

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Robert Sapien, Jr.

SUBJECT: FIRE DEPARTMENT "48/96" WORK SCHEDULE ANNUAL REPORT

DATE: October 15, 2019

Approved Date 10-16-19 **INFORMATION**

The purpose of the informational memorandum is the update the Council on the Fire Department "48/96" Work Schedule metrics.

BACKGROUND

The Fire Department (Department) provides around-the-clock all-hazard emergency response through the deployment of three platoons (A-Shift, B-Shift, C-Shift), each working approximately 122 shifts annually. Each shift is 24 hours in length.

While there are many schedule configurations possible for achieving three-platoon/around-theclock coverage, the 48/96 Work Schedule (48/96) has trended higher in recent years, inclusive of fire departments within Santa Clara County.

In May 2016, the City and the International Association of Fire Fighters, Local 230 (IAFF) agreed to the terms for implementation of a two-year 48/96 Work Schedule Pilot Program through a side letter agreement¹. The work schedule applies to all emergency response personnel assigned to the 56-hour per week work schedule excluding Arson Investigators. In October 2018, the 48/96 work schedule was incorporated into the successor Memorandum of Agreement between the City of San José (City) and IAFF.

¹ Side Letter Agreement: <u>http://www.sanjoseca.gov/DocumentCenter/View/56574</u>

The agreement between the City and IAFF on the 48/96 work schedule includes, among other items, the evaluation of a series of metrics to be reported annually. Per the agreement, these metrics are defined in the San José Fire Department 48/96 work schedule and are listed below.

48/96 Work Schedule Metrics	
(a) Overtime Costs	(b) FLSA Compensation
(c) Relief Personnel	(d) Sick Leave
(e) Vehicle Accidents	(f) Employee Injuries
(g) EMS/Patient Care	(h) Near-Miss Occurrences
(i) Employee Removal for Fatigue	(j) Mandated Compliance
(k) Station/Equipment Maintenance	(1) Turnout Time
(m) Fire Prevention Inspections	(n) APA Completion
(o) NFIRS & PCR Completions	(p) Residency Data
(q) Absence Rates	(r) Disability Costs

These metrics were selected to provide information to assess whether the schedule change has a positive, negative, or neutral effect on organizational productivity, quality, safety, and cost. Some of these metrics were previously tracked while others are new. New metrics may need refinement for relevance and reliability; however, ongoing refinements are expected to provide the Department with better information. The Department is to provide an annual update to the Mayor and City Council, including comparison of the data on the metrics from the prior similar time period and the effective date of the 48/96.

Based on prior reporting structure, this report has the recent four quarters provided individually. Subsequent reports will be provided as annual summarizations. The analysis below will describe data and provide continued assessment. The first six quarterly reports are available online at the following locations:

No	Date	Link
1	April 20, 2017	http://sanjose.granicus.com/MetaViewer.php?meta_id=628753
2	August 17, 2017	http://sanjose.granicus.com/MetaViewer.php?meta_id=648829
3	October 19, 2017	http://sanjose.granicus.com/MetaViewer.php?meta_id=670205
4	February 15, 2018	https://sanjose.legistar.com/View.ashx?M=F&ID=5795761&GUID=8E1157CA-6EE9- 47C2-A3F6-7C02A7B98A89
5	April 19, 2018	https://sanjose.legistar.com/View.ashx?M=F&ID=6191404&GUID=2467A34A-722F- 436D-A474-0F48D21C8D1D

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ANALYSIS

The Department has reviewed data on the agreed upon metrics for the period of October 1, 2018 - June 30, 2019. Additionally, two years of data is also available to compare against the calendar year 2016.

Below are the 48/96 metrics, the Department's assessment of that data, and the sources of that data are as follows (green highlight identifies previously reported quarterly data, included to provide an annual report):

(a) <u>Overtime Costs</u>: The Department will monitor and report on the overtime costs to determine if the new schedule has any impacts.

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference	Difference		
	June 30, 2016	June 30, 2019		as %		
Overtime Costs	\$1,666,723	\$2,096,516	\$429,793	25.79%		
Overtime Hours	30,181	32,296	2,115	7.01%		
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference	Difference		
	March 31, 2016	March 31, 2019		as %		
Overtime Costs	\$1,269,712	\$2,277,641	\$1,007,929	79.38%		
Overtime Hours	23,696	28,846	5,150	21.73%		
				11		
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference	Difference		
	December 31, 2016	December 31, 2018		as %		
Overtime Costs	\$2,276,850	\$2,481,926	\$205,076	9.01%		
Overtime Hours	40,992	32,604	(8,388)	(20.46%)		
Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference	Difference		
	July 1, 2016 – September 30, 2016	July 1, 2018 – September 30, 2018	Difference	Difference as %		
Q3 2016 vs Q3 2018 Overtime Costs		•	Difference \$641,946			
	September 30, 2016	September 30, 2018		as %		
Overtime Costs Overtime Hours	September 30, 2016 \$2,968,927 53,997	September 30, 2018 \$3,610,873 62,032	\$641,946 8,035	as % 21.62% 14.88%		
Overtime Costs Overtime Hours Cumulative Pilot Period	September 30, 2016 \$2,968,927 53,997 January 1, 2016 –	September 30, 2018 \$3,610,873 62,032 January 1, 2017 –	\$641,946	as % 21.62% 14.88% Difference		
Overtime Costs Overtime Hours Cumulative Pilot Period Comparison 2016 vs 2017	September 30, 2016 \$2,968,927 53,997 January 1, 2016 – December 31, 2016	September 30, 2018 \$3,610,873 62,032 January 1, 2017 – December 31, 2017	\$641,946 8,035 Difference	as % 21.62% 14.88% Difference as %		
Overtime Costs Overtime Hours Cumulative Pilot Period	September 30, 2016 \$2,968,927 53,997 January 1, 2016 –	September 30, 2018 \$3,610,873 62,032 January 1, 2017 –	\$641,946 8,035	as % 21.62% 14.88% Difference		
Overtime Costs Overtime Hours Cumulative Pilot Period Comparison 2016 vs 2017	September 30, 2016 \$2,968,927 53,997 January 1, 2016 – December 31, 2016	September 30, 2018 \$3,610,873 62,032 January 1, 2017 – December 31, 2017	\$641,946 8,035 Difference	as % 21.62% 14.88% Difference as %		
Overtime Costs Overtime Hours Cumulative Pilot Period Comparison 2016 vs 2017 Overtime Costs Overtime Hours	September 30, 2016 \$2,968,927 53,997 January 1, 2016 – December 31, 2016 \$8,182,212 148,865	September 30, 2018 \$3,610,873 62,032 January 1, 2017 – December 31, 2017 \$10,704,517 \$10,704,517 \$188,094	\$641,946 8,035 Difference \$2,522,305 39,229	as % 21.62% 14.88% Difference as % 30.83% 26.35%		
Overtime Costs Overtime Hours Cumulative Pilot Period Comparison 2016 vs 2017 Overtime Costs Overtime Hours Cumulative Pilot Period	September 30, 2016 \$2,968,927 53,997 January 1, 2016 – December 31, 2016 \$8,182,212 148,865 January 1, 2016 –	September 30, 2018 \$3,610,873 62,032 January 1, 2017 – December 31, 2017 \$10,704,517 188,094 January 1, 2018–	\$641,946 8,035 Difference \$2,522,305	as % 21.62% 14.88% Difference as % 30.83% 26.35% Difference		
Overtime Costs Overtime Hours Cumulative Pilot Period Comparison 2016 vs 2017 Overtime Costs Overtime Hours Cumulative Pilot Period Comparison 2016 vs 2018	September 30, 2016 \$2,968,927 53,997 January 1, 2016 – December 31, 2016 \$8,182,212 148,865 January 1, 2016 – December 31, 2016	September 30, 2018 \$3,610,873 62,032 January 1, 2017 – December 31, 2017 \$10,704,517 188,094 January 1, 2018– December 31, 2018	\$641,946 8,035 Difference \$2,522,305 39,229 Difference	as % 21.62% 14.88% Difference as % 30.83% 26.35% Difference as %		
Overtime Costs Overtime Hours Cumulative Pilot Period Comparison 2016 vs 2017 Overtime Costs Overtime Hours Cumulative Pilot Period	September 30, 2016 \$2,968,927 53,997 January 1, 2016 – December 31, 2016 \$8,182,212 148,865 January 1, 2016 –	September 30, 2018 \$3,610,873 62,032 January 1, 2017 – December 31, 2017 \$10,704,517 188,094 January 1, 2018–	\$641,946 8,035 Difference \$2,522,305 39,229	as % 21.62% 14.88% Difference as % 30.83% 26.35% Difference		

1) <u>A comparison of quarterly aggregate overtime costs:</u>

It should be noted that the figures above are based on a methodology that was updated for the <u>quarterly report dated February 5, 2018</u>, on calculating overtime costs that reflect aggregate overtime during the reflected time periods, including the prior quarters reported for 2016 and 2017. It should also be noted that a 3 percent general wage increase for IAFF represented employees became effective on June 19, 2016, 3 percent general wage increase for IAFF represented employees became effective on June 18, 2017, an additional 1% ongoing non-pensionable compensation increase became effective July 1, 2018 and 3% general wage increase became effective on July 1, 2018.

