

48/96 Work Schedule

Informational Packet
Local 1696
May, 2005



48/96 Work Schedule

Last year Local 1696 voted to compile information on the 48/96 schedule. This schedule has been discussed for several years and several members have researched the benefits of this schedule. This packet is a compilation of their efforts and others. Much of the information contained in this packet comes from a report written for the firefighters in the San Jose Fire Department. The report, which was prepared by their Local, includes information obtained directly from departments who work the 48/96 schedule.

The plan is to give the members of our department the information necessary to make an informed decision regarding this schedule. They will then be asked to vote on whether or not to implement this schedule on a 1 year trial basis. This vote is tentatively set for mid-June. If the simple majority vote is in favor of the 48/96 work schedule, it will be implemented on January 1st 2006. Towards the end of the 2006 year, another vote will be taken to determine if we keep the 48/96 work schedule.

It is recommended that an **escape clause** be written into the schedule change. This would allow any of the involved parties, namely the Membership of Local 1696, Fire Administration, or the Fire Board, to cancel the schedule change and revert back to the Kelly schedule at any time, should any serious issues arise that jeopardizes safety, productivity or the monetary concerns of the Unified Fire Authority or the Fire Board.

The 48/96 is currently being discussed with Fire Administration.

The 48/96 and the Fire Service

The 48/96 has been utilized by professional fire departments since the early 1990s. The use of the "48/96" is widespread and rapidly gaining in popularity, with over 2 dozen departments switching to the 48/96 in the last 5 years. As seen on the attached list, this schedule is not a theoretical experiment in the fire service but a proven and valid schedule option. The Departments using the schedule are diverse in their demographics, management structure, and overall philosophies.

One of the more telling findings of the 48/96 schedule was that all of the departments working the 48/96 share an overwhelming level of satisfaction with the schedule.

It is noteworthy that all agencies instituted the schedule on a trial basis and after the trial none of the agencies chose to return to their previous schedule. Included as an attachment is a list of departments that are known to be working the schedule, as well as departments researching implementation.

Comparisons of the 48/96 vs. the Kelly Schedules

The UFA currently works what is commonly called, the Kelly schedule. Below is an example of how the change impacts A-shift. (48/96 vs. Kelly).

X = 24 Hour work days

O = Off Days

Kelly Schedule (current)

ACABA BCBC ACABA BCBC
A-shift XOXOX OOOO XOXOX OOOO

3 Shifts working 56 Hours a week

48/96 Schedule (proposed)

AA BBCC AA BBCC AA BBCC AA
A-shift XX OOOO XX OOOO XX OOOO XX

3 Shifts working 56 hours a week

48/96 and Kelly Schedules are both:

- 3 Platoon, **ABC**
- 56 hours per week
- 112 hours per pay period
- 121 shifts per year

As shown in the example the number of shifts and hours worked remains identical, only the configuration of the hours change. An important finding is that there will be ***no change*** in the FLSA payout schedule.

Kelly

- 9 day work cycle
- Rotation jumps ahead two days each cycle: Monday/Wednesday/Friday, Wednesday/Friday/Sunday.
- For a given day, example Monday: work 3 consecutive Mondays, off next 6 consecutive Mondays

48/96

- 6 day work cycle
- Rotation falls back one day each cycle: Thursday/Friday, Wednesday/Thursday, Tuesday/Wednesday.
- For a given day, example Monday: work 2 consecutive Mondays, off next 4 consecutive Mondays

Four Days Off

Kelly

- 40 per year

48/96

- 60 per year
- **20 more** (50% increase)

Mornings at Home (not traveling to or from work)

Kelly

- 3 of every 9
- 33% of mornings at home
- 120 per year

48/96

- 3 of every 6
- 50% of mornings at home
- 180 per year
- **60 more** (50% increase)

Schedules Compared
Weekend Rotation

Kelly

48/96

Sat / Sun.

X O
 X O
 X O
 O O
 O O
 O X
 O X
 O X
 O O

Repeat

Sat / Sun.

