



TOUGH CHOICES FOR TOUGH TIMES: WORCESTER'S FY04 BUDGET

**Report No. 03-02
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Executive Summary

The City is facing its biggest fiscal crisis in more than a decade. This crisis is primarily the result of a decline in state revenues, which translates into reductions in local aid from the state. The net loss in local aid between FY03 and FY04 will be about \$9.0 million, or 4.1%. Since about 52% of the City's annual revenues come from the Commonwealth, it is clear that the City's fortunes and misfortunes are integrally tied to those of the state. (It should be recalled that the City was also the beneficiary of the state's largesse when the Commonwealth was awash with new revenues during the mid and late 90s. Between FY93 and FY02, local aid increased from \$83.5 million to \$205 million, or almost 146%.)

Because of its current fiscal crisis, the City is facing some very difficult choices. Cuts will have to be made in a careful and thoughtful manner that preserve core municipal services while continuing to treat the City's dedicated employees with respect and compassion. The seriousness of the situation, however, will require the City to take a fresh look both at restructuring such aspects of its operations as employee benefits and workforce structures and at eliminating City services that are really optional programs rather than core services. Since the anticipated budget shortfall cannot be covered by tax increases – which are (1) severely constrained by Proposition 2^{1/2}; (2) highly unpopular with City residents who are often already hard-pressed by high residential property taxes, the stock market plunge and a relatively weak national economy; and (3) in the case of business taxes, self-destructive (since they drive taxpaying businesses out of the City or deter them from locating here in the first place)¹ – we cannot afford a “business as usual” mentality towards City services. Efficient cost-cutting is the only way of ensuring that core City services such as public safety and education, park and road maintenance and the public library continue to be provided to residents without reduction in quality or availability.

Regarding workforce structures, the City needs to reconsider higher-than-necessary command-to-personnel ratios (in the Police and Fire Departments), costly uniformed flaggers in place of equally efficient non-uniformed personnel, and other practices that strain our resources without a demonstrable benefit. The City will also need to reconsider employee benefits, such as the City's contribution to municipal employee health insurance, that are far more generous than what most private employers can afford. It will have to reconsider its support for programs such as branch libraries and the Senior Center that largely duplicate other programs and are unaffordable in a time of limited resources. And it will also have to reconsider its continued ownership and maintenance of a public cemetery that is not an obvious municipal function.

The total savings from these recommendations would be \$28.9 million, if the City chose equal dollar health insurance contributions based on 75% of the lowest cost provider. According to the formula used by the City Assessor, implementing these recommendations, which could make up the anticipated deficit, would be equivalent to \$370 on the average residential property tax bill in

¹ Since the City Council introduced dual tax rates in FY84, the value of the commercial/industrial portion of the tax base has shrunk from 35.4% to 22.4%.

FY04, and \$1,887 on the average commercial property tax bill. If, however, the City's health insurance contributions were changed to 75% of all plans offered, which is the proposal currently supported by the City Manager and the Governor, then the total savings from all of the Research Bureau recommendations would be \$18.2 million. Implementing these recommendations would be equivalent to \$190 on the average residential property tax bill and \$969 on the average commercial property tax bill.

I. Introduction

The City's revenues come from three primary sources: property taxes, local aid from the state, and local receipts. Between FY93 and FY02, municipal revenues from all these sources increased by 81% while expenditures increased by 82%. (See Appendices A and B.) Inflation during this period was only 24%. Table 1 provides a comparison of revenues and expenditures for FY03 and FY04. While property taxes are expected to increase by \$7 million (2.5% of the prior year's maximum allowable levy plus the revenue generated by new construction), local aid will see a net reduction of about \$9.0 million. Fees and charges are expected to remain at the same level of about \$34 million. In sum, revenues in FY04 will be about \$5.4 million (about 1.3%) less than the original FY03 budget. Expenditures, however, are expected to increase by 4% as a result of contractual obligations for salary increases, and because of increases in municipal employee health insurance and pension costs. According to the City Manager, Worcester faces a revenue shortfall of \$21.5 million in FY04 based on estimated revenues of \$403.1 million and estimated expenditures of \$424.6 million (as of March 13, 2003).

Table 1: Comparison of FY03 and FY04 Municipal Budgets (as of March 13, 2003)

	FY03 budget (\$ millions)	FY03 revised (\$ millions)	FY04 projected (\$ millions)	% Change from FY03 budget
REVENUES				
Local Aid	220.4	216.1	211.4	(4.1)
Property Taxes	149.3	149.3	156.3	4.7
Fees and Charges*	34.0	34.0	34.0	0.0
Other Funds	1.4	1.4	1.4	0.0
Free Cash	3.4	3.4	0.0	(100.0)
TOTAL REVENUES	408.5	404.2	403.1	(1.3)
EXPENDITURES				
Education	217.0	217.0	226.7	4.5
Operational Budgets	98.5	98.5	98.0	(0.5)
Fixed Expenses**	74.0	74.0	80.8	9.2
Non-Municipal***	19.0	19.0	19.1	0.2
TOTAL EXPENDITURES	408.5	408.5	424.6	4.0
Shortfall	0.0	(4.3)	(21.5)	

*Motor vehicle excise, fines, etc.

** Debt service, health insurance, etc.

*** Inter-governmental charges, Educational offsets, etc.

Source: Budget Director, City of Worcester.

Prepared by: Worcester Regional Research Bureau.

In order to address this revenue shortfall, the City Manager is in the process of laying off 110 employees. (The Worcester Public Schools Superintendent estimates that he will have to lay off 300 to 800 employees.) The alternative to these massive layoffs is to consider a number of

recommendations that apply primarily to non-school spending.² These include restructuring municipal employee health insurance and pension benefits, restructuring other public safety benefits, and reorganizing the public safety departments. All of these recommendations can be implemented through contract negotiations. However, the recommendations pertaining to the pension system and the Quinn Bill would have to be changed by state government. These recommendations, if adopted, would permanently lower the overall cost of operating municipal government by millions of dollars each year. The bulk of the savings would come from this set of recommendations. The second set of recommendations eliminates or privatizes services. These include privatizing Hope Cemetery, closing the Senior Center and selling the building in which it is housed, and closing the branch libraries. (It should also be noted that instances in which a reduction in staff is recommended, the City would incur additional costs related to unemployment compensation.)