2) <u>Assessment</u>:

Personnel assignments and staffing balances amongst the three platoons are unaffected by the 48/96. For example, personnel holding bid assignments on Engine 1 A-Shift continue in that assignment and are scheduled the same number of 24-hour shifts per year in the "48/96" as they would under "3s & 4s" work schedule. Because both schedules are virtually the same relative to distribution of personnel, other variables must be evaluated to understand comparative increases and decrease in the overtime costs metric.

Daily vacancies resulting in overtime costs and overtime hours are influenced by a variety of factors, including position vacancies, employees expending accrued leave time, unavailability of personnel due to disability or modified duty restrictions, and augmented resource levels.

The results of the comparisons between quarters of 2016-17 and 2018-19 are:

- Q2-2019 overtime hours increased by 2,115 with 33 vacancies.
- Q1-2019 overtime hours increased by 5,150 with 55 vacancies
- Q4-2018 overtime hours decreased by <8,388> with 50 vacancies
- Q3-2018 overtime hours increased by 8,035 with 48 vacancies
- These increases can also be attributed to the restoring of Engine 30 and Engine 35, which were effective July 1, 2016, increasing the FTE by 24 positions (8 positions x 3 shifts). The BFO Authorized Overtime allotment, effective July 1, 2016 may have also influenced the increase in overtime costs.
- 3. Source: PeopleSoft

(b) <u>FLSA Compensation</u>: The Department will monitor and report on the amount of FLSA pay to ensure the new schedule is not systematically increasing FLSA compensation.

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference	Difference			
	June 30, 2016	June 30, 2019	2	as %			
FLSA Compensation	\$508,793	\$462,932	(\$45,861)	(9.01%)			
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference	Difference			
	March 31, 2016	March 31, 2019		as %			
FLSA Compensation	\$413,526	\$381,622	(\$31,904)	(7.72%)			
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference	Difference			
	December 31, 2016	December 31, 2018		as %			
FLSA Compensation	\$483,754	\$422,351	(\$61,403)	(12.69%)			
Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference	Difference			
	September 30, 2016	September 3, 2018		as %			
FLSA Compensation	\$495,653	\$616,406	\$120,753	24.36%			
				-			
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference	Difference			
Comparison 2016 to 2017	December 31, 2016	December 31, 2017		as %			
FLSA Compensation	\$1,901,726	\$2,016,622	\$114,896	6.04%			

1) <u>Comparison of aggregate FLSA compensation:</u>

Cumulative Pilot Period	January 1, 2016 –	January 1, 2018 –	Difference	Difference
Comparison 2016 to 2018	December 31, 2016	December 31, 2018		as %
FLSA Compensation	\$1,901,726	\$2,381,750	\$480,024	25.24%

2) <u>Assessment</u>:

The Fair Labor Standards Act (FLSA) compensation attempts to determine whether the 48/96 affects the City's exposure to FLSA costs. It should be noted that there was a 3 percent general wage increase for IAFF represented employees that became effective June 19, 2016. A 3 percent general wage increase for IAFF represented employees went into effect on June 18, 2017. An additional 1% ongoing non-pensionable compensation increase became effective July 1, 2018 and 3% general wage increase became effective on July 1, 2018.

3) <u>Source</u>: PeopleSoft

(c) <u>Relief Personnel</u>: The Department will monitor and report on the utilization of Relief Personnel to determine if the new schedule has any impacts.

Q2 2016 vs Q3 2019	April 1, 2016 –	April 1, 2019 –	Difference	Difference			
	June 30, 2016	June 30, 2019		as %			
Relief Personnel Placement	100%	100%	0	0			
Q1 2016 vs Q2 2019	January 1, 2016 –	January 1, 2019 –	Difference	Difference			
	March 31, 2016	March 31, 2019		as %			
Relief Personnel Placement	100%	100%	0	0			
Q4 2016 vs Q1 2018	October 1, 2016 –	October 1, 2018 –	Difference	Difference			
	December 31, 2016	December 31,		as %			
		2018					
Relief Personnel Placement	100%	100%	0	0			
Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference	Difference			
	September 30, 2016	September 3, 2018		as %			
Relief Personnel Placement	100%	100%	0	0			
	1						
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference	Difference			
Comparison 2016 vs 2017	December 31, 2016	December 31, 2017		as %			
Relief Personnel Placement	100%	100%	0	0			
Cumulative Pilot Period	January 1, 2016 –	January 1, 2018 –	Difference	Difference			
Comparison 2016 vs 2018	December 31, 2016	December 31, 2018		as %			

1) <u>Analysis of Relief Personnel placement relative to vacancy rates:</u>

2) <u>Assessment:</u>

The Relief Personnel metric attempts to measure whether the schedule change effectively utilizes the relief pool. This metric seeks to understand whether daily staffing vacancies are adequately filled by relief personnel to effectively stem overtime costs and also avoid unnecessary staffing overages. This metric, combined with overtime hours, could provide insights into how the schedule change affects behaviors related to accrued leave usage.

Current vacancy rates, combined with personnel unavailable due to disability and/or modified status, results in 58 relief personnel available for assignment, or 19.33 full-time equivalent (FTE) positions per shift. Under these conditions, this metric may not be a good indicator of employee behavior changes due to the 48/96 because the frequency of placement of relief personnel is invariably at 100 percent, and provides minimal offset of daily vacancies. Sick leave utilization for this period alone would result in approximately 10 daily vacancies and up to 27 daily vacancies which are allowable for vacation leave utilization. The chart below compares calendar year 2016 (before the implementation of the 48/96) vacancies to 2018 vacancies.

