

**STATE OF NEW JERSEY
PUBLIC EMPLOYMENT RELATIONS COMMISSION**

In the Matter of Interest Arbitration Between :
 :
THE CITY OF CLIFTON :
 "the Employer or City" : **INTEREST ARBITRATION**
 : **AWARD**
 and :
 :
CLIFTON FIREMEN'S MUTUAL :
 BENEVOLENT ASSOCIATION, LOCAL 21 : Docket No: IA-99-69
 "the FMBA or Union" :
 :

Before: Robert M. Glasson, Arbitrator

APPEARANCES

FOR THE FMBA:

David I. Fox, Esquire
Of Counsel
Stacey B. Rosenberg, Esquire
Of Counsel and on the Brief
Louis Imperato, Fire Chief, Passaic Fire Department
Frank Caswell, Sr., Fire Chief, Hillside Fire Department
Paul Chrystal, Battalion Chief, Union Township Fire Department
Robert F. Hill, Fire Chief, Roselle Fire Department
Jeffrey Markey, Fire Chief, South Orange Fire Department
William Lavin, FMBA State President & President, Elizabeth FMBA Local 9
Nicholas D. Marchisello, President, Clifton FMBA Local
Alan Bamdas, President, Maplewood FMBA Local 25

FOR THE CITY:

Mark S. Ruderman, Esquire
Of Counsel
Ellen M. Horn, Esquire
Of Counsel and on the Brief
Walter DeGroot, Fire Chief (Retired), Clifton Fire Department
John E. Dubravsky, Fire Chief, Clifton Fire Department
Joseph D'Arco, Business Administrator, South Amboy
Dr. David R. Carnow, M.D.

Background & Procedural History

The City of Clifton (the “Employer”) and Clifton Firemen’s Mutual Benevolent Association, Local 11 (the “FMBA”) are parties to a collective bargaining agreement (“CBA” or “contract”) that expired on December 31, 1998. The collective bargaining unit includes all rank-and-file firefighters, lieutenants, captains and deputy chiefs. Upon expiration of the CBA, the parties engaged in negotiations for a successor agreement. Negotiations reached an impasse, and the FMBA filed a petition with the New Jersey Public Employment Relations Commission (“PERC”) on February 16, 1999 requesting the initiation of compulsory interest arbitration. The parties followed the arbitrator selection process contained in N.J.A.C. 19:16-5.6 which resulted in my mutual selection by the parties and subsequent appointment by PERC on March 18, 1999 from its Special Panel of Interest Arbitrators.

I met with the parties in an initial mediation session on August 10, 1999 to determine the issues for interest arbitration and to explore a voluntary settlement. Subsequently, interest arbitration hearings were held on October 14, 18, and 26, 1999. Following the October 26, 1999 hearing, the parties agreed to an additional mediation session which was held on November 15, 1999. This mediation session resulted in the signing of a Memorandum of Agreement (“MOA”) providing for a four-year agreement for the period January 1, 1999 to December 31, 2002. The parties further agreed in the MOA that the sole issue to be submitted to interest arbitration “shall be the 24/72 shift schedule issue.” Following the ratification and approval of the MOA by the FMBA and the City, additional hearings were held on December 6 and 21, 1999 and January 19, February 7 and March 22, 2000. The parties agreed to file certifications and reply certifications. The final certifications were received on November 1, 2000. Both parties filed post-hearing briefs. The record was

closed on December 15, 2000, upon receipt of the briefs. The parties mutually agreed to extend the time for issuance of the award to September 1, 2001.

This proceeding is governed by the Police and Fire Public Interest Arbitration Reform Act, P.L. 1995, c. 425, which was effective January 10, 1996. While that Act, at N.J.S.A. 34:13A-16f(5), calls for the arbitrator to render an opinion and award within 120 days of selection or assignment, the parties are permitted to agree to an extension.

The parties did not agree upon an alternate terminal procedure. Accordingly, the terminal procedure in this case is conventional arbitration. The arbitrator is required by N.J.S.A. 34:13A-16d(2) to “separately determine whether the net annual economic changes for each year of the agreement are reasonable under the eight statutory criteria in subsection g. of this section.”

Statutory Criteria

The statute requires the arbitrator to:

decide the dispute based on a reasonable determination of the issues, giving due weight to those factors listed below that are judged relevant for the resolution of the specific dispute. In the award, the arbitrator or panel of arbitrators shall indicate which of the factors are deemed relevant, satisfactorily explain why the others are not relevant, and provide an analysis of the evidence on each factor.

- (1) The interests and welfare of the public. Among the items the arbitrator or panel of arbitrators shall assess when considering this factor are the limitations imposed upon the employer by P.L. 1976, c 68 (C.40A:4-45.1 et seq.).
- (2) Comparison of the wages, salaries, hours, and condition of employment of the employees involved in the arbitration proceedings with the wages, hours and condition of employment of other employees performing the same or similar services with other employees generally:
 - (a) In private employment in general; provided, however, each party shall have the right to submit additional evidence for the arbitrator’s consideration.

- (b) In public employment in general; provided, however, each party shall have the right to submit additional evidence for the arbitrator's consideration.
 - (c) In public employment in the same or similar jurisdictions, as determined in accordance with section 5 of P.L. 1995, c. 425 (C. 34:13A-16.2); provided, however, each party shall have the right to submit additional evidence concerning the comparability of jurisdictions for the arbitrator's consideration.
- (3) The overall compensation presently received by the employees, inclusive of direct wages, salary, vacations, holidays, excused leaves, insurance and pensions, medical and hospitalization benefits, and all other economic benefits received.
- (4) Stipulations of the parties.
- (5) The lawful authority of the employer. Among the items the arbitrator or panel of arbitrators shall assess when considering this factor are the limitations imposed upon the employer by the P.L. 1976, c. 68 (C.40A:4-45.1 et seq.).
- (6) The financial impact on the governing unit, its residents and taxpayers. When considering this factor in a dispute in which the public employer is a county or municipality, the arbitrator or panel of arbitrators shall take into account to the extent the evidence is introduced, how the award will affect the municipal or county purposes element, as the case may be, of the local property tax; a comparison of the percentage of the municipal purposes element, or in the case of a county, the county purposes element, required to fund the employees' contract in the preceding budget year with that required under the award for the current local budget year; the impact of the award for each income sector of the property taxpayers on the local unit; the impact of the award on the ability of the governing body to (a) maintain existing local programs and services, (b) expand existing local programs and services for which public moneys have been designated by the governing body in a proposed local budget, or (c) initiate any new programs and services for which public moneys have been designated by the governing body in its proposed local budget.
- (7) The cost of living.
- (8) The continuity and stability of employment including seniority rights and such factors not confined to the foregoing which are ordinarily or traditionally considered in the determination of wages, hours and conditions of employment through collective negotiations and collective bargaining between the parties in the public service and in private employment.

FINAL POSITION OF THE FMBA

The FMBA's Proposal to Implement The 24/72-Hour Shift Schedule:

1. Shift Schedule Proposal.

Effective thirty (30) days after the arbitration award, the Clifton firefighters' work schedule will be changed to a 24/72-hour shift schedule. The 24/72-hour shift schedule will be implemented on a one year trial period. The 24/72-hour shift schedule shall remain in effect and unless it is altered or replaced by this Interest Arbitrator pursuant to the procedure set forth below.

2. Trial Period.

The 24/72 hour-shift schedule will be implemented effective thirty (30) days after the award, on a one year trial basis. After the one year trial period, the City may petition this Arbitrator to eliminate the 24/72-hour shift schedule by demonstrating to this Arbitrator that the decision is made for reasonable cause. The FMBA may challenge the decision by submitting the issue of reasonable cause to arbitration before the Arbitrator. A longer trial period than one year is the norm and is acceptable to the FMBA.

There shall be no reversion to the 10/14-hour shift schedule prior to a decision by the Arbitrator. The notice and petition requirements shall be as follows: the City shall notify the FMBA, in writing, no later than thirty (30) days prior to the end of the trial period, if it decides to return to the prior work schedule together with the basis for its decision. If the FMBA decides to challenge the City's decision, it must notify the City and the Arbitrator in writing within fourteen (14) days of receipt of the written notification from the City of its intention to revert to the 10/14-hour shift schedule, following which the Arbitrator shall schedule a hearing to take place within thirty (30) days of receipt of the FMBA's written notification challenging the City's decision. All determinations referred to herein to be made by the Arbitrator shall be final and binding.

In the event the City does not petition the Arbitrator to eliminate the 24/72-hour shift schedule, or if any challenge by the City is unsuccessful, the awarded schedule shall be included in the collective bargaining agreement on a permanent basis.

Justification and Explanation of FMBA Work Schedule Proposal

The FMBA submits that a one-year trial period permits both parties sufficient time to evaluate the effectiveness of the 24/72-hour shift schedule. The FMBA notes that trial periods have been awarded by many arbitrators and approved by PERC when awarding a shift schedule change. Township of Teaneck, 25 NJPER 450 (¶30199).

In August 1998, the 24/72-hour shift schedule was awarded by Arbitrator Martin Scheinman to the East Orange firefighters on a one-year trial basis.

In March 1999, Arbitrator James Begin awarded the 24/72-hour shift schedule to Teaneck firefighters on a one-year trial basis. PERC affirmed this decision.

Mediated contract settlements before PERC appointed arbitrators resulted in implementation of the 24/72-hour shift schedule in both the Westfield and Bayonne Fire Departments on a trial basis.

In all communities where the 24/72-hour shift schedule has been implemented on a “trial basis”, this new work schedule has been a success and has continued beyond the expiration date of the trial period.

In Elizabeth, the 24/72-hour shift schedule was initially implemented on a trial basis. The FMBA asserts that at the completion of the trial period, the City was satisfied with the new shift schedule and its positive impact on sick leave and overtime reductions and agreed to continue the 24/72-hour shift schedule on a permanent basis and subsequently included the 24/72 shift schedule in the CBA.

In July of 1997, Maplewood and the FMBA Local No. 25 agreed to implement the 24/72-hour shift schedule and to simultaneously commence fire department EMS/ambulance duties. The new schedule was implemented as a one-year trial period. The 24/72-hour shift schedule was also a success in Maplewood and the Town did not exercise its right to petition to the standing arbitrator to restore the 10/14-hour shift.

The FMBA points to similar results in East Orange, Westfield and Bayonne which have continued the 24/72-hour shift schedule on a permanent basis upon successful completion of their effective trial periods.

The contract language proposed by the FMBA regarding the trial period and Clifton's right to petition this Arbitrator to return to the 10/14 hour shift schedule based on "reasonable cause only" is identical to the Maplewood Agreement.

The FMBA cites the testimony of the Fire Chiefs in Roselle, Passaic, Hillside and South Orange who testified as to the positive effects of the 24/72 schedule. The Fire Chiefs testified unanimously, based on actual and extensive "hands-on experience", that arguments opposing the proposed schedule were incorrect and unfounded. The Fire Chiefs all agreed that the 24/72-hour shift schedule would, all other things being equal, result in decreased sick time, injury leave and overtime and improve or increase firefighters recuperative time, firefighter health, safety and morale.

The FMBA cites the documentary and testimonial evidence showing that the experience in all other communities that have switched to the 24/72 shift schedule has been positive and continued beyond the initial trial periods. The FMBA asserts that the City has not presented any evidence as to problems in any of the municipalities that operate on a 24/72-hour schedule. Nor has the City identified any community that has returned to a 10/14-hour schedule.

The FMBA points out that all of Clifton's important mutual aid communities, including the primary communities of Passaic, Paterson and Nutley, have or will have the 24/72-hour shift. Communities with the 24/72-hour shift, and with full time emergency ambulance service (Maplewood, Hillside, Harrison and others), all enjoy improved performance with the 24/72-hour shift.

3. Conversion of Current Contractual Leave Benefits

The FMBA proposes to convert the current contractual leave benefits as follows upon the implementation of the 24/72 shift schedule:

During the 24/72-hour shift schedule trial period and continuing thereafter if the trial period is successfully completed, all contractual provisions for paid leave time such as vacations, holidays, personal days and sick leave shall be adjusted as follows to maintain the same level of benefit as under the current 10/14-hour shift schedule:

- (a) Article X, Holidays, Section B, provides for five (5) holiday which are taken as compensatory days off from duty at the employee's request. Under the 24/72-hour shift schedule, compensatory holidays would be converted to two and one-half (2½) 24-hour compensatory days off.
- (b) Article X, Holidays, Section E grants employees with two (2) additional compensatory holidays off from duty. These two additional compensatory days can be accrued. Under the 24/72-hour shift schedule, these two (2) additional compensatory holidays off are converted to one (1) 24-hour day off.
- (c) Article XII, Personal Days, Section A, provides for two (2) personal days per year. If these personal days are not taken during the calendar year these two days will be accrued. Under the 24/72-hour shift schedule, personal days are converted to one (1) 24-hour day which can also be accrued annually if this personal day is not taken during the calendar year.
- (d) Article XVIII, Vacations, provides at Section E, for a range of eighteen (18) to thirty (30) calendar days off for vacation under the 10/14-hour shift schedule. However, to convert vacation days for purposes of the 24/72-hour shift schedule, the current vacation schedule must be converted from calendar days to working days and then divided in half under the 24/72-hour shift schedule.

Set forth below is a chart converting the current vacation benefits under the 10/14-hour schedule to the 24/72-hour schedule:

<u>Current Vacation Schedule</u>	<u>24/72-Hour Shift</u>
18 calendar days = 10 work days	5 work days
22 calendar days = 12 work days	6 work days
24 calendar days = 12 work days	6 work days
26 calendar days = 14 work days	7 work days
28 calendar days = 15 work days	7 work days
	(½ falls on a day off)
29 calendar days = 16 work days	8 work days
30 calendar days = 16 work days	8 work days

- (e) Article XXVII, Sick Leave and Terminal Leave, provides for fifteen (15) accruable sick days. Under the 24/72-hour shift schedule, the fifteen (15) sick days would be useable in fifteen (15) 12-hour increments. For terminal leave purposes, a 12-hour period constitutes one (1) day.
- (f) Article XI, Bereavement Leave, of the CBA provides that employees shall be provided with “up to three (3) consecutive days leave without loss of regular pay upon the death of a member of their immediate family.” Under the 24/72-hour shift schedule, bereavement leave days would be converted to 1 ½ 24-hour days.

Justification and Explanation OF FMBA’s Conversion Proposal

The FMBA submits that the conversion of time-based or paid leave benefits from the 10/14-hour shift schedule to the 24/72-hour shift schedule is a simple calculation. The calculation is based on the fact that under the 24/72-hour shift schedule, firefighters work two tours, (a 10-hour day tour and 14-hour night tour) in one 24-hour period. Under the 10/14-hour shift schedule, fire personnel could utilize contractual time off provisions such as a vacation day or a personal day as either one 10-hour day tour or one 14-hour evening tour, 2 vacation days or personal days under the 10/14-hour schedule are the equivalent of 2 tours off (one day and one night tour).

Under the 24/72-hour shift schedule, fire personnel will be on duty for one continuous 24-hour period. The two (2) tours under the 10/14-hour shift schedule (one 10-hour day tour and one 14-hour night tour) are combined for one full tour of duty. Accordingly, the FMBA submits that to calculate paid time off benefits under the 24/72-hour shift schedule, such as holidays, vacations days, sick days and personal days, simply divide the benefit by two (2) or by one-half, i.e., two (2) personal days under the 10/14-hour shift schedule, which could be utilized as one 10-hour day tour and one 14-hour night tour, is now converted, under the 24/72-hour shift schedule, to one personal day or one 24-hour tour off-duty.

This method of calculating or converting paid leave benefits has been utilized in all communities that have switched from the 10/14-hour schedule to the 24/72-hour schedule. In the Teaneck Award, Arbitrator Begin ordered that all paid leave benefits should be maintained at the same level that existed in the CBA under the 10/14-hour schedule and ordered that the paid leave benefits be adjusted in the same manner proposed here by the FMBA. Similar calculations have been used in South Orange, Orange and Montclair.

The FMBA's Arguments in Opposition to an Award Maintaining the 10/14-hour Shift Schedule

The FMBA contends that the City made a number of unsubstantiated arguments in support of its request to maintain the current 10/14 shift schedule. First, the City alleges that firefighters' attention span or interest will not be maintained under the 24/72-hour shift schedule period. Second, the City argues that the 24-hour shift schedule adversely affects training. Third, the City maintains that implementation of the 24-hour shift schedule would jeopardize firefighter safety in terms of training and the new uniform requirements. Fourth, the City maintains that the 24/72-hour shift schedule will actually result in the use of more sick time. Fifth, the City maintains that communications and orders between rank-and-file firefighters and shift commanders will be negatively affected on the 24/72-hour shift schedule.

The FMBA asserts that it submitted overwhelming evidence to show the positive effects that the 24/72-hour shift schedule will produce. The FMBA also asserts that it demonstrated by documentary and testimonial evidence that the City's arguments in opposition to the schedule change are unsubstantiated and based on mere speculation, rather than on the experiences of other municipalities that utilize the 24/72-hour shift schedule. The arbitration record demonstrates that the new shift schedule will have positive economic and budgetary effects on sick leave and overtime, and will also have positive effects on fire department training, firefighter morale, efficiency and communications. All of these

positive effects have been experienced by other municipalities that use the 24/72-hour shift as confirmed by the testimony of the FMBA's witnesses, including the Fire Chiefs.

The FMBA contends that the City's case is not supported by any competent evidence. Chief Dubravsky and former Chief DeGroot rely on reports of the New Jersey Chiefs Association (C-3 and C-4) prepared almost 25 years ago. Former Chief DeGroot testified that former fire chiefs in Harrison and West Orange were the authors of the Chiefs Reports in opposition to the 24/72-hour shift schedule. However, the FMBA notes that both municipalities (Harrison and West Orange) have subsequently changed from the 10/14-hour shift schedule to the 24/72-hour shift schedule. Former Chief DeGroot admitted that he had no knowledge of any problems regarding the effectiveness of the fire departments in Harrison or West Orange during the period of the change in work schedule from the 10/14-hour shift to the 24/72-hour shift schedule. (Tr. 490-491 & 493.) Nor did former Chief DeGroot have any knowledge of problems in North Bergen, the community in which he served as an expert witness, where Arbitrator Tener refused to award change from the 24/72-hour shift schedule to the 10/14-hour shift schedule. (Tr. 502.)

The FMBA asserts that Chief Dubravsky and former Chief DeGroot also rely on the outdated report of Springfield Fire Chief William Gras, who has also been a vocal opponent of the 24/72-hour shift schedule. (C-27) The FMBA contends that Chief Gras shares the same outdated opinions regarding the alleged negative effects of the 24/72-hour shift and note that the Mayor of Springfield and the Town Council have distanced themselves from Chief Gras' opinions regarding the 24/72-hour shift schedule. (Fiorelli Cert.) The FMBA asserts that Springfield and FMBA Local No. 57 have been negotiating over a possible change to the 24/72-hour shift and that the Mayor of Springfield has assured the FMBA that the Town has an "open mind" regarding negotiations over a possible shift change, despite the traditional views of Fire Chief Gras. (Fiorelli Cert.)

The FMBA notes that neither former Chief DeGroot nor Chief Dubravsky have worked under the 24/72-hour shift schedule and, therefore, their personal experience is limited only to the existing 10/14-hour shift schedule. In describing himself as a shift schedule expert, former Chief DeGroot testified he was only an expert on the “negative aspects” of the shift schedule. (Tr. 496.) He admitted that he has never looked at, studied, or analyzed any of the positive aspects of the proposed shift schedule including, but not limited to, studying any municipality that has actually implemented the shift schedule. Former Chief DeGroot testified that he never made a thorough study of the 24/72-hour shift schedule. (Tr. p. 502.) Nor was former Chief DeGroot familiar with any of the recent interest arbitration awards and PERC decisions regarding the 24/72-hour shift schedule. (Tr. p. 506.)

The FMBA asserts that Chief Dubravsky and former Chief DeGroot have not examined or analyzed the actual effect of the 24/72-hour shift schedule in any of the municipalities that have switched their work schedules from the 10/14-hour shift schedule. Nor have they examined or studied these communities to substantiate the alleged negative aspects they testified would occur if, in fact, the 24/72-hour shift schedule was implemented, including, but not limited to, increasing firefighter fatigue and firefighter injuries. (Tr. 505-506.)

The FMBA contends that the City has failed to present any evidence regarding the “limited attention span” under the 24/72 hour shift schedule. There was no evidence that other municipalities that use the 24/72-hour shift have experienced any problems associated with firefighters’ attention span while working a 24-hour shift.

The FMBA contends that the City has not presented any evidence to support its claim that the 24/72-hour shift will adversely affect firefighter training. The City failed to present any evidence that firefighters in municipalities that utilize the 24/72-hour shift schedule are

not properly trained or that the schedule itself does not provide sufficient time for training. Nor has the City demonstrated that Clifton firefighters are currently better trained than firefighters in other communities that use the 24/72-hour shift schedule. The FMBA contends that the record demonstrates that the 24/72-hour shift schedule will enhance training by providing better flexibility in fire department scheduling to meet firefighter training demands and requirements as well as increased “on-duty” accessibility to the training officer.

The FMBA notes that the City relied on the testimony of Dr. Carnow concerning firefighter safety and fatigue. The City maintains that the 24/72-hour shift schedule will adversely affect firefighter fatigue due to the continuous number of hours on duty as well as changes in firefighter gear and uniforms as mandated by PEOSHA. (Tr. 380; 440-441.) The FMBA contends that the City’s experts, including Dr. Carnow, have not linked the increases in firefighter injuries to the adoption of new uniform requirements and the proposed work schedule. None of the City’s experts, including Dr. Carnow, have analyzed the municipalities that utilize the 24/72-hour shift schedule to determine what, if any, impact the new PEOSHA mandated uniforms have on firefighters’ ability to effectively and safely perform their duties and functions under the 24/72-hour shift schedule. The City also ignores the fact that the PEOSHA-mandated uniforms and gear are required to be worn by all fire personnel, paid and volunteer, throughout the State of New Jersey.

Although many New Jersey municipalities utilize the 24/72-hour shift schedule, the City has not studied the actual experience of firefighters who have switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule. Chief Dubravsky, former Chief DeGroot and Dr. Carnow all admit they have never examined the actual experience of firefighters in those municipalities that have switched to the 24/72-hour shift schedule. (Tr. 772.) Dr. Carnow admitted that he has not done any research or statistical analysis of the

injuries and sick leave incidents of those departments that utilize the 10/14-hour shift schedule as compared to the 24/72-hour shift schedule. (Tr. 774.)

The FMBA asserts that the 24/72-hour shift schedule works equally effectively in communities with full time emergency ambulance services.

Based on the above, the FMBA maintains that the City's resistance to the 24/72-hour shift schedule is unreasonable. A review of the record reveals that the City has not demonstrated a particularized need or reason that is supported by any credible evidence to maintain the existing shift schedule.

THE FMBA'S ARGUMENTS

Article XXVIII, Work Week, of the CBA sets forth the work schedule for Clifton firefighters and fire officers, all of whom are in the same bargaining unit covered by the same CBA. (Union 4 at 47.) Clifton fire personnel currently work a 10/14-hour shift in which they work an 8-day tour of two 10-hour consecutive day shifts (8:00 a.m. to 6:00 p.m.), followed by a day off and two 14-hour consecutive night tours (6:00 p.m. to 8:00 a.m.) followed by three days off (72-hours).

Nine witnesses testified or provided supporting documentation on behalf of the FMBA's proposal to implement the 24/72-hour shift schedule. The FMBA's witnesses were: (1) Louis Imparato, Passaic Fire Chief; (2) Frank Caswell, Hillside Fire Chief, (3) Robert Hill, Roselle Fire Chief, (4) Jeffrey Markey, South Orange Fire Chief, (5) Paul Chrystal, Union Township Battalion Chief, (6) William Lavin, President of the New Jersey State Firemen's Mutual Benevolent Association and Elizabeth FMBA, Local No. 9; (7) Alan Bamdas, President of Maplewood FMBA, Local No. 25; (8) Nicholas Marchisello, Clifton FMBA President; and (9) supporting information was submitted by James K. Pasquariello, Paterson Fire Chief.

A summary of the testimony provided by FMBA's witnesses is set forth below.

Passaic Fire Chief Louis Imparato. Chief Imparato testified to his career with the Passaic Fire Department, which is in the same county as Clifton. Passaic Fire Department is comparable to the Clifton Fire Department in terms of population, number of incidents responded to per firefighter per year and the number of fire companies.

Passaic Fire Department has utilized the 24/72-hour work schedule without interruptions since approximately 1976. It was Chief Imparato's opinion that the 24/72-hour shift schedule is "dramatically better" than the 10/14-hour shift schedule in terms of firefighter morale, sick leave, injuries and overtime. (Tr. 165-166.)

Under the 10/14-hour shift schedule firefighters are required to work two separate night tours, each of which are 14-hours. When firefighters are assigned to the 14-hour night tours, they are off duty for only 10-hours immediately preceding the night tours. During these 10-hours off duty, the Chief has no control over the activities of his fire personnel because they are off duty. (Tr.166-167.) Chief Imparato found that under the 24/72-hour shift schedule fire personnel will report for duty at 8:00 a.m. generally having three days rest from their last tour of duty.

Chief Imparato testified that under the 10/14-hour shift schedule "many times firefighters were coming and reporting to duty already exhausted from activities they had taken part in prior to working their [night] duties schedule." (Tr.166-167.) In Chief Imparato's opinion this is a disadvantage compared to the 24/72-hour shift schedule in which the Fire Chief has "full control over his fire personnel from the time he reports for duty until the time he is relieved of duty." (Tr. p. 168.)

Chief Imparato testified that no additional personnel were required to implement the 24/72-hour shift. (Tr.170.) As indicated in U-26, manning levels of the Passaic Fire Department have actually dropped from 140 firefighters and officers when the 24/72-hour

shift schedule was implemented in 1976 to the current 107 total fire personnel. The Passaic Fire Department has absorbed this significant decrease in manning without any corresponding decrease in the Fire Department's ability to handle its fire fighting responsibilities and workload. Chief Imperato testified that the 24/72-hour shift schedule is a more efficient and productive schedule for Fire Department operations. Chief Imperato also testified that sick leave and overtime dropped with implementation of the 24/72-hour shift schedule. (Tr.170.) (U-26.)

In terms of firefighter morale, Chief Imperato testified: "Morale - - it went through the roof." Chief Imperato testified that morale is very important to the fire service, which is a "very dangerous and stressful occupation." Chief Imperato testified that high morale improves Fire Department productivity. (Tr.170-173.)

Chief Imperato also testified that training improves under the 24/72-hour shift schedule. The 24/72-hour shift schedule also fosters better communication between line firefighters and tour commanders. (Tr.173-174.) Fire Chief Imperato's overall opinion regarding the benefits of the 24/72-hour shift schedule is best summed up as follows:

"I believe I stated prior to that the benefits of the 24/72 in regard to rehabing our people between shifts and allowing them to amply recover as much as they can depending, of course, on their situation so that they can report back to duty fully rested and prepared to do a full tour's worth of work

We have a very, efficient fire service . . . and I don't believe that our present 24/72-hour shift schedule has done anything but enhance our service to our community." (Tr. 180-181.)

Paterson Fire Chief James K. Pasquariello. Paterson Fire Department, another Passaic County Fire Department, also uses the 24/72-hour shift schedule. Paterson Fire Chief James K. Pasquariello provided a letter of support regarding the 24/72-hour shift schedule. The Paterson Fire Department has operated under the 24/72-hour shift schedule

since June 1994. Chief Pasquariello concurred with Chief Imperato that the 24/72-hour shift schedule "works well . . . with no negative impact on this department or its residents." (Union 79.)

Hillside Fire Chief Frank Caswell, Roselle Fire Chief Robert Hill and South Orange Fire Chief Jeffrey Markey unanimously concurred with the testimony of Passaic Fire Chief Imperato regarding the benefits of the 24/72-hour shift schedule.¹ The FMBA submits that the Fire Chiefs unanimously agreed that the 24/72-hour shift schedule was a better fire department shift schedule in terms of firefighter fatigue, training, sick leave, overtime and firefighter and civilian injuries. The FMBA asserts that the testimony of these Fire Chiefs is significant because all of them have personal experience working under both the 10/14-hour shift schedule and the 24/72-hour shift schedule.