II. Health Insurance

Recommendation: Decrease City's contribution to municipal employee health insurance to 75% of the lowest cost plan (currently Fallon)

Potential savings: \$17.4 million

In the current fiscal year, the total health insurance cost to the City is \$45.5 million. According to the latest estimates from health insurance providers, health insurance costs will increase by \$8.75 million in FY04. The Master Medical plans are expected to increase by 43.3%, Blue Choice by 18.3%, Medex by 10.1%, and Managed Blue for Seniors by 10.5%. Fallon will discontinue its current product and replace it with Fallon Direct and Fallon Select, which will cost 14.7% and 25.4% more than the current plan, respectively. The City is assuming that 10% of current Fallon subscribers will choose Fallon Direct, and 90% will choose Fallon Select. The Fallon Senior plan is expected to increase by about 30% in January 2004, halfway through FY04. Altogether these increases will bring the total estimated health insurance cost to the City in FY04 to \$54.2 million.

According to the Massachusetts Municipal Personnel Association "Benchmark Titles Salary Survey" (FY03 Edition), of the 69 Massachusetts municipalities with populations over 25,000 that responded to the survey, Worcester is tied for the tenth highest contribution rate to indemnity plans (75%), tied with 18 other communities for the highest rate to HMOs (90%), and pays the fifth highest rate to PPOs (87%), placing it overall among the highest percentage contributors in the state to municipal employee health plans. Twenty-four communities reporting in this survey offer no indemnity plan and forty communities contribute less than 90% to their HMO, including wealthier communities such as Needham (50%) and Shrewsbury (58%). Twenty-nine of the communities reporting contribute less than 87% toward their PPO, again including wealthier communities such as Wellesley (50%), and Needham (50%). Thirty-five do not even offer a PPO plan.

² The Research Bureau will address school spending in a subsequent report.

The Research Bureau recommends that the City change its contribution formula to pay an equal-dollar amount for all employees based on 75% of the lowest cost plan. (According to MGL 32B §7 and §16, the City must pay more than 50% of indemnity plans and HMOs, and may not pay more than 90% of HMOs.) An employee may still choose any of the available plans, but he would pay the difference beyond the City’s contribution. (Of the 245 municipalities reporting contributions to health insurance programs, at least five use a similar equal-dollar contribution system.) Table 2 below shows Worcester’s health care contribution rates and costs under three different scenarios: the current contribution schedule, 75% contribution rate for all plans, and equal-dollar contributions.

Table 2: Estimated Annual Health Insurance Costs (FY04)

		Total Cost Per Enrolled Employee	Current Contributions City's Share	75% Contributions City's Share	Equal Dollar Contributions City's Share
Individual Plans					
Master Medical	17	\$23,098	75% \$17,323	75% \$17,323	50% \$11,549*
Blue Choice	1,827	\$4,527	87% \$3,938	75% \$3,395	56% \$2,538
Fallon Select	645	\$3,699	90% \$3,329	75% \$2,774	69% \$2,538
Fallon Direct	72	\$3,384	90% \$3,046	75% \$2,538	75% \$2,538
Family Plans					
Master Medical Family	1	\$57,430	75% \$43,073	75% \$43,073	50% \$28,715*
Blue Choice Family	2,470	\$11,858	87% \$10,316	75% \$8,893	55% \$6,540
Fallon Select Family	1,103	\$9,543	90% \$8,589	75% \$7,157	69% \$6,540
Fallon Direct Family	123	\$8,720	90% \$7,848	75% \$6,540	75% \$6,540
Senior Plans					
Medex	1,995	\$3,741	75% \$2,806	75% \$2,806	50% \$1,870*
Managed Blue	536	\$3,394	75% \$2,546	75% \$2,546	50% \$1,697*
Fallon Senior	756	\$2,249	84% \$1,889	75% \$1,687	75% \$1,687
Total Annual Cost			\$54,209,116	\$47,414,820	\$36,770,866

*The City must pay more than 50% of any plan offered, according to State statute.
Source: Worcester City Budget Office.
Prepared by: Worcester Regional Research Bureau.

Under the proposed contribution plan (equal-dollar contribution), the City could save \$17.4 million in FY04. If the City paid 75% toward all plans offered, it could save \$6.8 million.

To achieve this, the City must get agreement from all bargaining units. Alternatively, the State legislature could amend Chapter 32B to reduce the maximum payment by municipalities to 75%. Both the Governor and City Manager³ support reducing the public employer’s contribution rate to 75%.

³ In addition to the proposed reduction in the City’s health insurance contributions, the City Manager has presented the unions with several options to avert layoffs, including one-week furloughs, eliminating education benefits, eliminating clothing allowances, eliminating holiday pay for non-scheduled employees, and eliminating stipends for those who operate motorized vehicles.

III. Police Department

Recommendation: Renegotiate the Police Department contract as follows:

- *Convert work schedules to be comparable to the schedules of other municipal employees*
- *Increase supervisors' responsibilities*
- *Redesign or eliminate the Police Career Incentive Program (Quinn Bill)*
- *Eliminate off-duty assignments at construction sites and use non-uniformed flaggers instead*

Potential savings: \$5.0 million⁴

- *Personnel reductions: \$2.2 million*
- *Quinn Bill: up to \$1.8 million*
- *Off-duty assignments: \$1.3 million*

The Worcester Police Department's FY04 budget is expected to be \$33.2 million, the largest department budget after the Worcester Public Schools. The Department expenditures are estimated at \$1.5 million more than in FY03, although this figure could rise since the current labor contract expires June 30, 2003 and must be renegotiated. Based on the number of uniformed officers funded in FY03 (459) and the average salary increases from FY02 to FY03 for those positions (6.5%), the total projected base salary for uniformed officers in FY04 is about \$25.3 million. Adding to this amount holiday pay, Quinn Bill increases, and overtime pay brings the total salary account to \$31.5 million. The number of positions budgeted in FY03 differs from the current complement due to unfilled vacancies and recent layoffs. While the number of personnel has changed, the concept behind this restructuring proposal remains relevant.

