

**\*DRAFT ONLY\***

**WESTMINSTER PROFESSIONAL FIREFIGHTERS**

RESEARCH PROJECT FOR THE:

**48/96**

WORK SCHEDULE

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## Introduction to the 48-96 work schedule

The 48-96-work schedule is an alternative to the traditional fire department work schedule, which in recent years has been growing in popularity and implementation among a broad range of fire service organizations. The 48-96 schedule is a progressive alternative, which takes into account emerging trends in the fire service as well as economic and environmental factors. The purpose of this document is to provide an accurate analysis of the 48-96 work schedule and propose it as an acceptable alternative to the current Kelly schedule worked by the Westminster Fire Department.

## Overview and comparison

The 48-96 schedule and the Kelly schedule, which is the Westminster Fire Department's current schedule, are comparable in basic structure, with the difference being in the arrangement of shifts worked. Both schedules consist of: three platoons, 56 hours per week, 112 hours per pay period, and 121 shifts per year. There is no difference in the amount of hours worked in an FLSA pay period.

Kelly schedule (currently worked by the Westminster Fire Department)

- The Kelly schedule consists of a 9-day rotation period where each platoon works three 24-hour shifts with 1, or 4 days off in-between shifts.
- For any given day of the week, an employee would work that day three weeks in a row, then not work that day of the week for nine weeks.
- Example: ACABABCBC
  - A-shift: X O X O X O O O O

48-96 schedule (proposed)

- The 48-96 work schedule consists of a 6-day rotation period where each platoon works two consecutive 24-hour shifts, followed by four days off.
  - For any given day of the week, an employee would work that day two weeks in a row, then have the next 4 off.
  - Example: AA BB CC
    - A-shift: X X O O O O
- (See appendix for complete example calendar)

## History of the 48-96 schedule in the fire service

The 48-96 work schedule has been utilized by professional fire departments since the early 1990s. The departments using this schedule are diverse in their demographics, management structure, and overall philosophies. Currently, there are at least 65 departments operating under the 48-96 schedule with many more departments actively researching the possibility of converting to this schedule also. (See appendix for complete list). Most of the departments that switched to the proposed schedule first utilized a 6-month or 1-year trial period with an escape clause that allowed management or labor personnel to cancel the schedule change at any time and revert back to the prior schedule. Of the research conducted, no departments used the escape clause and only one department did not switch to the 48-96 after the trial period (San Bernardino County).

Of the departments surveyed, votes to initiate a trial period of 48-96 ranged from 52% to 84% in favor. Upon completion of the trial period, votes to adopt 48-96 as the permanent schedule ranged from 90% to 100% in favor. Only two departments were below 90%, with one being 80% and the other 75%. In every case, the support for the schedule change was much higher on the second vote.

Reasons for the switch to the 48-96 schedule varied, but the results of the change were very positive among the vast majority of departments that now work this schedule. According to the San Jose Report in regards to reasons for changing:

“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 morale in surrounding departments who had switched to the 48-96. 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.”

Though relatively new, the 48-96 schedule is growing rapidly in popularity and implementation across the state and nation. Perhaps the biggest contributing factor to the rapid spread of this schedule is the overwhelming level of satisfaction displayed by personnel who have made the change. This can be seen by the fact that in votes after the trial periods, most departments adopted the 48-96 schedule with 90 – 100% in favor.

## **Benefits of the 48-96 schedule**

The benefits of the 48-96 work schedule are numerous and can be broken down into: fire department issues, scheduling and days off, personal benefits, and commuting/environmental benefits.

### ***1. Fire Department issues***

The following section outlines several issues related to how the 48-96 would affect fire department operations.

- **Productivity:** There may be concern by fire administration that productivity would suffer on the 48-96 schedule due to firefighters being fatigued on their second day of work, but it is possible that there could actually be an increase in productivity. It is true that short-term fatigue could pose a challenge for the busiest units; however, the decrease in long-term fatigue would help to minimize these effects. The issue of fatigue will be addressed in greater detail later in this document. Additionally, since personnel would always be coming to work after having four days off, they would be better rested, more motivated and ready to focus on work.
  - **Projects:** Having two continuous days to work on projects at the station would be more efficient. An employee could set up everything necessary (shop or office) and work continuously for two days without having to tear down and set back up. Communication with the public could be followed up with on the second day if unable to reach a party on the first day.
  - **Fire Inspections:** Switching to the 48/96 schedule would have no negative effects on the department's business inspection program because both schedules give each shift an average of 7 weekdays on-duty per month.
  - **Training:** Working two consecutive days would allow crews to make up training on the second day if unable to complete drills on the first day. Some departments have reported improvements in training because of greater crew continuity and cohesion.

