

# **Evaluation of a Light-Duty Program for the City of Milwaukee Fire Department**

by

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## Executive Summary

Firefighting is an inherently dangerous occupation. Injuries impose a cost on the organization, mostly in the form of overtime wages for workers who replace injured individuals. The Milwaukee Fire Department is not immune to this phenomenon. In fact, overtime costs in the fire department have increased by nearly 50 percent over the last five years. In addition, the department's current injury leave policy exacerbates this problem by providing disincentives for injured firefighters to return to full duty as soon as possible. A light-duty program that assigns injured firefighters to less physically demanding positions until they are capable of returning to full-duty would reverse these incentives and has the potential to reduce the amount that the fire department must pay in injury leave compensation and overtime salaries. Given the incentives present under current policy and the impending budget cuts to local government assistance by the state, we recommend that the Milwaukee Fire Department implement the light-duty program described within this report.

We recommend a light-duty program for several reasons. First, current injury leave policy provides injured firefighters with several *disincentives* to return to full duty as soon as they are physically able. A light-duty program provides them with *incentives* to return to full duty. The fire department will reduce the amount that they spend on overtime pay as a result of this program. Second, the department will be able to gain productivity by having light-duty personnel perform tasks that would otherwise be left undone or would be performed by a current employee who has other important jobs to do. Third, the fire department will be able to provide higher quality public services with a light-duty program. They will be able to respond to requests for public education appearances faster because they will have more personnel to perform this function. In addition, they will no longer be forced to take a company out of service in order to inspect municipal buildings or make public education appearances. Finally, the individual charged with managing the light-duty program (safety coordinator) will also provide injury prevention services. Any reduction in the number of injuries in the fire department will result in cost savings. At the same time, the costs of implementing a light-duty program are minimal compared with its benefits. The program will entail transitional costs associated with implementing such a program as well as the annual cost of staffing the safety coordinator position. We conclude that the benefits of a light-duty program, due to the reversal of incentives and the injury prevention benefits of the safety coordinator position, will outweigh the costs.

We make five general recommendations regarding the structure of the light-duty program so that it will be effective and efficient. We base our recommendations both on the programs observed in other fire departments throughout the country and on our analysis of the current situation in Milwaukee. First, the fire department should hire the previously mentioned safety coordinator to manage the light-duty program and provide injury prevention services. This individual will ensure that the program is run efficiently and will work to reduce the number of injuries that occur. Second, the fire department should utilize current technology, policies, and procedures used in other areas of city government when implementing the light-duty program in order to minimize transitional costs. We suggest a specific injury leave process that the city should use to minimize these costs. Third, the department should provide for quicker access to medical care for injured firefighters, which will allow a more efficient determination of fitness for light duty and full duty. Fourth, we suggest a default light-duty assignment that ensures that everyone who is eligible for light duty is given an assignment. Finally, we recommend that the

light-duty program be focused on those with the potential to be on it for the longest amount of time in order to take full advantage of the incentives that the program provides.

# **Evaluation of a Light-Duty Program for the City of Milwaukee Fire Department**

by Mike Krafve, Manda Last, and Trevor Pelot

**F**irefighting is an inherently dangerous occupation. Approximately 330 injuries occur each year in the Milwaukee Fire Department, ranging in severity from minor ankle sprains to broken legs. These injuries lead to a large number of lost workdays and major expenditures for the city. Injuries cost the city in two major ways. First, injured firefighters receive injury leave pay during their recovery period. Second, those who replace injured workers are paid a premium wage. These two factors combined place a large financial burden on the fire department. A reduction of these costs would be a great benefit to the City of Milwaukee.

A light-duty program can reduce the costs associated with firefighter injuries and increase the efficiency of the fire department. Currently, firefighters must remain on injury leave until they are physically able to resume their normal duties. A light-duty program would allow injured firefighters to return to work and perform another task such as office work or community education until they are deemed fit to return to full duty. The work performed by those assigned to light duty increases the efficiency of the department by providing personnel to do otherwise unattended tasks. Most important, the program would provide injured firefighters with an incentive to return to full duty as soon as possible.

This report analyzes the feasibility of implementing a light-duty program in the Milwaukee Fire Department. It provides background information about the department and examines the reasons for pursuing a light-duty program. Injury data, a survey of other fire departments throughout the country, input from Milwaukee's bureau chiefs, and an examination of other injury leave policies used in Milwaukee provide the basis for the analysis of a light-duty program. Finally, this report provides a recommendation based on an analysis of this information and the costs and benefits of implementing a light-duty program in the Milwaukee Fire Department.

## **Background**

The Milwaukee Fire Department employs 1,079 people, including 1,014 in fire suppression and support roles as well as 65 in administrative positions. There must be 281 fire suppression personnel on duty at all times. Each individual firefighter works a 24-hour shift followed by 48 hours off duty. The department operates 36 firehouses in six geographically organized battalions throughout the city. The department is composed of 37 engine companies, 16 ladder companies, 8 paramedic units, and 4 rescue squads. Other fire department responsibilities include the operation of a number of special teams (Dive Rescue, Hazardous Materials, and a Heavy Urban Rescue Team), fire inspections of municipal buildings, emergency medical services, and various fire prevention and

public education programs. The fire department serves Milwaukee’s population of approximately 600,000 as well as others who work in, shop in, and visit the city.

***Reasons to Examine Current Injury Leave Policy***

The following section describes the three main problems with the current injury leave policy from the perspective of the City of Milwaukee. These problems provide the motivation for exploring changes in this policy.

**The Fiscal Disincentive to Return to Work**

Injuries occur quite frequently in fire departments because of the hazardous nature of firefighting. Between 1994 and 2001, the Milwaukee Fire Department averaged nearly 250 injuries per year resulting in approximately 3,000 lost workdays per year. This represents 2.4 times the injury incidence rate of the police department and 1.4 times the incidence rate of the public works department. Lost time because of injuries results in considerable costs to the city. In 2001 dollars, the fire department has averaged \$1,120,000 per year in injury pay during this period.

Replacing injured workers has a substantial impact on the fire department’s budget. The department currently replaces injured workers with regularly staffed firefighters who work overtime and are paid premium wages (up to one-and-a-half times the nominal pay rate). Overtime pay in the fire department cost the city \$6,850,000 in 2001. This amount makes up 11.9 percent of the fire department’s total salaries and wages. Overtime pay has grown nearly 50 percent since 1998, a period in which other wages and salaries in the fire department grew only 1.4 percent. Consequently, overtime pay grew from 8.1 percent of total compensation in 1998 to 12.5 percent in 2002. While total overtime pay is not entirely composed of overtime pay for those replacing injured firefighters, reducing the magnitude of injury leave overtime pay by any significant degree would result in substantial cost savings for the city. Table 1 illustrates the overtime costs nominally and as a percentage of total salaries and wages for the fire department over the last five years.

**Table 1. Fire Department Overtime vs. Total Salary Expenditures**

<b>Salaries and Wages</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
Overtime Compensated	\$4,338,550	\$5,132,545	\$6,725,472	\$6,849,145	\$7,148,460
All Other Salaries and Wages	\$49,512,325	\$54,250,278	\$51,606,248	\$50,872,718	\$50,213,002
<b>Net Salaries and Wages Total</b>	<b>\$53,850,875</b>	<b>\$59,382,823</b>	<b>\$58,331,720</b>	<b>\$57,721,863</b>	<b>\$57,361,462</b>
<b>Overtime as a % of Total Salaries</b>	<b>8.06</b>	<b>8.64</b>	<b>11.53</b>	<b>11.87</b>	<b>12.46</b>

Source: City of Milwaukee Budget Office, Personal Communication, April 16, 2003

Under current policy, employees on injury leave are paid by the city although they are not actively contributing to the services of the department. A firefighter receives 80 percent of his or her gross salary exempt from all income taxes and payroll taxes. As a result, an injured firefighter actually takes home more in injury leave pay than they would by working. Injured firefighters also do not incur additional costs associated with working, such as the cost of commuting. It is likely that this high salary replacement rate

acts as a disincentive to return to full duty quickly. Although the fire department was not able to present any data providing direct evidence that the injury pay structure is a disincentive to returning to work, significant anecdotal evidence provided by fire department representatives we interviewed supported this conclusion. In addition, rational individuals are expected to weigh the costs and benefits of available options. It can be reasonably expected that some people would choose to postpone returning to work because the high replacement rate allows them to receive a higher post-tax salary by staying home than they would receive by returning to work. In addition, it is much more convenient for most people to stay home than to go to work. Although very few employees likely misuse the injury leave policies, the fact that the current system provides an incentive to stay home from work as long as possible is of some concern to the bureau chiefs we interviewed. Regardless, an injury leave policy clearly should not leave this incentive in place. A light-duty program that requires injured firefighters to report to work before they are physically able to return to full duty would prevent this possibility.

### **Other Disincentives to Return to Work**

An additional disincentive to a prompt return to work is an indirect effect of the current injury leave policy. This disincentive results from not requiring injured workers to report to the department on a regular basis. It is well known within city government that many firefighters in Milwaukee have part-time jobs apart from their firefighting duties. An injured firefighter who can continue working a part-time job while at the same time receiving injury leave pay has an even greater incentive to remain on injury leave status as long as possible. A light-duty program would eliminate this return to work disincentive by requiring many injured employees to work the more traditional eight hours per day. This would prohibit many firefighters from working their second job and would provide impetus for returning to their normal schedule of one day on, two days off as soon as possible in order to enable them to continue working their second job.