A. Work Schedule and Vacations

The current work schedule in the Police Department alternates four days of work with two days off, rather than the standard 5-day/2-day work schedule in other municipal departments. In addition to the 4/2 schedule, a "week" of vacation provides seven work days off, rather than the standard five days. With three weeks of vacation, an officer in the Police Department will work 220 days during the year. On the other hand, most municipal employees, working a standard 5/2 schedule, with 15 vacation days (three weeks), and 11 holidays, will work 232 days. Table 3 compares the current police schedule with the schedule of other municipal employees. If the Police Department adjusts its schedule so that police officers work the same number of days per year as municipal employees, it could reduce the number of uniformed officers by as many as 24, to 435, and still maintain the same number of on-duty officers during each shift. This personnel reduction would amount to 5.2% of the total budgeted complement. The next section addresses how this reduction could be targeted to reduce the number of supervisors and increase their responsibilities to be commensurate with increased salary levels.

⁴ If personnel reductions and Quinn Bill reform were both implemented, the sum of the savings from these two recommendations (\$2.2 million and \$1.8 million, respectively) would be reduced by the amount of Quinn Bill increases that were already included in the personnel reduction calculation (\$320,000). This accounts for the discrepancy between the sum of the three recommendations (\$5.3 million) and the total savings (\$5.0 million).

Table 3: Comparison of Annual Work Schedules

	Police	Municipal
Standard days off	121	104
Vacation days*	21	15
Holidays	0	11
Personal days	3	3
Total days off	145	133
Total workdays	220	232

* Assuming three weeks of vacation (after 5 years of service).

B. Span of Control

The Police Department currently has a span of control of 3.72 police officers per supervisor, the second lowest among New England cities surveyed, as shown in Table 4.

Table 4: Span of Control in seven Police Departments

	Police Officers	Supervisors	Ratio
Springfield	392	82	4.78
Providence	391	90	4.34
Lowell	210	49	4.29
Boston	1,667	399	4.18
Portland	124	33	3.76
Worcester	361	97	3.72
Cambridge	169	53	3.19

While the ratio of police officers to supervisory personnel is low compared to other cities surveyed, the salaries compared to the other cities seem to indicate that supervisors should be assuming more responsibilities. Table 5 compares the maximum salaries, excluding holiday pay and overtime, of the Worcester Police Department and five other police departments.

Table 5: Police Department Maximum Salaries (FY03)*

Position	Worcester	Lowell	Springfield	Providence**	Framingham	Fall River
Chief	\$140,864	\$116,215	\$122,836	\$96,196	\$155,520	\$103,826
Deputy Chief	\$117,859	\$98,677	\$100,024	-	\$87,224	\$88,389
Major	-	-	-	\$76,072	-	-
Captain	\$83,002	\$88,298	\$89,918	\$59,160	\$80,300	\$72,698
Lieutenant	\$76,289	\$79,032	\$76,814	\$54,957	\$69,827	\$63,216
Sergeant	\$68,550	\$70,759	\$65,645	\$50,339	\$60,720	\$54,971
Police Officer	\$59,509	\$58,108	\$54,756	\$43,881	\$51,088	\$47,800

* Includes Quinn Bill increase, assuming Bachelor's Degree (20% increase). Does not include Holiday pay and overtime.

** The Quinn Bill does not apply to Providence.

Table 6 suggests a plan of what changes could be made to increase the level of responsibility of ranking officers. There are currently three Deputy Chiefs, one each in charge of Operations, Investigations, and Administration. Based on private sector corporate models, where often a Chief Operations Officer (COO) reports to the CEO, it may be possible to have one Deputy Chief report to the Chief of Police. The Deputy Chief would oversee all of the operational and investigative divisions, while the administrative units would remain under the Chief of Police. Captains are currently in charge of each of the major divisions: Operations, Services, Traffic, Investigation, Juvenile, Vice Squad, Administration, and Internal Affairs. However, there are three Captains in charge of the three shifts in Operations. There could be just one captain in charge of Operations, as in the other divisions, and lieutenants could be placed in charge of the

three shifts instead. This is similar to the command structure in the Boston and New York City Police Departments. In addition, two of the shifts currently operate with seven sergeants, while the third shift has eight. Therefore, it may be possible for the third shift to operate with seven sergeants as well. Using the Traffic Division and Detective Bureau as a template, each of the remaining five divisions may be able to operate with two lieutenants and three sergeants.⁵

Table 6: Police Department Personnel

Division	Current Configuration	Proposed Configuration
	3 Deputy Chiefs	1 Deputy Chief
Operations	3 Captains	1 Captain
	8 Lieutenants	3 Lieutenants
	22 Sergeants	21 Sergeants
	164 Police Officers	164 Police Officers
Traffic	1 Captain	1 Captain
	2 Lieutenants	2 Lieutenant
	3 Sergeants	3 Sergeants
	24 Police Officers	24 Police Officers
Detective Bureau	1 Captain	1 Captain
	2 Lieutenants	2 Lieutenants
	3 Sergeants	3 Sergeants
	40 Police Officers	40 Police Officers
Services	1 Captain	1 Captain
	2 Lieutenants	2 Lieutenant
	7 Sergeants	3 Sergeants
	42 Police Officers	42 Police Officers
Juvenile	1 Captain	1 Captain
	1 Lieutenants	2 Lieutenants
	3 Sergeants	3 Sergeants
	17 Police Officers	17 Police Officers
Vice Squad	1 Captain	1 Captain
	2 Lieutenants	2 Lieutenants
	2 Sergeants	3 Sergeants
	25 Police Officers	25 Police Officers
Administration	1 Captain	1 Captain
	5 Lieutenants	2 Lieutenants
	6 Sergeants	3 Sergeants
	29 Police Officers	29 Police Officers
Internal Affairs	1 Captain	1 Captain
	1 Lieutenants	2 Lieutenants
	3 Sergeants	3 Sergeants
Other units	4 Lieutenants	4 Lieutenants
	1 Sergeant	1 Sergeant
	19 Police Officers	19 Police Officers
Total	3 Deputy Chiefs	1 Deputy Chief
	10 Captains	8 Captains
	29 Lieutenants	21 Lieutenants
	55 Sergeants	43 Sergeants
	361 Police Officers	361 Police Officers

The proposed changes would result in a net reduction of 24 personnel: two Deputy Chiefs, two captains, eight lieutenants, and 12 sergeants. The number of police officers would remain unchanged. According to Section III-A (p. 5), there is room to reduce the number of uniformed personnel in the Police Department by 24 (to 435) and still maintain FY03 staffing levels. These

⁵ It should be noted that the term Administration used in Table 6 and in the text refers to multiple smaller administrative units currently under the Deputy Chief of Administration.

targeted personnel reductions could save as much as \$2.1 million⁶ in salaries and \$180,000 in health insurance contributions, and would increase supervisors' span of control to 4.95 police officers per supervisor.

