June, 2004

Center for
Community
Performance
Measurement

Benchmarking Public Safety in Worcester: 2004

WORCESTER

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CCPM-04-03

Welcome…

Dear Citizen,

We are pleased to publish this second *Benchmarking Public Safety in Worcester* report from the Worcester Regional Research Bureau's Center for Community Performance Measurement (CCPM). The CCPM was established to benchmark municipal and community performance in the areas of economic development, public education, municipal and neighborhood services, public safety, and youth services. This report focuses on public safety.

The report is divided into two sections: police services, and fire and emergency medical services. Each section begins with statistics on the human and financial resources that are invested in these services each year. The indicators that follow these input statistics measure the results of the investment. We assess performance by asking, *"What has changed since last year, what have we accomplished, and what challenges are still before us?"*

Indicators appearing in this report are interrelated. For example, police-community relations (**Indicator 2**) can be related to the overall crime rate (**Indicator 1**) if residents report suspicious activity. Furthermore, this report is related to data provided in other Research Bureau and CCPM reports addressing public safety issues. These include: *The FY04 Budget: Did Worcester Make the Tough Choices?*, *Citizen Satisfaction With Municipal Services: 2003 Survey*, and *Benchmarking Municipal Youth Services in Worcester*.

We wish to thank the *Sloan Foundation* for its support of the CCPM and the *Greater Worcester Community Foundation* for its sponsorship of the *Benchmarking Public Safety in Worcester* report.

Thank you for taking the time to read this report. We look forward to hearing your comments and suggestions on the project.

Sincerely,

Philip R. Morgan - *President*   **Roberta R. Schaefer, Ph.D. -** *Executive Director*   **Jean M. Supel -** *Manager, CCPM*

Benchmarking Public Safety in Worcester: 2004

Worcester Police Department: Overview & Input Indicators

The Worcester Police Department has as its mission to promote the highest level of public safety and quality of life in the City of Worcester through exceptional police services to the City's residents, businesses, and visitors.[1]

The Worcester Police Department (WPD) currently employs 491 individuals, 444 of whom are sworn officers. The Department's budget is $31 million, and constitutes the second largest municipal expenditure after the Worcester Public Schools.

As shown in the table below, even though the WPD's budget decreased by 2.8% from FY03 to FY04, it has increased by more than 12% over the last three years, while the number of employees has declined by over 9%. The increase in the budget is primarily the result of increases in salaries required by the union contract. In order to pay for these increases, as well as to accommodate overall budget cuts, the number of personnel had to be reduced. According to the FBI, the average number of employees for a police department in similarly-sized cities in the Northeast was 3.5 per 1,000 population in 2002 (the most recent year for which information is available), whereas Worcester employed 3.13 per 1,000 people. Worcester employed 2.73 sworn officers per 1,000 population in 2002, which was also slightly lower than the average of 2.8 (also for similarly-sized cities in the Northeast).[2]

To increase the number of sworn officers, a $3.75 million Federal grant was awarded to the City by the U.S. Department of Justice in September 2003. Current plans are to use the grant as a funding source in FY05 through FY07 WPD budgets. Because this grant comes with a 25% matching requirement, the City must raise or reallocate a minimum of $937,500 for the WPD over these three years. Furthermore, once the grant ends, the City must take on responsibility for full coverage of the salaries and fringe benefits of the 50 officers it plans to hire.[3]

Also shown in the table below are input statistics for the Community Services unit, which relate to **Indicator 2: Police/Community Relations**, and for the Internal Affairs unit, which relate to **Indicator 3: Allegations of Police Misconduct**.

[1] City of Worcester Annual Budget, FY04 and Chief's Office, Worcester Police Department.

[2] FBI Uniform Crime Report, 2002.

[3] According to the Worcester Police Department: "The schedule for [distribution of federal funds from] the Universal Hiring Program is as follows: Year 1 - $40,000 per officer, year two - $25,000 per officer, year three - $10,000 per officer. The grant amount will be used as a funding source in the Worcester Police FY05 Budget and subsequent budgets until grant funds are completed - The schedule right now calls for the grant to be completely expended during FY07. In FY04 we expect to use just under $250,000, in FY05 the current projection based on a 6/1/04 academy start date is $1.907 million."

Input Statistics: Worcester Police Department

FULL DEPARTMENT	FY01	FY02	FY03	FY04	% Change, FY01-FY04	% Change, FY03-FY04
Total Budget	$27,344,297 (actual expenditures)	$30,827,363 (actual expenditures)	$31,643,184 (actual expenditures)	$30,743,364 (as amended 8/04)	12.4%	-2.8%
Number of positions funded	542	540	519	491	-9.4%	-5.4%
Positions (per 1,000 population)*	3.14	3.13	3.01	2.84	-9.6%	-5.6%
Total number of sworn officers	474	472	459	444	-6.3%	-3.3%
Sworn officers (per 1,000 population)*	2.75	2.73	2.66	2.57	-6.5%	-3.4%
COMMUNITY SERVICES UNIT (see Indicator 2)						
Budget**	$584,626	$454,459	$641,135	$548,547	-6.2%	-14.4%
Number of sworn officers	13	10	12	9	-30.8%	-25.0%
Number of civilian positions	1	1	1	1	0.0%	0.0%
INTERNAL AFFAIRS DIVISION (see Indicator 3)						
Budget**	$272,425	$333,424	$329,319	$373,633	37.2%	13.5%
Number of sworn officers	5	6	5	6	20.0%	20.0%
Number of civilian positions	1	1	1	0	-100.0%	-100.0%

Source: City of Worcester Budget Office and Worcester Police Department.   * Based on 2000 Census. Worcester total population = 172,648   **Salaries Only

1 Crime Rates

Why is it important?

Crime rates are the major indicator of a city's level of safety. When disaggregated by neighborhood, these rates can highlight how to allocate police resources to respond to problematic areas. Because external conditions such as the economy and changing demographics affect the level of crime in a community, crime rates do not directly reflect how well a police department is functioning. Nonetheless, high and increasing crime rates can cause residents and businesses to leave a city, while low and falling crime rates indicate a safer community in which to live and conduct business.

Chart 1.1: Historical Trend: Major Crimes in Worcester, 1994-2002 (per 100,000 people)

Data source: Worcester Police Department Crime Analysis Unit. Major crimes include murder and non-negligent manslaughter, robbery, aggravated assault, burglary, larceny, motor vehicle theft. Population based on 2000 Census.

Chart 1.2: Historical Crime Index Rates for Northeastern Cities, 2000-2002 (per 100,000 Population)

Data source: FBI Uniform Crime Reports. Based on population from 2000 Census. Includes murder and non-negligent manslaughter, robbery, aggravated assault, burglary, larceny, and motor vehicle theft.