- **Cost Savings and Environmental Impacts:** With the high costs of fuel and the push for “greener environment”, there would be a great opportunity for the City of Westminster to save fuel costs and to do their part in helping save the environment. Since grocery shopping could be accomplished all in one day, it would mean only half the trips to the store (approximately 180 less trips @ 3 miles each way = 1080 less miles a year per station.) At a cost of approximately \$2.00 per mile to operate a fire engine, that would equate to a savings of over **\$14,000 per year**. In addition this would also reduce the negative effects on the environment including pollution and congestion. Since the station cleaning duties would only need to be done at the beginning of the 48 hour shift, the cost of cleaning supplies essentially could be reduced by 50%. Currently about \$900.00 per month is spent on Fire Station cleaning supplies. By cleaning every other day, would essentially save the City another **\$4,800 per year**
- **Communication:** There would be half as many shift changes between crews, which would mean less opportunity for information to be lost in transmission. If the same crew was in charge of the station/apparatus two days in a row, they could ensure everything is maintained or repaired with less opportunity for things to “slip through the cracks.” There would be half as many “Pass-off” entries required.
- **Duplication of work:** There are certain daily tasks that take place each shift that are repetitive, but necessary for shift changes. A good example is the turnover of controlled medications between paramedics. Less changes of custody would mean less opportunity for error. Other examples include: placing gear on the engine, personnel rostering, shift briefings, equipment inventories, grocery shopping, etc. Some of these daily tasks could be modified if the same shift worked two days in a row, which would free up more time for training or other important activities. For example, crews could shop on the first day for both days of work, thus minimizing the time and fuel spent on multiple trips to the grocery store.
- **Flexibility:** One shift working two days consecutively would give the company officer more flexibility to plan and carry out shift objectives. If the first day is very busy, crews would still have the following day to follow up with tasks that were incomplete instead of passing it off to the next crew. For example, personnel could take care of all station work duties in the morning of day one, and prevention activities in the afternoon. They could then spend all morning on day two training and then take the afternoon of the second day for individual projects or making up for anything missed.
- **Sick leave usage:** Of the research conducted, no departments have reported an increase in sick leave usage as a result of switching to the 48-96 schedule. On the contrary, some have in fact seen decreases in sick leave usage. This may be due to improved long-term fatigue, less abuse, or other reasons, but the important point is that there weren't any negative trends.  
**Some True examples of this are:**
  - ✓ **Pacifica Fire Department** had a 20% reduction sick leave use after switching to the 48/96 schedule.
  - ✓ **Minneapolis Fire Department** switched to a modified 48/96 schedule and saw an overall reduction in sick leave use by 34%.
  - ✓ **Manhattan Beach Fire Department** had an 80% reduction in sick leave use after switching to the 48/96 schedule.
  - ✓ **Half Moon Bay Fire Department** had a 10% reduction in sick leave use after switching to the 48/96 schedule.
- **Holdover and shift relief:** This is one advantage of the 48-96 schedule that could benefit the city with less overtime costs due to shift change issues. Since there would be half as many shift changes, this creates half the amount of opportunities for late calls,

waiting for relief from another station, or other situations that mean paying an employee overtime to wait at the station for his/her relief. This also includes paying overtime to employees involved in a fire or other time consuming emergency that occurs near shift change time. These instances would be reduced by half with the 48-96 schedule.

- **Morale:** Many of the departments switched to the 48-96 schedule in part due to reports of improved morale among other departments working the schedule. Departments found that an overwhelming majority of employees working the 48-96 schedule were very satisfied with the work schedule and even noted that many personnel who were initially opposed to the switch later voted in favor of the permanent change. Many have attributed the increase in morale due to firefighters being more motivated to come back to work after having four days off, as well as the decrease in long-term fatigue.
- **Recruiting/Retaining employees:** The 48-96 work schedule has become so popular that it has become an asset in the recruiting and retention of employees.

## ***2. Scheduling and days off***

- **More four-days off:** The amount of four-days off would double compared to the current schedule. Instead of 3 four-days per month, or 36 per year, there would be 5 per month, or 60 per year. Every time an employee goes home it will be for four days off, and every time an employee comes to work, they will have just had four days off.
- **More weekends off:**
  - **Complete weekends off:** The current schedule provides 18 two-day weekends off per year as opposed to 26 four-day weekends off with the 48-96 schedule. The amount of complete weekends off (Saturday and Sunday) would increase by 8 from the current 18 per year to 26 per year. This would be a significant benefit to personnel involved in team sports, church services, or other community activities, as well as to personnel with friends or family who work a traditional 40-hour workweek.
  - **Partial weekends off:** On the current schedule, each shift works an average of 33 single weekend days per year (Saturday or Sunday). With 48-96, each shift works an average of 17 single weekend days per year, for a reduction of 50%.
  - **Complete weekends on:** The current schedule does not have an employee work both Saturday and Sunday. The 48-96 schedule would cause an employee to work both Saturday and Sunday an average of 9 times per year. Given the overall increase in complete weekends off; however, this apparent disadvantage is not as significant.
- **Overtime and shift trades:** One factor to be weighed is the number of additional shifts that can be worked (overtime or shift trade) without putting an employee on additional 48 or 72-hour shifts. Currently, an employee can work 36 additional shifts per year or 3 per month without having to work a 48-hour shift. This increases by 66% to 60 additional shifts per year or 5 per month with the 48-96 schedule.
- **Consecutive days worked:** With the current work schedule, personnel work the same day of the week for 3 weeks in a row and then have that day off for 9 weeks in a row. This makes it very difficult for personnel who take a class, are involved with sports for themselves or their children, or attend any event that is on the same day every week to make those appointments regularly. With the 48-96 schedule, employees would work the same day for 2 weeks in a row, then have it off for 4 weeks in a row. They would still

work the same number of days, but the arrangement makes it so they would not have to miss the obligation for a whole month at a time, or they would not have to take off as many shifts consecutively in order to attend the events.