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Q2 2016 vs Q2 2019	2016 Avg.	2016 Avg.	2019 Avg.	2019 Avg.	Difference	Difference
	Vacancies	Vac. Rate	Vacancies	Vac. Rate		as %
Q2	44	6.75%	33	4.72%	(11)	(2.03%)
		1	1		Γ	Γ
Q1 2016 vs Q1 2019	2016 Avg.	2016 Avg.	2019 Avg.	2019 Avg.	Difference	Difference
	Vacancies	Vac. Rate	Vacancies	Vac. Rate		as %
Q1	39	5.99%	55	8.04%	16	2.05%
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Q4 2016 vs Q4 2018	2016 Avg.	2016 Avg.	2018 Avg.	2018 Avg.	Difference	Difference
	Vacancies	Vac. Rate	Vacancies	Vac. Rate		as %
<u>Q4</u>	40	5.81%	50	7.27%	10	1.46%
					-	-
Q3 2016 vs Q3 2018	2016 Avg.	2016 Avg.	2018 Avg.	2018 Avg.	Difference	Difference
	Vacancies	Vac. Rate	Vacancies	Vac. Rate		as %
Q3	34	5.03%	48	6.98%	14	1.95%
					r	
	0016 4	00161				DI DI
Cumulative Pilot Period	2016 Avg.	2016 Avg.	2017 Avg.	2017 Avg.	Delta	Delta Rate
Cumulative Pilot Period Comparison 2016 vs 2017	2016 Avg. Vacancies	2016 Avg. Vac. Rate	2017 Avg. Vacancies	2017 Avg. Vac. Rate	Delta Vacancies	Delta Rate
	0	0	0	0		Delta Rate 1.04%
Comparison 2016 vs 2017	Vacancies	Vac. Rate	Vacancies	Vac. Rate	Vacancies	
Comparison 2016 vs 2017 Q1	Vacancies 39	Vac. Rate 5.99%	Vacancies 48	Vac. Rate 7.03%	Vacancies 9	1.04%
Comparison 2016 vs 2017 Q1 Q2	Vacancies 39 44	Vac. Rate 5.99% 6.75%	Vacancies 48 55	Vac. Rate 7.03% 8.00%	Vacancies 9 11	1.04% 1.25%
Comparison 2016 vs 2017 Q1 Q2 Q3 Q4	Vacancies 39 44 34 40	Vac. Rate 5.99% 6.75% 5.03% 5.81%	Vacancies 48 55 56 56	Vac. Rate 7.03% 8.00% 8.15% 8.20%	Vacancies 9 11 22 16	1.04% 1.25% 3.12% 2.39%
Comparison 2016 vs 2017 Q1 Q2 Q3 Q4 Cumulative Pilot Period	Vacancies 39 44 34 40 2016 Avg.	Vac. Rate 5.99% 6.75% 5.03% 5.81% 2016 Avg.	Vacancies 48 55 56 56 2018 Avg.	Vac. Rate 7.03% 8.00% 8.15% 8.20% 2018 Avg.	Vacancies 9 11 22 16 Delta	1.04% 1.25% 3.12%
Comparison 2016 vs 2017 Q1 Q2 Q3 Q4	Vacancies 39 44 34 40	Vac. Rate 5.99% 6.75% 5.03% 5.81%	Vacancies 48 55 56 56	Vac. Rate 7.03% 8.00% 8.15% 8.20%	Vacancies 9 11 22 16	1.04% 1.25% 3.12% 2.39%
Comparison 2016 vs 2017 Q1 Q2 Q3 Q4 Cumulative Pilot Period	Vacancies 39 44 34 40 2016 Avg.	Vac. Rate 5.99% 6.75% 5.03% 5.81% 2016 Avg.	Vacancies 48 55 56 56 2018 Avg.	Vac. Rate 7.03% 8.00% 8.15% 8.20% 2018 Avg.	Vacancies 9 11 22 16 Delta	1.04% 1.25% 3.12% 2.39%
Comparison 2016 vs 2017 Q1 Q2 Q3 Q4 Cumulative Pilot Period Comparison 2016 vs 2018	Vacancies 39 44 34 40 2016 Avg. Vacancies	Vac. Rate 5.99% 6.75% 5.03% 5.81% 2016 Avg. Vac. Rate	Vacancies 48 55 56 56 2018 Avg. Vacancies	Vac. Rate 7.03% 8.00% 8.15% 8.20% 2018 Avg. Vac. Rate	Vacancies 9 11 22 16 Delta Vacancies	1.04% 1.25% 3.12% 2.39% Delta Rate
Comparison 2016 vs 2017 Q1 Q2 Q3 Q4 Cumulative Pilot Period Comparison 2016 vs 2018 Q1	Vacancies 39 44 34 40 2016 Avg. Vacancies 39	Vac. Rate 5.99% 6.75% 5.03% 5.81% 2016 Avg. Vac. Rate 5.99%	Vacancies 48 55 56 56 2018 Avg. Vacancies 58	Vac. Rate 7.03% 8.00% 8.15% 8.20% 2018 Avg. Vac. Rate 8.44%	Vacancies 9 11 22 16 Delta Vacancies 19	1.04% 1.25% 3.12% 2.39% Delta Rate 2.45%

10

1.46%

7.27%

50

Source: PeopleSoft 3)

Q4

40

5.81%

(d) <u>Sick Leave</u>: The Department will monitor and report on the use of sick leave to determine if the new schedule has any impacts.

Q2 2016 vs Q2 2019	April 1, 2016 – June 30, 2016	April 1, 2019 – June 30, 2019	Difference	Difference as %
Sick Leave Hours	18,293	21,530	3,237	17.70%
Q1 2016 vs Q1 2019	January 1, 2016 – March 31, 2016	January 1, 2019 – March 31, 2019	Difference	Difference as %
Sick Leave Hours	14,502	16,542	2,040	14.07%
Q4 2016 vs Q4 2018	October 1, 2016 – December 31, 2016	October 1, 2018 – December 31, 2018	Difference	Difference as %
Sick Leave Hours	16,568	19,057	2,489	15.02%
02 2016 02 2019	I		D • 66	
Q3 2016 vs Q3 2018	July 1, 2016 – September 30, 2016	July 1, 2018 – September 30, 2018	Difference	Difference as %
Q3 2016 VS Q3 2018 Sick Leave Hours	• /	• /	Difference 664	
	September 30, 2016	September 30, 2018		as %
Sick Leave Hours Cumulative Pilot Period	September 30, 2016 21,620 January 1, 2016 –	September 30, 2018 22,284 January 1, 2017 –	664	as % 3.07% Difference
Sick Leave Hours Cumulative Pilot Period Comparison 2016 vs 2017	September 30, 2016 21,620 January 1, 2016 – December 31, 2016	September 30, 2018 22,284 January 1, 2017 – December 31, 2017	664 Difference	as % 3.07% Difference as %

1) <u>Comparison of aggregate sick leave usage:</u>

2) <u>Assessment</u>:

The sick leave metric attempts to measure whether the "48/96" affects sick leave utilization rates. Sick leave directly influences the overtime costs metric and can potentially provide insights into health and wellness impacts of the schedule change, and possibly FLSA influences. Multiple variables may make identification of causation of comparative distinctions difficult. For example, a dramatic increase in sick leave usage may match regional trends during a particular flu season. Data over multiple quarters may provide for increased analytical reliability for this metric.

It should be noted that since the 2016-17 budget, thirty-one sworn (31) positions were added to the Department, increasing the line staffing levels to 688 FTE.

3) <u>Source</u>: PeopleSoft

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(e) <u>Vehicle Accidents</u>: All company officers and personnel assigned to driving and operating emergency response vehicles will continue to ensure that personnel fatigue is closely monitored. Personnel who are deemed to be too fatigued to operate a vehicle safety will be removed from emergency response duty and remain in quarters until directed by their respective Battalion Chief. Instances where fatigue is determined to cause or potentially cause an unsafe driving condition will be reported immediately to the Duty Chief via the chain-of-command.

The Department will monitor and report on vehicle accidents to determine if the new schedule has any impacts.

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference	Difference
	June 30, 2016	June 30, 2019		as %
Vehicle Accidents	18	5	(13)	(72.22%)
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference	Difference
	March 31, 2016	March 31, 2019		as %
Vehicle Accidents	4	5	1	25.00%
Q4 2016 vs Q1 2018	October 1, 2016 – December 31, 2016	October 1, 2018 – December 31, 2018	Difference	Difference as %
Vehicle Accidents	15	11	(4)	(26.67%)
Q3 2016 vs Q3 2018	July 1, 2016 – September 30, 2016	July 1, 2018 – September 30, 2018	Difference	Difference as %
Q3 2016 vs Q3 2018 Vehicle Accidents	• /	• /	Difference (7)	
	September 30, 2016	September 30, 2018		as %
Vehicle Accidents Cumulative Pilot Period	September 30, 2016 15 January 1, 2016 –	September 30, 2018 8 January 1, 2017 –	(7)	as % (46.67%) Difference
Vehicle Accidents Cumulative Pilot Period Comparison 2016 to 2017	September 30, 2016 15 January 1, 2016 – December 30, 2016	September 30, 2018 8 January 1, 2017 – December 31, 2017	(7) Difference	as % (46.67%) Difference as %

1) <u>Comparison of number of Department involved vehicle accidents per quarter:</u>

2) <u>Assessment</u>:

All Fire Department-involved vehicle accidents are followed up by an accident investigation conducted by a supervising Battalion Chief and processed via the chain-of-command. These reports are evaluated individually and collectively to identify trends and opportunities for training and/or policy changes. For the purposes of the 48/96, the Department will closely evaluate each accident investigation report to determine whether the circumstances may be attributable to the schedule change. None of the accidents were determined to be related to driver fatigue or otherwise related to the 48/96.