[1] The central zone is comprised of the area between Main Street/Southbridge Street/ Canterbury Street and Park Avenue from Salisbury Street in the north to the Webster Square area in the south.
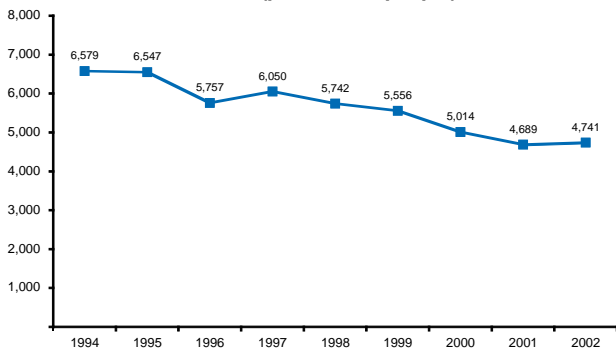
How does Worcester perform?

Despite a small (1.1%) increase in major crimes from 2001 to 2002 (the latest year for which data is available), Worcester's rates for murder and non-negligent manslaughter, robbery, aggravated assault, burglary, larceny, and motor vehicle theft (see Page 4 for definitions) have fallen significantly since 1994, as shown in **Chart 1.1**. In 1994, there were 6,579 instances of these crimes per 100,000 people. In 2002, this level had dropped 27.9% to 4,741 per 100,000 people. (It should be noted that larceny is the largest category of those listed, representing 2,517 crimes per 100,000 population in 2002.)

Because of these falling rates for major crimes, Worcester ranks fairly well compared to similarly-sized cities in the nation. As shown in **Table 1.1**, for the major crimes specified, Worcester ranked between 23rd and 64th of 95 cities with populations between 125,000 and 250,000. Several of these categories have decreased significantly over the last several years. For example, burglaries declined by 56% from 3,234 in 1994 to 1,421 in 2002, although it increased slightly from 2001 to 2002. Although aggravated assault in Worcester remains higher than in some other cities, it has declined 22% since 1998 (from 1,278 to 996 in 2002). Worcester also ranks well when compared to cities in the Northeast, as shown in **Chart 1.2**.
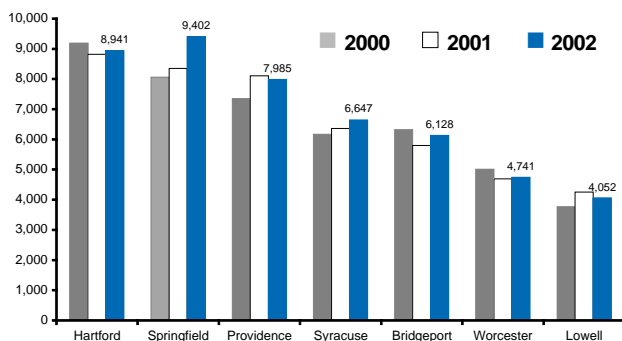
Quality of life is affected not only by the rate of the major crimes discussed above, but also by the amount of nuisance and disorder – loud parties, fights and disorderly conduct – in a neighborhood. **Table 1.2** shows the number of violations of public order in the various city police zones from 1999 to 2002. (See the Page 4 for situations considered part of public-order violations.) Because the area, residential population, and daytime and nighttime influx populations differ in these zones, for assessment purposes disorder in a zone should be compared only against prior levels in the same zone, rather than against the level in other zones. The central zone[1] saw the only increase in violations of public order from 2001 to 2002 (8.5%), but still had a decrease in violations from 1999 of 1.3%. The downtown and east zones both had significant decreases (13.8% and 16.9% respectively) from 2001 to 2002. (See the **Appendix** for a more detailed map of the violations of public order in these areas.)

What does this mean for Worcester?

Since the early 1990's, Worcester has experienced a significant decline in the major crimes identified above. As a result, Worcester ranks relatively well when compared to other northeastern cities as well as similarly sized cities across the nation. It is not known why crime fell during this period, although it is consistent with wider national trends. Possible reasons include declines in the number of 15- to 24-year-olds (the age bracket that commits most crimes), declines in drug use, and increases in community policing activities. While the crime index rate decreased nationwide during this period (14.3% since 1995), the decrease was greater in Worcester (28.1%). More specifically, between 1995 and 2002, burglaries fell 17.1% nationwide and 43.7% in Worcester, larcenies fell 11.8% nationwide and 24.9% in Worcester, and aggravated assaults fell 18.6% nationwide and 21.2% in Worcester. Robberies, however, fell 27.5% nationwide but only 12.9% in Worcester.

For a number of reasons, it is important for the Police Department to continue to track crime data. Tracking allows the department to respond quickly to surges in the number of crimes in a given neighborhood. It reveals longer-term trends in crime throughout the city which may require the redeployment of resources. It also enables the department to respond to requests for more information from citizens, neighborhoods groups, and the City Council, while enabling other agencies within the municipal government and private neighborhood groups to utilize this information.

*By tracking crime data in the future we will know whether Worcester continues to experience decreasing crime rates. According to the WPD, crime rates tend to ebb and flow with changes in the economy, demographics, and the efforts of the Police Department and other criminal justice agencies. For example, while crime has decreased over the long term, there have been steady increases in robberies and breaking and entering in the short term, as shown in **Table 1.3**. Next year's report on public safety will enable us to see whether these trends continue.*

Table 1.1: Major Crimes in Worcester Compared to Similarly Sized Cities, 2001

	Rate per 100,000 Residents	Rank Out of 95 Cities*	Percent Above or Below Average*
Burglary	664	64th	34.1% lower
Murder and non-negligent manslaughter	4.0	60th	48.1% lower
Larceny	2,549	64th	26.8% lower
Robbery	209	46th	13.3% lower
Motor Vehicle theft	702	38th	2.1% lower
Aggravated assault	539	23rd	32.0% higher

*Ranking and average is calculated from 95 cities nationwide with populations of 125,000 to 250,000.

Data Source: Worcester Police Department

Table 1.2: Violations of Public Order by Zone 1999-2002

	1999	2000	2001	2002	% Change 01-02	% Change 99-02
Central	6,863	6,641	6,243	6,774	8.5%	-1.3%
South	3,420	3,723	3,288	3,135	-4.7%	-8.3%
Downtown	2,719	3,181	3,062	2,640	-13.8%	-2.9%
Southeast	2,382	2,330	2,293	2,228	-2.8%	-6.5%
East	2,047	1,992	2,094	1,741	-16.9%	-14.9%
North	1,905	1,855	2,034	2,023	-0.5%	6.2%
West	1,828	1,902	1,806	1,704	-5.6%	-6.8%
Northwest	926	909	913	908	-0.5%	-1.9%

Data source: Worcester Police Department

Table 1.3: Most Current Crime Trends, Worcester

	2001	2002	2003	% Change 2001-2003	% Change 2002-2003
Incoming Calls From Citizens [1]	86,380	85,013	83,279	-3.6%	-2.0%
Patrol-Initiated Incidents	26,408	25,021	15,763	-40.3%	-37.0%
Assault [2]	1,460	1,403	1,633	11.8%	16.4%
Robbery	339	342	394	16.2%	15.2%
Breaking and Entering	1,241	1,427	1,591	28.2%	11.5%
Larceny from Motor Vehicle	1,984	1,866	2,215	11.6%	18.7%
Malic. Destruction Of Property	2,545	2,501	2,610	2.6%	4.4%
Vehicles Reported Stolen	1,129	1,070	1,284	13.7%	20.0%
Disorderly Conduct [3]	13,305	10,324	11,176	-16.0%	8.3%
Noise-Related Disorders [4]	5,072	4,730	4,968	-2.1%	5.0%

