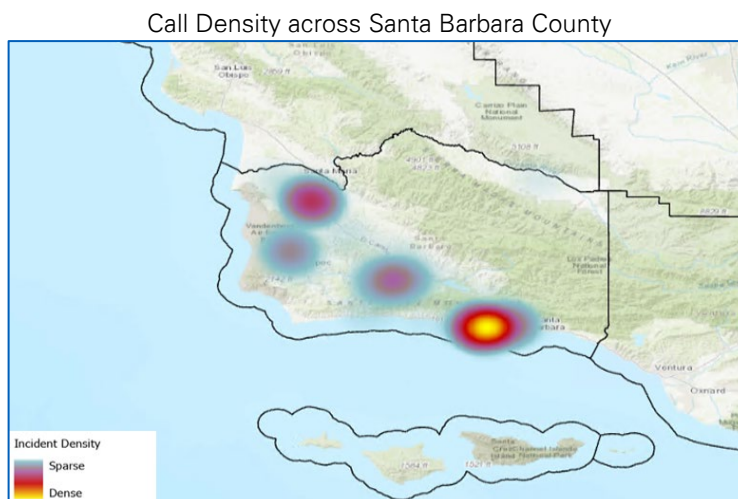
Call Density across Santa Barbara County

Figure 13: Source: KPMG analysis of CAD data

In order to optimize staffing and overtime use, to minimize response times, and to increase the efficiency of the Department's use of personnel and overtime hours, there is opportunity for the Department to:

Action One: Proactively schedule additional staff for high workload periods to increase capacity to respond to calls for service.

The Department should consider creating a 12-hour shift or overtime shift to implement 4-0 staffing during peak hours or in areas with high demand. The creation of these shifts may be dependent on expanding the pool of eligible staff.

Department leadership has a goal of implementing 4-0 staffing at all stations; however, personnel constraints currently require the Department to operate with a blend of 3-0 and 4-0 staffing. According to the National Fire Protection Association (NFPA), four-person staffing is the optimal number of personnel to operate fire apparatus for maximum efficiently and crew safety. Additionally, OSHA's "two-in/two-out" rule requires two firefighters to remain outside a "Immediately Dangerous to Life" zone, such as a burning building, during a fire response whenever two firefighters enter the building. As a result, an engine with 3-0 staffing may need to wait for an additional vehicle to arrive before personnel can enter an "Immediately Dangerous to Life" zone.

The Department currently determines which stations utilize 4-0 staffing based on geography and response times: stations with longer wait times for backup utilize 4-0 staffing. However, workload data can also be used to enhance this analysis. For example, the Department should consider scheduling 4-0 staffing during periods in which stations are most likely to experience structure fire calls or even just high workload, such as the 8:00 to 20:00 time periods shown in Figure 7 and Figure 8. It should be noted that the Arlington County Fire Department[8], Fairfax County Fire Department[9] and LA County Fire

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[7] Density is based on the kernel density calculation, which shows the concentration of points respective to the concentrations around them.
[8] https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/22/2019/07/ACFD-Overtime-Final-Report-7-31-19.pdf
[9] https://www.fairfaxcounty.gov/hr/sites/hr/files/assets/documents/hr/frd-compensation_and_org_review_study.pdf

Department all make use of scheduled overtime in order to staff for peak demand times. Recognizing that each Fire Department is different in terms of structure and culture, the concept of scheduling additional staff for high workload period is fundamental to increase capacity to respond to calls for service.

The Department also determines daily minimum staffing requirements for core operational personnel using a "draw down calculation." The calculation's primary assumption is the Department staffs three shifts of four personnel at each of the 16 stations but is able to respond to core demand with two shifts of four personnel at every station. The two shifts of four personnel at every station represents the minimum staffing requirement, or the "baseline" for the Department. The draw down is then calculated by taking the number of core operational personnel available and subtracting the number of personnel on leave (short-term leave, long-term leave, training, etc.) and subtracting 17 personnel that make up the five engine strike team – which is set aside daily to be at the ready and respond to mutual aid calls. If the number from this calculation is above the baseline, the Department can make the decision to send additional personnel to respond to mutual aid calls. It should be noted that this baseline number can evolve based on the needs inside and outside of the Fire District. The Department should evaluate if the strike team can be staffed up or down depending on the period of core demand. For example, the strike team can be shifted to core demand during high periods of core demand in order to increase the Department's capacity to respond to calls within the Fire District.

Action Two: Explore options to deploy fast-response vehicles to respond to medical calls.

The Department can schedule additional vehicles, such as "fast-response vehicles" (i.e., a non-transporting emergency medical services (EMS) vehicle), during peak hours to increase the number of apparatus available to respond to calls. These fast-response vehicles can be dispatched to independently manage low-acuity EMS calls that do not require transport to a hospital, thereby reducing wear and tear on engines and freeing up staff to manage higher-acuity calls. These fast-response vehicles are recommended in the 2020 City Gate report, particularly to manage calls in the urban area near the University of California Santa Barbara.

Additionally, as an intermediate option, these fast-response vehicles can be deployed with both an engine and ambulance (that is, in addition to the Department's current response protocols), arrive quickly at the scene of a call in advance of the arrival of a fire apparatus, and can call off the fire apparatus if the incident does not require an advanced life support (ALS) response. Basic life support (BLS) is delivered by EMTs, rather than paramedics, to patients who have a lower acuity of need. An ALS response requires paramedic staffing, as these professionals can deliver a wider array of treatment options, including drug administration and intravenous fluids. ALS responses are required for patients who need a higher level of care, and it is these high-acuity calls at which engine staffing may be most useful.

Based on the CAD data workload analysis, the fast-response vehicle(s) may be most useful during the 12-hour shift from 8:00 to 20:00 where demand for EMS is highest (shown in Figure 7 and Figure 8). Based on best-practice research and application by other fire departments, the vehicle can be staffed by a certified nurse practitioner and/or EMT(s), who can evaluate the patient and determine if this is a low-acuity call that can be better treated at home or referred to a primary care physician. Sending both a fire apparatus and ambulance to every medical call regardless of priority code, incident, or problem type may lead to unnecessary workload and cost to the Department (for example, excessive response can contribute to fire apparatus wear and tear). Benefits of the fast-response vehicle(s) include the ability for the Fire Department to keep more apparatus available for acute medical or fire-related emergencies. Fast-response vehicles have been implemented by the County of Santa Cruz[10] to better respond to calls and protect residents and first responders.

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[10] https://www.cityofsantacruz.com/Home/Components/News/News/8739/36

The Department notes that they are currently exploring options to deploy EMS fast-response vehicles.

Action Three: Review scheduling of activities such as training, inspections, and community engagement during low-demand times.

There is an opportunity for the Department to redistribute more nonemergency workload to the winter months—specifically from January through May as shown in Figure 5 and Figure 6—where the CAD analysis demonstrates that workload typically declines. Examples of workload that can be shifted to these lower-demand months include mandatory inspections, installing and testing smoke alarms,[11] trainings, certification renewals, and other administrative tasks. It should be noted that in 2021, the Department scheduled five of twelve trainings during the months of January to May. Shifting more tasks to low workload months will free up Fire Department staff capacity during peak fire season when workload is at its highest and allow the Department to better balance workload over the course of a calendar year. Recommendation 3.1 outlines specific actions to best manage inspections workload, including scheduling this work for low-demand periods.

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[11] https://datasmart.ash.harvard.edu/news/article/predicting-fire-risk-from-new-orleans-to-a-nationwide-tool-846

| 1.2 | **Revise emergency medical protocols to more efficiently and effectively triage and manage demand** |

The Department is responsible for providing EMS within the Santa Barbara County Fire Protection District. The County currently contracts for ambulance services through AMR, except for three ambulances that are owned by the Department. The Department typically dispatches a fire engine and ambulance to nearly all medical emergency calls, (please see Appendix C for a list of call types are categorized as medical calls), which encompass approximately 70 percent of all call volume. The one exception to this policy is medical calls from nursing homes where there is a nurse on staff who has assessed the incident and determined it to be low acuity; the County will respond to these calls for service with an ambulance alone. Currently, ambulances are staffed with one Emergency Medical Technician and one Paramedic, while a fire apparatus is typically crewed with three to four personnel (including a Fire Captain, Engineer, Firefighter, and Firefighter Paramedic or EMT).

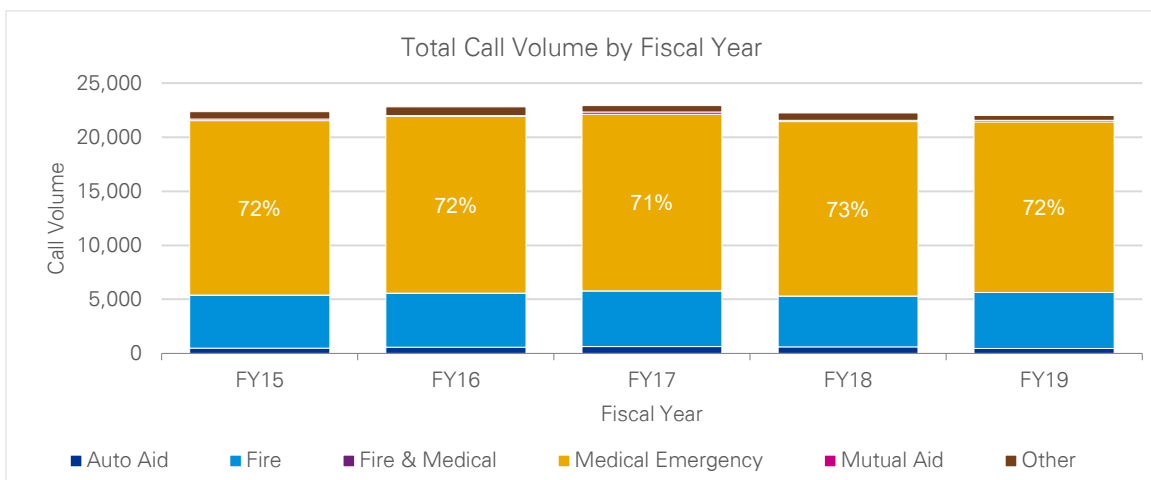The below graph illustrates the total number of calls by problem type by fiscal year from FY15-FY19.

Figure 14: Source: KPMG analysis of CAD data

Total Calls by Type					
Type	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**
Fire	22%	22%	23%	21%	24%
Fire & Medical	0%	0%	0%	0%	0%
Medical Emergency	72%	72%	71%	73%	72%
Mutual Aid	3%	3%	4%	3%	3%
Other	3%	4%	3%	3%	2%

Figure 15: Source: KPMG analysis of CAD data

It is important to note that while medical emergencies make up the majority of the Department's calls for service, they consume significantly less workload than fire-related calls. Medical emergencies consume approximately 72 percent of call volume per year on average, while fire calls consume 22 percent, and mutual aid consumes 3 percent of call volume. Meanwhile, mutual aid consumes approximately 51 percent of workload per year on average, followed by Fire calls and then Medical Emergencies, as illustrated in the graphs below. The high "other" workload in FY19 appears driven by one outlier call (master incident number FSBC200003636) that consumed 4,419 workload hours.
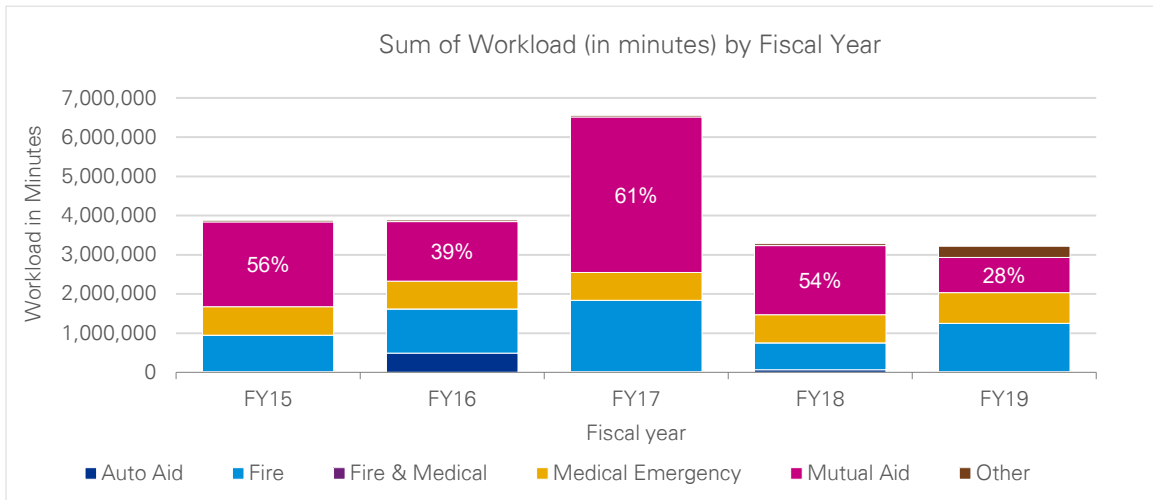
Figure 16: Source: KPMG analysis of CAD data

Percentage of Workload					
Type	FY15	FY16	FY17	FY18	FY19
Fire	24%	29%	28%	21%	37%
Fire & Medical	0%	0%	0%	0%	0%
Medical Emergency	19%	18%	11%	22%	24%
Mutual Aid	56%	52%	61%	56%	28%
Other	1%	1%	1%	1%	9%

Figure 17: Source: KPMG analysis of CAD data

In responding to these calls for service, a fire apparatus is expected to arrive on the scene of a medical emergency within seven minutes of receipt of the call within an urban environment. It should be noted that the County has varied response time requirements based on incident location due to the diverse geography and population density of the County, as detailed in the table below:

Area	Census Population	Population Density	Response Target
Urban Area	Population of 49,999 to 500,000	499 to 999 persons per square mile	7 minutes or less
Semirural Area	Population of 2,500 to 49,999	99 to 499 persons per square mile	14 minutes or less
Rural Area	Population of less than 2,500	10 to 99 persons per square mile	28 minutes or less
Remote Area	Districts without census tracts	5 to 9 persons per square mile	No time requirement
Wilderness Area	Districts without census tracts	Less than 5 persons per square mile	No time requirement

Figure 18: Source: KPMG analysis of CAD data

To address the County's medical call volume using the most efficient deployment model, and to minimize response times for the most urgent medical calls, the Department should implement advanced triage protocols. There is opportunity for the Department to:

Action One: Revise dispatch protocols to expand use of an "ambulance alone" response to most efficiently respond to low-urgency medical calls.

Currently, the Department utilizes ProQA, a software that integrates the National Academies of Emergency Dispatch Protocols with the Department's computer system to assist the dispatcher in quickly determining the acuity of emergency calls. Current policy calls for both a fire apparatus and an ambulance to be dispatched to nearly all medical calls. This policy can result in the unnecessary deployment of the Department's fire engines to low-urgency calls, contributing to equipment wear and tear and reducing staff capacity to respond to the most urgent calls for service.

There is an opportunity to optimize current dispatch protocols to expand an "ambulance alone" category where, based on information gathered about the nature of a call, Dispatch can elect to send only an ambulance to low-acuity calls, without an accompanying engine. The Department currently sends an ambulance alone to medical incidents at nursing homes where there is a nurse on staff who has assessed the incident and determined it to be low acuity. Department leadership should assess whether this "ambulance alone" category can be expanded to call types beyond the nursing home calls described above, a model that has been implemented by the City of Toronto.[12] The Department has expressed interested in expanding its use of an "ambulance alone" category once the Regional Fire Communications Facility becomes fully operational.

The Department's dispatch protocols should be designed to provide specific questions for dispatchers to quickly and reliably determine the acuity of a caller's medical need and to ascertain whether to send either (1) an ambulance staffed with paramedics or (2) an ambulance in addition to a fire apparatus. These protocols could also be employed to deploy a third option—a fast-response vehicle staffed with a nurse practitioner for less-serious calls as described in Recommendation 1.1. It should be noted that

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[12] https://www.governing.com/archive/col-fire-departments-rethink-delivery-emergency-medical-services.html

transitioning the protocol methodology would require communication and coordination with AMR, as ambulance services are provided by both the Department and AMR through their contract with the Public Health Department.

Action Two: Create a telehealth program to separate nonemergency calls from emergency calls.

The Department should consider the creation of a telehealth program to divert medical calls that do not require an in-person evaluation or transportation to a hospital's emergency department. Under such a program, dispatchers would have the option to transfer appropriate calls to nurse practitioners, who will in turn, determine whether the caller can be diverted to telemedicine or referred to local urgent care or community clinics. Patients who do not require emergency care can be connected with a provider who can assess the patient's condition, provide a treatment plan, and even call in prescriptions to support the treatment. A telehealth system can act as a viable diversion program for the Department to utilize to most efficiently refer individuals for treatment in nonemergency settings when appropriate, ultimately keeping beds available in the hospital environment and reserving EMS responses to crisis situations. Similar models have been deployed by the D.C. Fire and EMS Department[13] as well as the Los Angeles Fire Department.[14] Commendably, the Department noted that they intend to implement a "nurse advice line" in partnership with local healthcare providers through an accredited EMD system once the Regional Fire Communications Facility is operational.

Action Three: Partner with LEMSA to stage ambulances in the highest-demand emergency calling areas in the fire protection district.

Staging vehicles in high-demand areas can minimize response times and increase the impact of personnel and equipment by facilitating shorter travel distances to a scene. Given that LEMSA has oversight of ambulance deployment policies, the Department may need to partner with them to achieve this. As illustrated by the graph below, medical emergencies constitute a majority of workload at stations 12, 13, 17, 26, and 34. These stations represent ideal candidate stations to pilot adding additional vehicles, such as additional ambulances or fast-response vehicles. Stations that currently employ 4-0 staffing are denoted with an asterisk (*).

Average Annual Workload (in minutes) by Station excluding Mutual Aid

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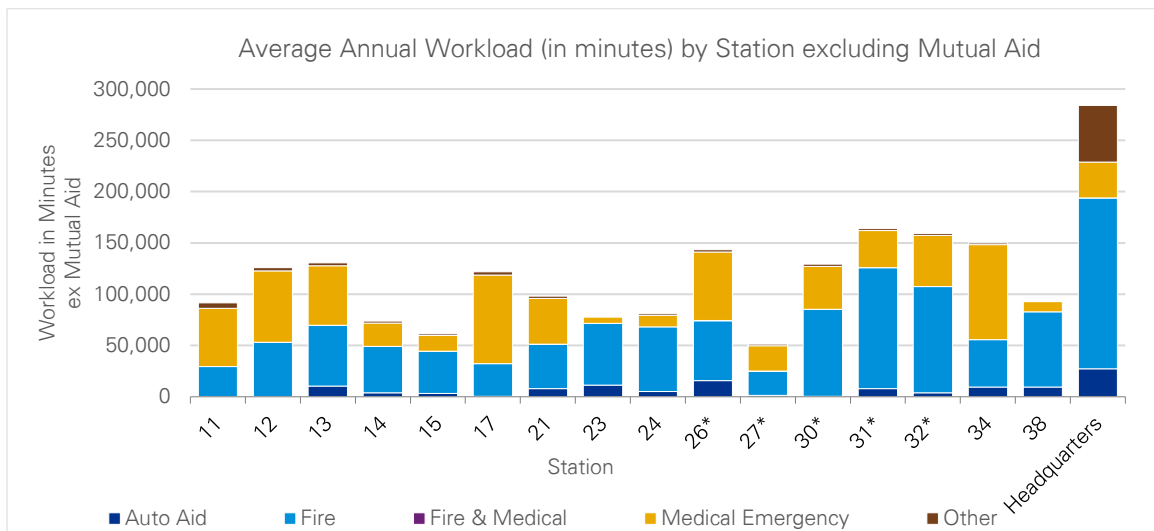
As illustrated by the heat maps below, medical calls are not distributed evenly throughout the County. During daytime hours, workload is clustered in the City of Santa Barbara and the City of Santa Maria, with smaller hot spots in the City of Lompoc and Santa Ynez Valley. Overnight, Santa Barbara and Santa Maria are responsible for an even larger share of calls and are the only two primary hot spots in the county.
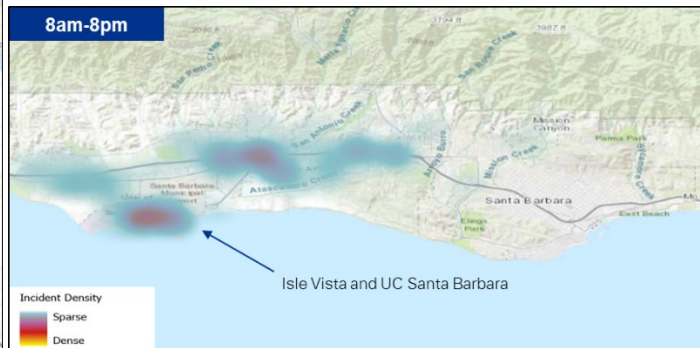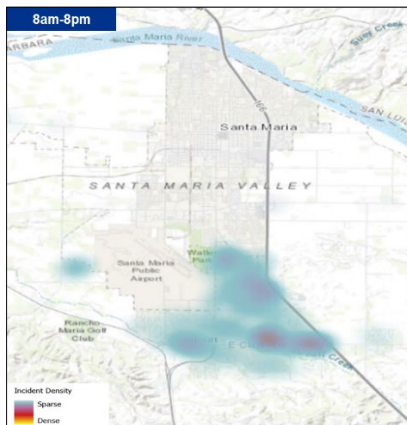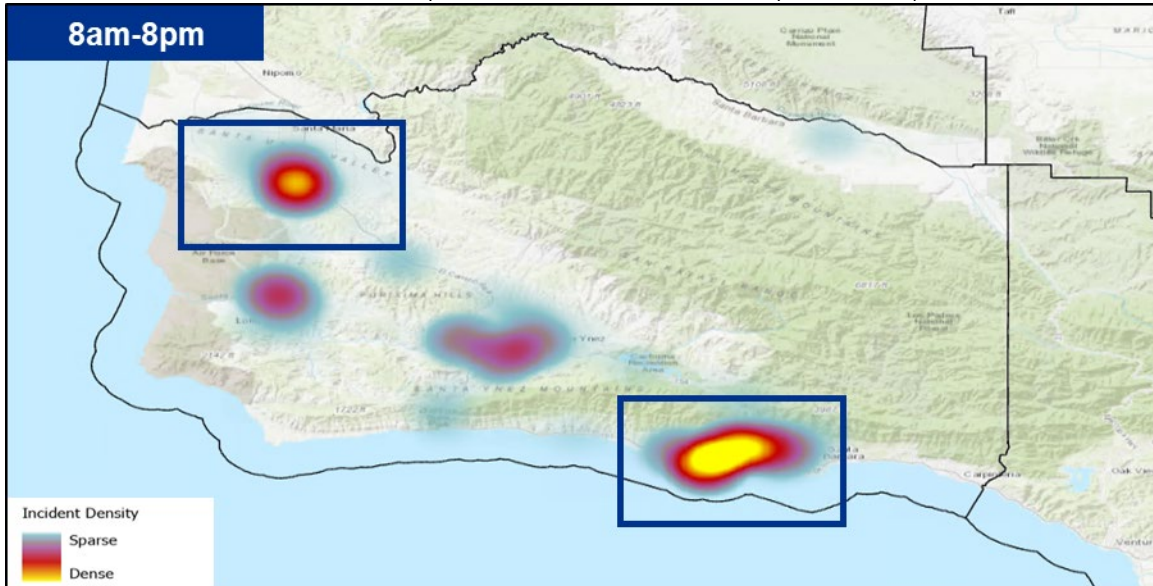
Medical Call Density across Santa Barbara County, 8 a.m.–8 p.m.

Figure 20: Source: KPMG analysis of CAD data

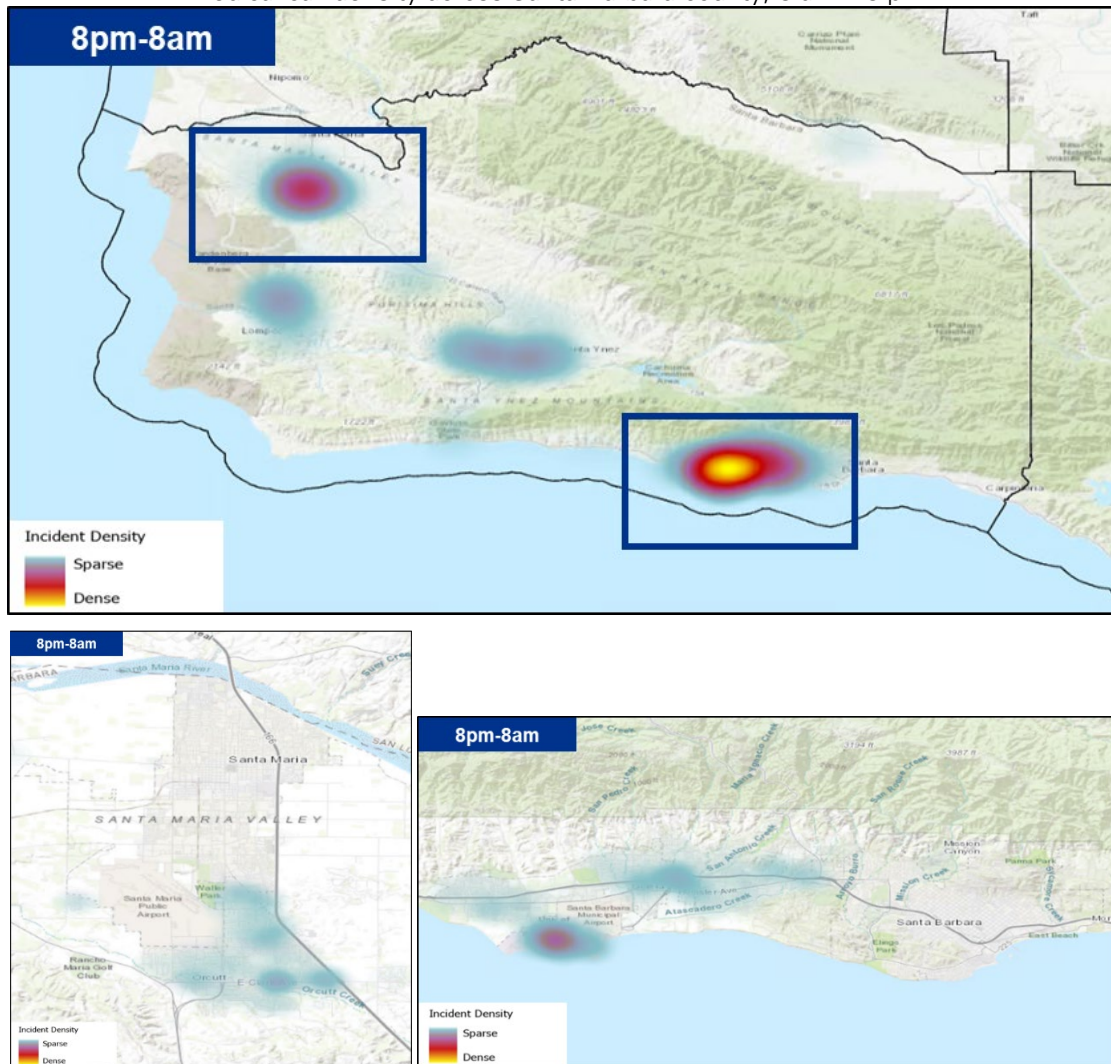Medical call density across Santa Barbara county, 8 a.m.–8 p.m.