O X
 X X
 X O
 O O
 O O
 O O

Repeat

X = 24 hour shift on duty, 0 = 24 hours off duty.

Complete Weekends Off

Kelly

- 3 out of 9
- 33% of weekends off
- 17 per year

48/96

- 3 out of 6
- 50% of weekends off
- 26 per year
- **9 more** (50% increase)

Work One Weekend Day (Sat or Sun)

Kelly

- 35 per year

48/96

- 17 per year
- **18 less** (50% reduction)

Work Both Saturday and Sunday

Kelly

- None

48/96

- 9 per year

Shifts falling on December 24 & 25

The schedule we propose uses an *adjustment* that assures no shift will have to work both Christmas Eve and Christmas Day. This is the same schedule used by departments currently working the 48/96. The adjustment is only needed every other year; it is simple and does not negatively affect any one shift. With the 48/96 each shift will work the same number of holidays as with the current schedule. A similar adjustment can be made for New Years Eve Day and New Years Day if the membership wishes.

Example:

December	22	23	24	25	26	27
Scheduled	C	C	A	A	B	B
Adjusted	C	A	C	A	B	B

Schedules Compared

Annual Vacation Usage (maximum consecutive days off)

	Kelly	48/96
1 shift leave =	6 days off	5 days off
2 shifts leave =	8 days off	10 days off
3 shifts leave =	13 days off	11 days off
4 shifts leave =	15 days off	16 days off
6 shifts leave =	22 days off	22 days off
7 shifts leave =	24 days off	23 days off
8 shifts leave =	26 days off	28 days off
9 shifts leave =	31 days off	29 days off
10 shifts leave =	33 days off	34 days off
11 shifts leave =	35 days off	35 days off
12 shifts leave =	40 days off	40 days off

Fatigue and the 48/96

Many employees support the 48/96 because of the fact that over time, the schedule can significantly reduce fatigue.

Prior to the schedule change, many individuals were concerned about possible increases in fatigue resulting in the schedule change. The departments found that after the schedule change, the issues of increased fatigue were not realized. In regards to short-term fatigue, members stated that their levels of fatigue were comparable or higher on the 3rd shift of the Kelly schedule, which offers no significant rest periods between shifts, when compared with the second shift of the 48/96.

Departments that have switched to the 48/96 schedule have seen no increases in injuries or disabilities resulting from the schedule change. In addition many departments have seen a reduction in sick leave use and all departments contacted stated that they have seen increase in morale as a result of the change. These positive findings can be attributed in part to a reduction in long-term fatigue.

Short-term fatigue

Short-term fatigue can be defined as consecutive hours without a significant amount of sleep. Once adequate sleep has been obtained, cumulated lack of sleep leads to long-term fatigue.

During busy periods short-term fatigue would be expected to increase for some individuals working the 48/96.

Short-term fatigue also exists with the Kelly (3/4) schedule and with any schedule where an employee can be expected to work for extended hours. Employees working extended shifts, 48s & 72s, is not new to the UFA. Due to overtime and or trades, employees frequently work 48s and 72 within the Kelly schedule framework in the UFA without any significant issues or problems with fatigue. In fact, just about every day of the year we have employees either beginning or ending a 48 or 72 hour shift. Independent of which schedule we work we will have exceptionally busy shifts or periods from time to time, which will require adjustments to the daily routine, that's the nature of the fire service in a metropolitan area. Departments we contacted, felt that short-term fatigue was not any more of a significant issue than with other work schedules.

Short-term fatigue becomes a serious issue when coupled with long-term fatigue.

One of the biggest advantages of the 48/96 is that it allows employees more opportunity to recover from sleep deprivation/ long-term fatigue.

Long term fatigue

Long-term fatigue can be defined as the accumulation of fatigue that lasts over weeks, months or longer periods without adequate rest periods. Long-term fatigue is more hazardous to employees in emergency services than short-term fatigue because the body is less able to compensate for the lack of rest than with short-term fatigue.