(1) Incoming Calls From Citizens = 911 emergency calls + calls for service + walk-ins + telephone reports;

(2) Assault = murder + assault with a dangerous weapon + assault and battery + simple assault + sexual assault;

(3) Disorderly Conduct = disorderly conduct + fights + gun shots/illegal carrying;

(4) Noise-Related Disorders = loud party/music/etc. + other disturbances

Data Source: WPD Police Incident Statistics

Definition of Major Crimes (UCR Part 1 Crimes)

Murder and Non-negligent Manslaughter: The willful killing of one human being by another. The classification of this offense, as for all other offenses listed here, is based solely on police investigation as opposed to the determination of a court, medical examiner, coroner, jury, or other judicial body. Not included… are deaths caused by negligence, suicide, or accident; justifiable homicides; and attempts to murder or assaults to murder, which are included as aggravated assaults.

Robbery: The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear.

Aggravated Assault: An unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault is usually accompanied by the use of a weapon or by means likely to produce death or great bodily harm. Attempts are included since it is not necessary that an injury result when a gun, knife, or other weapon is used which could and probably would result in serious personal injury if the crime were successfully completed.

Burglary: The unlawful entry of a structure to commit a felony or theft. The use of force to gain entry is not required to classify an offense as burglary. It is categorized into three sub-classifications: forcible entry, unlawful entry where no force is used, and attempted forcible entry.

Larceny: The unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession or another. It includes crimes such as shoplifting, pocket-picking, purse-snatching, thefts from motor vehicles, thefts of motor vehicle parts and accessories, bicycle thefts, etc., in which no use of force, violence, or fraud occurs. Motor vehicle theft is excluded from this category, as it is its own category as listed below.

Motor Vehicle Theft: The theft or attempted theft of a motor vehicle, which includes the stealing of automobiles, trucks, buses, motorcycles, snowmobiles, etc. The definition excludes the taking of a motor vehicle for temporary use by those persons having lawful access.

Violations of Public Order Violations of public order include the following and are not necessarily criminal offenses: disorderly conduct, fights, gunshots, loud parties/music, non-domestic disputes, suspicious persons or vehicles, animal complaints, vice crimes, and other disturbances.

Sources: U.S. Department of Justice, FBI "Crime in the United States 2000" and the Worcester Police Department.

2 Police-Community Relations

Why is it important?

Regular interaction, collaboration, and information sharing between the police and community residents and business owners can improve a city's safety. By working collaboratively, police departments can gain information on neighborhood problems, and community residents can learn how to make their neighborhoods safer. One way that police departments across the country have improved police-community relations is by implementing community policing programs. Community policing consists of two interrelated components: increased formalized interaction between the police and the community, and the adoption of a problem-solving approach to policing. In terms of day-to-day activities, community policing means replacing some patrol cars with foot or bicycle patrols, neighborhood substations, and other means of promoting interactions with the community. Officers get to know residents and business owners in their assigned neighborhood and can better identify crime-related activities as well as community needs, such as addressing parking, traffic, or nuisance problems.

In Worcester, community policing has been implemented through the creation of various neighborhood crime watch groups throughout the city (currently there are 42), a "citizens' police academy," some foot patrols, and the addition of some police substations, such as the one downtown on Front Street. Neighborhood watch groups meet on a regular basis (usually monthly) with a community services officer[1] who has received special training. During these meetings, residents are able to voice neighborhood safety concerns and discuss other community issues. The citizens' police academy is a program that enables citizens to learn more about the responsibilities of community members as well as the role of the police.

[1] While route officers may periodically attend neighborhood watch meetings, a separate officer with the community services division of the Police Department is the primary liaison to neighborhood watch groups.

[2] Margin of error = +/- 5%

[3] Margin of error = +/- 5%

[4] The total number of responses varies slightly by question (sometimes people choose not to respond to one or two), but the average number of responses was 100 in 2003 and 120 in 2004.

How does Worcester perform?

First, to determine the overall level of community satisfaction with the police, a random telephone survey of 1,404 households in Worcester was completed by InterGlobal Services under contract with the Research Bureau during the summer of 2003. Of these 1,404 households, 354 (23%) had had some contact with the police department over the preceding year. Of those 354 respondents, 64% said they were satisfied with their interaction, 15% were neutral, and 17% were not satisfied, as shown in **Chart 2.1**.[2] In terms of fairness and courtesy, 78% of those who had some contact with the department said that the police were fair in dealing with their situation, and 80% of respondents said that the police were courteous in their dealings.[3] These results are presented in **Table 2.1**. These results are almost identical to the results from 2002.
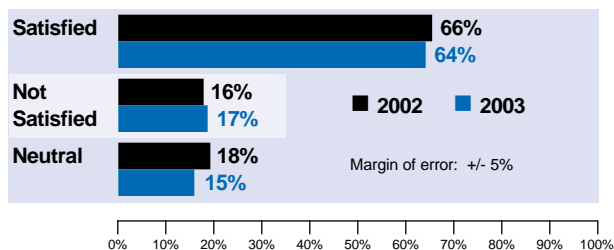
To measure the effectiveness of neighborhood watch groups in the city for achieving the purposes of community policing, a survey was conducted by the Research Bureau of these groups during the winter of 2004. A total of 124 surveys from 12 neighborhood watch groups were completed.

Table 2.2 shows the frequency of particular activities at meetings for the past two years.[4] In 2004, 64.7% of respondents said that the police representative always informs them about the types and number of crimes committed in the neighborhood. This represents a decrease of 12.1 percentage points in police reporting from 2003. Similarly, a majority (62.2%) said that the police representative always identifies problem areas and explains what police are doing to diminish crime in those areas, a decrease of 17.6 percentage points from 2003.   A slightly smaller percentage (57.1%) indicated that the officer always asks residents for suggestions for reducing crime, down 15.2 percentage points from the number responding affirmatively in 2003. Neighborhood watch members had the highest rate of affirmation for the question "Do police present information on how to deal with neighborhood disturbances?" with 66.7% saying "always," down 15.8 percentage points from 2003. The percentage of members who responded that time is always provided for residents to voice their opinions was 93% in both 2003 and 2004.