The FMBA maintains that the testimony of Hillside Fire Chief Caswell and Roselle Fire Chief Hill is also significant, since both fire departments provide full-time EMS in addition to their firefighting services, which is the same as Clifton. Chief Caswell's opinion regarding the 24/72-hour shift schedule is best summed up as follows:

"That longer period of time [72-hours off duty between shifts] enables the firefighter if he did have a particularly busy day, the 24-hours that he worked to recoup, to relax and get all of the toxic smoke out of his system or any chemicals that he might have come in contact with. The abuse of the physical work from that time, he has three days to recoup. . . . the shift schedule itself impacted in a positive way. Number one, sick leave went down which in turn, reducing overtime. And injuries went down. Basically, it was a win-win situation for the Department as well as the Township. Morale went up which provides for a better worker. You get more accomplished" (Tr. 71-72.)

Union Township Battalion Fire Chief Paul Chrystal. Battalion Chief Chrystal testified as a subject matter expert on behalf of the FMBA regarding the 24/72-hour shift

¹Letters of support from the Nutley Fire Department Manager and Fire Captain supporting the 24/72-hour shift schedule (Union 115 and 116). On or about December 5, 2000, Nutley and FMBA Local 44 agreed to implement the shift change effective January 1, 2001.

schedule. Battalion Chief Chrystal has been employed by the Union Township Fire Department for approximately 32 years. Battalion Chief Chrystal and other members of the Union Township Fire Department did a survey in 1986 regarding the effectiveness of the 24/72-hour shift schedule. (Tr. 228-235 & U-33.) (See "Union Township Study", U-40.)

The FMBA contends that the purpose of the Union Township Study was to compare the previous work schedule of the fire department 10/14-hour shift schedule for the years 1974 through 1979 and the 24/72-hour shift schedule for the years 1980 through 1985. The following items were specifically studied: use of overtime, sick leave allowance usage, reported firefighter and civilian injuries and service productivity.

Battalion Chief Chrystal testified that there were objective benefits of the 24/72-hour shift schedule, which included sick leave allowance decreases, overtime decreases and an increase in overall efficiency and productivity. Battalion Chief Chrystal testified that the total number of incidents increased 95% over the previous 10/14-hour shift schedule in addition to adding classified alarms, inspections and non-emergency services. The increases were "across the board in terms of alarms, inspections and non-emergency services" although manning levels in the Union Township Fire Department remained the same. (Tr. 231-232.)

The FMBA submits that the Union Township Study demonstrates that the following significant and positive events occurred after the implementation of the 24/72-hour shift schedule:

- Overtime had been reduced 1,128 (12-hour days) or 58% under the 24/72-hour shift schedule as compared to the 10/14-hour shift schedule (U-41, Tr.232.)
- Sick leave allowance/home illness decreased 35% under the 24/72-hour shift schedule (U-42, Tr. 233-234.)

- Tour of duty injuries decreased 23% and civilian injuries decreased 38% under the 24/72-hour shift schedule (U-43, Tr. 234.)
- Fire department service productivity (responses to classified alarms, tour fire inspections and non-emergency services provided by the Union Township Fire Department) increased 95% as compared to the 10/14-hour shift schedule (U-44, Tr. 231, 234.)

Battalion Chief Chrystal also concurred with the opinions of the Fire Chiefs who testified that training and morale improved significantly under the 24/72-hour shift schedule. (Tr. 236-239.)

William Lavin, President of the New Jersey State FMBA and Elizabeth FMBA, Local No. 9. President Lavin testified in support of the FMBA's shift schedule proposal. The FMBA asserts that Lavin's testimony, which included a "Power Point Demonstration", graphically confirmed and substantiated many of the opinions of the Fire Chiefs and Battalion Chief Chrystal regarding the benefits of the 24/72-hour shift schedule. (U-32). Lavin testified that the recent trend in fire department operations and negotiations has been to switch to the 24/72-hour shift schedules. Lavin testified that whether fire personnel worked a 24/72-hour shift schedule or the 10/14-hour shift schedule, fire personnel will continue to work the same number of shifts per year consisting of approximately 92 day tours, 92 night tours, 26 day weekend tours and 26 night weekend tours. (Tr. 265-266.)

Lavin also testified that the 24/72-hour shift schedule is also "the shift of choice" throughout the country. Lavin presented testimony and evidence that from the largest departments to the smallest ones, on a national basis and in New Jersey, fire departments have successfully switched to the 24/72-hour shift schedule.

"You see [departments] as small as Carteret or Roselle and as large as Jersey City, Elizabeth and Paterson and Camden." (Tr. 275.)

Lavin also testified to the growing number of New Jersey fire departments that perform EMS and operate the ambulance service out of the fire department. (Tr.284-285.) The FMBA contends that Lavin's testimony undercuts the City's argument that the 24/72-hour shift schedule will not be effective because Clifton is "novel" or "unique" in that Clifton firefighters perform EMS and ambulance services in addition to its fire and rescue operations. The FMBA emphasizes that many fire departments, including, but not limited to, Roselle and Hillside, use the 24/72-hour shift schedule while performing firefighting, EMS and ambulance duties. (Tr. 263-283.)

Nicholas Marchisello. Marchisello is a Clifton Firefighter/EMT and President of the FMBA. Marchisello is also a firefighter with the United States Air Force Reserve. In the Air Force, firefighters and EMTs work 24-hour shifts. (Tr. 298-300). Marchisello testified as to the Clifton Fire Department workload. In 1998, the total number of fire and EMS calls were 11,150 (7,015 EMS calls and 4,075 fire calls). (Tr. 299-300; U-84.) There are approximately 19 ambulance calls per day and the average ambulance call takes 45 minutes. (Tr. 300-301.) The average number of fire calls is approximately 3 or 4 per day that average 20 minutes per call. (Tr. 302-303.)

Marchisello testified as to his personal experience working as a firefighter and EMT in Clifton under the 10/14-hour shift. (Tr. 307-312.) He further testified to the fatigue problem he and other Clifton firefighters experience on the second consecutive evening (14-hour) shift under the 10/14-hour shift schedule. Marchisello testified he is "less fatigued" when he works the 24/72-hour shift with the Air Force and that even though he does his job well under the 10/14-hour shift, he finds it easier, with less fatigue, to do it under the 24/72-hour shift. (Tr. 307-308.)

Alan Bamdas. Bamdas is a Maplewood Firefighter and President of Maplewood FMBA, Local No. 25 (U-37). Bamdas testified as to the benefits of the 24/72-hour shift

schedule which was implemented based on an agreement between the Town and the FMBA to simultaneously commence fire department EMS/ambulance duties. (Tr.327-328; U-23E.) The 24/72-hour shift has been a success and was permanently implemented after the completion of a one year trial period. (Tr. 329.)

The FMBA submitted certifications from the following individuals: (1) Donato DiGeronimo, President of Montclair FMBA Local No. 20; (2) Daniel Sullivan, President of South Orange FMBA Local No. 240; (3) Certification of Robert A. DeLuca, Clifton Firefighter and Clifton FMBA Trustee; and (4) David I. Fox, Esq., Special Labor Counsel for Clifton FMBA Local No. 21 and Nutley FMBA Local No. 44. The FMBA submitted these post-arbitration certifications to respond to the testimony of the City's witnesses.

In Mr. DiGeronimo's certification, he explained the negotiations involving FMBA Local No. 20 and the Town of Montclair over the 24/72-hour shift schedule. An agreement was ultimately reached between the parties in August 2000 to implement the 24/72-hour shift schedule effective January 1, 2001. (DiGeronimo Cert. ¶3.)

The FMBA submitted a certification from Daniel Sullivan, the President of South Orange FMBA Local No. 240, which confirmed the opinions and testimony of Fire Chief Markey regarding the benefits of the 24/72-hour shift schedule including, among other things, decreases in overtime, sick leave, firefighter injuries and fatigue. (Sullivan Cert. ¶6.)

The FMBA submitted a certification from Robert A. DeLuca, Clifton firefighter and a member of the FMBA Board of Trustees.² According to DeLuca's certification and attached exhibits, which were based on the City's own sick, injury and terminal leave

²At the March 22, 2000 hearing, the Arbitrator directed the parties to review the Fire Department's official documentation to confirm and/or verify the evidence already presented regarding these issues. DeLuca's certification was submitted, consistent with the parties' agreement and approved by the Arbitrator, that the FMBA would be provided access to the Fire Department's attendance records and personnel records to verify and/or clarify the Department's sick leave records for the years 1996 through 1999.

documentation, Clifton has significantly higher sick or injury leave statistics than Passaic, a neighboring and comparable Passaic County Fire Department that has utilized the 24/72-hour shift schedule since 1976. (DeLuca Cert. ¶6 and ¶7). The FMBA contends that DeLuca's certification shows that for the years 1996 through 1999, Clifton's sick and injury leave figures are more than two times that of Passaic. (DeLuca Cert. ¶9).

The FMBA submitted a certification from Robert Hillman, President of Orange FMBA Local No. 10. Hillman explained the recent agreement between FMBA Local No. 10 and the City of Orange to implement the 24/72-hour shift schedule. (Hillman Cert. ¶7).

On November 1, 2000, the FMBA submitted certifications from Bruce Pollock, President of Milburn FMBA Local No. 32; James Beyer, President of Springfield FMBA Local No. 57; and Frank Fiorelli, Vice-President of Springfield FMBA Local No. 57.³

The FMBA submitted the above certifications to show that the City's certifications from the Business Administrators for Millburn and Springfield were inaccurate. The President and Vice-President of FMBA Local No. 57 stated that the Springfield Business Administrator inaccurately depicted prior collective negotiations with Local No. 57 regarding the 24/72-hour shift schedule. Contrary to the Business Administrator's statements, Local No. 57 reached a prior contract settlement with the Township of Springfield based on the parties' "mutual agreement" to drop or remove certain negotiating demands from the bargaining table. (Beyer Cert. ¶8; Fiorelli Cert. ¶9.) (Beyer Cert. ¶¶12-14).

³On or about October 5, 2000, the FMBA received from Arbitrator Glasson certifications submitted by the City. The City appears to have submitted these certifications to the Arbitrator by letters dated April 5 and August 22, 2000; however, these certifications were not provided to the FMBA until October 5, 2000. By letter dated October 20, 2000, Arbitrator Glasson ruled that the FMBA was entitled to submit responsive certifications.

Significantly, Beyer and Fiorelli stated that the Business Administrator was not employed by Springfield until after the negotiation events referred to in his certification and, in fact, the prior contract was negotiated and executed prior to his hiring. (Beyer Cert. ¶9; Fiorelli Cert. ¶9). According to Fiorelli's certification, the Mayor of Springfield did not support the statements made by the Business Administrator in his certification and stated that the submission of the certification in this Interest Arbitration was "a mistake" because Springfield had not yet made a decision regarding Local No. 57's current proposal to implement a 24/72-hour shift schedule. (Fiorelli Cert. ¶12.)

The FMBA contends that the City's submission regarding the Springfield Fire Department only repeats the testimony and exhibits already presented by the City. The FMBA contends that Chiefs DeGroot and Gras share outdated and unsupported opinions regarding the alleged negative effects of the 24/72-hour shift schedule.

The President of Milburn FMBA Local No. 32 also submitted a certification stating that, in its recent contract negotiations, the Town "linked" its longevity pay give-back proposal to the FMBA's shift schedule proposal. (Pollock Cert. ¶13). When it became evident to the representatives of Milburn and Local No. 32 that they had reached a bargaining impasse due solely to the work schedule and longevity proposals, Local No. 32 and the Town mutually agreed, at the suggestion of Milburn's Business Administrator, to drop these significant bargaining proposals to facilitate and expedite reaching a contract settlement. (Pollock Cert. ¶14).

The City also relied on a certification from the former Montclair Fire Chief Robert Pizzuti in opposition to the 24/72-hour shift schedule. However, as cited above, the FMBA submitted certifications from Donato DiGeronimo, President of Montclair FMBA Local No. 20, confirming an agreement to switch to the 24/72-hour shift from the 10/14-hour schedule effective January 1, 2001.

The FMBA argues that both Springfield and Milburn, which the City relies on as examples of communities that have continued to maintain the 10/14-hour shift schedule, are “off-the-mark” given the recent trend in fire department negotiations and interest arbitrations, which has been to either negotiate or award a change in work schedules from the 10/14-hour shift schedule to the 24/72-hour shift schedule. The FMBA contends that the overwhelming trend, as demonstrated in this Interest Arbitration, has been to change to the 24/72-hour shift schedule. Therefore, the FMBA contends that the City's reliance on the Milburn and Springfield situations is misplaced and, in fact, is based on inaccurate facts as demonstrated in these certifications provided by the FMBA.

The FMBA submits that the 24/72-hour shift schedule has become a common work schedule in New Jersey fire departments. The following chart lists the New Jersey Fire Departments that have switched to the 24/72-hour shift schedule from the 10/14-hour shift schedule:

Municipality	County	24/72-Hour Shift Implemented or Will be Implemented Within One Year	24/72-Hour Shift Implemented in Last 5 Years	24/72-Hour Shift Implemented 10 or More Years Ago
Paterson	Passaic		Yes	
Passaic	Passaic			Yes
Maplewood	Essex		Yes	
West Orange	Essex		Yes	
Irvington	Essex		Yes	
East Orange	Essex	Yes	Yes	
South Orange	Essex	Yes		Yes
Orange	Essex	Yes		
Nutley	Essex			
Montclair	Essex	Yes		

Hillside	Union			Yes
Cranford	Union	Yes		
Plainfield	Union	Yes		
Westfield	Union	Yes	Yes	
Rahway	Union	Yes	Yes	
Union Tsp.	Union			Yes
Harrison	Hudson		Yes	
Bayonne	Hudson	Yes	Yes	
West New York	Hudson			Yes
Weehawken	Hudson			Yes
Hoboken	Hudson			Yes
N. Bergen	Hudson			Yes
Jersey City	Hudson			Yes
Union City	Hudson			Yes
Morristown	Morris			Yes
Woodbridge	Middlesex			Yes
Cartaret	Middlesex			Yes
Edison	Middlesex			Yes
New Brunswick	Middlesex		Yes	
Perth Amboy	Middlesex			Yes
Camden	Camden		Yes	
Teaneck	Bergen	Yes		
Ridgewood	Bergen			Yes
Ocean City	Ocean			Yes
Gloucester City	Ocean	Yes		

The FMBA submits that the above chart and other record evidence show that the 24/72-hour shift schedule is a common work schedule for firefighters throughout New Jersey. All paid firefighters in Passaic County and the majority of firefighters in the

municipalities that provide mutual aid to the City of Clifton utilize the 24/72-hour shift schedule. The FMBA contends that the clear trend has been to switch to the 24/72-hour shift schedule from the 10/14-hour shift schedule. The FMBA asserts that this switch is because the experience has been so positive for fire departments throughout the State that none have reverted to the 10/14-hour shift schedule.

The FMBA maintains that the credible documentary evidence and testimony show that its Final Offer to implement the 24/72-hour shift schedule forms the most appropriate basis for an interest arbitration award. The FMBA maintains that the 24/72-hour work schedule proposal is properly based on the relevant statutory criteria and supported by substantial credible evidence in the interest arbitration record.

The Statutory Criteria

The FMBA asserts that its proposal for a 24/72-hour shift schedule is properly based on the relevant statutory criteria and supported by substantial credible evidence in the record. The FMBA asserts that the 24/72-hour shift schedule is a non-economic issue and notes that PERC arbitrators have determined this to be a “non-economic” issue and, therefore, not all of the statutory criteria are relevant in determining this issue. New Brunswick Award, (U-23H); East Orange Award, (U-123); and North Bergen Award, Exhibit No. C-1.

The FMBA addressed each of the relevant statutory criteria. The following is a summary of its position.

Interest and Welfare of the Public

The Reform Act requires the arbitrator to assess, when considering this factor, whether there are any legal limitations imposed upon the employer by the Local Government Cap Law, N.J.S.A. 40A:4-45.1 *et seq.* The FMBA asserts that Cap Law limitations and restrictions are not implicated in this Interest Arbitration.

The FMBA submits that no economic impact or cost differential is associated in changing to the 24/72-hour shift schedule from the 10/14-hour shift schedule. There is also no additional cost to the City in implementing the 24/72-hour shift schedule in terms of manpower. No additional manpower is necessary to make the change in the shift schedule.

The FMBA asserts that fire department work schedules do impact the “interest and welfare of the public.” The FMBA maintains that the evidence shows that the 24/72-hour shift schedule will serve the public interest and welfare in that the new shift schedule will increase productivity, reduce certain firefighter and civilian injuries due to fatigue, reduce the costs due to sick leave and overtime, and improve firefighter morale.

The FMBA cites the Union Township Study to show that there are savings in overtime and sick leave expenses associated with the 24/72-hour shift schedule. The FMBA contends that these savings have been common in all of the municipalities that have switched to the 24/72-hour shift schedule as testified to by the many FMBA witnesses.

The FMBA submits that these facts are supported by the interest arbitration awards in New Brunswick, Teaneck, and East Orange. The arbitrators in these interest arbitrations all concurred that the morale of fire department personnel impacts on productivity and effectiveness of fire suppression operations in the respective fire departments and, thus, ultimately impacts on the interest and welfare of the public.

In North Bergen, Arbitrator Tener refused to change the 24/72-hour shift schedule in favor of the 10/14-hour shift schedule because “any such a change would be detrimental to the morale of the firefighters.” Such an adverse effect on morale would ultimately impact productivity and effectiveness of the North Bergen Fire Department. (C-1 at 16-17.) Arbitrator Sands found in New Brunswick that the FMBA’s 24/72-hour shift schedule proposal served the public interest and welfare by increasing productivity and improving firefighter morale. (U-23H at 17, 19.)

The FMBA asserts that the implementation of the 24/72-hour shift schedule will provide a much needed boost in morale for the Clifton Fire Department. This should also lead to more efficient operations and increased productivity. Firefighter morale can definitely be linked to an efficient operation and increase productivity, as found by various arbitrators throughout the State and as testified to by the Fire Chiefs.

The FMBA submits that firefighter safety, as well as the citizens the firefighters protect is “in the interest and welfare of the public.” The FMBA notes that it presented historical evidence based on the Union Township Study and testimonial evidence from the Fire Chiefs and other witnesses that sick leave and civilian injuries decrease as a result of implementation of the 24/72-hour shift schedule. (U-26, U-33, U-34, U-35, and U-40). The FMBA contends that firefighters will be better rested when reporting for duty thereby reducing the possibility of firefighter and civilian injury.

The FMBA submits that the 24/72-hour shift schedule ensures that all personnel will be well rested when reporting to duty. The FMBA contends that the 24/72-hour shift schedule will lessen the chance of firefighter fatigue by eliminating the two consecutive night tours. The FMBA contends that under the current Clifton work 10/14-hour schedule, reporting for duty at 6:00 p.m. does not guarantee a “fresh crew”. With the 24/72-hour shift schedule, firefighters report for duty every fourth day at 8:00 a.m. without having worked the night before, thereby eliminating or, at least, substantially decreasing firefighter fatigue at the time he or she is required to report for duty.

The FMBA submits that training, which also impacts on firefighter and civilian injuries, is also enhanced under the 24/72-hour shift schedule with proper scheduling and management. Under the 24/72-hour shift schedule, training is held every fourth day. Under the 10/14-hour shift schedule, firefighters get training during the two day 10-hour tours. Training generally does not occur at night because the training officer is not on duty on the

night shift. Rather than being trained every fourth day under the 24/72-hour scheduling, Clifton firefighters are now trained every six days. Under the 10/14-hour shift schedule, depending on when a company begins its shift, the firefighter may not see the training officer for sixteen days.

The FMBA disputes the City's contention that the 24/72-hour shift schedule will adversely affect firefighter fatigue due to the continuous number of hours on duty as well as changes in firefighter gear and uniforms as mandated by PEOSHA. The FMBA contends that the City's experts, including Dr. Carnow, did not link increases in firefighter injuries to the adoption of new uniform requirements and the proposed work schedule. The FMBA submits that none of the City's experts, including Dr. Carnow analyzed the municipalities that utilize the 24/72-hour shift schedule to determine what, if any, impact the new PEOSHA mandated uniforms have on firefighters' ability to effectively and safely perform their duties and functions under the 24/72-hour shift schedule.

Although numerous New Jersey municipalities utilize the 24/72-hour shift schedule, the City has not studied the actual experience of firefighters who have switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule. Chief Dubravsky, former Chief DeGroot and Dr. Carnow all admit they never examined the actual experience of firefighters in those municipalities that have switched to the 24/72-hour shift schedule. (Tr. 772-773.) Dr. Carnow admitted that he has not done any research or statistical analysis of the injuries and sick leave incidents of those departments that utilize the 10/14-hour shift schedule as compared to the 24/72-hour shift schedule. (Tr. 773-774.) Nor has Dr. Carnow performed any specific research with regard to the equipment or uniforms he maintains are "so oppressive" to the alleged need for additional rehabilitation time if this equipment or uniforms are worn on the 24/72-hour shift schedule. (Tr.774.) Dr. Carnow's primary experience is in Jersey City, where the 24/72-hour tour has been successfully used for many

years. The FMBA points out that all of the communities that comprise the newly formed North Hudson Fire District also successfully use the 24/72-hour tour.

The FMBA contends that the City also ignores the fact that the PEOSHA-mandated uniforms and gear are required to be worn by all fire personnel, paid and volunteer, throughout the State of New Jersey. In North Bergen, Arbitrator Tener specifically concluded that no other municipalities have returned to the 10/14-hour shift schedule as a result of the new uniform requirements. Specifically, the City has not presented any evidence to show that the impact from the change in shift schedule will be more negative in Clifton than anywhere else as a result of the new PEOSHA-mandated uniforms. With regard to this very issue, Arbitrator Tener found:

“That change [in uniform requirements] which was accomplished by January, 1995, applies not only to firefighters of North Bergen but to all firefighters in New Jersey. There is certainly no reason to believe that the impact of that change will be more negative in North Bergen than elsewhere. There also is no correlation between the injuries since the adoption of the new gear and the work schedule. There is no indication that other municipalities have changed schedules as a result of new requirements (PEOSHA). Dr. Carnow was not able to link the 24/72-hour shift schedule with any injuries and DiPaolo [former North Bergen Chief] agreed that there had been no reports in North Bergen of heart attacks, strokes or medical reports of stress as a result of the use of the new gear. In short, there was much speculation by the Township’s witnesses regarding the new uniforms and a connection with the 24/72-hour shift schedule, but this was not supported with hard evidence.”
(Exhibit C-1 at 17.)

***Comparison of the Wages, Salaries, Compensation,
Hours, and Conditions of Employment***

The FMBA asserts that arbitrators have determined that municipal firefighters are not comparable to employees in the private employment. Arbitrator Tener in North Bergen found that neither the 24/72-hour schedule nor 10/14-hour schedule is common in the private sector. However, with regard to firefighters, Arbitrator Tener in North Bergen found that “the evidence is overwhelming that the 24-hours schedule is the norm.”

The FMBA submits that the overwhelming evidence shows that the 24/72-hour shift schedule has become a common work schedule in New Jersey fire departments. According to nationwide statistics 70% of paid fire departments work the 24/72-hour shift schedule. (Tr. 267.)

The City maintains mutual aid agreements with the following municipalities: Paterson, Passaic, Montclair, Nutley and Bloomfield. Except for Bloomfield, all of the mutual aid communities utilize or will soon utilize the 24/72-hour shift schedule. Former Chief DeGroot testified that he would not refuse mutual aid from a 24/72-hour shift department. (Tr. 536.)

The FMBA asserts that the fire service in all of these communities has not experienced the problems and challenges forecasted by the City as a result of the 24/72-hour shift schedule. The City has not presented any evidence that the positive experience of those municipalities that have switched to the 24/72-hour shift schedule would not occur in Clifton. More important, none of the City's experts have even examined the actual experiences in these other municipalities to substantiate their claims that implementation of the 24/72-hour shift schedule will adversely affect its fire and EMS operations. The FMBA submits that the City has failed to present any direct evidence in support of its claims and allegations. Chief Dubravsky and former Chief DeGroot admitted, on cross examination, that they have not reviewed the FMBA's exhibits or data regarding the positive effects of the 24/72-hour shift schedule. Nor have former Chief DeGroot and Chief Dubravsky studied or considered the actual experiences of those municipalities that have switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule.

In Teaneck, the Arbitrator refused to maintain the existing 10/14-hour shift schedule as requested by the Town because the FMBA had presented overwhelming evidence to support the schedule change and the Town failed to substantiate its fears and concerns over

the implementation of the 24-hour shift. (U-23G.) The following is Arbitrator Begin's conclusions regarding the Teaneck's case:

“Despite the fact that our newest New Jersey communities with the 24/72-hour shift schedule whose experiences could be mined to provide support for the hypotheses about the negative effects of the schedule, the town offered no direct evidence from these communities.” (U-23, at 34.)

The FMBA contends that, as in Teaneck, the City has not presented any evidence to support its concerns that the 24/72-hour shift would have a negative effect on the Clifton Fire Department. Further, the City has failed to refute or rebut the FMBA's documentary and testimonial evidence that the 24/72-hour schedule would have substantial benefits.

The Overall Compensation Presently Received by the Employees.

The FMBA maintains that this factor is irrelevant because the work schedule proposal addresses a working condition that does not have an impact on compensation. The same conclusions were reached by Arbitrator Sands in New Brunswick, (U-23H) and Arbitrator Tener in North Bergen, (C-1).

Stipulations of the Parties.

As previously stated, the parties agreed in the MOA to submit the FMBA's work schedule proposal to implement the 24/72-hour shift schedule to interest arbitration. No other stipulations or agreements have been reached by the parties on the work schedule issue.

The Lawful Authority of the Employer.

The FMBA contends that this factor generally involves restrictions or limitations imposed on municipalities pursuant to N.J.S.A. 40A:4-45.1 *et seq.* The FMBA contends that the Cap Law is not relevant to this matter since the FMBA shift schedule proposal is a non-economic item that has no budgetary consequences except to reduce expenses. The FMBA submits that the record evidence shows that the implementation of the 24/72-hour shift

schedule will have a positive economic impact on the fire department budget by reducing sick time and overtime as compared to the 10/14-hour shift schedule. The 24/72-hour shift schedule places the same number of personnel performing the same services at the same locations using the same equipment as under the 10/14-hour shift schedule. This fact has been accepted by arbitrators throughout the State, who have faced this issue.

The FMBA submits that to the extent there is any economic impact with regard to the implementation of the 24/72-hour shift schedule — it is only positive in terms of the fire department budget. The FMBA cites the testimony of its numerous witnesses who presented credible and empirical evidence that the 24/72-hour shift schedule will result in savings in terms of overtime and sick leave costs. Battalion Chief Paul Crystal testified regarding the Union Township Study, which included, among other things, that with the same staffing levels before and after the shift schedule change, there was a 35% decline in the use of sick allowance/home illness and a 58% decline in overtime expenses. (U-40, U-41 and U-42.) Similar decreases in sick time and overtime costs were reported by the Fire Chiefs in Passaic, Paterson, Hillside, Roselle and South Orange as a result of the implementation of the 24/72-hour shift schedule. (U-26, U-33, U-34, U-35 and U-36).

Cost of Living

The FMBA asserts that this factor is irrelevant since cost of living is not connected to the FMBA's proposed work schedule. (See New Brunswick and North Bergen.)

Continuity and Stability of Employment.

The FMBA contends that this factor generally involves the stability of employment, including seniority and layoffs, as well as hours of work in the nature of employment. The FMBA contends that continuity and stability of employment will be greatly enhanced by a change in the fire department work schedule from the 10/14-hour shift schedule to the 24/72-hour shift schedule.

The FMBA cites Arbitrator Sands' conclusion in the New Brunswick:

“the 24/72's will make the firefighting job less stressful, will support a healthier work force with higher morale, and will make the firefighting job more attractive. All those factors should serve to decrease employee turnover due to resignation, death and disability.”

The FMBA maintains that, based on the above, its 24/72-hour shift schedule proposal is properly supported by the relevant statutory criteria and substantial credible evidence in the record.

By contrast, the FMBA maintains that the City's case is unsupported by any competent evidence. Chief Dubravsky and former Chief DeGroot relied on reports of the New Jersey Chiefs Association (“Chiefs Reports”), (C-3 and C-4) prepared almost 25 years ago. Former Chief DeGroot testified that former fire chiefs in Harrison and West Orange were the authors of the Chiefs Reports in opposition to the 24/72-hour shift schedule. However, both Harrison and West Orange have subsequently changed from the 10/14-hour shift schedule to the 24/72-hour shift schedule. (Tr. 490-492.)