Overall, recovering employees have very few requirements during the recovery period. They are required to present themselves at the Bureau of Administration on the Tuesdays that correspond to a regular shift date (effectively every third Tuesday). Also, they are required to remain in their homes during their regular 24-hour shift times. This requirement has proven difficult to enforce. According to the bureau chiefs, employees can become quite disengaged from their unit when the requirements are so minimal. An employee with minimal reporting requirements who receives a higher than usual wage has little incentive to return to work in a timely manner. A light-duty program would preclude the possibility of this outcome.

### **Department Efficiency**

Other less direct effects of the current injury policy raise concerns for the fire department and the city budget office. For one, it is quite inefficient from a budgetary perspective to pay a substantial number of employees who are not working. Furthermore, the fire department's mission is to provide public services. Unproductive municipal employees do not provide public services, and are thus inefficient from the perspective of service provision. Moreover, the very act of managing the injured personnel and the program that supports them is a cost in terms of both human resources management for

the city and lost continuity in the firehouses. The current injury leave payment structure also does not preclude accrual of sick or vacation leave while on injury leave status.

Like all municipalities, the City of Milwaukee is continually seeking ways to provide public services more efficiently. Finding ways to reduce costs is particularly important now because of current budget pressures. These pressures result from the expected cut in state aid and from Mayor Norquist's pledge to keep property tax rates low. As the mayor stated in his budget address, "The state shared revenue payments that support [the] budget still won't keep pace with inflation, much less the soaring cost of health care." Therefore, the city was forced into making "a lot of hard choices... [including] reductions throughout every department including library, Fire Department and Police."

## **What is a Light-Duty Program?**

In response to the continuing concerns over the problems with current injury leave policy, the City of Milwaukee seeks an alternative policy aimed at reducing costs and providing a higher quality of services. The specific details of light-duty programs (also called limited or restricted-duty programs) vary significantly by type of organization and from city to city. The overriding goal of these programs, however, is to provide incentives to return to full duty as soon as possible and to gain productive output from injured employees before they are able to resume their full duties. Under most state worker compensation laws, employers can require their employees to work in any capacity that is consistent with their physical limitations. Most fire departments assign light-duty positions based on the injured individual's background, experience, and personal strengths and weaknesses. For example, an injured firefighter would not be assigned to fire education activities in schools if he or she does not work well with children.

Light-duty work in fire departments generally includes administrative tasks such as filing, answering the phone, and light office work, but it may also entail dispatching, providing transportation services, public education, employee training, or doing building inspections. Light-duty work is assigned by matching the length and severity of a given injury and the individual's personal characteristics with available light-duty positions. Alternatively, an employee may simply be asked to report for regularly scheduled duty and undertake whatever tasks are assigned.

## **Purpose of This Report**

The Milwaukee Office of Budget and Management and the fire department administration are interested in studying a light-duty program for the fire department. The intended outcomes include cost containment, increased department efficiency and productivity, and improved public service. This report analyzes the feasibility of a light-duty program within the Milwaukee Fire Department. It is based on an examination of the department's history, current organization, and the number and types of light-duty jobs currently available in the department's six bureaus. This report draws lessons from similar light-duty programs operating in fire departments throughout the country. It also draws on the experiences of the Milwaukee Police Department and the Milwaukee Department of Public Works, both of which have long-established light-duty programs.

According to a 1999 audit of Milwaukee's injury pay procedures conducted by the city's comptroller, the Milwaukee Fire Department is one of a very small number of municipal fire departments of similar size without a light-duty program. The same audit concluded that there are "potentially significant benefits from a well-designed light- or restricted-duty program in the fire department."<sup>1</sup> This report concurs with the audit's conclusions and offers concrete policy guidelines for implementing a light-duty program in the Milwaukee Fire Department.

## **Investigation and Analysis**

Our investigation consisted of studying the current injury leave policies in the Milwaukee Fire Department, the pattern of actual injuries and lost work time, and light-duty programs in other cities.

### ***Current Fire Department Injury Leave Policies***

Although a light-duty program currently does not exist within the Milwaukee Fire Department, explicit policies and procedures govern the actions and responsibilities of firefighters who are injured on the job and those who administer the injury leave program.

Under current policy, firefighters injured on the job must immediately notify their supervisor who must then fill out an injury report form. Of course, the injured worker is to report immediately to a hospital emergency room if the injury is severe enough. The supervisor is required to file the report with the Bureau of Administration within three days of the incident. The injury report outlines the nature of the injury, where the injury occurred, the circumstances of the incident, any medical treatment received, and the condition of the employee. The Bureau of Administration records this information in a computer database and sends the relevant information to the Milwaukee Department of Employee Benefits (DEB), which takes over responsibility for the injury case. The DEB then follows procedures for determining injury pay eligibility, scheduling of an independent medical examination (if necessary), and awarding injury leave benefits. Also, the DEB is responsible for monitoring the progress of the employee's recovery and following up on the physician's estimate of a return-to-duty date. The records of all injuries are kept on file in the fire department, and a copy is kept by the DEB.

An injured employee remains on injury leave until the employee's private physician deems that he or she is fit to return to duty. The physician must outline a treatment plan and give a date by which the employee is expected to reach a "healing plateau." This is the point when the employee has reached the maximum point of healing, which in most cases will result in full physical health. A claims adjuster within the DEB handles continual communication with the private physician regarding the employee's status. The claims adjuster works with department nurses to determine the accuracy of the physician's diagnosis, treatment plan, and likely return-to-work date. The nurses have reference material by which they can judge the efficacy of treatment plans and likely recovery duration periods. The employee may be sent for an independent medical

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<sup>1</sup> Morics, W.M. "Audit of the City of Milwaukee Injury Pay Program," City of Milwaukee Comptroller, October 1999, p. 14.

examination if an adjuster questions the diagnosis of the private physician for any reason or has reason to believe that the employee is not trying to return to work. The independent medical exam is performed by a city-approved physician, and the results help determine the next steps in the injury determination process. For example, such an examination would be used if the firefighter does not return to full duty by the expected return-to-work date and the adjuster wants to take a closer look at the individual case to determine whether to change the employee's status. The case can be appealed through the State of Wisconsin Worker's Compensation Bureau if the employee does not agree with the diagnosis of the independent medical examiner. The employee can be denied benefits if he or she refuses to return to work after being deemed fit by the city-approved physician. The goal of this entire process is to ensure that the employee is following his or her treatment plan and to monitor his or her progress toward returning to full duty.

Employees who are deemed unable to work at full capacity are placed on injury leave status until they are fully recovered. Recovering employees are not allowed to return to full duty without an authorizing medical slip from their private physician. The employee is given minimal responsibilities while on injury leave status, as outlined earlier.

### ***Injury Types and Statistics***

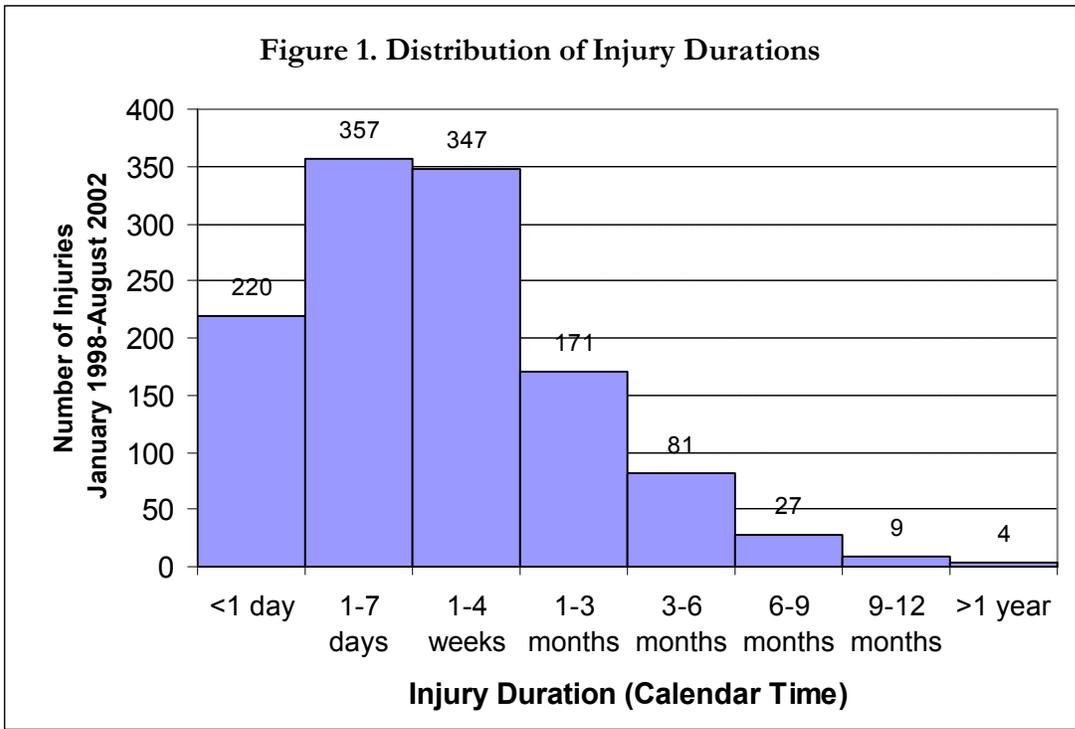
Between January 1998 and August 2002, Milwaukee firefighters suffered 1,218 injuries resulting in nearly 12,000 lost workdays. Appendix A includes a table describing these injuries. An average of approximately 330 injuries occurred each year, and the average injury duration was 9.7 days. Back injuries are the single most common type of injury suffered by Milwaukee firefighters, comprising 21 percent of the total injuries and 20 percent of the total lost workdays. Injuries to shoulder, knee, and ankle, along with lacerations and burns, occur frequently as well. These injuries each account for between 6 percent and 12 percent of the total injuries. Table 2 details the most common injuries and their average durations.