Participants at neighborhood watch meetings appear to be satisfied with their route officers. The route officers are the officers who are assigned to regular patrols in a neighborhood and may or may not attend neighborhood watch meetings. When asked whether they felt the relationship between the neighborhood and the route officers was productive and mutually helpful, 73% of respondents said "always", as shown in **Chart 2.2**. This percentage was close to that from 2003 (75%), although the number of responses was actually higher (84 "always" responses in 2004 compared to 74 in 2003).
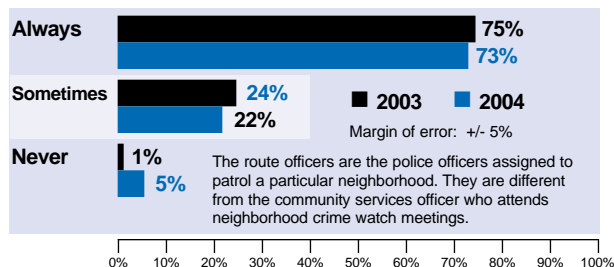
Chart 2.1: Satisfaction with Police Department Interaction

Satisfied	66% / 64%
Not Satisfied	16% / 17%
Neutral	18% / 15%

■ 2002   ■ 2003

Margin of error: +/- 5%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Data Source: Worcester Regional Research Bureau, Citizen Satisfaction Survey 2003

Chart 2.2: Is the relationship between neighborhoods and route officers a productive one in which they help each other?

Always	75% / 73%
Sometimes	24% / 22%
Never	1% / 5%

■ 2003   ■ 2004

Margin of error: +/- 5%

The route officers are the police officers assigned to patrol a particular neighborhood. They are different from the community services officer who attends neighborhood crime watch meetings.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Data Source: Worcester Regional Research Bureau, Crime Watch Survey 2004

Table 2.1: Police Department Fairness & Courteousness

	2003			**2002**		
	Yes	No	Don't Know	Yes	No	Don't Know
Were the Police fair in dealing with your situation?	78%	16%	6%	79%	18%	3%
Were the Police courteous in dealing with your situation?	80%	14%	6%	80%	17%	3%

Margin of error: +/- 5%

Data Source: Worcester Regional Research Bureau, Citizen Satisfaction Survey 2003

What does this mean for Worcester?

While the neighborhood watch surveys indicate a successful relationship between citizens surveyed and police, the proportion of favorable responses had decreased for 4 of the 5 measures. These decreases were due primarily to an increase in non-favorable responses rather than large decreases in the number of favorable ones. The increase in total number of survey respondents corresponds roughly to the increase in the number of "sometimes" responses. While the decrease in favorability may have been a side effect of transitions undergone by the police department during the intervening year (e.g., reductions in patrol personnel and changes in police community services liaisons), it may also be a reflection of the views of new crime watch participants. 3% of respondents commented in open response sections that they thought their neighborhood patrols and the community services unit were understaffed and/or overcommitted, while an additional 3% commented that they were new members. What the WPD does to improve its favorability rating should be examined in next year's report.

There are certain limitations to the generalizability of the neighborhood watch survey. The results of this survey represent only the views of those who attend these meetings, and cannot be interpreted as being representative of all constituencies in Worcester. For example, the survey probably did not reach a large number of business owners, who also depend on the police. Implementation of a parallel survey of business owners might yield additional perspectives. Furthermore, those who attend neighborhood watch groups may have traits that make them more likely to attend meetings and also to rate the police better on these measures. For example, a neighborhood resident who attended one or two meetings but was displeased with the response or lack of response from the police may stop attending meetings, and therefore would not have been surveyed. On the other hand, those who attend may also do so because they are more concerned or affected by crime, and have a complaint. Still, it is noteworthy that those who attend the watch groups are basically satisfied with their community services officers and their route officers.

The telephone survey also indicated general satisfaction with the police. In fact, there was no statistically significant change in satisfaction levels from the previous year. Because it was a random survey of households in Worcester, it can be interpreted as representative of everyone who had contact with the police over the last year, within the associated margins of error. These surveys will be repeated annually to determine whether attitudes change regarding satisfaction with the police.

Table 2.2: Frequency of Activities at Neighborhood Crime Watch Meetings

	ALWAYS			**SOMETIMES**			**NEVER**		
	2003	2004	% Point Change	2003	2004	% Point Change	2003	2004	% Point Change
Police inform residents about the types and number of crimes committed in the neighborhood	76.8%	64.7%	-12.1	21.2%	33.6%	12.4	2.0%	1.7%	-0.3
Police identify problem areas and explain what they are doing to diminish crime	79.8%	62.2%	-17.6	19.2%	36.1%	16.9	1.0%	1.7%	0.7
Police ask residents for suggestions on how to reduce crime	72.3%	57.1%	-15.2	25.7%	33.6%	7.9	2.0%	9.2%	7.2
Police present information on how to deal with neighborhood disturbances	82.5%	66.7%	-15.8	17.5%	31.6%	14.1	0.0%	1.7%	1.7
Time is provided for residents to voice their opinion	93.0%	93.2%	0.2	6.0%	6.8%	0.8	1.0%	0.0%	-1.0

3 Allegations of Police Misconduct

Why is it important?

The police department's role in preventing criminal activity and apprehending criminals must be limited by respect for the rights of the accused and protection of the innocent from unwarranted harassment. One rough measure to determine whether the police are appropriately balancing these concerns is the number of allegations of police misconduct and the number of those allegations that are substantiated following investigation by the Internal Affairs Division of the Worcester Police Department.

Chart 3.1: **Number of Allegations and Number Sustained Following Investigation, FY01-FY03**

Data source: Worcester Police Department

Chart 3.2: **Disposition of All Citizen Allegations, FY01-FY03**

Data source: Worcester Police Department
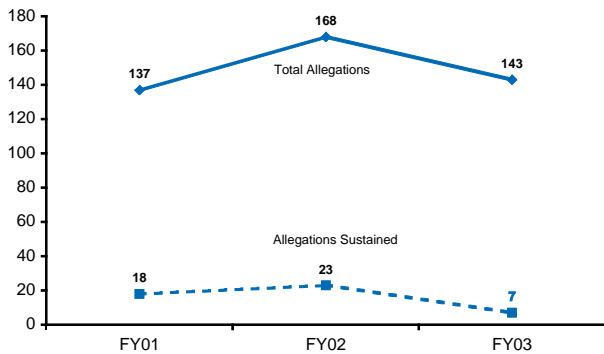
How does Worcester perform?

The Internal Affairs Division of the Worcester Police Department handles all citizen complaints, including allegations of corruption and misconduct. After a complaint is filed, the allegations it includes are investigated internally by the Department, the resultant findings lead to one of six conclusions:

Unfounded/Resolved at Intake: The behavior in the complaint did not occur, the behavior did not violate any departmental rules and regulations, or the behavior did not involve the Worcester Police Department.

Exonerated: The incident occurred but the actions of the officer were lawful and proper.

Not Sustained: Investigation did not reveal sufficient evidence.

Sustained: There was sufficient evidence to sustain the allegation.

Sustained Other: Investigation reveals that the officer committed a violation other than the one named in the complaint.

Policy Failure: The allegation is true, but the officer was acting in a manner consistent with policy, which indicates a policy revision is necessary.