C. Quinn Bill

The Police Career Incentive Pay Program, also known as the Quinn Bill, increases officers' salaries by 10%, 20% and 25% for holding associate, bachelor's and master's degrees in criminal justice, respectively. It is a local option program enacted by the state legislature in 1970 and adopted by the Worcester City Council in 1987. The expenditures associated with the Quinn Bill are expected to be about \$3.1 million in FY03, of which \$1.45 million (47%) will be reimbursed by the state. In FY04 estimated expenditures will increase to \$3.4 million. Assuming the same rate of reimbursement from the state, the Quinn Bill will cost the City \$1.8 million in FY04. It should be noted, however, that the local community must absorb overtime and pension costs that increase due to the higher salaries. Paying Quinn Bill benefits as a percentage of salary means the higher the salary, the greater the financial windfall. The education bonus grows with every contractual pay raise and with each additional degree. It also means that officers of higher rank (and therefore higher base pay) receive larger Quinn Bill payments for the same degree.

While Governor Romney has decided not to reform the Quinn Bill at this time, the Board of Higher Education has eliminated granting credit for life experience, and it has tightened accreditation requirements for degree-granting institutions to ensure that there are qualified instructors and credit-worthy courses. The elimination of state funding would not absolve the City from having to pay the entire cost of the Quinn Bill since it is now part of contractual obligations. The City cannot opt out of the Quinn Bill without approval from the state legislature. However, the costs involved in funding this program impose a significant burden that the City can no longer afford. The Research Bureau suggests two options. If it is determined that there is a public benefit to these educational programs, then the state legislature should change the incentive payments from a percentage of salary to a fixed dollar amount. Otherwise, the Commonwealth should make it illegal to have these incentive payments as part of police contracts, thereby absolving the City of further financial obligations for this program.

D. Off-Duty Assignments

Another costly practice that could be reformed either by the State legislature or through local contract renegotiation is off-duty police assignments at construction sites. In FY02, the Police Department's off-duty assignments cost other departments as well as private companies \$3.9 million for almost 17,000 jobs. The projected FY03 cost to the Department of Public Works, which is the largest municipal user of this program, is about \$1.1 million.⁷ Police officers get paid for a minimum of four hours per job, even if the job takes substantially less than that amount of time. The current hourly rates range from \$35.64 for patrol officers to \$49.71 for captains. After eight hours on a single job, the hourly rates increase to "time and a half," from \$53.46 to \$74.57,

⁶ Projection based on average FY03 salaries for the positions mentioned, 6.5% average salary increase (from FY02 to FY03), 20% Quinn Bill increase for eliminated positions, and average projected holiday and overtime pay.

⁷ Based on \$706,450 charged to the Department of Public Works between July 2002 and February 2003.

respectively. In all other states (except Vermont), non-uniformed flaggers are used to direct traffic at road and other construction sites. Some states, such as Delaware, require certified flaggers at hourly rates ranging from \$16.01 to \$21.11. Other states, such as New Hampshire, do not require certification at all, and flaggers are usually general laborers such as highway maintenance staff, and are paid between \$9.82 and \$13.19 per hour.⁸ If Worcester's \$1.1 million worth of DPW off-duty assignments were staffed by flaggers instead of police, they would have cost as little as \$220,000, assuming that the vast majority of jobs were at least four hours long but not longer than eight hours. This could have saved the City as much as \$840,000 in FY03.

In addition, the Police Department has an Off-Duty Assignments Division consisting of four staff members, two officers and two civilians, whose combined salary is \$180,000. If police off-duty assignments for construction sites were eliminated, the need for this Division would be reduced, and its staff could be cut, saving as much as \$200,000 in FY04. In FY02, the City collected almost \$290,000 in administrative fees from private companies, primarily from the utilities such as gas, electric, and telephone, that are required to utilize off-duty policemen at installation and repair sites. However, these administrative fees add to the cost of doing business in the Commonwealth as does the requirement to hire off-duty policemen compared to non-uniformed flagmen. Those costs are ultimately passed on to consumers in the form of higher rates for the services provided.

IV. Fire Department

Recommendation:

- *Reorganize supervisory positions to give more responsibilities to higher-ranking positions*
- *Eliminate two engine companies*

Potential Savings: \$990,000

- *Reorganize supervisory positions: \$350,000*
- *Eliminate two engine companies: \$640,000*

The Fire Department budget for FY04 is expected to be \$30.1 million, an increase of \$740,000 over FY03. This figure includes \$1.8 million for a 23-member fire class, which was to begin in FY03 but has been postponed. Based on the number of uniformed personnel (438) funded in FY03 and the average salary increase from FY02 to FY03 for uniformed personnel (5.1%), the total projected base salary for uniformed personnel in FY04 is about \$27.1 million. When contractual obligations (such as educational stipends and holiday pay) and overtime pay are added to this amount, the total salary account is about \$29.7 million. The number of positions budgeted in FY03 differs from the current complement due to unfilled vacancies and recent layoffs. While the number of personnel has changed, the concept behind this restructuring proposal remains relevant.

⁸ American Traffic Safety Services Association, <http://www.flagger.com>; State of New Hampshire, Department of Administrative Services, Division of Personnel, <http://admin.state.nh.us/personnel>.

A. Reorganizing Supervisory Positions

The Fire Department currently has a span of control of 2.74 firefighters per supervisor. Table 7 below compares Worcester's ratio to those of ten other cities in the Northeast. Of these, Worcester has the fourth lowest span of control.