The 48/96 schedule decreases long term fatigue in four ways;

1. Every time an employee leaves work he goes on a 4-day/rest period. ***The 48/96 increases rest periods (4-days) by 50%, increasing the number from 40 to 60 a year.*** In addition, the frequency of “4-days” increases to a “4-day” every 6 days as opposed to every 9 days with the Kelly schedule. An employee who works overtime shifts during their “4-days” sees his/her percentage of “4-days” increase even more significantly. For example, an employee who works an average of 10 overtime shifts a year, during their “4 days”, can see an increase of “4-days” of 67% from 30 to 50 a year, while an employee who works 20 overtime shift a year, during their “4 days”, can see a 100% increase in the number of “4-day” on an annual basis from 20 to 40 a year.
2. ***The 48/96 increases the number of “sleep in days” (days waking up at home and not going to work) by 60%, increasing the number from 9 to 15 per month.*** Working overtime shifts during employees “4-days” has a similar effect in increasing the percentage of “sleep in days” when compared to the Kelly schedule.
3. ***The 48/96 reduces the number of days/hours an employee spends getting ready for work and time in the commute by 50%.*** A reduction of time spent in the commute reduce both stress and fatigue.
4. ***The 48/96 is more forgiving for employees working overtime or trades.*** As shown in item #1, an employee working the 48/96 can work 20 additional shifts a year and still have the same number “4-days” (rest periods) a year (40) as an employee working the Kelly schedule who works no additional shifts. In addition, the 48/96 increase the number of days an employee can work a trade or overtime shift without it resulting in a 48 or 72. Because the schedule increases the number of “4-days” by 50%, the employee has 10 days/month to work an additional shift without it resulting in a 48 or 72. Our current schedule only allows 6-7 days/month.

Due to the reductions in long-term fatigue and stress, employees are better able to handle short-term fatigue and stress resulting from busy shifts, or from working additional days (OT & Trades), resulting in a quicker recovery periods.

Sick Leave and the 48/96 Schedule

Background

Many departments that have switched from the 3/4 schedule (Kelly schedule) to the 48/96 have reported significant reductions in sick leave use after switching to the 48/96. None of the departments that we have contacted have reported any increases in sick leave use as a result of the schedule change.

Analysis

The general consensus is that switching to the 48/96 has had either a neutral or positive effect on reducing sick leave usage. Reasons for the reduction could be the result of many factors including some or all of the following; improved morale, decreases in long term fatigue or simply that the 48/96 schedule virtually eliminates the majority of sick leave abuse on the 2nd shift (which accounts for 50% of work days).

Accurate data that demonstrates direct reductions in sick leave use as a result of the schedule change has been a challenge to obtain. “Useable” data is difficult to obtain, in part, because sick leave use is dependent on many factors, including those not related to a work schedule. For example, in small departments one or two long term non-work related illness or injuries could significantly skew sick leave trends.

The 48/96 Committee is continuing our attempts to gather accurate data regarding the effects that the 48/96-schedule change has on sick leave use. The following are some of the departments that provided us with sick leave data.

Pacifica Fire Department had a 20% reduction sick leave use after switching to the 48/96 schedule¹

Minneapolis Fire Department switched to a modified 48/96 schedule² and saw an overall reduction in sick leave use by 34%³

Manhattan Beach Fire Department had an 80% reduction in sick leave use after switching to the 48/96 schedule⁴

Half Moon Bay Fire Department had a 10% reduction in sick leave use after switching to the 48/96 schedule⁵

It is important to note that none of the departments contacted had increases of sick leave use as a result of the schedule change, while many of the departments realized significant reductions in sick leave use.

¹ Monthly sick leave use averaged 7.5 days/month for the 24 months prior to changing from the Kelly to the 48/96 schedule. After switching to the 48/96 sick leave usage dropped to an average of 6 days/month. Data provided by Bill Wilson of the Pacifica Fire Local.

² Minneapolis Fire schedule consists of one shift working a 48/96 with the remaining shifts working a modified Kelly schedule.