- **Annual leave:** The following chart compares the number of days off an employee can have by using annual leave or shift trades.

SHIFTS TAKEN OFF	DAYS OFF ON CURRENT SCHEDULE	DAYS OFF ON 48-96 SCHEDULE
1	6	5
2	8	10
3	13	11
4	15	16
5	17	17
6	22	22
7	23	23
8	28	28
9	30	29
10	33	34

- **Holiday season:** One potential area of concern with the 48-96 work schedule is that there is a possibility of one shift having to work both Christmas Eve and Christmas Day. Research has shown that this will only take place 8 times from 2008 to 2026, and during those years an amendment can be made to the schedule. The shift scheduled to work December 23<sup>rd</sup> switches that day with the shift scheduled to work December 24<sup>th</sup>. See the sample calendar below for an example.

**December Schedule**

Su	M	T	W	Th	F	Sa
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				

A-Shift      B-Shift      C-Shift

**Revised December Schedule**

Su	M	T	W	Th	F	Sa
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				

A-Shift      B-Shift      C-Shift

**3. Personal benefits**

- **Family time:** Another great benefit of the 48-96 schedule is that it affords employees more quality time at home with their families. The number of mornings that a firefighter is neither traveling to work or from work is increased from 9 per month (108 per year) under the current schedule to 15 per month (180 per year) under the 49-96 schedule. This

allows the firefighter nearly twice as many mornings at home to help get the kids to school, sleep in, or just spend the morning with their family.

Another point to consider is that time spent at home will be of higher quality because firefighters are neither recovering from their previous shift nor preparing for an upcoming shift. As it is with the current schedule, 3 out of every 4 days at home the firefighter has either worked the day before or will work the following day. The day following a shift the firefighter may be tired from the previous day, and the day before a shift the firefighter will most likely go to bed early to prepare for the next day. With the 48-96 schedule, days at home preparing for or following a shift at work are reduced to 2 out of 4, for a 25% reduction compared to the current schedule worked.

The benefit already discussed of more complete weekends off also applies to increased quality of family time. With over 50% more complete weekends at home, this allows more opportunities for short family vacations even with a spouse working a 40-hour week or children in school 5-days a week.

For personnel involved in projects at home, 48-96 creates an advantage because every time he or she goes home from work, they have four continuous days to work without interruption opposed to having to set up and clean up for just one or two day's work.

Susan L. Koen, Phd., an organizational psychologist, has studied the 48-96 work schedule and its effects on the family. Consider her findings:

“Research on family distress among shift working households, including firefighters, have revealed that the off time pattern of the shift employees’ work schedule is the most significant determinant of family well-being. In other words, is the firefighter at home and positively interacting with his/her spouse, children and other family members often enough and for long-enough duration to be a viable family member?”

She goes on to note “consecutive hours at home with the family, and increased amount and frequency of weekend time are advantages of the 48-96 schedule”.

- **Fatigue and 48-96:** A major issue of importance with the 48-96 work schedule is as it relates to the level of fatigue imposed upon firefighters compared to more traditional work schedules. Factors that must be reviewed are short-term fatigue vs. long-term fatigue and how these relate to the overall health and well being of the firefighter.

*Short-term fatigue:* Short-term fatigue can be defined as consecutive hours worked without adequate sleep. This is a reality of the fire service that firefighters have to cope with and adapt to, which is nothing new. Since firefighters would work 48 consecutive hours on a regular basis instead of the current 24 hours, the 48-96 schedule would pose an increase in short-term fatigue. This level of short-term fatigue resulting from a 48-hour shift is nothing new to Westminster firefighters since the department currently permits members to work 48 or 60-hour shifts due to overtime or shift trades. Many members work 48 or 60-hour shifts on a regular basis and find the level of fatigue is manageable, usually without any alteration to the normal daily routine. While the 48-96 schedule poses an apparent increase in the level of short-term fatigue, the major advantage to this schedule is its relation to 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 major advantage of the 48-96-work schedule as compared with the current



schedule worked is the reduction in long-term fatigue or sleep deprivation, for the following reasons:

- 100% more 4-day rest periods, giving firefighters more time to catch up on lost sleep. Every time a firefighter starts a shift, they will be well rested from just having 4 days off.
- Nearly 70% more sleep in days at home that the firefighter is neither traveling to nor returning from work.
- More opportunity to work overtime or shift trade without working 72 hour shifts.