Figure 21: Source: KPMG analysis of CAD data

1.3	Better define CAD problem and incident types to accurately capture incident and response data

Currently, the Department uses 36 "incident types" and 60 "problem types" in CAD to record calls for service. However, in many cases, these call-type categories are too vague to enable effective analysis without a case-by-case analysis of call notes and incident reports. This lack of clear call categories is illustrated in the incident and problem types pulled from the CAD system (please see Appendix C). Problem types such as "Any Situation that's Not Here" and "* Miscellaneous Dispatch," as well as incident types such as "Public Assist" and "Misc Fire," are too broad to convey the type of call activity.

Action One: Develop clear call-type categories to accurately capture incident and response data.

By incorporating clearer naming conventions for call types into the CAD system, Department leadership will be able to run analyses to inform decision-making around issues such as staffing levels, overtime, and scheduling and develop an improved understanding of the demand generated by the public. With the County preparing for Next Generation 911, now is the appropriate time to redefine call types to develop a more substantive understanding of call demand. The department has the opportunity to condense problem and incident types into one dispatch-type category. Examples of updated CAD dispatch-type categories to enable clear analysis include:

AA (Automatic Alarm)	BOAT (Boat or Ship Fire)	CLIFF (Cliff Rescue)	Fire (General Fire)	INVESTF (Fire Investigation)
AF (Aircraft Fire)	BRAVOT (Bomb, Airport Structure)	CS (Collapsed Structure)	FO (Fire Reported Out)	INVESTM (Medical Investigation)
AUTO (Automobile Fire)	BRUSH (Brush Fire)	DFLOW (Mud and Debris Flow)	HAZMAT (Hazardous Materials)	LNG (Natural Gas Leak)
BELLS (Bells Ringing)	CHEM (Chemical Spill)	ENG (Engine Response)	ILLEGAL (Illegal Burning)	SF (Structure Fire)

Figure 22: Source: KPMG Knowledge of Other County Dispatch

Additionally, all medical calls should also be coded as "ALS Response" or "BLS Response" so the department can track and analyze the frequency and workload of these types of emergency response. This updated data tracking and analysis can inform leadership decision-making around issues such as staffing, deployment, call diversion, and vehicle procurement.

Action Two: Expand data tracking related to Mutual Aid.

Given that mutual aid comprises as much as 60 percent of department workload in some years, the Department should expand its data tracking related to these incidents. This expanded tracking should include the recording of the jurisdiction to which the Department is providing aid, thereby enabling more granular analysis of the Department's mutual aid workload as discussed in Recommendation 2.1 surrounding mutual aid cost recovery.

Financial management

2.1	Enhance processes for tracking the cost of services delivered and revenue generated by Tax Rate Area (TRA) within the County, as well as cost recovery for Mutual Aid provided to jurisdictions outside of the County, to better track the costs and reimbursements of the Department's services

KPMG reviewed two of the Department's funding mechanisms to determine the extent to which they cover the cost of workload delivered by the Department:

— First, KPMG worked to analyze the property tax revenue generated by TRA region compared to the cost of service. Because data is not tracked in this way, a formulaic historical analysis is not readily available by region.

— Second, KPMG estimated the cost of mutual aid workload delivered to Out-of-County incidents to assess whether reimbursements provided full cost recovery to the County. This analysis is detailed below in the "Tracking Mutual Aid Cost Recovery" section of this recommendation.

Across both areas of analysis, it is recommended that the Department enhance the tracking and analysis of the cost of workload delivered as compared to the funding, revenue, or reimbursement recovery. Developing a consistent methodology for tracking workload and related cost and conducting this analysis on a recurring basis can inform Department and County leadership as they manage the Department's budget and staffing. The information may be useful in informing Board policy regarding negotiation with incorporated cities and around issues such as the 17% reallocation. By practice, under-collecting in the cities may result in General Fund revenue collected from the unincorporated area to subsidize the cities.

Tracking the Cost of Services Delivered By TRA

While the Department obtains TRA revenue data from the Auditor Controller's Office annually, it is recommended that the County calculate workload hours and cost generated by TRA or TRA region on a recurring and regular basis. As a result of a tax transfer resolution adopted by the Board in May 2012 and implemented in FY14-15, the Santa Barbara County Fire District receives approximately a 17 percent share of the allocable property taxes available to the County, increased from the rate of 12 percent that was in place prior to this adoption. This increase in property tax funding was accomplished through a reallocation of funds that would have previously gone to the General Fund. As a result of this resolution, proposition 172 revenues were forfeited by the Fire Department and cost allocation charges were fully implemented.

The Department provides services to a number of incorporated cities within the Fire District, and has contracts related to additional services (provided to the cities of Buellton, Goleta, and Solvang. As these cities are within the County's Fire District, the services provided to these cities are expected to be funded by property tax apportionment in the absence of an agreement stipulating otherwise.

As described in Recommendation 1.1, demand for fire services varies significantly across the County. For example, given that wildland fires may require high workload, areas of the County that are prone to burn often consume disproportionate workload. Property tax revenue is tracked by TRA, which are physical geographical areas throughout the County whose tax revenue is allocated across various taxing entities, including the Fire District for TRAs that fall within the district. The amount of property tax

revenue generated varies across the County by TRA based on the size and property value of an area. While there are hundreds of TRAs across the County, the Auditor-Controller's Office groups them to calculate the revenue generated by TRA region. Examples include the City of Santa Barbara, the Santa Barbara Unincorporated Area, Santa Ynez Valley Unincorporated Area, etc.

At present, the Department does not track the workload delivered by regions. The implementation of processes to calculate workload by region on an annual basis and estimate the cost of this workload would allow Department leadership to understand the extent to which these workload costs are being covered by the property tax revenue generated by each region, thereby providing enhanced transparency and visibility to Department and County leadership. It is important to note that property tax revenues are not the sole source of revenue for the Fire Department or Fire District as not all calls rely on property tax revenue for cost recovery.

Recognizing that there may be multiple ways to calculate cost, KPMG conducted an initial analysis of TRA revenue by region and the Total Department cost, utilizing CAD data provided by the County as a starting point for the County's decision-making process.

Revenue: Revenue for each TRA and TRA region for FY19-20 was provided by the Auditor-Controller's Office. Additionally, the boundaries for each TRA were drawn from a shapefile provided by the County Clerk-Recorder, Assessor & Registrar of Voters.

Cost: Cost estimates by station were estimated based on documents provided by the Fire Department. Cost estimates were determined by taking the FY19-20 Total Fire Department operating budget and allocating the $87,173,727 across all stations. Note that Programs 1030 and 6036 (Fire Operations Mgt and Fire Crew) were allocated to station "Headquarters" in the analysis per the direction of the Fire Department. As costs are not directly allocated to stations or areas by the Department, the Department recommended that station costs be weighted by the number of posts at each station, as illustrated in the graphic below. These estimates were used to determine the workload cost by County and are detailed in the table to the right.

Station	Location	Number of Station Posts	Total Department Cost Weighted by Station Post
11	Goleta	6	$ 7,859,673
12	Goleta	3	$ 3,929,837
13	Santa Barbara	3	$ 3,929,837
14	Goleta	3	$ 3,929,837
15	Santa Barbara	3	$ 3,929,837
17	UCSB	5	$ 6,549,728
21	Orcutt	4	$ 5,239,782
23	Sisquoc	3	$ 3,929,837
24	Los Alamos	3	$ 3,929,837
26	Orcutt	4	$ 5,239,782
27	New Cuyama	4	$ 5,239,782
30	Solvang	4	$ 5,239,782
31	Buellton	4	$ 5,239,782
32	Santa Ynez	4	$ 5,239,782
34	Mission Hills	5	$ 6,549,728
38	Gaviota	3	$ 3,929,837
Station Total			*$ 79,906,676*
Headquarters			$ 7,267,051
Total			**$ 87,173,727**

Figure 24: Source: KPMG analysis of CAD data and Fire Department costs

It is important to note there are multiple ways to calculate cost. As detailed in the Action Items at the end of this recommendation, in refining and refreshing this analysis on an annual basis, the CEO's Office, Department, and other stakeholders should come to a consensus around the most appropriate methodology to estimate cost to support future cost allocation analysis and monitoring.

Note: the total ($87,173,727) is equal to the Department's Operating Budget, which excludes General Fund Reallocations, Charges for Service, Decrease to Fund Balance, and Intergovernmental and Miscellaneous Revenue. The Operating Budget was used in this analysis per the direction of the Department.

Department Cost Versus TRA Revenue Analysis

As illustrated by the figure below, the cost of Fire Department operations exceeds the property tax revenue generated by the TRA regions when removing the 17% tax shift. This indicated a need for the General Fund allocations, Charges for Services, Intergovernmental and other sources to cover current operating costs.

Please note that fire workload costs may vary by year based on the location of large-scale incidents. The analysis just covered one fiscal year (FY19-20), but the Department should repeat this analysis on an annual basis and determine a three- to five-year rolling average in order to understand the cost of workload by region.

Santa Barbara Fire Department Revenue Analysis, FY19-20		
Location	Estimated Revenue by County Area (excluding 17%), FY19-20	Total Department Operating Cost, FY19-20
Unincorporated		
Goleta / Unincorporated	$ 7,543,415	
Santa Barbara / Unincorporated	$ 5,662,052	
Orcutt / Unincorporated	$ 5,598,650	
Lompoc / Unincorporated	$ 3,556,359	
Santa Ynez Valley / Unincorporated	$ 3,084,267	
Santa Maria / Unincorporated	$ 1,610,116	
Los Olivos / Unincorporated	$ 998,887	
Gaviota / Unincorporated	$ 778,100	
Ballard (Santa Ynez Valley) / Unincorporated	$ 736,630	
Buellton / Unincorporated	$ 453,578	
Solvang / Unincorporated	$ 394,349	
Cuyama / Unincorporated	$ 273,229	
Guadalupe / Unincorporated	$ 114,994	
Total unincorporated	$ 30,804,626	
Incorporated		
City of Goleta	$ 7,931,205	
City of Buellton	$ 1,191,779	
City of Solvang	$ 801,656	
City of Santa Barbara	$ 147,272	
Total incorporated	$ 10,071,912	
Total unincorporated and incorporated revenue	**$ 40,876,538**	**$ 87,173,727**
General Fund Reallocations	$ 17,613,119	
Charges for Services (including, but not limited to, State Contract)	$ 26,487,000	
Decrease to Fund Balance**	$ 9,013,300	
Intergovernmental and Miscellaneous Revenue	$ 1,692,300	
Total	**$ 95,682,257**	

Equal to the Total Department Operating FY19-20 Cost

Equal to the Total Department FY19-20 Cost

Figure 25: Source: KPMG analysis of CAD data and Fire Department costs

Note: there are TRAs within the City of Santa Barbara that pay property tax revenue to Santa Barbara County Fire Protection District, as these TRAs were never detached from the Fire Protection District through LAFCO. Since these City of Santa Barbara TRAs remain within the Fire Protection District, and since initial fire response is handled by the County Fire Department rather than the City Fire Department, this analysis includes City of Santa Barbara workload hours as "regular" workload, rather than mutual aid.

**Note: $17.6 million in revenues redirected from the General Fund to the Fire District in accordance with the 2012 tax resolution were not included in the estimated revenue by County Area, as they effectively represent a reallocation from the County General Fund. Please see Appendix D for the estimated General Fund Reallocation by TRA.

Tracking Mutual Aid (Out of District) Cost Recovery

The California Fire and Rescue Mutual Aid system, which enables local fire departments across the state to support each other in responding to major disasters, provides critical resiliency and flexibility to the state's emergency response system. The Department dedicates significant workload to supporting the mutual aid system. Mutual aid averages approximately 47% of the Department's workload each year.

To inform leadership decision-making around staffing, scheduling, budgeting, and cost recovery, it is recommended that the Department enhance processes related to tracking mutual aid workload, as well as cost recovery for this workload. The Department currently tracks mutual aid workload hours via its payroll system with staff being required to code time spent on mutual aid activities to a dedicated program code. Enhancing this data tracking and developing a consistent methodology to calculate the related workload cost will help Department and County leadership understand the cost of the time and resources spent on incidents and emergencies out of county against the available reimbursements.

It should be noted that the County appears to be calculating and receiving reimbursement according to the California Fire Assistance Agreement terms. The question for the County is whether the mutual aid reimbursement process and associated data provides sufficient transparency to leadership with clarity on: 1) what the County can recover within the CFAA limitations, 2) the cost to the County of responding to Mutual Aid calls, and 3) the financial impact to the County of absorbing costs that cannot be recovered.

As detailed below, KPMG utilized a similar methodology to the TRA analysis to conduct an initial analysis of the cost of mutual aid workload for FY19.

Mutual Aid (Out of District) Workload Calculation

CAD Problem Types that encompass mutual aid were identified in conjunction with the Department and include: Mutual Aid – Other out of county, and Mutual Aid-SLO Fire. As reimbursement is not sought for Auto Aid, it was excluded from the mutual aid workload calculation.

CAD Problem Type	Mapping
Mutual Aid – Other out of county	Mutual Aid
Mutual Aid-SLO Fire	Mutual Aid
HazMat Mutual Aid	Auto Aid
AAUTO AID Given	Auto Aid
Cover Engine for Other Agency	Auto Aid

Figure 26: Source: KPMG analysis of CAD data

Fire Department mutual aid workload was calculated using CAD data, using the mapping identified in above as follows:
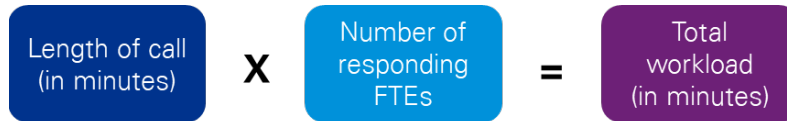
| Length of call (in minutes) | X | Number of responding FTEs | = | Total workload (in minutes) |

Figure 27: Source: KPMG analysis of CAD data

Mutual Aid (Out of District) and Auto Aid (In District) Workload Compared to Total Workload

Total workload was subsequently compared to mutual aid and auto aid workload using the following steps. First, total workload hours per fiscal year were identified utilizing CAD data provide by the Department. Mutual aid workload hours were then divided by total workload hours to calculated mutual aid as a percentage of total workload. Auto aid workload hours were then also divided by total workload hours to calculated auto aid as a percentage of total workload. Based on this analysis Mutual Aid (Out of District) represents an average of 47% of total workload over the five-year period presented, while Auto Aid (In District) represents an average of 3% of total workload over the same period.

	Sum of Total Workload Hours	Sum of Total MA Workload Hours	MA as a % of Dept Workload	Sum of Total AA Workload Hours	AA as a % of Dept Workload
FY 19	54,785	15,082	28%	292	1%
FY 18	54,665	29,497	54%	1,072	2%
FY 17	109,249	66,201	61%	280	0%
FY 16	64,773	25,294	39%	8,221	13%
FY 15	64,632	36,072	56%	263	0%

Figure 28: Source: KPMG analysis of CAD data

Mutual Aid (Out of District) Cost per Station based on Total Department Cost for FY19/20

Like the previous TRA analysis, cost estimates by station were estimated based on documents provided by the Fire Department. Cost estimates were determined by taking the FY19-20 Total Fire Department operating budget and allocating the $87,173,727 across all stations. Note that Programs 1030 and 6036 (Fire Operations Mgt and Fire Crew) were allocated to station "Headquarters" in the analysis per the direction of the Fire Department. As costs are not directly allocated to stations or areas by the Department, the Department recommended that station costs be weighted by the number of posts at each station.

These estimates were used to determine the mutual aid workload cost by station and are detailed in the following graphic. Total workload and mutual aid workload were mapped to each station using the CAD data. The total department costs weighted by number of posts was then multiplied by the percentage of mutual aid workload for the corresponding station to determine the cost of providing mutual aid for that station.

Station	Number of Station Posts	Total Department Cost by weighted number of posts	Mutual Aid workload (hours)	Total workload (hours)	Mutual Aid as a % of Total Workload	Cost of Mutual Aid per station
11	6	$ 7,859,673	755	2,024	37%	$ 2,930,145
12	3	$ 3,929,837	790	3,314	24%	$ 936,333
13	3	$ 3,929,837	592	1,951	30%	$ 1,192,404
14	3	$ 3,929,837	1,924	2,976	65%	$ 2,539,811
15	3	$ 3,929,837	502	1,355	37%	$ 1,456,923
17	3	$ 6,549,728	128	1,645	8%	$ 510,358
21	4	$ 5,239,782	390	2,500	16%	$ 816,645
23	3	$ 3,929,837	16	1,238	1%	$ 50,462
24	3	$ 3,929,837	1,510	2,512	60%	$ 2,362,656
26	4	$ 5,239,782	710	2,835	25%	$ 1,311,392
27	4	$ 5,239,782	771	1,321	58%	$ 3,057,794
30	4	$ 5,239,782	1,853	3,916	47%	$ 2,480,089
31	4	$ 5,239,782	1,802	4,968	36%	$ 1,900,494
32	4	$ 5,239,782	723	4,266	17%	$ 887,987
34	5	$ 6,549,728	1,002	3,434	29%	$ 1,911,977
38	3	$ 3,929,837	197	1,749	11%	$ 443,135
Station Total		$ 79,906,680	13,664	42,003		$ 24,788,603
Headquarters		$ 7,267,051	1,331	11,271	12%	$ 858,356
Total			**28,660**	**95,278**		**$ 25,646,959**

Figure 29: Source: KPMG analysis of CAD data

Based on the data provided, KPMG calculated mutual aid workload cost using the methodology described above. However, it is important to note that there are other methodologies which could be adopted to calculate mutual aid related cost. Regardless of the approach taken, the CEO's Office and Department should come to a consensus around a methodology to calculate the cost of mutual aid workload delivered as compared to the reimbursements recouped as detailed in the action steps below.

Action 1: Enhance processes for data tracking and analysis to calculate workload by incident.

The Department should develop processes to track workload by incident on a recurring basis. This data can then be used to determine the workload consumed by varying TRA regions and mutual aid incidents on an annual basis. To achieve this, the Department may need to record additional data about mutual aid workload in CAD, including the specific incident toward which this workload was directed, and to calculate workload by TRA region and mutual aid incident on a recurring basis. It should be noted that the Department currently tracks out-of-County expenses through Program 6035 – Out of County Labor & S/S accruals, and that this Program is used to calculate current reimbursements for Mutual Aid workload and incidents. Program 6035 tracking should enable the Department to assess total Mutual Aid reimbursement by year and by relevant mutual aid agreement, for example which reimbursements are received through the Graybook agreement or the CFAA agreement.

Action 2: Develop consensus on methodology to calculate cost per station and workload hour.

As noted above, there are multiple ways to calculate workload cost. For example, station and workload costs can be determined by a fixed station costs of $3.8 million (as noted in the City of Goleta Fire Protection Revenue and Expense Analysis provided by the CEO's Office), a weighted cost by the number of posts at each station, or a fixed hourly workload cost. The Department and CEO's Office will need to develop a consensus on the methodology to calculate the most accurate representation of cost per station and workload per hour. With this methodology, the County can then determine the estimated cost of the workload hours calculated in Action 1.

Action 3: Enhance processes to compare revenue by TRA region to annual workload or cost recovery by incident to incident workload.

Drawing on the workload cost information developed in Action 2, the Department should establish processes to compare the workload cost by TRA region to the tax revenue generated by said TRA Region on an annual basis, as well as the workload cost per mutual aid incident to the cost recovery for said incident. The Department should work with the Assessor-Controller's Office to calculate the Fire Department tax revenue generated by TRA. Tracking the cost recovery by mutual incident may require support from the Fire Department's Finance team. The TRA workload cost versus revenue analysis and mutual aid workload cost versus revenue analysis should then be run on a recurring basis by the Department. This will allow the Department to better understand the cost associated with delivering services to TRA regions and the cost of delivering mutual aid services to inform future budgetary decisions.

2.2	Develop more transparent and equitable cost-sharing processes for Air Support Unit between Sheriff and Fire to support fair allocation of costs and increased transparency

The Santa Barbara County Sheriff and Fire Air Support Unit (ASU) is a shared program between the Sheriff's Office and the Fire Department. While funding for the program is drawn from the budgets of both departments, the Sheriff's Office is responsible for overseeing budgeting and maintenance processes for ASU. Throughout this review, interviewees noted opportunities to improve communication and transparency between the two departments around program expenses, fleet maintenance, and budget priorities.

The recent acquisition of a Firehawk helicopter by the Fire Department presents a logical opportunity for the two departments to reexamine their cost-sharing procedures, as the Firehawk carries high maintenance costs yet contributes only to the Fire Department's mission. There are benefits to operating a combined unit; for example, this structure allows the departments to share pilots, hanger space, and aircraft. While the ASU should maintain this joint structure, there is opportunity for both the Department and Sheriff's Office to take the following actions:

Action 1: Develop separate ASU budgets to increase transparency and clearly define which costs will be shared between departments or funded independently.

It has been noted by those involved in the ASU budget process that the communication between departments is often inefficient, requiring multiple conversations and meetings to come to a consensus. Fire Department participants expressed a desire for expanded communication around two issues:

— Opportunities to submit key budget priorities, such as vehicle purchases, for inclusion in the budget

— Discussion of which costs are shared between the Departments and which are funded separately

The separation of financials will allow each department to prioritize, budget for, and fund the equipment they need to complete their mission, without Fire funds being directed to Sheriff priorities and vice versa, while preserving the efficiencies delivered by the joint structure of the unit in areas such as personnel costs and hanger space. It is also recommended that the Department continue with the quarterly financial reviews of the ASU; these meetings should review any reimbursements received by the Fire Department for use of their aircrafts to help ensure appropriate cost sharing is applied to both aircraft costs and to reimbursements.

Action 2: Separate maintenance costs by vehicle and department to most fairly allocate costs based on vehicle usage.

The County may consider identifying maintenance costs by vehicle and then determining whether these costs should be borne by one department or shared between the two based on each department's respective usage of that vehicle. For example, the Fire Department owns apparatus 308 and apparatus 964 within the ASU. Under this system, the Fire Department funds maintenance for this fleet, incurring all expenses for these assets without cost sharing, while the Sheriff's Office would do the same for other vehicles.

With support from the CEO's Office, the Sheriff's Office and Fire Department should jointly develop uniform fleet rates and a pilot/mechanic time coding structure to properly capture chargebacks when using the other department's fleet, as some apparatuses are a shared resource. Under this system, both departments will remain able to use any apparatus within the county fleet; however, there will be a clearer process for accounting for maintenance or other costs as incurred. The departments should then employ a monthly or quarterly charge-back mechanism to true up any usage costs between the departments.

2.3	Forecast and prioritize capital planning, in conjunction with General Services

Interviewees report that many of the fire stations within the County are antiquated, in some cases needing upgrades to basic infrastructure. The Department has a goal of replacing these antiquated stations with additional improvements to allow ALS services to be delivered from every station. A 2012 report by City Gate Associates states that the Department had a backlog of building and equipment replacement needs, estimated at over $88 million in costs. As of late 2020, City Gate was undertaking an update to its analysis, intended to include an updated estimate of the Department's capital needs. Alongside City Gate's revised analysis on estimated capital program costs, there is an opportunity for the Department to develop a strategic prioritization of capital planning-related projects, including station and fleet investments, in coordination with General Services. This prioritization should evaluate and score projects based on designated criteria to guide capital investment decisions in order to most efficiently utilize available funds.

It is recommended that the Department take the following actions:

Action One: Develop priority scores for station rebuilds to establish relative priority for upgrades and resulting funding commitments.

The Department should coordinate with General Services to understand and leverage their evolving capital planning prioritization approach. An option that should be considered is that the Department develop a comprehensive capital planning policy that requires that all projects be scored on agreed-upon weighted evaluation criteria to establish those projects that should be prioritized within the Department's overall capital program. Potential evaluation criteria should include an assessment of the degree to which the project improves health and safety factors associated with the infrastructure asset (for example, projects that result in the reduction of accidents, improved structural integrity, and mitigation of health hazards would score higher), the degree to which the project improves the quality of life in the community, the degree to which the project is responding to a regulatory or legal requirement, the degree to which the project supports operational efficiency and delivery of service, and the degree to which the project otherwise furthers the County and Department's strategic goals. Development of a capital project prioritization should be driven by the Finance function in coordination with the Deputy Fire Chief of Operations and Administration. The Finance function has visibility across all stations. This process can be integrated into the General Services' Capital Projects recommendation to enable the County to develop a holistic and systematic approach to manage and reduce unexpected capital expenditures and balance any deferred maintenance liabilities on existing assets against new project initiatives throughout the County.

Together, the Department and the County should also explore the extent to which alternative or innovative project delivery solutions could be appropriate for addressing the Department's capital needs. For example, a procurement focused on achieving the best value for 'whole-of-life' project costs could be developed to pursue the integrated design-build-finance-major maintenance of a 'bundle' (i.e., multiple) of the fire station redevelopments. Bundling the redevelopment of all (or multiple stations) could help create a critical mass of capital development that could attract private sector capital, resource and innovation to streamline delivery to the County from a counterparty standpoint, accelerate delivery, reduce long-term operating and maintenance costs, and transfer appropriate risk to a developer for timely, on-budget completion and long-term service delivery.