Between July 2002 and June 2003, there were 95 citizen complaints against the Worcester Police Department. Contained in those complaints were 143 allegations of corruption and misconduct, such as theft, bribery, unlawful arrest, or harassment. Of those 143 allegations, 7 (4.9%) were sustained following investigation, indicating that there was sufficient evidence to sustain the allegations. This was 16 fewer sustained allegations than in FY02. These results are shown in **Chart 3.1**.
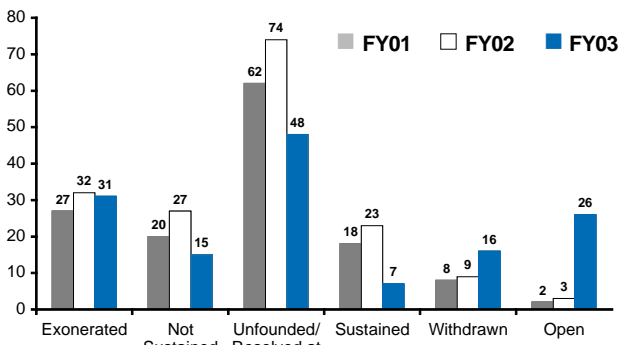
Chart 3.2 shows the disposition of all complaints during FY01 (137 total allegations), FY02 (168 total allegations), and FY03 (143 total allegations). The number of allegations that were sustained in FY03 (7) was not only lower than that in FY02 (23), but also made up a much smaller percentage of the total allegations for the year (13.4% in FY02 and 4.9% in FY03). Allegations that were not sustained or were unfounded/resolved at intake were also down both numerically and as a percentage of total allegations. Unsustained allegations decreased from 27 (16.1% of total) in FY02 to 15 (10.5% of total) in FY03. Allegations that were unfounded/resolved at intake decreased from 74 (44.0% of total) in FY02 to 48 (33.6% of total) in FY03. The number of allegations that were withdrawn almost doubled from 9 (5.4% of total) in FY02 to 16 (11.2% of total) in FY03. It should be noted, however, that a much greater number of allegations were still open at the end of FY03 (26, or 18.2% of total allegations) than in FY02 (3, or only 1.8% of total allegations).

What does this mean for Worcester?

The purpose of the Internal Affairs Division of the Police Department is to ensure that citizens are protected against inappropriate or unlawful police behavior, and that police officers are protected against unwarranted allegations. According to the data presented here, the number of sustained allegations has decreased between FY02 and FY03, although the number of allegations that were still open at the end of FY03 was much higher than for FY02. It is difficult to draw conclusions regarding emerging trends based only on information for three years, especially when one of those years involved changes in department management. The number of open allegations present at the end of FY03 is large enough that the distribution of that year's allegations should be reexamined once most of them have been resolved. Another issue for consideration in future reports will be whether decreases (from budget cuts) and increases (from a Federal hiring grant) in the number of officers, or changes in departmental management, correlate with the number of citizen allegations or departmental disposition of those allegations.

*As mentioned in last year's report, one limitation of these data is that they do not indicate the success or soundness of the **process** that the*
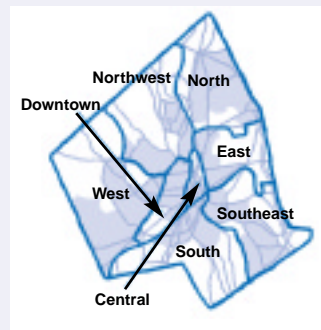
Police Department utilizes to investigate these allegations. According to the Police Department, the process is as follows: "…complaints are thoroughly investigated and then a report is prepared, which includes information contained in the statements from the complainant, the accused, and any witnesses. The completed investigative report also includes a narrative summary of the events and a finding of facts as determined by the evidence, including the statements of those involved. The report is then given to the Chief of Police to review for completeness, objectivity and evaluation. If the Chief of Police has reason to believe that there was misconduct or corruption on the part of the employee, the Chief shall take whatever remedial action necessary." [1] Given the large number of 2003 cases still open, the development of a benchmark which measures how long it takes to resolve allegations may serve as one standard of the effectiveness of this process. A sound process is critical to ensuring both that the rights of Worcester's citizens are protected and that police officers can perform their duties without being unjustly accused of misbehavior.

[1] Worcester Police Department Internal Affairs Division:
http://www.ci.worcester.ma.us/police/iad.htm

Appendix: Additional Police Data – Distribution of Violations of Public Order, 2003

(Shaded areas within each geographical area indicate the primary concentration of violations of public order for that area.)

Zone	No. of Violations	Percent of City Total	Percent Change From 2001	Concentration of Violations
North Zone	1,889	9.7%	-7.1%	72.7% of all violations in this area are in the Great Brook Valley and Greendale areas.
Northwest Zone	983	5.0%	+7.7%	70.4% of all violations in this area are in the Gold Star Boulevard/Grove Street and Pleasant Street/Highland Street areas.
Central Zone	6,807	34.9%	+9.0%	73.4% of all violations in this area are in the Highland Street, lower Pleasant Street, lower Chandler Street, and Main South areas..
West Zone	1,943	10.0%	+7.6%	77.2% of all violations in this area are in the Park Avenue/Pleasant Street/Chandler Street/May Street and Webster Square areas.
Downtown Zone	2,150	11.0%	-29.8%	90.7% of all violations in this area are in the Southbridge Street, Franklin/Front Streets, and Main Street areas.
South Zone	3,241	16.6%	-1.4%	80.9% of all violations in this area are in the Green Island, Vernon Hill and South Worcester areas.
Southeast Zone	2,672	12.0%	+16.5%	64% of all violations in this area are in the lower Pleasant St, lower Chandler St, and Main South areas. Highland Street area has high commercial activity.
East Zone	1,931	9.9%	-7.8%	88.7% of all violations in this area are in the Belmont Hill and Shrewsbury Street areas.

Violations of public order are not necessarily criminal offenses and include: disorderly conduct, fights, gunshots, loud parties/ music, non-domestic disputes, suspicious persons or vehicles, animal complaints, vice crimes, and other disturbances.

Source: Worcester Police Department.

Worcester Fire Department and Emergency Medical Services: Overview & Input Indicators

The Fire Department describes its mission as protecting the lives and property of the citizens of Worcester from the adverse effects of fire, medical emergencies, or any hazardous conditions both man-made and natural. [1]

The Worcester Fire Department (WFD) employs 431 individuals, 421 of whom are uniformed firefighters. Beginning in mid-June 2004, the department will be adding approximately 25 new firefighters (thus bringing its uniformed total to 446) from a training class that is now in progress. Its current budget of $28.4 million is the third largest municipal expenditure after the Worcester Public Schools and the Worcester Police Department. The WFD has 23 fire companies in 11 fire stations located throughout the city. (A fire company consists of about 16 people with about four on each shift. Because of the Fire Department work schedule, there are generally several firefighters from each company off duty at any point in time.)

The WFD has primary responsibility for dealing with all fires and hazardous materials situations, and is the "first responder" for medical emergencies. In other words, the WFD responds to medical emergencies until UMass Memorial EMS arrives to provide advanced life support and transport. As discussed in **Indicator 6: Response Times for Emergency Services**, UMass Memorial EMS provides this service at no cost to the municipal government.