One of the more persuasive arguments of the benefits of the 48-96 schedule as it relates to fatigue is from firefighters that made the transition from a traditional schedule to the 48-96 schedule. Increase in fatigue was one of the biggest concerns that came up when departments were considering switching to this schedule, but in actuality many were surprised to find that the overall level of fatigue was actually reduced due to the increase in rest periods. Proof of this is found in the overwhelming level of satisfaction seen in firefighters working this schedule and the high percentages by which it was passed by members voting for the change.

### **3. Commuting and environmental benefits**

From a broad perspective, the greatest long term benefit of the 48-96 work schedule is the 50% reduction in commuting for all personnel and the resulting economic and environmental benefits this would create. Without considering overtime or shift trades, firefighters currently work an average of ten shifts per month, resulting in ten commutes to and from work. With the 48-96 schedule, they would still work ten shifts per month, but commutes to and from work would be cut in half to five. More and more firefighters are commuting from further out to areas such as Loveland, Ft. Collins, Windsor, Castlerock, etc for whatever reasons. As a result, commutes to work have become longer and issues related to driving have also increased.

Consider the following statistics compiled regarding the commute for Westminster Firefighters. Westminster Firefighters would save over 12,000 gallons of gas per year. Environmental impact would reduce the amount of carbon in the air by 72,731 pounds. Westminster Firefighters would save over \$48,000 in fuel costs alone. Westminster Firefighters would save almost 250,000 miles driving on the roads, thus reducing the chances for a serious accident. The benefits of reducing the department commute in half are numerous:

- **Monetary savings:** All costs for firefighters related to driving and commute would be cut in half, as there would be half as much driving. This would be a huge benefit as the prices of gasoline and diesel are at all time highs and keep rising. This also includes all costs associated with vehicle maintenance, as firefighters would be putting half the amount of mileage on their vehicles and thereby reducing overall wear and tear. Personnel may be qualified for reductions in the price of automobile insurance due to the lower annual mileage.
- **Time gained:** With round trip commutes averaging between 1 and 2 hours. Switching to the 48-96 schedule would give firefighters an additional 5 -10 hours per month or 60 -120 hours per year at home with their families.
- **Traffic impact:** While the number of Westminster firefighters is not so high as to make a significant reduction in traffic, there will be fewer vehicles on the road contributing to busy roadways. Less time driving also means less time exposed to the hazards and stress of driving, including traffic collisions.

- **Environmental impact:** Because all driving would be cut in half, the amount of emissions and pollution caused by firefighters commuting to and from work would also be cut in half. With the recent emphasis being placed on environmental impacts by local, national, and international leaders and groups, people worldwide are being asked to do what they can to decrease emissions, fossil fuel use, and overall pollution. Many environmental leaders see the solution to problems influenced by pollution and emissions, such as global warming, coming from individuals, communities, and local governments taking whatever steps they can to decrease the impact they have on the environment.

## Potential negative aspects of 48-96

While there are numerous benefits of the 48-96 work schedule, there are also potential negative aspects that need to be addressed.

- **Frequent 48 hour shifts will result in greater fatigue:** This issue has been addressed under the section on fatigue. To summarize, while there is potential for higher levels of short-term fatigue on the second shift, this is balanced out by the decrease in long-term fatigue due to more frequent four-day rest periods.
- **Each shift works 9 complete weekends per year:** While each shift would have to work the Saturday-Sunday rotation 9 times throughout the year, they would also see an increase in the number of complete weekends off from 18 to 26 per year.
- **Decreased morale among firefighters opposed to the change:** Most departments reported a small percentage of firefighters were opposed to changing to 48-96, but after the trial period this percentage was much smaller.
- **Away from family for 48 hrs:** Being away from the family for 48 hours on a regular basis may disrupt the routine for some families and create new challenges. This may be more of a concern for personnel who have special issues such as childcare, child custody, or care of a sick or injured family member to attend to. These challenges are difficult under any 24-hour work schedule and a switch to the 48-96 schedule may require alternative solutions to be sought out. While these are valid concerns, the potential benefits to the family already discussed should be taken into account as well.
- **Disconnect between administration and line:** It could be argued that there would be a greater disconnect between 40-hour fire administration personnel and line personnel due to frequent 4-days and shifts working Saturday/Sunday rotation. However, given today's enhanced means of communication through email, voicemail, tele-staff, etc. this should not be a problem and only once every six weeks does it occur that a shift works both Saturday and Sunday.
- **How would the 48/96 schedule affect current policies/procedures?** A switch to the 48-96 work schedule would not require any significant alterations to current department policies and procedures. Since each 24-hour period would still be considered one shift, no changes would need to be made to staffing policies. Operationally, no major changes have been identified. The FLSA cycle would have to be changed from a 27 day cycle to a 24 day cycle, again reducing the cost of FLSA overtime for the City.
- **How would the 48/96 schedule affect training?** A switch to 48-96 would not have a major impact on department training. One issue is that a training session could not be scheduled for three consecutive days and reach all three shifts, as with the current work

schedule. Departments that have adopted the 48-96 schedule have noted no other negative impacts on training.