The FMBA points out that neither former Chief DeGroot, nor Chief Dubravsky have worked under the 24/72-hour shift schedule and, therefore, their personal experience is limited only to the existing 10/14-hour shift schedule. Chief Dubravsky and former Chief DeGroot have not examined or analyzed the actual effect of the 24/72-hour shift schedule in any of the municipalities that have switched their work schedules from the 10/14-hour shift schedule. Nor have they examined or studied these communities to substantiate the alleged negative aspects they testified would occur if, in fact, the 24/72-hour shift schedule was implemented, including, but not limited to, increasing firefighter fatigue and firefighter injuries. (Tr. 505-506.)

Former Chief DeGroot testified that he never made a thorough study of the 24/72-hour shift schedule. (Tr. 502.) Nor was former Chief DeGroot familiar with any of the

recent interest arbitration awards and PERC decisions regarding the 24/72-hour shift schedule. (Tr. 506.)

The FMBA notes that former Chief DeGroot, in describing himself as a shift schedule expert, testified he was only an expert on the “negative aspects” of the shift schedule. (Tr. 496.) However, he has never looked at, studied, or analyzed any of the alleged negative aspects of the proposed shift schedule. The FMBA contends that the following excerpts from former Chief DeGroot’s testimony are revealing with regard to his qualifications as an expert and the credibility of his opinions and testimony:

Q. Have you examined in each community the impact of this switch [in shifts] and the horrible aspects of it that you’ve outlined to see if that really is the case in those communities?

A. Have I done a thorough examination of each one of those communities?

Q. That’s right, sir.

A. . . . the answer is no.

* * *

Q. That is not the question I asked you, sir. The question was whether or not you did a thorough examination of all of these communities including the ones you’ve testified to here as having the Chief said they had to stay on the 10 and 14 hour tour. Have you done that?

A. No . . .

* * *

Q. Sir, the question was, and I think it is the case, isn’t it, that you haven’t done a study in any of the communities I’ve mentioned as to what the - - to demonstrate that all of the negative aspects that you’re talking about including the fatigue, the increased injuries, all those things have actually taken place in the communities that I’m referring to now? You haven’t done that study, have you?

A. That’s correct.

* * *

Q. Let’s hone in on Arbitrators decisions in New Jersey who have considered this matter. Have you read them all?

A. No. (Tr.506.)

The FMBA asserts that its 24/72-hour work schedule proposal is properly based on the relevant statutory criteria and supported by substantial, credible evidence in the record.

PERC Precedent and Standards

The FMBA contends that based on established PERC precedent standards for awarding a work schedule proposal in interest arbitration proceedings, its proposal to implement the 24/72-hour work schedule should be awarded.

The bargaining unit includes rank-and-file firefighters, lieutenants, captains and deputy chiefs, all of whom currently work under the 10/14-hour shift schedule. The FMBA proposes to change the Fire Department work schedule for all bargaining unit employees including rank-and-file firefighters and superior fire officers.

Under the FMBA's proposal, fire personnel would work an 8-day tour of one 24-hour tour followed by 72-hours (3 days) off duty, followed by another 24-hour day on duty and three days off duty. The FMBA points out that under the 24/72-hour work schedule and the 10/14-hour work schedule, fire personnel work the same number of hours: 48 hours every 8 days over an eight-week cycle for an average of 42 hours per week.

PERC and the Appellate Division have generally held that work schedules of police and fire employees are mandatorily negotiable. Maplewood Tp., *supra*, NJPER at 113; See Mt. Laurel Tp., 215 N.J.Super. 108 (App. Div. 1987); Middlesex Cty., 17 NJPER 420 (¶22202 1991), *aff'd*, NJPER Supp. 2d 290 (¶231 App. Div. 1992); Borough of Maywood, 9 NJPER 144 (¶14068 1983), *aff'd*. 10 NJPER 70 (¶15044 App. Div. 1983); Borough of Roselle, 6 NJPER 247 (¶11120 1980), *aff'd*. NJPER Supp. 2d 97 (¶80 App. Div. 1981).

In Maplewood Tp., PERC comprehensively addressed the negotiability of work schedules in the context of the interest arbitration process as follows:

"When the Legislature required negotiations over terms and conditions of employment, it recognized that both management and employees would have legitimate concerns and competing arguments and it decided that the negotiations process was the best forum for addressing those concerns and arguments and the best way to improve morale and efficiency. See N.J.S.A. 34:13A-2; Woodstown - Pilesgrove at 591. When the Legislature approved interest arbitration as means of resolving negotiations impasses over the wages, hours and employment conditions of police firefighters, it recognized that both management and employees would have legitimate concerns and competing evidence and had it decided that the interest arbitration process was the best forum for presenting, considering, and reviewing those concerns and evidentiary presentations and the best way ensure the high morale of these employees and the efficient operations of their departments. N.J.S.A. 34:13A-14 et seq. Indeed, the Legislature expressly instructed interest arbitrators to consider the public interest and welfare in determining wages, hours, and employment conditions and contemplated that such considerations would be based on a record developed by the parties in the interest arbitration proceeding. N.J.S.A. 34:13A-16(g)(1). See also Hillsdale PBA Local 207 v. Bor. of Hillsdale, 137 N.J. 71 (1994). The question, then, is not which party should prevail in negotiations or interest arbitration, or whether a particular proposal raises some legitimate concerns, but whether the facts demonstrate that a particular work schedule issue so involves and impedes governmental policies that it must not be addressed through the negotiations process at all despite the normal legislative desideratum that work hours be negotiated in order to improve morale and efficiency."

In October 1999, PERC considered the appeal of the Teaneck Award which included, among other things, the award of the 24/72-hour shift. In Township of Teaneck, 23 NJPER 450 (¶3019 1999), PERC affirmed Maplewood Tp., *supra*, regarding the negotiability of the police and fire work schedules. However, PERC clarified Maplewood, which was issued in the context of a pre-arbitration scope petition, to provide interest arbitrators with additional direction and standards for considering a work schedule proposal.

The FMBA asserts that PERC set forth standards which an interest arbitrator should apply when presented with a proposal to change a term and condition of employment other than salary, such as the 24/72-hour shift schedule. PERC explained that an interest arbitrator should weigh the competing concerns of the employer and the union regarding the proposed work schedule costs, if any, and its impact on department operations, discipline or supervision. The interest arbitrator should then weigh these concerns in evaluating the

evidence based on the relevant statutory factors, including the public interest, N.J.S.A. 34:13A:16(g)(1).

In ruling on a non-salary proposal to change an employment condition such as the work schedule, the arbitrator must apply the traditional arbitration principle that the party proposing a change must justify it.” In addressing work schedule issues and the role of the interest arbitrator, PERC held that before awarding a major work schedule change, the arbitrator should “carefully consider the fiscal, operational, supervision and managerial implications of such a proposal, as well as its impact on employee morale and working conditions. (Teaneck, *supra*, 25 NJPER at 454-55.)

The Burden

The FMBA acknowledges that the burden is on the Union to justify the schedule change. The FMBA notes that it submitted numerous Exhibits and the testimony of various subject matter experts, including the Fire Chiefs, to support its proposal to implement the 24/72-hour shift schedule. The FMBA contends that a review of the entire record shows that it presented compelling and substantial evidence to support an award of the new shift schedule. The FMBA asserts that it made a comprehensive presentation, which included numerous documentary exhibits, the testimony of eight subject matter experts, including five Fire Chiefs, and post-arbitration certifications, to support its shift schedule proposal. The FMBA asserts that its witnesses "presented credible and empirical support to justify the award of the 24/72-hour shift schedule."

The FMBA contends that the City failed to present any direct evidence to rebut the FMBA's case in support of the 24/72-hour shift schedule or to prove, by a preponderance of the evidence, that the 24/72-hour shift schedule would have a negative impact on the Clifton Fire Department and the City. The FMBA also contends that the City did not present any credible evidence that the existing work schedule should be preserved.

The FMBA notes that the Teaneck arbitrator gave greater weight to the FMBA evidence as to the potential benefits of the new shift schedule, which was based on data from other jurisdictions. In this Interest Arbitration, as in the Teaneck and East Orange arbitration proceedings, Battalion Chief Paul Chrystal and William Lavin, President of New Jersey State FMBA and Elizabeth FMBA, Local No. 9, testified in support of the FMBA's proposal to implement the 24/72-hour shift schedule. Battalion Chief Chrystal and Mr. Lavin confirmed their own experiences regarding the change from the 10/14-hour shift schedule to the 24/72-hour shift schedule. The experience in both Union Township and Elizabeth were positive and consistent with Arbitrator John Sands' findings in the New Brunswick Award, including but not limited to, decreased use of sick leave and overtime. Here, in addition to Mr. Lavin and Battalion Chief Chrystal, the FMBA had 7 other witnesses testified or otherwise provided support for the 24/72-hour shift schedule.

The FMBA submits that Arbitrator Sands' analysis of the New Brunswick record, which included the evidence on the experience with the work schedule in Union Township, drew many of the same conclusions about the effect of the 24/72-hour work schedule as Battalion Chief Chrystal, Mr. Lavin and the Fire Chiefs. The FMBA asserts that the same is true with regard to the conclusions reached by Arbitrator Begin in Teaneck and Arbitrator Scheinman in East Orange. In all three interest arbitrations where the 24/72-hour work schedule was awarded (New Brunswick, Teaneck, and East Orange), the respective arbitrators awarded the shift change on a trial period. Various mediated contract settlements have also resulted in implementation of the 24/72-hour shift schedule on a trial basis. The FMBA notes that in Teaneck, PERC specifically approved the arbitrator's establishment of a trial period. The FMBA asserts that in all communities where the 24/72-hour shift schedule is implemented on a "trial basis", the new work schedule has continued beyond the expiration date of the trial basis.

The FMBA asserts that it satisfied its burden to justify the schedule change by offering undisputed evidence as to the potential advantages of the 24/72-hour shift schedule.

Sick Leave

The FMBA asserts that it submitted testimony and empirical data showing that implementation of the 24/72-hour shift schedule would result in a reduction of firefighter sick leave and firefighter injuries. The FMBA relies on the findings in the Union Township Study, a comparison of Union Township firefighters' use of sick leave over a 12-year period from 1974 through 1985. The following are some specific findings regarding sick leave:

- Through years 1974 through 1979 under the 10/14-hour shift schedule, sick leave allowance/or illness totaled 4,997 days. During the years 1980 through 1985, under the 24/72-hour shift schedule, sick leave allowance/or illness totaled 3,244 days.
- Accordingly, sick leave allowance/or illness decreased 35% under the 24/72-hour shift schedule. (Tr. 235; U-40, U-42.).

The FMBA contends that the dramatic decline in sick leave is not unique to Union Township. The Passaic Fire Department has utilized the 24/72-hour work schedule without interruption since 1976. Passaic Fire Chief Imperato testified that there was a dramatic drop in sick leave which resulted after the implementation of the 24/72-hour shift. (Tr.170.) Chief Imperato testified that the decrease of sick leave can be attributed to the additional recuperative time between on-duty shifts. (Tr.170.)

The FMBA asserts that the Fire Chiefs unanimously agreed that implementation of the 24/72-hour shift schedule will result in a decrease in sick time. When South Orange originally went from the 10/14-hour shift schedule to the 24/72-hour shift schedule, sick leave and overtime were reduced dramatically. Morale was increased and the firefighters had an easier time recuperating over 72 hours. (Tr. 1013.) Hillside Fire Chief Caswell testified that sick leave and overtime went down as a result of the 24/72-hour shift schedule.

(Tr. 72, 92.) Roselle Fire Chief Hill testified that during the trial period, there was little sick time and less overtime. Chief Hill stated that he believed that there would be an increase in sick time if the Roselle Fire Department were to return to the 10/14-hour shift schedule. Chief Hill attributed the decline in sick leave to the 72 hours recovery time from smoke inhalation and a return to normal stress levels. Chief Hill testified regarding a major fire in which a roof collapsed and three firefighters were “seriously hurt and were sent on injury leave with a doctor’s certificate stating that they would be out of work for a minimum of three days”. Chief Hill explained that if Roselle utilized the 10/14-hour shift schedule, these firefighters would have been unable to return to work for three days and he would have had to hire additional manpower on an overtime basis. As a result of the 24/72-hour shift schedule, these firefighters were off duty for a three-day period. On the fourth day, their next regularly scheduled day of duty, these firefighters were able to return to work. The FMBA maintains that the 24/72-hour shift schedule enabled Chief Hill to allow his injured firefighters to recuperate at home on their off-duty days without the need to recall additional men on overtime. (Tr. 137-138.) Chief Hill described the 72-hour recuperative period as a sensible period of time for recovery and specifically stated:

“ . . . You know, you’re working at a fire. That particular fire is a major fire. We were there for over 24 hours. And, you know, the stress of working at this fire, the physical part of it, the aches and pains, 72 hours I get these guys back fresh. They work at 10 and 14. They’re in the next day. And it just proves specifically in this instance that the 24/72 worked very well to get these guys back to full duty with no overtime.” (Tr. 138.)

The City maintains, without any corroborating evidence, that the 24/72-hour shift schedule will result in an increase in sick leave. The FMBA points out that both Chief Dubravsky and former Chief DeGroot admit that they have not analyzed those communities that actually utilized the 24/72-hour shift schedule to confirm the validity of their claims regarding an alleged increase in sick leave upon implementation of the 24/72-hour shift

schedule. (Tr. 501-506; 549; 931-934.) Chief Dubravsky testified that experience in other communities operating under the 24/72-hour shift schedule was irrelevant to him, was of “no concern” and did “not affect him”. (Tr. 958.)

The FMBA contends that Chief Dubravsky’s unwillingness to consider the positive effects of the 24/72-hour shift schedule experienced by municipalities that switched to the 24/72-hour shift is unreasonable and irresponsible. The FMBA asserts that Chief Dubravsky cannot credibly argue in opposition to a shift schedule he has not fully considered without presenting any direct evidence substantiating his claims.

The FMBA points out that former Chief DeGroot admitted that he never studied any other communities to confirm the negative aspects he believes will occur under the 24/72-hour shift nor did he analyze the FMBA’s data or evidence regarding the 24/72-hour shift schedule and sick leave and is therefore unable to confirm or substantiate his claims and opinions that the 24/72-hour shift will adversely affect fatigue, firefighter injuries and overtime. (Tr. 496; 505-506.)

The FMBA contends that the City failed to present any evidence refuting the FMBA’s data and testimony that implementation of the 24-hour shift schedule will result in a decrease in sick time usage, as well as a decrease in overtime.

The FMBA disputes the City’s contention (Chief Dubravsky) that any positive impact of the 24/72-hour shift schedule on sick leave is not relevant since the use of sick leave by Clifton firefighters is allegedly not a problem. (Tr. 662.) Chief Dubravsky’s opinion is based on C-32, C-32A and C-34 which compare the use of sick days in Clifton and in other municipalities in the State including the City of Passaic. The FMBA contends that based on the Fire Department’s own official documentation, the City has misrepresented its sick leave figures used in C-34. The FMBA contends that the City failed to include in its sick leave statistics, work related injury leave and terminal leave which are included in

the data for the Passaic Fire Department. The FMBA contends that the data contained in C-34 is suspect since the Passaic calculations are based on a work force of 104 personnel contrary to Passaic Fire Chief Imparato's testimony that the total Passaic work force is 107.

The FMBA contends that, based on its review of the City's official attendance records and personnel records, Clifton has significantly higher annual sick and injury leave than Passaic. (See DeLuca Cert. at ¶6 and ¶14.) A review of the City's attendance sheets, personnel file cards and OSHA-200 forms shows the following:

1996 total sick and injury leave - 561 days
1997 total sick and injury leave - 907 days
1998 total sick and injury leave - 750 days
1999 total sick and injury leave - 718 days.

(DeLuca Cert ¶9, Exhibit D-E).

The FMBA asserts that the above figures are significantly higher than the sick leave figures reported and testified to by Chief Dubravsky and set forth in C-34. The FMBA contends that the City misrepresented the sick leave figures in C-34 by failing to include work related injury leave and terminal leave which are included in the Passaic data. The FMBA notes that Chief Dubravsky testified that work related injury leave and terminal leave were not included in the City's figures. (Tr. 951; 960-961; 963-964.) Sick leave is taken as part of terminal leave. The use of terminal leave has reduced, and adversely affected Clifton Fire Department manning for the years 1996, 1997, 1998 and 1999. (Tr. 963-964; U-102.)

Pursuant to Article XXVII of the CBA, the FMBA maximum terminal leave benefit is 130 days. (U-4.) Since 1996, on average, at least ten firefighters or officers have been on terminal leave each year. In 1997, according to Chief Dubravsky, the total number of firefighters, as a result of terminal leave, was 128. (Tr. 964.)

The FMBA submits that U-102, memoranda from Chief Dubravsky, shows that sick leave is taken as part of terminal leave and that the use of terminal leave reduced Clifton manning to 128 in 1997 as well as reducing manning levels in 1996, 1998 and 1999. (Tr. 960; 965.) The FMBA cites a quote from Chief Dubravsky in a Herald & News article dated February 11, 1999 regarding terminal leave and fire department manning:

“The Chief said the department has experienced shortages within the past three years because of the number of senior fire officials on terminal leave. He said those officers could not be replaced until they were off the City’s payroll . . . Ten fire officers who had more than 25 years on the job were on terminal leave in 1998.” (U-105.)

The FMBA contends that when terminal leave is considered together with the City’s sick, injury and illness leave figures discussed above, it shows that Clifton has twice as much sick leave per year as Passaic. (DeLuca Cert. at ¶12-14.) The FMBA claims that the sick leave figures used for Passaic, in C-34, include on-duty work-related injuries and accumulated terminal leave. Set forth below is a chart comparing sick and injury figures for Clifton and Passaic for the years 1996 through 1998 showing that Clifton’s sick and injury leave figures are more than double that of the City of Passaic.

Year	Number of Sick Days		Average Number of Sick Days Per Man	
	CLIFTON	PASSAIC	CLIFTON (Total manpower of 130 men due to average terminal leave per year.)	PASSAIC (Total manpower of 107 men per testimony of Fire Chief Imperato.)
1996	1861	616	14.32	5.75
1997	2207	748	16.98	6.99
1998	2050	832	15.77	8.32

The FMBA contends that the City’s calculations regarding Clifton’s sick time are inaccurate in terms of “average sick time per man” as set forth in C-34 because the City based its calculations on a table of organization of 140 personnel, despite testimony that, on

average, the total work force is 130 personnel based on an average ten to twelve firefighters or officers being on terminal leave since at least 1996. The FMBA points out that Chief Dubravsky's testimony when read with U-102, show that Clifton's manpower was at 128 in 1997 as a result of such terminal leave.

Overtime

The FMBA maintains that implementation of the 24/72-hour shift schedule results in a reduction in overtime. The Union Township Study compared the use of overtime under the 10/14-hour shift schedule from 1974 to 1979 against the use of overtime under the 24/72-hour schedule from 1980 to 1985 as follows:

- The total amount of overtime under the 10/14-hour schedule during the years 1974 through 1979 was 1,950 days (12-hour days). The total amount of overtime under the 24/72-hour schedule for the years 1980 through 1985 was 822 days (12-hour days).
- Accordingly, overtime was dramatically reduced by 1,128 days (12-hour days) or 58% under the 24/72-hour shift schedule, as compared to the 10/14-hour shift schedule. (Tr. 232; U-40,U-41.)

The FMBA cites the testimony of Union Township Battalion Chief Chrystal that the decrease in overtime was probably related to the decrease in the use of sick leave and the reduction in firefighter injuries over the same period of time:

“the reduction in overtime is the ability under the 24 to better manage situations . . . to better manage recuperative power, to better manage rehab. The 72 then to recuperate further reduces the sick time and that home illness that generally creates overtime.” (Tr. 245.)

The FMBA notes that Paterson Fire Chief Pasquariello agreed that the 24/72-hour shift has reduced overtime costs with regard to decreased sick time and with regard to the change of shifts.

“A great number of our fires including multiple alarm fires occur between the hours of 1800 hours and 0800 hours in the morning. So actually the 1 & 3 work schedule has proven to be beneficial to us, especially in reducing our

sick and injury leave as well as overtime. For example, if one of our people is injured, they have 72 hours to recuperate. Whereas if this same firefighter were injured working the first night of a 10 & 14 schedule, he would only have 10 hours to recoup and most often, this is not sufficient time to recover therefore he must be placed on injury leave. This creates greater costs for the city, mainly due to manpower replacement.

* * *

The 1 & 3 work schedule has also reduced overtime costs incurred at the change of shifts. For example, if there is a job in progress at shift change, under the 1 & 3 work schedule the overtime incurred relieving the changing shifts can only occur at 0800 hrs. On the other hand under the 10 & 14 work schedule this could occur at 0800 hrs, therefore increasing anticipated overtime costs. (U-78 & U-79.)

Hillside Fire Chief Caswell testified that sick leave and overtime were reduced by the 24/72-hour shift schedule. (Tr. 72.) Chief Caswell's testimony:

"overtime has been reduced because of the reduction in sick leave. The overall efficiency of the department by going to the 24-hour system has been better than a 10 and 14." (Tr. 92.)

Fire Chief Hill testified that if the Roselle Fire Department returned to the 10/14-hour shift, sick time would go up and there would have to be more overtime. (Tr. 137-138.)

President Lavin testified that the City of Elizabeth's implementation of the 24/72-hour shift resulted in significant savings in sick leave and overtime. In its first year of implementation, Elizabeth experienced a 3,800 man hour reduction in sick leave, a reduction that continued in subsequent years. (U-32.) Lavin also testified that there were similar reductions in overtime in Elizabeth after the implementation of the 24/72-hour shift schedule. (Tr. 269.)

The FMBA submits that there was much speculative testimony from the City's witnesses regarding firefighter sick leave and injuries associated with the 24/72-hour shift, but this testimony has not been supported with hard evidence. The City has not cited a single example of a fire department that has returned to the 10/14-hour schedule because of increased sick time, firefighter injuries or overtime. Whereas, the FMBA has presented

numerous examples supported by testimony and documentary evidence that the 24/72-hour schedule will result in a decrease in firefighter injuries, use of sick leave and overtime.

Fatigue

The FMBA contends that the 24/72-hour shift schedule will eliminate or reduce firefighter fatigue and injuries. Union Township's Study reported significant decreases in firefighter and civilian injuries which are as follows:

- From the years 1974 through 1979 under the 10/14-hour schedule, there were 254 tour of duty firefighter injuries and 94 civilian injuries. From the years 1980 through 1985 under the 24/72-hour shift schedule, there were 194 tour of duty firefighter injuries and 58 civilian injuries.
- Under the 24/72-hour shift schedule, tour of duty firefighter injuries decreased 23%.
- Under the 24/72-hour schedule, civilian injuries decreased 38%. (U-40 and U-43.)

Battalion Chief Chrystal testified that the decrease in firefighter injuries can be attributed to less firefighter fatigue under the 24/72-hour shift schedule. Chrystal testified that the 24/72-hour shift schedule provides firefighters with additional time to "rehab after a strenuous tour of duty". Under the 24/72-hour shift schedule, firefighters are provided three days off or a 72-hour period between on-duty shifts to recuperate from their firefighting activities. Battalion Chief Chrystal testified to his own experience and his opinion that the 10/14-hour shift schedule has a more adverse effect on firefighter fatigue and, thus, civilian and firefighter injuries. (Tr. 241-242; U-33.)

Passaic Fire Chief Imparato testified that the 10/14-hour shift schedule has a more adverse effect on firefighter efficiency, firefighter fatigue and firefighter safety as compared to the 24/72-hour shift schedule. Chief Imparato testified that under the 10/14-hour shift schedule, firefighters are required to work two separate 14-hour night tours of duty. When firefighters are assigned to the 14-hour night tours, they are off duty for the 10 hours

immediately preceding the night tours. During these 10 hours off duty, the fire chief has no control over the activities of fire personnel. Firefighters reporting to duty for the 14-hour night tour may have been involved in family obligations, child care, social activities, or even a part-time job. Such a firefighter may already be fatigued or tired from his day events before beginning the 14-hour night tour. (Tr. 166-168; 185.)

The FMBA contends that the fatigue factor is compounded for the second consecutive 14-hour night tour of duty since the firefighter is required to return to duty ten hours later at 6:00 p.m. to start a second consecutive 14-hour night tour.

Chief Imperato testified that the 24/72-hour shift schedule reduces firefighter fatigue since there is more control over the activities of fire fighters during a full 24-hour period ensuring that all personnel will be well-rested when reporting to duty. Chief Imperato testified that the 24/72-hour shift schedule reduces the potential for fatigue by eliminating the two consecutive 14-hour night tours. (Tr. 168; 185.)

South Orange Chief Markey testified that the problem with the 10/14-hour shift schedule is “you always have the likelihood of having a busy night on the first night, going home for ten hours and then coming back for the second night and getting hit again.” (Tr. 1015.) Roselle Chief Hill testified that there was less firefighter fatigue on the 24/72-hour shift schedule because he has a “fresh” firefighter crew reporting for duty. Chief Hill testified:

“Well, I found since we’ve been on the 24-hour shift that having a fresh firefighter after 72 hours off has certainly made the job much easier for me as Chief than on the 10 and 14. The fatigue factor based on what firefighters might do in their off-duty time before they came into work at night on the 10 and 14 hour shift was always a problem . . .

. . . on the 24-hour shift, they come in at 8 o’clock, they’re fresh. I control their activities during the daytime and at nighttime. If we have training scheduled during the day, if we have fires, I provide down time for them so they can get the proper rest and they can provide the proper protection later on if anything else does occur . . . I have controlled the fatigue factor if there

was any fatigue factor. That's my job as the manager of the fire department, to control that. (Tr. 131-132.)

Hillside Fire Chief Caswell testified that the 24/72-hour shift has a favorable impact on firefighter fatigue:

"The fatigue factor, we don't have a problem with the fatigue factor. Basically the 24-hour schedule works a little bit better for us [Hillside]. We have a little bit better control over our firefighters because they are in the station for 24 hours a day. If they are not in the station 24 hours a day [under the 10/14-hour shift], they can be working second jobs, they take care of their family, they can go to weddings, do whatever they want to do, and we have no control over it." (Tr. 70; U-34.)

Chief Caswell also testified that the longer period of time off between shifts allows the firefighter to get the smoke out of his system, or any other toxins he may come into contact with while on duty. (Tr. 71-72.)

"The longer period of time [72-hours] enables the firefighter, if he did have a particularly busy day on the 24-hours that he worked, to recoup, to relax and get the toxic smoke out of his system or any chemicals that he might have come in contact with. The abuse of the physical work from that time, he has three days to recoup." (Tr. 71-72.)

The FMBA disputes the City's contention that 1) being on duty for 24 consecutive hours naturally causes fatigue; 2) the likelihood of being exposed to multiple fires is greater on a 24-hour shift than on a 10/14-hour shift schedule; and 3) the new PEOSHA required uniforms and firefighting gear increases physical stressors and fatigue. The FMBA points out that the change in firefighters' uniforms and gear mandated in 1995 by PEOSHA applies to all firefighters in New Jersey. The FMBA contends that the City did not present any evidence to show that the impact of the new PEOSHA uniforms and firefighting gear has caused a negative health impact on firefighters anywhere in the State. The FMBA further contends that Dr. Carnow has failed to show any correlation between firefighter fatigue or injuries and the 24/72-hour work schedule since the adoption of the new PEOSHA mandates. The FMBA points out that Dr. Carnow testified that he never studied or analyzed the use of

the new PEOSHA mandated gear in the municipalities that operate under a 24/72-hour shift schedule. The FMBA submits that the following excerpts from Dr. Carnow's testimony show that there is no empirical data or evidence regarding the PEOSHA mandated uniforms and a causal connection with increased firefighter fatigue or injuries under the 24/72-hour shift:

- Q. Now, I take it that since Bayonne is on the 10 and 14 schedule, that that's the schedule you believe still works?
- A. I have no opinion about what Bayonne works.
- Q. Do you have any opinion as to - - you haven't taken a look then at the actual experience of firefighters on a 10 and 14 schedule who have switched to a 24-hour schedule, have you?
- A. No.
- Q. Have you compared those two? You haven't looked at that at all?
- A. No, I haven't looked at that.
- Q. So you actually have not made a study of results that may have taken place, good, bad, where that has actually taken place, that switch, have you?
- A. No.
- Q. Do you know of any fire departments where such a switch has taken place?
- A. Not for certain.
- Q. You haven't done any statistical analysis of injuries, sick leave incidents, of departments as compared between a 10 and 14 schedule working 44 hours as you described it and a 24-hour schedule working 56 hours as you described it?
- A. I've performed no such research, no.
- Q. Thank you. And do you have any specific research with regard to the uniforms which you say are so oppressive and increase the likelihood that there will be a need for additional rehabilitation time? Have you actually done research which demonstrates that to be true on an actual basis treating firefighters?
- A. I haven't performed research. (Tr. 771-774)

The FMBA asserts that, in contrast to Dr. Carnow's testimony, the Fire Chiefs all have experienced working the 24/72-hour shift schedule and are required to wear the new PEOSHA mandated uniforms and gear. Passaic Chief Imparato testified that there has been no problem with the 24-hour schedule with regard to sick time, firefighter fatigue or the wearing of the new PEOSHA mandated uniforms. Chief Imparato stated that the 24/72-hour shift schedule is better for recuperation purposes "because we give our people more time between tours to recuperate." (Tr. 212; 215-16.)