Table 7: Firefighter to Supervisor Ratio: Worcester and ten other cities

	Firefighters	Supervisors	Ratio
Hartford	295	69	4.28
Waterbury	295	78	3.78
Boston	1238	364	3.40
Portland	178	60	2.97
New Haven	267	91	2.93
Rochester	393	136	2.89
Springfield	240	84	2.86
Worcester	320	117	2.74
Bridgeport	240	93	2.58
Manchester	157	63	2.49
Providence	239	100	2.39

Table 8, on the other hand, shows that salaries in Worcester are much higher than those of the other Massachusetts communities surveyed. The low firefighter to supervisor ratio coupled with high salaries seems to indicate that supervisors in Worcester should be assuming more responsibilities.

Table 8: Fire Department Maximum Salaries (FY03)*

Position	Worcester	Springfield	Fall River	Framingham	Lowell**
Chief	\$106,716	\$102,363	\$88,650	\$129,600	\$112,000
Deputy Chief	\$98,217	\$91,997	\$73,224	\$72,687	\$71,962
District Chief	\$81,195	-	\$60,585	-	-
Captain	\$73,415	\$58,890	\$52,683	\$56,352	\$60,215
Lieutenant	\$66,446	\$50,920	\$45,810	\$49,303	\$55,129
Firefighter	\$58,754	\$43,130	\$39,836	\$43,043	\$47,372

*Does not include contractual obligations (such as holiday pay and educational stipends) and overtime pay.

** Estimates based on FY02 schedules and estimated increases of 2%.

Table 9 suggests a plan of what changes could be made to increase the level of responsibility of ranking officers in the Fire Department. There are currently three Deputy Chiefs, one each in charge of Operations, Support Services and Fire Prevention. Based on private sector models, where often a Chief Operations Officer (COO) reports to the CEO, it may be possible to have only one Deputy Chief in charge of Operations.

Suppression is the largest division within the Fire Department. Currently there is no one supervising entire shifts. The position of Battalion Chief, which exists in the New Haven and Providence fire departments, among others, is designed to supervise an entire shift. If Worcester chose to hire Battalion Chiefs, four would be needed to supervise the four Fire Suppression Groups that operate one per shift. Battalion Chiefs are similar in rank to District Chiefs, and would probably receive close to a District Chief's salary. Captains could replace the eight District Chiefs as district commanders (there are two districts, or geographical areas, which require supervision during four shifts). In addition to their operational duties, the four Battalion Chiefs and eight captains could each take administrative responsibility for one of the 12

stationhouses. Lieutenants could supervise the 23 trucks in the Department’s fleet. Since each truck requires a supervisor during each shift, a total of 92 truck supervisors are needed. Since the other five major divisions in the Fire Department (Special Operations, Support Services, Fire Prevention, Safety, and Training) are significantly smaller than Suppression, it may be possible for captains to supervise each of these.

The Department’s 22 engines and ladders require a minimum of three personnel per truck, and the heavy rescue vehicle requires five, for a total minimum need of 284 personnel. However, because firefighters will take vacations, sick leave, personal leave, and injured-on-duty leave, there must be additional personnel to be able to maintain minimum staffing requirements while some are on leave. The City estimates that about 1.25 personnel are needed to fill one on-duty position during a shift, bringing the total minimum requirement to 355 (284 x 1.25) personnel. Under the proposed structure, 92 of these would be the truck supervisors (lieutenants), and the remaining 263 would be firefighters. If the Department maintains its current number of 305 firefighters in Suppression, it would have 42 additional firefighters above the minimum to staff its trucks.

Table 9: Fire Department Personnel

Division	Current Configuration	Proposed Configuration
	3 Deputy Chiefs	1 Deputy Chief
Suppression	8 District Chiefs 23 Captains 71 Lieutenants 305 Firefighters	4 Battalion Chiefs 8 Captains 92 Lieutenants 305 Firefighters
Special Operations	1 District Chief	1 Captain
Safety	1 District Chief	1 Captain
Support Services	1 District Chief 1 Firefighter	1 Captain 1 Firefighter
Training	1 District Chief 1 Captain 1 Lieutenant 2 Firefighters	1 Captain 1 Lieutenant 2 Firefighters
Fire Prevention	1 Captain 5 Lieutenants 12 Firefighters	1 Captain 5 Lieutenants 12 Firefighters
Total	3 Deputy Chiefs 12 District Chiefs 25 Captains 77 Lieutenants 320 Firefighters	1 Deputy Chief 4 Battalion Chiefs 13 Captains 98 Lieutenants 320 Firefighters

These changes would result in one less supervisory position. The potential savings would be as much as \$100,000⁹ in salary for the eliminated position (Deputy Chief), and \$10,000 in the City’s portion of health insurance costs. In addition, about \$230,000 would be saved in salary differentials for one less Deputy Chief, eight fewer District Chiefs, 12 fewer captains, and 21 additional lieutenants. The number of firefighters would remain unchanged.

⁹ Projection based on average FY03 salaries for the positions mentioned, 5.1% average salary increase (from FY02 to FY03), and average projected contractual and overtime pay.

B. Eliminate Two Engine Companies

In early 2000, the TriData Corporation presented the findings of its Worcester “Fire Department Operations Study.” The findings included a recommendation to take three trucks out of service and redistribute personnel among the remaining trucks. The TriData study suggested that it would be more beneficial to staff fewer trucks with four personnel per truck than to keep more trucks with only three personnel per truck.¹⁰ The closing of the Central Street fire station presents an opportunity to implement this TriData recommendation. If the two engine companies at that station were taken out of service, their 22 firefighters could be reassigned to the other companies so that most trucks could be staffed with four personnel. The eight lieutenant positions supervising those two engine companies would no longer be needed.

These changes would result in eight fewer supervisory positions. This would increase the firefighter to supervisor ratio to 2.96. The potential savings from these changes would be as much as \$590,000 in salary for the eliminated positions, and \$60,000 in the City’s health insurance contributions. In addition, truck and station maintenance costs would be lower as a result of closing the Central Street station and eliminating two engine companies.

V. Pensions

Recommendations:

- *The State retirement system, of which the City is a part, should be restructured from a defined benefits plan to a defined contribution plan similar to what exists throughout private industry*
- *The State’s “presumption” provision needs to be modified to disallow disability pensions for non-work-related illnesses*

In FY03, the total cost of the retirement system was about \$29.5 million. According to the City Auditor, who also serves on the Retirement Board, that cost will increase to almost \$35 million in FY04 due, in part, to poor return on investment (ROI). The City’s retirement system, which is part of the state system (MGL Chapter 32), is a defined benefits program, meaning that retirement benefits are defined by a formula based on salary, years of service, and retirement age, which the City is required to pay regardless of return on investment. Under this kind of plan, the risk lies with the employer. It is different from a defined contribution plan, such as a 401(k), which is based on returns to investment of contributions made by employees and employers, and where the risk lies with the employee.