- **AREA Departments currently working 48/96.**
  - West Metro
  - North Metro
  - (who ever else)

## **Conclusion**

The 48-96 work schedule has been tried and tested by a wide variety of fire departments and has been proven as a valid alternative to traditional work schedules. The fact that many cutting-edge, trendsetting organizations in the fire service are considering adopting the 48-96 schedule shows that it is both a progressive and credible option as a fire department work schedule. The overwhelming level of satisfaction and high morale among firefighters working this schedule provides motivation for a change for Westminster Firefighters.

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## DEPARTMENTS CURRENTLY WORKING THE 48/96 SCHEDULE

1. Torrance City Fire
2. Norco City Fire
3. Chino Valley Fire District
4. Albuquerque NM City Fire
5. INEEL (Idaho National Engineering & Environmental Lab) Fire
6. Fort Irwin Fire
7. Paso Robles City Fire
8. Atascadero City Fire
9. El Segundo Fire
10. Colton Fire
11. La Verne Fire
12. South Pasadena Fire
13. Manhattan Beach Fire
14. Hermosa Beach Fire
15. Rancho Cucamonga Fire
16. Redondo Beach Fire
17. San Bernardino City Fire
18. Piedmont City Fire
19. Atwater Fire
20. Cathedral City Fire
21. Big Bear Lake Fire
22. Barstow Fire
23. San Mateo City Fire
24. Half Moon Bay Fire
25. Vallejo Fire
26. Foster City Fire
27. Union City Fire
28. Millbrae Fire
29. North County Fire (Brisbane & Pacifica)
30. Central Fire (Burlingame & Hillsborough)
31. Orinda Moraga Fire
32. Piner Ambulance Company – Napa
33. Woodside Fire
34. South San Francisco Fire
35. Menlo Park Fire
36. City of Folsom Fire
37. Rocklin Fire
38. Valley of the Moon Fire
39. Corte Madera Fire
40. Larkspur Fire
41. Marinwood Fire
42. Mill Valley Fire
43. Novato Fire
44. Ross Valley Fire
45. San Rafael Fire
46. Sausalito Fire
47. South Marin Fire
48. Tiburon Fire
49. Marin County Fire
50. North Tahoe Fire
51. North Lake Tahoe Fire
52. Donner Summit Fire
53. Truckee Fire
54. Squaw Valley Fire
55. Lake Valley Fire
56. Northstar Fire
57. Tahoe Douglas Fire
58. Auburn City Fire
59. Montebello City Fire
60. Marion County Fire (Salem OR.)
61. Santa Fe Springs City Fire
62. South Placer Fire Protection District
63. Loma Linda Fire
64. Eagle River Fire Protection District CO
65. Mesquite Fire Rescue
66. West Metro Fire Protection
67. North Metro Fire Protection

2008 Fire Service Leadership Conference – Arizona Fire Chiefs Association  
July 30<sup>th</sup>, 2008

*The seminar was titled “Organizational Impact of the 48/96 Shift Schedule” – The speakers were:*

*Chief Douglas McBee, West Metro Fire District*

*Chief Mike Iacona, Flagstaff Fire Department*

*Chief Paul Wilson, Sun Lakes Fire Department*

*Division Commander Tige Watson, Albuquerque Fire Department*

*Chief Paul Adams, Avondale Fire Department*

*The format for the seminar was basically the 4 person panel who each described their departments organizational impacts of the 48/96 schedule. Then it was opened up for questions from the audience. The seminar lasted about 2 hours, then about 30 minutes of follow-up questions.*

*This seminar was attended by Lieutenant Jayson Sale and Paramedic Mike Rosado.*

Avondale Fire –

- Had 51% vote when they went to trial
- 90% acceptance vote after trial period
- Overall very positive experience
- Noticed more of the “back to basics” firehouse behavior. Examples were eating more meals together, more camaraderie, more “crew time”
- Noticed less of the “nit picking” issues around the kitchen table – basically a more comfortable work environment. Positive increase in moral.
- Better training experience (per Training Division) because of having the ability to have a day off in between major trainings (live burns). Training Division thought they were able to provide a better training because of the day break in between trainings.
- Huge success with the City, because of them able to sell the “Go Green” concept
- Since implementation, the entire City of Avondale has helped out the Going Green concept, by working 4- 10’s. The entire City offices are closed on Fridays

Albuquerque Fire Department -

- Using the 48/96 the longest. Been in place for last 14 years.
- 682 personnel – 23 stations
- Required 50% to go to trial
- Received 90% acceptance after trial
- Worked a 12/24/10 schedule prior to going to 48/96.
- Most of the medics were shift trading to make the 48/96’s before it was adopted.
- Improved sick leave (mainly because of odd schedule prior, a lot of “sick days” were used on the 3<sup>rd</sup> 10 hour shift)
- Biggest benefit: – “Improved moral”

- Biggest challenge: - Training – hard time coordinating in the beginning.