³ Monthly sick leave use averaged 166 days/month for the 24 months prior to changing from the Kelly to the 48/96. After switching to the modified 48/96-schedule, sick leave usage dropped to an average of 110 days/month. The shift working the 48/96, the C-shift, saw a reduction of sick leave from the department monthly average (per shift, i.e. A, B or C shift) of 66 days/month to 43 days/month. Information provided by BC Jim Clack, Minneapolis Fire Department.

⁴ Information provided by BC Chuck Wilson of the Manhattan Beach Fire Department.

⁵ Information taken from a 48/96 survey completed by James Ascht of the Half Moon Bay Fire District.

It is believed that the UFA will see a reduction in sick leave use as a result of switching to the 48/96. Although we believe there will be a reduction, it is impossible to estimate the size of the reduction based on the information that we have obtained from other departments and the variables involved.

Additional Findings

What were the department motivations for a schedule change?

Most of the departments were motivated by the reduction in commuting and the fact that employees could spend more time at home with their families. A number of departments chose to switch as a means of attracting and maintaining employees. Many departments changed because they saw the positive benefits and improvements in moral in surrounding departments who had switched to the 48/96.

In all cases it was a member(s) from labor who brought the idea to their department for consideration.

The departments that switched schedules saw the 48/96 as a progressive schedule, one that addressed many of the concerns and problems that employees and administrations are facing, and will continue to face, in large metropolitan areas. The departments saw the schedule as a significant benefit for employees.

Was the 48/96 schedules implemented on a trial basis?

All but two departments implemented a 1-year trial period. Two departments implemented a six-month trial period. In all cases, language was included to allow labor or management to opt out of the trial period at any time (escape clause). No departments exercised this clause.

Was there a membership vote before and / or after the trial period?

In all cases, members voted to approve a trial period. In all cases, members voted again after the trial period to adopt the 48/96 schedule. One department used an intermediate vote at 6 months to extend the trial period an additional 6 months before a final vote at 1 year.

What was the percent in favor for each vote?

In all cases, a simple majority was needed to approve a trial period. Votes for the *initial* trial period ranged from 52% to 84% in favor. The final votes to adopt the schedule at the end of the 1-year trial period ranged from 90% to 100% in favor. Only two were below 90%, one at 80% and one at 75%.

In every case, the percentage in favor was much higher on the second vote.

Many of the members the committee interviewed for this survey (from labor and management) initially voted against the trial period. The majority of them has since become advocates of 48/96.

Every department who completed a trial period chose to adopt the 48/96 schedule!

What are the benefits that the departments experienced?

Improved Moral

This is supported, on part, by the high percentage of vote approval at the end of the trial periods. Improved moral was a comment we heard over and over. “Employees are well rested after “4 days off” and are eager to come to work”. Employees felt more productive and better organized on and off duty. Fewer transitions between shifts made for less duplication, better communication and more operational continuity.

Increased productivity and project follow through on duty

Employees found the schedule allowed for more flexibility in scheduling daily work schedules over two days. Members with program responsibilities can leave paperwork on their desk to work on for two days. Follow-up meetings and phone calls are easier to follow up on the second day.

Better communication between shifts

Fewer transitions between shifts mean more day to day continuity. Less lost information at shift exchanges.

Less duplication of work

The same personnel are on duty the first and second shift. Example: Shopping for food can be done once on the first shift for both days. This leaves more time for training, cleaning and maintenance.

Greater employee retention, more qualified applicants

For some of the departments contacted this was one of the primary reasons for switching to the 48/96. In tight labor markets, such as for Firefighter Paramedic, departments working the 48/96 schedule can draw a larger pool of applicants, due to employees increased ability afford homes while cutting commutes in half.

Employees have more time at home/ with family and friends/ more personal time

Employees with an average commute will gain an average of 20 hours per month. Employees living locally will gain an average of 10 hours a month. This is dead time that would be spent getting ready for work and commuting on the Kelly schedule. In addition, members will have more opportunities to connect with family and friends on a Monday-Friday schedule without having to get up the following morning. Members will have 60% more mornings free to help get the kids to school, etc.