**Table 2. Common Injuries in the Milwaukee Fire Department**

<b>Injury Type</b>	<b>Number of Injuries</b>	<b>Percent of Injuries</b>	<b>Total Days Lost</b>	<b>Average Days Lost</b>	<b>Percent of Total Days</b>
Back	252	20.7	2,299	9.1	19.6
Knee	150	12.3	2,215	14.9	18.9
Shoulder	126	10.3	1,980	15.7	16.9
Ankle	94	7.7	464	4.9	4.0
Lacerations	78	6.4	534	6.9	5.6
Burns	77	6.3	276	3.6	2.4
Other	441	36.3	3,966	9.0	32.6
<b>Total</b>	<b>1218</b>	<b>100.0</b>	<b>11,734</b>	<b>9.7</b>	<b>100.0</b>

Source: Milwaukee Fire Department Injury Data: January 1998-August 2002

Approximately 76 percent of firefighter injuries resulted in less than ten lost workdays, or one 27-day work period. These account for approximately 298 of 331 yearly injuries. Figure 1 shows the distribution of injury durations.



Source: Milwaukee Fire Department Injury Data.

***Existing Light-Duty Programs in Other Fire Departments***

We interviewed officials in a number of fire departments around the country in an effort to understand how light-duty programs work. The aim of these interviews was to learn from the experiences of fire departments and to gather information regarding the most important characteristics of such programs. We looked for best practices and common features, focusing on the most common implementation difficulties and procedural troubles in both the design and operation of the programs. We also tried to learn about and understand the history of the programs, the motivation for starting light-duty efforts, specific barriers to implementation (union contracts, receptiveness of the firefighters, coordination), how the programs are managed, and other, ongoing issues. Unfortunately, none of the fire departments interviewed record the types of data necessary for a before-and-after policy comparison. This type of information would have allowed us to determine whether or not injury duration reductions are associated with the implementation of a light-duty program. Most of these light-duty programs have been in effect for so long that the people interviewed do not remember the program’s inception.

We contacted fire departments in fourteen cities that were either similar in population to Milwaukee or had fire departments of a similar size. Chicago and Minneapolis were also surveyed given their proximity to Milwaukee. Eleven of the fourteen (79 percent) fire departments operate light-duty programs. We were able to obtain detailed descriptions of light-duty programs for five cities: Minneapolis, Pittsburgh, Cleveland, Indianapolis, and Cincinnati. Brief descriptions of the light-duty programs in these cities are provided in Appendix B.

Table 3 provides a summary of the important characteristics of the programs used in five fire departments.

**Table 3. Characteristics of Other Light-Duty Programs**

City	City Population	Number of Personnel	Program Manager	City Doctor	Typical Light-Duty Jobs
Cincinnati	331,000	881	Yes	Yes	General office work, building inspections, and arson investigation.
Cleveland	478,000	1,006	Yes	No	Any area in the department in which personnel is needed. Based on physical capabilities and personal characteristics.
Indianapolis	782,000	751	Yes	No	Delivery services, general office work, community education, and building inspections.
Minneapolis	383,000	460	Yes	Yes	Drivers for mobile command vans, general office work, training, and fire prevention for long-term injuries and various work in the individual's firehouse for short-term injuries.
Pittsburgh	335,000	868	Yes	No	Any area in the department in which personnel is needed. Based on physical capabilities and personal characteristics.
Milwaukee	597,000	1,077	N/A	No	N/A

Source: U.S. Census Bureau, 2000 Census; telephone interviews with program managers.

We assume that the similarities among the programs point to areas that should be considered by the Milwaukee Fire Department because all of these fire departments have had considerable experience in using a light-duty program. All of these experienced departments, for example, use a program manager. Also, all of the departments assign light-duty personnel to similar tasks. This similarity may mean that light-duty personnel may perform these tasks the best given their physical capabilities. Not all of these fire departments use a city doctor, though. This difference may mean that each department makes this choice depending on the resources available to them and the personnel used prior to the implementation of a light-duty program. Overall, this information shows that the Milwaukee Fire Department should consider using a program manager that assigns tasks similar to those above. However, they should not use a city doctor given the scarce resources available and the current lack of a city doctor.

### ***Existing Light-Duty Programs in Milwaukee***

Light-duty programs have existed in the Milwaukee Police Department and the Department of Public Works since the early 1980s. The following section provides a brief discussion of the programs used in these departments.

#### **The Police Department**

The police department has approximately 2,400 employees and sustains approximately 1,000 injuries per year, 300 of which result in significant lost time. The light-duty program is available to both sworn and civilian personnel within the

department and to pregnant employees. The overriding goal of the program is to offer its injured employees a chance to continue making a positive contribution to operations, enable the police department to use its human resources more effectively, and to retain a high level of productivity. Placing injured workers in positions that do not require fully physically capable employees better utilizes the available human resources. Thus the department is better able to accomplish its mission of serving the community in the most efficient manner.

A light-duty position in the police department is not really a position, but is instead considered a “status.” This designation means that employees restricted to light-duty continue working the same shifts as if there were no injury, but are restricted to work that is not physically demanding beyond their capacity. This type of duty-switching would work much better in the police department than it in the fire department because police work often requires a good deal more paperwork than firefighting. Lessons can still be learned, however, from the police department’s policies.

Those employees limited to light duty are generally assigned to administrative tasks, including filing of police reports, typing, performing record-checks, filling open records requests, doing background checks, and dispatching. These positions reduce physical demands on the employee and isolate them from the hazards inherent in normal police work.

The injury leave process for injured police officers is quite similar to that for injured firefighters. For example, they must report any injury immediately to their supervisor, and the DEB monitors their recovery. Any differences in the process are directly related to the light-duty program and are as follows. First, the officer’s physician determines what tasks and duties the injured worker is capable of performing while they are recovering from their injuries. The doctor must fill out a form explaining the extent of the injury, any necessary work restrictions, an estimated time of recovery, and an estimated date of return to full duties. The employee is required to revisit his or her physician and obtain an updated status report at 30 days, 4 months, or 6 months, depending on the severity of the injury. Second, the police department maintains a database to track employee injuries and job fitness status. This database is maintained by a safety specialist in the administration bureau and is shared between the administration and various supervisors. It also facilitates management and tracks scheduling, personnel availability, injury durations, and injury types. Included in the database are the location of where the injury occurred, job title of employee, date of injury, type of injury or condition, whether the injury was sustained when the officer was on or off duty, estimated fit-for-duty date, light-duty placement date, and the date by which the employee must update his or her status with a physician.

### **The Department of Public Works**

The Milwaukee Department of Public Works employs approximately 4,200 people who work in various divisions. The light-duty program is quite different from the program within the police department. The principal goal of the policy is not to minimize costs or maximize efficiency by obliging injured employees to remain productive, but rather to aid the employee’s transition back to full-time work. This difference is mainly due to the nature of both the type of work and the employees in the two departments. Much of the work in the public works department is not amenable to individuals with

physical limitations, and there are very few office work positions. Also, many of the employees do not have sufficient familiarity with computers or other office skills or do not have sufficient educational backgrounds to do most types of office work. Instead, light-duty positions consist of a limited number of support jobs that vary widely in scope.

The program aims to bring an employee back to work approximately 20 days prior to the date he or she is deemed fully recovered from injury. In fact, the department limits its employees to 20 light-duty days per year. This limit was adopted for a number of reasons. First, limiting light-duty days keeps the potential for on-the-job re-aggravation of an injury to a minimum. Second, the practical limit to the amount of light-duty work to be done limits the amount that is allowed. Third, the department wanted to avoid the perception of favoritism whereby employees might question why some workers were assigned light-duty positions while others were not.

Injury leave processes are somewhat different from those used with firefighters. The employee and his or her supervisor must immediately fill out an injury report form when a public works employee is injured on the job. Copies of this report are sent to payroll, the public works safety coordinator, and to the DEB. The employee then has the option of seeing a private physician or a city-approved doctor. Time missed between the time of the injury and the doctor visit must be charged to the employee's sick leave account. Thus the advantage of the city-approved doctor is that the service is guaranteed within 48 hours. The safety coordinator uses the doctor's write-up to determine physical restrictions and a likely return-to-work date for the employee. If he or she has questions about the diagnosis, the safety coordinator may phone the doctor for clarification. An adjuster may send the employee for an independent medical exam when warranted. Twenty days prior to the specified full recovery date, the returning employee is assigned a light-duty position if any are available.

### ***Light-Duty Positions Available in the Fire Department***

A light-duty program would maintain or enhance productivity while encouraging injured employees to return to work in as timely a manner as possible by matching the injury type and expected duration with available positions. The most important aspect of the light-duty program is to provide impetus to encourage the employee to return to work as soon as possible. A common difficulty with light-duty programs is that the structure may not provide enough light-duty positions to match the number of injured workers. There may also be periods when the number of jobs to be done exceed the number of available workers.

The following is a list of possible light-duty positions available within each of the six bureaus that make up the fire department. This list was compiled by interviewing the bureau chiefs. In addition to the jobs available within each bureau, two light-duty positions are available that involve transporting employees from company to company as needed. Also, the 2003 budget eliminated two positions responsible for transporting the chiefs to work-related functions and performing other administrative duties. These positions could be filled with two employees assigned to light-duty at minimal cost to the city. Table 4 provides a summary of current light-duty positions. The following section describes the light-duty positions available within each bureau.