3) <u>Source</u>: Department Vehicle Accident Tracking Worksheet

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(f) <u>Employee Injuries</u>: All company officers and personnel assigned to emergency response duties will ensure that personnel fatigue is closely monitored. Personnel who are deemed to be too fatigued to function safely will be removed from emergency response duty and remain in quarters until directed by their respective Battalion Chief. Instances where fatigue is determined to cause or potentially cause employee injury will be reported immediately to the Duty Chief via the chain-of-command.

The Department will monitor and report on employee injuries to determine if the new schedule has any impacts.

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference	Difference
	June 30, 2016	June 30, 2019		as %
New Injury Reports	74	61	(13)	(17.57%)
Injuries Resulting in				
Lost Time	34	18	(16)	(47.06%)
	-	-	7.400	7.400
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference	Difference
	March 31, 2016	March 31, 2019		as %
New Injury Reports	76	68	(8)	(10.53%)
Injuries Resulting in				
Lost Time	34	31	(3)	(8.82%)
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference	Difference
Q4 2010 VS Q4 2018	December 31, 2016 –	December 31, 2018 –	Difference	as %
New Injury Reports	62	76	14	22.58%
Injuries Resulting in				
Lost Time	32	23	(9)	(28.13%)
Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference	Difference
	Sontombon 20 2016	Sontombon 20 2018		00.0/
	September 30, 2016	September 30, 2018		as %
New Injury Reports	67	63	(4)	as % (5.97%)
Injuries Resulting in	67	/		
		/	(4)	
Injuries Resulting in Lost Time	67 44	63 17	(27)	(5.97%) (61.36%)
Injuries Resulting in	67	63		(5.97%)
Injuries Resulting in Lost Time Cumulative Pilot Period Comparison 2016 to 2017	67 44 January 1, 2016 –	63 17 January 1, 2017 –	(27)	(5.97%) (61.36%) Difference
Injuries Resulting in Lost Time Cumulative Pilot Period Comparison 2016 to 2017 New Injury Reports	67 44 January 1, 2016 – December 31, 2016	63 17 January 1, 2017 – December 31, 2017	(27) Difference	(5.97%) (61.36%) Difference as %
Injuries Resulting in Lost Time Cumulative Pilot Period Comparison 2016 to 2017	67 44 January 1, 2016 – December 31, 2016	63 17 January 1, 2017 – December 31, 2017	(27) Difference	(5.97%) (61.36%) Difference as %
Injuries Resulting in Lost Time Cumulative Pilot Period Comparison 2016 to 2017 New Injury Reports Injuries Resulting in Lost Time	67 44 January 1, 2016 – December 31, 2016 279 144	63 17 January 1, 2017 – December 31, 2017 323 53	(27) Difference 44 (91)	(5.97%) (61.36%) Difference as % 15.77% (63.19%)
Injuries Resulting in Lost TimeCumulative Pilot Period Comparison 2016 to 2017New Injury Reports Injuries Resulting in Lost TimeCumulative Pilot Period	67 44 January 1, 2016 – December 31, 2016 279 144 January 1, 2016 –	63 17 January 1, 2017 – December 31, 2017 323 53 January 1, 2018 –	(27) Difference 44	(5.97%) (61.36%) Difference as % 15.77% (63.19%) Difference
Injuries Resulting in Lost Time Cumulative Pilot Period Comparison 2016 to 2017 New Injury Reports Injuries Resulting in Lost Time	67 44 January 1, 2016 – December 31, 2016 279 144	63 17 January 1, 2017 – December 31, 2017 323 53	(27) Difference 44 (91)	(5.97%) (61.36%) Difference as % 15.77% (63.19%)
Injuries Resulting in Lost TimeCumulative Pilot Period Comparison 2016 to 2017New Injury ReportsInjuries Resulting in Lost TimeCumulative Pilot Period Comparison 2016 to 2018New Injury Reports	67 44 January 1, 2016 – December 31, 2016 279 144 January 1, 2016 –	63 17 January 1, 2017 – December 31, 2017 323 53 January 1, 2018 –	(27) Difference 44 (91)	(5.97%) (61.36%) Difference as % 15.77% (63.19%) Difference
Injuries Resulting in Lost TimeCumulative Pilot Period Comparison 2016 to 2017New Injury ReportsInjuries Resulting in Lost TimeCumulative Pilot Period Comparison 2016 to 2018	67 44 January 1, 2016 – December 31, 2016 279 144 January 1, 2016 – December 31, 2016	63 17 January 1, 2017 – December 31, 2017 323 53 January 1, 2018 – December 31, 2018	(27) Difference 44 (91) Difference	(5.97%) (61.36%) Difference as % (63.19%) Difference as %

1) Comparison of number of injuries occurring per quarter:

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2) <u>Assessment</u>:

A "New Injury" report is a work related injury reported by an employee for which the employee does not have a current open workers' compensation claim. "Injuries Resulting in Lost Time" indicate injuries for which an employee missed work due to the injury. These injuries differ from those that may require simple medical treatment and result in no time missed from work.

Like vehicle accidents, each employee injury is investigated, and reports are reviewed by the respective Deputy Chief. The reviewing Deputy Chief evaluates for trends, opportunities for training and/or policy changes, and directs further actions specific to each occurrence. The number of reported injuries will be compared to the same quarter of the previous year. Additionally, Deputy Chiefs will also evaluate each report and flag those that are possibly attributable to the schedule change for further evaluation. Employees are required to report all injuries or possible injuries and supervisors are required to investigate each occurrence. No Supervisor's Accident Investigation Reports for this period determined causal relationship to the 48/96.

- 3) <u>Source</u>: Department tracking Excel worksheet (based on Employers First Report of Injury, Medical Reports, and Department Worker's Compensation Reports)
- (g) <u>EMS/Patient Care (Medical Call Reviews)</u>: All company officers and personnel assigned to patient care as EMT or EMT-P will ensure that personnel fatigue is closely monitored. Personnel who are deemed to be too fatigued to function safely in this capacity will be removed from emergency response duty and remain in quarters until directed by their respective Battalion Chief. Instances where fatigue is determined to cause or potentially cause a compromise in patient care will be reported immediately to Med 30, and reviewed by the EMS Division through the standing CQI process. Fatigue-related Medical Call Reviews will be collected and reported to the Bureau of Field Operations throughout the pilot period.

The Department will monitor and report on EMS Quality Assurance, including any Quality Improvement actions that may result, to determine if the new schedule has any impacts.

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference	Difference
	June 30, 2016	June 30, 2019		as %
Medical Call Reviews	8	4	(4)	(50.00%)
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference	Difference
	March 31, 2016	March 31, 2019		as %
Medical Call Reviews	4	3	(1)	(25.00%)
			-	
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference	Difference
	December 31, 2016	December 31, 2018		as %
Medical Call Reviews	11	6	(5)	(45.45%)

1) <u>Comparison of number of Medical Call Reviews initiated:</u>

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Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference	Difference
	September 30, 2016	September 30, 2018		as %
Medical Call Reviews	4	7	3	75.00%
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference	Difference
Comparison 2016 vs 2017	December 31, 2016	December 31, 2017		as %
Medical Call Reviews	27	20	(7)	(25.93%)
Cumulative Pilot Period	January 1, 2016 –	January 1, 2018–	Difference	Difference
Cumulative Pilot Period Comparison 2016 vs 2018	January 1, 2016 – December 31, 2016	January 1, 2018– December 31, 2018	Difference	Difference as %

2) <u>Assessment</u>:

The Department responds to more than 65,000 Emergency Medical Services calls annually, providing Advanced Life Support level of care by providing a Firefighter/Paramedic and Firefighter/EMT personnel on each apparatus. The standard of care is determined by the California Emergency Medical Services Agency with local oversight provided by the Santa Clara County Emergency Medical Services Agency. The Department provides an internal Continuous Quality Improvement function partly through the Medical Call Review process.