There are several different types of retirement benefits in Worcester’s retirement program. The standard retirement benefit is based on a superannuation formula, which is capped at 80% of the highest three-year average salary. If an employee retires at the retirement age (55 for fire and police, 65 for all others), his benefit is defined by the following formula: $.025 \times \text{years of service} \times$

¹⁰ According to the TriData report, NFPA 1500, *Fire Department Occupational Safety and Health Program*, recommends “that a minimum acceptable fire company staffing level should be four members responding with each engine and each ladder company responding to any type of fire.” In addition, TriData reported that OSHA and other organizations require that four firefighters be present at the scene of a fire before two of them can begin interior operations, with two remaining behind as backup: “Fire Department Operations Study: Worcester, Massachusetts,” TriData Corporation, December 1999, pp. 23-24.

highest three-year average salary. If the employee retires one year before he reaches retirement age, the formula is $.024 \times Y.O.S. \times$ highest three-year average salary.

For example, a city employee who began work at age 25, retired at age 60, and earned an average of \$45,000 during his last three years would receive \$32,000 ($.02 \times 35 \times \$45,000$) in retirement benefits per year. Had that same employee worked for five more years, and his highest three-year average salary increased to \$55,000 (assuming an average annual increase of 4%), he would receive \$44,000¹¹ per year.

Employees who suffer work-related illness or injury are entitled to a disability retirement benefit. Disability retirement benefits are exempt from federal and state income taxes. The formula for disability retirement benefits is 72% of the final year of salary, roughly equal to getting full salary less federal and state income taxes. In addition, these employees receive an additional annuity based on the amount of money that they contributed into the retirement system, their age, and national life expectancy statistics.

Employees who work at least 10 years, but suffer a non-work-related disability, may also be eligible for special retirement benefits. These employees receive benefits based on the superannuation formula for full retirement age, even if they are retiring at an earlier age.

Finally, widows of municipal employees receive death benefits that are equal to two-thirds of their deceased spouse's benefits, unless that employee was on a disability retirement plan, and died as a result of the disability for which he received those benefits. In that case, the widow receives the full benefits.

A. Defined Benefits Plan

To finance these pensions, each employee hired before 1975 pays 5% of his salary into the retirement system. Since that time, the employee contribution has gradually increased so that new hires must pay 9% of their salary plus an additional 2% for salary in excess of \$30,000. According to Worcester's City Auditor, those employees paying the maximum into the system are probably financing the total cost of their pensions after factoring in the ROI, whereas those paying 5% are probably getting a significant contribution from the City after retirement. While a defined benefits plan places the risk on the employer, the City was managing to meet its obligation until the Commonwealth shifted the responsibility for the COLA (Cost of Living Adjustment) from the state to each municipality, so that every retiree would receive a 3% COLA every year subject to an annual vote of the local Retirement Board. This new obligation added \$60 million to the City's unfunded pension liability, or about \$7 million per year to the existing funding schedule. In 1999, the City requested and received permission from the state to issue a 30-year Pension Obligation Bond, which had to be repaid at 6.3% rather than the 8.5% interest the City was paying at the time to finance its retirement system. In order for the retirement

¹¹ $.025 \times 40 \times \$55,000 = \$55,000$: since the maximum payout is 80% of the salary used for this calculation, the actual benefit would be \$44,000 annually.

system to remain fiscally sound, the ROI would have to exceed 6.3%. While that has not been achieved during the past couple of years, the goal may well be met when averaged over the 30-year life of the POB.

Since the ROI fluctuates annually, the poor performance of investments will have a negative impact on the City's budget. In the interest of fiscal stability, the Commonwealth should convert the state and local retirement systems, all of which are part of the state system, to a defined contribution plan, such as a 401(k), in which contributions are invested, and the returns on that investment fund the employee's retirement. In such a system, short-term market fluctuations have no substantive effect on the City's budget. While only new hires should be required to participate in the defined contribution plan, current employees should be given the option to participate as well. A number of states, including West Virginia, Nebraska, Utah and North Carolina have defined contribution plans, while others, such as Washington and Florida, have hybrid systems that combine both defined benefit and defined contribution plans. As of 2000, the number of employers in the U.S. who now offer defined contribution plans is twice the number that offer defined benefit plans.

B. Presumption Clause for Disability Retirement

For firefighters, developing heart disease, lung disease, or any type of cancer is presumed to be the effect of on-the-job hazardous conditions if the illness occurs during employment or within five years after retirement. For police officers, the presumption is only for heart disease. Public safety officers who come under this presumption clause will receive disability retirement benefits. In addition, the firefighter's union is lobbying the State legislature to add HIV and Hepatitis A, B, and C to the list of presumptions.

According to current scientific evidence available from the Centers for Disease Control and Prevention (CDC) and the American Cancer Society (ACS), not all instances of the presumed job-related illnesses will in fact be job related. In addition, it may be possible to determine, with some level of certainty, which illnesses occur as a result of job-related conditions.

For example, according to the ACS's "Cancer Facts and Figures 2003," "the only well-established risk factors for prostate cancer are age, ethnicity, and family history of prostate cancer." There is no mention of any risk factor that could be associated with conditions related to work performed by firefighters. The ACS reports that prostate cancer will occur in one out of every six men. This means that rather than going on regular retirement, as many as one out of every six male firefighters may go on disability retirement for what would in actuality be a non-work-related illness.

According to the CDC, HIV can only be contracted through infected blood and other bodily fluids getting into the bloodstream through sexual contact, needles, and very rarely through mucous membranes or cuts. "Contact with saliva, tears, or sweat has never been shown to result

in transmission of HIV.”¹² Therefore, if a mouth protection device is used for mouth-to-mouth resuscitation, the likelihood of transmission of HIV through this type of contact is virtually none.