**Table 4. Light-Duty Positions Available in the Fire Department**

<b>Bureau</b>	<b>Number Available</b>	<b>Brief Description</b>
<b>General</b>	2	Transport firefighters as needed
	2	Transport chiefs as needed
<b>Administration</b>	1	Assistant to office assistant 1
	1	General office tasks
	1	Delivery and maintenance*
<b>EMS</b>	1-2	General office tasks and delivery services
<b>Special Teams</b>	1	Inventory control
<b>Training and Education</b>	4-6	Public education visits
<b>Total for Light-Duty</b>	13-16	
<b>Technical Services</b>	1-2	Basic technical assistance**
<b>Building Inspection</b>	4-6	Inspection of municipal buildings***
<b>Total Possible Positions</b>	18-24	

Source: Interviews with bureau chiefs.

\* Indicates that this position is currently filled.

\*\* Indicates the need for a long training period.

\*\*\* Would require a policy change.

### **Bureau of Administration**

The Bureau of Administration could take on a minimum of two light-duty employees. First, a light-duty employee could assist an Office Assistant 1 position. Second, an additional light-duty position could be created that would help relieve some of the pressures on the current office staff. The employee in this position would assist with various office tasks in order to make the bureau run more efficiently and generally help with getting things done in a more timely manner. Third, a light-duty position could replace the delivery and maintenance position the bureau currently fills with a public works employee. This task could be transferred to a firefighter on light duty, barring union blockage of the change.

### **Bureau of Emergency Management Services (EMS)**

The Bureau of Emergency Management Services is responsible for overseeing all EMS-related services and has only six positions in the bureau. Still, this bureau could fill one or two light-duty positions, but this would be contingent on having tasks for light-duty personnel at any given time. The amount of work available varies throughout the year, so some flexibility would need to be built into these positions. Individuals assigned to this bureau for light duty would likely perform office tasks and some delivery services.

### **Bureau of Special Teams**

The Bureau of Special Teams oversees the dive team, heavy urban rescue team, and the hazardous materials response team. Despite these responsibilities, the deputy chief is the only position in the bureau. Once again, any light-duty positions in this bureau would be dependent on the availability of office-type work at any given time. Given this constraint, this bureau could likely fill two light-duty positions. One individual could perform common office tasks in the bureau office. Another could perform inventory control, which is the logging of all the equipment in each company, a task currently performed by other personnel. According to the bureau chief, there is currently not enough manpower to accomplish all of the necessary tasks. A more accurate

inventory could be maintained if a person in a light-duty position was assigned to this task. This would result in better record-keeping as well as more accurate forecasting of procurements.

### **Bureau of Training and Education**

The Bureau of Training and Education handles firefighter training and fills requests for public education visits. This bureau could fill four to six light-duty positions in the area of public education. A light-duty program would allow the bureau to perform its functions more efficiently and would eliminate the need to take firefighters out of the field to make public education appearances. This type of position does not require large amounts of training, but individuals assigned to it would have to possess basic people skills. Training academy positions within this bureau are too physically demanding to be considered for light duty.

There is also considerable room for other light-duty positions within this bureau. For example, the fire department currently takes a company out of service when they have to inspect municipal buildings. This practice makes the fire department more vulnerable in times of emergency. An inspecting unit consisting of those on light duty could perform this function effectively while freeing up all companies to fight fires.

### **Bureau of Technical Services**

The Bureau of Technical Services consists mainly of highly trained professionals in information technology. As a result, no positions would be available for those with anything but very long-term injuries, which would give them enough time to obtain the necessary skills to fill the positions effectively. This bureau could possibly fill one to two long-term light-duty positions in the area of less complex technical assistance. These jobs would require at least two weeks of training in order for someone to perform them satisfactorily.

### ***An Evaluation of the Benefits of a Light-Duty Program***

A successfully implemented light-duty program has many potential benefits. The following section describes the benefits of a light-duty program.

#### **Return to Work Incentives**

As outlined in detail above, a light-duty program in the Milwaukee Fire Department would remove the current disincentives to return to work. Instead, personnel assigned to light-duty positions would face incentives to return to their regular duties quickly for several reasons. First, some firefighters may dislike the light-duty tasks assigned to them. Second, some firefighters may not be comfortable with the 40-hour workweek versus the normal firefighter schedule. Third, those firefighters who have part-time employment in addition to their regular firefighting shifts will find that the 40-hour workweek will conflict with their part-time jobs, providing a return-to-work incentive.

#### **Increased Departmental Productivity and Efficiency**

The light-duty program would effectively afford the fire department additional personnel so it could undertake additional duties including increased fire inspection and public education. The additional personnel provided by the light-duty program would allow the fire department to expand services without significantly reducing its capacity to perform vital department functions. In addition to filling the duties that currently take

firefighters away from their primary job, light-duty personnel would accomplish office tasks and simple projects that otherwise may remain uncompleted. Adding workers in order to complete necessary but not crucial tasks increases department efficiency by allowing current staff to perform their jobs more effectively. Furthermore, depending on the size of the light-duty program, the fire department could begin to undertake functions that are not currently assigned to it. For example, fire department employees on light duty could probably do arson inspections and private building inspections.

### **The Safety Coordinator Position**

A permanent safety coordinator position would have to be created to manage the light-duty program. An additional benefit of the light-duty program would result from the dual role of this position. This individual would be responsible for injury prevention within the fire department in addition to managing and coordinating the light-duty assignments and working closely with the DEB to ensure proper implementation of the light-duty program. The 1999 audit of the City of Milwaukee's injury pay policies also recommended the establishment of such a position due to the high rate of increase in Worker's Compensation payments and the slower reduction in workdays lost to injury as compared to the police and public works departments. This audit recommended the duties of the position include "initiating safety measures and monitoring their effectiveness; analyzing injury trends and comparing safety practices within the department to comparable municipal fire departments."<sup>2</sup>

Many well-documented studies promote the usefulness and cost-effectiveness of an injury prevention specialist. Comprehensive injury prevention strategies are available for all major types of injury. Included in these strategies are steps such as identifying high-risk tasks, analyzing ergonomics, increased training to educate employees regarding safe work practices, and increased tracking and reporting of injuries. Implementing injury prevention efforts is very job or task specific, but simple steps can often be taken to significantly reduce the probability of injury. Combining the position of light-duty program manager with injury prevention specialist would bring this added benefit to the Milwaukee Fire Department.

### **Future Benefits**

A final benefit that is likely to occur following the implementation of a light-duty program in the Milwaukee Fire Department may be seen when the department looks to create a new position. The light-duty program may benefit the department once again if the fire department requires the addition of personnel to fill a role that is currently understaffed. A light-duty employee may be the best fit for a new position, thus saving the department the time and expense that goes with hiring and employment. This is especially true when considering that there are only 13-16 light-duty positions currently available compared with the historical average of nearly 24 employees available for light-duty work at any given time. It is not possible to conclude that there will be more light-duty eligible employees than there are positions at all times, but given our analysis, that outcome appears likely.

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<sup>2</sup> Ibid.

## **Fiscal Benefits**

An important benefit of a light-duty program would be the significant cost savings it would deliver to the City of Milwaukee. A properly designed light-duty program would probably result in considerable direct cost savings for the fire department and the city. These direct savings are in addition to increased departmental efficiency and improved public service provision as outlined earlier. A reasonably accurate estimate of the potential cost-savings from implementing a light-duty program in the fire department would come from an analysis of injury leave data from a fire department that had recently implemented a light-duty program. The fire departments we surveyed were unable to provide us with data on the duration of injury-related leaves before and after the implementation of their light-duty programs.

Our approach is to outline the direct budgetary costs seen by the city based on an injured employee's status, both under the current policy and under a light-duty policy. We then explain the factors involved in calculating overall costs for each case, and summarize the causes of uncertainty in the prediction of the costs.

Under the current injury leave policy, the injured employee's normal shift is taken over by another firefighter. An uninjured employee is paid a regular salary and receives standard fringe benefits. These expenditures come out of the fire department budget for regular salaries. In contrast, the same employee on injury leave is paid 80 percent of regular gross salary for each missed shift up until the point of full recovery. This money comes out of the separate fire department injury leave budget. Injury leave pay is not considered earnings, so the amounts are not liable for payroll taxes. The employee, however, continues to accrue vacation and sick leave time while on injury leave.

Under the current policy, the replacement employee is paid either at the regular pay rate, at a premium pay rate (1½ times regular pay), or at a median amount between these two. The pay rate depends on the number of hours worked per pay period by that particular employee. On average, a replacement worker is paid 12 hours at regular pay and 12 hours at premium pay. In addition, the fire department pays payroll taxes as a percentage of this (increased) pay rate. The replacement is paid out of the department salary budgets.

The fire department is essentially paying the equivalent of a normal pay rate plus any additional premium pay and associated taxes, and it is also paying 80 percent of a regular salary. In addition, sick and vacation time is being accrued by the injured and replacement worker during the recovery period. Sick leave and vacation time cost the city different amounts depending on the years of experience of a particular firefighter.

The pay structures outlined above remain entirely the same under a light-duty program. The cost differential under the new policy would result most directly from the change in the incentive structure, as discussed earlier. Under this policy, an injured employee who is unable to work a light-duty assignment is paid the same 80 percent gross salary and receives the same benefits as outlined above. This same injured employee would be paid according to the regular salary structure while on a light-duty assignment. While the injured employee is either on regular injury leave or on a light-duty assignment, a replacement would be working the injured employee's regular shift and be paid replacement worker rates, as described earlier.