Increasingly in the U.S., state and local governments are leveraging leading, performance-based contracting practices from alternative and innovative delivery model solutions to drive their capital transformations and manage long-term maintenance and operating costs. The City of Oxnard, California, for example, delivered their 14,000 SF Fire Station #8 as a turn-key project with a private developer under a lease-backed structure. The Board of Supervisors of Greene County, Virginia, has authorized the exploration of alternative delivery models to rebuild multiple fire stations across the county and the City

of Austin, Texas, is exploring alternative delivery for the redevelopment of more than five stations. From a bundling standpoint, in February 2021 Prince George's County, Maryland, reached financial close on a bundle of six K-12 schools in one performance-based availability payment contract, reducing costs through economies of scale, accelerating delivery of their redevelopment program by 13 years, addressing a significant deferred maintenance backlog, and transferring risk. These select examples, among others, are indicative of an increasing shift in delivery of new projects at the county and local level.

The pros and cons of potential alternative or innovative project delivery models to the Department for this program of projects should be assessed in close coordination with the CEO's office, the Department, and General Services.

Action Two: Develop a schedule for the purchase of medical equipment and apparatuses for use in ALS services.

ALS equipment and vehicle purchases require heavy financial investment. For example, a fire engine costs roughly around $1 million; the chassis an ambulance sits on costs roughly $125,000, and the modules that fit on the back cost roughly $25,000 each. It is important to note that it is more economical to invest in ambulances and fast-response vehicles (two vehicles where the demand is dictated by the customer at around 70 percent medical calls) than to continue to purchase fire apparatus.

Developing a schedule for these acquisitions will allow the Department to create a corresponding long-term, sustainable funding plan over multiple (ideally five) years to forecast the acquisition costs and timing of the purchase of these capital equipment needs. The replacement and purchase schedule for medical equipment and ambulances should be evaluated annually to determine the funding necessary in future years to avoid spikes and unpredictability of annual funding requirements. Any ALS purchases should be integrated into the Department's Five-Year Financing Projection Summary to help ensure routine maintenance compliance to enable the Department to anticipate and minimize mechanical issues, operate a more compliant fleet and balance workload more efficiently and holistically.

| 2.4 | Create an formalized, automated inventory management strategy to accurately account for assets and minimize risk |

The Department lacks a formalized, comprehensive, automated process to manage inventory. It is important to note that the departmental inventory process is separate from any County policies that exist; however, the Department adheres to the County's policies and procedures associated with fixed / capital assets over $5,000. The Department purchases a significant amount of inventory each year, consisting of items such as ladders, radios, and personal protective equipment. The Logistics Division has existing controls in place to monitor key inventory at the stations and on the apparatus. All equipment and personal protective equipment (PPE) per Fire District policy are checked daily, weekly and monthly and division chiefs are required to inspect all equipment and PPE quarterly to ensure compliance. The logistics and finance sections work together to track all safety and asset allocations annually. However, presently, there is no data tracking being undertaken related to purchasing date, age, brand/model, usage, location, or storage to effectively manage and reconcile the inventory or to assess the need for replacement or maintenance

It is important to note that the Department has commendably allocated funding in the next fiscal year to obtain an automated inventory management system. The recommendations below identify steps to support this effort to strengthen inventory management.

This lack of a formal inventory management system creates risk: for example, equipment on may fail at critical moments (i.e., if uniforms are not decontaminated or if PPE is not properly cleaned for carcinogens). This risk—and liability—is significant given that the inventory directly supports the Department's core operations and its ability to fulfill its public safety mission. Examples include the following:

| Fire hoses, foam, and nozzles | Self-contained breathing apparatus (SCBA) equipment | Firefighter personal protective equipment and gear | Radios and critical assets |
| Fire ladders | Firefighter turnout gear | Apparatus and apparatus equipment | MDCs and iPads |

Figure 30: Source: KPMG

The Department has two written policies focused on the inventory process, Section 3.1.6 – Apparatus Inventory and Section 3.1.10 – Individual Assigned Property Inventory in the Department's Policies and Procedures. These brief policies lack critical information needed to provide effective, comprehensive guidance and structures to facilitate inventory management. The Department should adopt a policy and automated process for tracking inventory. To accomplish this, the Department should take the following actions:

Action One: Clearly define roles and responsibilities to help ensure accountability.

Roles and responsibilities for those involved in the Department's inventory process are not clearly defined in policy nor understood by those within the Department. Currently, no job function "owns" inventory management. The Finance team closely monitors the assets that are issued to personnel, but primarily from a monetary point of view. The Department lacks insight into where assets are, if maintenance needs to be performed, and the usage patterns of assets. Accountability and expectations

related to inventory management should be established in job descriptions and policy and communicated and enforced with staff.

Action Two: Refine policies and procedures to include a physical inventory count.

Currently, the Department does not perform any type of formal inventory count, although requires station staff to monitor key inventory using checklists coupled with site visits from the Logistics Division. A formal inventory count process is an integral component of an organization's internal control environment, and management's commitment is critical to establishing effective and reliable internal controls. Physical inventory counts are critical to verify the existence and completeness of inventory records. However, at present, inventory counts are neither required by policy nor conducted by the Department. Conducting inventory counts would help verify the existence and completeness of inventory and provide reliable information for management to make decisions. To make the inventory count manageable by the Department, counts could first be conducted by asset class (i.e., radios, fire apparatus, etc.), or by monetary value (i.e., assets over $5,000, assets between $4,000 and $5,000, assets between $3,000 and $4,000, and so on). For example, each quarter, the Department could count and record all assets above $5,000. The following quarter, all assets between $4,000 and $5,000 could be counted and recorded. Records should continue to be maintained so the inventory count is up to date.

Action Three: Automate the inventory management process to gain inventory viability.

The Department has allocated funding in the next fiscal year to obtain an automated inventory management system and should be commended for this effort. The Department should ensure that the system is able to facilitate:

— Management: tracking of managed asset usage, inspections, calibrations, and maintenance

— Tracking: tracking of all equipment, uniforms, vehicle contents, pooled items, and other supplies across multiple issue points and locations in a single system

— Ownership: display of all assets and supplies that have been issued to each individual personnel, regardless of their location

— Accountability: tracking of equipment check-in/check-out and supply consumption.

It is also recommended that the Department develop a plan of action to operationalize inventory management. In addition, in the longer term the Department should consider implementing a systems-based inventory approach with transaction entries using handheld radio-frequency identification (RFID) barcode scanners. With RFID capability, the Department will be able to quickly carry out specific actions such as recording and tracking receipt of an asset, equipment deployment and return, etc., across the asset inventory. General Services would be a natural partner in lessons learned when it comes to inventory and asset management, as General Services, and specifically the Building Maintenance division, have had to rethink how to manage their assets as well.

Inspections process

3.1	Implement processes to enhance consistency, streamline workload, and measure performance to increase efficiency of inspections process

The purpose of the inspection program is to ensure that businesses and buildings follow the requirements of local fire ordinances and provisions of the California Fire Code (CFC). Complex inspections and inspections of businesses that present a larger potential for life and/or dollar loss are conducted by specialized Inspections Services staff. Facilities subject to these inspections include schools, hospitals, large care facilities, hazardous occupancies, and assembly occupancies such as restaurants, movie theaters, and auditoriums. Inspection Services staff delegate simpler and lower-risk inspections to the engine companies on an annual or biannual basis to ensure that businesses adhere to legal mandates.

Engine company staff reported conflicting views regarding the benefits of delegating simple inspections to engine companies. It was also reported that inspections assigned to engine companies increased engine company workload and that sending a full engine to conduct an inspection may be more staffing than is necessary. On the other hand, interviewees reported that these investigations prove useful, as they allow engine companies to develop a basic familiarity with building structures in their jurisdiction prior to an incident occurring. Some engine company staff reported clear communication around performance targets, while others reported a lack of guidance or inefficient data systems for tracking progress. The Department utilizes Image Trend which ties inspection data to response data (as opposed to inspection data being tied to building data), however, some engine company staff reported technology difficulties associated with ImageTrend and Fulcrum silos and use of the digital inspections form on iPads).

Inspections Services staff—those who handle complex inspections—noted that the Department lacks formal trackers to monitor the completion of these complex inspections, leading staff to build their own trackers in order to monitor their progress. Consequently, Inspections Services does not currently have easily accessible data related to workload and performance—presenting a liability to the Department as inspections are required to be completed by the state.

In order to develop a well-coordinated, risk-based inspections process with strong performance management, there is opportunity for the Department to take the following actions:

Action One: Establish and operationalize a Fire Prevention inspection "checklist" in order to maintain consistency in how inspections are carried out.

Presently, inspections are carried out across engine companies, battalions, and Inspection Services staff. The Department lacks guidance for the inspection process, which may lead personnel to perform inspections inconsistently. Rather, fire personnel rely on hands-on training from other personnel, inspectors' interpretation of Code, informal direction from management, and personal experience. Leadership assert there is an inspection guidebook with information on inspection processes, fire code, permits and fire protection services. However, during interviews, staff reported a lack of guidance which suggests there is a disconnect between this guidebook and operational processes. Without established guidance, management is unable to ensure that inspections are performed consistently and may struggle to hold employees accountable for performance. The department should develop a checklist that includes practical guidance on how to evaluate the fire safety of an occupancy for

personnel to reference as they perform an inspection. The checklist should be used as a supplement to the current inspection form providing guidance to personnel on spotting hazardous conditions, what areas to focus on, and what questions to ask an occupancy to ensure a safe, thorough, and accurate inspection.

Action Two: Establish an inspections database or case management system in order to increase collaboration and transparency between parties requiring inspections data.

Presently, property information may be entered or edited by inspectors or fire company personnel, depending on who is conducting the inspection. Because the data may be entered by different sources, it is important that the input of information is done in a consistent format. The Department should develop a comprehensive inspections database or case management system (such as Accela, which is currently utilized by multiple County departments) that includes all applicable properties within the County and information including business name, address, occupancy type, property use, and approved occupancy loads, past inspection details, and building plans where appropriate. This database will allow for relevant parties to input, view, and extract inspections information related to specific occupancies in a consistent and reliable format. Interviewees noted this is particularly important for risk management around activities such as post incident structural fire inspections. To help ensure data quality, the Department should have documented processes in place and a quality assurance approach to make certain all data captured is collected and stored in a consistent manner.

When workload permits, there is opportunity for Inspection Services to bring engine companies alongside to post inspection walk-throughs for complex and high-risk occupancies within a company's jurisdiction. This increased collaboration between engine companies and Inspection Services will enable companies to understand building layout, hazardous materials, and entry and exit points should they need to respond to an incident in that location. These inspections benefit the companies by increasing visibility in the community and by improving their knowledge of structures and hazards in their response area. It should also be reiterated that the majority of inspections involving engine companies should occur between the months of January and May, where workload is considerably lower for engine companies (please see Recommendation 1.1).

Action Three: Implement more detailed performance measures for inspections to understand workload and backlog.

Inspection Services personnel and engine company personnel indicated that they do not have formal performance targets or performance management tools in completing their workload (such as a target for the number of inspections to be completed each week). The Department reports a single performance measure related to fire inspections, which is the number of fire inspections performed in a year. This measure alone does not provide the necessary context to guide management decision-making to improve the Department's effectiveness and efficiency. Additionally, there has been emphasis on increasing the number of fire inspections conducted, without consideration to the time required for each type of inspection conducted or the quality of those inspections—metrics that are not currently tracked.

There is opportunity for the Department to establish clear workload standards and performance tracking mechanisms. Since inspections are not created equally and inherently have different workloads, the Department should establish metrics to qualify the type of inspection—including by square footage, fire code, building type, etc. Inspection Services should then begin to record the level of time and level oversight each inspection requires. To manage workload, metrics should be analyzed weekly, monthly, quarterly, and annually by inspectors and Department management. Adjustments to this standard can be made once actual data is available to set more appropriate standards by type of inspection.

Tracking performance measures will provide context on the relative efficiency of inspections by measuring productivity and workload rather than a simple count of inspections completed. This will also help to identify the backlog of inspections and allow the Department to prioritize the backlog based on occupancy (i.e., schools, nursing homes, commercial warehouse) and quantify the time it will take to

complete the backlog. Please reference Figure 24 below for performance tracking measures that can be utilized to inform the inspections workload. Metrics can be input into Excel templates created by the Department, with supporting PowerBI visualizations. The County should also explore options to integrate ImageTrend and Fulcrum, the two platforms used to record inspection details and outcomes, to decrease information held in silos.
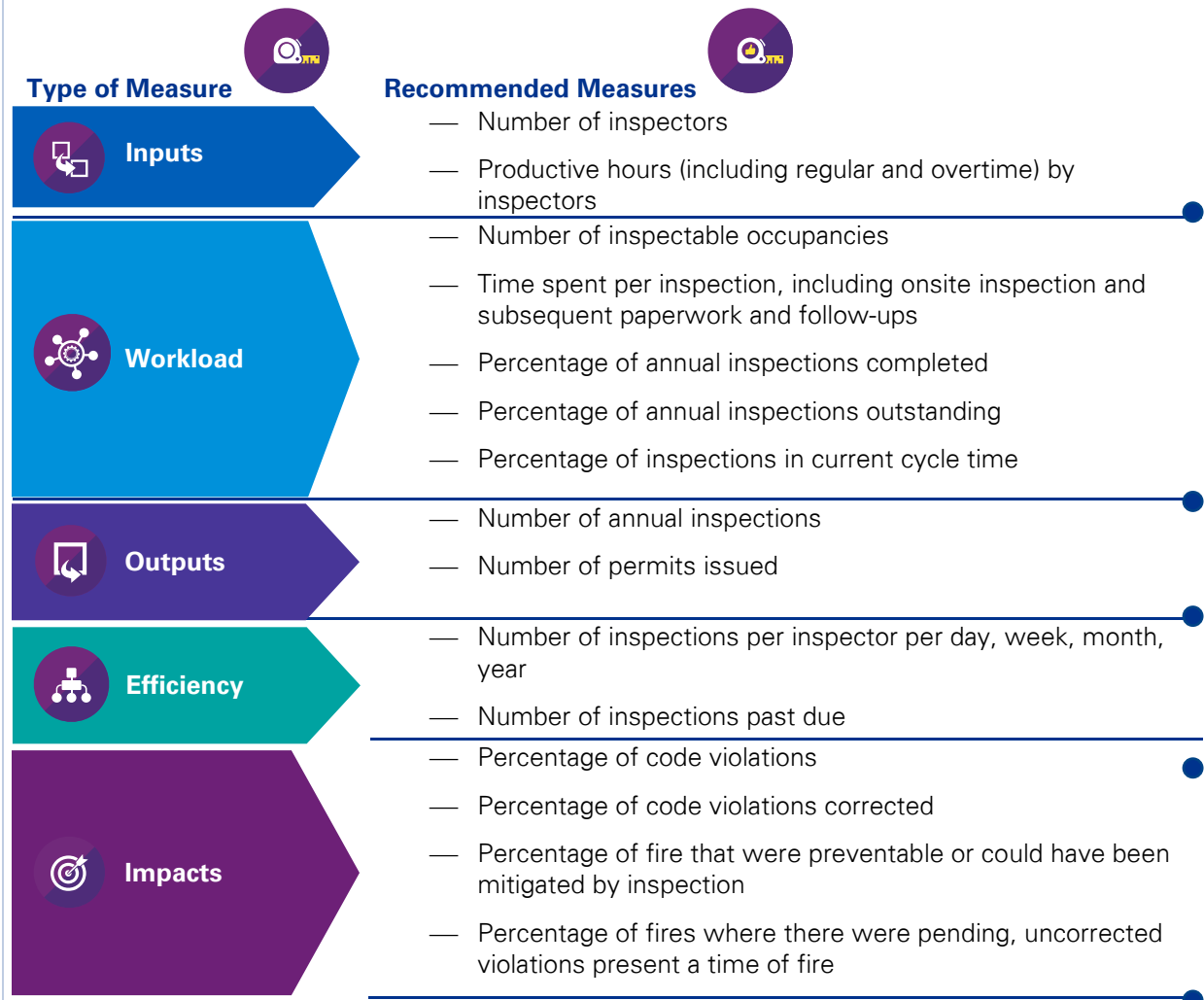
Potential fire prevention performance measure by type[15]

Type of Measure | **Recommended Measures**

Inputs
— Number of inspectors
— Productive hours (including regular and overtime) by inspectors

Workload
— Number of inspectable occupancies
— Time spent per inspection, including onsite inspection and subsequent paperwork and follow-ups
— Percentage of annual inspections completed
— Percentage of annual inspections outstanding
— Percentage of inspections in current cycle time

Outputs
— Number of annual inspections
— Number of permits issued

Efficiency
— Number of inspections per inspector per day, week, month, year
— Number of inspections past due

Impacts
— Percentage of code violations
— Percentage of code violations corrected
— Percentage of fire that were preventable or could have been mitigated by inspection
— Percentage of fires where there were pending, uncorrected violations present a time of fire

Figure 31: Source: KPMG

Action Four: Implement a self-inspection program for low-risk businesses to alleviate inspections workload.

On average, 2,486 inspections are completed by the department each year—which is between 60 percent and 90 percent of total inspections the Department is required to complete (please refer to Figure 25). To help the Department reach 100 percent of inspection completions, the County should

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[15] H. Hatry, Performance Measurement, 2nd Ed; Vision 20/20: National Strategies for Fire Loss Prevention, Model Performance Measures for Fire Prevention Program

implement a "self-inspection policy," for low-risk occupancies. This will include defining requirements for the self-inspection program (i.e., criteria defining what would be considered a "low risk" occupancy), identifying occupancies that meet the requirements of the self-inspection program (i.e., outreach to the selected occupancies notifying them of the self-inspection program), developing an operational list of items necessary to implement the program (such as an inspection check sheet to provide guidance on how to conduct the inspection, what to look for, why issues are considered a violation, and how to report the outcome of the self-inspection) and evaluate the success of the inspection program (i.e., schedule "spot checks" to ensure compliance with the code and that the program is working properly). Inspection Services should ensure that an inspector or fire company can be made available by appointment if an occupancy needs help with an inspection. The self-inspection program would be available to occupancies every other year, with an inspection from an engine company or Inspection services on the off years. The Department had previously engaged in a self-inspection program called B-Safe. The program was marginally successful, and prevention and floor staff have both expressed an interest in returning to an active inspection program.
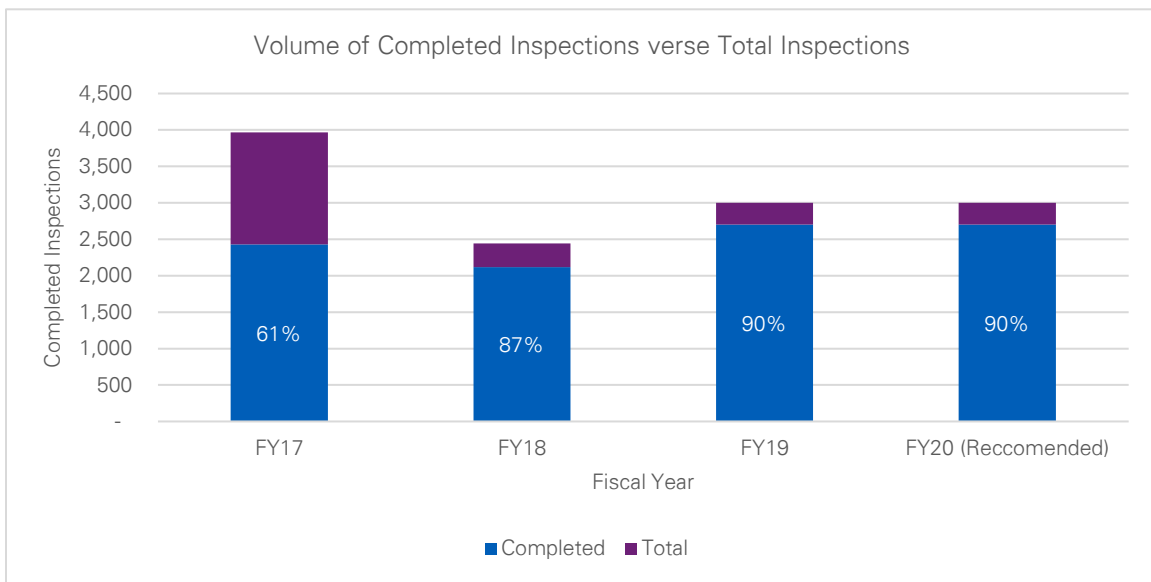
Figure 32: Source: KPMG

Occupancies that fail to complete the process would be subject to a formal inspection with additional costs to the business. Occupancies that fail to correct violations or maintain a code-compliant facility would be subject to additional code enforcement activities and removed from the self-inspection program. The program should be evaluated annually by tracking metrics such as how many occupancies accessed the online self-inspection form, how many occupancies filled out the self-inspection form, how long occupancies took to fill out the self-inspection form, how many inspection reminders were sent out, and how many violations were noted and corrected to make changes to the program as needed. Engine companies should offer complimentary inspection support or drop-ins to ensure basic familiarity with occupancies within their jurisdiction. Monterey County Regional Fire District[16] and Central County Fire Department[17] both utilize a self-inspection program where certain commercial occupancies have the option of conducting their own fire and life safety inspection.

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[16] https://www.mcrfd.org/business-inspections-program
[17] https://ccfd.org/fire-prevention/fire-inspections/#d

Performance management

4.1 Strengthen performance measurement processes to enable continuous improvement and regular evaluation of progress toward established targets

In the annual budget, the Department lists 13 key performance measures, which provide some insight into the extent to which the Department is achieving aspects of its strategic performance goals. For example, the percentage of fire code inspections conducted that meet the Department's target cycle time and the percentage of medical calls arrived at within the Emergency Medical Services Agency (EMSA) response time standards. During the interview process, however, leadership and staff noted that the Department does not utilize performance metrics beyond those listed in the budget book. These indicators alone are insufficient to providing a comprehensive view into performance at each station, battalion or at Department level, particularly if they are only updated during the budgeting process.

This recommendation outlines a series of steps to expand key performance indicators (KPIs) to provide a comprehensive view of performance at the Department, divisional and personnel levels and to operationalize the data collected to deliver performance feedback and enable continuous improvement. There is opportunity for the Department to take the following actions:

Action One: Develop comprehensive KPIs and analytics at the personnel, station, battalion, and Department levels to increase management visibility into Department operations.
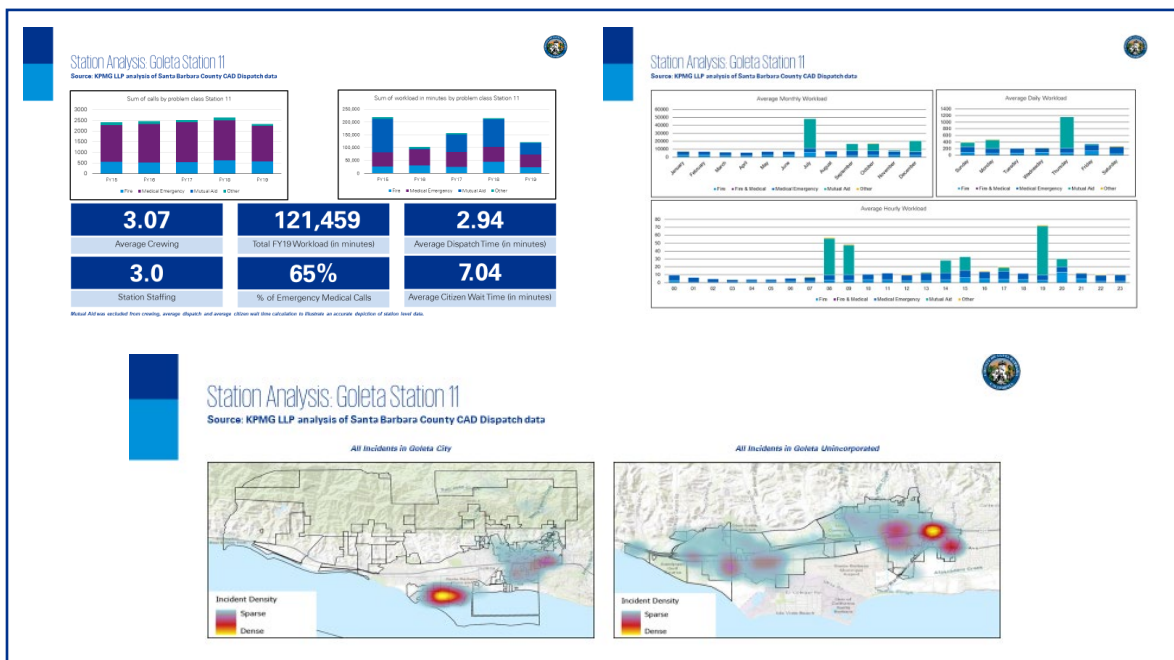
Figure 33: Source: KPMG analysis of CAD data

The Department would benefit from the development of additional performance measures to more robustly measure and drive performance at the personnel, station, battalion, and Department levels. By developing goals, objectives, and performance measures, the Department can more effectively evaluate the level of services they provide as well as identify areas needing improvement. This will allow the Department to demonstrate their real needs with verifiable data on workload, personnel, and other resources, which can be helpful in justifying budget requests, charting a direction for the Department's future, and suggesting changes in service.

These measures should be aligned to the Department's strategy and designed to provide management and leadership with a data-driven perspective into the Department's progress toward the goals enumerated in this strategy. The graphic on the previous page illustrates a selection of KPIs for station 11 based on an analysis of CAD data. Additional station-level dashboards are available in Appendix C. For example, potential KPIs may include, but are not limited to:

Average dispatch, turnout, and response times by vehicle, station, and battalion	**Average number of responses per unit**
Total overtime hours worked and overtime cost/staffing	**Automatic aid ratio for aid provided and aid received**
Overtime hours by station	**Average annual cost of an engine or ladder company**
BLS arrival on scene: percentage of EMS responses with BLS arrival in 4 minutes or less	**ALS arrival on scene: percentage of EMS responses with ALS arrival in 8 minutes or less (provided that a first responder with AED or BLS unit arrived in 4 minutes or less)**
Time on assignment: percentage of the time response units are engaged in a given period to maintain minimum 25% of frontline fleet availability 85% of the time	**Back-to-back responses: percentage of incidents assigned to a responding unit within 10 minutes of becoming available in a given period**

Figure 34: Source: KPMG

By developing KPIs, analyzing these reports on a regular basis, and establishing a formal structure to discuss and implement this data, the Department will have a greater ability to evidence the results it is achieving for County residents, measure progress toward established strategic goals, proactively detect and address challenges as they arise, and provide support and coaching to staff. The Development of KPIs should be created by Fire Department management in conjunction with the CEO Office. The KPIs should be maintained and tracked jointly by the CEO Fire Analyst and Fire Finance, with support from EMS and Support Services personnel.

Action Two: Expand response time tracking to vehicle, station, battalion, and Department levels to enable continuous improvement related to this key metric.