#### Middlepark (California) Fire Department –

- Went to the schedule in January ‘03
- Administration was initially concerned about productivity. “Were guys just going to lie around and do nothing on the 2<sup>nd</sup> day?”
- Administration required a measurable 4 part work schedule each tour from the line personnel including:
  - District training
  - Company training
  - District activities. I.e. Inspections, pub ed, etc.
  - Station activities
- First 6 months, sick leave increased 21%, mainly because of the Saturday/Sunday rotations on the 48/96 schedule
- Dropped to an overall 12% increase in 2<sup>nd</sup> year.
- 3<sup>rd</sup> year on, basically back to the even point.
- Used measurable benchmarks for comparison reasons.
- Productivity increased 1<sup>st</sup> year
- By the 3<sup>rd</sup> year productivity was back to even point.
- “The numbers on sick leave and productivity had some dramatic changes in the first couple of years, but by the 3<sup>rd</sup> year, everything was back to midline”

#### West Metro Fire –

- Initially looked at the Denver schedule (Kelly day), but that would have required to hire another 1/3 firefighters.
- Chief McBee was initially very against this schedule for many reasons
- Required a super majority vote to go to trial
- 1<sup>st</sup> vote was at 64% to go to trial – No votes were counted as a “NO” votes
- 2<sup>nd</sup> vote after 9 months was 88% to continue 48/96’s
- Currently now at a 92-94% acceptance rate
- Initially this was brought to the Fire Protection Board, and they voted against it.
- Was again brought to the Board by the Chief to help with the small percentage wage increase. Used basically in Union negotiations.
- “We can’t give them much of a raise this year, so let’s let them try out this 48/96 schedule”
- McBee talked a lot about the “study “that was conducted by the sleep doctors and with St. Anthony’s Hospital.
- Sick leave initially had dramatically reduced
- Sick leave still down at this time compared to original schedule
- Accidents – no changes that can be contributed to 48/96 schedule
- No changes in exposure incidents that can be contributed to 48/96’s
- They have a 5 hour clause that says if a unit or station does not receive 5 hours of down time (not consecutive) or a 2<sup>nd</sup> alarm fire, the BC and station officers have the liberty to change out “sister stations”
- They have actually moved personnel 9 times since the schedule started

- Train busy stations the 1st day and slower stations the 2<sup>nd</sup> day
- Had NO increase in citizen complaints on new schedule
- Require stations to only shop 1 time for the 48 hours.
- Decreases fuel costs
- Citizen shopping complaints have decreased
- Better attitude on inspections – increased moral
- Have consecutive days for preplans and inspection follow-ups
- With tele-staff and Outlook, communications have improved
- “If you’re looking for this schedule to dramatically improve customer service, it’s probably not going to do that, but the thing to remember is that there is NO documentation that proves it will decrease customer service either”

### Flagstaff Fire Department

- City does not recognize Union
- 7 stations
- Conducted a formal work group with Council – Work Session
- Had unilateral opt-out provision for:
  - City Administration
  - Fire Administration
  - Employee group
- Some difficulties with communication between shifts and Fire Administration
  - Communication improved after getting email and staffing access for people at their home. (like our lancelet and tele-staff)
- Specific measurements during trial period
  - Employee surveys
  - Turnout time
  - Accidents
  - Injuries
  - Inspections
  - Training hours
  - Physical fitness hours
- Required some payroll modifications
- “It was a way to empower my employees that essentially didn’t cost me a dime”
- “It’s what the employee group wanted, so I stood behind them”





## Memorandum

**TO:** Mike Wilcox

**FROM:** Dan Kadomoto

**SUBJECT:** FLSA impact on Proposed  
Fire Department Schedule

**DATE:** July 25, 2002

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The Payroll department has reviewed your proposed Fire Department schedule referred to as a 2/4, for 2 days on and 2 days off. Our analyses of these schedules were conducted for the entire calendar year of 2003, with the transition to the new schedules starting in the third pay period of the calendar year.

Our analysis indicates that there will be no impact to the FLSA cycles by going to the new 2/4 schedules for calendar 2003.

Dan Kadomoto  
Finance Department  
Manager, Payroll /Business Systems &  
Support

cc: Mark Burton  
Pat Sawicki  
Ofelia Hsieh  
Anita Pennington  
Mary Flatley





**Peter J. Nowicki**  
**Battalion Chief**

Moraga-Orinda Fire District  
33 Orinda Way  
Orinda, CA 94563

Phone: (925) 258-4599  
Fax: (925) 258-4595  
Voice Mail (925) 258-4512

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Mike Murray  
550 Ventura Avenue  
San Mateo, CA 94403

11-19-2002

Mike,

Thanks for your recent call pertaining to the 48/96 work schedule. It has been enthusiastically accepted by the staff and membership (with a few exceptions). Beyond moral, we have also seen a steady decline in sick leave usage. Through the first 4 months, the decline has been 25-30%.