The FMBA contends that, in addition to the lack of evidence supporting Dr. Carnow's opinion, Dr. Carnow also lacked knowledge regarding the specific work schedules and the operations of the Clifton Fire Department. Dr. Carnow was not certain of the average hours worked in fire departments which utilize the 24/72-hour shift or the 10/14-hour shift schedule. Dr. Carnow inaccurately testified about the weekly hours under both of the shift schedules. Dr. Carnow did know how many fire companies were used in Clifton or the difference between a firehouse and a fire company. Dr. Carnow did not know how many firefighters work each tour. Dr. Carnow did not know and did not use the "actual" Clifton Fire Department data or "actual" fire company response times in developing his opinion. (Tr. 772-773; 776; 779.)

The FMBA asserts that the overwhelming evidence in the record shows that the trend has been to switch from the 10/14-hour shift schedule to the 24/72-hour shift schedule subsequent to the PEOSHA mandate of January, 1995. The FMBA submits that the City failed to establish that any other municipality has changed its schedule as a result of the new PEOSHA uniform requirements. The FMBA asserts that the speculative testimony by the City's witnesses regarding the new uniforms and the 24/72-hour shift schedule is not supported by any evidence. The FMBA notes that the same conclusions were reached by Arbitrator Tener regarding the testimony of Dr. Carnow in North Bergen. (Exhibit C-1.)

The FMBA notes that Dr. Carnow could not identify any municipality that has switched in the last five years from the 24/72-hour shift schedule to the 10/14-hour shift schedule due to increased firefighter injuries, illnesses or fatigue and that Dr. Carnow was surprised to learn that so many fire departments have switched to the 24/72-hour shift in recent years. Although Dr. Carnow disagreed that a 72-hour off duty period is the necessary recuperation time for firefighters to rid their bodies of fumes, smoke and toxins, he could not testify to another “optimal” recuperation time. The FMBA notes that Dr. Carnow testified that 72-hours off duty is better than 10-hours off duty between the day and evening shifts under the 10/14-hour shift schedule. (Tr. 797-799; 804-5.)

Training

The FMBA asserts that firefighter training is enhanced under the 24/72 hour schedule. Under the 24/72-hour shift schedule, training can occur during the day or in the evening. Under the 10/14-hour shift schedule, training occurs every fourth day whereas, in most communities that utilize the 10/14-hour shift schedule training generally occurs only every six days on the day tour.

Union Township Battalion Chief Chrystal testified that training is impacted by the change from the 10/14-hour shift schedule to the 24/72-hour shift schedule:

“We believe training is better because it’s more consistent. There is no breakup of training in the change of shifts. Normally in the 10/14 hour day, one changes shifts around six o’clock. So if you have a training scheduled, you either have to cut it short or change it.

We found that in training we were able to see the firemen twice a week. In the 10/14, sometimes as much as two weeks could go by before the training officer who is on weekday duty, two weeks could go by before training officer could see a particular tour. What we found here was that at least once a week, a training officer would see you, sometimes twice a week.”
(Tr. 236-237.)

Hillside Fire Chief Caswell testified that training is much easier and more flexible because he can have fire personnel take a break to respond to a call and then they can come back, critique that call while it is still fresh in the firefighters’ minds. Chief Caswell

explained that training occurs every fourth day with the training officer or on their own under the 24/72-hour shift schedule. Chief Caswell explained that under the 10/14-hour shift schedule, you would normally get training during the two day tours and occasionally at night, but only if the training officer is not working the day shift. Chief Caswell testified that under the 10/14-hour shift schedule, fire personnel end up with two days of training and then six days later may be the next time they see the training officer. If the tour begins on a Saturday, under the 10/14-hour shift schedule, fire personnel will have a 15-day period between any meetings with the training officer. (Tr. 85-86.)

The FMBA points out that the work experience of Fire Chief Dubravsky and former Chief DeGroot is limited to the 10/14-hour shift schedule. All of the Fire Chiefs unanimously agreed that Fire Chief Dubravsky's concerns regarding his inability to meet training demands under the 24/72-hour shift schedule were unsubstantiated based on their own experiences. Chief Caswell testified:

Well, we covered just about everything that's required . . . actually we cover everything that's required by law. In addition, there are areas that are specific to our Township on the 24-hour schedule. If there is something that needs to be covered the following day, then it's covered the following day. But for the most part, we set up our programs to anticipate that. In the 24-hour schedule gives us more leeway than the 10 and 14s did. Because if there is an important point that we have to cover and it's getting close to say 5:30 in the evening, well, we just continue on that point or we will break for supper, men will go back to that point after supper.

Yes, my experience is different from the Chief's [Dubravsky] speculation. Even on 10 and 14's, there are certain topics that require more than one day or two days or four days coverage, especially if you predominantly start off your training sessions with classroom. And that might take four hours, six hours or eight hours, depending on the evolution of your teaching. So that you start your classroom off, you do your classroom; the guys have a chance to absorb it and then the following work day, 24-hour day, you either have more classroom or you go right out to the field.

Or you can split it up. There are different ways that you can work it. You can start your classroom in the morning for four hours, in the afternoon you do your evolutions. It depends what type of evolution that we're trying to teach and where we want to go with it. But it's very relaxed as far as setting up your schedules. And I find that the - - I found that the 24-hour schedule was very conducive to training. (Tr. 87-88).

Roselle Fire Chief Hill agreed that training time has about “doubled” since Roselle Fire Department changed from the 10/14-hour shift schedule to the 24/72-hour shift schedule. Chief Hill testified that there has been no increase in manpower to accommodate training needs under the 24/72-hour shift schedule which provides more flexibility in terms of scheduling training. (Tr. 133; 138.)

Passaic Chief Imperato testified that Passaic fire personnel train every day for at least two hours and that the 24/72-hour shift schedule provides flexibility to accommodate training needs based on workload since the training can be put off later in the day if something comes up. He also stated that the training officer has sufficient time to provide training under the 24/72-hour shift schedule. (Tr. 173-74; 180.)

The training requirements for fire personnel have significantly increased due to state mandated regulations, directives and procedures. The FMBA contends that the operation of the 24/72-hour shift schedule has not in any way interfered with the increased training requirements. The FMBA cites the testimony of Elizabeth FMBA President Lavin that Deputy Fire Chief Patrick Tanzola, Training Officer for the Elizabeth Fire Department, favors the 24/72-hour shift schedule and that the 24/72-hour shift schedule has enhanced Elizabeth’s Fire Department training effectiveness (Tr. 270-272.)

The FMBA contends that the City’s current training situation is in need of improvement and implementation of the 24/72 hour shift schedule may enhance Clifton’s firefighter training. The Union submits that this is supported by a memorandum dated July 1, 1999, to all deputy chiefs and company officers from the Clifton Training Officer. In this memorandum, the Training Officer urged the deputy chiefs to make training “meaningful” and “worthwhile” and further stated:

“in the past few months, organized training through this office has been below par or non-existent to an extent. Time constraints and the expansion of the Training Officer’s role will not make the situation better in the near future.” (U-119.)

Communications

The FMBA asserts that the 24/72-hour shift schedule fosters better fire department communications between line firefighters and tour commanders. This is because the most important information regarding fire department operations only has to be transferred once during a 24-hour shift. Under the 10/14-hour shift schedule, information regarding staffing, apparatus, construction and other vital information must be communicated at the start and finish of the day and evening shifts to the incoming crew. The FMBA cites Hillside Fire Chief Caswell's testimony regarding the schedule's impact on communications:

". . . when you have a transfer of information, for the lesser amount of times, it means it has a tendency to be transferred in a correct manner and not being handed down either forgetting something or not remembering to inform someone of a certain thing, like a sprinkler system being shut down or things of that nature. So the transfer of information, the transfer of daily reports happens at one time on the 24 with regards to twice on the 10 and 14.
(Tr. 92-93.)

The FMBA cites the testimony of Roselle Chief Hill that "communications have improved with implementation of the 24/72-hour shift schedule." (Tr. 134-135.)

The FMBA disputes the City's position that conveying communications more than once may "reinforce" the information since on the 10/14-hour shift schedule, you would not be "reinforcing" an order or directive to the same tour, rather, you would be conveying the information to two different personnel on the changing day and evening tours. The FMBA cites Chief Caswell's testimony:

"On a 24-hour schedule, it's as it's needed. It's one time in the morning at the shift change or if something else comes up during the day or in the evening, it's again reinforced. But if you are working on the 10 and 14, you're having one in the morning, and then you are talking to a different set of people in the evening, whereas the 24-hour, it is the same people for 24 hours."
(Tr. 103-104.)

Passaic Chief Imperato testified that communications are better under the 24/72-hour shift schedule because there is "no confusion" as to when the next shift is coming in, and

there is always continuity in terms of conveying and passing on important information, directives and orders. (Tr. 175.)

The FMBA notes that all of the Fire Chiefs agreed that communication with fire personnel in terms of training critiques is also improved under the 24/72-hour shift schedule.

The FMBA cites the testimony of President Lavin:

"There isn't that change if you have an incident say at 6:00, if you wanted to do a critique, if something happened at 4:00 and let's say you had a bad car accident or death, you'd have the opportunity . . . when incidents that happen during the day or training exercise, you could take a break and then have an opportunity to revisit that later on at the night and not have to worry about shutting everything down and then being ready for the following day. It is a kind of continuous phase". (Tr. 278-279.)

The FMBA notes that Chiefs Caswell and Hill agreed that the 24/72-hour shift schedule had not interfered with their ability to "critique" fire or EMS incidents or responses.

Morale

The FMBA contends that the 24/72-hour shift schedule will have a positive impact on firefighter morale which is essential to an effective and safe fire fighting force. The FMBA points out that all of the Fire Chiefs testified as to the importance of firefighter morale and the effect that morale has on fire department operations.

Passaic Fire Chief Imparato testified that morale improved on a 24/72-hour shift schedule. Chief Imparato testified that morale improved because he believed "not only was it more efficient for us to run the department, but it was also a burden for the firefighter in his family life" under the 10/14-hour shift schedule. Chief Imparato further testified that morale is very important in the fire department. Chief Imparato testified that morale is even more important in public safety situations because the fire service is "a very dangerous occupation and it involves often-times very stressful and difficult responses and involvement." (Tr. 172-73.)

The FMBA asserts that the other Fire Chiefs concurred with Chief Imperato's assessment and opinion of the role that high morale plays in delivering effective and safe fire and EMS services. The Fire Chiefs also agreed that morale increased dramatically once the fire departments changed to the 24/72-hour shift schedule. (Tr. 141-142; 72.)

South Orange Fire Chief Markey testified how the unilateral imposition of the 10/14-hour shift schedule adversely affected the morale of the fire department:

"The switch back to the 10/14-hour shift had an extremely deleterious effect on morale of the department, which related across the board within the department on a day-to-day operation of the department. (Tr. 1013.)

Chief Markey's testified that there was improved morale after the 24/72-hour shift schedule was reinstated in 1992:

"There was a big change in morale of the department and along with the change in morale came a change in motivation of the department again. People became more interested; they participated more." (Tr.1020.)

The FMBA cites the statement of Paterson Fire Chief Pasquariello that the morale of his men has "greatly improved" with the 24/72-hour shift schedule.

"In the past, shift work in the fire service has proven to be very stressful on the firefighter's home life. The 1 and 3 work schedule enables the firefighter to spend more continuous quality time with their families creating more stability in their lives." (U-79.)

Chief Pasquariello stated that the 24/72-hour shift with its "derived benefits works well in Paterson with no negative impact on this department or its residents." (U-79.)

The FMBA maintains that the 24/72-hour shift schedule will provide the Clifton firefighters a well-needed boost in morale, which it contends is at an all time low. Chief Dubravsky testified that the Clifton Fire Department has suffered numerous retirements over the last 4 or 5 years. (DeLuca Cert. ¶17). (Tr. 920.) Chief Dubravsky estimated that approximately 70 firefighters and officers have retired since 1996. Most, if not all, of the fire personnel who retired were under the age of 65 and, therefore, were not mandatorily or

statutorily required to retire. Substantially all of the fire personnel who retired were physically fit and could have continued to perform their firefighting duties. (DeLuca Cert. ¶17.)

The FMBA contends that other indicators of a decline in firefighter morale is the filing of numerous grievances, arbitration demands and unfair practice litigation. Since 1997, the FMBA has pursued arbitration over approximately 6 matters including reduction in health benefits grievance, overtime violations, acting pay grievances and Union discrimination grievances. (DeLuca Cert. ¶19.)

The FMBA claims that morale hit an all time low when Chief Dubravsky and former Chief Walter DeGroot initiated a public campaign of misrepresentation, fear and anti-union animus against the FMBA for its pursuit of the 24/72-hour shift schedule. Chief Dubravsky and former Chief DeGroot publically stated and circulated a petition falsely accusing the FMBA of “selfishly seeking this shift change at the expense of public safety and for its own self interest.” (DeLuca Cert. ¶20.)

The FMBA contends that former Chief DeGroot and Chief Dubravsky have intentionally misrepresented the FMBA’s position in support of its work schedule proposal and have intentionally withheld from the public the FMBA’s health and safety arguments. The FMBA asserts that the Chiefs’ campaign against the FMBA has caused a pervasive drop in morale and resulted in the filing of an unfair practice charge with PERC against the City and Fire Chief Dubravsky. (DeLuca Cert. ¶20.)

The FMBA contends that Chief Dubravsky and former Chief DeGroot have intentionally engaged in a “smear” campaign against the FMBA and its membership by publically denouncing fire personnel as being “selfish” and “uninterested in public safety” and that this campaign has had a demoralizing effect upon the Clifton Fire Department. (DeLuca Cert. ¶20.)

Productivity

The FMBA asserts that the 24/72-hour shift schedule positively impacts firefighter efficiency and productivity in terms of manning levels and workload. In the Union Township Study, an analysis was done of the fire department's overall productivity level in terms of its ability to provide fire department services such as, responding to classified alarms, performing tour fire hazard inspections and performing other non-emergency services prior and subsequent to the implementation of the 24/72-hour shift schedule in 1980.

U-40 and U-44 set forth the services/productivity comparison compiled in the Union Township Study:

- Total services provided from 1974 through 1979 under the 10/14-hour shift schedule were 18,470.
- Total services provided by Union Township Fire Department from 1980 through 1985 under the 24/72-hour shift schedule was 37,894. (Tr. 230-232; U-44.)
- Under the 24/72-hour schedule, services/productivity in the Union Township Fire Department increased 19,424 or a total of 95% as compared to 10/14-hour schedule.

In explaining these results, Fire Chief Chrystal testified:

"the productivity increased went up actually across the board. The number of runs went up, in-service inspections went up, the number of non-emergency services. So it was across the board in all categories." (Tr. 231.)

The FMBA points out that manning levels remained the same as services/productivity increased 95% following implementation of the 24/72-hour shift schedule. (Tr. 232.)

Passaic Fire Chief Imparato testified that manning levels of the Passaic Fire Department dropped approximately 25% since the 24/72-hour shift schedule was initially implemented in 1976. Passaic Fire Department, like Union Township, has absorbed the significant decrease in manning from approximately 140 personnel to 107 without any decrease in the fire department's ability to handle fire fighting responsibilities, workload and

training. (Tr. 169-170.) Captain James A. McBride of Passaic's Fire Prevention Bureau submitted a letter dated December 17, 1999 attesting to Passaic's In-Service Building Inspection Program which has grown and expanded over the past 28 years. (U-80.)

Roselle Fire Chief Hill testified that although the number of firefighters in Roselle has remained the same the number of calls has increased. Chief Hill explained that Roselle Fire Department has met the increasing demands of the job because fire personnel have been more efficient and get things done under the 24/72-hour shift schedule. (Tr. 134.)

The FMBA asserts that, based on the Union Township Study and the testimony of the Fire Chiefs, productivity increases under the 24/72-hour shift schedule.

Residency

The FMBA maintains that an award of the 24/72-hour shift schedule will not cause a large number of firefighters to move out of the city of Clifton. N.J.S.A. 40A:14-9.1 prohibits municipalities from requiring residency therein as a condition of employment for any paid fire personnel. Specifically, N.J.S.A. 40A:14-9.1 provides:

"No municipalities shall pass any ordinance, resolution, rule, regulation, order or directive, making residency therein a condition of employment for the purpose of original appointment, continued employment, promotion, or for any other purpose for any member of a paid fire department and force or paid member of a part-paid fire department and force . . . "

The FMBA disputes the City's contention that the 24/72-hour shift schedule enhances a firefighter's desire to move away from Clifton and that this result will have an adverse or negative impact on emergency recall or response time. Clifton Firefighters cannot be required to reside within the City of Clifton as a condition of appointment or continued employment. The FMBA submits that in adopting this statute, the Legislature rejected the municipality's arguments regarding emergency recall. The FMBA argues that implementation of the 24/72-hour shift schedule will not have a negative impact on firefighter residency, since approximately 50% of Clifton's firefighters already reside outside

the City of Clifton. The FMBA suggests that this can be attributed to, among other things, the City's consent agreement with the NAACP opening firefighter appointments to all residents in the State of New Jersey. (U-70.) Former Chief DeGroot testified that when he was Chief, "hiring was open to everyone in the State of New Jersey as a result of the lawsuit by the NAACP." (Tr. 574.) Former Chief DeGroot also testified that when he was Chief, some of his employees lived far away in South Jersey including, Atlantic City and Williamstown. (Tr. 575-576.)

The FMBA suggests that considerations other than shift schedule such as affordable and appropriate housing, family priorities, family relationships and time, and things such as school systems generally influence firefighter residency. South Orange Fire Chief Markey testified, "people move away for quality of life reasons, environment, it has nothing to do with a particular tour." (Tr. 1027.) Elizabeth President Lavin testified that, "of the municipalities that have switched to the 24/72-hour shift schedule, they have not experienced a mass exodus in any of these towns." (Tr. 276.) Hillside Fire Chief Caswell testified that, "the ratio of firefighters living outside the county in his department has not changed as a result of the 24/72-hour shift schedule." (Tr. 113.) The FMBA asserts that there has been no correlation between the 24/72-hour shift schedule and more personnel living further away from the Passaic Fire Department. (Tr. 195-196.)

Conclusion

The FMBA asserts that, based on the statutory criteria and the substantial credible evidence in the record, that its Final Offer to implement the 24/72-hour shift schedule is more acceptable than the shift schedule proposal of the City of Clifton and, therefore, should be awarded.

FINAL POSITION OF THE CITY

The City opposes the FMBA's work schedule proposal. The City seeks to maintain the 10/14-hour work schedule as currently utilized by the Clifton Fire Department. The City's final offer is: **No change in the current work schedule.**

The FMBA's Final Offer

The FMBA proposes to eliminate the current 10/14-hour work schedule and to implement the 24/72-hour work schedule. Under the 24/72-hour work schedule, fire fighters report to work for twenty-four hours followed by seventy-two hours off. This pattern repeats once every four days, so that officers work about ninety-one twenty-four-hour shifts each year, exclusive of time off. As under the 10/14-hour work schedule, fire fighters work an average of 42 hours per week.

The FMBA proposes to implement the 24/72-hour work schedule for a one-year trial period, after which time, the City could petition the Arbitrator to eliminate the 24/72-hour work schedule upon a showing of reasonable cause. The FMBA may challenge the decision by submitting the issue of reasonable cause to the Arbitrator. Absent a decision by the Arbitrator awarding a return to the 10/14-hour work schedule, the City is barred from unilaterally implementing the 10/14-hour work schedule.

The FMBA proposes the following notice and petition requirements: The City shall notify the FMBA in writing no later than 30 days prior to the end of the trial period, if it decides to return to the prior work schedule and shall provide the FMBA with the basis for its decision. If the FMBA decides to challenge the City's decision, it must notify the City and the Arbitrator in writing within 14 days of receipt of the City's notification that it intends to reinstitute the 10/14-hour work schedule. The Arbitrator shall schedule a hearing

to take place within 30 days of receipt of the FMBA's written notification challenging the City's decision. The Arbitrator's decision shall be final and binding upon the parties.

The FMBA proposes that the change to the 24/72-hour work schedule shall not result in any reduction of contractual paid leave benefits. To account for the 24/72-hour work schedule, the FMBA proposes to reduce paid time off by dividing the benefit by two. This calculation stems from the fact that under the 24/72-hour work schedule, fire fighters work two tours, one ten-hour tour and one fourteen-hour tour, in one twenty-four-hour period.

The City's Proposal

The City proposes to retain the current 10/14-hour work schedule. Under the 10/14-hour work schedule, fire fighters work ten hours, from 8:00 a.m. until 6:00 p.m., for two days, followed by one day off, followed by two nights where the fire fighters work from 6:00 p.m. until 8:00 a.m., followed by seventy-two hours off. This cycle repeats every eight days. Fire fighters work an average of 42 hours per week. The City of Clifton Fire Department has worked a 10/14-hour work schedule for the past thirty-one years. (Tr. 434.)

The City notes that the FMBA complained that it finds it difficult to have only ten hours off between the two night shifts. Alternatively, the City proposes to increase the 10 hours off between the first night shift and the second night shift, the City proposes implementing a modified 10/14-hour schedule. Under the modified work schedule, fire fighters would work ten hours the first day and ten hours the second day. On the third day, instead of having the full day off, fire fighters would report for duty for the night shift. Fire fighters would be off on the fourth day and work a night shift on the fifth day, followed by two days off. (C-35.) This work schedule also averages 42-hours per week. (Tr. 465-66.)

The Burden of Proof

The City seeks to maintain the status quo and vigorously opposes the adoption of the 24/72-hour work schedule. The City maintains that the party seeking to alter a work schedule bears the strongest of burdens to warrant an award implementing such a radical change. Interest Arbitrator Jeffrey Tener, in an interest arbitration award between the Township of North Bergen and the International Association of Firefighters (the "IAFF") denied the Township's request to change from a 24/72 hour work schedule to a 10/14 hour work schedule. Interest Arbitrator Tener observed:

"The party seeking to change the status quo, particularly on an issue as important as the work schedule, bears a very heavy burden." (C-1, 18.)

The City also cites the interest arbitration award of John Sands denying the PBA/SOA's request for a schedule change in an interest arbitration award rendered between the Township of Springfield and the Springfield PBA/SOA on December 14, 1998. Arbitrator Sands noted:

Although other jurisdictions may be using similar schedules, there is still significant basis for the Township's concern that increasing the length of the work days and the time between four-day "weeks" will increase manpower and overtime costs, complicate scheduling, and disrupt training and communication between supervisors and rank and file. The Unions have failed to bear their burden of proof with respect to justifying an arbitral change of the status quo. (Twp. of Springfield & PBA Local/SOA Local 76A, PERC Docket No. IA-97-140 at 113.)

In another case, Interest Arbitrator Joel Weisblatt, denied the PBA's schedule change proposal, noting that the party seeking to alter the work schedule bears a "very heavy burden." (City of Passaic and Passaic PBA Local 14, Docket No. IA-99-6 at 36.)

The City disputes the FMBA's contention that the Arbitrator should reject the City's arguments concerning the very heavy burden which must be met by a party seeking to achieve a scheduling change. Specifically, the FMBA asserted that the statute does not

“speak to extra special burdens for one thing or another.” (Tr. 340.) The City submits that several interest arbitrators have determined that the party seeking the scheduling change bears a very heavy burden. Therefore, the City maintains that the FMBA bears a very heavy burden, especially when, as here, the City strongly opposes the scheduling change.

The City again cites Arbitrator Weisblatt’s Passaic award:

“When it comes to altering existing work schedule the record must clearly provide a solid basis for making change in the absence of mutual assent.” (IA-99-6 at 36.)

THE CITY’S ARGUMENTS

Conventional Interest Arbitration

The New Jersey Employer-Employee Relations Act (the “Act”), N.J.S.A. 34:13A-1 *et seq.*, includes a compulsory interest arbitration procedure for public police departments and the police officers’ exclusive representatives who reach impasse in collective bargaining negotiations. On January 10, 1996, the Legislature passed the Police and Fire Public Interest Arbitration Reform Act (the “Reform Act”) which implemented significant amendments to New Jersey’s compulsory interest process.

The Reform Act establishes conventional arbitration, instead of final offer interest arbitration, as the terminal procedure applicable to resolve impasse between parties who fail to agree upon one of six terminal procedures available under the Reform Act. N.J.S.A. 34:13A-16(d) (2). Because the parties to this arbitration failed to agree to a terminal procedure, conventional arbitration applies. The Interest Arbitrator must, therefore, separately determine “whether the total net annual economic changes for each year of the agreement are reasonable under the eight statutory criteria.”

The Statutory Criteria

N.J.S.A. 34:13A-16(g) states that the Interest Arbitrator must determine the dispute based upon “a reasonable determination of the issues.” Because reasonableness requires the Interest Arbitrator to apply a subjective standard, the Legislature enumerated eight statutory criteria which the Interest Arbitrator must give “due weight” in determining the appropriate award. The City submits that a review of the enumerated factors reveals three underlying themes: (1) the public interest; (2) comparability; and (3) the financial ramifications of the offer.

The City asserts that the sole issue in this interest arbitration is whether, based upon the eight statutory criteria, it would be reasonable to maintain the 10/14-hour work schedule as opposed to adopting a 24/72-hour work schedule. Unlike most interest arbitration proceedings, this interest arbitration does not involve a dispute concerning the reasonableness of a demanded salary increase or expanded benefits which entails direct financial ramifications upon the public employer. This was clearly expressed by Interest Arbitrator Jeffrey B. Tener in his interest arbitration award between the Township of North Bergen and the IAFF:

“It is difficult to apply the statutory criteria to an issue such as this one (change in the work schedule) which does not have any direct economic consequences in terms of dollars or hours worked.” (C-1, at 16.)

The City contends that this interest arbitration primarily focuses on the Clifton Fire Department’s ability to maximize safety for its fire fighters and the general public. The City maintains that an analysis of the statutory criteria when applied to the instant matter show that maintaining the current 10/14-hour work schedule reflects a more reasonable approach than adopting the 24/72-hour work schedule.

The Interest and Welfare of the Public

The Act requires the Arbitrator to consider “the interest and welfare of the public” in determining a reasonable award. The Supreme Court recognized that although compulsory interest arbitration is an adversarial process between a public employer and its employees, the public is a “silent party” to the proceeding. Hillsdale PBA Local 207 v. Borough of Hillsdale, 137 N.J. 71, 82 (1994). The Court described the impact the interest arbitration process has on the public:

Compulsory interest arbitration of police and fire fighters’ salaries affects the public in many ways, most notably in the cost and adequacy of police and fire-protection services. Indeed, section 16g expressly requires the arbitrator to consider the effect of an award on the general public. Hence, an award runs the risk of being found deficient if it does not expressly consider “the interest and welfare of the public.”

The City contends that, although the Act requires Interest Arbitrators to consider the impact of an award upon “the interest and welfare of the public”, Interest Arbitrators frequently do not give the factor its proper weight in deliberations. The City asserts that, in determining a reasonable award, the Interest Arbitrator must consider the effect the award will have on the citizens and taxpayers of the City of Clifton.

The City maintains that the adoption of the 24/72-hour work schedule is not in “the interest and welfare of the public.” The City advocates maintaining the 10/14-hour work schedule over the 24/72-hour work schedule for many reasons, including more effective training and productivity, lower sick leave use, and improved fire safety. In support of its position, the City introduced the testimony of several witnesses.

First, the City called Fire Chief Walter DeGroot, the former Chief of the Clifton Fire Department, who has thirty-seven years of fire fighting experience. In addition to offering testimony concerning the operation of the Clifton Fire Department, Chief DeGroot updated

a report on the 24-Hour Work Schedule for the New Jersey Career Fire Chiefs' Association which summarizes the rationale for eliminating the 24-hour work schedule. (C-3.)

Second, the City introduced the testimony of current Clifton Fire Chief John Dubravsky who has thirty-one years of fire fighting experience. Chief Dubravsky testified in opposition to the adoption of the 24/72-hour work schedule.