As shown in the table below, even though the WFD's budget has decreased slightly from FY03 to FY04, it increased more than 7% over the last three years, from $26.4 million in FY01 to $28.4 million in FY04, while the number of employees declined 10% from 479 in FY01 to 431 in FY04.

The decrease in the number of firefighters mirrors a national trend: nearly every major city has reduced its firefighting ranks in the last three years. The reason is that "structural blazes" no longer constitute a major problem in much of the U.S. Between 1997 and 2002, according to the National Fire Protection Association, the number of fires declined from 3.2 million a year to 1.6 million.[2]

The reason for the increase in the budget is the same as that noted for the Police Department: contractual salary increases. The result of the increased cost was that firefighters who retired or otherwise left could not be replaced. The number of fire companies has remained unchanged, although they are now distributed among one fewer stations (because of the closing of the Central Station). According to statistics from the National Fire Protection Association, the median number of firefighters per 1,000 population in similarly-sized cities in the northeast in 2000 (the most recent year for which information is available) was 2.51.[3] In Worcester, it was 2.70 per 1,000 population in FY01, but this level has declined to 2.44 per 1,000 population in FY04. If all of the members of the current training class become firefighters for the City, and there are no additional retirements/exits, the number of firefighters per 1,000 population in Worcester would increase to 2.58 by the end of the fiscal year.

[1] City of Worcester Annual Budget, FY03.

[2] Eli Lehrer, "Do we need more firefighters?," *The Weekly Standard*, Volume 009, Issue 30, April 12, 2004.

[3] Michael J. Karter, "U.S. Fire Department Profile Through 2000," National Fire Protection Association, 2000.

Input Statistics: Worcester Fire Department

	FY01	FY02	FY03	FY04	% Change, FY01-FY04	% Change, FY03-FY04
Total department budget	$26,396,474	$26,396,832	$29,230,494	$28,390,740	7.6%	-2.9%
Total number of funded positions	479	479	449	431	-10.0%	-4.0%
Positions (per 1,000 population)	2.77	2.77	2.60	2.50	-10.0%	-4.0%
Total number of uniformed personnel	466	466	438	421	-9.7%	-3.9%
Uniformed personnel (per 1,000 population)	2.70	2.70	2.54	2.44	-9.7%	-3.9%
Number of fire companies	23	23	23	23	0.0%	0.0%

Source: Worcester City Budget Office, Worcester Fire Department.

4 Number of Fires and Calls for Emergency Services

Why is it important?

The number of fires and emergency medical situations in the City indicates the workload of the Fire Department and UMass Memorial EMS. Tracking the number of fires and emergency medical situations can help allocate resources where they are needed most.

Chart 4.1: Number of Structure, Vehicle, and Other Fires in Worcester, 1995-2002

	1995	1996	1997	1998	1999	2000	2001	2002*
Structure	548	556	271	345	428	435	476	243
Vehicle	264	341	107	171	291	235	301	195
Other	1601	1253	587	758	1076	761	777	986
Total Fires	2413	2150	965	1274	1795	1431	1554	1424

Data source: Massachusetts Fire Marshal. *2002 represents the first year fire departments were required to use a new version of their reporting system. As a result, data pre-2002 and data from/post-2002 may not be comparable.

Chart 4.2: Number of Arson Fires in Worcester, 1995-2002

Structure arson

Change in Arson Definition

Vehicle

	1995	1996	1997	1998	1999	2000	2001	2002*
Vehicle arson	93	28	14	33	39	24	30	13
Structure arson	58	66	27	44	55	49	41	43

Data source: Massachusetts Fire Marshal. *2002 represents the first year fire departments were required to use a new version of their reporting system. This involved significant changes in the definition of "arson." As a result, data pre-2002 and data from/post-2002 are not comparable. Pre-2002 data is shown here solely to depict past trends until enough data has been gathered under the new system to produce new ones.

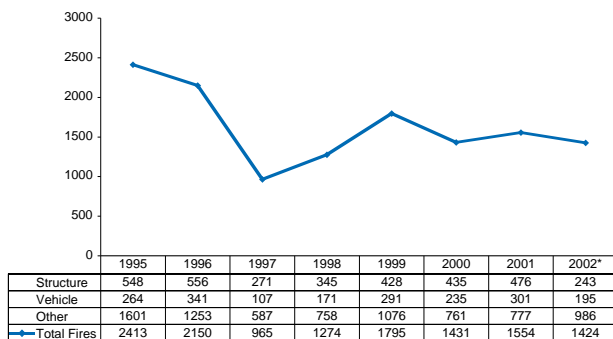## How does Worcester perform?

From 1995 to 2002, the total number of fires in Worcester declined 41.0%, from 2,413 to 1,424. This decline is probably the result of changes in materials used in construction and prevention measures such as smoke detectors. Structure and vehicle fires represent 17.1% and 13.7%, respectively, of all fires reported[1] by the Department to the Massachusetts Fire Marshal in 2002. 2002 was the first year that MA fire departments were required to use a new version of their reporting system. While definitions of non-arson fires remained unchanged, variations and difficulties in adopting the new technology may mean that pre-2002 data and post-2002 data may not be fully comparable.

As shown in **Chart 4.1**, before 2002 the number of structure fires was lowest in 1997 at 271 and rose slowly to 476 in 2001. In 2002, under the new reporting system, there were 243 structure fires. The number of vehicle fires has followed a similar trend. The rate of decline in the number of fires has been faster in Worcester than in the rest of the country. From 1995 to 2000 (the most recent year for which information is available), the total number of fires in Worcester fell 41%, while the number of fires nationwide declined 13%.[2]

Under the new fire reporting system the definition of arson changed significantly, from all intentionally set and suspicious fires to only intentional fires where the age of the person involved is at least 17. Furthermore, "suspicious" is no longer a category in the new system, having been replaced by "cause under investigation" (which is not added to the arson numbers). As a result, arson numbers will be lower beginning in 2002 for all cities in Massachusetts. **Chart 4.2** shows the 2002 arson numbers for Worcester as well as the past trend data from 1995 to 2001. While the data are not comparable, the pre-2002 data are still being shown to represent general past trends until enough new data have been gathered to show new trends.
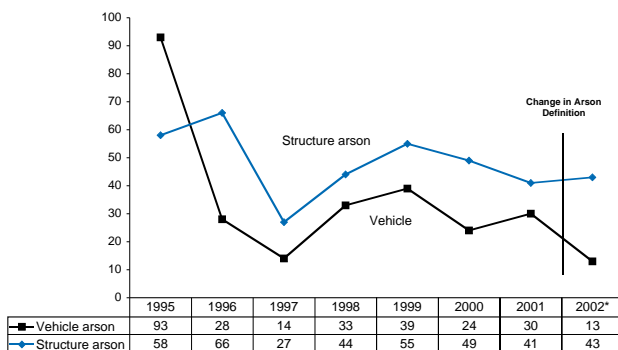
[1] MA fire departments are required by law to report fires and explosions that result in a "loss." The state fire marshal defines a "loss" as "a dollar loss or human casualty." Consequently, many outside fires (e.g., dumpster fires, brush or grass fires) are not reported.