If I may be of any other assistance, please don't hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to be "Peter J. Nowicki", written over a horizontal line.



# ***City of Albuquerque***

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

**Albuquerque Fire Department**

[www.cabq.gov/fire](http://www.cabq.gov/fire)

**Martin Chavez, Mayor**

June 12, 20002

Manual Alarcon, Fire Chief  
San Jose Fire Department  
Bureau of Field Operations  
4 North Second St., Ste. 1100  
San Jose, CA 95113

Dear Chief Alarcon:

Please find the attached answers for the Albuquerque Fire Fighter Local 244 48/96 Shift Schedule Questions. If you have any additional questions, please feel free to contact my office at 505-833-7300.

Sincerely,

Robert E. Ortega  
Fire Chief

Cc: Marty Hoenisch, Fire Captain

Albuquerque Firefighter Local 244  
48/96 Shift Schedule Questions

1. Have there been any negative changes in fatigue or stress resulting from the change to the 48/96 schedule?

There has been no documented increase in either fatigue or stress levels. The Fire fighters feel this is positive to both the personal and professional aspects of their lives.

2. Has there been any increase or decrease in the use of sick leave resulting from the change to the 48/96 schedule?

Sick leave usage is consistent with the previous schedules worked within our department, (10-hour day, 24-hour shift, 14-hour night, and three days off. Three ten hour days, three 14-hour nights, three days off.)

3. Have there been any increases or decreases in disability leave resulting from the change to the 48/96 schedule?

None

4. What benefits or drawbacks, from the perspective of Fire Administration, have you seen since switching to the 48/96 schedule?

There have been no drawbacks administratively with the schedule. I was assigned to the field when this schedule was implemented. At the time I was totally against the change to the 48/96, but since have become a staunch supporter of the schedule. It lends itself to a more rewarding family experience and also provides for a more positive approach to the work environment.

5. Has there been any increase or decrease in retention of personnel?

Increases and decreases in personnel are still affected by monetary, disciplinary, and other issues not related to the work schedule.

6. Have you seen a reduction or increase in the use of shift trades?

Trades of shifts have remained at their previous levels.

7. Have you seen an increase or change in productivity?

We have no data in regards to productivity, but moral seems to have increased resulting in a better work environment which in turn increases job performance. This can be attributed in large part to the change in schedule that increased amount of concurrent time off.

8. Has the 50% reduction in commute hours and the resulting energy savings and pollution reduction resulted in any benefits to your City/District/Department?

We have no data as far as pollution, but there is a direct correlation between decreased commute times that in turn lead to less fuel consumption and decreased vehicle emissions. This also results in personal savings in the fuel cost and wear and tear on their vehicles.

9. Has there been a reduction in FLSA costs to your City/District?

We pay two hours less per person per FLSA period.

10. What problems or benefits, from the perspective of your Fire Administration, have you seen since switching to the 48/96?

From an Administrative perspective we feel if the membership is positive then the likelihood of increased productivity may be a by-product.

11. Has the 48/96 had a significant impact on attendance/scheduling of training?

This remains the same as the previous two schedules.

12. Has the 48/96 resulted in any staffing problems or benefits?

No staffing problems other than the normal areas covered by vacation, sick leave and injuries that are a part of the regular operations.

13. Has the 48/96 has any negative or positive effect on your Union activities i.e., Membership meeting, Political action etc.?

No

Chief's comments:

As I stated earlier, I was originally opposed to this schedule, after having worked it in the field my perspective has totally reversed itself. The benefits are many fold, not only within the work place, but also within the family experience. It allowed for a much greater point of participation and involvement in my children's school, sports, and other activities. It allowed me to dedicate personnel time to them. Within the work place it seems to reflect increased moral and a better work ethic for the majority of the fire personnel. At this point I feel the members of the Albuquerque Fire Department would fight very vigorously to keep this schedule in place.

Letter From BC Chuck Wilson, Manhattan Beach Fire/ Fire Tactics/ Assessment Center Instructor

From: cwilson@ci.manhattan-beach.ca.us  
To: [mikemjw@yahoo.com](mailto:mikemjw@yahoo.com)  
Subject: 48/96 schedule

Hi Mike.

I speak with absolute conviction that this is the best schedule I have ever worked. Even as a manager. Reasons as follows. This schedule results in less time away from the family. I have the most wonderful wife in the world and do not like to leave at any time, but we both think this is a better schedule.

The **commute time** from a 3 & 4 schedule is drastically cut (just look at your commute days if you work a Mon.-Wed.- Fri) which is not only driving time but prep to leave and return. I drive to work once and return home once in a 6 day period!.

**Fatigue** has been addressed by being flexible in the activities of the "go-round". If we get hammered on the first night, we can work around it with wake up and lunch times. I want us to present a professional image, so we do not lounge around in "robes" but there is a modified approach to allow rest.