Tables 5 and 6 summarize the payroll implications of an injury to an “average” firefighter. The average salary number (\$486.72) represents the salary paid per 24-hour shift to an average employee. Injury leave pay is represented in the tables as 80 percent of this salary. Replacement workers filling in for the injured employees are paid, on average, \$608.40 per 24-hour shift.<sup>3</sup> The fire department also pays payroll taxes as a percent of the payroll amount. These values are also shown in the tables. Vacation and sick time accrual are also shown.

**Table 5. Outline of Costs Under Current Policy**

<b>Costs to the Fire Department Budget Under Current Policy</b>		
<b>Uninjured:</b>		
To uninjured employee:	Average Salary - 24 hr. shift	\$486.72
	Social Security (6.2%)	\$30.18
	Medicare (1.45%)	\$7.06
	Sick Time	Accrues
	Vacation Time	Accrues
	<b>Total</b>	<b>\$523.95</b>
<b>Injured:</b>		
To injured employee:	Injury Leave Pay - 24 hr. shift (80% of salary)	\$389.38
	Sick Time	Accrues
	Vacation Time	Accrues
	<b>Total</b>	<b>\$389.38</b>
To replacement worker:	Overtime Pay	\$608.40
	Social Security (6.2%)	\$37.72
	Medicare (1.45%)	\$8.82
	Sick Time	Accrues
	Vacation Time	Accrues
	<b>Total</b>	<b>\$654.94</b>

**Source:** Communication with City of Milwaukee Budget Office.

<sup>3</sup> Numbers based on personal communication with the Milwaukee Budget Office, April 12, 2003.

**Table 6. Outline of Costs with a Light-duty Program**

<b>Costs to the Fire Department Budget with a Light Duty Program</b>		
<b>Uninjured:</b>		
	Average Salary - 24 hr. shift	\$486.72
	Social Security (6.2%)	\$30.18
	Medicare (1.45%)	\$7.06
	Sick Time	Accrues
	Vacation Time	Accrues
	<b>Total:</b>	<b>\$523.95</b>
<b>Injured:</b>		
To injured employee (not ready for light duty):	Injury Leave Pay - 24 hr. shift (80% of salary)	\$389.38
	Sick Time	Accrues
	Vacation Time	Accrues
	<b>Total:</b>	<b>\$389.38</b>
To injured employee (on light-duty):	Average Salary - 24 hr. shift	\$486.72
	Social Security (6.2%)	\$30.18
	Medicare (1.45%)	\$7.06
	Sick Time	Accrues
	Vacation Time	Accrues
	<b>Total:</b>	<b>\$523.95</b>
To replacement worker:	Overtime Pay	\$608.40
	Social Security (6.2%)	\$37.72
	Medicare (1.45%)	\$8.82
	Sick Time	Accrues
	Vacation Time	Accrues
	<b>Total:</b>	<b>\$654.94</b>

**Source:** Communication with City of Milwaukee Budget Office.

The direct cost savings to the fire department would result from the effect the program has on reducing the time employees remain on injury leave. Savings would not directly result from the employee working the light-duty position, though the productivity of the employee on light duty is a direct benefit to the fire department and the community at large. As described earlier, reducing the time an injured employee is away from the regular full-duty shift is an important goal of the light-duty program and is accomplished

by turning the current disincentives to returning to work into incentives. The previous section outlining program benefits describes the basis for believing that the program would reduce injury leave times substantially. The difficulty in accurately estimating savings resulting from a light-duty program comes from an inability to estimate how long employees would be on light duty and how much the program would reduce injury leave durations.

### ***An Evaluation of the Costs of a Light-Duty Program***

The light-duty program would have certain implementation costs—setup of the managerial role and an injury database system. Much of this process can be copied from the light-duty program operating in the police department. The managerial role can be mimicked and the information technology can be adapted in a relatively simple manner as well. These transition costs should be one time only and minimal relative to the fiscal benefits. The ongoing costs of running the light-duty program would be relatively small, mainly that of the salary of the safety program coordinator. A safety coordinator position within the Department of Public Works is paid between \$44,000 and \$61,000 annually. The savings, however, should easily outweigh the cost of this position if the safety program coordinator can reduce the number of injuries.

One concern, voiced by officials at the DEB, is that the light-duty program may create an incentive for employees to underreport the severity of their injury and misinform the attending physician as to their true condition. These individuals believe that most firefighters would dislike a light-duty assignment because of the 40-hour workweek and the tasks they would be given. An employee faced with a light-duty assignment may act as though the injury is less severe than it really is, and as a result may end up on the job when he or she should be recovering. This situation presents a danger for re-injury or aggravation of the injury and potentially poses a risk to public safety. An official at the DEB believes that in spite of this concern, it has rarely occurred with police officers and public works employees. In addition, physicians can perform tests to determine the severity of an injury despite what an individual may tell them.

We believe that the benefits of an effectively implemented and managed light-duty program would outweigh its costs. Input from other fire departments and the Milwaukee Police Department supports this assertion as well.

## **Recommendations**

We recommend that the Milwaukee Fire Department implement a light-duty program for the reasons outlined above. The following section provides broad recommendations for implementing a light-duty policy and also outlines specifics of the program.

### ***1. Create a safety coordinator position within the fire department.***

The safety coordinator would manage the light-duty program as well as provide injury prevention services. This individual would ensure that the light-duty program is run efficiently and fairly. He or she would be responsible for keeping a record of currently available light-duty jobs, determining which injured employees are or will be eligible for light-duty, and assisting the DEB with monitoring injured individuals. Each

bureau chief agreed that a light-duty program manager is necessary to ensure that the program runs efficiently. When hiring the safety coordinator, preference should be given to someone who is or has been employed in the fire department. An individual familiar with the fire department's culture, policies, and tasks performed would be able to perform his or her job more efficiently because of this intimate knowledge. Hiring a current or past employee would also minimize the transition costs associated with acquainting someone with the fire department.

2. *Utilize current technology, policies, and procedures when implementing the light-duty program.*

The light-duty program should utilize as many of the fire department's current injury leave policies and other city procedures as possible in order to minimize transition costs. Examples of transition costs include requiring DEB employees to learn a new injury determination and monitoring process and requiring the creation of a new form for doctors to complete outlining the injured firefighter's physical capabilities. For instance, the police department currently requires doctors to complete a form detailing the activities that an injured officer can and cannot do. The fire department could use this form, with minor changes, for the new light-duty program. Claims adjusters currently meet with officials at the police and public works departments in order to monitor individual cases more effectively. The safety coordinator should also meet regularly with claims adjusters for the same reason. Overall, transition costs would be minimal because the fire department would use technology and practices that are already being used elsewhere in the city.

3. *Provide for quicker access to medical care.*

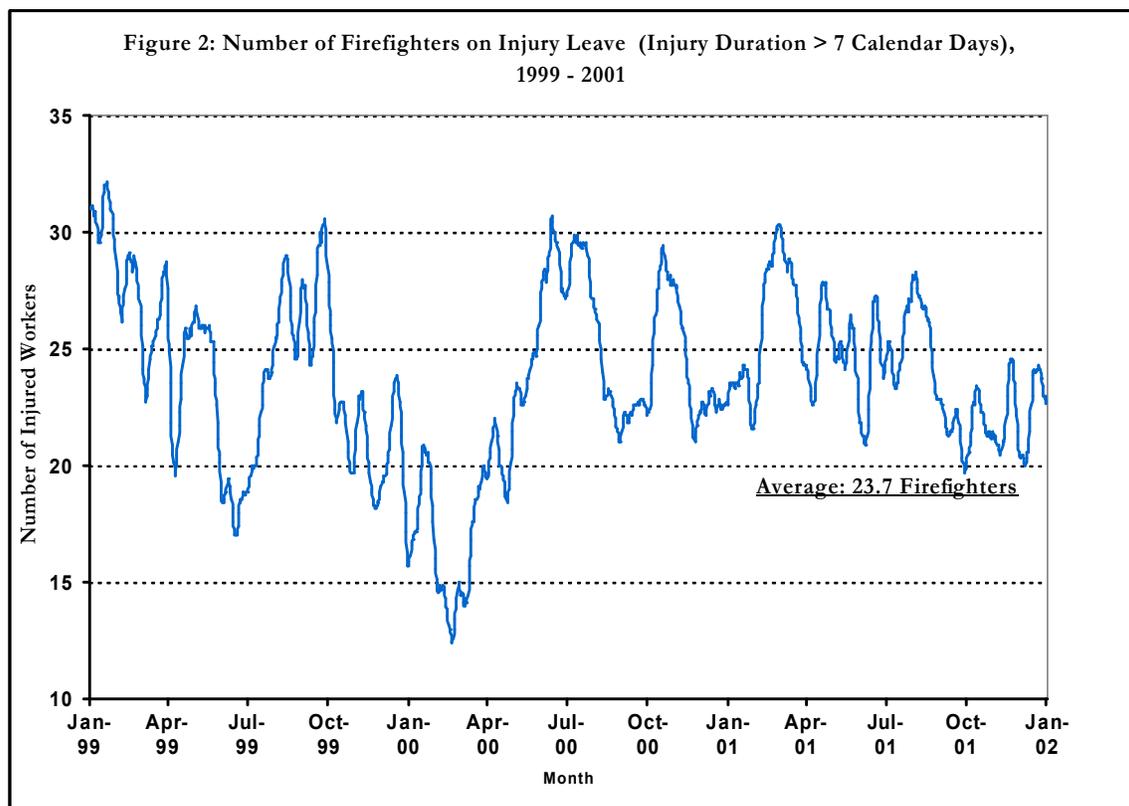
The safety coordinator and the DEB should work together to ensure that injured firefighters are able to see a doctor as needed. The light-duty program's effectiveness depends on quick access to medical evaluations, which would allow the safety coordinator and the DEB to determine more quickly when a firefighter is eligible for light duty or eligible to return to full duty. In Minneapolis, for example, physicians promise to see an injured firefighter within 24 hours of the request in return for the contract with the fire department. If the individual refuses to see this doctor, he or she must use sick time while waiting for an appointment with another private physician. A similar policy is followed currently in the Milwaukee Department of Public Works, and the injured employee is able to see a city-approved physician immediately. This process in the Milwaukee Fire Department would ensure that the firefighter receive a quick diagnosis while minimizing costs to the city.