Response times are perhaps the most critical performance metric related to the Department's emergency responses, whether they be for fire or medical calls. In order to evaluate and continuously improve the Department's response times, it is essential to measure, assess, and report all the individual time components of the response process. There is an opportunity to more regularly analyze

detailed dispatch data to assess Department operations and to identify opportunities to streamline and improve. Key performance indicators related to response times include, but are not limited to[18]:

Turnout time	Travel time	Total response time
Percentage of all fire and special operations turned out in less than 80 seconds; percentage of all EMS responses turned out in 60 seconds	percentage of all fire/EMS responses that achieve first responder engine travel time of 4 minutes or less; percentage of all low- and medium-hazard fire responses that achieve a full-alarm travel time of 8 minutes or less; percentage of all high-hazard fire responses that achieve full-alarm travel time of 10 minutes or less	Percentage of all fire and rescue responses that achieve first responding engine travel time of 4 minutes or less; percentage of all fire responses that achieve full-alarm assignment effective response force assembly in 8 minutes or less

Figure 35: Source: KPMG

Building on the Department's CAD data, KPMG ran analysis on the 90% fractile for the Department's Dispatch Time, Time Assigned, Travel Time and Response Time. The below tables illustrate KPI's the Department should run on a regular basis to understand response times and can be further broken down by at the vehicle, station, and battalion level.

Dispatch Time 90% Fractile (in Minutes)

	Fire	Fire & Medical	Medical Emergency	Other
2017	8.35	4.74	3.27	6.25
2018	7.54	Data not Available	3.38	6.50
2019	8.27	3.79	3.42	7.05
2020	9.30	8.86	3.40	5.82

Time Assigned 90% Fractile (in Minutes)

	Fire	Fire & Medical	Medical Emergency	Other
2017	6.57	3.87	2.80	3.65
2018	5.60	Data not Available	2.87	3.96
2019	6.67	2.98	2.88	4.46
2020	7.20	7.46	2.90	3.52

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[18] Per NFPA 1710 standards

Travel Time 90% Fractile (in Minutes)

	Fire	Fire & Medical	Medical Emergency	Other
2017	11.95	5.35	8.05	11.51
2018	10.57	Data not Available	8.18	10.60
2019	10.42	4.73	8.30	10.03
2020	11.67	6.25	8.75	8.74

Response Time 90% Fractile (in Minutes)

	Fire	Fire & Medical	Medical Emergency	Other
2017	25.18	11.27	13.00	19.19
2018	22.81	Data not Available	13.25	20.39
2019	23.86	9.67	13.43	18.72
2020	26.58	16.67	13.93	17.24

Figure 36: Source: KPMG analysis of CAD data

As discussed in the following action item, these metrics can be developed by station, battalion, and Department as performance management tools to identify and resolve the causes of any delays.

Action Three: Develop a data-driven feedback and problem-solving loops for management performance at the vehicle, station, battalion, and Department levels.

Performance metrics provide value in managing performance at the Department, battalion, station, and vehicle or individual levels, enabling employee development while allowing management to make adjustments to maximize the performance of the teams they supervise. In interviews, Department staff across levels noted that outside of the EPR process, processes to deliver performance feedback and coaching are infrequent and unpredictable. It was noted that there is lack of support for promotion tracks, inconsistent feedback and training across supervisors, and absence of additional structured processes to provide an opportunity to discuss challenges that personnel may be facing or provide a chance for staff to ask questions and gain additional training opportunities. At the Firefighter and Captain level, it was noted that performance is discussed only on an ad hoc basis if something goes wrong.

The Department should be commended for the increased communication from management under the present Fire Chief. To further establish a culture of open communication, constructive and proactive coaching, and continuous improvement, the Department should establish a formal process to facilitate regular performance coaching and feedback at the station, vehicle, and individual level:

— It is recommended that Department leadership establish biweekly or monthly performance discussions at the Battalion Chief level. These conversations can be used to not only discuss opportunities for improvement (both in terms of station performance and processes), but also career development, retention, and succession planning. For example, these meetings should be used to review trends in staffing and response time at the battalion and station level, discuss leadership and training opportunities for Captain and Firefighter personnel, as well as capital planning and development priorities within the battalion.

— Additionally, station leadership should hold performance management meetings on a monthly basis to review station-level and apparatus-level performance measures. These meetings can be used to problem solve any challenges or declines in service level experienced by staff. For

example, these meetings should review trends in response times at the apparatus and station level, analyzing the reasons for any delays and developing mitigations collaboratively.

By developing KPIs, analyzing these reports on a regular basis, and establishing a formal structure to discuss and implement this data, the Department will have a greater ability to evidence the results it is achieving for County residents, measure progress toward established strategic goals, proactively detect and address challenges as they arise, and provide support and coaching to staff.

Workforce development

5.1	Better enable the training of new staff and establish pipelines for recruiting talent to enhance workforce development, succession planning, and Department resiliency

Succession planning is a priority area countywide. By identifying critical roles and key personnel necessary to successfully deliver the Department's mission, leadership can plan to avoid disruptions in service levels or operations due to attrition, single points of failure, or injury, illness, or other reasons for personnel turnover. The Department does not currently utilize methods or strategies for succession planning to maintain resiliency, leaving it susceptible to knowledge gaps and the potential loss of leadership. To build resiliency, the Department should cultivate future leaders through training and development programs, recruit additional staff to bolster critical skill sets within the Department, document key policies and procedures to better enable the training of new staff, and establish pipelines for recruiting talent.

Action One: Establish permanent positions and a clear annual work plan to increase hand crew resiliency and retention.

In California, the window for "fire season" has grown from a five-month season to a year-round season. The Santa Barbara County Wildland Fire hand crew is staffed seven days a week during fire season for wildland fire suppression and fuels management. This differs from most CalFire contract counties, including Los Angeles County, Ventura County, Orange County, and Marin County, who employ year-round hand crews. It was noted in interviews that the County loses hand crew personnel to competing counties where hand crews are employed year-round, stripping Santa Barbara of experienced hand crew personnel and leadership.

With the unpredictable nature of wildfires, longer fire seasons, and increased development of housing and communities in fire-prone areas, shifting toward a full-time hand crew could greatly benefit the County. It was noted in interviews that there is "more than enough work" for hand crews year-round, including alteration and improvements to fire stations, fire road maintenance, operation of fire breaks, and ensuring brush is modified around occupancies. The benefits of investing in a year-round hand crew include increased employee retention, as hand crews can serve as a promotion pathway into the general force; decreased training costs, as hand crews are not let go, rehired, and retrained each season; and lowered risk of injury or death.

Action Two: Provide increased support for training and training compliance to confirm accountability of completion.

Interviewees indicated that the County does a commendable job in working to ensure all annual certifications (i.e., paramedic and EMT certifications) are up to date but is lacking in support when it comes to additional training, such as Department-required trainings for promotion as these trainings are not necessarily required by the Department. While opportunities to attend trainings may be identified by the County and the Department, the Department does not provide all the required training itself. Although the Department provided seven in-house trainings required for promotion in 2017 and 2018 and provided fourteen in-house trainings required for promotion in 2019, personnel noted the need to travel to other jurisdictions and departments for additional training, resulting in personnel leave and out-of-pocket costs. It was also noted by interviewees that there may not be consistent consequences for not completing Department-required trainings. Noncompletion of trainings and lack of support in

providing trainings creates liability issues for the Department, as the Department can be held accountable for safety, culture, and operational impacts.

There is also an opportunity for the County to host more trainings required for promotion tracks to better support succession planning in the Department. If the County is unable to provide trainings in-house, HR can be of assistance to help find the best training in the region to support personnel development opportunities.

Action Three: Improve the standard operating procedures (SOPs) by position to minimize single points of failure and document day-to-day tasks and procedures.

Interviewees noted there is little resiliency at the Captain level and above. Although the Fire District delivers training programs such as a two-week Captains academy and a a Battalion Chiefs workshop on an annual basis there is no consistent guidance around documented policies and procedures on the execution and completion of tasks, such as inspections. When Captains and levels above leave the Department, much of the institutional knowledge leaves with them. The lack of documentation around SOPs can be somewhat attributed to lack of capacity at the Captain and Battalion Chief level, although it was noted that some individuals do take responsibility and initiative to pass knowledge to successors.

There is opportunity for the Department to improve current SOPs to include written guidelines to explain what is expected and required of fire personnel in performing their jobs. The comprehensive set of SOPs should define in significant detail how the Department intends to operate. Improvement should be made specifically in the following categories:

Performance expectations	Standardization of activities	Training and reference
Describe and document what is expected of personnel in the performance of their duties; provides a benchmark for personnel, an objective mechanism for evaluating operation performance, and a tool for promoting organizational culture	Identify planned and agreed-upon roles and action; helps to standardize activities and promote coordination and communication among personnel; simplify decision-making requirements under potentially stressful situations	Provide the framework for training programs, member briefings, drills, and exercises; serve as a self-study and reference document for personnel

Figure 37: Source: KPMG

Improving the Department's SOPs will provide a mechanism to identify needed changes, articulate strategies, document intentions, implement regulatory requirements, enhance training, and evaluate operational performance. The result is improved operational efficiency, greater accountability, and reduced liability. By strengthening and formalizing performance activities related to succession planning as noted above, the Department can more systematically share effective practices, provide support and coaching to employees, and deliver higher-quality services to residents of Santa Barbara County.

Technology enablement

6.1	**Digitalize paper processes to alleviate workload on engine companies, dispatch, and administration**

Legacy uses of paper, such as Form 10 (paper timecards), Form 19 (internal budget and tracking tool), and burn permits, are entrenched within daily operations of the Fire Department. There are significant costs, in both time and effort, associated with transporting, storing, collating, and managing paper documentation. One example of the Department's paper-based system involves purchase orders, where requests sent to the County can take upwards of several weeks to be approved. In many instances for these paper forms, there is only one copy of the critical paper record, which can be associated with a single point of failure if lost or misplaced. While there are examples of the Department moving toward paperless systems such as the implementation of electronic forms for inspections and use of iPads, opportunities remain to expand paperless processes.

There is opportunity for the department to take the following actions:

Action One: Increase efficiency and automate workflows, digitize old and new files, and educate constituents.

The Department can leverage software workflows to replicate and streamline existing paper handling processes. Automated workflows will help to automate data entry, ensuring information, such as contact information for burn permits, employee information for timecards and trainings, and station information and approvals for purchase orders can be automatically entered into the right form, in the right format. For example, burn permits currently require constituents to fill out paper forms and hand deliver checks to the Fire Department. Citizens should be able fill out these forms, sign agreements, and submit electronically, at any time, from any place, on nearly any device.

The Department should also improve access to historical data by digitizing Form 10, purchase orders, trainings, etc., and host it in a centralized, searchable location accessible across the Department, alleviating any single points of failure that are associated with keeping singular paper copies.

Paperless systems can provide compelling user experiences for both the Department and constituents, as well as reduce workload associated with the distribution of paper forms. Process automation through paperless systems will help to alleviate redundant activities such as having a high number of handovers or repetitive manual work, as well as enhance distribution of materials.

| 6.2 | **Develop information technology plan and process to assess and establish current and future technology needs.** |

Over the past few years, the Department has worked to expand its use of technology to enhance operational efficiency and decision-making. This has increased the amount of computer work and use of several applications for several Department functions, including scheduling and time reporting, incident reporting, inspection tracking and billing, and facilities and vehicle maintenance. Additionally, the information housed in each of these applications exists in silos. Examples include:

ImageTrend	Fulcrum	MDC Computers
iPads	Personal Phones	Daily Staffing
Burn Permits	Form 10	Form 19

Figure 38: Source: KPMG

Problems arise when trying to transmit information from one silo to another, making it complicated to transmit information to all personnel within the Department in a timely and consistent manner. These silos can lead to communication failures and compound risks; additionally, work may be duplicated, resources can be allocated inefficiently, and information can be lost.

These silos exist in part because planning for information technology needs is ad hoc; there is no Department-wide committee to identify and plan for information technology needs. The Department does not currently possess an information technology strategy or plan to address the Department's information system needs.

Action One: Establish committee to develop IT plan and process in coordination with General Services ICT

There in an opportunity for Fire Chief to convene a formal Department-wide committee to assess the immediate and long-term information technology needs and develop the framework for an information technology strategy and implementation plan, especially as the Department moves to a new dispatch center and will likely adopt Next Generation 911 technology and protocols. This plan should include roles and responsibilities for the person who is responsible for planning, coordinating, and implementing new technology systems; which problems and challenges the Department is hoping to address with technology; which technologies are available that can be used, adapted, or developed for use in the Department; and how new technologies can be incorporated with existing processes and technology. This effort should also include coordination with the General Services ICT division to align with the broader County IT strategy.

The use of technology can break down organization silos, improve processes, add value to existing and emerging operations, and create an environment of data that is complete, consistent, accurate, and accessible.

Appendix A: CAD Data Analysis by Station

Station Dashboard Definitions

Metric	Definition/Calculation
Average Crewing	Calculated by the total number of responding FTEs divided by the total number of incidents
Average Annual Workload	Calculated by "unit cleared" less "unit assigned" multiplied by the number of FTE on specific unit
% of Emergency Medical Calls	Calculated by the total number of emergency medical calls divided by the total number of calls (please see Appendix C for CAD mapping)
Average Dispatch Time (in minutes)	Calculated by CAD "time en-route" less "time phone pick up"
Average Citizen Wait Time (in minutes)	Calculated by CAD "time first unit arrived" less "time phone picked up"

* Mutual Aid was excluded from crewing, average incident workload, average dispatch and average citizen wait time calculation to illustrate an ac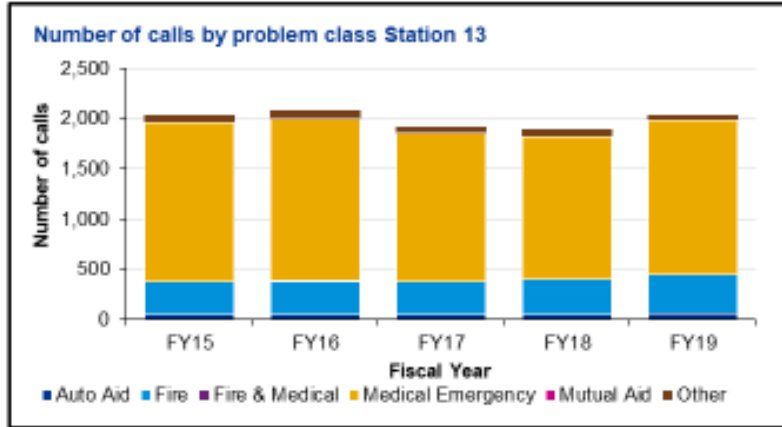curate depiction of station level data. Incidents coded to Engine 319, 329, and 339 were excluded from the station level analysis as they do not align to a single station.

Station Analysis: Goleta Station 11

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 11

Legend: Auto Aid, Fire, Medical Emergency, Mutual Aid, Other

Sum of workload in minutes by problem class Station 11

Legend: Auto Aid, Fire, Medical Emergency, Mutual Aid, Other

3.07	41.08	2.16
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
3.0	**73%**	**7.04**
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
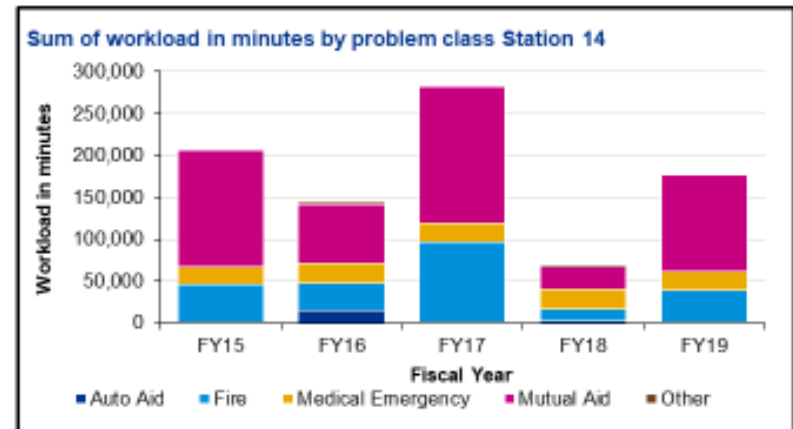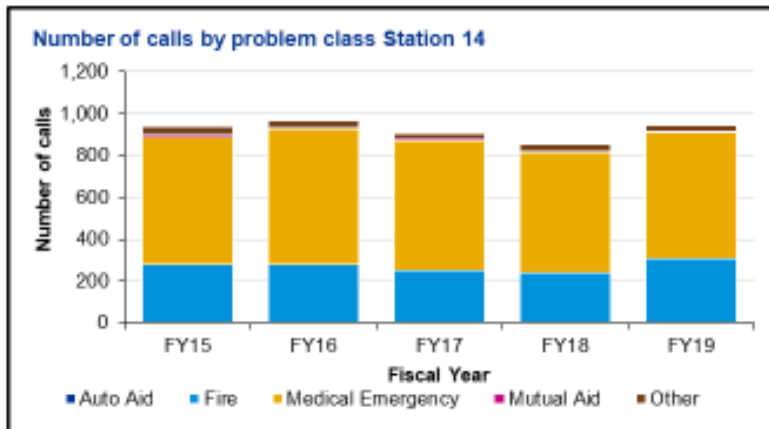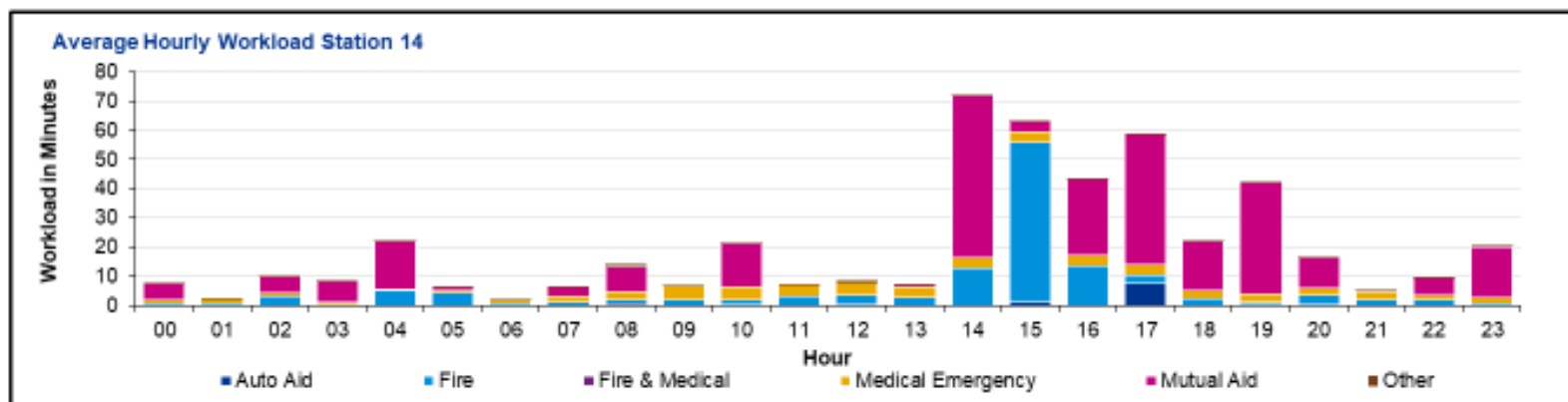
Station Analysis: Goleta Station 11

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 11

Average Daily Workload Station 11

Average Hourly Workload Station 11

Station Analysis: Goleta Station 12

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 12

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Sum of workload in minutes by problem class Station 12

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

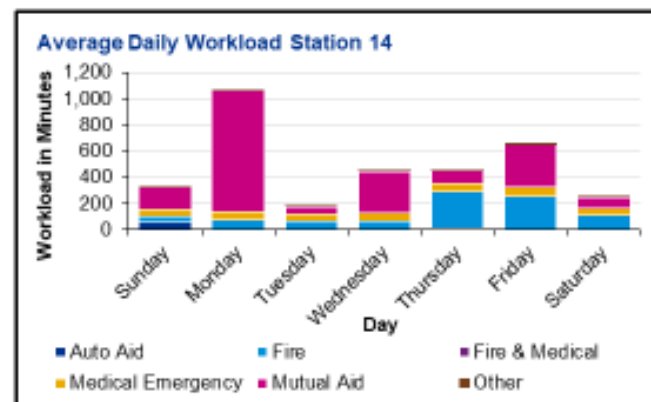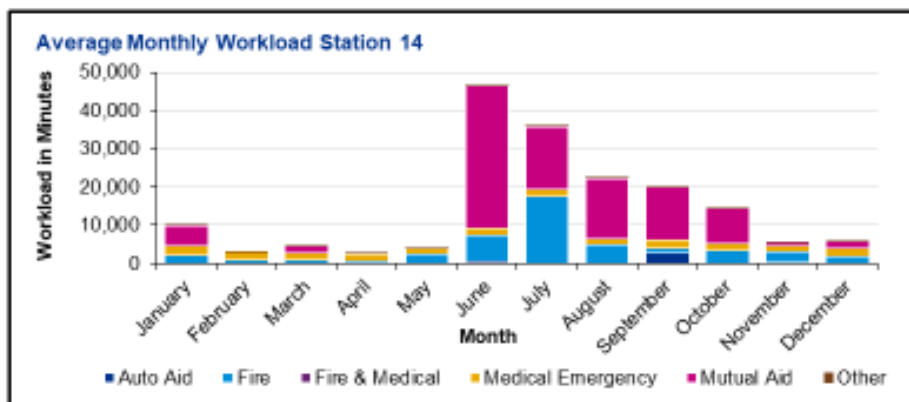| 3.10	58.36	2.11
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
3.0	80%	6.54
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
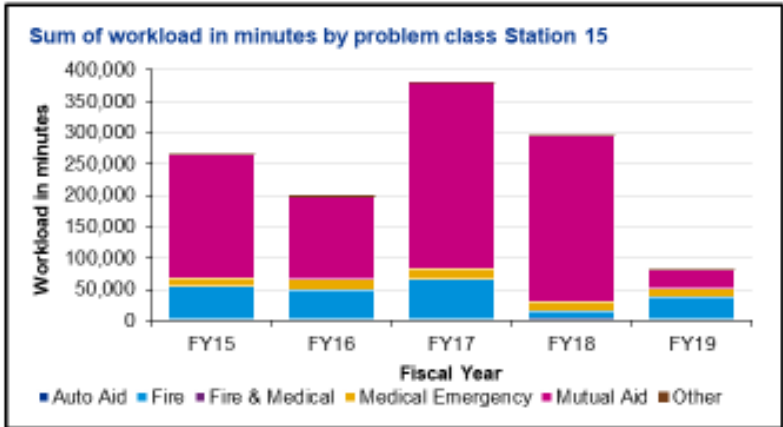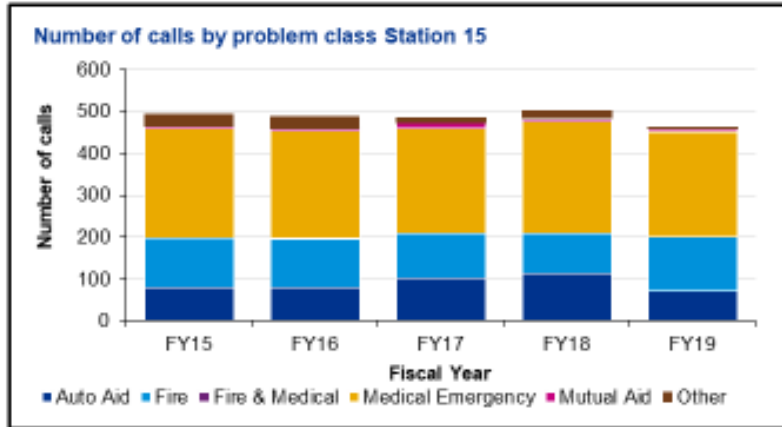
Station Analysis: Goleta Station 12

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 12

Average Daily Workload Station 12

Average Hourly Workload Station 12

Station Analysis: Santa Barbara Station 13

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 13

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Sum of workload in minutes by problem class Station 13

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

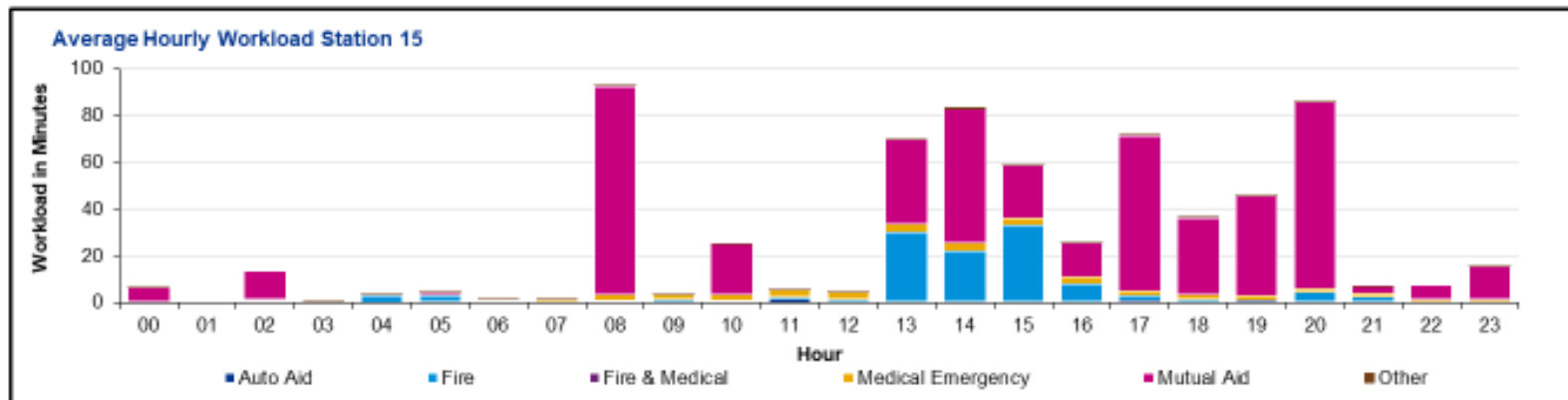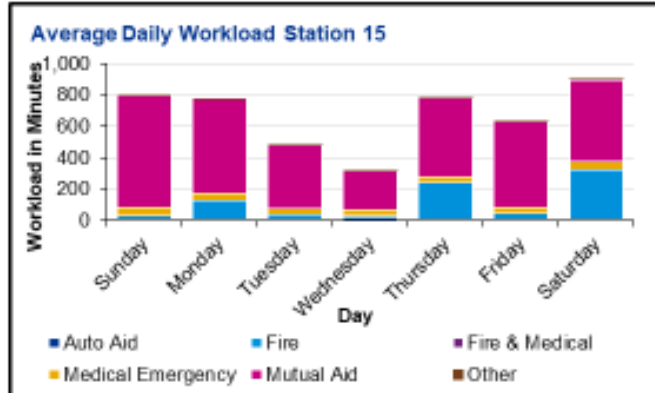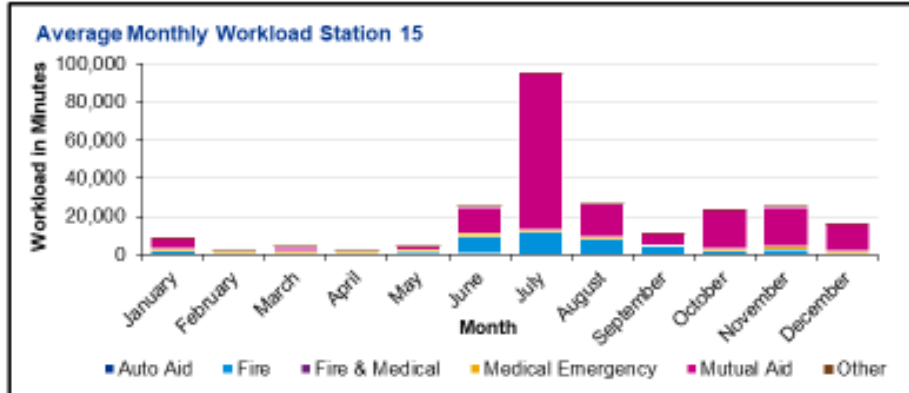| 2.98	69.02	2.20
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
3.0	77%	7.84
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.