Medical Call Reviews may be triggered through clinical performance discrepancy discovered through a variety of sources including internal patient contact record screening, base hospital referral, supervisor referral, or complaint originating from any source (County EMS Agency, ambulance transport provider, civilian, or patient). Call Reviews are non-punitive inquiries seeking to understand specific details of patient care toward Continuous Quality Improvement. Call reviews may result in no action or remediation actions (advanced training, patient contact record auditing, peer mentoring, etc.), and possible referral to the Department Emergency Medical Services Directing Physician. None of the Medical Call Reviews conducted during the reporting period were deemed to be related to fatigue or otherwise related to the 48/96. Variations in the number of call reviews, in a given time period, can correlate to the number of newly accredited Firefighter/Paramedics in the field.

3) Source: Image Trend, EMS PCR Program

(h) <u>Near-Miss Occurrences</u>: Near-miss reporting will continue as outlined in the SJFD Injury and Illness Prevention Plan manual.

The Department will monitor and report on near-miss reporting to determine if the new schedule has any impacts

1) <u>Comparison of number of near-miss reports submitted:</u>

Q2 2016 vs Q2 2019	April 1, 2016 – June 30, 2016	April 1, 2019 – June 30, 2019	Difference	Difference as %		
Near-Miss Reports Submitted	0	N/A	N/A	N/A		
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference	Difference		
	March 31, 2016	March 31, 2019		as %		
Near-Miss Reports Submitted	0	N/A	N/A	N/A		
Q4 2016 vs Q1 2018	October 1, 2016 –	October 1, 2018 –	Difference	Difference		
Q4 2010 VS Q1 2018	December 31, 2016	December 31, 2018		as %		
Near-Miss Reports Submitted	0	N/A	N/A	N/A		
Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference	Difference		
Q5 2010 VS Q5 2018	September 30, 2016	September 30, 2018		as %		
Near-Miss Reports Submitted	0	0	0	0%		
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference	Difference		
Comparison 2016 vs 2017	December 31, 2016	December 31, 2017		as %		
Near-Miss Reports Submitted	0	0	0	0%		
Cumulative Pilot Period	January 1, 2016 –	January 1, 2018 –	Difference	Difference		
Comparison 2016 vs 2018	December 31, 2016	December 31, 2018		as %		
Near-Miss Reports Submitted	0	N/A	N/A	N/A		

2) <u>Assessment</u>:

The Department's Injury and Illness Prevention Plan requires that near-miss occurrences be reported in the same manner as actual injuries through the Supervisor's Accident Investigation Report. Given the hazardous conditions confronting first responders on a daily basis, it is likely that near-miss occurrences are unreported. The Department is currently preparing a training module for dissemination to remind and encourage employees to utilize this method to report occurrences. This effort will likely skew comparative data; however, the Department recommends maintenance of this metric for its value in identifying possible safety issues related to the 48/96.

3) <u>Source</u>: Department Accident Investigation Report.

(i) <u>Employee Removal for Fatigue</u>: The Department will not compromise the safety of employees nor the public in the implementation of an alternate work schedule.

The Department will monitor and report on the number of instances where an employee is removed from the line due to fatigue to determine if the new schedule has any impacts.

1) <u>Instances where supervisors intervened due to concerns for excessive employee</u> <u>fatigue:</u>

Q2 2016 vs Q2 2019	April 1, 2016 – June 30, 2016	April 1, 2019 – June 30, 2019	Difference	Difference as %
Excessive employee fatigue reported	0	0	0	0%
Q1 2016 vs Q1 2019	January 1, 2016 – March 31, 2016	January 1, 2019 – March 31, 2019	Difference	Difference as %
Excessive employee fatigue reported	0	0	0	0%
Q4 2016 vs Q4 2018	October 1, 2016 – December 31, 2016	October 1, 2018 – December 31, 2018	Difference	Difference as %
Excessive employee fatigue reported	0	0	0	0%
Q3 2016 vs Q3 2018	July 1, 2016 – September 30, 2016	July 1, 2018 – September 30, 2018	Difference	Difference as %
Excessive employee fatigue reported	0	0	0	0%
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference	Difference
Comparison 2016 to 2017	December 31, 2016	December 31, 2017		as %
Comparison 2016 to 2017 Excessive employee fatigue reported	December 31, 2016 0	December 31, 2017 0	0	as %
Excessive employee			0 Difference	

2) <u>Assessment</u>:

This metric was included to signal immediate safety concerns due to employee fatigue observed by supervisors or peers. Procedurally, Battalion Chiefs who are made aware of safety concerns due to fatigue are directed to immediately contact the Duty Chief for action and investigation. The Duty Chief is directed to immediately contact the Assistant Fire Chief in this circumstance. The Department will continue to monitor this metric and the possible related impacts caused by employees being required to work increased overtimes, and to determine if any increases in employee fatigue is attributable to the 48/96.

- 3) <u>Source</u>: Senior Staff
- (j) <u>Mandated Training/Testing/Evaluation Compliance</u>: Annually, the Department strives to achieve completion of mandatory training, testing, and evaluation for all sworn personnel. Instances where personnel miss their scheduled events and subsequently miss scheduled make-up dates are costly to the department in terms of staff time and efficiency.

The Department will monitor and report on completion of mandatory training, testing, and evaluation for all sworn personnel to determine if the new schedule has any impacts.

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2016 – April 1, 2019 –	
	June 30, 2016	June 30, 2019	as %
% of Mandated Compliance	40.64%	48.83%	8.19%
	1	1	
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference
	March 31, 2016	March 31, 2019	as %
% of Mandated Compliance	45.48%	70.32%	24.84%
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference
	December 31, 2016	December 31, 2018	as %
% of Mandated Compliance	36.14%	52.64%	16.50%

1) <u>Comparison of compliance with mandated training assignments:</u>

Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference
	September 30, 2016	September 30, 2018	as %
% of Mandated Compliance	29.23%	56.18%	26.95%
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference
Comparison (Average) 2016 to 2017	December 31, 2016	December 31, 2017	as %
% of Mandated Compliance	37.87%	56.03%	18.16%
Cumulative Pilot Period	January 1, 2016 –	January 1, 2018 –	Difference
Comparison (Average) 2016 to 2018	December 31, 2016	December 31, 2018	as %
% of Mandated Compliance	37.87%	56.68%	18.81%

2) <u>Assessment</u>:

This metric seeks to capture productivity level changes in mandated training compliance attributable to the schedule change. Ongoing Department training is delivered in a variety ways including in-person/in-service didactic and manipulative training, on duty online (Target Solutions) training, in service company/battalion level training, off duty career development training, and required training on HONORABLE MAYOR AND CITY COUNCIL October 15, 2019 Subject: Fire Department "48/96" Work Schedule Annual Report Page 16 of 27

overtime. Records are kept for required course work as well as miscellaneous professional certifications and continuing education credited work. A review of the source records found inaccuracies within individual records. For example, some personnel training records were found to include "self-assigned" courses which, when selected (or self-assigned), create a due date. Personnel not completing these non-mandated training modules are counted as non-compliant in the metric. The accuracy of this metric may be improved in the upcoming quarters as records are updated and obsolete assignments and "self-assigned" courses are removed.

- 3) <u>Source</u>: Target Solutions
- (k) <u>Station/Equipment Maintenance</u>: Personnel safety and response readiness are highly dependent on the condition of equipment and stations. Equipment and station maintenance standards will not be compromised during the 48/96 pilot period.

The Department will monitor and report on equipment and station maintenance to determine if the new schedule has any impacts.