**Productivity.** No question, productivity is better. Apparatus and equipment get their check-out by on-coming crews and they "own" it for two days leaving more time the second day. As a BC, I can unpack projects and work into the evening and not have to repack each day. Phone tags get completed and I believe the longer time allows me to stay focused on projects at hand, to get them completed, and they are more thought out as the focus is not always changed by going home.

We have not seen any increase in **injury or disability**. In fact **sick leave** has dropped 80%! We are a small sample, and other Departments have seen similar results. Clearly, many members of the Fire Service do not like ANY **change**. This is one where both sides get polarized, vocal and bring forward real and phantom issues. Why not try a one year **pilot program**, and either labor or management can opt out if it does not work. Both sides need to make a commitment to make it work.

We had 60% for the schedule and 40% strongly opposed before we tried it. Now there is 99+% absolutely loving the 48/96 schedule. In fact, if anyone suggested another schedule, they might get hurt by many of our members. Figuratively speaking.

We do work up to 96 hours and the 72 is not viewed by our folks as bad. In fact, it results in OT with less commuting and many members work the 96's.

Our **Morale** has been greatly improved, and yes, we have the typical Department where there will always be "issues". Never have heard of a negative one regarding the schedule. The only person who still prefers not to work a 48 is 55 years old and lives in town, his wife is a teacher.

**Family life** events such as school car-pooling and **custody/visitation** have not been a problem.

Mike, in looking at your list, the issues represent " stumbling blocks" to avoid even a trial period. If your folks want it to work, it will.

If you want more info or further help, let me know. I have been real busy with my classes off duty, and am leaving for Hawaii this Sunday for 2 weeks. If I don't get back to you right away, please understand.

Chuck

**Robert P. Halton**

→ SENIOR BATTALION CHIEF  
ALBUQUERQUE NEW MEXICO

31 Joe Mae Road  
87015

Denis Bell  
San Jose Fire Department  
San Jose, California

Dear Dennis

I am very happy to reply to your inquiry concerning our departments use and success with the 48 hour on 96 off scheduling. Our organization has been using it for over four years and it has been a tremendous success. The schedule appears imposing at first glance however it affords our firefighters several benefits. The schedule has it's critics although among the members on the schedule there is only one critic who I think of as I write this. They are my relief and I can refer her to you if you need to make contact.

One of the most significant benefits has to do with lowering stress levels, it has been proven that coming to work is one of the highest stress times for an individual. Our members experience this elevated stress level only once every 6 days. I regards to fuel usage and conservation our members now make only one round trip to work every six days. This provided decreased travel incidence has afforded opportunities for car pooling as well as attracting applicants for outside our city a county boundaries.

Our organization in my opinion has benefited in many ways from this very member friendly schedule. I have been a promoted battalion commander since 93 serving longer in this position than any other in my organization. It is my opinion that this schedule has improved our morale our camaraderie and our fireground excellence. We are a metro sized organization with an engine company, # 5, which has been recognized as the thirty busiest in America. I supervise this company on B shift. This busy company is one of the happiest under this plan. They feel they can knock out a tour and have sufficient time off to recuperate and re-energize for the next shift. They do not feel the duty is constant or insufferable. Since the schedule I have had only one transfer from this house, prior to the schedule transfer request were constant.

We are very successful under this plan in terms of scheduling training and accomplishing our goals. I can endorse this schedule without reservation. I also have a good friend who recently implemented this schedule in his organization last year. His name is Fire Chief Rocco Forte of Minneapolis Minnesota please feel free to contact him and mention my name. He organization has found the schedule similarly beneficial. Our union President John Garcia can also be reached for comment.

If I can be of any other assistance please feel free to contact me.

Sincerely,

Bobby Halton



## CITY OF MANHATTAN BEACH FIRE DEPARTMENT

400 15<sup>TH</sup> Street  
Telephone (310) 802-5200

Manhattan Beach, CA 90266  
FAX (310) 802-5200

November 14, 2002

Mike Wilcox  
203 Storey St.  
Santa Cruz, California 95060

Dear Mike:

In response to our telephone conversation, I'm sending you a brief summary of what I believe to be the most beneficial by-products of the "48/96" shift schedule:

- Tangible increase in productivity, most probably attributable to the continuity of personnel enabling projects to be initiated and completed within the 48-hour cycle, without interruption or intrusion by other stimuli. This schedule also makes redundant many daily morning routines, (e.g. - briefings), thereby permitting more time allotments for job-related activity.
- Dramatic reduction in sick leave usage and a corresponding drop in overtime budgets. Our sick leave usage in the past couple of years has shown a 65-70% drop-off, far exceeding our predictions.
- Palpable boost to department morale. At virtually no cost to the governing municipality, a new wave of appreciation for the administration's sensitivity to employee needs was generated. This good will filtered to all levels of the organization and represented a forward-thinking attitude and a willingness to accept change. The troops were surprised and delighted.

As the years have gone by, all members, including administration, have come to further respect the wisdom of our decision to adopt the "48/96." We hope it works equally well for you and your department.

Kindest regards

  
Ron Redmond, Battalion Chief - "A" Shift





