

Center for
Community
Performance
Measurement



WORCESTER
REGIONAL
RESEARCH
BUREAU

Benchmarking
Municipal
Youth Services
in Worcester:
2005

CCPM-05-02



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Highlights:

- Overall WPS spending on after-school and supplemental services decreased by 7% from FY02 to FY05.
- More than 4,400 WPS students are enrolled in a wide variety of college and employment preparation programs.
- In 2004, 83% of Worcester Public Schools (WPS) seniors planned to attend either a two- or four-year college following graduation.
- The number of juvenile arrests in Worcester declined by 17% from 2001 to 2004.
- 2,144 (29%) of the City's
 18- and 19-year olds were
 registered to vote in the
 2004 presidential election.
 Fifty-five percent of these
 registered youth actually voted
 in the November election.



Center for Community Performance Measurement



Dear Citizen,

We are pleased to publish this second annual *Benchmarking Municipal Youth Services in Worcester* report prepared by the Worcester Regional Research Bureau's Center for Community Performance Measurement (CCPM). The CCPM was established to measure municipal performance for the five goals established in the City's Strategic Plan: to improve economic development, public education, municipal and neighborhood services, public safety, and youth services.

As stated in the first publication of this report, the data available on municipal youth services are limited. Many of the services provided by the City and the Worcester Public Schools (WPS) that are utilized by youth simultaneously benefit the adult population, and the data cannot be disaggregated by age group. Therefore, a number of municipally-funded services that benefit Worcester's youth are not discussed in this report. In addition, while our goal is to benchmark youth services provided by municipal government, a significant number of youth services in Worcester are provided by nonprofit organizations such as the YMCA, and are funded primarily by Federal, state, and private donations.

This report will include four measures of youth services: health and behavior, arrests and safety, employment and college preparation, and civic and extracurricular participation. We measure performance by asking, "What has changed since last year, what have we accomplished, and what challenges are still before us?"

As we have previously stressed, no single indicator listed in this report should be considered in isolation. The indicators included here are interrelated. For example, reducing youth involvement in gang and other criminal activity (see **Indicator 2**) may reduce the level of fear in a neighborhood and lead to improved educational outcomes for youth living in and attending school in the neighborhood. Furthermore, the indicators discussed in this report are influenced by those in other reports. For example, increasing family involvement in a child's education (discussed in CCPM report 04-06, *Benchmarking Public Education in Worcester: 2004*) may result in higher academic achievement and increase the likelihood that the child continues his or her education beyond high school.

Thank you for taking the time to read this report. We hope that it will encourage widespread discussion of youth services, serve as a basis for sound priority-setting and decision-making, and promote the adoption of performance measurement practices at the municipal level. Finally, we thank the Sloan Foundation for its continued support of the CCPM and the Fred Harris Daniels Foundation for its sponsorship of this report.

Sincerely,

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Overview

One of the goals established by the City is

" to have a strong, healthy, supported, engaged,



educated, and trained youth." 1

In this report we attempt to assess the City's progress towards achieving that goal. Before reviewing the indicators of success, we will define the age range of youth for this report and provide an estimate of the City's financial resources dedicated to youth services.

 $^{^{\}scriptscriptstyle 1}$ See Benchmarking Worcester's Future: 2001-2006 Strategic Plan, Worcester City Manager's Office.



I. Profile of Worcester's Youth

Various agencies and programs define "youth" differently. In this report, wherever possible, we define "youth" as those between the ages of 12 and 19 which generally corresponds to grades 7 through 12. Data from some sources could not be broken down and reorganized to match our focus. In such cases, the closest age range is utilized and the information is labeled accordingly.

We use two key sources of demographic data: the 2000 U.S. Census and data collected annually by WPS. The U.S. Census data describe the entire population of youth living in the City of Worcester, while the data collected by WPS describe only those enrolled in the WPS.

A. U.S. Census 2000 Highlights:

- According to U.S. Census estimates, the City's population was 172,648 in 2000.²
- The 20,346 youth aged 12 to 19 in Worcester constituted 11.8% of the City's population.
- Among youth 12 to 19, 72.5% were Caucasian, 7.7% were Black or African American, 5.4% were Asian, 0.6% were American Indian and Alaska Native, 0.1% were Native Hawaiian or Other Pacific Islander, 9.5% were of other minority groups, and 4.3% identified themselves as two or more races.
- Approximately 20% of youth ages 12 to 19 in the City identify themselves as Hispanic or Latino.
- About 22.3% of youth aged 12 to 17 lived below the Federal poverty level (in 2000, approximately \$17,000 for a family of four, including transfer payments).
- 28.6% of youth between 12 and 17 lived in households headed by a single mother.
- 6.6% of 16- to 19-year olds (766) were not enrolled in school or were not high school graduates.