[2] "The U.S. Fire Problem," 2001, National Fire Protection Association.
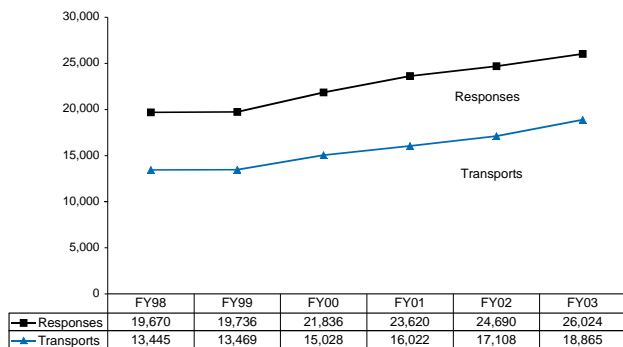
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INDICATOR

4 Number of Fires and Calls for Emergency Services (cont.)

While the number of fires in the city has declined, the number of EMS calls that the Fire Department and UMass Memorial EMS have responded to has increased. According to the Worcester Fire Department, the number of first-responder EMS calls has increased 53.8% between 1999 and 2002, from 9,069 calls to 13,952 calls. As shown in **Chart 4.3,** the number of medical responses as reported by UMass Memorial EMS increased by 32.3%, from 19,670 in FY98 to 26,024 in FY03. The number of hospital transports by UMass Memorial EMS increased by 40.3%, from 13,445 in FY98 to 18,865 in FY03.

Chart 4.3:   Number of EMS Calls, FY98-FY03

	FY98	FY99	FY00	FY01	FY02	FY03
Responses	19,670	19,736	21,836	23,620	24,690	26,024
Transports	13,445	13,469	15,028	16,022	17,108	18,865

Data Source: UMass Memorial EMS

What does this mean for Worcester?

While the number of fires in the city has declined over the last decade, the number of firefighters and engine companies has remained about the same. In 1996, there were 2,150 fires in Worcester and 457 firefighters.[3] In 2002, there were 1,424 fires (33.7% fewer than in 1996) and 466 firefighters (2.0% more than in 1996). Should the structure of the WFD remain the same in spite of the decrease in fires and the increase in emergency calls? In addition, what are the ramifications of these changes for the usage of current engines and equipment as well as plans for the acquisition of future vehicles? As is discussed further in **Indicator 6: Response Time for Emergency Services,** *the Fire Department serves as first responder for EMS calls because state law requires that each community designate a first responder. Because of its numerous locations throughout the city, the Fire Department can usually arrive on the scene of a medical situation more quickly than UMass Memorial EMS. The success of both the Fire Department and UMass Memorial EMS in providing EMS services, as measured by response times, is discussed more fully in* **Indicator 6: Response Times for Emergency Services.**

[3] Worcester Municipal Research Bureau, Report No. 97-1, "Police and Fire Department Staffing: A survey of Worcester and eleven other cities," p. 3.

5 Satisfaction with Fire Department

Why is it important?

The Fire Department, when responding to calls for fire or medical emergencies, should arrive in a timely manner and should act professionally and treat all citizens with respect. One way to determine the quality of the Fire Department's services and personnel is through household surveys.

How does Worcester perform?

A random telephone survey of 1,404 households in Worcester was completed by InterGlobal Services under contract with the Research Bureau during the summer of 2003. (See **Indicator 2: Police/Community Relations** for additional data from this same survey.) Out of these 1,404 households, 158 (11%) had had some contact with the Fire Department during the preceding year for either a fire or medical emergency.
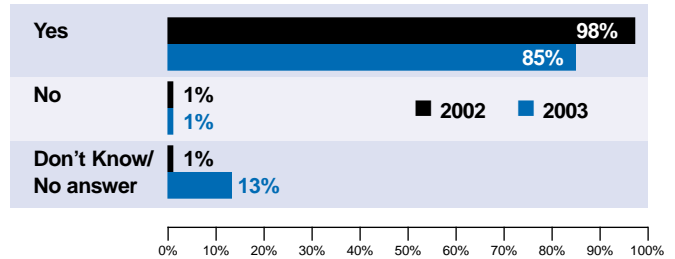
Of those who had some contact with the Fire Department, 85% said that the Department arrived in a reasonable amount of time. This represents a statistically significant decline from the 98% who responded affirmatively in 2002.[1] The decline is accounted for by an increase in the number of participants who responded "don't know" or didn't answer (from 1% in 2002 to 13% in 2003). Fire response times are covered further in **Indicator 6: Emergency Services Response Times**.

86% of respondents said that the overall service from the Fire Department was excellent or good. Again, this represents a statistically significant decline from the 2002 rate of 94% that can be accounted for by a corresponding increase in "don't know/no answer" responses. Under 2% reported in 2003 that service was fair or poor. These results are shown in **Charts 5.1** and **5.2**.

Chart 5.1: Did the Fire Department Respond in a Timely Manner?

Yes — 98% (2002), 85% (2003)
No — 1% (2002), 1% (2003)
Don't Know/No answer — 1% (2002), 13% (2003)

■ 2002 ■ 2003

Margin of error +/- 8%
Data Source: Worcester Regional Research Bureau, Citizen Satisfaction Survey 2003

Chart 5.2: Level of Overall Satisfaction with Fire Department Service

Excellent — 78% (2002), 73% (2003)
Good — 16% (2002), 13% (2003)
Fair — 4% (2002), 1% (2003)
Poor — 2% (2002), 0% (2003)
Don't Know — 0% (2002), 13% (2003)

■ 2002 ■ 2003

Margin of error +/- 8%
Data Source: Worcester Regional Research Bureau, Citizen Satisfaction Survey 2003

[1] A change that is statistically significant means that we are at least 95% confident it is an actual change in the percentage of residents who are satisfied and not the result of sampling error.

What does this mean for Worcester?

Overall, those who have had contact with the Fire Department over the last year are overwhelmingly satisfied with the service that they received. The declines in affirmative responses regarding WFD response times and overall service from 2002 to 2003 may have to do with a lack of public understanding about reasonable expectations for Fire Department performance (hence the increase in "don't know/no answer" responses). Furthermore, it is unknown to what degree public understanding of WFD performance may have been influenced (either positively or negatively) by media coverage at that time regarding the closing of the Central Fire Station and declines in the number of uniformed fire personnel. The trends that emerge with additional data during the next few years may help us to clarify these issues.
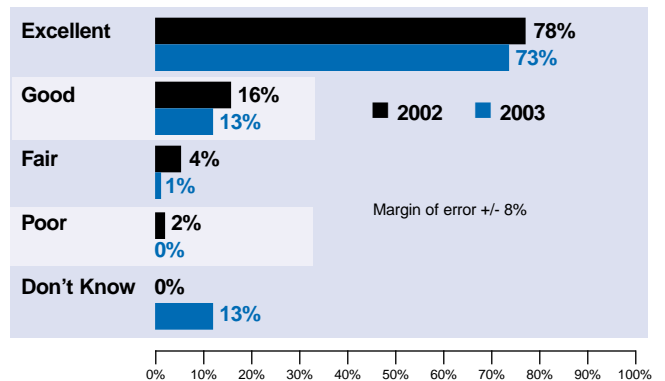
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6 Emergency Services Response Times

Why is it important?