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference
	June 30, 2016	June 30, 2019	as %
Station and Equipment Maintenance	N/A	100%	N/A
Q1 2016 vs Q1 2019	January 1, 2016 –		
Station and Equipment Maintenance	March 31, 2016	March 31, 2019	as %
	N/A	100%	N/A
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference
	December 31, 2016	December 31, 2018	as %
Station and Equipment Maintenance	N/A	100%	N/A
Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference
	September 30, 2016	September 30, 2018	as %
Station and Equipment Maintenance	N/A	100%	N/A
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference
Comparison 2016 to 2017	December 31, 2016	December 31, 2017	as %
Station and Equipment Maintenance	N/A	100%	N/A
Cumulative Pilot Period	January 1, 2016 –	January 1, 2018 –	Difference
Comparison 2016 to 2018	December 31, 2016	December 31, 2018	as %
Station and Equipment Maintenance	N/A	100%	N/A

1) Observations regarding fire station and equipment maintenance:

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2) <u>Assessment</u>:

Department senior managers conduct four formal inspection tours annually at each fire station to assess care and maintenance of fire stations, fire apparatus, uniforms and personal protective equipment, and operational readiness.

The Department will continue to track and review the care and maintenance of fire stations and equipment to determine if any significant changes are attributable to the 48/96.

- 3) <u>Source</u>: Senior Staff
- (1) <u>Turnout Time</u>: The Department will continue to monitor all aspects of response time performance. Turnout Time is the response time segment that is most controllable at the company level.
 - 1) <u>Comparison of Turnout Time performance levels:</u>

Q2 2016 vs Q2 2019	April 1, 2016 – June 30, 2016	April 1, 2019 – June 30, 2019	Difference as %
Priority 1	73.51%	87.04%	13.53%
Priority 2	71.52%	84.97%	13.45%
Q1 2016 vs Q1 2019	January 1, 2016 – March 31, 2016	January 1, 2019 – March 31, 2019	Difference as %
Priority 1	70.56%	85.69%	15.13%
Priority 2	69.13%	84.46%	15.33%
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference
	December 31, 2016	December 31, 2018	as %
Priority 1	74.01%	86.30%	12.29%
Priority 2	71.28%	85.37%	14.09%
			-
Q3 2016 vs Q3 2018	July 1, 2016 – September 30, 2016	July 1, 2018 – September 30, 2018	Difference as %
Priority 1	74.15%	82.61%	8.46%
Priority 2	72.11%	80.93%	8.82%
		001/0/0	0.0270
Cumulative Pilot Period	January 1, 2016 –		
Cumulative Pilot Period Comparison (Average) 2016 vs 2017	January 1, 2016 – December 31, 2016	January 1, 2017 –	Difference
Comparison (Average) 2016 vs 2017	December 31, 2016	January 1, 2017 – December 31, 2017	Difference as %
		January 1, 2017 –	Difference
Comparison (Average) 2016 vs 2017 Priority 1 Priority 2 Cumulative Pilot Period	December 31, 2016 73.51%	January 1, 2017 – December 31, 2017 76.43%	Difference as % 2.92%
Comparison (Average) 2016 vs 2017 Priority 1 Priority 2	December 31, 2016 73.51% 71.57% January 1, 2016 –	January 1, 2017 – December 31, 2017 76.43% 74.62% January 1, 2018 –	Difference as % 2.92% 3.05% Difference

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2) <u>Assessment</u>:

The Department has reinforced the importance of improved response times through ongoing messaging to emergency responders and implementation of the "early dispatch" protocol. The Q2 2019 quarter results reflect an improvement of over 13% in comparison to the Q2 2016 Turnout Time performance levels. The Department believes that, in addition to the response time improvement initiatives, there is modest benefit from greater efficiency created by having 50 percent fewer shift changes. Emergency responses occurring at shift change (0800 hours) can be delayed as personnel remove personal protective equipment from fire apparatus to allow oncoming personnel to take over.

- 3) <u>Source</u>: Computer Aided Dispatch (CAD)
- (m) <u>Fire Prevention Inspections</u>: The Department maintains and will continue an aggressive line occupancy inspection program including educational facilities (E) and multiple housing units (R).

The Department will monitor and report on these life safety programs to determine if the new schedule has any impacts.

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference
	June 30, 2016	June 30, 2019	
Educational Facilities (E) Assigned	N/A	0	N/A
Educational Facilities (E) Initiated	N/A	0	N/A
Educational Facilities (E) Completed	N/A	1	N/A
Multiple Housing Units (R) Assigned	N/A	6	N/A
Multiple Housing Units (R) Initiated	N/A	53	N/A
Multiple Housing Units (R) Completed	N/A	589	N/A
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference
	March 31, 2016	March 31, 2019	
Educational Facilities (E) Assigned	N/A	1	N/A
Educational Facilities (E) Assigned Educational Facilities (E) Initiated	N/A N/A	1 0	N/A N/A
		1 0 0	-
Educational Facilities (E) Initiated	N/A	8	N/A
Educational Facilities (E) Initiated Educational Facilities (E) Completed	N/A N/A	0	N/A N/A
Educational Facilities (E) Initiated Educational Facilities (E) Completed Multiple Housing Units (R) Assigned	N/A N/A N/A	0 32	N/A N/A N/A
Educational Facilities (E) Initiated Educational Facilities (E) Completed Multiple Housing Units (R) Assigned Multiple Housing Units (R) Initiated	N/A N/A N/A N/A	0 32 44	N/A N/A N/A N/A

1) <u>Comparison of Fire Prevention inspection performance levels:</u>

Q4 2016 vs Q4 2018			Difference
	December 31, 2016	December 31, 2018	
Educational Facilities (E) Assigned	0	0	0
Educational Facilities (E) Initiated	24	9	(15)
Educational Facilities (E) Completed	152	125	(27)
Multiple Housing Units (R) Assigned	0	42	42
Multiple Housing Units (R) Initiated	160	140	(20)

Multiple Housing Units (R) Completed	795	1,740	945
Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference
	September 30, 2016	September 30, 2018	
Educational Facilities (E) Assigned	173	178	5
Educational Facilities (E) Initiated	0	29	29
Educational Facilities (E) Completed	11	19	8
Multiple Housing Units (R) Assigned	5,037	5,162	125
Multiple Housing Units (R) Initiated	153	235	82
Multiple Housing Units (R) Completed	1,445	2,332	887
		r	-
Cumulative Pilot Period	January 1, 2016 –	*January 1, 2017 –	Difference
Comparison 2016 vs 2017	December 31, 2016	December 31, 2017	
	December 51, 2010	December 51, 2017	
Educational Facilities (E) Assigned	173	177	4
*	/	/	4 (4)
Educational Facilities (E) Assigned	173	177	-
Educational Facilities (E) Assigned Educational Facilities (E) Initiated	173 48	177 44	(4)
Educational Facilities (E) Assigned Educational Facilities (E) Initiated Educational Facilities (E) Completed	173 48 176	177 44 111	(4) (65)
Educational Facilities (E) Assigned Educational Facilities (E) Initiated Educational Facilities (E) Completed Multiple Housing Units (R) Assigned	173 48 176 5,037	177 44 111 5,083	(4) (65) 46
Educational Facilities (E) Assigned Educational Facilities (E) Initiated Educational Facilities (E) Completed Multiple Housing Units (R) Assigned Multiple Housing Units (R) Initiated	173 48 176 5,037 438	177 44 111 5,083 728	(4) (65) 46 290

Cumulative Pilot Period	January 1, 2016 – *January 1, 2018 –		Difference
Comparison 2016 vs 2018	December 31, 2016	December 31, 2018	
Educational Facilities (E) Assigned	173	178	5
Educational Facilities (E) Initiated	48	41	(7)
Educational Facilities (E) Completed	176	149	(27)
Multiple Housing Units (R) Assigned	5,037	5,204	167
Multiple Housing Units (R) Initiated	438	451	13
Multiple Housing Units (R) Completed	4,270	4,878	608

*Beginning in July 2017, the Department initiated reporting under the new inspection cycle.

It should be noted that the figures above are based on a methodology that was updated on July 1, 2018 on tracking Multiple Housing Units inspection data. Multiple Housing Permits are added based on the number of buildings in the apartment complex in order to capture the true workload of line inspections.