There is also little evidence to support inclusion of Hepatitis A, B, and C in the presumption clause. Hepatitis A does not result in a chronic (long-term) infection, nor can it recur.¹³ Public safety workers may be at limited risk of contracting Hepatitis B and C through the same means as HIV. Vaccination against Hepatitis B and the use of routine barrier precautions minimizes their risk.¹⁴ Considering these facts, there seems to be little reason for presuming that the contraction of HIV or Hepatitis by public safety workers must have come from on-the-job sources.

There does not seem to be a job-related presumption in the health care field, where it could be argued that doctors, nurses, and other health care professionals may be more exposed to HIV and Hepatitis than public safety workers. According to one major area health care provider, the employee must take some responsibility for showing a connection between an infection and an incident at work. The employee must file an incident report and have his blood tested within 48 hours of the incident, and retested at regular intervals. If the illness is shown to be job related, then the employee is eligible for worker’s compensation.

Table 10 below shows the number of retirees receiving disability and superannuation benefits from the City. These data show that a much greater proportion of Police and Fire Department retirees are receiving disability retirement benefits than in other departments in the City. Even the Department of Public Works (DPW), which, like Police and Fire, can be assumed to have a higher risk of job-related illness or injury than other municipal departments, has a significantly lower proportion of disability retirees than Police and Fire. Although it is not clear if this difference is due in part to a higher risk of injury in Police and Fire than in DPW, it is possible that the presumptions granted to the policemen and firefighters contribute to this disparity. (It should be noted that recently there have been more superannuation retirees than normal due to early retirement programs implemented in the City.)

Table 10: Retirees by Department (as of December, 2002)

Department	Disability Retirees	Superannuation Retirees	Percent on Disability
Police	143	104	57.9
Fire	180	144	55.6
DPW	64	217	22.8
Other Departments	118	1394	7.8

¹² “HIV and its Transmission,” July 1999, Centers for Disease Control and Prevention.

¹³ “Hepatitis A Fact Sheet,” Centers for Disease Control and Prevention.

¹⁴ “Hepatitis B Fact Sheet,” “Hepatitis C Fact Sheet,” Centers for Disease Control and Prevention.

VI. Hope Cemetery

Recommendation: Privatize Hope Cemetery

Potential savings: about \$600,000

Hope Cemetery is a division of the Department of Parks, Recreation, and Cemetery. It is a non-denominational cemetery, open to burial for all including the indigent. The Division is responsible for the overall maintenance and the management of the Cemetery's 160 acres. According to the Department's Commissioner, the total fiscal year cost of operating the Cemetery is approximately \$850,000. This sum is comprised of both budgeted (\$540,000) and other expenditures (\$310,000 in emergency overtime, inter-departmental/inter-divisional maintenance assistance, and employee fringe benefits). Since fees are collected for interments and for the installation of markers and monuments, which amount to approximately \$250,000, the net cost of operating the Cemetery is approximately \$600,000 per year. While there are eleven authorized positions, budget reductions have left the Division with eight full time staff. Injuries, illness, and vacation time often reduce these staffing levels to five on any given day. Interments are a daily occurrence and require a three-person crew, thereby further reducing the available staff for basic grounds maintenance (weeding, mowing, raking, etc.). It is important to note that the cemetery had a staff of 30 prior to the FY90 crisis. According to industry standards cited by the Commissioner, FY03 staff levels are far below what is necessary for basic ground maintenance. The two staff available for grounds maintenance would be unable to address basic mowing needs given the rate of grass growth in the spring and summer months. Poor maintenance has an effect on the sale of lots, a major source of revenue that could offset the cost of operations.

Since operating a cemetery is not considered a core municipal service based on current community priorities and funding dedicated to this service, the Research Bureau urges the City administration to consider the privatization of Hope Cemetery, thus eliminating this expense from the municipal budget. About a decade ago, during the last downturn in the economy, the City privatized Belmont Home, the City's nursing home, because it was not a core municipal service, and the City's cost structure was much higher than privately run nursing homes. Massachusetts law prohibits a funeral home director from owning a cemetery as well, thereby limiting the number of potential buyers for the cemetery. According to the Department's Commissioner, however, there are enough plots available for the next 100 years, indicating that there is a potentially profitable product available if marketed properly. Therefore, the City should identify the pool of potential buyers and issue a request for proposals to determine whether such a sale is possible.

VII. Worcester Public Library

Recommendation: Close branch libraries

Potential savings: \$350,000

The Worcester Public Library's budget for FY04 is expected to be about \$4.1 million, which is \$21,000 more than its FY03 budget. The library system consists of a main library and two branch libraries, the Frances Perkins Branch in Greendale and the Great Brook Valley Branch, which is operated in a Worcester Housing Authority facility. The branch libraries are intended to provide support for recreational reading, basic reference, electronic access to larger collections, and literacy programs. The Perkins Branch serves primarily children and senior citizens while the Great Brook Valley Branch is open only in the afternoons and serves primarily as a homework center for school-age children. These services, although convenient and beneficial, are also available through the main library, which has been renovated recently at a cost of \$23.5 million.¹⁵ The main library is centrally located and easily accessible by public transportation. The Bureau recommends that the branch libraries be closed at this time, and that the main library be used for all of the above services.

The branch library budget for FY03 is about \$300,000. This includes six funded positions. Health insurance costs associated with these positions, which are not included in the library budget, would total about \$45,000 in FY04, depending on the health plan chosen. Also, a small portion of the WPL's Building Services Division budget (\$420,000 in FY03), which provides building maintenance for the library buildings, would be eliminated.

VIII. Senior Center

Recommendation: Close the Senior Center and lease out space or sell the building

Potential savings: \$4.1 million

- *Operations: \$570,000*
- *Sale of building: \$3.5 million*

The Senior Center budget for FY04 is expected to be about \$570,000, the same as in FY03. The Office of Elder Affairs operates the Senior Center. Elder Affairs projected about 140,000 "person per session contacts" in FY03. The Senior Center provides health programs, support groups, recreation, learning, benefits counseling, and a venue for various meetings of other organizations. Many of these services are provided in conjunction with other senior service organizations in Worcester and the surrounding region. In addition, most of these services are replicated through other agencies, many of which are supported by large organizations such as the Central

¹⁵ The funding for the renovations came from tax levy (\$13.5 million), state (\$5.8 million), donations (\$3.8 million), and trust funds (\$350,000).