Station Analysis: Goleta Station 13

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 13

Average Daily Workload Station 13

Average Hourly Workload Station 13

Station Analysis: Goleta Station 14

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 14

Sum of workload in minutes by problem class Station 14

3.01	91.94	2.79
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
3.0	**66%**	**7.37**
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.

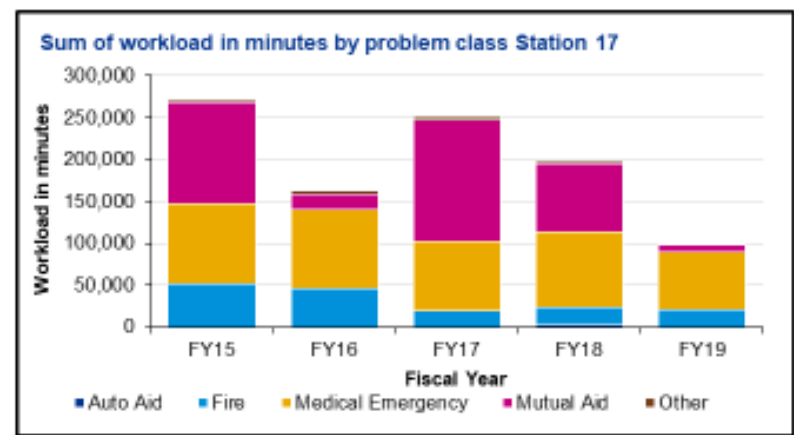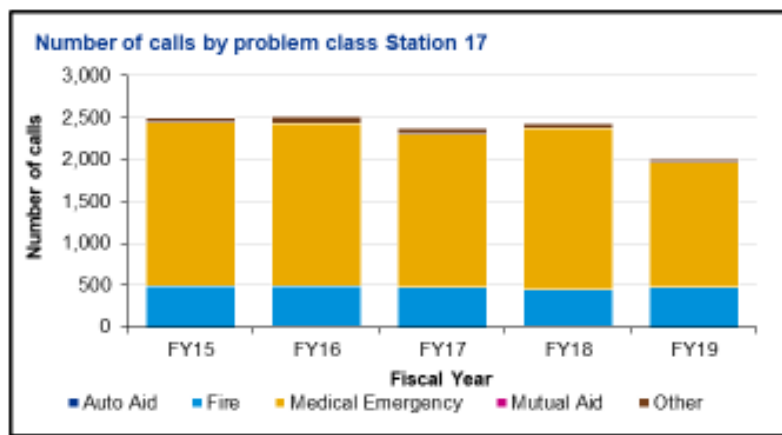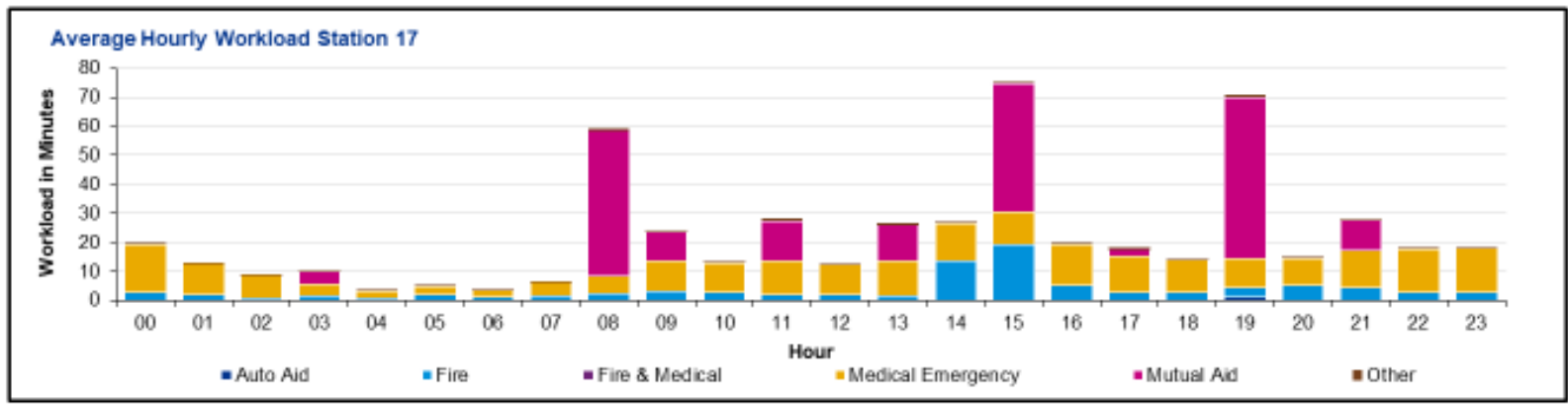# Station Analysis: Santa Barbara Station 14

Average Monthly Workload Station 14

Average Daily Workload Station 14

Average Hourly Workload Station 14

Station Analysis: Santa Barbara Station 15

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 15

Legend: ■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Sum of workload in minutes by problem class Station 15

Legend: ■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

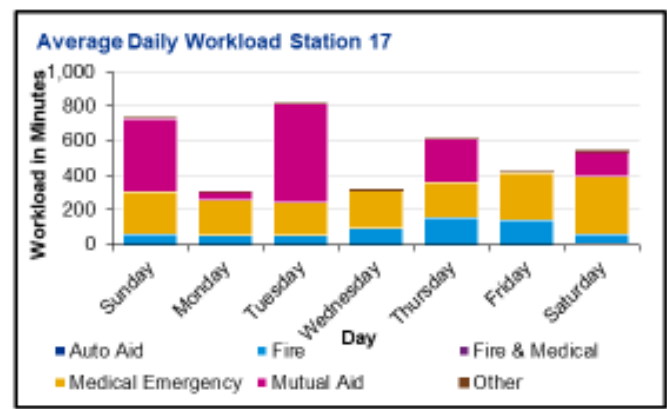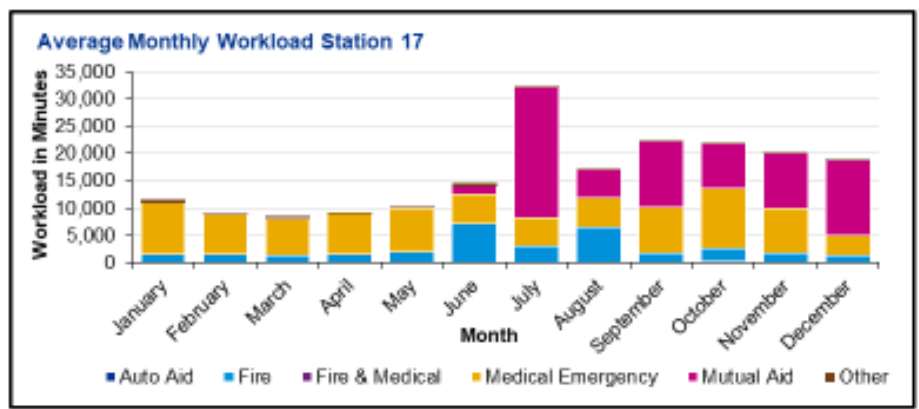| 3.13	138.83	3.31
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
3.0	53%	10.42
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
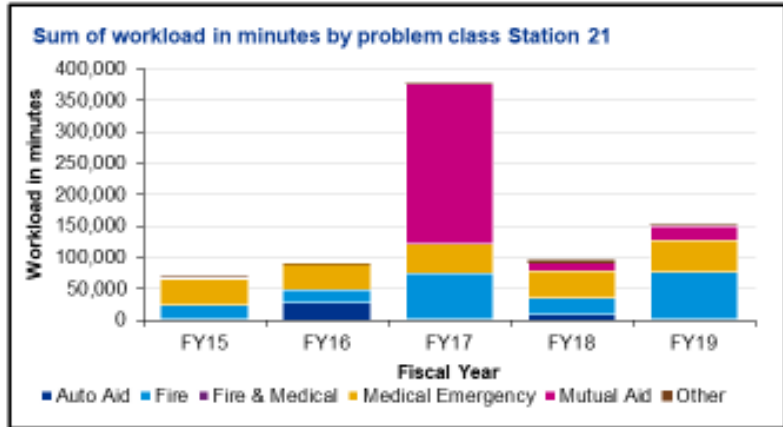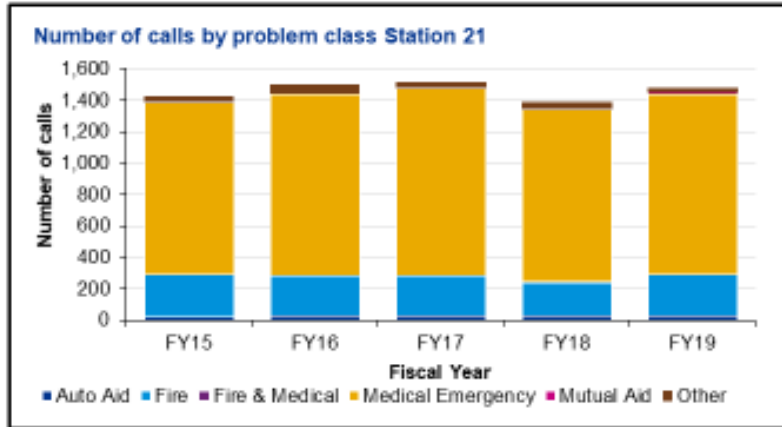
Station Analysis: Santa Barbara Station 15

Average Monthly Workload Station 15

Average Daily Workload Station 15

Average Hourly Workload Station 15

Station Analysis: UCSB Station 17

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 17

Sum of workload in minutes by problem class Station 17

2.79	54.49	2.22
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)

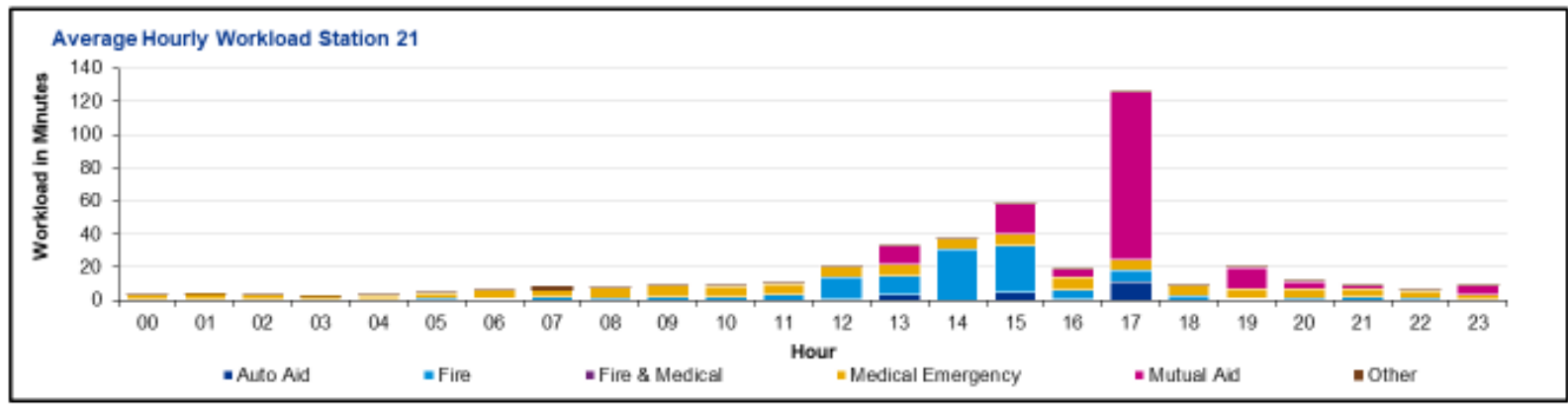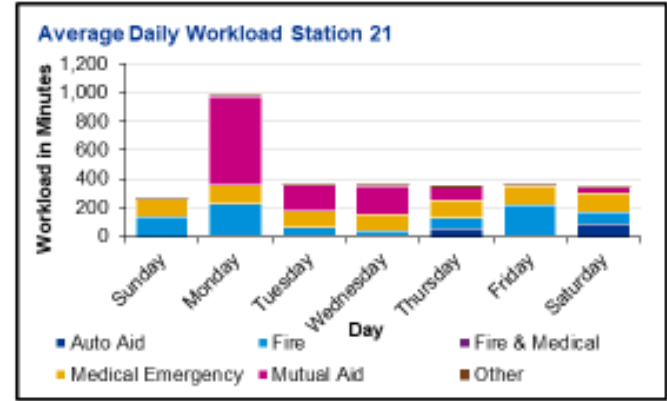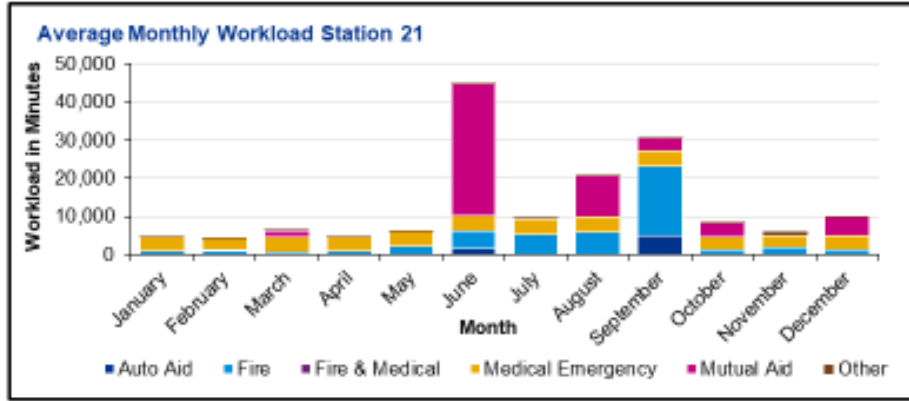| 3.0	2.0	77%	5.97
Station Staffing	Ambulance Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.

Station Analysis: UCSB Station 17

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 17

Average Daily Workload Station 17

Average Hourly Workload Station 17

Station Analysis: Orcutt Station 21

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 21

(Legend: Auto Aid, Fire, Fire & Medical, Medical Emergency, Mutual Aid, Other)

Sum of workload in minutes by problem class Station 21

(Legend: Auto Aid, Fire, Fire & Medical, Medical Emergency, Mutual Aid, Other)

3.10	71.03	2.42
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
4.0	78%	7.48
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
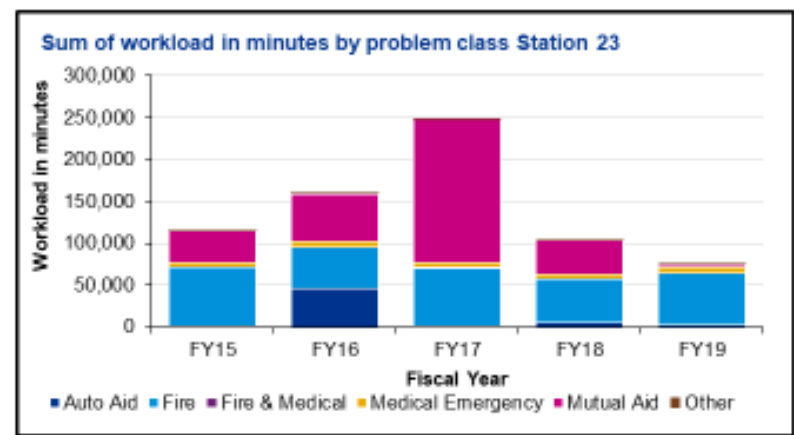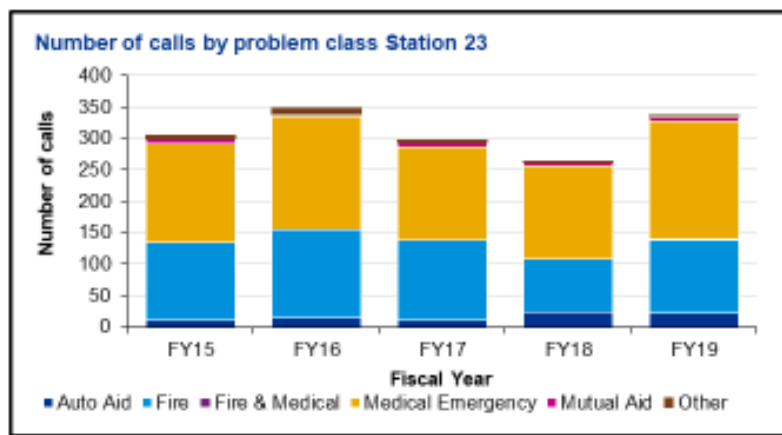
Station Analysis: Orcutt Station 21

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Station Analysis: Sisquoc Station 23

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 23

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Sum of workload in minutes by problem class Station 23

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

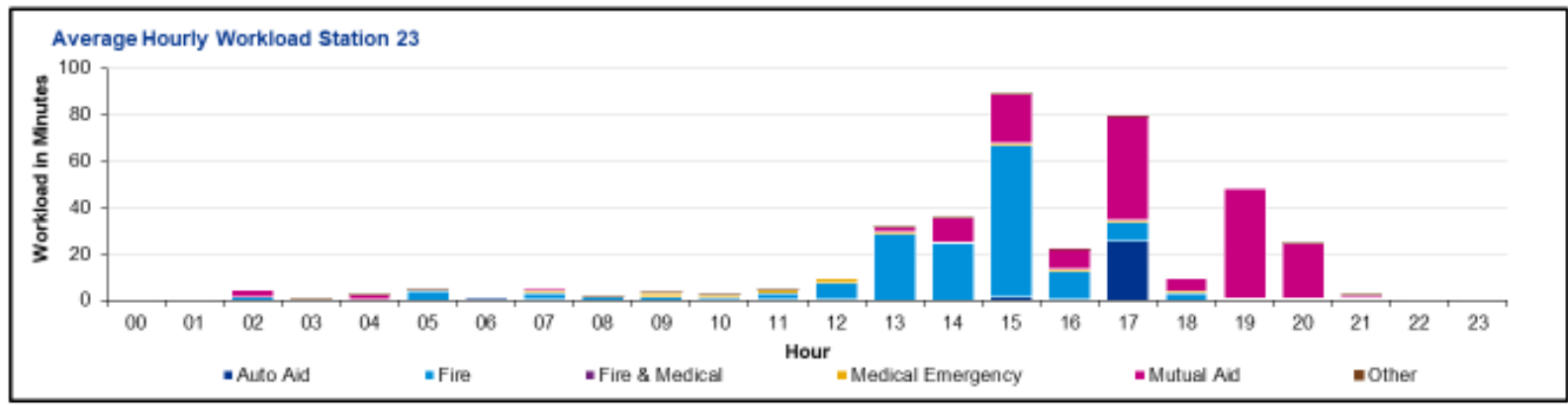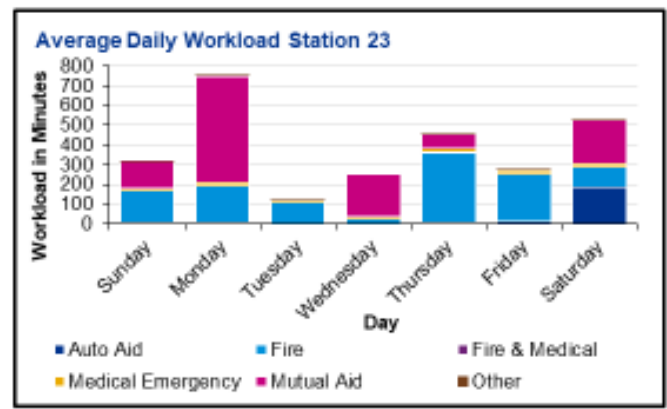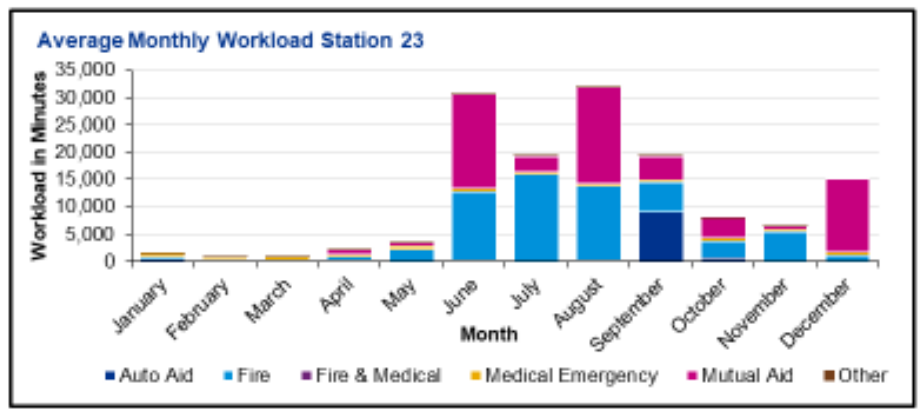| 3.06	301.38	5.24
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
3.0	52%	12.30
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
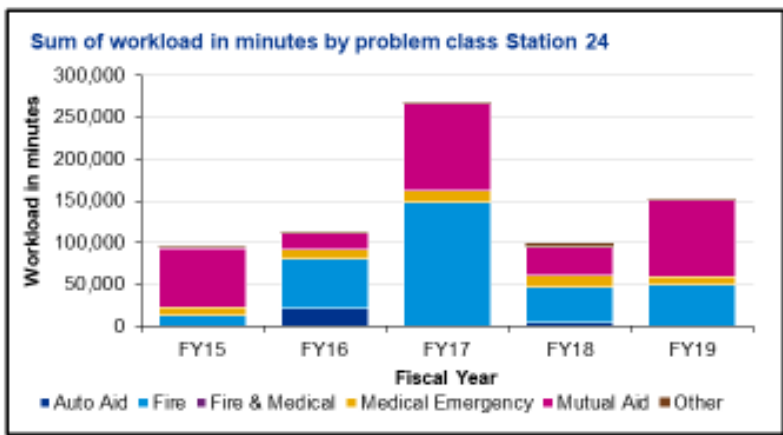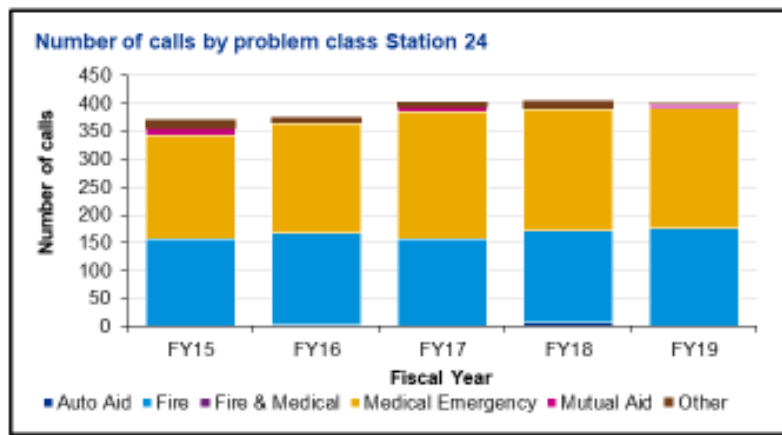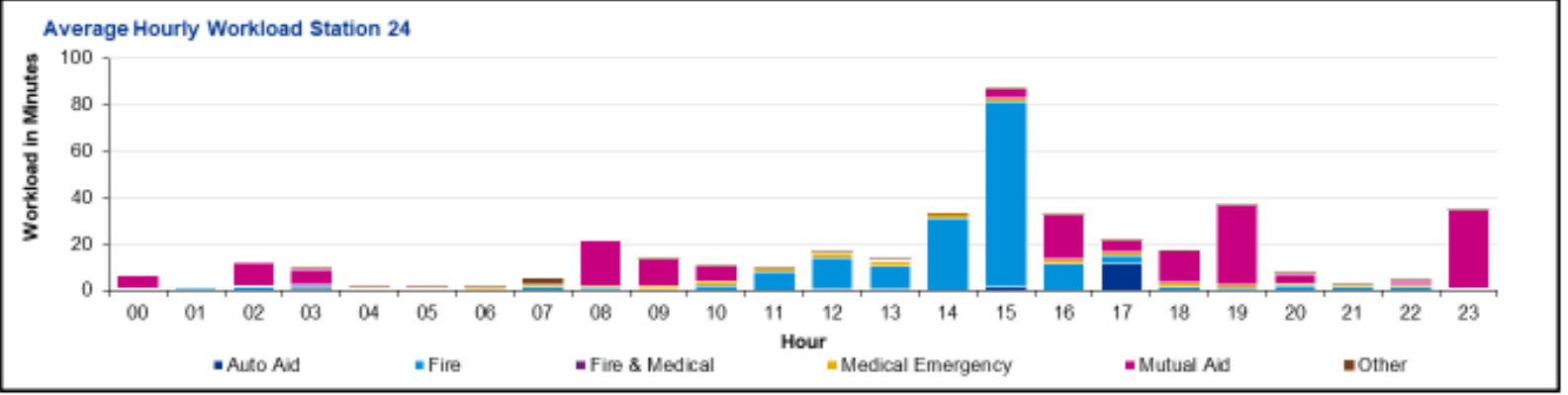
Station Analysis: Sisquoc Station 23