2) <u>Assessment</u>:

The Fire Prevention Inspections metric was included in an effort to capture any productivity differences attributable to the 48/96. It should also be noted, as of July 2017, inspections cycle changed to align with the fiscal year for improved budget performance reporting. Previously, educational facility (E) line inspections were assigned in the month of September and were to be completed by December 31. Residential (R) line inspections were assigned in the month of March and were to be completed by February 28 of the following year. The Department will continue to report on this metric to capture progress on the current inspection cycle.

3) <u>Source</u>: Firehouse

(n) <u>Annual Performance Appraisal Completion</u>: Personnel performance and future performance objectives are captured and memorialized in the Annual Performance

Appraisal process. Personnel performance tracking and supervisor feedback is provided in order to develop employees and to set future objectives. This process will continue during the pilot period.

The Department will monitor and report on the Annual Performance Appraisal) process to determine if the new schedule has any impacts.

a. <u>Comparison of Annual Performance Appraisal completion levels:</u>

Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference
	June 30, 2016	June 30, 2019	as %
Percentage of Appraisals			
Completed (averaged)	70.67%	71.70%	1.03%
			1
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019–	Difference
	March 31, 2016	March 31, 2019	as %
Percentage of Appraisals			
Completed (averaged)	63.00%	71.00%	8.00%
			•
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference
	December 31, 2016	December 31, 2018	as %
Percentage of Appraisals	·		
Completed (averaged)	70.00%	56.00%	(14.00%)
			(
Q3 2016 vs Q3 2018	July1, 2016 –	July 1, 2018 –	Difference
	September 30, 2016	September 30, 2018	as %
Percentage of Appraisals	• · · · · · · · · · · · · · · · · · · ·	•	
Completed (averaged)	73.00%	58.52%	(14.48%)
			(
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference
Comparison 2016 vs 2017	December 31, 2016	December 31, 2017	as %
Percentage of Appraisals	,		
Completed (averaged)	69.29%	66.34%	(2.95%)
F (** •= * * •		()
	January 1, 2016 –	January 1, 2018 –	Difference
Cumulative Pilot Period			
	December 31, 2016	December 31, 2018	as %
Comparison 2016 vs 2018 Percentage of Appraisals	December 31, 2016	December 31, 2018	as %

2) <u>Assessment</u>:

This metric was selected to capture any productivity changes relative to appraisal completion possibly attributable to the 48/96.

3) <u>Source</u>: Department Annual Performance Appraisal Excel Worksheet

(0) <u>National Fire Incident Reporting System (NFIRS) & Patient Care Report (PCR)</u> <u>Completions</u>: Accurate and timely completion of emergency response reports is a critical department function and required in policy.

The Department will monitor and report on the accurate and timely completion of emergency response reports to determine if the new schedule has any impacts.

1) <u>Comparison of NFIRS and PCR completion performance levels:</u>

Q2 2016 vs Q2 2019	April 1, 2016 – June 30, 2016	April 1, 2019 – June 30, 2019	Difference	Difference as %
Completed NFIRS Incident				
Reports	19,757	20,755	998	5.05%
% of Completed NFIRS Reports	88.32%	86.38%	(1.94%)	(1.94%)
PCRs Completed	14,191	18,193	4,002	28.20%
% of PCRs Completed	70.31%	99.13%	28.82%	28.82%

Q1 2016 vs Q1 2019	January 1, 2016 – March 31, 2016	January 1, 2019 – March 31, 2019	Difference	Difference as %
Completed NFIRS Incident				
Reports	19,667	20,626	959	4.88%
% of Completed NFIRS Reports	89.72%	86.44%	(3.28%)	(3.28%)
PCRs Completed	14,637	18,241	3,604	24.62%
% of PCRs Completed	72.24%	99.68%	27.44%	27.44%

Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference	Difference
	December 31, 2016	December 31, 2018		as %
Completed NFIRS Incident				
Reports	19,498	21,033	1,535	7.87%
% of Completed NFIRS Reports	87.06%	86.09%	(0.97%)	(0.97%)
PCRs Completed	15,880	17,980	2,100	13.22%
% of PCRs Completed	79.38%	96.97%	17.59%	17.59%

Q3 2016 vs Q3 2018	July 1, 2016 – September 30, 2016	July 1, 2018 – September 30, 2018	Difference	Difference as %
Completed NFIRS Incident				
Reports	19,495	20,276	781	4.01%
% of Completed NFIRS Reports	85.81%	86.93%	1.12%	1.12%
PCRs Completed	14,382	11,955	(2,427)	(16.88%)
% of PCRs Completed	72.20%	99.18%	26.98%	26.98%

Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference	Difference
Comparison 2016 to 2017	December 31, 2016	December 31, 2017		as %
Completed NFIRS Incident				
Reports	78,417	85,330	6,913	8.82%
% of Completed NFIRS Reports	87.80%	87.87%	0.07%	0.07%
PCRs Completed	59,090	69,881	10,791	18.26%
% of PCRs Completed	73.47%	91.34%	17.87%	17.87%

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Cumulative Pilot Period	January 1, 2016 –	January 1, 2018 –	Difference	Difference
Comparison 2016 to 2018	December 31, 2016	December 31, 2018		as %
Completed NFIRS Incident				
Reports	78,417	82,293	3,876	4.94%
% of Completed NFIRS Reports	87.80%	87.03%	(0.77%)	(0.77%)
PCRs Completed	59,090	66,062	6,972	11.80%
% of PCRs Completed	73.47%	96.97%	23.50%	23.50%

2) <u>Assessment</u>:

The NFIRS and PCR completion metric was selected to capture any changes in productivity levels possibly attributable to the 48/96. These records are created on two separate records management system software platforms. NFIRS are created on FireHouse hosted by the Department, and PCR are created on Fieldbridge hosted by the County EMS Agency. Data reliability is challenged by variables in reporting requirements, user input errors and incomplete entries. Additionally, limited staff availability results in little quality assurance oversight. Training efforts have previously resulted in improved reporting quality and will continue to be a Department priority. Comparative results for this reporting period reflect improved PCR completion rates which may be partly attributable to the recently implemented electronic tablet-based reporting or "E-PCR."

In an effort to more accurately collect and report on PCR completion criteria, Fieldbridge was utilized to collect and evaluate the data reported above, and will be the data source utilized going forward.

- 3) <u>Source</u>: FireHouse, Fieldbridge, and Computer Aided Dispatcher (CAD)
- (p) <u>Residency</u>: Per the City's personnel records as of January 1, 2017, Department members reside in a geographically disperse area.

The Department will monitor and report on the firefighter residency proximity to the Department to determine if the new schedule has any impacts.

In addition, as a condition of employment, all employees hired during the term of the 48/96 shall reside within one hundred and twenty (120) minutes travel time from the nearest City of San Jose fire station.

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Cumulative Pilot Period Comparison	3/31/16	6/30/16	9/30/16	12/31/16	3/31/17	6/30/17	9/30/17	12/31/17
San José	107	103	103	99	98	98	96	94
	18.14%	17.46%	17.46%	16.78%	16.61%	16.61%	16.27%	15.93%
Santa Clara County (Not San Jose)	75 12.71%	75 12.71%	77 13.05%	73 12.37%	75 12.71%	74 12.54%	75 12.71%	77 13.05%
Adjacent to	234	233	230	232	231	234	231	229
SCC	39.66%	39.49%	38.98%	39.32%	39.15%	39.66%	39.15%	38.81%
Non-Adjacent	174	179	180	186	186	184	188	190
to SCC	29.49%	30.34%	30.51%	31.53%	31.53%	31.19%	31.86%	32.20%
Total Employees	590	590	590	590	590	590	590	590

1) <u>Comparison of residency locations for IAFF employees:</u>

Cumulative Pilot Period Comparison	3/31/18	6/30/18
San Jose	95	94
San Jose	16.10%	15.93%
Santa Clara County	80	78
(Not San Jose)	13.56%	13.22%
Adia sont to SCC	226	226
Adjacent to SCC	38.31%	38.31%
Non Adiacont to SCC	189	192
Non-Adjacent to SCC	32.03%	32.54%
Total Employees	590	590

	August 31, 2016 through August 31, 2019			
	EmployeePercentagDifferenceDifference			
San Jose	-12 Employees	(10.62%)		
Santa Clara County (Not San Jose)	+7 Employees	9.46%		
Adjacent to SCC	-11 Employees	(4.85%)		
Non-Adjacent to SCC	+16 Employees	9.09%		

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2) <u>Assessment</u>:

Personnel separations (i.e. voluntary resignations, terminations, and retirements) or personnel being promoted out of a classification represented by IAFF may have an impact on residency information. Accordingly, the figures above include only employees who were employed in an IAFF-represented classification during all of the periods noted above. They **do not** include any employees who were not employed by the City in an IAFF-represented classification as of March 31, 2016 (the end of the first quarter in the calendar year immediately preceding the 48/96 becoming effective in 2017), or employees who left City service, or who were promoted out of an IAFF-represented classification after March 31, 2016.