Third, the City offered the testimony of Dr. David Carnow, an expert in occupational and environmental medicine. Dr. Carnow provided expert testimony and an expert report concerning the medical ramifications of adopting the 24/72-hour work schedule. Dr. Carnow also provided testimony and an expert report concluding that the 10/14-hour work schedule is healthier and safer than the 24/72-hour work schedule.

Fourth, the City provided testimony from Joseph D'Arco, former City Manager of South Orange, concerning the effect of the 24/72-hour work schedule in South Orange.

Finally, the City introduced several post-hearing certifications in support of its position.

Training

The City contends that the 24/72-hour work schedule negatively impacts training. Fire departments train through repetition. (Tr. 377-78.) Unlike the 10/14-hour tour, the 24/72-hour tour precludes training on consecutive days. (C-4, at 9.) Further, under the 10/14-hour work schedule, firefighters report for duty four times in eight days. Under the 24/72-hour work schedule, fire fighters report for duty two times in eight days. The City asserts that the 10/14-hour work schedule provides double the opportunities for repetitive training than the 24/72-hour work schedule. (Tr. 377-78.)

The City contends that a fire department cannot train for extended periods during a 24-hour tour due to attention-span limitations. (Tr. 378.) Additionally, the 24/72-hour work

schedule will result in the elimination of night training because of fatigue and restlessness after fire fighters have already worked for about ten or more hours. (C-4, at 9.) Moreover, under the 24/72-hour tour, a fire department may need to cancel training due to a very busy day, or inclement weather delaying the training for at least four days, whereas under the 10/14-hour work schedule, the fire department could simply postpone the training until the following day. (C-6, at 2-3.)

Productivity

The City contends that the 24/72-hour work schedule will result in less productivity than the 10/14-hour work schedule since individuals cannot maintain attention for the duration of the 24-hour shift. (Tr. 379-80; 628; 654-55; C-3 at 2.) In fact, “it is difficult to expect more than eight hours of active work and still have fire fighters function well in an emergency.” (C-7 at 4.) As one publication noted, “[t]he longer the shift length, the lighter workload that an employee can handle for each hour of the shift.” (C-8.) As a result, fire fighters cannot sustain intensity for job responsibilities such as fighting fires, performing inspections and participating in training for as much of their shift as under the 10/14-hour schedule. Chief Dubravsky testified that the 24/72-hour tour requires a department to build in substantial amounts of non-emergency time, including planned downtime. (Tr. 671; C-17.) Chief Dubravsky also testified that the 10/14-hour work schedule permits fire fighters to “work, rest, work, rest as opposed to committing that person to a rigorous 24 hour hostile environment.” (Tr. 654.)

The City contends that fire fighters will lose interest under the 24-hour schedule because they have so many days off each year. Under the 24/72-hour work schedule fire fighters only work 91.25 days per year (excluding vacation and other leave time) with 272.75 days off per year. After converting Clifton fire fighters’ leave time into 24-hour days

in accordance with the FMBA's Final Position dated July 6, 2000, fire fighters will receive 3.5 compensatory holidays off, one personal day, and between five and eight vacation days, depending upon length of service. This totals between 9.5 and 12.5 24-hour tours per year, exclusive of sick leave. As a result, fire fighters will report for duty between 78.75 and 81.75 days per year, if the fire fighters do not take any sick time. Consequently, a Clifton fire fighter would report for duty about once every four and one-half days. Under the 24/72-hour schedule, one municipality, the Village of South Orange, experienced fire fighters taking leave time which resulted in as long as forty consecutive calendar days off from work. (Tr. 850-51; C-44.)

The City contends that the infrequent work schedule leaves fire fighters free to pursue second full-time employment, which often takes precedence over fire fighting. Former Fire Chief DeGroot opined:

“Obviously if a man is off for 72 hours, which equates to three days, I don't believe he'll be home resting. I believe he'll pursue another occupation.”
(Tr. 393.)

Gregg Hill, Administrator of the City of Passaic, stated in his Certification that “firefighting for the City of Passaic has become a secondary occupation for some City firefighters.” (Hill Cert. ¶6.) Citing the testimony of Chief DeGroot, the City maintains that although fire fighters prefer the 24/72-hour work schedule over the 10/14-hour shift because it provides for longer periods off between shifts, it would not be in the best interest and welfare of the citizens of Clifton to adopt the 24/72-hour tour. (Tr. 393.)

Sick Time and Transfers

The City contends that the 24/72 schedule results in the use of more sick time. Under the 10/14 schedule, a fire fighter who calls in sick misses either a 10-hour tour or a 14-hour tour. Every sick day under the 24/72 schedule equals two sick days under the 10/14

schedule. (Tr. 384; C-3 at 2; C-4 at 3.) The City points out that if a fire fighter's absence causes the department to fall below minimum manning levels, the department would need to recall a fire fighter at overtime rates to cover for the absent employee. Under the 24/72 schedule, the municipality pays the fire fighter for 24 hours at time and one-half. The 10/14 schedule results in half the overtime payment. (Tr. 415; C-4 at 7.)

The City contends that specific statistics support its position. According to the *New Jersey Career Fire Chief's Association Fire Department Services, Salary and Benefits Survey*, ten municipalities whose fire departments work 24/72-hour schedule average 4.75 24-hour days of sick time per fire fighter per year. (C-32.) 4.75 24-hour days convert to 9.5 10/14-hour days. Fourteen municipalities whose fire departments work a 10/14-hour schedule average 4.1 10/14-hour sick days per fire fighter per year. As a result the average sick leave in municipalities which work a 24/72-hour tour exceeds the average sick leave in municipalities which work a 10/14-hour tour by 5.4 10/14-hour days annually.

Additionally, the City of Passaic, which works a 24/72-hour work schedule and shares mutual aid with Clifton, has significantly more sick leave and injury leave than the City of Clifton. (Dubravsky Cert.) The following chart compares average sick leave per year in Clifton to average sick leave per year in Passaic.

	Clifton	Passaic
<u>Year</u>	<u>Avg. # of Days</u>	<u>Avg. # of Days</u>
1996	4.31 days	11.5 days
1997	6.97 days	13.98 days
1998	5.76 days	16.64 days

(Dubravsky Cert. ¶6.)

The City contends that In 1996, the average sick leave per fire fighter in Passaic ran nearly three times the sick leave per fire fighter in Clifton. In 1997, Passaic incurred double the amount of sick leave as Clifton. In 1998, average sick leave per fire fighter in Passaic ran almost three times the sick leave per fire fighter in Clifton.

The FMBA introduced the Certification of Robert A. DeLuca, a Clifton fire fighter, which concluded that the City of Clifton has more than double the sick leave of Passaic. The City contends that DeLuca reached his conclusion by inflating Clifton's statistics by including terminal leave time thereby adding 1,300 sick days per year. About 10 fire fighters per year from 1996 though 1998 took the maximum 130 days of terminal leave benefits pursuant to Article XXVI of the Collective Bargaining Agreement between the City and the FMBA. (DeLuca Cert. ¶11.)

The City asserts that the inclusion of terminal leave benefits drastically and artificially inflates the City's sick leave by 3,900 days over three years. Clifton fire fighters receive terminal leave benefits as "a prelude to retirement." (J-3 at 43.) The amount of terminal leave benefits a fire fighter receives depends upon the amount of sick leave the fire fighter took during his employment. For the purpose of calculating terminal leave benefits, fire fighters accrue fifteen sick days per year. Prior to retirement, the City pays the fire fighter one-half of accrued but unused sick leave up to a maximum of 130 days. Thus, the more sick days a fire fighter takes during his or her employment, the less terminal leave benefits that a firefighter will receive. Fire fighters, therefore, receive terminal leave benefits because they accumulated their sick leave, instead of using it. (Dubravsky Cert. ¶4; J-3 at 43.)

The City contends that the FMBA also incorrectly subtracted the ten employees on terminal leave from the total number of fire fighters, increasing the average sick leave per fire fighter. (DeLuca Cert. ¶16.) The City contends that fire fighters on terminal leave remain employed by the City, and therefore should be included in the total number of fire fighters in calculating the average sick leave and that for purposes of calculations that 130 firefighters represent the total number of firefighters in the Clifton Fire Department. (Dubravsky Cert. ¶ 7.)

Additionally, the City contends that the figures for Passaic also needed to be doubled to convert from a 24/72-hour schedule to a 10/14-hour schedule. (Dubravsky Cert. at ¶ 7; Hill Cert. at ¶ 3.) Further, the City contends that the FMBA incorrectly asserted that the sick leave figures used for Passaic in C-34 include on-duty work-related injuries and accumulated terminal leave. (DeLuca Cert. at ¶ 12.) The City contends that the FMBA, which based its analysis on Passaic sick leave as contained in C-34, does not explain the basis for this statement. In direct contrast to the FMBA's assertion, the sick leave calculations for Passaic do not include on-duty or work related injuries or accumulated sick leave. (Hill Cert. at ¶3 (figures are based on an analysis of "sick leave" conducted by Passaic Fire Director Mingo.) Therefore, the City maintains that the 24/72-hour schedule imposes higher sick leave and minimum manning costs than the 10/14-hour tour.

The City also contends that the 24/72-hour schedule also increases costs related to transfers. A fire department may need to transfer a fire fighter from one shift to another. The fire department, however, cannot reduce the fire fighter's off-duty time as a result of the transfer. Consequently, the fire department must provide the fire fighter with an extra day off. The extra day off under the 24-hour tour equals 24 hours, while the extra day off under the ten-fourteen tour equals ten hours. (C-4 at 3.) As with sick leave, the 24-hour tour, therefore, imposes additional costs related to transfers upon the municipality than the 10/14-hour tour.

Discipline

The City contends that the 24/72 schedule detrimentally affects morale and follow through on discipline. Fire fighters work in close quarters with one another. The 24-hour tour – due to its length – increases the possibility of irritability and arguments between incompatible fire fighters whereas the significantly shorter 10/14-hour tour decreases the likelihood of conflict between fire fighters. (Tr. 386.) The City contends that the 24-hour tour also makes it difficult to follow through on disciplinary matters. Because of the comparatively scant overlap of tours and the infrequency of on-duty time under the 24/72 schedule, a superior officer may not be able to meet with the accused, investigate the incident, or prepare disciplinary charges in a timely manner. (Tr. 385; C-4 at 4.)

Fatigue

The City asserts that the adoption of the 24/72 schedule will result in decreased fire safety. The City contends that it is more likely that a fire fighter would be exposed to multiple working fires during one 24-hour shift than he would be on a ten or fourteen-hour shift thereby increasing fatigue. Fatigue, in turn increases an individual's susceptibility to injuries. "A straight 24-hour work day greatly increases the possibility of fatigue and therefore injuries with resultant additional medical and compensation expenses plus loss of time." (C-4 at 4.)

The City contends that the amendments to the regulations promulgated pursuant to the Public Employees' Health and Safety Act for Public Employees ("PEOSHA"), N.J.A.C. 12:100-10.1 *et seq.*, compounds a fire fighter's exposure to heat, further supporting a 10/14-hour tour over a 24/72-hour work schedule. The amended PEOSHA regulations require fire fighters to wear uniforms which improve protection from burns. The City contends that the improved protection, however, encapsulates the body, making it difficult for the fire fighters to expel heat. (Tr. 438-39.)

Before the effective date of the revised amendments, fire fighters wore three-quarter protective rubber boots with a steel toe, a turn-out coat about 35 inches in length, gloves, hood and helmet. Now, the uniforms require fire fighters to wear knee-high boots, bunker pants, a shorter turn-out coat, gloves, hood and helmet. Unlike the older uniforms, the bunker pants prevent air from circulating at the upper thighs and under the turn-out coat. The City also contends that the new helmet and longer flaps which protect ears and neck also prevent air circulation. The City contends that the polyester and cotton station wear fire fighters wore under their old uniforms kept them cooler than the current station wear, which is made of Nomex. The City asserts that the current uniforms essentially encapsulate the fire fighter to prevent burns. (Tr. 438-39; Pizzuti Cert. ¶8.)

The City asserts that the current uniforms support maintaining the 10/14-hour tour over the 24/72-hour tour to give fire fighters rehabilitation time after one-half the exposure. While the current uniforms increase a firefighters need for rehabilitation, the 24/72-hour tour provides for less rehabilitation during a longer tour. (Pizzuti Cert. ¶8.)

The City further cites the testimony of Dr. Carnow:

“The recent changes in fire fighting uniforms required by PEOSHA have decreased radiant and evaporative heat elimination because the new uniforms are more resistant to the passage of heat, and the body is more fully covered preventing airflow. Since heat is increased inside the new uniforms and the physical effort of wearing them is also greater than the older ones, the stressors have significantly increased. The new protective suits reduces the body’s ability to cool itself and increases the adverse impact of thermal and physical stressors. The 10/14-hour schedule reduces the doses of these stressors and fosters an earlier initiation of recovery than the 24 hour schedule” (C-38 at 8.)

Therefore, the new uniforms which reduce a fire fighter’s ability to cool himself, increase a fire fighter’s need for rehabilitation. The City maintains that the 24/72-hour schedule would decrease fire safety by delaying rehabilitation and doubling the exposure the

fire fighters would receive under a 10/14-hour tour, thereby decreasing the likelihood of a full recovery. (Tr. 730, 736, 738.)

The City cites Dr. Carnow's testimony concerning firefighter stress. Fire fighters face four stressors, mental stress, physical stress, thermal stress and chemical stress. Mental stress stems from a fire fighter's need to be ready to transition from rest to near maximum exertion at any moment without knowing when and without any warm-up period. (Tr. 745-746.) Fire fighters also face mental stress because they do not know what to expect upon arrival at a scene. They may have to engage in lifesaving efforts, see burn victims and engage in life-threatening hazardous operations. (Tr. 729-730.) Fire fighters also face physical stress. They wear protective clothing, boots and a self-contained breathing apparatus, which weighs more than fifty pounds. (Tr. 731; C-38.)

The City cites the following from Dr. Carnow's Report:

"the equipment used to fight a fire includes hoses that are heavy when empty and require great strength to control once the intense water pressure is turned on. The use of ladders and the activities involved in a rescue also require great physical strength and endurance." (C-38.)

The City cites Dr. Carnow's testimony that fire fighting is one of the most physically demanding activities. (Tr. 742.) The City further cites Dr. Carnow's testimony that in addition to mental and physical stressors, fire fighters face multiple thermal stressors. In addition to the current encapsulating uniforms which cut off a fire fighter's exposure to the air and, in turn, the fire fighter's ability to cool his or her body, fire fighters face a hot fire which can result in temperatures up to 400 degrees Fahrenheit. (Tr. 733; C-28 - Medical Requirements for Fire Fighters.) Summertime heat and intense physical activity further compound these thermal stressors. (Tr. 736, 753-54.) Finally, fire fighters face chemical stressors, when they breathe smoke and other products produced by fire which contain numerous poisons. (C-38 at 7.)

The City asserts that the 10/14-hour schedule provides two advantages over the 24/72-hour schedule. First, under the 10/14 hour schedule, firefighters will be exposed to the mental, physical, thermal and chemical stressors for one-half the time that they would be exposed under the 24/72-hour schedule. This results in smaller doses than under the 24/72-hour schedule, which, in turn, enables the body to recover more easily. Second, fire fighters would begin their recovery twice as soon under the 10/14-hour tour than under the 24/72-hour schedule. (Tr. 747-48.)

The City cites the following from Dr. Carnow's report:

"A firefighter who works a twenty-four hour shift has a long period of exposure (24 hours of potential exposure to multiple health hazards.) Therefore, he is more likely to require additional rehabilitation and faces a variety of potential health concerns as a result of multiple fire and emergency medical calls during one long shift than a fire fighter who works a ten/fourteen hour shift."

"Some firefighters are exposed to health hazards over a twenty-four hour long period, and initiate recovery at the end of this shift, twenty-four hours after starting work. It is true that the same health hazards are faced by firefighters working the shorter period (ten/fourteen-hours), however, they are exposed to these health hazards for about half as long a period and are likely to initiate recovery before the exposures accumulated to the point that they cause the body to be damaged." (C-38 at 8.)

The City points out that the FMBA failed to introduce any medical evidence in support of its position. Dr. Carnow's testimony remained un rebutted.

The City cites the following testimony of former Chief DeGroot who expressed his concern about the impact of a 24/72-hour schedule on fire fighter fatigue:

"We had many multiple workers where a fire would be an all-hands fire and would take place on the day shift, in other words, the shift that starts at eight and goes home at 1800 hours. And it was a welcome relief to have a fresh crew come on at 1800 hours and relieve those men who were already on the scene and still fighting this fire. It was a welcome sight to see the oncoming shift who relieved the men who were pretty beat who had already been on the scene for five, six, or seven hours already." (Tr. 382.)

The City argues that if Clifton had worked under the 24/72-hour schedule, the fire fighters who arrived at the scene during the day would have remained on duty until 8:00 a.m. the following day – despite their intense fatigue. Thus, the City contends that the adoption of the 24/72-hour work schedule would increase firefighter safety risks.

The City asserts that an increase in firefighter safety risks under the 24/72-hour tour will cause an increase in sick leave and an increase in on-the-job injuries. (Tr. 681, 748, 752.) The City submits that in 1998, Clifton has the lowest number of workers' compensation claims per officer in comparison with Paterson and Passaic, both of which work a 24/72-hour schedule. Specifically, Clifton has 25.0 claims per 100 officers while Paterson has 32.6 claims per 100 officers and Passaic has 27.7 claims per 100 officers. (C-34.) The City contends that these statistics support its assertion that fire departments on a 24/72 schedule will incur a greater number of work-incurred injuries as a result of the work schedule. (Tr. 680.)

Recall

The City contends that the 24/72-hour shift causes mutual aid and recall problems. Because firefighters need to commute to work half as often under the 24/72-hour tour than under the 10/14-hour tour, fire fighters tend to reside a further distance from the community in which they work. (Tr. 386, 634.) Frequently fire departments need to recall off-duty fire fighters to supplement or relieve those who responded to a first alarm. The City contends that the further away a fire fighters live, the longer it takes to report for duty. A longer recall response time would have minimal benefits because the fire fighter would report after the occurrence which required his recall. The City cites the testimony of former Chief DeGroot that generally, firefighters who live more than thirty miles away cannot report to work for

an emergency quickly enough to be useful. (Tr. 387.) Also, because fire fighters can only report for duty one day in four under the 24-hour schedule, their availability for recall is less than fire fighters who work the ten-fourteen hour schedule, where the shift changes twice each day. (C-4 at 9.)

The City contends that statistics from the Borough of Roselle, City of Passaic and the Village of South Orange illustrate that the 24/72-hour schedule encourages fire fighters to live further from their jobs. In 1989, the year before Roselle adopted the 24/72-hour schedule, 68 percent of their fire fighters lived in town. At present, about ten years later, only 32 percent of their fire fighters live in town. (C-21.) Additionally, as of December 8, 1999, under the 24/72 work schedule, only 23 of 109 Passaic fire fighters live in Passaic. (C-30.) The City notes that in contrast to Roselle and Passaic, 57 of 140 Clifton fire fighters currently live in Clifton. (C-31.) In percentage terms, 21 percent of the Passaic fire department lives in town, while 41 percent of the Clifton fire department lives in town. The City contends that this marked 20 percent difference relates directly to the different work schedules. (Tr. 612-613.)

Also, in South Orange, fire fighters worked a 24/72-hour tour from about 1981 until January 1990, when the Village ordered the department to switch to the 10/14-hour work schedule. (Tr. 1012.) The South Orange police officers worked a 4/4 schedule, which required their presence at work more frequently than the 24/72-hour firefighter work schedule. In 1990, the South Orange Fire Department had 54 police officers and 34 fire fighters. (Tr. 902-3; C-43.) Of the 54 police officers, 52 or 96 percent lived within fifteen miles of South Orange. Of the 34 fire fighters, twenty-four or 70 percent lived within fifteen

miles of South Orange. Thus, 26 percent more of the fire department lived more than fifteen miles from South Orange in comparison with the police department. The City contends that this differential directly correlates to the schedule worked by the police department and the fire department. (Tr. 848, 850.) Additionally, four of the 34, or 12 percent of the fire fighters lived beyond thirty miles from South Orange, which the City submits is too far to be useful in an emergency recall situation. For the above reason, the City advocates maintaining its current 10/14-hour work schedule.

Public Relations

The City contends that a change from the 10/14-hour tour to the 24/72 hour tour would harm public relations. The 10/14-hour tour generates more respect for the fire department than the 24/72-hour tour among citizens who work a traditional five-day work week. (C-4 at 5.) Additionally, the City contends that fire fighters who report for duty two times in eight days (not including time off) would have less of an interest in the community in which they work than a fire fighter who reported for duty twice as often. The City cites the observation of Clifton Deputy Chief Richard Baksa:

“More and more of the work force lives outside the confines of the community, and as such, have less of an interest, aside from the work aspect, towards this development. This is demonstrated in the high regard they have for the one and three work schedule. This limits the community relationship by one-half and further detaches the man from the job. This alone makes it more difficult to implement programs which could benefit the community.”
(C-13; Tr. 655-5.)

Thus, the City maintains that the infrequency with which a fire fighter reports for duty under the 24/72-hour schedule encourages detachment from the community in which the fire fighter works, and thereby harms public relations.

Management Opposes the 24/72 Schedule

The City emphasizes that, unlike other municipalities who voluntarily adopted the 24/72-hour schedule, its management officials vigorously oppose changing the shift from the 10/14-hour schedule to the 24/72-hour work schedule. Specifically, the City Manager Robert P. Hammer, Fire Chief John E. Dubravsky and the Mayor & Council of the City of Clifton steadfastly object to the implementation of the 24/72-hour work schedule. (Hammer Cert. at ¶2.) The City contends that the citizens of Clifton also oppose the 24/72-hour work schedule as demonstrated by petitions signed by 372 citizens of Clifton.

The City submits that an arbitration award compelling the City to switch from a 10/14-hour schedule, under which it maintains a well-run department, to a 24/72-hour schedule would require it to operate under a work schedule strongly opposed by its Chief, the City Manager, the Mayor & Council and its residents.

The City asserts that it presently runs an effective and efficient fire department. Specifically, the City's fire department has steadily increased its productivity. In comparing 1991 with 1998, the Clifton Fire Department increased its total fire responses from 2,334 to 4,254 and its total ambulance responses from 5,799 to 8,015. (C-31.) Therefore, in eight years, the fire department increased its responses to fires by slightly less than 100 percent and its responses to ambulance calls by slightly less than 50 percent. As of about December 7, 1999, the Clifton fire department had responded to 8,122 ambulance calls, already exceeding its 1998 total ambulance responses by 107 calls. Because the City steadily employed about 140 fire fighters from 1991 through 1998, it increased its productivity in response to an increase in calls without a corresponding increase in manpower. (Tr. 647.)

The City further asserts that the Clifton Fire Department also functions with minimal overtime and does not face any sick leave abuse problems. (Tr. 661-62.) In other words, as City Manager Robert Hammer emphasized in opposing a change in the shift schedule, “if it ain’t broke, don’t fix it.” The City submits, that the arbitrator, in reaching a reasonable determination of the work schedule issue, should strongly consider that Clifton’s upper management, the very individuals who would be responsible for implementing the work-schedule change and ensuring its success, strongly oppose the 24/72-hour work schedule.

In summary, the City asserts that, based upon a reasonable determination of the issues, the arbitrator should reject the FMBA’s proposal to adopt a 24/72-hour work schedule. The City further asserts that the 24/72-hour work schedule is not in the best interest and welfare of the public because it will cause training problems, reduce productivity, increase sick time, decrease fire safety, impose recall problems, and harm public relations. Finally, those responsible for managing the Fire Department, including the Mayor & Council, the City Administrator, and the Fire Chief, strongly oppose the implementation of the 24/72-hour work schedule.

The City submits that the analysis of Arbitrator Joel Weisblatt in Passaic, even though it dealt with a Police Schedule change, is applicable in this matter:

“The PBA presented some intriguing evidence that there may be operational benefits to converting, at least the patrol division, to a 4/4 work chart. However, on balance the record did not prove, even by a preponderance of the evidence that the alteration would be in the public interest. Indeed, it fell short in providing sufficient facts to be reasonably certain that the operational concerns of the Police Department administration were unfounded. Areas of greatest concern were questions of supervision and administration under the proposed schedule; issues of special details and units; issues related to traffic details; issues related to the detective bureau and concerns over court overtime. While the PBA adroitly addressed these elements in argument, there was completely inadequate evidence for this Arbitrator to conclude that the proposed change is in the public interest.”

The City observes, as noted above by Arbitrator Weisblatt, that a shift schedule change carries very heavy burden. The City concedes that, while the Union was “adroit” in its arguments, it just failed to meet this heavy burden to conclude that the proposed change is in the public interest especially given the depth of the opposition by the Clifton Management Team including the Fire Chief, City Manager and Mayor and Council. This concludes the City’s arguments regarding the statutory factor concerning *the interest and welfare of the public*.

Comparability and Overall Compensation

The Act requires the arbitrator to consider a comparison of the wages, salaries, hours, and conditions of employment of the employees involved in the arbitration proceedings with the wages, hours, and conditions of employment of other employees performing the same or similar services and with other employees in (a) in private employment in general; (b) in public employment in general; (c) in public employment in the same or similar comparable jurisdictions.

The City contends that focusing this section on work schedules, the 24/72-work schedule does not compare with work schedules in the private sector where individuals generally work eight hours per day, five days per week. Other than fire fighters, no one, including airplane pilots, bus drivers and truck drivers work for 24 hours straight. (Tr. 641.) The City contends that the 10/14-hour schedule more closely resembles private sector work schedules than the 24/72-hour work schedule.

The FMBA introduced evidence concerning other departments which operate under the 24/72-hour shift. To support its requested schedule change, the FMBA introduced testimony of the upper management of several fire departments which operate under the 24/72-hour schedule: Louis Imparato, Chief of the Passaic Fire Department; Frank Caswell,

Sr., Chief of the Hillside Fire Department; Robert F. Hill, Chief of the Roselle Fire Department, and Paul Chrystal, Battalion Chief of the Union Fire Department. In all of these departments, the 24/72-hour schedule received the support of upper management.

The City notes that unlike Passaic, Hillside, Roselle and Union, upper management in Clifton does not support the 24/72-hour schedule. Similarly, the City contends that the FMBA's request for the 24/72-hour schedule in Springfield and Millburn did not succeed, where the 24/72-hour schedule did not receive the Chief's support or the support of the Mayor & Council. (Sheola cert. and Gordon cert.)

The City points out that many fire departments continue to operate under the 10/14-hour schedule. These departments include Atlantic City, Bloomfield, Brigantine, Englewood, Hackensack, Jersey City, Kearney, Madison, Millburn, North Plainfield, Nutley, Pleasantville, Springfield, Summit, Trenton, Ventnor City, and West Windsor. (C-32 & C-55.) The City asserts that maintaining the 10/14-hour work schedule in Clifton compares favorably with the work schedule maintained in other New Jersey fire departments.

The Lawful Authority of the Employer

N.J.S.A. 34:13A-16g (5) requires the Interest Arbitrator to consider the "lawful authority of the employer" in determining whether the public employer or the union has proposed the more reasonable economic package. The Reform Act specifically requires the Interest Arbitrator to consider, in evaluating this factor, "the limitations imposed upon the employer by [The New Jersey Local Government Cap Law (the "Cap Law"), N.J.S.A. 40A:4-45.1 *et seq.*]" N.J.S.A. 34:13A-16(g) (5). The City asserts that this section is difficult to apply to an issue such as work schedules which do not involve direct additional costs.

**The Financial Impact on the Governing Unit, its
Residents and Taxpayers**

N.J.S.A. 34:13A-16g (6) requires the Interest Arbitrator to consider the financial impact on the governing unit, its residents and taxpayers in determining whether the municipality or the union presents the more reasonable final offer. The City asserts that similar to the “lawful authority of the employer” statutory factor discussed above, this statutory factor is also a difficult one to apply to an issue such as work schedules which does not involve direct additional costs.

The Consumer Price Index

N.J.S.A. 34:13A-16g (7) requires the Interest Arbitrator to consider the consumer price index (“CPI”) in determining reasonableness of the party’s economic proposals. Again, this statutory factor is a difficult one to apply to an issue such as work schedules which does not involve direct additional costs.

Continuity and Stability of Employment

N.J.S.A. 34:13A-16g (8) requires an Interest Arbitrator to consider the “continuity and stability of employment” in determining a reasonable economic package. Like the above factors, this section is a difficult one to apply to an issue such as work schedules which does not involve direct additional costs.