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 23

Workload in Minutes (y-axis: 0 to 35,000)

X-axis (Month): January, February, March, April, May, June, July, August, September, October, November, December

Legend: Auto Aid, Fire, Fire & Medical, Medical Emergency, Mutual Aid, Other

Average Daily Workload Station 23

Workload in Minutes (y-axis: 0 to 800)

X-axis (Day): Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

Legend: Auto Aid, Fire, Fire & Medical, Medical Emergency, Mutual Aid, Other

Average Hourly Workload Station 23

Workload in Minutes (y-axis: 0 to 100)

X-axis (Hour): 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23

Legend: Auto Aid, Fire, Fire & Medical, Medical Emergency, Mutual Aid, Other

Station Analysis: Los Alamos Station 24

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

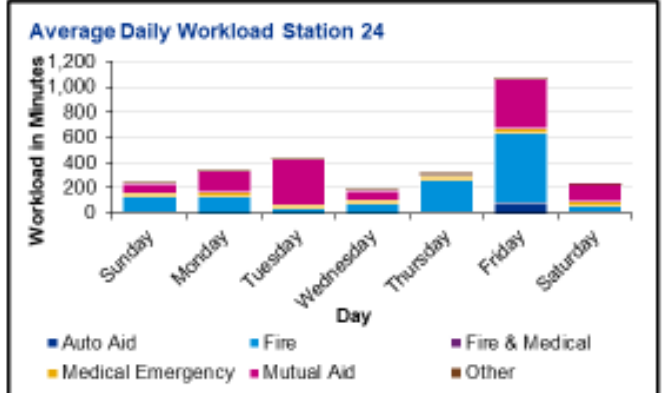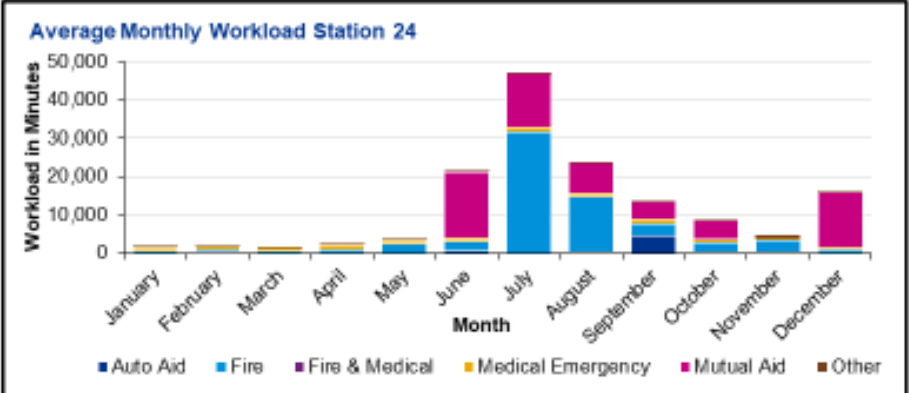| 3.03	236.73	3.90
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
3.0	53%	9.50
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
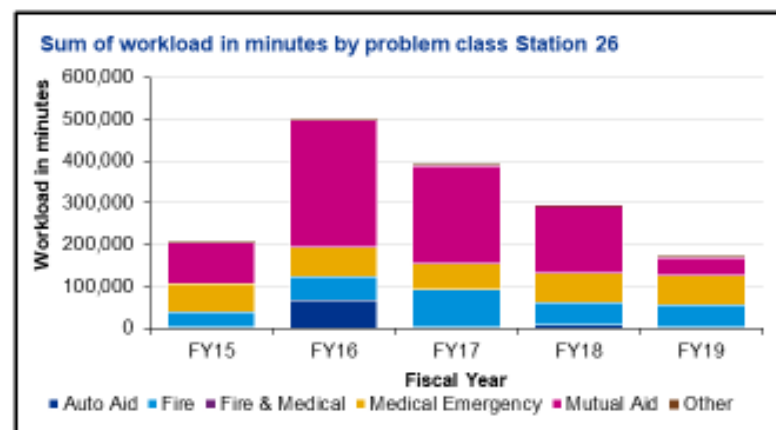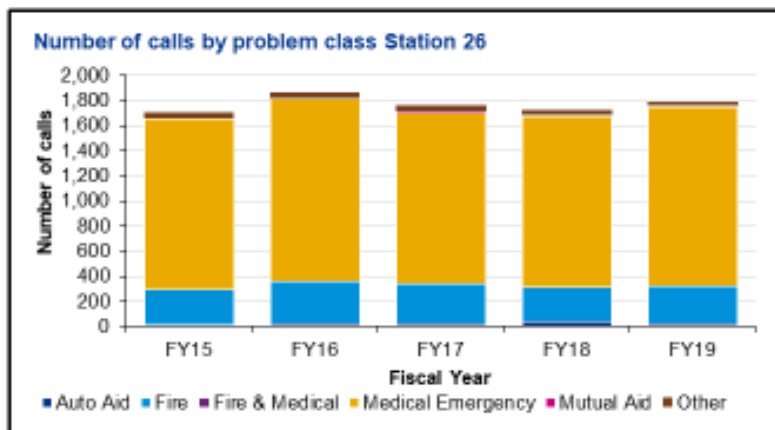
Station Analysis: Los Alamos Station 24

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 24

Average Daily Workload Station 24

Average Hourly Workload Station 24

Station Analysis: Orcutt Station 26

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 26

Sum of workload in minutes by problem class Station 26

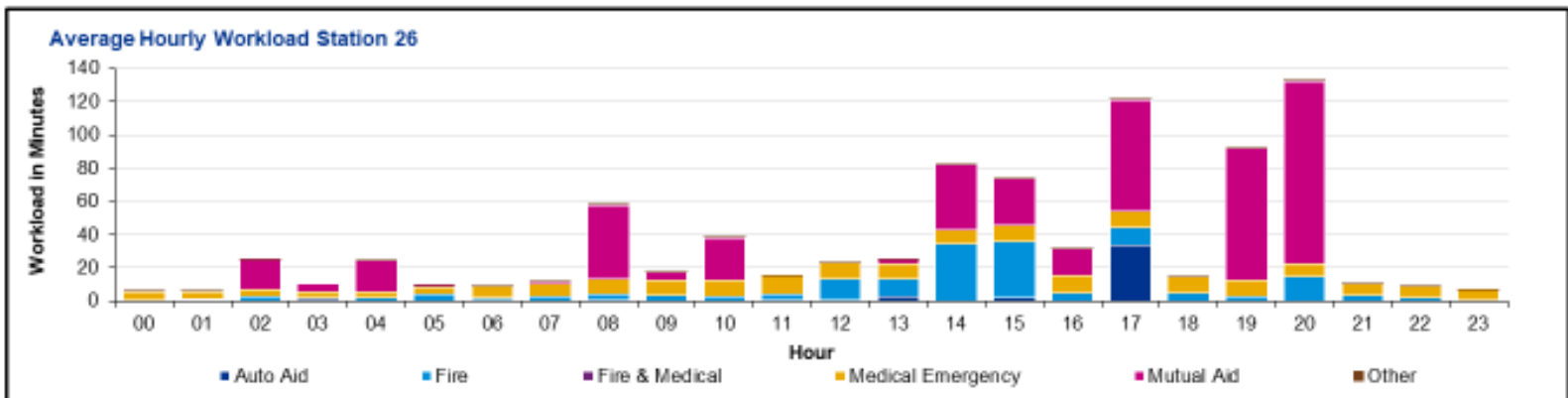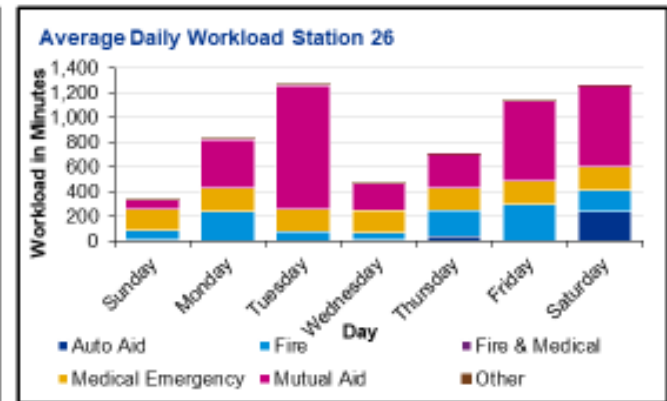| 4.01	86.05	2.40
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
4.0	79%	7.54
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.

Station Analysis: Orcutt Station 26

Average Monthly Workload Station 26

Average Daily Workload Station 26

Average Hourly Workload Station 26

Station Analysis: New Guyama Station 27

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 27

Sum of workload in minutes by problem class Station 27

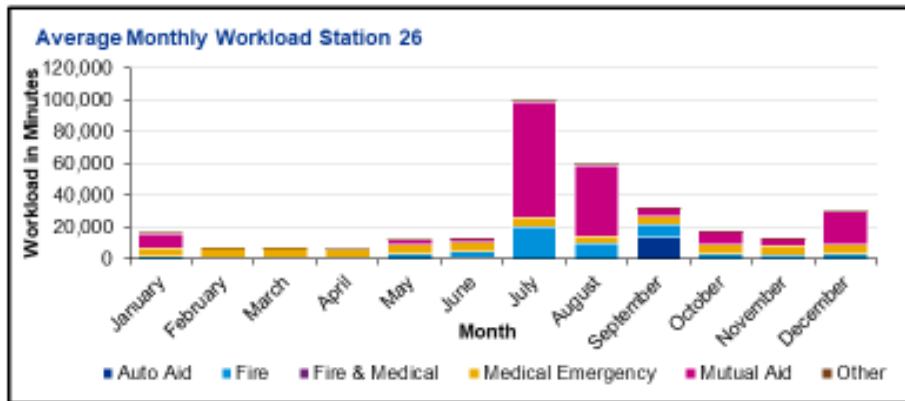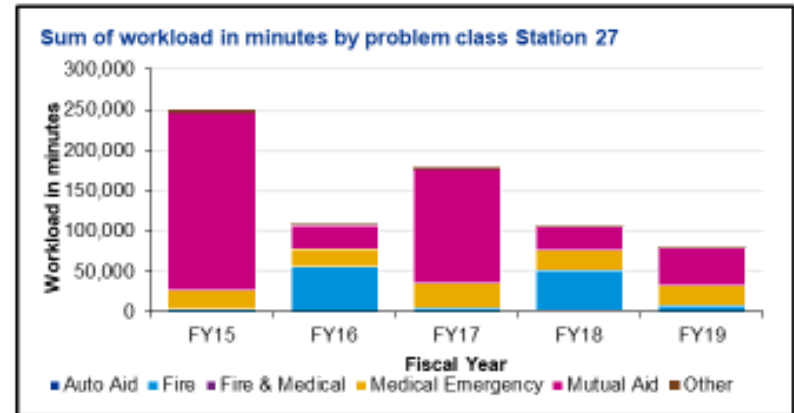| 2.08	167.12	3.75
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
3.0	77%	14.48
Station Staffing (cross staffed for the engine and ambulance)	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
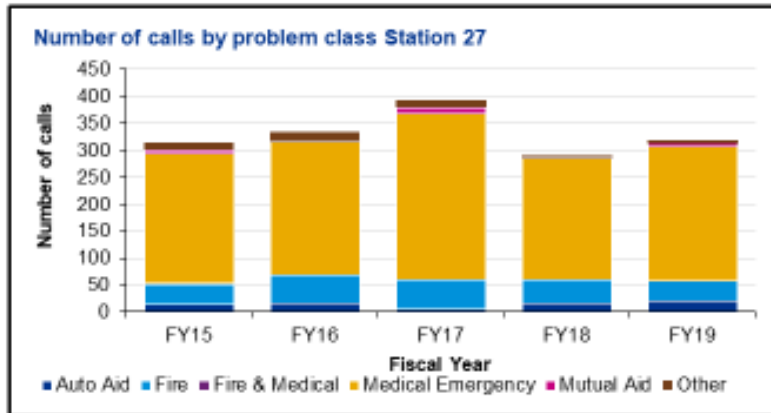
Station Analysis: New Cuyama Station 27

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 27

Average Daily Workload Station 27

Average Hourly Workload Station 27

Station Analysis: Solvang Station 30

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

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Station Analysis: Solvang Station 30

Average Monthly Workload Station 30

Legend: Auto Aid, Fire, Fire & Medical, Medical Emergency, Mutual Aid, Other

Average Daily Workload Station 30

Legend: Auto Aid, Fire, Fire & Medical, Medical Emergency, Mutual Aid, Other

Average Hourly Workload Station 30

Legend: Auto Aid, Fire, Fire & Medical, Medical Emergency, Mutual Aid, Other

Station Analysis: Buellton Station 31

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 31

Sum of workload in minutes by problem class Station 31

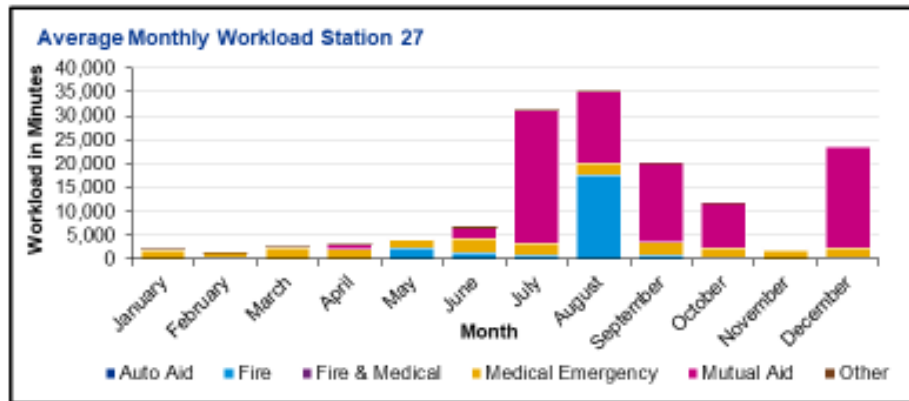| 4.07	192.88	3.45
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
4.0	66%	8.75
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
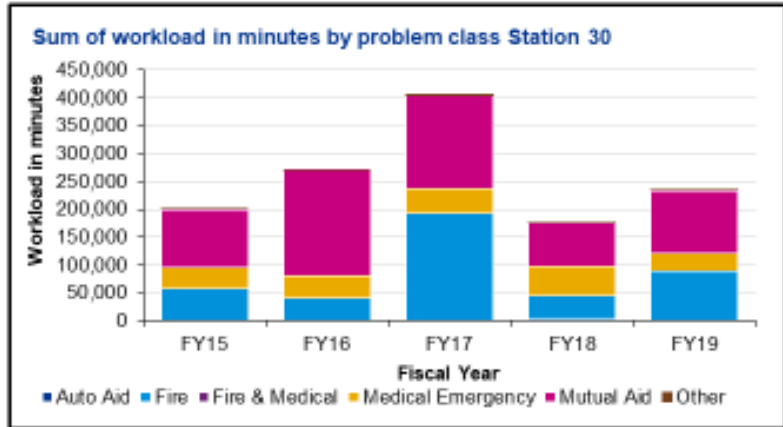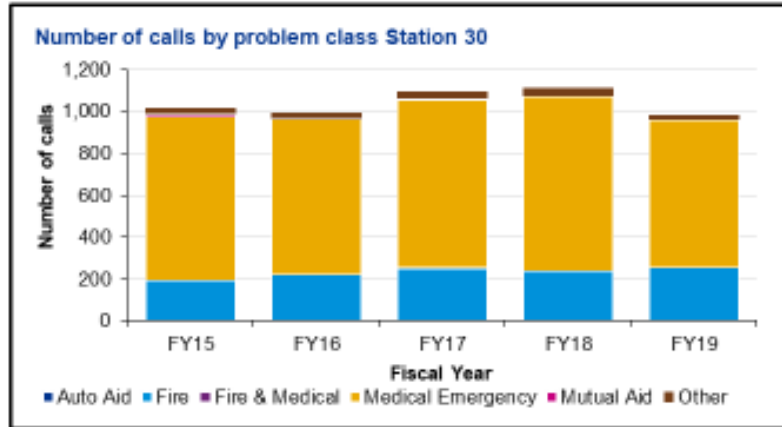
Station Analysis: Buellton Station 31

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 31

Legend: ■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Average Daily Workload Station 31

Legend: ■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Average Hourly Workload Station 31

Legend: ■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Station Analysis: Santa Ynez Station 32

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Station 32

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Sum of workload in minutes by problem class Station 32

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

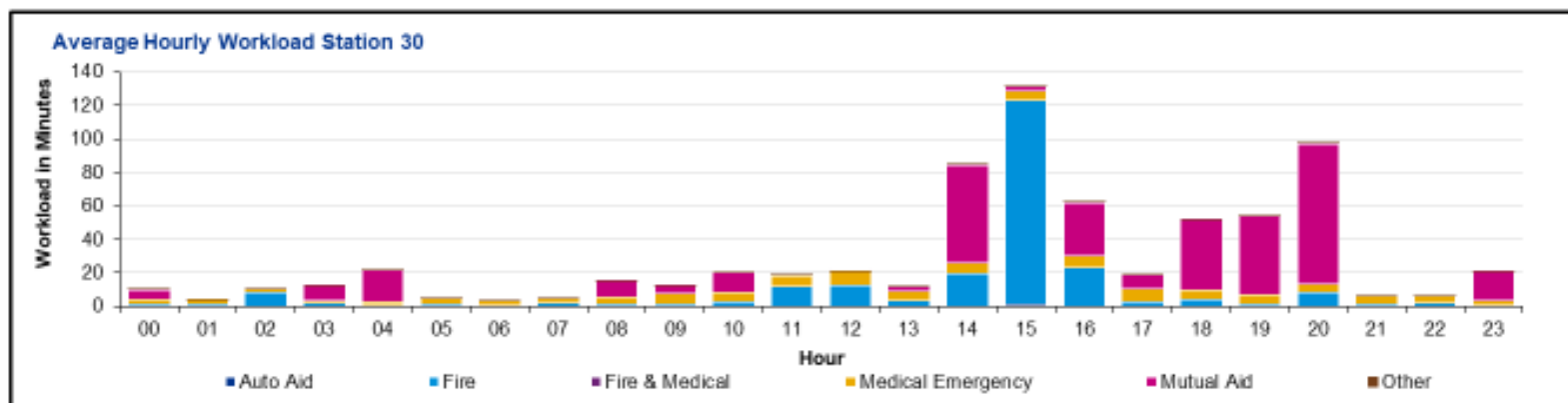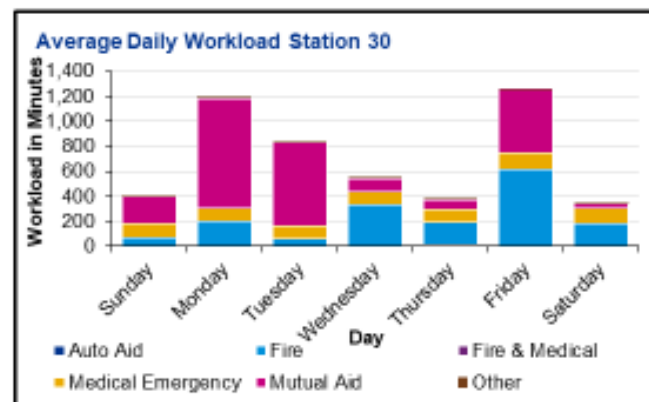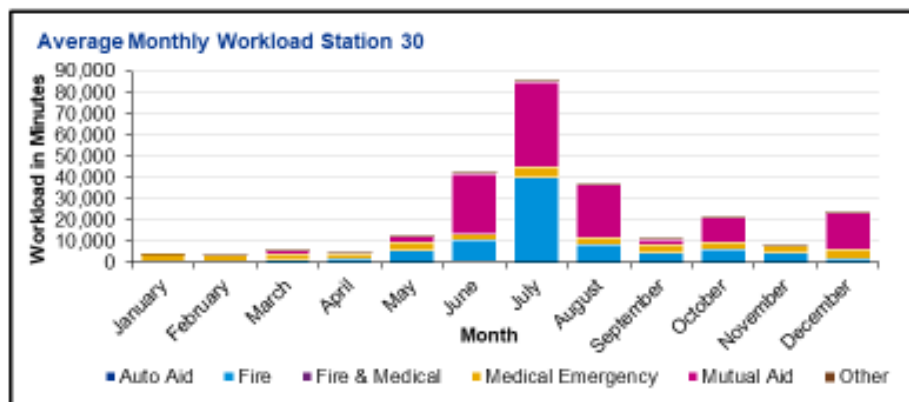| 3.88	161.40	3.58
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
4.0	67%	10.64
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
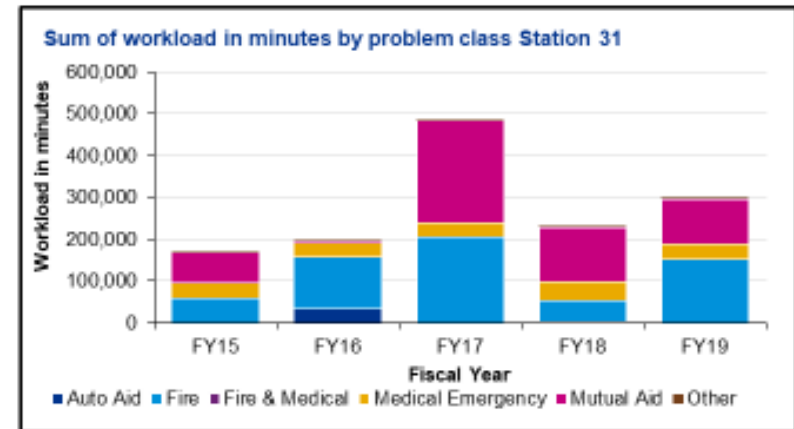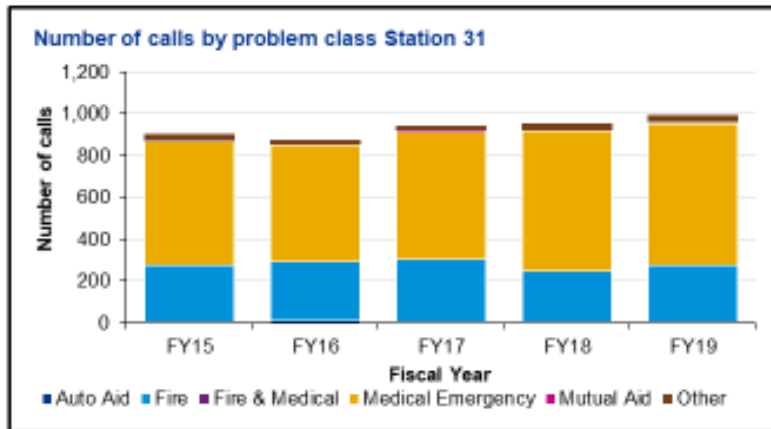
Station Analysis: Santa Ynez Station 32

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 32

Average Daily Workload Station 32

Average Hourly Workload Station 32

Station Analysis: Mission Hills Station 34

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

2.60	69.21	2.51
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)

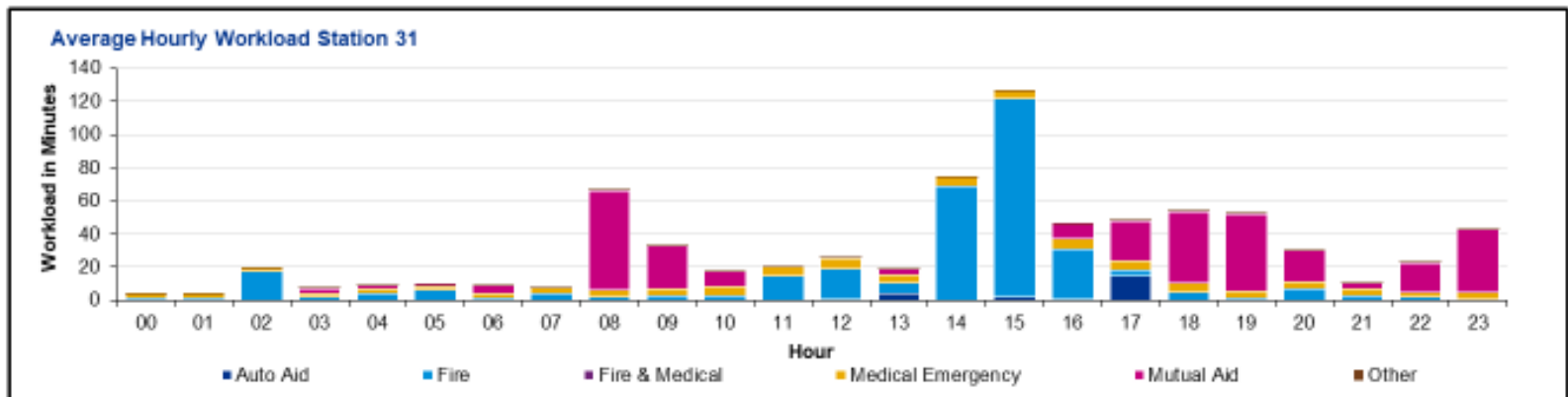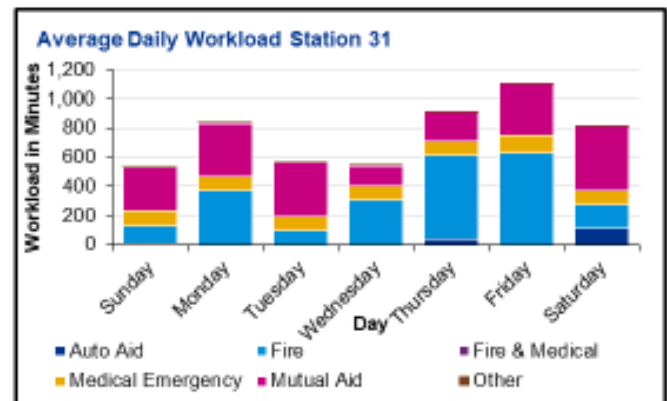| 3.0	2.0	79%	7.32
Station Staffing	Ambulance Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.