Responding quickly to fires and emergency medical situations can save lives and reduce property damage. In Worcester, response to fires is solely the duty of the Fire Department, while emergency medical services (EMS) are provided by both the Fire Department and UMass Memorial EMS. The Worcester Fire Department serves as the "first responder" for medical emergencies and provides basic life support services until advanced life support and hospital transport can be provided by UMass Memorial EMS. The average response time from the receipt of a call to a provider arriving on the scene is one indicator of how well the Fire Department and UMass Memorial EMS are providing emergency services.

Over the last decade, fire departments across the country have assumed more prominent roles in the provision of EMS. As discussed in **Indicator 4: Number of Fires and Calls for Emergency Medical Services**, this has occurred during an overall decline in the number of fires and an increase in the number of medical calls. As noted earlier, Worcester Fire Department staffing levels have remained about the same.

[1] Latest year for which figures are available.

[2] Incoming emergency calls are handled by agencies independent of the Fire Department. Land-line 911 calls are dispatched from the City of Worcester Communications Department while cell phone 911 calls are dispatched from the state police in Framingham. The time for these separate agencies to process calls is not part of the standard for Fire Department response times.

How does Worcester perform?

Table 6.1 shows the summary of the response times for the various emergency services, and the industry standards set for those services by the National Fire Protection Association. During calendar year 2002[1], the Worcester Fire Department's average time for responding to both structure fires and emergency medical services calls was 4 minutes 7 seconds.[2] This represents an increase from 2001 in the average response time to structure fires of 17 seconds, or 7.4% (from 3 minutes 50 seconds) and a decrease in the average response time for emergency medical services calls of 6 seconds, or 2.4% (from 4 minutes 13 seconds).

During 2002, the overall average response time for UMass Memorial EMS was 6 minutes 11 seconds. This was an increase of 5 seconds from 2001. However, the number of calls to which UMass Memorial EMS responded increased by 4.5% citywide during the same period. The response time varied by area of the city covered because of the distribution of ambulances throughout the city. These results are presented in **Chart 6.1**. Sector 4, the downtown area, had the quickest response time of 5 minutes 11 seconds. Additionally, Priority 1 calls, or those that are most life-threatening, have a quicker average response time of 5 minutes 7 seconds for the entire city (a decrease of 1.9% in response time, or 6 seconds, from 2001).
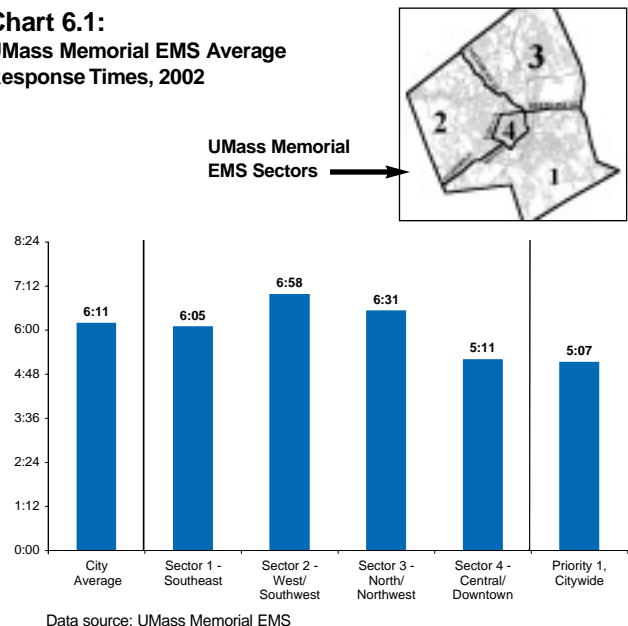
Table 6.1: Summary of Response Times & Industry Standards

	Average Response 2002	Industry Standard*	Worcester Performance Better Than Standard?
Fire Department Response to Fire	4:07	5:00	Yes - by 0:53
Fire Department Response to EMS	4:07	5:00	Yes - by 0:53
UMass Memorial EMS Response to EMS	6:11	8:00	Yes - by 1:49

Data source: Worcester Fire Department; UMass Memorial EMS

* Includes turnout plus response time

Chart 6.1:
UMass Memorial EMS Average Response Times, 2002

UMass Memorial EMS Sectors →

City Average	Sector 1 - Southeast	Sector 2 - West/Southwest	Sector 3 - North/Northwest	Sector 4 - Central/Downtown	Priority 1, Citywide
6:11	6:05	6:58	6:31	5:11	5:07

Data source: UMass Memorial EMS

What does this mean for Worcester?

According to standards set by the National Fire Protection Association, response times for the Worcester Fire Department are better than the standard for both structure fires as well as for first-responder EMS calls by 53 seconds (or 21.5%). UMass Memorial EMS also performs better than its industry standard for advanced life support response.

Worcester has a somewhat unusual system for providing emergency medical services. In fact, out of 200 cities surveyed by the Journal of Emergency Medical Services, approximately 3% utilize hospital-based EMS services. Worcester is the only northeastern city out of this group that provides such a service. (Although it is not included in the 200-city survey, UMass EMS also provides EMS for Shrewsbury.) A hospital-based EMS service, such as that provided by UMass Memorial EMS, puts a premium on the medical side of EMS because of the support provided to the program from the UMass Memorial Medical Center (UMMC). UMMC provides ongoing training and professional development opportunities to the staff of UMass Memorial EMS. As well, because UMass Memorial EMS is overseen by a full time medical director, and thus is bound by hospital quality-assurance and oversight, staff are authorized to undertake advanced medical procedures in the field that are otherwise only provided in the hospital setting. Thus, rather than simply a public safety service, it is a public health service as well. Since times for advanced-life support EMS are significantly better than the industry standard, and medical services are the focus of a hospital-based service, the current performance of EMS in Worcester seems to be very successful.

It should also be noted that UMass Memorial EMS provides this service at no charge to the City. Under this arrangement, the City does not have to purchase or maintain ambulances, or provide advanced life support training to the Fire Department staff who are trained primarily in fire suppression. Thus, not only does the current structure perform better than industry standards, it also saves Worcester the expense of running an ambulance service.

CCPM Advisory Committee

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Marge Purves	Crown Hill
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The Worcester Regional Research Bureau is a private, nonprofit organization dedicated to conducting independent, non-partisan research on financial, administrative, management and community issues facing Worcester's municipal government and the surrounding region.

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