4. *Injured firefighters should report to their company for their normal shift if they are physically able to do so.*

Reporting to one's company on the normal shift day would be the default light-duty assignment if an injured firefighter is physically able to do so. The employee would remain on his or her regular shift until transferred to light duty or until the healing process is complete. Firefighters on light duty at the firehouse would perform any given tasks that need to be done. These tasks may include cleaning and paperwork. We recommend this policy for two reasons. First, it is inherently unfair to require some injured individuals to report to light duty while not requiring others to do so—if they are

physically able. Injured employees should not be exempt from light duty simply because no light-duty positions are available. Second, the safety coordinator may not be able to receive a firefighter's diagnosis in time to assign them to a light-duty position prior to their next shift. This policy provides a default light-duty assignment when this situation arises.

The safety coordinator would have to deal with situations in which the number of available light-duty employees exceeds the number of available light-duty positions. For example, between 1999 and 2001, an average of 24 firefighters were on injury leave for at least one week at any given time. Figure 2 provides a graph of the number of individuals on injury leave for more than a week at any given time. We use a one-week injury leave as a proxy for eligibility for assignment to the coordinated light-duty position. We assume that those on injury leave for less than one week would rarely be considered for these light-duty assignments because of the need for training, the logistics of managing short-term assignments, and the likelihood that enough employees with longer-term injuries would fill the positions. Thirteen to sixteen light-duty positions were available within the six bureaus. The number of those on injury leave for longer than one week dipped below fifteen only once between 1999 and 2001.



5. *Focus light-duty assignments on those who would be eligible for light duty for the longest time.*

The safety coordinator needs guidelines for prioritizing the individuals eligible for light duty because the number of positions available within the six bureaus is finite. Individuals with the potential to be on light duty for the longest period are those who

have the largest gap between the date they are eligible for light duty and the date that they are predicted to return to full duty. The focus should be on these individuals for several reasons. First, concentrating on these individuals gives the department the greatest opportunity for savings. The incentives for workers to return to full duty as soon as possible are the most powerful for those with longer-term injuries. For example, assume that one injured firefighter is expected to be on light duty for two months and another is expected to be on light duty for two weeks. The light-duty program has greater potential for reducing the time before the first individual returns to full duty than it does for the latter. Second, this procedure reduces the amount of training that light-duty employees would need to perform the task they are given effectively. Consequently, the department would be able to get as much productivity as possible from their light-duty positions. Third, this focus would allow the safety coordinator to manage his or her time more efficiently. Rather than managing constant turnover among the light-duty assignments, the coordinator would be able to allocate more time to injury prevention efforts and other activities.

Overall, we recommend that the Milwaukee Fire Department implement a light-duty program for several reasons. First, a light-duty program replaces return-to-work disincentives with return-to-work incentives. Second, the fire department would gain productivity and efficiency as a result of the program. Third, the safety coordinator would provide benefits in addition to the management of the light-duty program. Finally, our analysis shows that the benefits of an effectively managed light-duty program far outweigh its costs. The specific structure of the recommended light-duty program is provided in Appendix C. Flow charts illustrating the current and recommended injury leave processes are provided in Appendixes D and E, respectively. These flow charts show the similarity between the two processes.

## **Acknowledgments**

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## Appendix A

### *Milwaukee Fire Department Injuries, January 1998-August 2002*

Injury Type	Number of Injuries	% of Total Injuries	Number of Days	Average Number of Days	% of Total Days
<b>Abdomen</b>	<b>8</b>	<b>0.7%</b>	<b>44.8</b>	<b>5.6</b>	<b>0.38%</b>
Strain	6	0.5%	40.5	6.8	0.35%
Other	2	0.2%	4.3	2.1	0.04%
<b>Abrasion</b>	<b>11</b>	<b>0.9%</b>	<b>26.8</b>	<b>2.4</b>	<b>0.23%</b>
<b>Allergy</b>	<b>7</b>	<b>0.6%</b>	<b>12.0</b>	<b>1.7</b>	<b>0.10%</b>
<b>Ankle</b>	<b>94</b>	<b>7.7%</b>	<b>463.9</b>	<b>4.9</b>	<b>3.95%</b>
General Injury	7	0.6%	57.3	8.1	0.49%
Pain	16	1.3%	43.8	2.7	0.37%
Sprain	60	4.9%	345.4	5.8	2.94%
Strain	4	0.3%	5.6	1.6	0.05%
Twist	6	0.5%	10.8	1.8	0.09%
Other	1	0.1%	1.0	1.0	0.01%
<b>Arm</b>	<b>22</b>	<b>1.8%</b>	<b>213.4</b>	<b>9.7</b>	<b>1.82%</b>
Pain	14	1.1%	76.1	5.4	0.65%
Strain	3	0.2%	27.3	9.1	0.23%
Other	5	0.4%	110.0	22.0	0.94%
<b>Back</b>	<b>252</b>	<b>20.7%</b>	<b>2299.4</b>	<b>9.1</b>	<b>19.60%</b>
General Injury	21	1.7%	402.1	19.2	3.43%
Pain	141	11.6%	1149.9	8.2	9.80%
Strain	86	7.1%	688.5	8.0	5.87%
Other	4	0.3%	58.9	14.7	0.50%
<b>Blunt Trauma</b>	<b>4</b>	<b>0.3%</b>	<b>94.0</b>	<b>23.5</b>	<b>0.80%</b>
<b>Burns</b>	<b>77</b>	<b>6.3%</b>	<b>275.8</b>	<b>3.6</b>	<b>2.35%</b>
<b>Chest</b>	<b>6</b>	<b>0.5%</b>	<b>21.0</b>	<b>3.5</b>	<b>0.18%</b>
Strain	5	0.4%	20.0	4.0	0.17%
Other	1	0.1%	1.0	1.0	0.01%
<b>Concussion</b>	<b>3</b>	<b>0.2%</b>	<b>21.2</b>	<b>7.1</b>	<b>0.18%</b>
<b>Contusion</b>	<b>40</b>	<b>3.3%</b>	<b>271.5</b>	<b>6.8</b>	<b>2.31%</b>
<b>Dehydration</b>	<b>4</b>	<b>0.3%</b>	<b>4.0</b>	<b>1.0</b>	<b>0.03%</b>
<b>Elbow</b>	<b>32</b>	<b>2.6%</b>	<b>385.2</b>	<b>12.0</b>	<b>3.28%</b>
Pain	23	1.9%	275.6	12.0	2.35%
Strain	6	0.5%	64.6	10.8	0.55%
Other	3	0.2%	45.0	15.0	0.38%
<b>Electric Shock</b>	<b>3</b>	<b>0.2%</b>	<b>19.8</b>	<b>6.6</b>	<b>0.17%</b>
<b>Eye</b>	<b>16</b>	<b>1.3%</b>	<b>25.2</b>	<b>1.6</b>	<b>0.22%</b>
Foreign Object	8	0.7%	10.6	1.5	0.09%
General Injury	7	0.6%	14.1	2.0	0.12%
Other	1	0.1%	0.5	0.5	0.00%