Santa Clara County data in the table above does **not** include employees who reside in the San Jose. Adjacent counties include Alameda, Merced, Monterey, San Benito, San Joaquin, San Mateo, Santa Cruz, and Stanislaus. It should be noted that, as part of the 48/96, a Community Response Readiness requirement mandates that all new hires during the term of the 48/96, as a condition of employment, reside within 120 minutes' travel time from the nearest City of San José Fire Station. This Community Response Readiness requirement information will be included in any academies that commence after March 2017.

3) <u>Source:</u> Data above is based on information provided by City OER.

(q) <u>Absence Rates</u>: The Department will monitor and report on absence rates to determine if the new schedule has any impacts.

1)	Comparison	of absence rates:
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Q2 2016 vs Q2 2019	April 1, 2016 –	April 1, 2019 –	Difference
	June 30, 2016	June 30, 2019	as %
Absence Rate: Overall	17.45%	16.75%	(0.70%)
Absence Rates: Sick	3.96%	4.83%	0.87%
Absence Rates: Vacation	7.36%	7.56%	0.20%
Absence Rates: Other	6.13%	4.35%	(1.78%)
Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019 –	Difference
	March 31, 2016	March 31, 2019	as %
Absence Rate: Overall	15.79%	13.32%	(2.47%)
Absence Rates: Sick	3.65%	3.85%	0.20%
Absence Rates: Vacation	5.80%	5.46%	(0.34%)
Absence Rates: Other	6.34%	4.01%	(2.33%)
Q4 2016 vs Q4 2018	October 1, 2016 –	October 1, 2018 –	Difference
	December 31, 2016	December 31, 2018	as %
Absence Rate: Overall	18.39%	14.94%	(3.45%)
Absence Rates: Sick	4.05%	4.20%	0.15%
Absence Rates: Vacation	6.58%	6.11%	(0.47%)
Absence Rates: Other	7.75%	4.63%	(3.12%)

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Q3 2016 vs Q3 2018	July 1, 2016 –	July 1, 2018 –	Difference
	September 30, 2016	September 30, 2018	as %
Absence Rate: Overall	20.15%	20.96%	0.81%
Absence Rates: Sick	4.49%	4.92%	0.43%
Absence Rates: Vacation	8.50%	9.08%	0.58%
Absence Rates: Other	7.16%	6.95%	(0.21%)
Cumulative Pilot Period	January 1, 2016 –	January 1, 2017 –	Difference
Comparison 2016 to 2017	December 31, 2016	December 31, 2017	as %
Absence Rate: Overall	17.94%	17.09%	(0.85%)
Absence Rates: Sick	4.04%	3.76%	(0.28%)
Absence Rates: Vacation	7.06%	7.24%	0.18%
Absence Rates: Other	6.84%	6.09%	(0.75%)
Cumulative Pilot Period	January 1, 2016 –	January 1, 2018 –	Difference
Comparison 2016 to 2018	December 31, 2016	December 31, 2018	as %
Absence Rate: Overall	17.94%	18.10%	0.16%
Absence Rates: Sick	4.04%	4.55%	0.51%
Absence Rates: Vacation	7.06%	7.37%	0.31%
Absence Rates: Other	6.84%	6.18%	(0.66%)

2) <u>Assessment</u>:

The absence rates metric was included to identify general absence behavior changes possibly attributable to the 48/96. Absence rates are a ratio of total scheduled work hours compared to the total employee leave hours utilized. "Other" absences shown above include compensatory time, disability/modified duty, Family Medical Leave Act (FMLA), funeral leave, jury duty, and military leave.

This metric was selected to capture employee absence changes possibly attributable to the 48/96. Data reflects slightly lower absence rates as compared to the same time period in 2016. This outcome may support that current vacancy rates are the principal driver for the increased overtime costs identified in metric (a) as there are fewer personnel available to fill even normal vacancies.

3) <u>Source</u>: PeopleSoft

(r) <u>Disability Costs</u>: The Department will monitor and report on the disability leave costs to determine if the new schedule has any impacts.

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1) <u>Comparison of absence rates:</u>

Q2 2016 vs Q2 2019	April 1, 2016 – June 30, 2016	April 1, 2019 – June 30, 2019	Difference	Difference as %
Disability Leave Costs	\$1,082,286	\$887,191	(\$195,095)	(18.03%)
Disability Leave Hours	28,700	18,487	(10,213)	(35.59%)

Q1 2016 vs Q1 2019	January 1, 2016 –	January 1, 2019–	Difference	Difference
	March 31, 2016	March 31, 2019		as %
Disability Leave Costs	\$927,356	\$790,324	(\$137,032)	(14.78%)
Disability Leave Hours	24,658	16,734	(7,924)	(32.14%)

Q4 2016 vs Q4 2018	October 1, 2016 – December 31, 2016	October 1, 2018 – December 31, 2018	Difference	Difference as %
Disability Leave Costs	\$1,224,733	\$989,970	(\$234,763)	(19.17%)
Disability Leave Hours	31,335	21,198	(10,137)	(32.35%)

Q3 2016 vs Q3 2018	July 1, 2016 – September 30, 2016	July1, 2018 – September 30, 2018	Difference	Difference as %
Disability Leave Costs	\$1,409,656	\$1,214,905	(\$194,751)	(13.82%)
Disability Leave Hours	36,049	29,915	(6,134)	(17.01%)

Cumulative Pilot Period Comparison 2016 to 2017	*January 1, 2016 – December 31, 2016	*January 1, 2017 – December 31, 2017	Difference	Difference as %
Disability Leave Costs	\$4,644,031	\$4,215,554	(\$428,477)	(9.23%)
Disability Leave Hours	120,742	105,587	(15,155)	(12.55%)

Cumulative Pilot Period Comparison 2016 to 2018	*January 1, 2016 – December 31, 2016	*January 1, 2018 – December 31, 2018	Difference	Difference as %
Disability Leave Costs	\$4,644,031	\$4,261,843	(\$382,188)	(8.23%)
Disability Leave Hours	120,742	107,245	(13,497)	(11.18%)

*For this reporting period, the data source was changed from TeleStaff to a PeopleSoft report from Human Resources Department. This has proved to be a more accurate data source and will be utilized for all subsequent reports.

2) <u>Assessment</u>:

The disability costs metric was included to identify health, safety, or cost attributable to the 48/96. The disability costs metric represents disability earnings and hours and does not include modified duty work hours or earnings. The Department anticipates that this metric will require several reporting periods in order identify actual trends, as there are multiple variables influencing disability leave costs.

3) <u>Source</u>: PeopleSoft (report from Human Resources Department)

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CONCLUSION

After more than 30 months of evaluation, the Department has determined no adverse results from the schedule change and has received positive employee feedback. While not included in the Pilot metrics, staff have expressed benefit from reduced commute hours and fuel costs, reduction in operational interruptions related to shift changes, and reduced staffing workload. The 48/96 schedule has become increasingly common amongst Santa Clara County fire agencies and throughout the State. Aligning common schedules may offer benefit as the Department seeks opportunities for regionalization of services beyond existing auto-aid and mutual aid agreements. The Department will continue to monitor efficiency and effectiveness relative to the 48/96 schedule.

/s/ ROBERT SAPIEN, JR. Fire Chief

For questions, please contact Robert Sapien, Jr., Fire Chief, at (408) 794-6952.