Station Analysis: Mission Hills Station 34

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 34

Average Daily Workload Station 34

Average Hourly Workload Station 34

Station Analysis: Gaviota Station 38

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
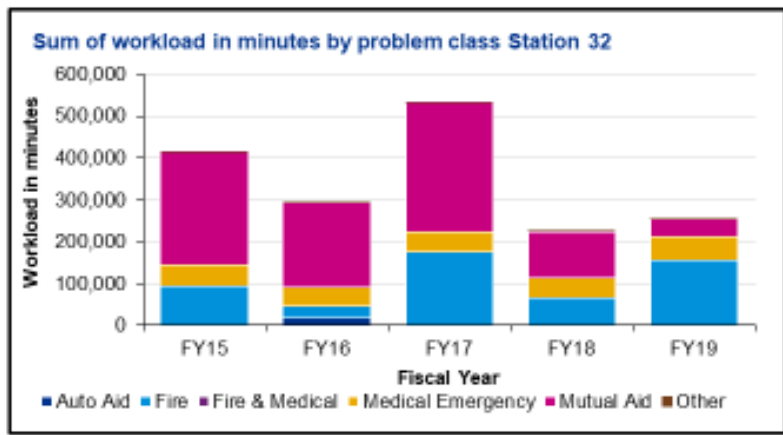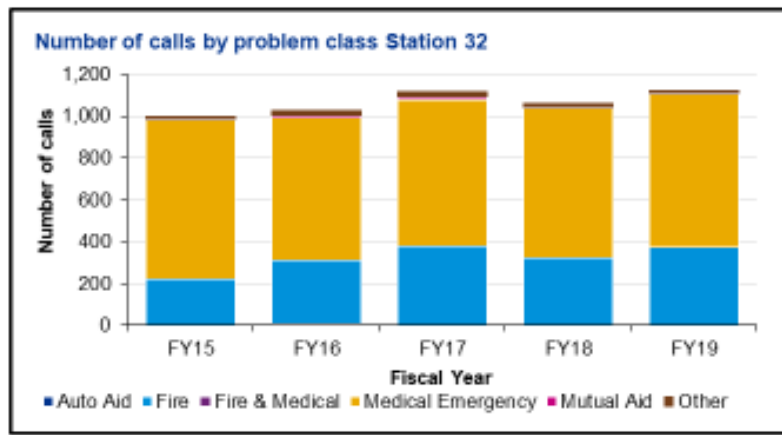
Station Analysis: Gaviota Station 38

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Average Monthly Workload Station 38

Legend: ■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Average Daily Workload Station 38

Legend: ■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Average Hourly Workload Station 38

Legend: ■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Station Analysis: Headquarters

Source: KPMG LLP analysis of Santa Barbara County CAD Dispatch data

Number of calls by problem class Headquarters

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

Sum of workload in minutes by problem class Headquarters

■ Auto Aid ■ Fire ■ Fire & Medical ■ Medical Emergency ■ Mutual Aid ■ Other

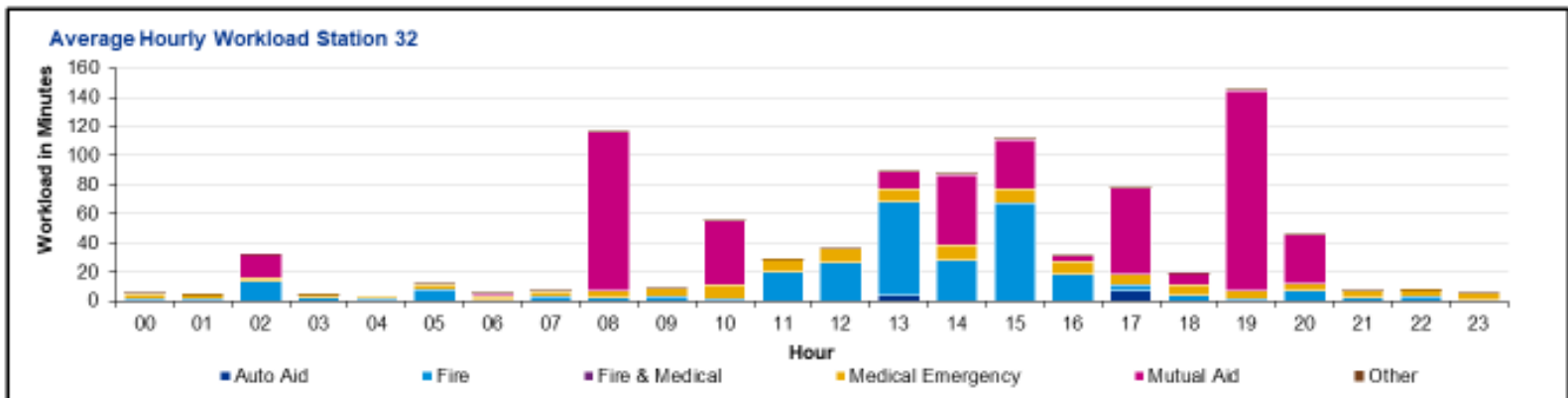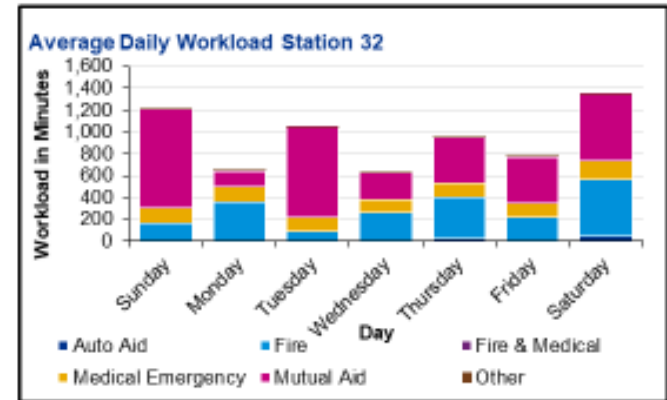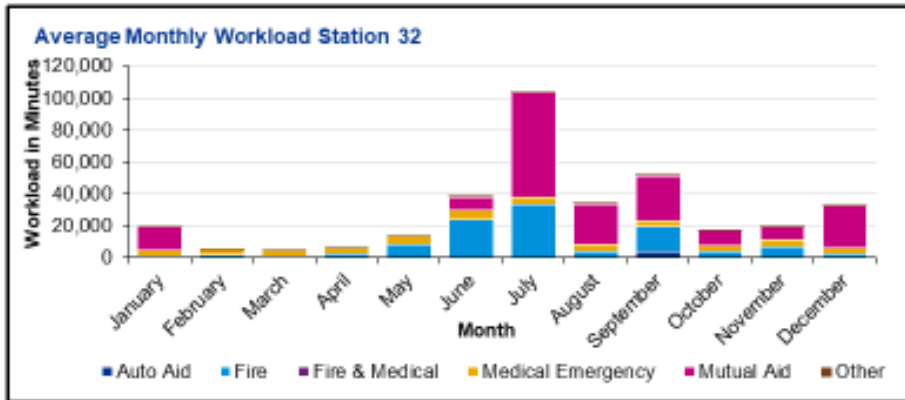| 1.08	173.15	5.72
Average Crewing	Average Workload (in minutes)	Average Dispatch Time (in minutes)
N/A	55%	10.54
Station Staffing	% of Emergency Medical Calls	Average Citizen Wait Time (in minutes)

Mutual Aid was excluded from crewing, average dispatch and average citizen wait time calculation to illustrate an accurate depiction of station level data.
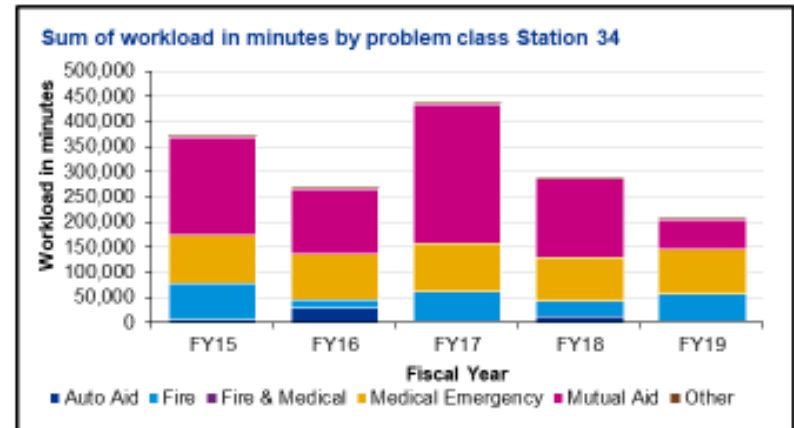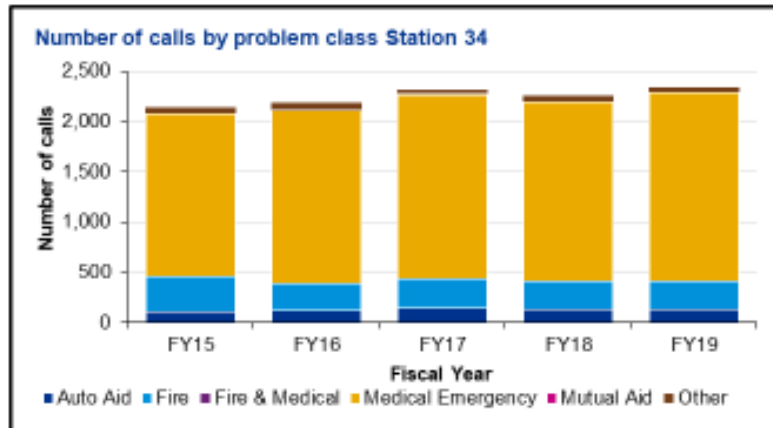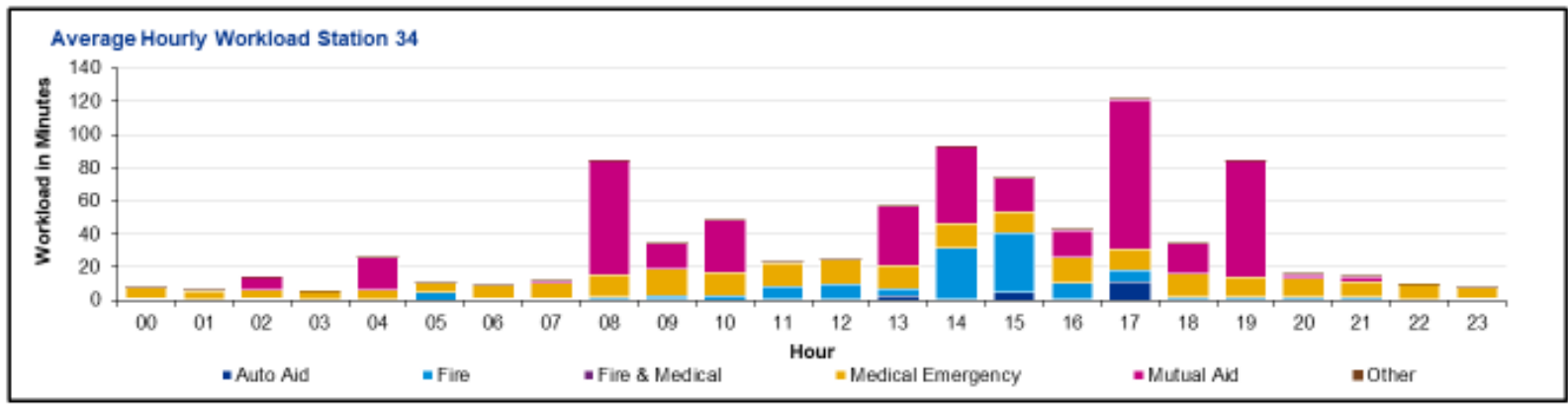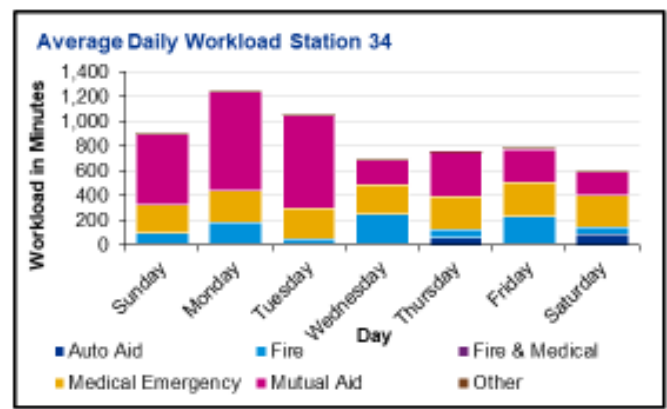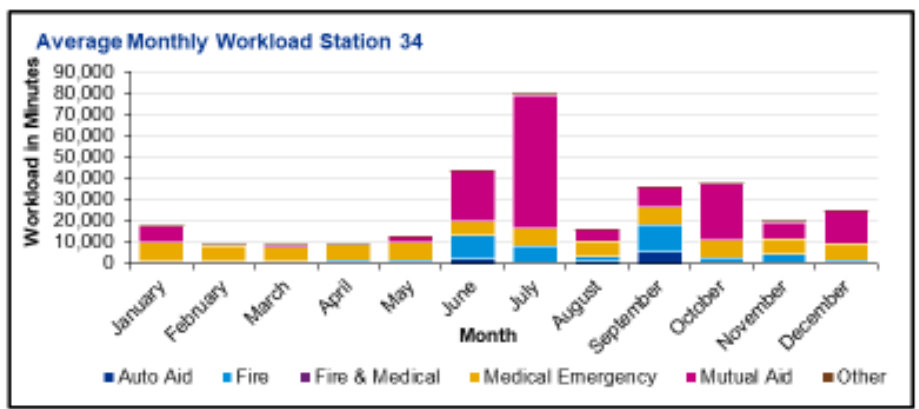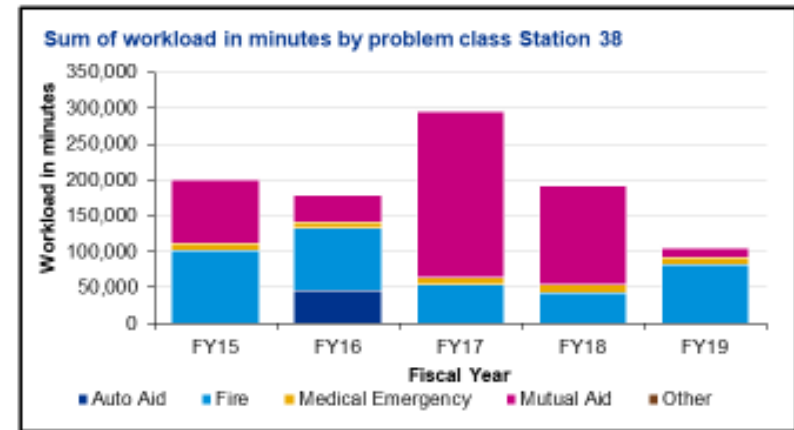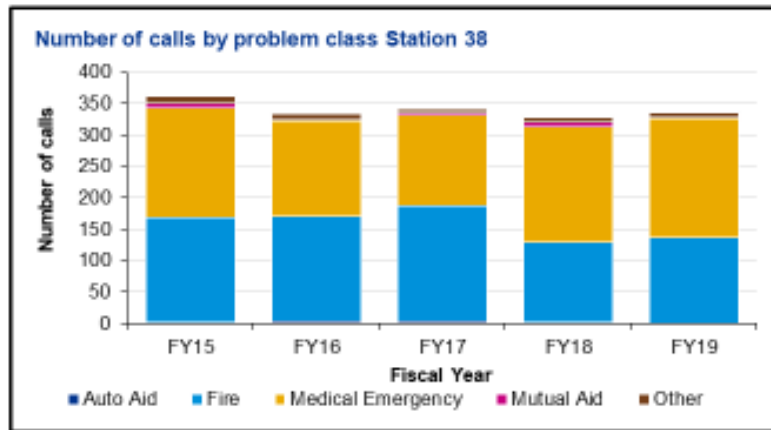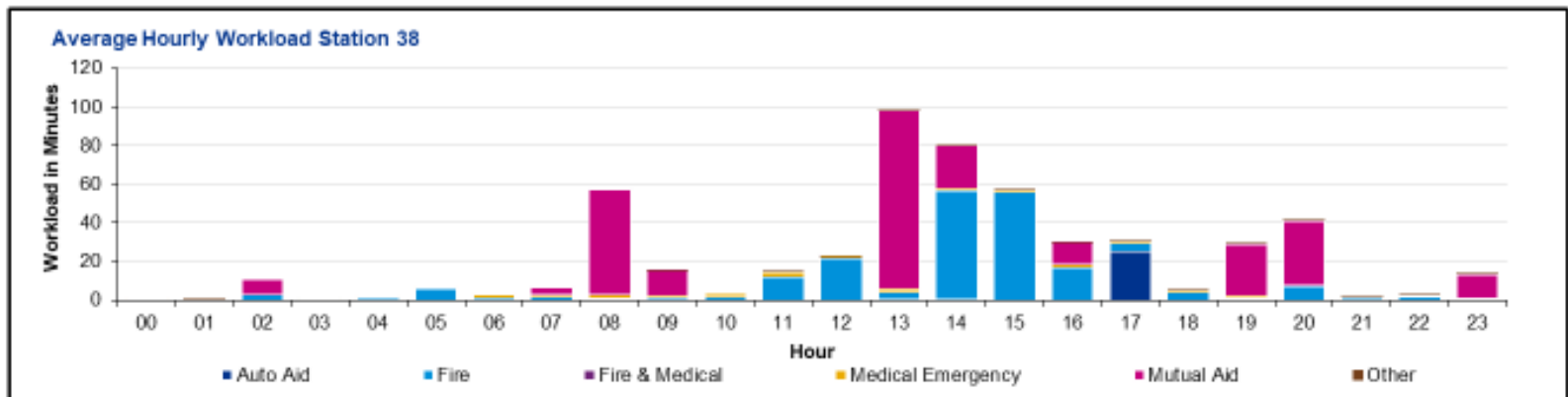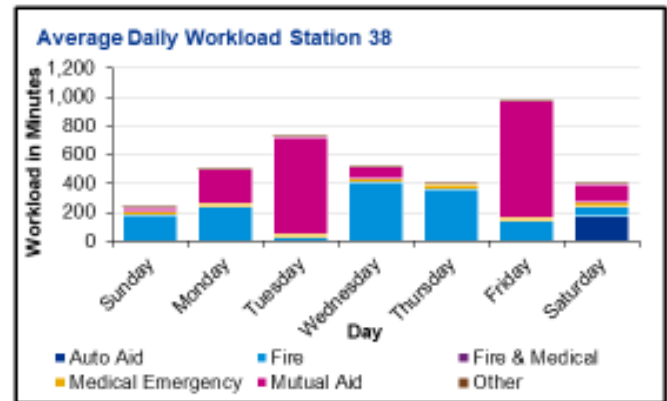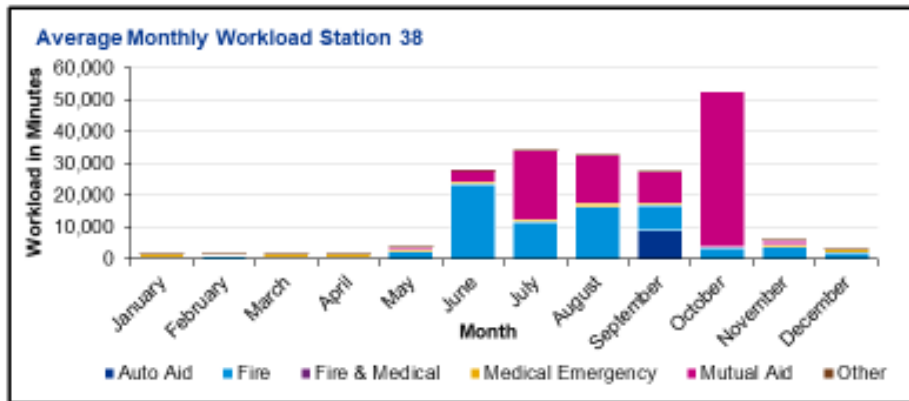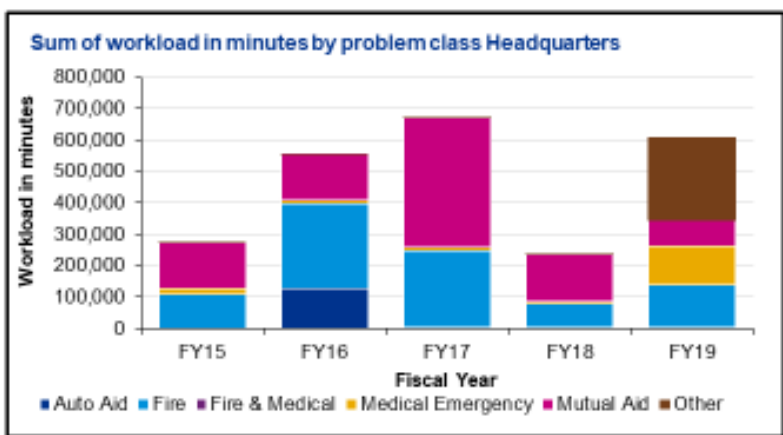
Station Analysis: Headquarters

Average Monthly Workload Headquarters

Average Daily Workload Headquarters

Average Hourly Workload Headquarters

Appendix B: Benchmarks

A benchmarking and leading practice review was conducted of the County with three benchmark fire districts and one benchmark fire authority, drawing on fire protection services in Contra Costa County, Orange, San Bernardino County, and Ventura County. Benchmark Counties were chosen based on Fire Districts which had the same structure as the Santa Barbara Fire Department in terms of contracts with incorporated cities. Enterprise budget and FTEs relates to total countywide budget and number of FTEs for each benchmark county. Calculating each Fire Department's budget as a percentage of Enterprise budget allows for greater comparison across agencies. Please note that no decisions are made based on this benchmarking, but it is rather a point of reference.

		Santa Barbara	Average	Contra Costa	Orange	San Bernardino	Ventura
FY 2018	Fire Dept FTE	261	857	361	1,402	1,067	597
	Enterprise FTE	4167	14,992	9,717	18,286	23,000	8,963
	Percent of Enterprise	6%	6%	4%	8%	5%	7%
	Fire Dept Budget	$ 77,805,100	$ 304,309,858	$ 241,674,859	$ 552,168,699	$ 236,760,429	$ 186,635,446
	Enterprise Budget	$ 1,103,906,000	$ 3,873,614,492	$ 1,927,875,521	$ 6,210,300,000	$ 6,172,800,000	$ 1,183,482,447
	Percent of Enterprise	7%	10%	13%	9%	4%	16%
	County Population	445,780	1,835,346	1,150,520	3,175,970	2,166,750	848,142
	Land Area Served (square miles)	2,480	5,283	304	780	19,200	848
	Population Density	180	2,242	3,785	4,072	113	1,000
FY 2019	Fire Dept FTE	270	874	398	1,414	1,071	614
	Enterprise FTE	4248	15,090	9,823	18,354	23,232	8,949.95
	Percent of Enterprise	6%	6%	4%	8%	5%	7%
	Fire Dept Budget	$ 95,244,600	$ 322,567,013	$ 255,749,963	$ 589,892,771	$ 260,486,974	$ 184,138,345
	Enterprise Budget	$ 1,141,000,000	$ 4,087,884,783	$ 2,048,718,400	$ 6,472,300,000	$ 6,611,300,000	$ 1,219,220,732
	Percent of Enterprise	8%	10%	12%	9%	4%	15%
	County Population	446,499	1,838,827	1,153,530	3,175,690	2,180,080	846,006
	Land Area Served (square miles)	2,480	5,283	304	780	19,200	848
	Population Density	180	2,244	3,795	4,071	114	998
FY 2020	Fire Dept FTE	274	910	414	1,569	1,043	616
	Enterprise FTE	4304	15,234	9,821	18,483	23,797	8,836.37
	Percent of Enterprise	6%	6%	4%	8%	4%	7%
	Fire Dept Budget	$ 102,153,500	$ 346,849,236	$ 267,065,312	$ 676,441,428	$ 267,487,554	$ 176,402,651
	Enterprise Budget	$ 1,187,700,000	$ 4,397,222,649	$ 2,423,491,862	$ 6,833,100,000	$ 6,943,000,000	$ 1,389,298,735
	Percent of Enterprise	9%	9%	11%	10%	4%	13%
	County Population	447,218	1,842,308	1,156,530	3,175,410	2,193,420	843,870
	Land Area Served (square miles)	2,480	5,283	304	780	19,200	848
	Population Density	180	2,246	3,804	4,071	114	995

Appendix C: CAD Problem type mapping

With the assistance of the Department, CAD "problem types" were grouped into five categories: fire calls, medical emergency calls, combined fire and medical calls, mutual aid, and other.

CAD Problem Type	Mapping	CAD Problem Type	Mapping
Alarm-Fire/Co Detector	Fire	Code 2 Medical	Medical Emergency
BDS Alarm USPS	Fire	Helicopter/CalStar	Medical Emergency
Bomb Threat	Fire	Lift Assist	Medical Emergency
Control Burn	Fire	Medical Emergency	Medical Emergency
Fire- Structure-High Rise	Fire	Public Assist – Elevator	Medical Emergency
Fire- Structure	Fire	Public Assist – Lift Assist	Medical Emergency
Fire-Center Divider	Fire	Rescue – Ocean/Surf	Medical Emergency
Fire-Couch	Fire	Rescue – Swift Water	Medical Emergency
Fire-Reported Out	Fire	Rescue-Tech:Trench/USAR/ConSpa	Medical Emergency
Fire-Trash/Dumpster/etc. – Away	Fire	Vehicle Acc – Code2	Medical Emergency
Fire-Trash/Dumpster/near Bldg	Fire	Vehicle Acc – Code3	Medical Emergency
Gas Leak Inside	Fire	Vehicle Accident Over the Side	Medical Emergency
Gas Leak Outside	Fire	WALKIN	Medical Emergency
HazMat 1 Eng	Fire	AAUTO AID Given	Auto Aid
HazMat Full Response	Fire	Cover Engine for Other Agency	Auto Aid
HazMat- Investigator	Fire	HazMat Mutual Aid	Auto Aid
Illegal Burn Smoke Check	Fire	Mutual Aid – Other out of coun	Mutual Aid
Lines down/Wires Arcing	Fire	Mutual Aid-SLO Fire	Mutual Aid
Prescribed Burn	Fire	* Miscellaneous Dispatch	Other

CAD Problem Type	Mapping	CAD Problem Type	Mapping
Vegetation Fire	Fire	Alrt1 SBA Potential Minor Emer	Other
Vegetation Fire/Center Divider	Fire	Alrt1 SMX Potential Minor Emer	Other
Vehicle Fire – Commercial - Bus	Fire	Alrt2 SBA Potential Major Emer	Other
Vehicle Fire – Passenger Car	Fire	Alrt2 SMX Potential Major Emer	Other
Alrt SYZ Airp RED	Fire & Medical	Alrt3 SBA Aircraft Accident	Other
Plane Down off Airport	Fire & Medical	Alrt3 SMX Aircraft Accident	Other
TrainFire/Derail	Fire & Medical	Any Situation that's Not Here	Other
5150/MH Transport (Fire)	Medical Emergency	Public Assist – All	Other
Active Shooter	Medical Emergency	Safe Surrender Baby	Other
Bike/Motorcycle accident	Medical Emergency	Single Engine Response – Defau	Other
C3ECHO	Medical Emergency	Test Call	Other

Appendix D: Estimated General Fund 17% reallocation by TRA location

The table below lists the property tax revenue generated by TRA location that has been reallocated from the General Fund to the Fire District per the tax transfer resolution adopted by the Board of Supervisors. This amounts to approximately a 17 percent share of the allocable property taxes available to the County.