10 additional full weekends off a year

Members with children in school or a spouse that works Monday- Friday find this feature especially appealing. Half of the weekends are free for sports activities, travel etc.

20 additional “4 days” a year

Every time you go home, you go home to a 4-day. You get extra opportunities for home projects, travel, camping, etc. More mornings for personal endeavors!

Increased productivity at home

A member building a house can get a lot more done in four consecutive days off vs. every other day. Projects can be left out to continue into the next day. You get extra mornings for an early start on projects.

What are the negative aspects of the 48/96 schedule?

Away from family for 48 hours

This was one of the biggest concerns voiced by line personnel. For some personnel this will be a negative aspect of the 48/96. What the committee found in regards to this topic was that most members who now work the 48/96 have found there concerns about being away much less significant than originally thought. The majority found the benefits the schedule offered the family more than compensated for the negatives of the 48s, ie; 50% more “4-days”, 60% more “sleep in” days at home with the family, reductions in long-term fatigue, more full weekends off, etc.

Employees live further away

The positive aspect to the 48/96 on this issue is, it give our employees an option when choosing where to raise their families.

Because of the greater flexibility the 48/96 offers, it is possible that some members of the UFA will chose to move further from the Salt Lake Valley. *Although the departments contacted found that the vast majority of personnel don't relocate because of a schedule change.*

The issue of members living out of the area is a real issue in metropolitan fire departments with any schedule and is largely based on the economy and cost of housing. As the economy improves it is very likely that the problem will worsen independent of the schedule that we work.

In regards to *off duty response* to large-scale emergencies, having employees living out of the area can be a benefit. Examples could be, a terrorist attack or major earth quake effecting Salt Lake County. In both cases a large percentage of employees will only report to work after they have secured their families and homes. If the majority of employees live in the effected area, off-duty response could be greatly delayed and small in numbers of personnel. On the other hand, employees living outside the effected area will likely respond to assist, as the concerns for family and homes will be minimal compared to those living in the effected area.

As far as Union participation, some departments have initiated incentive programs to increase both attendance and union participation.

Departments found that employees living long distances are better rested with the 48/96.

Complication of personal issues

Some members face unique issues in regards to childcare, child custody, care of an elderly parent or care of sick family members. These can be difficult and challenging issues under any circumstances. Any change in scheduling may cause stress and anxiety. It has been reassuring to hear that most families have found acceptable alternatives with the 48/96. For many, working 48/96 improved their situation, in part because the schedule is more regular and predictable, and results in fewer exchanges of children/elderly when care issues are involved.

Difficult for administration to contact personnel when working Sat./Sun rotation

Once every six weeks a shift will work both Saturday and Sunday. This means there is a ten day period when shift personnel will not be on duty to meet with those working a typical 40 hour work week (fire administration, vendors, etc.) This has become less of a problem with the advent of E-mail and voice mail.

How will the 48/96 schedule affect our current policies and procedures?

The schedule will have very little effect on current policies and procedures.

For the purposes of daily work routines, vacation leave, sick leave, overtime, or any other policies / procedures, ***each twenty-four hour shift is considered one shift.***

Example: a member takes off two consecutive shifts for vacation. Overtime for each 24-hour shift is filled separately.

Our existing policies and procedures can be applied to the 48/96 schedule without modifications. Expectations and standards will not change. Example: awake, in uniform and properly groomed by 8:00 am for each shift.

Mandatory Training

Although some of the departments that have switched to the 48/96 have had short adjustment periods to get accustomed to the new schedule, once the “switch” was completed they have seen no negative impact on the scheduling. This is due in part to the fact that we will not change the number of days/weekdays we work per month. In our department we believe that the 48/96 schedule will have a positive effect on scheduling due in part to increased continuity of companies, due to a reduction of employees regularly shift trading to work 48s and 72s and possible reductions in sick leave use. Some departments working the 48/96 routinely schedule busy companies for mandatory training on the first shift of the 48 and the slowing companies on day two.