<b>Finger</b>	<b>23</b>	<b>1.9%</b>	<b>94.6</b>	<b>4.1</b>	<b>0.81%</b>
Avulsion	4	0.3%	26.4	6.6	0.23%
General Injury	3	0.2%	7.9	2.6	0.07%
Pain	4	0.3%	28.0	7.0	0.24%
Sprain	6	0.5%	23.0	3.8	0.20%
Other	6	0.5%	9.3	1.6	0.08%
<b>Foot</b>	<b>25</b>	<b>2.1%</b>	<b>101.9</b>	<b>4.1</b>	<b>0.87%</b>
Pain	12	1.0%	58.7	4.9	0.50%
Puncture	3	0.2%	7.5	2.5	0.06%
Sprain	4	0.3%	12.4	3.1	0.11%
Strain	5	0.4%	23.0	4.5	0.20%
Other	1	0.1%	0.3	0.3	0.00%
<b>Fracture</b>	<b>39</b>	<b>3.2%</b>	<b>461.2</b>	<b>11.8</b>	<b>3.93%</b>
<b>Groin</b>	<b>28</b>	<b>2.3%</b>	<b>162.5</b>	<b>6.0</b>	<b>1.38%</b>
Hernia	12	1.0%	56.0	4.7	0.48%
Strain	12	1.0%	38.2	3.5	0.33%
Other	4	0.3%	68.3	17.1	0.58%
<b>Hand</b>	<b>19</b>	<b>1.6%</b>	<b>148.6</b>	<b>7.8</b>	<b>1.27%</b>
General Injury	3	0.2%	7.9	2.6	0.07%
Pain	6	0.5%	19.6	3.3	0.17%
Sprain	4	0.3%	23.0	5.8	0.20%
Other	6	0.5%	98.0	24.5	0.84%
<b>Head</b>	<b>6</b>	<b>0.5%</b>	<b>86.7</b>	<b>14.5</b>	<b>0.74%</b>
Pain	5	0.4%	85.4	14.5	0.73%
Other	1	0.1%	1.3	1.3	0.01%
<b>Heat</b>	<b>5</b>	<b>0.4%</b>	<b>9.0</b>	<b>1.8</b>	<b>0.08%</b>
<b>Hernia</b>	<b>4</b>	<b>0.3%</b>	<b>39.6</b>	<b>9.9</b>	<b>0.34%</b>
<b>Hip</b>	<b>3</b>	<b>0.2%</b>	<b>61.3</b>	<b>20.4</b>	<b>0.52%</b>
Other	3	0.2%	61.3	20.4	0.52%
<b>Knee</b>	<b>150</b>	<b>12.3%</b>	<b>2214.5</b>	<b>14.9</b>	<b>18.87%</b>
General Injury	19	1.6%	361.8	19.0	3.08%
Pain	65	5.3%	959.6	15.0	8.18%
Sprain	19	1.6%	105.0	7.4	0.89%
Strain	32	2.6%	332.0	10.4	2.83%
Twist	10	0.8%	274.7	27.5	2.34%
Other	5	0.4%	145.5	29.1	1.24%
<b>Laceration</b>	<b>78</b>	<b>6.4%</b>	<b>534.4</b>	<b>6.9</b>	<b>4.55%</b>
<b>Leg</b>	<b>17</b>	<b>1.4%</b>	<b>117.0</b>	<b>6.9</b>	<b>1.00%</b>
Pain	8	0.7%	72.2	9.0	0.62%
Strain	6	0.5%	19.6	3.3	0.17%
Other	3	0.2%	25.2	8.4	0.21%
<b>Neck</b>	<b>31</b>	<b>2.5%</b>	<b>291.7</b>	<b>9.4</b>	<b>2.49%</b>
Pain	16	1.3%	199.4	12.5	1.70%
Strain	15	1.2%	92.3	6.2	0.79%

<b>Rib Pain</b>	<b>6</b>	<b>0.5%</b>	<b>61.0</b>	<b>10.2</b>	<b>0.52%</b>
<b>Shoulder</b>	<b>126</b>	<b>10.3%</b>	<b>1979.8</b>	<b>15.7</b>	<b>16.87%</b>
Dislocation	4	0.3%	173.2	43.3	1.48%
General Injury	19	1.6%	421.9	22.2	3.60%
Pain	66	5.4%	1049.1	15.9	8.94%
Sprain	3	0.2%	40.3	13.4	0.34%
Strain	31	2.5%	191.6	6.2	1.63%
Other	3	0.2%	103.6	34.5	0.88%
<b>Smoke Inhalation</b>	<b>5</b>	<b>0.4%</b>	<b>9.5</b>	<b>1.9</b>	<b>0.08%</b>
<b>Surgery</b>	<b>19</b>	<b>1.6%</b>	<b>736.6</b>	<b>38.8</b>	<b>6.28%</b>
<b>Thumb</b>	<b>4</b>	<b>0.3%</b>	<b>11.1</b>	<b>2.8</b>	<b>0.09%</b>
Other	4	0.3%	11.1	2.8	0.09%
<b>Wrist</b>	<b>21</b>	<b>1.7%</b>	<b>188.8</b>	<b>9.0</b>	<b>1.61%</b>
Pain	13	1.1%	69.2	5.3	0.59%
Sprain	5	0.4%	107.5	21.5	0.92%
Other	3	0.2%	12.1	4.0	0.10%
<b>Other</b>	<b>30</b>	<b>2.5%</b>	<b>245.9</b>	<b>8.2</b>	<b>2.10%</b>
<b>Total</b>	<b>1218</b>	<b>100%</b>	<b>11733.8</b>	<b>9.6</b>	<b>1.0</b>

Source: Milwaukee Fire Department-Bureau of Administration

## **Appendix B**

### ***Description of Light-Duty Programs in Other Fire Departments***

#### **Minneapolis Fire Department**

The Minneapolis Fire Department has 460 sworn personnel, 4 battalions, 20 engine companies, and 10 ladder companies, making it approximately one-half the size of the Milwaukee Fire Department. The department serves a population of approximately 380,000 people living within Minneapolis city limits.

The Minneapolis Fire Department has had a light-duty program since the early 1960s. The policies have undergone some minor revisions since then, adjusting for changing department size, budgetary realities, and firefighter demographics, but overall have remained fairly stable. The light-duty program in Minneapolis has eight “permanent” light-duty positions, four of which are assigned to firefighters on lifetime disability and four to firefighters with long-term injuries. A “long-term” injury is defined as an injury that will take longer than approximately two months for recovery (depending on the number of injured workers, the need for people to fill positions, etc.) but considered to be a permanent disability. Permanent light-duty workers serve as full-time drivers for mobile command vans transporting personnel and equipment to fire scenes, while the long-term light-duty positions include an administrative assistant, a position in the fire prevention division, a position in fire training squad, and one in the equipment supply room. The Minneapolis Fire Department determined that four longer term light-duty positions are a suitable number based on the current average injury leave times and numbers, and these positions were primarily assigned based upon that knowledge. If it becomes clear, based on the growing size of the department or based upon an increase in injury frequency, that the department should assign another position to light-duty status, the department may adjust the number and type of these positions over time.

For short-term recovery periods, in most cases light-duty positions are assigned within the firehouses themselves. Minneapolis requires the injured workers to report to their home fire station for their regular shifts. Employees are required do any type of work that a supervisor assigns and that falls within their medical restrictions. According to the staff deputy chief, this policy has two positive outcomes. One is that the injured worker contributes to the overall productivity of the firehouse (in particular) and to the fire department as a whole. Second, even in the event that there is no meaningful work, requiring attendance acts as a persuasive tool to motivate the employee to return to active duty in a more timely fashion. The employee does not lose contact with fellow employees, maintains pride, and has a desire to get back to work quickly. In some instances, a firefighter on light duty may be asked to work at different fire stations, in the administrative office, or on special events. For example, a firefighter on light duty may be required to attend to security measures at a public event. In either case, the employee adds productivity to the department and is more likely to return to work sooner.

Under Minnesota’s worker’s compensation laws, the City of Minneapolis is legally authorized to ask for output from an employee who is on the payroll. The Minneapolis Fire Department thus requires an injured firefighter to report for duty (assuming they are not physically unable) on their regular shift. This action is built in to the formal policy of the department and has become part of its culture, and thus is seen as part of the responsibility of the firefighter. As the deputy chief put it, “light duty is an

obligation, not a choice.” An injured employee is expected to show up at the station on their regular shift, with a physician’s form outlining his or her work restrictions.

When an employee is injured on the job, the supervisor in charge must fill out an injury report form, which must then be forwarded to the administration office within 24 hours. This report then is forwarded to the worker’s compensation department, a process that is facilitated with electronic communication. An initial evaluation of the injury (unless the severity is such that emergency medical treatment is necessary) is done through a physician at a city-approved occupational medical clinic, and this evaluation must be completed within the first 72 hours of the injury. In the Minneapolis Fire Department, the city physician plays a decisive role in the injury determination and fit-for-duty determination process. The city physician has a detailed checklist outlining the physical demands of a particular employee’s job description (see Appendix B), and the physician uses this checklist to determine whether the employee is fit for full duty, light duty, or not fit for duty. The city physician then determines approximate dates for availability for light duty as well as for full recovery, and fills out a workability form. While the employee is recovering, he or she reports to the city physician every two weeks for consultation and reevaluation. If an employee disagrees with the conclusions of the city physician with regard to the injuries, that employee may appeal the decision to a private physician of his or her choice. If this physician has an opinion contrary to the initial conclusion of the city physician, the matter is sent to an “independent,” city-approved physician for final determination.

Employees suffering injuries while off duty can be included in the light-duty program in order to retain their sick leave and vacation leave hours. In this case, however, the light-duty work they return to must be “meaningful” and productive.

### **Pittsburgh Fire Department**

The City of Pittsburgh Fire Department is geographically divided into five battalions, which includes 35 stations, 30 engine companies, 11 truck companies, and a mobile air compressor unit. The department has 868 employees, with a minimum of 186 fire suppression personnel on duty at all times. The department serves a population of approximately 340,000 people within the city limits. The following is a brief outline of the light-duty policy within the Pittsburgh Fire Department.

When a firefighter is injured on the job, he or she goes to a third-party physician contracted with by the city. That doctor sends him or her back to the fire department with work restriction information. The fire department then finds a job for that individual based on this recommendation. The only exception to this rule is that they will not take anyone with a cast, crutches, or any other physical restraint. As an example of this policy, if the doctor says this individual can work four hours a day with no lifting, the fire department may find him or her a position filing papers or answering the phone. Firefighters injured off the job are ineligible for a light-duty assignment. In sum, a light-duty position will be found for nearly any firefighter injured on the job. There are no light-duty positions for those with permanent disabilities.

### **Cleveland Fire Department**

The Cleveland Fire Department serves a population of approximately 500,000 people living within the city limits. The following is a brief outline of the light-duty policy within the Cleveland Fire Department.