Estimated General Fund 17% Reallocation by TRA Location	
Location	**Estimated General Fund Reallocation**
Unincorporated	
Goleta / Unincorporated	$ 3,283,261
Santa Barbara / Unincorporated	$ 2,490,970
Orcutt / Unincorporated	$ 2,491,402
Lompoc / Unincorporated	$ 1,553,474
Santa Ynez Valley / Unincorporated	$ 1,345,819
Santa Maria / Unincorporated	$ 712,114
Los Olivos / Unincorporated	$ 432,735
Gaviota / Unincorporated	$ 353,746
Ballard (Santa Ynez Valley) / Unincorporated	$ 322,544
Buellton / Unincorporated	$ 198,280
Solvang / Unincorporated	$ 170,792
Cuyama / Unincorporated	$ 119,923
Guadalupe / Unincorporated	$ 50,410
Total unincorporated	*$ 13,525,470*
Incorporated	
City of Goleta	$ 2,879,831
City of Buellton	$ 391,335
City of Solvang	$ 752,043
City of Santa Barbara	$ 64,440
Total incorporated	*$ 4,087,649*
Total unincorporated and incorporated	**$ 17,613,119**

Appendix E: Meeting tracker

This section provides detail on the meetings held with the Fire Department during the review.

Subject	KPMG Attendees	Date
Budget Interview with Nancy Anderson	Alex Rothman, Bill Zizic, Caoimhe Thornton, Cate Singer, Lauren Coble	Wednesday, November 18, 2020
Interview with Deputy Chief Woody Enos	Alex Rothman, Bill Zizic, Caoimhe Thornton, Cate Singer, Lauren Coble	Monday, November 23, 2020
Interview with Chief Mark Hartwig	Alex Rothman, Bill Zizic, Caoimhe Thornton, Cate Singer, Lauren Coble	Wednesday, December 2, 2020
Interview with David Grant	Alex Rothman, Caoimhe Thornton, Cate Singer, Lauren Coble	Wednesday, December 2, 2020
Interview with Karen Boyd	Alex Rothman, Caoimhe Thornton, Cate Singer, Lauren Coble	Thursday, December 3, 2020
Interview with Diane Sauer	Alex Rothman, Cate Singer, Lauren Coble	Friday, December 4, 2020
Interview with Wesley Welch	Alex Rothman, Lauren Coble	Friday, December 4, 2020
Interview with Chief Martin Johnson	Alex Rothman, Caoimhe Thornton, Cate Singer, Lauren Coble	Monday, December 7, 2020
Interview with Chief Patrick Byde	Alex Rothman, Caoimhe Thornton, Cate Singer, Lauren Coble	Tuesday, December 8, 2020
Interview with Chief Tom Himmelrich	Alex Rothman, Caoimhe Thornton, Cate Singer, Lauren Coble	Wednesday, December 9, 2020
Follow Up Conversation with Diane Sauer	Alex Rothman, Cate Singer, Lauren Coble	Thursday, December 10, 2020
Interview with Patrick Zuroske	Alex Rothman, Cate Singer, Lauren Coble	Friday, December 11, 2020
Santa Barbara Fire Department Focus Group	Alex Rothman, Lauren Coble	Tuesday, December 15, 2020
Interview with Michael Klusyk and Kent Boisen	Alex Rothman, Lauren Coble	Tuesday, December 15, 2020
Interview with Joe Ayala re CAD data	Alex Rothman, Lauren Coble	Wednesday, December 16, 2020
Interview with Chief Anthony Stornetta	Alex Rothman, Lauren Coble	Thursday, December 17, 2020

Subject	KPMG Attendees	Date
Capital Planning with Chief Heckman	Alex Rothman, Cate Singer, Lauren Coble	Thursday, December 17, 2020
Meeting with Shawna Jorgensen and Diane Sauer	Alex Rothman, Cate Singer, Lauren Coble	Thursday, December 17, 2020
Training/EMS Focus Group	Alex Rothman, Lauren Coble	Friday, December 18, 2020
Interview with Chief Sergio Sanchez	Alex Rothman, Lauren Coble	Friday, December 18, 2020
Santa Barbara Fire Department Focus Group – Air/Wildland	Alex Rothman, Lauren Coble	Monday, December 21, 2020
Santa Barbara Fire Department Focus Group – Vegetation Management	Alex Rothman, Lauren Coble	Tuesday, December 22, 2020
Santa Barbara Fire Department Focus Group – Investigations & Inspection Services	Alex Rothman, Lauren Coble	Tuesday, December 22, 2020
Battalion 2 Captain Focus Group with KPMG	Alex Rothman, Lauren Coble	Wednesday, December 23, 2020
SB Fire Battalion 3 Focus Group with KPMG	Alex Rothman, Lauren Coble	Tuesday, January 5, 2021
Inspection Services Focus Group	Alex Rothman, Lauren Coble	Thursday, January 7, 2021
Battalion 2 Engineer and Firefighter Focus Group	Alex Rothman, Lauren Coble	Friday, January 8, 2021
Battalion 1 Captain, Engineer, and Firefighter Focus Group	Alex Rothman, Lauren Coble	Friday, January 8, 2021
Battalion 3 Focus Group: Engineers, Paramedics, and Firefighters	Alex Rothman, Lauren Coble	Thursday, January 14, 2021
Interview with Joe Ayala re CAD data	Alex Rothman, Lauren Coble	Thursday, January 21, 2021
Meeting with Deputy Chief Heckman	Alex Rothman, Cate Singer, Lauren Coble	Tuesday, January 26, 2021
Meeting with Nancy Anderson	Alex Rothman, Cate Singer, Lauren Coble	Tuesday, January 26, 2021
Dispatch and EMS follow up with Martin Johnson, Matt Farris	Alex Rothman, Lauren Coble	Monday, January 18, 2021
Meeting to Review Initial Opportunities with Fire Dept Leadership	Alex Rothman, Cate Singer, Lauren Coble	Wednesday, February 3, 2021

Appendix F: Data tracker

This section provides detail on data received throughout the Fire Department Review.

Data Item	File Name
Balance Sheet 5 Years	6. Balance Sheet 5 Years.xlsx
Board Letters and Attachments	2002 GOLETA REVENUE NEUTRALITY AGREEMENT.pdf
Board Letters and Attachments	Attachment 1 Volume 1 Main Report.pdf
Board Letters and Attachments	Attachment 2 Volume 2 Map Appendix.pdf
Board Letters and Attachments	Attachment A – Response to Citygate Recommendations.pdf
Board Letters and Attachments	Attachment B – Fire Operations Enhancement Plan.pdf
Board Letters and Attachments	Attachment C – Capital Improvement Plan.pdf
Board Letters and Attachments	Attachment H – Tax Transfer Resolution with base plus 25% increment to 17%.pdf
Board Letters and Attachments	Board Letter 2-14-12 CityGate Study.pdf
Board Letters and Attachments	Board Letter 3122012.pdf
Board Letters and Attachments	Board Letter 4-10-12 CityGate Phased Plan.pdf
Board Letters and Attachments	Board Letter 5112.pdf
Board Letters and Attachments	goletarvw1920pkg.pdf
Board Letters and Attachments	Sheriff letter regarding Dispatch.pdf
CAD Data 5 Years	KPMG FIRE 2015-2019.xlsx
City Contracts or Agreements	11_20_07 Attachment A – Resolution.pdf
City Contracts or Agreements	11_20_07 Attachment B – MOU.pdf
City Contracts or Agreements	11_20_07 Board Letter.pdf
City Contracts or Agreements	11_20_17 Attachment C _ Joint.pdf
City Contracts or Agreements	3_13_07 Board Letter.pdf
City Contracts or Agreements	3_13_07 Memorandum.pdf
City Contracts or Agreements	3_13_07 MOU.pdf
City Contracts or Agreements	3_13_07 Resolution.pdf
City Contracts or Agreements	7_12_05 Board Letter and Agreement.pdf
City Contracts or Agreements	8_14_07 Board Letter.pdf
City Contracts or Agreements	Buellton 2005.pdf

Data Item	File Name
City Contracts or Agreements	Cost Recovery Methodology Municipal Fire Srv. Contract2433441 Kern County.pdf
City Contracts or Agreements	Goleta Revenue Neutrality Agreement.pdf
City Contracts or Agreements	Goleta RNA amendment.pdf
City Contracts or Agreements	Kern County Final Report2372503.pdf
City Contracts or Agreements	Agreement for Fire Services on the Chumash Reservation-2015.pdf
City Contracts or Agreements	Goleta Revenue Neutrality Agreement.pdf
City Contracts or Agreements	Goleta RNA amendment.pdf
City Contracts or Agreements	Solvang Board Action and MOU.pdf
Department and Division Programs Services Overview	FY 20-21 D-Pages.pdf
Department and Division Programs Services Overview	Air and Wildland.pdf
Department and Division Programs Services Overview	Emergency Medical Services.pdf
Department and Division Programs Services Overview	Fire Investigation Law Enforcement Unit.pdf
Department and Division Programs Services Overview	Inspection ServicesPermits.pdf
Department and Division Programs Services Overview	Office of the County Fire Marshal.pdf
Department and Division Programs Services Overview	Operations Area Coordinator.pdf
Department and Division Programs Services Overview	Planning and Engineering Development.pdf
Department and Division Programs Services Overview	Training Section.pdf
Department and Division Programs Services Overview	Wildfire Prevention and Mitigation.pdf
Department and Division Programs Services Overview	Wildland Fire Crew.pdf
Department County Mandates, Policies & Procedures	The Fire Protection District Law of 1987.htm
Department County Mandates, Policies & Procedures	P&P Complete.pdf
Department County Mandates, Policies & Procedures	Table of Contents.pdf

Data Item	File Name
Department County Mandates, Policies & Procedures	Volume I Administration.pdf
Department County Mandates, Policies & Procedures	Volume II Training.pdf
Department County Mandates, Policies & Procedures	Volume III – Apparatus and Equipment.pdf
Department County Mandates, Policies & Procedures	Volume IV Fire Prevention.pdf
Department County Mandates, Policies & Procedures	Volume V Emergency Operations.pdf
Department Fund, Unfunded, Vacant Positions 3 years	17-18 Q3 Vacancies.pdf
Department Fund, Unfunded, Vacant Positions 3 years	18-19 Q3 Vacancies.pdf
Department Fund, Unfunded, Vacant Positions 3 years	19-20 Q3 Vacancies.pdf
Department Performance Metrics & Targets	Q2 – Finance Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q2 – HR Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q2 – IT Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q2 – Operations Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q2 – Prevention Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q2 – Support Services Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q3 – Departmentwide Project Tracking.docx
Department Performance Metrics & Targets	Q3 – EMS Communications Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q3 – HR Project Tracker Sheet (1).docx
Department Performance Metrics & Targets	Q3 – HR Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q3 – IT Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q3 – Operations 2018.docx

Data Item	File Name
Department Performance Metrics & Targets	Q3 – Prevention Project Tracker Sheet.docx
Department Performance Metrics & Targets	Q3 – Support Services Project April 30th 2018.docx
Department Performance Metrics & Targets	Q4 – Departmentwide Project Tracking.docx
Department Performance Metrics & Targets	Q4 – IT Project Tracker Sheet .docx
Department Performance Metrics & Targets	Q1 – EMS Communications Project Tracker – FY 2018-19.docx
Department Performance Metrics & Targets	Q1 – Finance Project (Fiscal) – FY 2018-19.docx
Department Performance Metrics & Targets	Q1 – Finance Project – FY 2018-19.docx
Department Performance Metrics & Targets	Q1 – HR Project Tracker Sheet- FY 2018-19b.docx
Department Performance Metrics & Targets	Q1 – IT Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q1 – Operations – FY 2018-19.docx
Department Performance Metrics & Targets	Q1 – Prevention Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q1 – Support Services Project – FY 2018-19.docx
Department Performance Metrics & Targets	Q2 – EMS Communications Project Tracker – FY 2018-19.docx
Department Performance Metrics & Targets	Q2 – Finance Project (Fiscal) – FY 2018-19.docx
Department Performance Metrics & Targets	Q2 – HR Project Tracker Sheet- FY 2018-19b.docx
Department Performance Metrics & Targets	Q2 – IT Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q2 – Operations Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q2 – Prevention Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q2 – Support Services Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q2 Department-wide Update-CFO Project Tracker Sheet FY 2018-19.pdf

Data Item	File Name
Department Performance Metrics & Targets	Q2 – HR Project Tracker Sheet- FY 2018-19b.docx
Department Performance Metrics & Targets	Q3 – Dept.-wide Update-CFO – FY2018-19.docx
Department Performance Metrics & Targets	Q3 – EMS Communications Project Tracker – FY 2018-19.docx
Department Performance Metrics & Targets	Q3 – Finance Project (Fiscal) – FY 2018-19.docx
Department Performance Metrics & Targets	Q3 – IT Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q3 – Prevention Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q3 Operations FY 2018-19.docx
Department Performance Metrics & Targets	Q4 – Finance Project (Fiscal) – FY 2018-19.docx
Department Performance Metrics & Targets	Q4 – HR Project Tracker Sheet- FY 2018-19b.docx
Department Performance Metrics & Targets	Q4 – IT Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q4 – Prevention Project Tracker Sheet – FY 2018-19.docx
Department Performance Metrics & Targets	Q4 Operations FY 2018-19.docx
Department Performance Metrics & Targets	Q1 – EMS & Training Project Tracker.docx
Department Performance Metrics & Targets	Q1 – Finance Project (Fiscal) – FY 2019-20.docx
Department Performance Metrics & Targets	Q1 – HR Project Tracker Sheet- FY 2019-20.docx
Department Performance Metrics & Targets	Q1 – Prevention Project Tracker Sheet – FY 2019-20.docx
Department Performance Metrics & Targets	Q1 – Support Services Project – FY 2019-20.docx
Department Performance Metrics & Targets	Q1 Operations FY 2019-20.docx
Department Performance Metrics & Targets	Q1 Operations FY 2019-20.pdf
Department Performance Metrics & Targets	Q2 – EMS & Training Project Tracker.docx

Data Item	File Name
Department Performance Metrics & Targets	Q2 – HR Project Tracker Sheet- FY 2019-20.docx
Department Performance Metrics & Targets	Q2 – IT Project Tracker.docx
Department Performance Metrics & Targets	Q2 – Operations FY 2019-20.docx
Department Performance Metrics & Targets	Q2 – Prevention Project Tracker Sheet – FY 2019-20.docx
Department Performance Metrics & Targets	Q2 – Support Services Project – FY 2019-20.docx
Department Performance Metrics & Targets	Q3 – EMS & Training Project Tracker.docx
Department Performance Metrics & Targets	Q3 – HR Project Tracker Sheet- FY 2019-20.docx
Department Performance Metrics & Targets	Q3 – IT Project Tracker.docx
Department Performance Metrics & Targets	Q3 – Prevention Project Tracker Sheet – FY 2019-20.docx
Department Performance Metrics & Targets	Q3 – Support Services Project – FY 2019-20.docx
Department Performance Metrics & Targets	Q4 – HR Project Tracker Sheet- FY 2019-20.docx
Department Performance Metrics & Targets	Q4 – IT Project Tracker.docx
Department Performance Metrics & Targets	Q4 – Prevention Project Tracker Sheet – FY 2019-20.docx
Department Performance Metrics & Targets	Q4 – Support Services Project – FY 2020-21.docx
Department Performance Metrics & Targets	Q1 – EMS & Training Project Tracker.docx
Department Performance Metrics & Targets	Q1 – HR Project Tracker Sheet- FY 2020-21.docx
Department Performance Metrics & Targets	Q1 – Prevention Project Tracker Sheet – FY 2020-21.docx
Department Strategic Plans	Draft Citygate Report.docx
Department Strategic Plans	SBC Unit Strategic Fire Plan.pdf
Department Strategic Plans	SBC_hazard mitigation plan _2011.pdf
Department Vendor Contracts	Board Contracts.xlsx
Department Vendor Contracts	Contracts Blankets and Purchase Orders.pdf

Data Item	File Name
Department Vendor Contracts	Contracts Blankets and Purchase Orders.xlsx
Department Workload Reports	SBC Calls for Service by Sector 2019.pdf
Department Workload Reports	Turnout times 2019.pdf
Dept Job Descriptions	Job Descriptions.docx
Dept Key Technology Systems	16. Key Technological Systems Inventory.xlsx
Dept Organizational Chart	Org Chart 10-26-20 9 (without EXH).pdf
Dept Time Allocation	Dept Time Allocation.xlsx
Dept Union Agreements MOUs	2046 MOU.pdf
Dept Union Agreements MOUs	620 MOU.pdf
Dept Union Agreements MOUs	Assistant Dept Head Resolution.pdf
Dept Union Agreements MOUs	Dept Head Resolution.pdf
Dept Union Agreements MOUs	DSA MOU -Pilots.pdf
Dept Union Agreements MOUs	ENG&TECH (ETA) MOU.pdf
Dept Union Agreements MOUs	Management Resolution.pdf
Map and List of Department Facilities	8. SBC Stations Facilities Map.pdf
Map and List of Department Facilities	County Fire Stations.pdf
Other Recommended Materials Reports Audits	Board Action on Tax Transfer.docx
Other Recommended Materials Reports Audits	Board Contracts.xls
Other Recommended Materials Reports Audits	Dispatch Center Audit Report – DRAFT 3-8-16.pdf
Other Recommended Materials Reports Audits	Fire Tax Shift Board Letter.pdf
Other Recommended Materials Reports Audits	Attachment 1 Volume 1 Main Report.pdf
Other Recommended Materials Reports Audits	Attachment 2 Volume 2 Map Appendix.pdf
Other Recommended Materials Reports Audits	Attachment B – Fire Operations Enhancement Plan.docx
Other Recommended Materials Reports Audits	Citygate Status Update 041013.docx
Other Recommended Materials Reports Audits	Appx E – Citygate 2012 Recommendations Update (11-10-20).docx
Other Recommended Materials Reports Audits	Appx F – Recommendations Implementation Table (11-10-20).docx

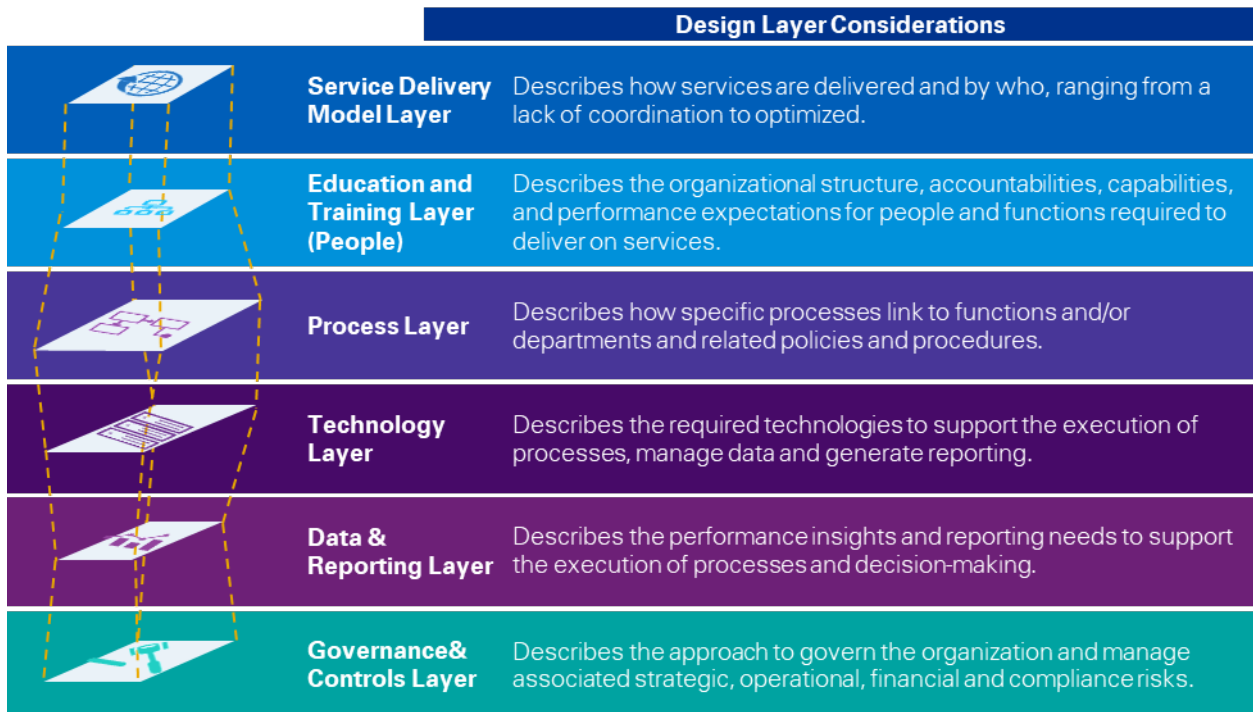| Data Item	File Name
Other Recommended Materials Reports Audits	Vol 1 – Technical Report – Santa Barbara County OEU (11-10-20).docx
Other Recommended Materials Reports Audits	Board Agenda Letter-Draft Update 7-10-2017.docx
Other Recommended Materials Reports Audits	DWX SBCo Dispatch Findings & Alternatives DRAFT 2017-07-11v1.docx
Other Recommended Materials Reports Audits	SBCo BOS Meeting 2017-07-11v1.pptx
Performance Reports and Supporting Data	Citygate Recommended Performance Measures.docx
Performance Reports and Supporting Data	FY 2016-17 Performance Measures.pdf
Performance Reports and Supporting Data	FY 2017-18 Performance Measures.pdf
Performance Reports and Supporting Data	FY 2018-19 Performance Measures.pdf
Performance Reports and Supporting Data	FY 2019-20 Performance Measures.pdf
Performance Reports and Supporting Data	FY 2020-21 Performance Measures.pdf
Previous Studies & Review Reports	Grand Jury Report 051401.docx
Previous Studies & Review Reports	Management Partners Study 2006.pdf
Previous Studies & Review Reports	Prior Fire Service Studies.pdf
Recruitment and Attrition Data	Recruitments Since 2015.xlsx
Recruitment and Attrition Data	Separations.xlsx
Revenue and Expenditure Data	4. Revenue and Expenditure Data 5 Years.xlsx
Revenue and Expenditure Data	Revenue and Expenditure data by program.xlsx
Revenue Trend by Budget Program	5. Revenue Trend by Budget Program.xlsx
Schedule Samples for all Divisions	EMS and Training Division.xlsx
Schedule Samples for all Divisions	Finance.xlsx
Schedule Samples for all Divisions	HR.xlsx
Schedule Samples for all Divisions	InspectionServices.xlsx
Schedule Samples for all Divisions	Investigation-Enforcment.xlsx
Schedule Samples for all Divisions	KPMG Schedule Sample by Division Workbook-Finance.xlsx
Schedule Samples for all Divisions	Logistics Section.xlsx
Schedule Samples for all Divisions	Ops Shift.pdf

Data Item	File Name
Schedule Samples for all Divisions	Planning-Engineering.xlsx
Schedule Samples for all Divisions	Prevention.xlsx
Schedule Samples for all Divisions	Vegetation Management.xlsx
Staffing Assignments	Staffing Assignments.xlsx
Staffing Assignments for all Divisions	Org Chart 10-26-20 9 (without EXH).pdf

Category							
Service Delivery Model	Lack of data-driven decision-making to guide deployment	1	2	There are few data processes in place meaning that established data management processes are not in place and used throughout the organization	4	Data is available in real time accessible via automated systems and accessible in a format which is ready and appropriate for analysis	Optimized deployment
Education and Training	Lack of coordination	1	There are some elements of a leadership development strategy	3	The leadership development strategy supports delivery of department objectives and strategy by aligning with other key strategies, training engagement performance management etc.	5	Robust
Process	Locally specific	1	Processes are designed to support departmental strategy and goals. The use and utilization of processes is limited	3	Processes are uniformly executed and monitored. Reviews ensure consistency, efficiency and strategic relevance	5	Standardized
Technology	Incompatible systems	1	2	The use and utilization of technology is limited by information silos and incompatibilities	Technology is utilized y the entire department to connect and facilitate strategic delivery and proactively identify needs	5	Enterprise system
Governance and Controls	Informal	1	2	Controls and compliance requirements formally document, but incomplete lacking important considerations with standardized procedures	4	Controls and compliance requirements clearly documented with standardized procedures across the entire enterprise with department-wide understanding	Centralized, automated and preventative
Data and Reporting	Inconsistent or decentralized data models and reporting structures	1	2	Data is reviewed and updated on an irregular basis, mainly after a period of extreme (high or low) performance	4	Data is reviewed and updated on a regular basis. Reporting is accurate, consistent and regularly shared across the department	Established processes for sharing and analysis

Appendix H: Operating model framework

This section describes the operating model framework that was developed to articulate how a function should be designed, structured, and operated to improve operational efficiency, effectiveness, and service delivery. It consists of six interacting layers that need to be considered in conjunction with each other to determine how to optimally deliver services to the public.

	Design Layer Considerations
Service Delivery Model Layer	Describes how services are delivered and by who, ranging from a lack of coordination to optimized.
Education and Training Layer (People)	Describes the organizational structure, accountabilities, capabilities, and performance expectations for people and functions required to deliver on services.
Process Layer	Describes how specific processes link to functions and/or departments and related policies and procedures.
Technology Layer	Describes the required technologies to support the execution of processes, manage data and generate reporting.
Data & Reporting Layer	Describes the performance insights and reporting needs to support the execution of processes and decision-making.
Governance & Controls Layer	Describes the approach to govern the organization and manage associated strategic, operational, financial and compliance risks.

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