Telestaffing

Telestaff can easily be adapted to the 48/96 schedule. Other departments on the 48/96 use Telestaffing.

Vacations Selection

No change in vacation picks, with one exception. The one exception would be that a set would be equal to 2 shifts (48 hours) instead of 3 shifts. During each round, you will be able to draw either one or two days. Each member must draw a minimum of 6 days. The following is the way vacation draw will work:

1st Round

Holiday draw- Everyone draws

2nd Round

Holiday draw- Everyone draws

3rd Round

Holiday draw- Everyone draws

4th Round

Vacation draw- Members with 17+ years draw

5th Round

Vacation draw- Members with 9+ years draw

6th Round

Vacation draw- Members with 9+ years draw

7th Round

Vacation draw- Everyone draws

8th Round

Vacation draw- Everyone draws

9th Round

Vacation draw- Everyone draws

Subsequent rounds as needed.

What would the departments that have implemented this schedule do differently?

Many of the departments stated that they wished they had made the change earlier. They recommend using a 1 year trial period instead of a six month. They would also allow those opposed to the schedule equal time to make presentations.

Conclusion

We continue to believe the greatest testament to the 48/96 schedule comes from those who work the 48/96.

The fact is that the information from those working the 48/96 has been **overwhelmingly positive** and there are relatively few negative aspects to report.

The greatest barrier to progress is a lack of understanding. If questions remain, contact a committee member or better yet, contact someone who works the 48/96.

Partial list of Departments on the 48/96 Schedule

Currently using proposed schedule

Albuquerque, N.M. 5 years
San Bernardino City 1 year
City of San Mateo 6 months
Half Moon Bay
Vallejo
Foster City
Union City
Redondo Beach 3 years
Inglewood 3.5 years
Hermosa Beach 8 years
South Pasadena 9 years
Hillsborough 2 years
Hesperia 5 years
Manhattan Beach 3 years
El Segundo 3 years
North County Fire (Formerly Brisbane & Pacifica)
Burlingame Fire
South Pasedna Fire Department
Redondo Beach Fire Department
Sausalito Fire Department
LaVerne
Atwater Fire
Atascadero Fire
Paso Robles
North Tahoe Fire
American River Fire Department
Truckee Fire Department
Atwater Fire Department
Barstow Fire Department
Covina Fire Department
Ebbetts Pass Fire Department
El Segundo Fire Department
Gardena Fire Department
Hawthorne Fire Department
Hermosa Beach Fire Department
Hesperia Fire Fire Department
Inglewood Fire Department
Piner Ambulance (Napa)
Orinda Moraga Fire District

Reported as researching implementation

Fremont Fire
Sacramento County
Santa Clara County Fire
LA County
Palo Alto Fire
Torrance Fire Department

What does the 48/96 schedule look like?

January						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

How do the schedules compare?

Current January						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

	Days Worked		CM Opp's
A-Shift	10		21
B-Shift	10		21
C-Shift	11		20

48/96 January						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

	Days Worked		CM Opp's
A-Shift	10		21
B-Shift	10		21
C-Shift	11		20

How many days will I wake up at home with my family?

Current Schedule

48/96 Schedule

- 10 days per month
- 120 days per year
- 15 days per month
- 180 days per year

How many days will I have to commute to or from work?

Current Schedule

48/96 Schedule

- 240 days per year
- *Using example commute of 25 miles with 30 minute average travel time:*
6000 miles per year
120 travel hours per year.
- 120 days per year
- *Using example commute of 25 miles with 30 minute average travel time:*
3000 miles per year
60 travel hours per year.

How many overtimes can I work without working another 48?

Current Schedule

48/96 Schedule

- 40 days per year
- 60 days per year

How many overtimes can I work without working a 72?

Current Schedule

48/96 Schedule

- 80 days per year
- 120 days per year