Conclusion

In conclusion, based upon a reasonable determination of the issues, the City maintains that the FMBA's proposal to adopt a 24/72-hour work schedule should be rejected. The City asserts that the 24/72-hour work schedule is not in the best interests and welfare of the public because it will cause training problems, reduce productivity, increase sick time, decrease fire safety, impose recall problems, and harm public relations.

Finally, the City reiterates that those responsible for managing the Fire Department, including the Mayor & Council, the City Administrator, and the Fire Chief, strongly oppose the implementation of the 24/72-hour work schedule. As a result, the City of Clifton respectfully requests the arbitrator to issue an award which rejects the FMBA's proposed implementation of a 24/72-hour work schedule and which maintains the 10/14-hour work schedule.

DISCUSSION AND ANALYSIS

The arbitrator is required to decide a dispute based on a reasonable determination of the issues, giving due weight to the statutory criteria which are deemed relevant. Each criterion must be considered and those deemed relevant must be explained. The arbitrator is required to provide an explanation as to why any criterion is deemed not to be relevant.

I have carefully considered the evidence which has been presented as well as the arguments of the parties. I have examined the evidence in light of the statutory criteria. Certain factors have been found relevant in this matter although, as discussed below, the weight I have given to each factor varies.

The parties did not consider all of the factors to be relevant. The parties agree that the 24/72-hour shift schedule is a non-economic issue. PERC arbitrators have determined that the 24/74-hour shift schedule is a “non-economic” item and, therefore, not all of the statutory criteria are relevant in determining this issue. (See awards of Arbitrator John Sands in New Brunswick (U-23H); Arbitrator Martin Scheinman in East Orange, (U-123); and Arbitrator Jeffrey Tener in North Bergen, (C-1.)

N.J.S.A. 34:13A-16g (5) requires the Interest Arbitrator to consider the *lawful authority of the employer* in determining whether the public employer or the union has proposed the more reasonable economic package. The Reform Act specifically requires the Interest Arbitrator to consider, in evaluating this factor, “the limitations imposed upon the employer by [The New Jersey Local Government Cap Law (the “Cap Law”), N.J.S.A. 40A:4-45.1 et seq.]” N.J.S.A. 34:13A-16(g) (5). Both the City and the FMBA agreed that this factor is difficult to apply to a work schedule issue which does not involve any additional costs. Neither party offered any evidence on this factor. I find that the *lawful authority of the employer* is not implicated in this matter.

N.J.S.A. 34:13A-16g (6) requires the Interest Arbitrator to consider the *financial impact on the governing unit, its residents and taxpayers* in determining whether the municipality or the union presents the more reasonable final offer. Again, both parties agreed that this factor is difficult to apply to a work schedule issue which does not involve any additional direct costs and therefore has no *financial impact on the governing unit, its residents and taxpayers*. The parties provided evidence and argument concerning the potential impact on sick time and overtime (potential indirect costs or cost savings) and to that extent I find that the *financial impact* factor is relevant in this matter. This will be discussed in more detail below.

N.J.S.A. 34:13A-16g (7) requires the Interest Arbitrator to consider the *consumer price index* (“CPI”) in determining reasonableness of the party’s economic proposals. This statutory factor is a difficult one to apply to an issue such as work schedules which does not involve direct additional costs. Again, both parties agreed that this factor is difficult to apply to a work schedule issue which does not involve any additional costs and any relationship to the CPI. Neither party offered any evidence on this factor. I find that the *consumer price index* is not implicated in this matter.

The only stipulations in this matter are included in the parties’ Memorandum of Agreement (“MOA”) providing for a four-year agreement for the period January 1, 1999 to December 31, 2002. The parties agreed in the MOA that the sole issue to be submitted to interest arbitration “shall be the 24/72 shift schedule issue.”

The remaining statutory factors will be discussed in detail in analyzing the evidentiary record.

It is undisputed that the burden on a shift schedule issue is on the party seeking to change the status quo. The FMBA, in seeking to change the existing 10/14-hour shift

schedule to a 24/72-hour shift schedule, bears a very high burden. Several arbitrators have commented on this burden. Interest Arbitrator Jeffrey Tener, in denying the Township of North Bergen's proposal to change the existing 24/72-hour work schedule back to a 10/14-hour work schedule, found:

“The party seeking to change the status quo, particularly on an issue as important as the work schedule, bears a very heavy burden.” (C-1, 18.)

In Passaic, Arbitrator Joel Weisblatt, denied the PBA's schedule change proposal, noting that the party seeking to alter the work schedule bears a “very heavy burden.” (City of Passaic and Passaic PBA Local 14, Docket No. IA-99-6 at 36.)

The Public Employment Relations Commission (“PERC”) has also discussed the issue of “burden” in interest arbitration matters:

“Where an appeal does challenge an arbitrator's ruling on a non-salary proposal to change an employment condition, we will consider whether the arbitrator applied the traditional arbitration principle that the party proposing a change must justify it. . . . Application of that standard is particularly important where, as here, one party proposes to change a work schedule that has been in effect since 1970 and has implications for the overall management and operations of the fire department.

* * *

Therefore, before awarding a major work schedule change, an arbitrator should carefully consider the fiscal, operational, supervision and managerial implications of such a proposal, as well as its impact on employee morale and working conditions. (Township of Teaneck, 23 NJPER 450 ¶3019 1999 at 454-55.)

In Teaneck, the Commission also found that if the proposed work schedule would result in superior officers and rank-and-file firefighters working different shifts, the interest arbitrator must consider whether supervision would be impaired by operating two different shift schedules. The FMBA bargaining unit includes all rank-and-file fighters and superior officers. Therefore, my decision in this matter will not result in superior officers and rank-and-file firefighters working different shifts

In a Scope of Negotiations decision in Maplewood, the Commission noted that the 24/72 schedule was a common one nationally and in New Jersey. It held that a union could propose such a schedule in interest arbitration, where the arbitrator could evaluate the union's arguments that the schedule improved safety and increased productivity, as well as the employer's arguments that the schedule might affect recalls; limit training; increase fatigue; and diminish commitment. Maplewood stressed the arbitrator's obligation to consider the public interest and all the statutory criteria. See Maplewood Tp., P.E.R.C. No. 97-80, 23 NJPER 106 (¶28054 1997).

The FMBA and the City have both addressed all or some of the above standards. They have also addressed the statutory factors with a pronounced emphasis on *the interest and welfare of the public* factor. In full consideration of the above standards and the relevant statutory factors, I shall now review and evaluate the parties' arguments.

The FMBA is seeking a 24/72-hour shift schedule to replace the current 10/14-hour shift schedule. Under a 24/72-hour shift schedule, firefighters would work an eight-day tour of one 24-hour day followed by 72 hours (3 days) off, followed by another 24-hour day on and three days off. Under a 10/14 schedule, unit members work an eight-day tour of two ten-hour days (8:00 a.m. to 6:00 p.m.), followed by a day off and two 14-hour night shifts (6:00 p.m. to 8:00 a.m.), followed by three days off. Under a 24/72 or 10/14 schedule, an officer works the same number of hours: 48 hours every eight days and, over eight weeks, an average of 42 hours per week. The Legislature has authorized paid fire departments to implement a work schedule where officers and firefighters are on duty 24 hours a day. See N.J.S.A. 40A:14-46.

I note at the outset that this issue is vigorously proposed by the FMBA and just as vigorously opposed by the City which seeks to maintain the status quo. The parties have also vigorously argued the merits of their respective positions. The record is massive and includes

nearly 200 exhibits and testimony and certifications from nearly thirty individuals over eight days of hearing. The transcript includes more than 1,100 pages of testimony. The parties filed lengthy post-hearing briefs.

Interests and Welfare of the Public

The statute specifically requires the Interest Arbitrator to consider, in evaluating this factor, “the limitations imposed upon the employer by [The New Jersey Local Government Cap Law (the “Cap Law”), N.J.S.A. 40A:4-45.1 et seq.]” N.J.S.A. 34:13A-16(g) (5). Both the City and the FMBA agreed that this aspect of the *interest and welfare of the public* factor does not apply to a work schedule issue which does not involve any additional costs. This was clearly expressed by Interest Arbitrator Jeffrey B. Tener in his interest arbitration award between the Township of North Bergen and the IAFF:

“It is difficult to apply the statutory criteria to an issue such as this one (change in the work schedule) which does not have any direct economic consequences in terms of dollars or hours worked.” (C-1, at 16.)

The City agrees that this interest arbitration matter does not “entail direct financial ramifications.” The City maintains that this interest arbitration “primarily focuses on the Clifton Fire Department’s ability to maximize safety for its fire fighters and the general public.” The FMBA agrees with the City that there is no economic impact or cost differential in changing to the 24/72-hour shift schedule from the 10/14-hour shift schedule. The FMBA asserts that fire department work schedules do impact the *interest and welfare of the public*. The FMBA maintains that the evidence shows that the 24/72-hour shift schedule will serve the public interest and welfare in that the new shift schedule will increase productivity, reduce certain firefighter and civilian injuries due to fatigue, reduce the costs due to sick leave and overtime, and improve firefighter morale.

I turn now to the arguments raised by the parties with respect to many issues which are appropriately discussed under the *interest and welfare of the public* factor.

Training

The City contends that the 24/72-hour work schedule negatively impacts training since Fire departments train through repetition and unlike the 10/14-hour tour, the 24/72-hour tour precludes training on consecutive days. Further, under the 10/14-hour work schedule, fire fighters report for duty four times in eight days whereas under the 24/72-hour work schedule, fire fighters report for duty two times in eight days. The City asserts that the 10/14-hour work schedule provides double the opportunities for repetitive training than the 24/72-hour work schedule.

The City contends that a fire department cannot train for extended periods during a 24-hour tour due to attention-span limitations. Additionally, the 24/72-hour work schedule will result in the elimination of night training because of fatigue and restlessness after fire fighters have already worked for about ten or more hours. Moreover, under the 24/72-hour tour, a fire department may need to cancel training due to a very busy day, or inclement weather delaying the training for at least four days, whereas under the 10/14-hour work schedule, the fire department could simply postpone the training until the following day.

The FMBA asserts that firefighter training is enhanced under the 24/72 hour schedule. Under the 24/72-hour shift schedule, training can occur during the day or in the evening. Under the 24/72-hour shift schedule, training occurs every fourth day where, in most communities that utilize the 10/14-hour shift schedule training generally occurs only every six days on the day tour.

The FMBA provided uncorroborated testimony from many Fire Chiefs that currently operate under a 24/72-hour shift schedule attesting to the improved ability to provide training.

Union Township Battalion Chief Chrystal:

“We believe training is better because it’s more consistent. There is no breakup of training in the change of shifts. Normally in the 10/14 hour day, one changes shifts around six o’clock. So if you have a training scheduled, you either have to cut it short or change it.

We found that in training we were able to see the firemen twice a week. In the 10/14, sometimes as much as two weeks could go by before the training officer who is on weekday duty, two weeks could go by before training officer could see a particular tour. What we found here was that at least once a week, a training officer would see you, sometimes twice a week.”

(Tr. 236-237.)

The FMBA aptly notes that all of the Fire Chiefs who testified at the hearing had experience with both the 24/72-hour shift schedule and the 10/14-hour shift schedule whereas current Clifton Fire Chief Dubravsky and former Chief DeGroot have only worked under a 10/14-hour shift schedule. The FMBA correctly points out that all of the Fire Chiefs testified that Chief Dubravsky’s concerns regarding his inability to meet training demands under the 24/72-hour shift schedule were unsubstantiated based on their own experiences.

Hillside Chief Caswell clearly stated this:

Well, we covered just about everything that’s required . . . actually we cover everything that’s required by law. In addition, there are areas that are specific to our Township on the 24-hour schedule. If there is something that needs to be covered the following day, then it’s covered the following day. But for the most part, we set up our programs to anticipate that. In the 24-hour schedule gives us more leeway than the 10 and 14s did. Because if there is an important point that we have to cover and it’s getting close to say 5:30 in the evening, well, we just continue on that point or we will break for supper, men will go back to that point after supper.

Yes, my experience is different from the Chief’s [Dubravsky] speculation. Even on 10 and 14's, there are certain topics that require more than one day or two days or four days coverage, especially if you predominantly start off your training sessions with classroom. And that might take four hours, six hours or eight hours, depending on the evolution of your teaching. So that you start your classroom off, you do your classroom; the guys have a chance to absorb it and then the following work day, 24-hour day, you either have more classroom or you go right out to the field.

Or you can split it up. There are different ways that you can work it. You can start your classroom in the morning for four hours, in the afternoon you do your evolutions. It depends what type of evolution that we’re trying to teach and where we want to go with it. But it’s very relaxed as far as

setting up your schedules. And I find that the - - I found that the 24-hour schedule was very conducive to training. (Tr. 87-88).

Roselle Fire Chief Hill testified that training time has about “doubled” since Roselle Fire Department changed from the 10/14-hour shift schedule to the 24/72-hour shift schedule. (Tr. 133; 138.)

Passaic Chief Imperato testified that Passaic fire personnel train every day for at least two hours and that the 24/72-hour shift schedule provides flexibility to accommodate training needs based on workload since the training can be put off to later in the day if something comes up. He also stated that the training officer has sufficient time to provide training under the 24/72-hour shift schedule. (Tr. 173-74; 180.)

Elizabeth FMBA President Lavin testified that Deputy Fire Chief Patrick Tanzola, Training Officer for the Elizabeth Fire Department, favors the 24/72-hour shift schedule and stated that the 24/72-hour shift schedule has enhanced Elizabeth’s Fire Department training effectiveness (Tr. 270-272.)

The record includes a memorandum from the Clifton Training Officer stating that in July of 1999 “organized training through this office has been below par or non-existent to an extent” and further stating that “time constraints and the expansion of the Training Officer’s role will not make the situation better in the near future.” The memorandum further stated that “more of the training must be assumed by the Deputy Chiefs and their respective company officers.” (U-119.)

It is undisputed that training is an essential component of effective firefighting.

“A large number of firefighters are killed and injured every year in this country. Some injuries and deaths occur because of the dangerous situations firefighters confront, while others occur because of the inadequacies of training and safety.” (C-51.)

I find that the FMBA has shown through the testimony of the Fire Chiefs that training will not be limited or curtailed under a 24/72-hour shift schedule. The Chiefs’

testimony, as well as the testimony of State President Lavin concerning their experience under both the 10/14-hour and the 24/72-hour shift schedules shows that training under the 24/72-hour shift schedule is enhanced and is more flexible than the 10/14-hour shift schedule. The City did not offer any testimony or documentation to show that training has been limited in any way in the substantial number of fire departments that have switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule.

Fatigue

The issue of fatigue is an extremely important issue since it directly impacts on the delivery of effective firefighting services and the safety of firefighters and the public. The Union Township Study reported significant decreases in firefighter (23%) and civilian injuries (38%) following the implementation of the 24/72-hour shift schedule. Union Township Battalion Chief Chrystal attributed this reduction to the additional time (72 hours) to “rehab after a strenuous tour of duty.” Chrystal testified that the 10/14-hour shift schedule has a more adverse effect on firefighter fatigue and, thus, civilian and firefighter injuries. (Tr. 241-242; U-33.)

Passaic Fire Chief Imperato testified that the 10/14-hour shift schedule has a more adverse effect on firefighter efficiency, firefighter fatigue and firefighter safety as compared to the 24/72-hour shift schedule. Chief Imperato based his testimony primarily on the impact of firefighters having to work two consecutive 14-hour night tours of duty with only a ten-hour period between these fourteen-hour shifts. Chief Imperato convincingly testified that firefighters reporting to duty for the second 14-hour night tour may have been involved in family obligations, child care, social activities, etc., and that such a firefighter may already be fatigued or tired from his day events before beginning the 14-hour night tour. (Tr. 166-168; 185.)

I find that this is a major deficiency in the 10/14-hour shift schedule which creates the strong potential for increased fatigue on the job. There is simply no way for fire

supervisors to adequately control this on the 10/14-hour shift schedule. The fatigue factor is compounded when a firefighter is required to report to duty for a second 14-hour shift with only a 10-hour break following the first 14-hour shift. This is less likely to be an issue when a firefighter reports to duty after being off for 72 hours. I am aware that an irresponsible firefighter could report to work without adequate sleep even after being off for 72 hours but that will occur much more frequently when the break is only 10 hours. Even the most responsible firefighters will have difficulty reporting to work fully rested after working two fourteen-hour shifts with only a ten-hour break between. This deficiency in the 10/14-hour shift schedule will increase fatigue more than the 24/72-hour shift schedule which provides a 72-hour break between shifts.

The testimony of other Fire Chiefs confirmed this deficiency. South Orange Chief Markey testified that the problem with the 10/14-hour shift schedule is “you always have the likelihood of having a busy night on the first night, going home for ten hours and then coming back for the second night and getting hit again.” (Tr. 1015.) Roselle Chief Hill testified that there was less firefighter fatigue on the 24/72-hour shift schedule because he has a “fresh” firefighter crew reporting for duty. Chief Hill testified:

“Well, I found since we’ve been on the 24-hour shift that having a fresh firefighter after 72 hours off has certainly made the job much easier for me as Chief than on the 10 and 14. The fatigue factor based on what firefighters might do in their off-duty time before they came into work at night on the 10 and 14 hour shift was always a problem
. . . on the 24-hour shift, they come in at 8 o’clock, they’re fresh. I control their activities during the daytime and at nighttime. If we have training scheduled during the day, if we have fires, I provide down time for them so they can get the proper rest and they can provide the proper protection later on if anything else does occur . . . I have controlled the fatigue factor if there was any fatigue factor. That’s my job as the manager of the fire department, to control that. (Tr. 131-132.)

Hillside Fire Chief Caswell testified that the 24/72-hour shift has a favorable impact on firefighter fatigue:

“The fatigue factor, we don’t have a problem with the fatigue factor. Basically the 24-hour schedule works a little bit better for us [Hillside]. We have a little bit better control over our firefighters because they are in the station for 24 hours a day. If they are not in the station 24 hours a day [under the 10/14-hour shift], they can be working second jobs, they take care of their family, they can go to weddings, do whatever they want to do, and we have no control over it.” (Tr. 70; U-34.)

Chief Caswell also testified that the longer period of time off between shifts allows the firefighter to get the smoke out of his system, or any other toxins he may come into contact with while on duty. (Tr. 71-72.)

“The longer period of time [72-hours] enables the firefighter, if he did have a particularly busy day on the 24-hours that he worked, to recoup, to relax and get the toxic smoke out of his system or any chemicals that he might have come in contact with. The abuse of the physical work from that time, he has three days to recoup.” (Tr. 71-72.)

The City asserts that the adoption of the 24/72 schedule will result in decreased fire safety. The City contends that it is more likely that a fire fighter would be exposed to multiple working fires during one 24-hour shift than he would be on a ten or fourteen-hour shift thereby increasing fatigue. The City did not offer any testimony or documentation to show that fatigue has increased in any of the substantial number of fire departments that have switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule. The City did offer an opinion from the “New Jersey Career Fire Chiefs’ Association”:

“A straight 24-hour work day greatly increases the possibility of fatigue and therefore injuries with resultant additional medical and compensation expenses plus loss of time.” (C-4 at 4.)

However, this exhibit includes no evidence of any empirical analysis of communities that operate under the 24/72-hour shift schedule. The City had the opportunity (and the obligation) to provide evidence of increased fatigue in those communities that have switched to the 24/72-hour shift schedule. As is amply demonstrated in the section on *comparability*, there are many communities that the City could have analyzed but it failed to do so. The City’s general arguments in this regard are unpersuasive and unsupported by any evidence in the record.

A corollary issue is the impact of the new PEOSHA uniforms and firefighting gear and its potential relationship to fatigue. The amended PEOSHA regulations require fire fighters to wear uniforms which improve protection from burns. The City contends that the improved protection, however, encapsulates the body, making it difficult for the fire fighters to expel heat. The City contends that the amendments to the regulations compounds a fire fighter's exposure to heat. The City asserts that the current uniforms essentially encapsulate the fire fighter to prevent burns. The City argues that the current uniforms support maintaining the 10/14-hour tour over the 24/72-hour tour to give fire fighters rehabilitation time after one-half the exposure. In its brief, the City described the differences between the "old" uniforms and the now required uniforms. The City also relies on the following excerpts from the report of its expert witness, Dr. David R. Carnow:

"The recent changes in fire fighting uniforms required by PEOSHA have decreased radiant and evaporative heat elimination because the new uniforms are more resistant to the passage of heat, and the body is more fully covered preventing airflow. Since heat is increased inside the new uniforms and the physical effort of wearing them is also greater than the older ones, the stressors have significantly increased. The new protective suits reduces the body's ability to cool itself and increases the adverse impact of thermal and physical stressors. The 10/14-hour schedule reduces the doses of these stressors and fosters an earlier initiation of recovery than the 24 hour schedule" (C-38 at 8.)

I find, as Arbitrator Tener did in North Bergen, that the City did not provide any evidence that the impact from the change in shift schedule will be more negative in Clifton than anywhere else as a result of the new PEOSHA-mandated uniforms. Dr. Carnow also testified on this issue before Arbitrator Tener in the North Bergen matter. Arbitrator Tener's specific finding:

"That change [in uniform requirements] which was accomplished by January, 1995, applies not only to firefighters of North Bergen but to all firefighters in New Jersey. There is certainly no reason to believe that the impact of that change will be more negative in North Bergen than elsewhere. There also is no correlation between the injuries since the adoption of the new gear and the work schedule. There is no indication that other municipalities have changed schedules as a result of new requirements (PEOSHA). Dr. Carnow was not

able to link the 24/72-hour shift schedule with any injuries and DiPaolo [former North Bergen Chief] agreed that there had been no reports in North Bergen of heart attacks, strokes or medical reports of stress as a result of the use of the new gear. In short, there was much speculation by the Township's witnesses regarding the new uniforms and a connection with the 24/72-hour shift schedule, but this was not supported with hard evidence." (Township of North Bergen and North Bergen IAFF Local 1387, Docket No. IA-96-107 at 17.)

There is simply no basis to conclude that the PEOSHA uniform requirements will result in increased injuries or fatigue. PEOSHA was certainly aware that the 24/72-hour shift schedule was the most common shift schedule used in New Jersey when it promulgated its new uniform requirements. The City did not offer any testimony or documentation to show that fatigue has increased in any of the substantial number of fire departments that have switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule because of the PEOSHA mandated uniform changes. The City has failed to show any correlation between firefighter fatigue or injuries and the 24/72-hour work schedule since the adoption of the new PEOSHA mandates. The City's arguments regarding additional fatigue caused by PEOSHA mandated uniform changes on the 24/72-hour shift schedule are not supported by any evidence in the record and are rejected.

The City also relies on Dr. Carnow's testimony that in addition to mental and physical stressors, fire fighters face multiple thermal stressors and chemical stressors. The City asserts that the 10/14-hour schedule provides two advantages over the 24/72-hour schedule. First, under the 10/14 hour schedule, fire fighters will be exposed to the mental, physical, thermal and chemical stressors for one-half the time that they would be exposed under the 24/72-hour schedule. This results in smaller doses than under the 24/72-hour schedule, which, in turn, enables the body to recover more easily. Second, fire fighters would begin their recovery twice as soon under the 10/14-hour tour than under the 24/72-hour schedule. (Tr. 747-48.)

The City cites the following from Dr. Carnow's report:

"A firefighter who works a twenty-four hour shift has a long period of exposure (24 hours of potential exposure to multiple health hazards.) Therefore, he is more likely to require additional rehabilitation and faces a variety of potential health concerns as a result of multiple fire and emergency medical calls during one long shift than a fire fighter who works a ten/fourteen hour shift."

"Some firefighters are exposed to health hazards over a twenty-four hour long period, and initiate recovery at the end of this shift, twenty-four hours after starting work. It is true that the same health hazards are faced by firefighters working the shorter period (ten/fourteen-hours), however, they are exposed to these health hazards for about half as long a period and are likely to initiate recovery before the exposures accumulated to the point that they cause the body to be damaged." (C-38 at 8.)

Dr. Carnow's statements in his report are general statements that when read in isolation appear to merit consideration. Dr. Carnow equates the longer 24-hour shift with a higher potential for exposure and therefore more likely to require rehabilitation. This is certainly true but it is also true that firefighters working two consecutive 14-hour shifts, which equate to 28 hours in a 38-hour period, are also exposed to a similar exposure requiring rehabilitation. Although Dr. Carnow disagreed that a 72-hour off duty period is the necessary recuperation time for firefighters to rid their bodies of fumes, smoke and toxins, he could not testify to another "optimal" recuperation time. Dr. Carnow did testify that 72-hours off duty is better than 10-hours off duty between the day and evening shifts under the 10/14-hour shift schedule. (Tr. 797-799; 804-5.)

Testimony at the hearings confirms that rehabilitation is essential and required in extended on-the-scene firefighting. This is used in all Fire Departments to reduce a firefighter's exposure to health hazards such as toxic smoke or chemicals. Hillside Chief Caswell's testimony favors the 24/72-hour shift schedule since "the longer period of time [72-hours] enables the firefighter to recoup, to relax and get the toxic smoke out of his system or any chemicals that he might have come in contact with." Chief Caswell went on to state that after exhaustive "physical work" a firefighter "has three days to recoup." (Tr. 71-72.)

Paterson Fire Chief Pasquariello agreed that the 24/72-hour shift provides additional time for firefighters to recuperate after an injury:

“For example, if one of our people is injured, they have 72 hours to recuperate. Whereas if this same firefighter were injured working the first night of a 10 & 14 schedule, he would only have 10 hours to recoup and most often, this is not sufficient time to recover therefore he must be placed on injury leave. This creates greater costs for the city, mainly due to manpower replacement.”

Union Township Battalion Chief Chrystal also spoke of the advantages of the 24/72-hour shift schedule regarding rehabilitation and recuperation:

“the reduction in overtime is the ability under the 24 to better manage situations . . . to better manage recuperative power, to better manage rehab. The 72 then to recuperate further reduces the sick time and that home illness that generally creates overtime.” (Tr. 245.)

Dr. Carnow lacked knowledge regarding the specific work schedules and the operations of the Clifton Fire Department. Dr. Carnow was not certain of the average hours worked in fire departments which utilize the 24/72-hour shift or the 10/14-hour shift schedule. Dr. Carnow inaccurately testified about the weekly hours under both of the shift schedules. Dr. Carnow did not know how many fire companies there were in Clifton or the difference between a firehouse and a fire company. Dr. Carnow did not know how many firefighters work each tour. Dr. Carnow did not know and did not use the “actual” Clifton Fire Department data or “actual” fire company response times in developing his opinion. (Tr. 772-773; 776; 779.)

Dr. Carnow’s testimony and expert report is not based on any empirical evidence or research of any of the many communities that have switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule. The following excerpts from Dr. Carnow’s testimony bear this out:

Q. Do you have any opinion as to -- you haven't taken a look then at the actual experience of firefighters on a 10 and 14 schedule who have switched to a 24-hour schedule, have you?

A. No.

Q. So you actually have not made a study of results that may have taken place, good, bad, where that has actually taken place, that switch, have you?

A. No.

Q. Do you know of any fire departments where such a switch has taken place?

A. Not for certain.

Q. You haven't done any statistical analysis of injuries, sick leave incidents, of departments as compared between a 10 and 14 schedule working 44 hours as you described it and a 24-hour schedule working 56 hours as you described it?

A. I've performed no such research, no.

Q. Thank you. And do you have any specific research with regard to the uniforms which you say are so oppressive and increase the likelihood that there will be a need for additional rehabilitation time? Have you actually done research which demonstrates that to be true on an actual basis treating firefighters?

A. I haven't performed research.

Dr. Carnow's admission that he has done no research or analysis of those communities that have switched to the 24/72-hour shift schedule undermines the credibility and accuracy of his testimony and favors a finding in favor of the extensive testimony from the various Fire Chiefs. These Fire Chiefs all convincingly testified in favor of the 24/72-hour shift schedule and their testimony was based on experience under both the 10/14-hour shift schedule and the 24/72-hour shift schedule. Neither former Chief DeGroot nor current Chief Dubravsky ever worked under both the 10/14 and 24/72 shift schedules and thus were unable to provide any testimony comparing the different shift schedule based on their own experiences. Neither former Chief DeGroot nor current Chief Dubravsky conducted any

analysis or research of those communities that have switched to the 24/72-hour shift schedule. Certainly there is a significant amount of data that they could have examined — particularly with an issue like “fatigue” which is a significant safety issue which impacts not only on the safety of firefighters but also on the safety of the citizens of Clifton. Arbitrator Begin made a similar finding in Teaneck:

“Despite the fact that there are numerous New Jersey communities with the 24/72 schedule whose experiences could have been mined to provide support for hypotheses about negative aspects of the schedule, the Towns offered no direct evidence from those communities.” (Township of Teaneck and Teaneck FMBA Local 42, Docket No. IA-97-45 at 34.)