Massachusetts Agency on Aging, Elder Services of Worcester Area, Inc., or the Age Center of Worcester, Inc.

Examples of the programs offered by other organizations include the following:

- Health: Nutrition Program at the Age Center of Worcester Area, Inc.; Medication Management through the VNA Care Network; and exercise programs at the YWCA of Central Massachusetts.
- Support: Crisis Intervention through Elder Services of Worcester; elder rehab and survival skills through Vision Community Services; Alcoholics Anonymous; and grief support groups through the Diocese of Worcester.
- Recreation: Friendly House Multi-Service Center; Green Island Neighborhood Center; and Jewish Community Center Senior Adult Services.
- Learning: Crafts classes at the South Worcester Neighborhood Center and Quinsigamond Village Community Center; Massachusetts Senior Action Council public education program; WISE program at Assumption; free tuition for senior citizens at Worcester State College.
- Benefits: Financial counseling through the Age Center; senior citizen law and advocacy project through the Legal Assistance Corporation of Central Massachusetts; home-delivered meals through Elder Services and the Age Center (Meals on Wheels).

Since the services provided by the Senior Center are duplicated elsewhere in the city, the Research Bureau recommends that the City close the Senior Center and lease out the space or sell the building, which is currently assessed at \$3.5 million. An alternative would be for the Senior Center to assess fees for usage of space by other groups, or seek additional sources of outside funding to cover the costs of the Center. Leases and activity fees in FY02 totaled only \$26,000.

IX. Union Station

Recommendation: Pursue leasing space to businesses and develop parcels in the vicinity

Potential savings: \$440,000

Union Station's FY04 budget is expected to be \$440,000, the same as in FY03. The City should develop an aggressive plan for leasing the space interior to Union Station as well as the parcels surrounding it. This is essential to generate revenue to cover the \$440,000 annual operating expenses to maintain Union Station. The City cannot afford to cover these expenditures indefinitely.

APPENDIX A: General Governmental Expenditures - GAAP Basis

CITY OF WORCESTER, MASSACHUSETTS

Last Ten Fiscal Years

(amounts expressed in \$ thousands)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	% Change
General government	14,726	12,990	12,760	11,015	10,504	11,362	10,690	9,185	8,059	7,764	89.7
Public safety	62,954	58,025	56,609	58,069	47,440	47,250	44,800	41,721	35,751	37,588	67.5
Health and human services	5,595	5,426	5,267	4,886	4,573	4,177	3,302	3,610	3,149	3,187	75.6
Education	179,401	172,357	165,579	156,265	149,893	139,948	128,682	115,457	103,363	85,337	110.2
Libraries	4,183	3,717	3,661	3,755	4,030	4,155	4,045	3,880	3,352	3,047	37.3
Public works	14,848	17,165	13,183	13,639	12,887	13,272	15,910	11,504	12,535	11,982	23.9
Culture and recreation	4,238	4,111	3,694	3,397	3,514	3,339	2,794	1,906	1,281	1,231	244.3
Fringe benefits*	43,286	39,003	38,993	49,734	47,220	43,536	43,977	44,544	45,145	41,164	5.2
Intergovernmental	2,276	2,132	3,041	1,971	2,043	1,969	2,043	2,024	1,704	1,610	41.4
Debt service*	44,501	44,488	41,474	22,273	21,223	18,801	16,158	13,727	14,125	13,250	235.9
TOTALS	376,008	359,414	344,261	325,004	303,327	287,809	272,401	247,558	228,464	206,160	82.4

* The substantial drop in fringe benefits and substantial increase in debt service between FY99 and FY00 is the result of the City issuing a Pension Obligation Bond (POB) to finance its retirement system.

Source: City of Worcester: Comprehensive Annual Financial Report, June 30, 2002.

APPENDIX B: General Governmental Revenues - GAAP Basis

CITY OF WORCESTER, MASSACHUSETTS

Last Ten Fiscal Years

(amounts expressed in \$ thousands)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	% Change
Property taxes	140,712	133,885	130,798	126,888	121,189	116,559	112,279	111,602	103,446	102,196	37.7
Motor vehicle excise taxes	13,091	12,460	11,134	9,961	10,521	8,875	8,388	9,727	6,985	9,073	44.3
Other taxes and in-lieu payments	2,411	2,338	1,867	2,300	1,661	1,672	1,203	2,163	2,030	1,994	20.9
Interest and penalties on taxes	1,977	1,938	2,114	1,845	1,848	1,425	1,839	2,465	2,029	2,194	-9.9
Licenses and permits	4,468	4,577	4,401	4,329	4,048	3,859	3,855	3,188	3,646	3,134	42.6
Intergovernmental	205,068	202,269	189,378	173,108	160,326	146,439	131,165	119,507	101,713	83,528	145.5
Charges for services	2,477	2,355	2,373	2,273	2,276	2,310	2,247	2,242	1,325	739	235.2
Fines and forfeitures	2,122	2,024	2,195	2,378	2,401	2,628	2,378	2,408	2,671	2,696	-21.3
Investment earnings	1,321	2,921	2,263	3,056	2,515	1,672	2,720	1,522	567	983	34.4
Miscellaneous	1,257	2,218	1,159	945	799	1,344	2,849	2,406	2,973	453	177.5
TOTALS	374,904	366,985	347,682	327,083	307,584	286,783	268,923	257,230	227,385	206,990	81.1

Source: City of Worcester: Comprehensive Annual Financial Report, June 30, 2002.

UPCOMING RESEARCH BUREAU EVENT:

Forum:

Can We Solve the Housing Crisis in Massachusetts?

Speakers:

Charles Euchner, Executive Director
Rappaport Institute for Greater Boston
John F. Kennedy School of Government
Harvard University

Daniel Morgado
Town Manager
Shrewsbury, Massachusetts

James Palma, Research Manager
Donohue Institute
University of Massachusetts

Kevin Sweeney
Sweeney & Sons, Inc.
President, Home Builders Association of Massachusetts

Moderator:

Harriette Chandler
Massachusetts State Senator
Chair, Senate Housing Committee

Tuesday, April 22, 2003
7:45 a.m. to 9:15 a.m.
Holy Cross College
Hogan Campus Center