The Cleveland Fire Department operates an informal, unwritten light-duty program, called “transitional duty.” A firefighter who is injured on the job goes to his or her private physician, who sends the employee back to the fire department with a note stating the individual’s restrictions. The firefighter then reports to the department doctor, who also gives a diagnosis. This department doctor provides these services for all of the city’s uniformed personnel and serves as a guarantee against possible abuses by the individual’s private physician. The injured employee is then assigned a transitional duty assignment matching available work in the department with the individual’s physical restrictions. This assignment cannot be refused. The firefighter’s temporary supervisor keeps a log of the individual’s progress and their impression of the employee’s attitude toward the assignment throughout the assignment.

### **Indianapolis Fire Department**

The City of Indianapolis Fire Department is geographically divided into four battalions, which includes 26 stations and 25 engine companies. The department employs more than 750 sworn firefighters and about 50 civilians. The department serves a population of approximately 400,000 people living within Indianapolis city limits. The following is a brief outline of the light-duty policy of the Indianapolis Fire Department.

Firefighters must orally notify their company officer and the battalion chief when they are injured. This notification must include the specific nature of the injury, the contact information for the attending (private) physician, and their anticipated date of return. This information is forwarded to the personnel office, which assumes a record-keeping and regulatory role. Firefighters with an extended injury leave must contact their shift commander on the first shift day of each week to provide an update on their condition. Shift commanders are responsible for monitoring the status of firefighters on leave. In order to combat possible abuses of the system, the fire department may require documentation from the attending physician regarding the extent of the injury and estimated date of return to duty. Otherwise, the firefighter may be ordered to an evaluation by one of the department’s two contracted-out physicians. In addition, the firefighter must see one of these physicians if they are expected to miss more than ten calendar workdays.

If the firefighter has limitations that leave him or her unable to perform normal duties, but able to perform less physically demanding jobs, he or she is put on limited duty. Typical limited-duty jobs include delivery services, office work, community education, and building inspections. The fire department attempts to match limited-duty jobs with the individual’s personal characteristics, their physical and emotional limitations, and wherever the need for extra help within the fire department is the greatest. Limited-duty assignments are mandatory, but firefighters may use vacation time in lieu of the assignment.

When a firefighter is released from limited-duty work and is able to return to full duty, he or she must report immediately to the personnel office for instructions. Personnel

will ensure that a department physician evaluates the firefighter in order to make sure that he or she is capable of returning to full duty. Once the firefighter's fitness for duty is determined, the personnel office will inform him or her of the return-to-duty date. Personnel will also notify the pertinent battalion chief of the firefighter's status and return-to-duty date.

### **Cincinnati Fire Department**

The Cincinnati Fire Department has 881 sworn personnel. The department serves a population of approximately 332,000 people living within the Cincinnati city limits.

An injured Cincinnati firefighter first reports to the city physician, who determines whether the firefighter will be placed off duty, sent back to full duty, or placed on restricted duty (equivalent to light duty). The physician also provides the injured individual with a date for a return checkup. If placed on restricted duty, the firefighter must report to the training bureau at 7:00 a.m. every day to receive an assignment. Those on restricted duty due to an injury work four ten-hour shifts per week. Common restricted-duty jobs include office work, building inspections, and arson investigation. The given tasks are consistent with physical limitations. Injured firefighters are required to sign in and out every time they arrive at or leave the training bureau. A job will be found for every firefighter eligible for restricted duty, and the assignment is mandatory.

Upon receipt of an assignment, the chief of the bureau to which the firefighter is assigned monitors the individual to ensure that he or she is complying with the job requirements. Firefighters on restricted duty used to report to their company, but it was found that the company chiefs were not adequately monitoring them. The personnel office manages the light-duty program and sets up the basic rules that injured firefighters must follow. For example, they created the sign-in and sign-out sheet and ensure that those on restricted duty follow the sign-in rules. If the personnel office or the training bureau chief feel an individual is abusing the program, that person can be required to re-report to the doctor to get a current diagnosis and estimated date of return to full duty. The sign-in and sign-out sheet was a major incentive for people to return to work in a timely manner.

## Appendix C

### *Structure of the New Light-Duty Program*

This appendix provides the recommended structure for the light-duty program. The structure incorporates the recommendations made earlier to create a light-duty program that is both effective and efficient.

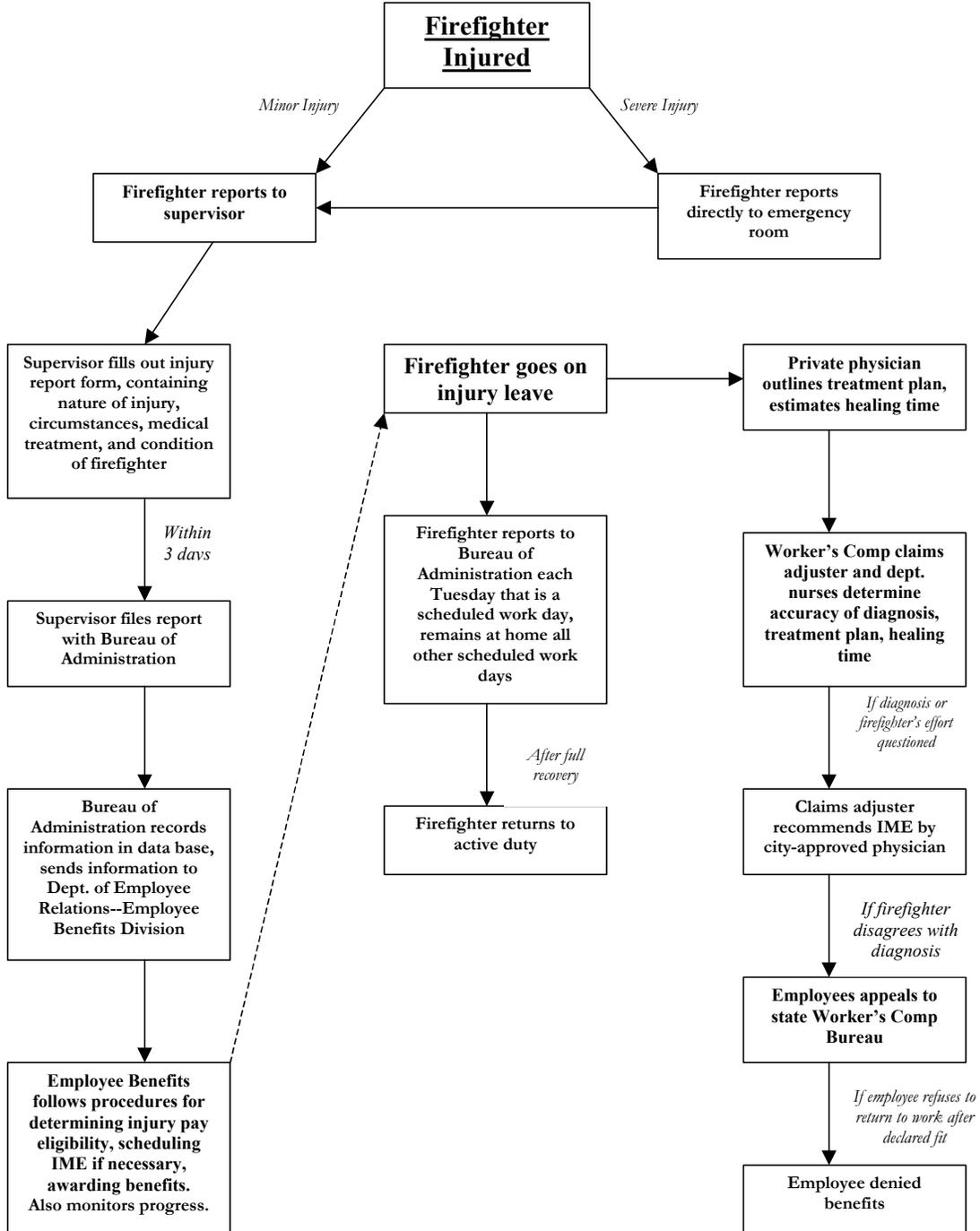
Much of the injury leave process under the light-duty program would be the same as it is under current policy. When a firefighter is injured, the individual reports to his or her supervisor. Within three days, the supervisor then completes the same injury report form that he or she would under current policy and forwards it to the Bureau of Administration. Administration records the necessary information and forwards it to the DEB and the safety coordinator. Together they determine injury pay eligibility and monitor the individual's recovery.

The individual reports to his or her physician as usual. The physician completes a form, similar to that used in the police department, that outlines the physical activities the injured firefighter can perform and the estimated dates of eligibility for light duty and return to full duty. This form goes to the firefighter's supervisor, the Bureau of Administration, the safety coordinator, and the DEB to ensure effective monitoring of the treatment plan. If the physician deems that the individual is eligible for light duty, he or she reports to the firehouse on the normal shift day until the safety coordinator assigns him or her to a light-duty position. The safety coordinator, the DEB, and the firefighter's physician work together to determine eligibility for light-duty assignments. The firefighter reports to the position to which he or she is assigned as soon as the safety coordinator finds an available position.

The safety coordinator and the DEB use regular physician reports to determine a date of return to full duty. When this date is known, the safety coordinator notifies the individual's supervisor, who prepares for the firefighter's return. The DEB conducts business as usual throughout most of this process. For example, they already monitor the firefighter's treatment plan and recovery in order to ensure a timely return to full duty. Under a light-duty policy, they would perform this task in addition to monitoring an individual's eligibility for light duty. They would regularly meet with the safety coordinator for the reasons outlined above. In sum, the current process is followed as closely as possible to minimize transition costs and to allow for the continuity of the work that is already performed.

**Appendix D**

***Flow Chart of Current Injury Leave Process***



## Appendix E

### *Flow Chart of Recommended Injury Leave Process*