For all of the above reasons, I find that the 24/72-hour shift schedule will not increase fatigue and will provide a more reasonable schedule that will improve safety by providing for 72 hours off between shifts and eliminating the two consecutive 14-hour shifts with only ten hours between shifts.

Sick Leave/Overtime

The findings in the Union Township Study, a comparison of Union Township firefighters’ use of sick leave over a 12-year period from 1974 through show that sick leave declined by 35% under the 24/72-hour shift schedule:

- Through years 1974 through 1979 under the 10/14-hour shift schedule, sick leave allowance/or illness totaled 4,997 days. During the years 1980 through 1985, under the 24/72-hour shift schedule, sick leave allowance/or illness totaled 3,244 days.
- Accordingly, sick leave allowance/or illness decreased 35% under the 24/72-hour shift schedule. (Tr. 235; U-40, U-42.)

The Union Township Study compared the use of overtime under the 10/14-hour shift schedule from 1974 to 1979 against the use of overtime under the 24/72-hour schedule from 1980 to 1985. The Study found that overtime was reduced by 58% under the 24/72-hour shift schedule:

- The total amount of overtime under the 10/14-hour schedule during the years 1974 through 1979 was 1,950 days (12-hour days). The total amount of overtime under the 24/72-hour schedule for the years 1980 through 1985 was 822 days (12-hour days).
- Accordingly, overtime was dramatically reduced by 1,128 days (12-hour days) or 58% under the 24/72-hour shift schedule, as compared to the 10/14-hour shift schedule. (Tr. 232; U-40,U-41.)

Testimony from the Fire Chiefs shows that this decline in sick leave and overtime has occurred in other municipalities that have switched to the 24/72-hour shift schedule. Passaic Fire Chief Imperato testified that there was a dramatic drop in sick leave which resulted after the implementation of the 24/72-hour shift. (Tr.170.) Chief Imperato testified that the decrease of sick leave can be attributed to the additional recuperative time between on-duty shifts. (Tr.170.) South Orange experienced a reduction in sick leave and overtime after the implementation of the 24/72-hour shift. (Tr. 1013.) Hillside Fire Chief Caswell testified that sick leave and overtime went down as a result of the 24/72-hour shift schedule. (Tr. 72, 92.)

Roselle Fire Chief Hill testified that during the trial period, there was little sick time and less overtime. Chief Hill testified of the benefits of the 24/72-hour shift schedule following a major fire in which a roof collapsed and three firefighters were “seriously hurt and were sent on injury leave with a doctor’s certificate stating that they would be out of work for a minimum of three days”. As a result of the 24/72-hour shift schedule, these firefighters were off duty for a three-day period. On the fourth day, their next regularly scheduled day of duty, these firefighters were able to return to work. (Tr. 137-138.)

“ . . . You know, you’re working at a fire. That particular fire is a major fire. We were there for over 24 hours. And, you know, the stress of working at this fire, the physical part of it, the aches and pains, 72 hours I get these guys back fresh. They work at 10 and 14. They’re in the next day. And it just

proves specifically in this instance that the 24/72 worked very well to get these guys back to full duty with no **overtime.**" (Tr. 138.) (Emphasis by arbitrator.)

Union Township Battalion Chief Chrystal testified regarding the benefits of the 24/72-hour shift schedule:

"the reduction in overtime is the ability under the 24 to better manage situations . . . to better manage recuperative power, to better manage rehab. The 72 then to recuperate further reduces the sick time and that home illness that generally creates overtime." (Tr. 245.)

Paterson Fire Chief Pasquariello stated that the 24/72-hour shift schedule reduced overtime costs:

"A great number of our fires including multiple alarm fires occur between the hours of 1800 hours and 0800 hours in the morning. So actually the 1 & 3 work schedule has proven to be beneficial to us, especially in reducing our sick and injury leave as well as overtime. For example, if one of our people is injured, they have 72 hours to recuperate. Whereas if this same firefighter were injured working the first night of a 10 & 14 schedule, he would only have 10 hours to recoup and most often, this is not sufficient time to recover therefore he must be placed on injury leave. This creates greater costs for the city, mainly due to manpower replacement.

The 1 & 3 work schedule has also reduced overtime costs incurred at the change of shifts. For example, if there is a job in progress at shift change, under the 1 & 3 work schedule the overtime incurred relieving the changing shifts can only occur at 0800 hrs. On the other hand under the 10 & 14 work schedule this could occur at 0800 hrs, therefore increasing anticipated overtime costs. (U-78 & U-79.)

Hillside Fire Chief Caswell testified that sick leave and overtime were reduced by the 24/72-hour shift schedule:

"overtime has been reduced because of the reduction in sick leave. The overall efficiency of the department by going to the 24-hour system has been better than a 10 and 14." (Tr. 72, 92.)

FMBA President Lavin testified that the City of Elizabeth experienced a significant savings in sick leave and overtime following the implementation of the 24/72-hour shift schedule. This included a 3,800 man hour reduction in sick leave in the first year of the

implementation of the 24/72-hour shift schedule, a reduction that continued in subsequent years. (U-32.) Lavin also testified that there were similar reductions in overtime in Elizabeth after the implementation of the 24/72-hour shift schedule. (Tr. 269.)

The City contends that implementation of the 24/72-hour shift schedule will result in an increase in the use of sick time. The City and the FMBA submitted exhibits showing that a comparison of the use of sick leave in Clifton and Passaic favored their respective positions. The testimony at hearing was unclear as to the basis of the statistics with disagreement as to the inclusion of terminal sick leave benefits and work related injury leave days.

The City argues that the City of Passaic, which works a 24/72-hour work schedule and shares mutual aid with Clifton, has significantly more sick leave and injury leave than the City of Clifton. The City submitted the following chart in support of its position:

Year	Clifton Avg. # of Days	Passaic Avg. # of Days
1996	4.31 days	11.5 days
1997	6.97 days	13.98 days
1998	5.76 days	16.64 days

The FMBA contends that the City has misrepresented its sick leave figures. The FMBA contends that the City failed to include in its sick leave statistics, work related injury leave and terminal leave which are included in the data for the Passaic Fire Department.

The FMBA contends that, based on its review of the City's official attendance records and personnel records, Clifton has significantly higher annual sick and injury leave than Passaic. (See DeLuca Cert. at ¶6 and ¶14.) A review of the City's attendance sheets, personnel file cards and OSHA-200 forms shows the following:

1996 total sick and injury leave - 561 days
1997 total sick and injury leave - 907 days
1998 total sick and injury leave - 750 days
1999 total sick and injury leave - 718 days.

The FMBA asserts that the above figures are significantly higher than the sick leave figures reported and testified to by Chief Dubravsky and set forth in C-34. The FMBA contends that the City failed to include work related injury leave and terminal leave which the FMBA claim is included in the Passaic data. The record is unclear as to the composition of the Passaic data that appears in C-34 or in C-32 and C-32a — it may or may not include the additional sick leave components in its data. What is clear is that the City did not include work related injury leave and terminal leave in its calculations and thus it underestimated (unintentionally) the average sick days of a Clifton firefighter in relation to the average sick days of a Passaic firefighter.⁴ Thus, the City's data is unreliable in evaluating its claims.

Pursuant to Article XXVII of the CBA, the FMBA maximum terminal leave benefits per man is 130 days. (U-4.) Since 1996, on average, at least ten firefighters or officers have been on terminal leave each year. In 1997, according to Chief Dubravsky, the total number of firefighters, as a result of terminal leave, was 128. (Tr. 964.)

The record shows that sick leave is taken as part of terminal leave in Clifton and that the use of terminal leave reduced Clifton manning to 128 in 1997 as well as reducing manning levels in 1996, 1998 and 1999. (Tr. 960, 965; U-102.)

The FMBA correctly points out that when terminal leave is considered together with the City's sick, injury and illness leave figures discussed above, it shows that Clifton has twice as much sick leave per year as Passaic. The FMBA claims that the sick leave figures used for Passaic, in C-34, include on-duty work-related injuries and accumulated terminal

⁴Chief Dubravsky testified that work related injury leave and terminal leave were not included in the City's figures. (Tr. 951; 960-961; 963-964.) Sick leave is taken as part of terminal leave. The use of terminal leave has reduced, and adversely affected Clifton Fire Department manning for the years 1996, 1997, 1998 and 1999. (Tr. 963-964; U-102.)

leave. The FMBA submits that the following chart comparing sick and injury figures for Clifton and Passaic for the years 1996 through 1998 shows that Clifton's sick and injury leave figures are more than double that of the City of Passaic:

Year	Number of Sick Days		Average Number of Sick Days Per Man	
	CLIFTON	PASSAIC	CLIFTON (Total manpower of 130 men due to average terminal leave per year.)	PASSAIC (Total manpower of 107 men per testimony of Fire Chief Imperato.)
1996	1861	616	14.32	5.75
1997	2207	748	16.98	6.99
1998	2050	832	15.77	8.32

The City asserts that the inclusion of terminal leave benefits drastically and artificially inflates the City's sick leave by 3,900 days over three years. The City contends that the FMBA incorrectly subtracted the ten employees on terminal leave from the total number of fire fighters, increasing the average sick leave per fire fighter. The City may be correct that the ten employees on terminal leave should be included in the "divisor", be it 120 or 130. However, the City is simply wrong in seeking to exclude the average 1300 days per year for terminal sick leave benefits. The terminal leave days (and on-duty work-related injuries) must be included in the comparisons since it is unclear if the City included these days in Passaic or the other municipalities in U-32 and U-32a, (a comparison of sick leave usage in 10/14 communities and 24/72 communities). In any event, the inclusion of these additional days increases the Clifton average beyond that of Passaic and the other municipalities listed in U-32 and U-32-a. I believe this is an exercise in pure speculation. The City of Clifton and the FMBA should be proud of its low sick leave usage in comparison to other municipalities. The inclusion of terminal leave benefits (a contractual benefit

negotiated by the City and the FMBA) while appropriate for comparison purposes does distort the true reality that Clifton firefighters do not abuse sick leave now under the 10/14-hour shift schedule and there is no reason to believe that any abuse will occur under the 24/72-hour work schedule. This is even more likely given the strong record evidence of reductions in sick leave in municipalities immediately following the implementation of the 24/72-hour shift schedule.

For all of the above reasons, I find that the 24/72-hour shift schedule will not result in an increase of either overtime or sick time and that all of the evidence in the record shows that municipalities that switch from the 10/14-hour shift schedule experience a decrease in both overtime and sick time.

Discipline/Morale

The City contends that implementation of the 24/72-hour shift schedule will detrimentally affect morale and follow through on discipline. Fire fighters work in close quarters with one another. The 24-hour tour – due to its length – increases the possibility of irritability and arguments between incompatible fire fighters whereas the significantly shorter 10/14-hour tour decreases the likelihood of conflict between fire fighters. The City contends that the 24-hour tour also makes it difficult to follow through on disciplinary matters. Because of the comparatively scant overlap of tours and the infrequency of on-duty time under the 24/72 schedule, a superior officer may not be able to meet with the accused, investigate the incident, or prepare disciplinary charges in a timely manner.

It is undisputed that the 24/72-hour shift schedule will have a positive impact on firefighter morale in Clifton. Passaic Fire Chief Imperato testified that morale improved on a 24/72-hour shift schedule. Chief Imperato testified that morale improved because he believed "not only was it more efficient for us to run the department, but it was also a burden for the firefighter in his family life" under the 10/14-hour shift schedule. Chief Imperato

further testified that morale is very important in the fire department. Chief Imperato testified that morale is even more important in public safety situations because the fire service is "a very dangerous occupation and it involves often-times very stressful and difficult responses and involvement." (Tr. 172-73.)

Other Fire Chiefs testified that high morale plays an important role in the delivery of effective and safe firefighter and EMS services and that morale increased dramatically once the fire departments changed to the 24/72-hour shift schedule. (Tr. 141-142; 72.)

South Orange Fire Chief Markey testified how the unilateral imposition of the 10/14-hour shift schedule adversely affected the morale of the fire department:

"The switch back to the 10/14-hour shift had an extremely deleterious effect on morale of the department, which related across the board within the department on a day-to-day operation of the department. (Tr. 1013.)

Chief Markey testified that there was improved morale after the 24/72-hour shift schedule was reinstated in 1992:

"There was a big change in morale of the department and along with the change in morale came a change in motivation of the department again. People became more interested; they participated more." (Tr.1020.)

The FMBA cites the statement of Paterson Fire Chief Pasquariello that the morale of his men has "greatly improved" with the 24/72-hour shift schedule:

"In the past, shift work in the fire service has proven to be very stressful on the firefighter's home life. The 1 and 3 work schedule enables the firefighter to spend more continuous quality time with their families creating more stability in their lives." (U-79.)

Passaic Fire Chief Imperato's testimony: "Morale - - it went through the roof." Chief Imperato testified that morale is very important to the fire service, which is a "very dangerous and stressful occupation". Chief Imperato testified that high morale improves Fire Department productivity. (Tr.170-173.) Chief Imperato testified that the 24/72-hour shift schedule also fosters better communication between line firefighters and tour commanders. (Tr.173-174.)

Hillside Fire Caswell testified regarding morale, describing it as a “win/win situation”:

. . . the shift schedule itself impacted in a positive way. Number one, sick leave went down which in turn, reducing overtime. And injuries went down. Basically, it was a win-win situation for the Department as well as the Township. Morale went up which provides for a better worker. You get more accomplished” (Tr. 71-72.)

The FMBA claims that morale hit an all time low when former Chief Walter DeGroot initiated a public campaign of misrepresentation, fear and anti-union animus against the FMBA for its pursuit of the 24/72-hour shift schedule by circulating a petition falsely accusing the FMBA of “selfishly seeking this shift change at the expense of public safety and for its own self interest.” (DeLuca Cert. ¶20.) The FMBA contends that former Chief DeGroot intentionally misrepresented the FMBA’s position in support of its work schedule proposal and have intentionally withheld from the public the FMBA’s health and safety arguments. The FMBA contends that former Chief DeGroot has intentionally engaged in a “smear” campaign against the FMBA and its membership by publically denouncing fire personnel as being “selfish” and “uninterested in public safety” and that this campaign has had a demoralizing effect upon the Clifton Fire Department. (DeLuca Cert. ¶20.)

I find no evidence in the record to support the City’s contention that the 24/72-hour shift schedule will detrimentally affect morale and follow through on discipline. This is pure conjecture and is not based on any record evidence to support the City’s contention. The City offered no evidence of any disciplinary or morale problems in the numerous municipalities that have switched to the 24/72-hour shift schedule. None of the Fire Chiefs who testified cited any issues related to discipline and provided only positive examples of the impact of the 24/72-hour shift schedule on morale. It is undisputed that the “shift of choice” is the 24/72-hour shift schedule. This is borne out by the number of municipalities that have switched from the 10/14-hour shift schedule and by the 70% of all departments nationally that enjoy some form of a 24-hour shift schedule.

I am convinced that morale in Clifton has been negatively impacted by the efforts of former Fire Chief DeGroot's "public relations" campaign within the City. The City did submit petitions signed by approximately 350 Clifton citizens who opposed the implementation of the 24/72-hour shift schedule. This represents less than one-half of one percent of the citizens of Clifton. It is undisputed that former Chief DeGroot has been opposed to the 24/72-hour shift schedule for at least 35 years and probably longer. A review of his testimony confirms that he has not updated his facts for many years and has not taken the time to analyze or research the impact of the implementation of 24/72-hour shift schedules in numerous municipalities throughout the State of New Jersey and throughout the United States. While I do not question former Chief DeGroot's commitment to the delivery of quality fire services, I am convinced that his facts are outdated and unsupported by any research or analysis comparing the advantages and disadvantages of the 24/72-hour shift schedule and the 10/14-hour shift schedule and that his actions have contributed to low morale in the ranks of the City's firefighters.

Accordingly, I find, for all of the above reasons, that the implementation of the 24/72-hour shift schedule will improve morale and discipline will not be negatively affected by this implementation.

Residency/Recall

The City contends that the 24/72-hour shift causes mutual aid and recall problems. Because firefighters need to commute to work half as often under the 24/72-hour tour than under the 10/14-hour tour, fire fighters tend to reside a further distance from the community in which they work. Frequently fire departments need to recall off-duty fire fighters to supplement or relieve those who responded to a first alarm. The City contends that the further away a firefighter lives, the longer it takes to report for duty. A longer recall response

time would have minimal benefits because the fire fighter would report after the occurrence which required his recall. The City cites the testimony of former Chief DeGroot that generally, firefighters who live more than thirty miles away cannot report to work for an emergency quickly enough to be useful. (Tr. 387.) Also, because fire fighters can only report for duty one day in four under the 24-hour schedule, their availability for recall is less than fire fighters who work the ten-fourteen hour schedule, where the shift changes twice each day. (C-4 at 9.)

The City contends that statistics from the Borough of Roselle, City of Passaic and the Village of South Orange illustrate that the 24/72-hour schedule encourages fire fighters to live further from their jobs. In 1989, the year before Roselle adopted the 24/72-hour schedule, 68 percent of their fire fighters lived in town. At present, about ten years later, only 32 percent of their fire fighters live in town. (C-21.) Additionally, as of December 8, 1999, under the 24/72 work schedule, only 23 of 109 Passaic fire fighters live in Passaic. (C-30.) The City notes that in contrast to Roselle and Passaic, 57 of 140 Clifton fire fighters currently live in Clifton. (C-31.) In percentage terms, 21 percent of the Passaic fire department lives in town, while 41 percent of the Clifton fire department lives in town. The City contends that this marked 20 percent difference relates directly to the different work schedules. (Tr. 612-613.)

Also, in South Orange, fire fighters worked a 24/72-hour tour from about 1981 until January 1990, when the Village ordered the department to switch to the 10/14-hour work schedule. (Tr. 1012.) The South Orange police officers worked a 4/4 schedule, which required their presence at work more frequently than the 24/72-hour firefighter work schedule. In 1990, the South Orange Fire Department had 54 police officers and 34 fire fighters. (Tr. 902-3; C-43.) Of the 54 police officers, 52 or 96 percent lived within fifteen

miles of South Orange. Of the 34 fire fighters, twenty-four or 70 percent lived within fifteen miles of South Orange. Thus, 26 percent more of the fire department lived more than fifteen miles from South Orange in comparison with the police department. The City contends that this differential directly correlates to the schedule worked by the police department and the fire department. (Tr. 848, 850.) Additionally, four of the 34, or 12 percent of the fire fighters lived beyond thirty miles from South Orange, which the City submits is too far to be useful in an emergency recall situation. For the above reason, the City advocates maintaining its current 10/14-hour work schedule.

The FMBA maintains that an award of the 24/72-hour shift schedule will not cause a large number of firefighters to move out of the city of Clifton. N.J.S.A. 40A:14-9.1 prohibits municipalities from requiring residency therein as a condition of employment for any paid fire personnel. Specifically, N.J.S.A. 40A:14-9.1 provides:

"No municipalities shall pass any ordinance, resolution, rule, regulation, order or directive, making residency therein a condition of employment for the purpose of original appointment, continued employment, promotion, or for any other purpose for any member of a paid fire department and force or paid member of a part-paid fire department and force . . . "

The FMBA disputes the City's contention that the 24/72-hour shift schedule enhances a firefighter's desire to move away from Clifton and that this result will have an adverse or negative impact on emergency recall or response time. Clifton Firefighters cannot be required to reside within the City of Clifton as a condition of appointment or continued employment. The FMBA submits that in adopting this statute, the Legislature rejected the municipality's arguments regarding emergency recall. The FMBA argues that implementation of the 24/72-hour shift schedule will not have a negative impact on firefighter residency, since approximately 50% of Clifton's firefighters already reside outside the City of Clifton. The FMBA suggests that this can be attributed to, among other things,

the City's consent agreement with the NAACP opening firefighter appointments to all residents in the State of New Jersey. (U-70.) Former Chief DeGroot testified that when he was Chief, "hiring was open to everyone in the State of New Jersey as a result of the lawsuit by the NAACP." (Tr. 574.) Former Chief DeGroot also testified that when he was Chief, some of his employees lived far away in South Jersey including Atlantic City and Williamstown. (Tr. 575-576.)

The FMBA suggests that considerations other than shift schedule such as affordable and appropriate housing, family priorities, family relationships and time, and things such as school systems generally influence firefighter residency. South Orange Fire Chief Markey testified, "people move away for quality of life reasons, environment, it has nothing to do with a particular tour." (Tr. 1027.) Elizabeth President Lavin testified that, "of the municipalities that have switched to the 24/72-hour shift schedule, they have not experienced a mass exodus in any of these towns." (Tr. 276.) Hillside Fire Chief Caswell testified that, "the ratio of firefighters living outside the county in his department has not changed as a result of the 24/72-hour shift schedule." (Tr. 113.) The FMBA asserts that there has been no correlation between the 24/72-hour shift schedule and more personnel living further away from the Passaic Fire Department. (Tr. 195-196.)

There is a myriad of reasons why a firefighter or any other municipal employee may move to a different community. The FMBA has accurately referenced these reasons and they do not need repeating. The City has again offered no evidence of recall problems in any municipality that has implemented a 24/72-hour shift schedule. The City has only offered data to show that the percentage of firefighters who live in certain municipalities has declined following the implementation of a 24/72-hour shift schedule. This data might be conclusive if the City had also provided data to show that municipalities that have a 10/14-hour shift schedule have not seen a commensurate decline in the percentage of firefighters

who continue to live in the municipality they work in. The record includes no such data. The record also includes no evidence that communities that have switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule have experienced recall problems. I note that Clifton has approximately 50% of its firefighters living within the City. This appears to be a high percentage in comparison to other communities and is more likely indicative of the high quality of life that residents of Clifton enjoy. This high quality of life will not be affected by the implementation of the 24/72-hour shift schedule and bodes well for the future.

Accordingly, I find, for all of the above reasons, that the implementation of the 24/72-hour shift schedule will not affect recall. I further find that the City has not provided any evidence that recall has been a problem in any other municipality that has switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule. There is simply no basis to conclude that there will be any diminished commitment by Clifton firefighters following the implementation of the 24/72-hour shift schedule

This completes my analysis of the *interests and welfare of the public* factor. In my view, this is the most important factor in making a determination on a shift schedule issue. This factor implicates numerous issues including safety, fatigue, training, productivity, morale, recall, and working conditions. For all of the above reasons, and in full consideration of the evidence in the record, I find that *the interests and welfare of the public* factor will be best served by the implementation of the 24/72-hour shift schedule.

**Comparison of the Wages, Salaries, Compensation,
Hours, and Conditions of Employment**

Arbitrator Tener in North Bergen found that “the evidence is overwhelming that the 24-hour schedule is the norm.” Arbitrator Tener found that “all but three of the paid departments in Hudson County have the 24-hour schedule” and “the Township did not cite

a single example of a fire department which had gone from the 24-hour schedule to the 10/14 schedule.” Arbitrator Tener also noted that “nationally, some 70% of the fire departments work some form of the 24-hour schedule, although often with more tours than is the norm in New Jersey.” (Township of North Bergen and North Bergen IAFF Local 1387, Docket No. IA-96-107 at 17-18.)

Elizabeth President Lavin testified that the recent trend in fire department operations and negotiations has been to switch to the 24/72-hour shift schedules. (Tr. 265-266.) Lavin testified that the 24/72-hour shift schedule is also “the shift of choice” throughout the country. Lavin presented testimony and evidence that from the largest departments to the smallest ones, on a national basis and in New Jersey, fire departments have successfully switched to the 24/72-hour shift schedule.

“You see [departments] as small as Carteret or Roselle and as large as Jersey City, Elizabeth and Paterson and Camden.” (Tr. 275.)

The following chart shows that the 24/72-hour shift schedule has become a common work schedule in New Jersey fire departments:

Municipality	County	24/72-Hour Shift Implemented or Will be Implemented Within One Year	24/72-Hour Shift Implemented in Last 5 Years	24/72-Hour Shift Implemented 10 or More Years Ago
Paterson	Passaic		Yes	
Passaic	Passaic			Yes
Maplewood	Essex		Yes	
West Orange	Essex		Yes	
Irvington	Essex		Yes	
East Orange	Essex	Yes	Yes	
South Orange	Essex	Yes		Yes
Orange	Essex	Yes		
Nutley	Essex	Yes		

Montclair	Essex	Yes		
Hillside	Union			Yes
Cranford	Union	Yes		
Plainfield	Union	Yes		
Westfield	Union	Yes	Yes	
Rahway	Union	Yes	Yes	
Union Tsp.	Union			Yes
Harrison	Hudson		Yes	
Bayonne	Hudson	Yes	Yes	
West New York	Hudson			Yes
Weehawken	Hudson			Yes
Hoboken	Hudson			Yes
N. Bergen	Hudson			Yes
Jersey City	Hudson			Yes
Union City	Hudson			Yes
Morristown	Morris			Yes
Woodbridge	Middlesex			Yes
Cartaret	Middlesex			Yes
Edison	Middlesex			Yes
New Brunswick	Middlesex		Yes	
Perth Amboy	Middlesex			Yes
Camden	Camden		Yes	
Teaneck	Bergen	Yes		
Ridgewood	Bergen			Yes
Ocean City	Ocean			Yes
Gloucester City	Ocean	Yes		

The record shows that all paid firefighters in Passaic County and the majority of firefighters in the municipalities that provide mutual aid to the City of Clifton utilize the 24/72-hour shift schedule.

For all of the above reasons, and in full consideration of the evidence in the record, I find that the *comparisons of wages, salaries, compensation and conditions of employment* factor favors the implementation of the 24/72-hour shift schedule

Continuity and Stability of Employment

The City notes that N.J.S.A. 34:13A-16g (8) requires an Interest Arbitrator to consider the “continuity and stability of employment” in determining a reasonable economic package and asserts that factor is a difficult one to apply to an issue such as work schedules which does not involve direct additional costs.

The FMBA asserts that this factor generally involves the stability of employment, including seniority and layoffs, as well as hours of work in the nature of employment. The FMBA contends that continuity and stability of employment will be greatly enhanced by a change in the fire department work schedule from the 10/14-hour shift schedule to the 24/72-hour shift schedule.

The FMBA cites Arbitrator Sands’ conclusion in the New Brunswick:

“the 24/72’s will make the firefighting job less stressful, will support a healthier work force with higher morale, and will make the firefighting job more attractive. All those factors should serve to decrease employee turnover due to resignation, death and disability.”

I have found that the implementation of the 24/72-hour shift schedule will improve morale and therefore find that the *continuity and stability of employment* will be enhanced by the implementation of the 24/72-hour shift schedule.

This completes my analysis of the statutory criteria. I have found that all of the relevant criteria favor the award of the 24/72-hour shift schedule. In summary, I have found that the *interests and welfare of the public* factor is the most important factor in making a determination on a shift schedule issue since this factor implicates numerous issues including safety, fatigue, training, productivity, morale, recall, and working conditions. The record convincingly shows that implementation of the 24/72-hour shift schedule will positively impact all of these issues which is in the *interests and welfare of the public*.

The FMBA has satisfied its “very heavy burden” of justifying a change in the current 10/14-hour shift schedule. Application of this standard is particularly important where, as here, one party proposes to change a work schedule that has been in effect for many years and has implications for the overall management and operations of the fire department. The threshold for this burden must be very heavy, where, as here, all of the elected and senior managers in Clifton are opposed to the shift schedule change. The City submitted copies of memoranda from Deputy Chiefs seeking their opinion on the 24/72-hour shift schedule. None of the Deputy Chiefs expressed support, with one Deputy Chief, indicating that he would “keep an open mind.” I have given little weight to these opinions since it is clear that these opinions were solicited in order to evaluate candidates for Fire Chief to replace the now former Chief DeGroot. Chief DeGroot’s long-term opposition (more than 35 years) to the 24/72-hour shift schedule was well known to his Deputy Chiefs and it is unlikely that any Deputy Chief would have supported consideration of the 24/72-hour shift schedule.

The City’s opposition is fostered by the views of former Chief DeGroot who has long opposed the 24/72-hour shift schedule. I am hopeful that the one-year trial period will dispel the negative attitude that the City harbors and that the City of Clifton will experience the same positive results that innumerable communities within the State have realized. I

strongly recommend that the City make every effort to facilitate the implementation of the 24/72-hour shift schedule.

I have carefully considered the fiscal, operational, supervision and managerial implications of such a proposal, as well as its impact on employee morale and working conditions. There are no issues relating to supervisors working different shifts as in Teaneck, since all of the superior fire officers are included in the bargaining unit with the rank-and-file firefighters. The testimony of the various Chiefs makes it abundantly clear that fiscal, operational, supervision and managerial issues in other municipalities have not been impacted negatively by the implementation of the 24/72-hour shift schedule. The record established that no community has returned to the 10/14-hour shift schedule following the trial period for the 24/72-hour shift schedule. The Chiefs' testimony and the testimony of other FMBA witnesses clearly established that the implementation of the 24/72-hour shift schedule has positively impacted employee morale and working conditions.

I have found that the 24/72-hour schedule will improve safety and productivity (reduction in overtime and sick leave) and have considered the City's arguments with respect to recall, training, fatigue and diminished commitment. In all instances, I found that the City's arguments were without merit and were not supported by any credible evidence in the record whereas the FMBA provided credible evidence through the direct testimony of various Fire Chiefs and Union officers who testified regarding their own experiences in municipalities that switched from the 10/14-hour shift schedule to the 24/72-hour shift schedule. It is worth noting that the record does not include evidence of even one municipality reverting to the 10/14-hour shift schedule after the completion of the 24/72-hour shift schedule trial period.

Accordingly, I hereby issue the following:

AWARD

1. 24/72-Hour Shift Schedule

Effective within thirty (30) days after the receipt of this interest arbitration award, the FMBA's 24/72-hour shift schedule shall be implemented. The parties may mutually agree to a different implementation date. The 24/72-hour shift schedule will be implemented on a one-year trial period. The 24/72-hour shift schedule shall remain in effect and unless it is altered or replaced by this Interest Arbitrator pursuant to the procedure set forth below.

2. Trial Period

The 24/72 hour-shift schedule will be implemented effective thirty (30) days after the receipt of this Award, on a one-year trial basis. After the one-year trial period, the City may petition this Arbitrator to eliminate the 24/72-hour shift schedule by demonstrating to this Arbitrator that the decision is made for reasonable cause. The FMBA may challenge the decision by submitting the issue of reasonable cause to arbitration before the Arbitrator.

There shall be no reversion to the 10/14-hour shift schedule prior to a decision by the Arbitrator. The notice and petition requirements shall be as follows: the City shall notify the FMBA, in writing, no later than thirty (30) days prior to the end of the trial period, if it decides to return to the prior work schedule together with the basis for its decision. If the FMBA decides to challenge the City's decision, it must notify the City and the Arbitrator in writing within fourteen (14) days of receipt of the written notification from the City of its intention to revert to the 10/14-hour shift schedule, following which the Arbitrator shall schedule a hearing to take place within thirty (30) days of receipt of the FMBA's written notification challenging the City's decision. All determinations referred to herein to be made by the Arbitrator shall be final and binding.

In the event the City does not petition the Arbitrator to eliminate the 24/72-hour shift schedule, or if any challenge by the City is unsuccessful, the awarded schedule shall be included in the collective bargaining agreement on a permanent basis.

3. Conversion of Current Contractual Benefits

During the 24/72-hour shift schedule trial period and continuing thereafter if the trial period is successfully completed, all contractual provisions for paid leave time such as vacations, holidays, personal days and sick leave shall be adjusted as follows to maintain the equivalent level of benefit as under the current 10/14-hour shift schedule:

- (a) Article X, Holidays, Section B, provides for five (5) holiday which are taken as compensatory days off from duty at the employee's request. Under the 24/72-hour shift schedule, compensatory holidays would be converted to two and one-half (2½) 24-hour compensatory days off.
- (b) Article X, Holidays, Section E grants employees with two (2) additional compensatory holidays off from duty. These two additional compensatory days can be accrued. Under the 24/72-hour shift schedule, these two (2) additional compensatory holidays off are converted to one (1) 24-hour day off.
- (c) Article XII, Personal Days, Section A, provides for two (2) personal days per year. If these personal days are not taken during the calendar year these two days will be accrued. Under the 24/72-hour shift schedule, personal days are converted to one (1) 24-hour day which can also be accrued annually if this personal day is not taken during the calendar year.
- (d) Article XVIII, Vacations, provides at Section E, for a range of eighteen (18) to thirty (30) calendar days off for vacation under the 10/14-hour shift schedule. However, to convert vacation days for purposes of the 24/72-hour shift schedule, the current vacation schedule must be converted from calendar days to working days and then divided in half under the 24/72-hour shift schedule.

Set forth below is a chart converting the current vacation benefits under the 10/14-hour schedule to the 24/72-hour schedule:

<u>Current Vacation Schedule</u>	<u>24/72-Hour Shift</u>
18 calendar days = 10 work days	5 work days
22 calendar days = 12 work days	6 work days
24 calendar days = 12 work days	6 work days

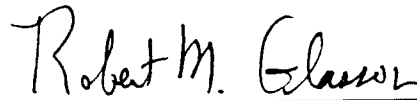
26 calendar days = 14 work days
28 calendar days = 15 work days
29 calendar days = 16 work days
30 calendar days = 16 work days

7 work days
7 work days (½ falls on a day off)
8 work days
8 work days

- (e) Article XXVII, Sick Leave and Terminal Leave, provides for fifteen (15) accruable sick days. Under the 24/72-hour shift schedule, the fifteen (15) sick days would be useable in fifteen (15) 12-hour increments. For terminal leave purposes, a 12-hour period constitutes one (1) day.
- (f) Article XI, Bereavement Leave, of the CBA provides that employees shall be provided with “up to three (3) consecutive days leave without loss of regular pay upon the death of a member of their immediate family” Under the 24/72-hour shift schedule, bereavement leave days would be converted to 1 ½ 24-hour days.

I shall retain jurisdiction for the limited purpose of resolving any disputes over the conversion of paid leave time including but not limited to vacations, holidays, personal days and sick leave days. These days are to be adjusted to maintain the equivalent level of benefits that existed under the 10/14-hour shift schedule.

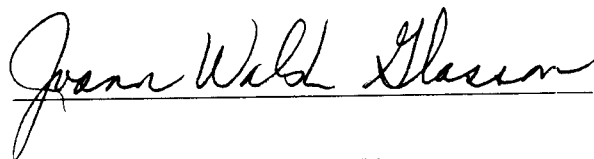
Dated: September 1, 2001
Pennington, NJ



Robert M. Glasson
Arbitrator

STATE OF NEW JERSEY) ss.:
COUNTY OF MERCER)

On this 1st day of September 2001, before me personally came and appeared ROBERT M. GLASSON, to me known and known by me to be the individual described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.



Joann Walsh Glasson
Notary Public
State of New Jersey
Commission Expires 12-11-01

APPENDIX A - LISTING OF EXHIBITS

JOINT EXHIBITS

- Joint 1. 1998-1998 Agreement
- Joint 2. FMBA's Final Offer
- Joint 3. City of Clifton's Final Offer
- Joint 4. Interest Arbitration Petition

FMBA EXHIBITS

- FMBA 1. Petition to Initiate Compulsory Interest Arbitration
- FMBA 2. Response of Clifton to Petition to Initiate Compulsory Interest Arbitration
- FMBA 3. Agreement between Clifton and Clifton FMBA, Local No. 21 with Addendum Setting Forth Salaries from January 1, 1995 through December 31, 1998
- FMBA 4. Article XXIII Showing Salary Increases of Expired Agreement, with Addendum A Showing January 4, 1994 Salaries
- FMBA 5. Salaries Under Contract Which Expired December 31, 1998
- FMBA 6. Summary of Employees in Unit
- FMBA 7. Current Contract between Clifton PBA Local 36 for the period January 1, 1998 through December 31, 2000
- FMBA 8. PBA - Patrolmen Salaries
- FMBA 9. Parity with Patrolmen and Senior Officer Differential
- FMBA 10. December 14, 1998 Position Statement of Clifton as to FMBA Local 21 Proposal
- FMBA 11. Summary of Proposals of Local 21 Attached to Petition to Initiate Compulsory Interest Arbitration
- FMBA 12. Determination by PERC Providing for Mandatory Negotiability of 24 Hour Shifts
- FMBA 13. PERC's Scope Decision Ruled that the 24/72 Hour Schedule Was Mandatorily Negotiable

- FMBA 14. Arbitrator John E. Sands 1996 Interest Arbitration Involving New Brunswick FMBA Local 17 Awards FMBA "24/72" Work Schedule
- FMBA 15. Consistent with Arbitrator Sands' Ruling in the New Brunswick Interest Arbitration, this Arbitrator Should Rule in Favor of Teaneck FMBA's Request to Implement the 24/72 Hour Schedule
- FMBA 16. Efficiency and Productivity Study Prepared by Union Township FMBA Local 46 and Fire Officers Association Local 15
- FMBA 17. Clifton Has Made the Following Proposals which Local 21 is Prepared to Implement As Follows
- FMBA 18. Outstanding Grievances
- FMBA 19. Backup Material on Manning Shortfalls
- FMBA 20. New Jersey Fire Departments that Have Switched to the 24/72-Hour Shift Schedule from the 10/14-Hour Shift Schedule
- FMBA 21. Certain Relevant Fire Departments as to which there will be Testimony from Chiefs or Other High Ranking Personnel
- FMBA 22. Ridgewood and Ocean City Fire Departments Successfully Work 24-Hour Work Schedule Based on a 56-Hour Work Week
- FMBA 23. May 27, 1999 Submission by the FMBA to City Counsel in Support of the FMBA's 24/72-Hour Work Schedule, including the Benefits and Effectiveness of this Shift Schedule
 - 23A. Letter from Fox and Fox to Gerald G. Friend, Esq. dated May 27, 1999
 - 23B. Letter from Fox and Fox to Mark S. Ruderman, Esq. Dated June 1, 1999
 - 23C. Determination by PERC Providing for Mandatory Negotiability of 24 Hour Shifts
 - 23D. PERC in its Scope Decision Ruled that the 24/72 Hour Schedule was Mandatorily Negotiation
 - 23E. Memorandum of Agreement between the Township of Maplewood ("Township") and Maplewood Firemen's Mutual Benevolent Association Local 25 ("FMBA")

- 23F. City of Egg Harbor City, 25 NJPER 223 (¶29105, 1998)
- 23G. New Jersey Public Employment Relations Commission Opinion and Award, In the Matter of the Interest Arbitration between Town of Teaneck, N.J. and F.M.B.A. Local 42, PERC Docket No. IA-97-45
- 23H. Arbitrator John E. Sands in a 1996 Interest Arbitration Involving New Brunswick FMBA Local 17 Awards FMBA "24/72" Work Schedule
- 23I. Efficiency and Productivity Study Prepared by Union Township FMBA Local 46 and Fire Officers' Association Local 15
- FMBA 24. Summary of Testimony of Nick Marchisello, President, Clifton FMBA Local 21
- FMBA 25. Certain Relevant Demographics Regarding Clifton Fire Department as to which Testimony will be Provided to Consider the FMBA's Shift Schedule Proposal
- FMBA 26. Summary of Testimony of Passaic Fire Chief Louis Imperato
- FMBA 27. Certain Relevant Demographics Regarding Passaic Fire Department, a Neighboring Passaic County Municipality, which has Utilized the 24/72-Hour Shift Schedule since 1976 and as to which there will be Testimony from Fire Chief Imperato
- FMBA 28. City of Passaic and Passaic Firefighters Association Negotiated a 2-Year Contract Effective July 1, 1999 with Wage Increases of 3% per Year without any Give-Backs, including the Work Schedule
- FMBA 29. Passaic Fire Department Operates under 24/72-Hour Shift Schedule
- FMBA 30. Collective Bargaining Agreement between the City of Passaic and Passaic Firefighters Association A/W Passaic FMBA Local 13, effective January 1, 1988 through December 31, 1990
- FMBA 31. Collective Bargaining Agreement between the City of Passaic and Firefighters Association A/W Passaic FMBA Local 13, effective January 1, 1991 through December 31, 1993.
- FMBA 32. Summary and Testimony of William Lavin, President, New Jersey State Firemen's Mutual Benevolent Association and Elizabeth FMBA Local 9 in Support of the 24-Hour Shift Schedule

- FMBA 33. Summary of Testimony of Battalion Chief Paul Chrystal Regarding the 24/72-Hour Shift Schedule
- FMBA 34. Summary of Testimony of Fire Chief Frank Caswell
- FMBA 35. Summary of Testimony of Roselle Fire Chief Robert Hill Regarding the 24/72-Hour Shift Schedule
- FMBA 36. 1990 Written Presentation prepared by Robert Hill, Current Chief of the Roselle Fire Department, and FMBA Local 55 which was Presented to the Prior Fire Chief and Mayor and Council in Support of FMBA Local 55's Proposal to Institute the 24/72-Hour Work Schedule effective January 1, 1991
- FMBA 37. Summary and Testimony of Alan Bambas, President, Maplewood FMBA Local 25 in Support of the 24/72-Hour Shift Schedule
- FMBA 38. Certain Relevant Demographics regarding Union Township Fire Department which has Utilized the 24/72-Hour Shift Schedule since 1980 and to which there will be Testimony from High Ranking Fire Department Officials
- FMBA 39. Collective Bargaining Agreement between the Township of Union and FMBA Local 47 effective January 1, 1996 through December 31, 1999
- FMBA 40. Efficiency and Productivity Study Prepared by Union Township FMBA Local 46 and Fire Officers Association Local 15
- FMBA 41. Union Township Fire Department Overtime Comparison Survey
- FMBA 42. Union Township Fire Department Sick Leave Allowance Comparison Survey
- FMBA 43. Union Township Fire Department Injury Comparison Survey
- FMBA 44. Union Township Fire Department Services/Productivity Comparison Survey
- FMBA 45. Certain Relevant Demographics regarding Hillside Fire Department which Provides Fire and Full-Time EMS/Ambulance Services under the 24/72-Hour Shift Schedule as to which there will be Testimony from Fire Chief Frank Caswell
- FMBA 46. Collective Bargaining Agreement between the Township of Hillside and FMBA Local 35 effective January 1, 1993 through June 30, 1996

- FMBA 47. Certain Relevant Demographics regarding Roselle Fire Department which Provides Fire and Full-Time EMS/Ambulance Services under the 24/72-Hour Shift Schedule as to which there will be Testimony from Fire Chief Robert Hill
- FMBA 48. Collective Bargaining Agreement between the Borough of Roselle and FMBA Local 55 effective January 1, 1996 through December 31, 1999
- FMBA 49. Certain Relevant Demographics regarding Maplewood Fire Department which Simultaneously Switched to the 24/72-Hour Shift Schedule and Implemented a Fire Department EMA Program effective September 1, 1997
- FMBA 50. Collective Bargaining Agreement between Township of Maplewood and FMBA Local 25 effective January 1, 1996 - December 31, 1998
- FMBA 51. Determination by PERC Providing for Mandatory Negotiability of 24 Hour Shifts
- FMBA 52. Certain Relevant Demographics regarding Fire Departments that Utilize the 24/72-Hour Shift Schedule
- FMBA 53. Comparison of 10/14 hour Schedule and 24/72 Hour Schedule
- FMBA 54. Time Off between Shifts is the Same under the 10/14-Hour Shift Schedule and the 24/72-Hour Shift Schedule
- FMBA 55. Contrary to the City's Arguments, Firefighter Fatigue is not Increased or in any way Adversely Affected by Implementation of the 24/72-Hour Shift Schedule
- FMBA 56. Contrary to the City's Arguments, Training is Enhanced under the 24/72-Hour Shift Schedule
- FMBA 57. Recent Interest Arbitration Award involving Teaneck FMBA Local 42 and Town of Teaneck
- FMBA 58. Teaneck FMBA Local 42 was Awarded the 24/72 Hour Shift Schedule
- FMBA 59. Consistent with Arbitrator Sand's Ruling in the New Brunswick Interest Arbitration, this Arbitrator Should Rule in Favor of Clifton FMBA's Request to Implement the 24/72 Hour Schedule
- FMBA 60. Firefighters throughout the State of New Jersey Commonly Work 42-Hour Week

- FMBA 61. Passaic Fire Department Operates under 24/72-Hour Work Schedule
- FMBA 62. Paterson Fire Department Operates under the 24/72-Hour Work Schedule
- FMBA 63. Maplewood Fire Department Operates under the 24/72-Hour Work Schedule
- FMBA 64. City of Rahway and FMBA Local 33 Recently Negotiated the 24/72-Hour Shift Schedule
- FMBA 65. East Orange FMBA Local 23 was Awarded, in Interest Arbitration Proceedings, the 24/72-Hour Shift Schedule
- FMBA 66. Township of Westfield Agrees, in Mediation/Interest Arbitration Proceedings before Arbitrator Marty Scheinman, to Implement the 24/72 Hour Shift Schedule
- FMBA 67. 24-Hour Shift Schedule is a Common Work Schedule Utilized by Fire Departments throughout the State and is being Negotiated with more Frequency in Recent Years
- FMBA 68. Statewide Comparison of Fire Departments that Utilize 24-Hour Shift Schedules
- FMBA 69. N.J.S.A. 40A:14-9.1 Prohibits Municipalities from Requiring Residency Therein as a Condition of Employment for any Paid Fire Personnel
- FMBA 70. The City of Clifton is a Party to a Consent Decree with the NAACP which Provides for, among Other Things, to Open Firefighter Appointments to all Residents of the State of New Jersey
- FMBA 71. Implementation of the 24/72-Hour Shift will not Detrimentially Affect the Quality of EMS and Ambulance Care Provided by Clifton Fire Department. The 24/72-Hour Shift Schedule will Decrease the Potential for Firefighter Fatigue and On-the-Job Injuries
- FMBA 72. Clifton EMTs who are Certified in Basic Life Support are not Permitted to Administer Medication
- FMBA 73. Clifton Misstates the Nature of an Incident Involving a Missed 911 Call and its Importance with Regard to the FMBA's Shift Schedule Proposal. Contrary to Clifton's Arguments, the 24/72-Hour Shift Schedule does not Adversely Affect Firefighter Fatigue and the Quality of Firefighting and EMS Work
- FMBA 74. Summary of FMBA's Arguments and Evidence in Opposition to the Memorandum of Fire Chief Dubravsky and of Former Chief Walter DeGroot. Clifton's Position Regarding the 24/72-Hour Shift is Outdated Given the Recent Trend in New Jersey to Switch to the 24/72-Hour Shift Schedule from the 10/14-Hour Schedule

- FMBA 75. Memorandum of Fire Chief Dubravsky and Position Statements of Former Chief Walter DeGroot Regarding the 24/72-Hour Shift is outdated Given the Recent Trend in New Jersey to Switch to the 24/72-Hour Shift Schedule from the 10/14-Hour Schedule
- FMBA 76. Chief Rule's Article Entitled "Shift Change" that Appeared in the August 1999 *Fire Chief Magazine* is Outdated Given the Recent Trend in New Jersey to Switch to the 24/72-Hour Shift Schedule from the 10/14-Hour Schedule
- FMBA 77. Chief DeGroot's Letter to the Editor, *Herald & News*, September 6, 1996
- FMBA 78. Chief James K. Pasquariello's Letter to the Editor, *Herald & News*, October 25, 1996
- FMBA 79. Letter from Chief James Pasquariello regarding the 24/72-Hour Schedule
- FMBA 80. Letter from Captain James A. McBride, dated December 17, 1999, regarding the number of Fire Department Building Inspections
- FMBA 81. Harrison 1994-1995 CBA
- FMBA 82. Harrison 1996-1998 CBA
- FMBA 83. West Orange 1995-1997 CBA
- FMBA 84-89 South Orange 1986 to present CBAs
- FMBA 90. Chief DeGroot's Report of Firefighter Hours Worked 1/1/93 to 6/30/93
- FMBA 91. Procedure for Exchange of Tours
- FMBA 92. Chief DeGroot's Report of Firefighter Hours Worked 1/1/96 to 12/31/96
- FMBA 93. Map of New Jersey
- FMBA 94. Calendar of 10/14 Hour Tours
- FMBA 95. March 13, 1990 Letter from Dennis J. Alessi to Stuart Reichman, Amending Unfair Practice Charge
- FMBA 96. Affidavit of Firefighter Jeff Markey, dated January 3, 1990
- FMBA 97. Affidavit of Jeff Market, dated February 23, 1990
- FMBA 98. Memorandum of Agreement between South Orange and the South Orange Superior Officers Association Local 240 and the South Orange FMBA 40

- FMBA 99. November 13, 1991 letter from David I. Fox to James W. Mastriani
- FMBA 100. Bayonne Fire Department Sick Days Comparison
- FMBA 101. Results of West Orange Move to 24 Hour Tour
- FMBA 102. Memoranda of Chief Dubravsky to Chief Financial Officer dated May 27, 1997 and July 10, 1997
- FMBA 103. 1997 Clifton Fire Department Official Sick and Injury Leave
- FMBA 104. 1996 Clifton Fire Department Official Sick and Injury Leave
- FMBA 105. "Training Thins Clifton Fire Ranks" from *Herald & News*, February 11, 1999
- FMBA 106. Clifton/Passaic Comparison - Withdrawn by FMBA
- FMBA 107. Dr. Carnow's Numbers for Worker's Compensation Claims in Jersey City for 1998 and 1999
- FMBA 108. New Jersey Career Fire Chief's Association Comparison of 24 Hour Schedule and 10/14 Hour Schedule
- FMBA 109. Agreement between City of Ocean City and Firemen's Mutual Benevolent Association, Local 27, January 1, 1996 through December 31, 1997
- FMBA 110. Agreement between City of Jersey City and Uniformed Fire Fighters Association of Jersey City, January 1, 1994 through December 31, 1996
- FMBA 111. Agreement between the Management at McGuire Air Force Base and Local F-106, International Association of Firefighters
- FMBA 112. Chief DeGroot's Report of Firefighters Hours Worked - January 1, 1993 to March 31, 1993
- FMBA 113. Chief Dubravsky's Report of Firefighters Hours Worked - March 18, 1999 to December 31, 1999
- FMBA 114. Discipline of Firefighter John Anderson by Chief Dubravsky
- FMBA 115. January 7, 2000 Letter from Captain Frederick Scalera Regarding 24 Hour Shifts
- FMBA 116. February 1, 2000 Letter from Fire Chief Thomas A. Peters Regarding 24 Hour Shifts

- FMBA 117. Manning Letter by Chief Dubravsky, dated April 16, 1996
- FMBA 118. Clifton Fire Department Interoffice memorandum, Dated July 10, 1997
- FMBA 119. July 1, 1999 Letter from Training Officer, Captain Henry Cholewczynski
- FMBA 120. OSHA Work-Related Injury Report by Clifton with Days away from Work for 1997 and 1999
- FMBA 121. Newspaper Articles Reflecting Efforts by Clifton Firefighters and Clifton Union and Volunteers in Disciplinary Matters Regardless of whether they Reside in or Outside of Clifton
- FMBA 122. January 14, 2000 Newspaper Article from *The Record* regarding Disparate Results in Clifton Schools
- FMBA 123. Interest Arbitration Award

CITY OF CLIFTON EXHIBITS

- CITY 1. Opinion and Award in the Matter of the Arbitration between Township of North Bergen and International Association of Firefighters Local 1387, dated October 17, 1997
- CITY 2. Resume of Walter DeGroot
- CITY 3. Report - 24 Hour Work Schedule - Chief Doran
- CITY 4. New Jersey Career Fire Chiefs' Association Report on 24 Hour Work Schedule
- CITY 5. Towns that Share Mutual Aid with Clifton
- CITY 6. Clifton Fire Department Interoffice Memo, dated January 19, 1999 to City Manger Robert Hammer from Chief Dubravsky
- CITY 7. Analysis of Opportunities for Improving Productivity within the 24-Hour Shift (National Fire Academy Executive Development III Program/1981)
- CITY 8. Article - Two Minutes with On Workload, July, 1998
- CITY 9. Newspaper Article "7 Blazes in a Night Taxing for Firefighters"
- CITY 10. Newspaper Article *Herald News* "Blaze Destroys 2 Paterson Homes" 8-7-98
- CITY 11. Newspaper Article "Firefighters Rescue Three From Attic as Home Burns" 7/96

- CITY 12. Clifton Fire-Public Safety Department Memo From Anthony M. Alessi, Deputy Chief to City Manager Robert Hammer, re: Organizational Staffing, dated 10/29/96
- CITY 13. Clifton Fire Department Interoffice Memo to Fire Chief Walter DeGroot from Deputy Chief Richard Baksa, re: Organizational Staffing, dated 10/22/96
- CITY 14. Clifton Fire Department Interoffice Memo to Robert P. Hammer and Chief Walter DeGroot from Deputy Chief Joseph Sartori
Re: Acting Fire Chief Position dated 10/28/96
- CITY 15. Clifton Fire Department Interoffice Memo to Fire Chief Walter DeGroot from Deputy Chief John Dubravsky, Re: Response to Organizational Staffing Memo dated 10/31/96
- CITY 16. Article in Fire Chief - "Shift Change" 8/99
- CITY 17. Article "Managing Fire Services" by ICMA
- CITY 18. Article "Rehab Units at Work" by James Cline, *Fire Engineering*, February, 1997
- CITY 19. Article "Personnel Management" - ICMA
- CITY 20. Article "Stand Watch", September , 1999 - *Fire Rescue Magazine*
- CITY 21. Roselle Residency Exhibit
- CITY 22. Clifton Fire Department Interoffice Correspondence to John Cudworth from John Dubravsky, dated October 19, 1999 - Outside Employment
- CITY 23. Clifton Fire Department Dollar Loss from Fires
- CITY 24. Article "Firefighter Injuries" 1998 *NFPA Journal*, November, 1999
- CITY 25. State of New Jersey, Department of Labor Compliance Alert #6 (R9-99) Firefighters Protective Clothing, September 1999
- CITY 26. Article "Burned Firefighter Wins Lawsuit Claiming Gear Was Inadequate", *NY Times*, October 26, 1996
- CITY 27. Proposed Schedule Change (Response), Chief William Gras, Springfield
- CITY 28. *Your Firemen Magazine* - 1964 - Publication of FMBA 42 Hour Work Week Committee

- CITY 29. Clifton Fire Department (October, 1999) List of Employees, Addresses, Telephone Numbers and Beeper Numbers, etc.
- CITY 30. Passaic Fire Department (December 8, 1999) List of Employees, Addresses, Telephone Numbers, etc., Living in Passaic
- CITY 31. Clifton Fire Department Incident Response - 1991-1998
- CITY 32. 10/14 Day Schedule and 24 Hour Schedule - Sick Leave Use - Various Towns
From "New Jersey Career Fire Chiefs Association
- CITY 33. Workers' Compensation Comparison -1998 - Number of Officers vs. Total Workers' Compensation Claims - Paterson, Passaic, Clifton
- CITY 34. Sick Leave - Clifton vs. Passaic - 1993 through 1998 - Number of Days - Average per Man
- CITY 35. Alternative Work Shift Schedule 10 & 14
- CITY 36. Complementary Citizen Letters
- CITY 37. Curriculum Vitae of Dr. David Carnow
- CITY 38. Dr. Carnow's Occupational Medicine Expert Report
- CITY 39-53 Various South Orange Charts used in Joseph D'Arco's testimony
- CITY 54. Curriculum Vitae of Joseph D'Arco
- CITY 55 Demographic Data

APPENDIX B - LISTING OF CERTIFICATIONS

FMBA CERTIFICATIONS

- FMBA 1. Certification of Bruce Pollock, President, Millburn FMBA, Local 32
- FMBA 2. Certification of James R. Beyer, President, Springfield FMBA, Local 57
- FMBA 3. Certification of Frank Fiorelli, Vice President, Springfield FMBA, Local 57
- FMBA 4. Certification of Daniel Sullivan, President, South Orange FMBA Local 240
- FMBA 5. Certification of Donato DiGeronimo, President, Montclair FMBA, Local 20
- FMBA 6. Certification of Robert Hillman, President, Orange FMBA, Local 20
- FMBA 7. Certification of Robert A. DeLuca, Clifton FMBA, Local 21
- FMBA 8. Certification of Donato DiGeronimo, President, Montclair FMBA, Local 20
- FMBA 9. Certification of David I. Fox, Esq., Special Labor Counsel for Clifton FMBA, Local 21

CITY OF CLIFTON CERTIFICATIONS

- CITY 1. Certification of Robert Pizzuti, Montclair Fire Department
- CITY 2. Certification of Robert Hammer, City Manager of the City of Clifton
- CITY 3. Certification of Greg Hill, Business Administrator for the City of Passaic
- CITY 4. Certification of Tim Gordon, Administrator for the Township of Millburn
- CITY 5. Certification of Richard Sheola, Administrator for the Township of Springfield
- CITY 6. Certification of John Dubravsky, Fire Chief of the City of Clifton