B. Worcester Public Schools 2003-2004³ Information:

- 10,787 students were enrolled in grades 7 through 12 in the district's eleven middle, high, vocational, and comprehensive schools.
- Of these students, 70.2% were Caucasian, 18% were African American, 11% were Asian, and 0.8% were Native American.
- Approximately 43.9% of WPS students identify themselves as Hispanic or Latino.
- Overall, 8.1%, or 870, of WPS middle and high school students are limited English proficient.
- Fifty eight percent (6,237) of WPS middle and high school students were eligible for free or reduced-price lunch.
- 18.6% of WPS students were identified as special-education students with Individualized Education Plans (IEP).

Continued on next page 🗢



 $^{^2\,}$ According to U.S. Census estimates, the City's population increased 1.7% (from 172,648 to 175,706) between 2000 and 2003.

Source: Massachusetts Department of Education School Profiles (http://profiles.doe.mass.edu) and the WPS Superintendent's Office

Overview (cont.)

II. Municipal Spending on Youth

Municipal programs that directly affect youth in Worcester are administered by several different City departments, including the Executive Office of Employment and Training, the Executive Office of Neighborhood Services, the Parks and Recreation Department, the Police Department, the Worcester Public Library, and WPS. With the exception of the WPS, it is often difficult to isolate these agencies' spending on youth from their overall budgets.

Table A outlines direct youth services spending on after-school and supplemental services provided by the WPS. Overall spending in this area decreased by 7% from FY02 to FY05. Counseling services make up the majority of WPS's youth services budget each year.

During the 2003-2004 school year, WPS had a total enrollment of 24,538 students. It is difficult to determine how much WPS are spending on academic support programs, but WPS FY04 per-pupil spending on two of the larger programs, the 21st Century After School Program and MCAS Support, was about \$1,200 and \$400 respectively, per eligible pupil. In addition, significant amounts of WPS youth services programming is funded by state and Federal grants (and administered by a mix of WPS, non-profit, and state agencies) and are not incorporated into what WPS defines as its own youth services budget.

Municipal support for youth services also comes from Federal grants: Community Development Block Grant (CDBG), Local Law Enforcement Block Grant (LLEBG), and Emergency Services Grant (ESG). While the Federal government distributes

Table A: Worcester Public Schools Youth Services K-12 Spending: Non-Classroom City Budget Funds Only

					% Change
Program	FY02	FY03	FY04	FY05	FY02 to FY05
Athletics	\$883,241	\$865,397	\$796,535	\$815,766	-7.6%
Guidance Counselors	\$2,932,837	\$3,030,202	\$3,069,886	\$2,642,309	-9.9%
School Adjustment Counselors	\$2,393,275	\$2,341,570	\$2,460,963	\$2,816,995	17.7%
School Psychologists	\$1,386,058	\$1,374,380	\$1,266,387	\$1,245,254	-10.2%
Community Schools	\$417,233	\$413,658	\$263,070	\$263,070	-36.9%
Community Service Program	\$270,649	\$128,403	\$0	\$0	-100.0%
JROTC (approx 50% of total cost)	\$143,196	\$159,029	\$171,665	\$190,997	33.4%
New Citizens School	\$102,857	\$118,347	\$122,312	\$60,320	-41.4%
Truancy Center	\$66,871	\$61,475	\$0	\$0	-100.0%
Marching Band	\$7,333	\$7,333	\$0	\$0	-100.0%
Worcester Future Teachers Academy	\$39,000	\$20,000	\$10,000	\$10,000	-74.4%
Worcester Juvenile Court Liaison	\$111,074	\$57,710	\$31,840	\$32,513	-70.7%
Worcester Police Services	\$120,000	\$120,000	\$120,000	\$150,000	25.0%
Children's Friend Society	\$50,000	\$50,000	\$50,000	\$50,000	0.0%
Junior Achievement	\$15,000	\$10,000	\$10,000	\$10,000	-33.3%
Spartacus Program	\$36,000	\$18,000	\$15,000	\$15,000	-58.3%
SCORE Program (Student Conflict Resolution)	\$20,000	\$20,000	\$15,000	\$15,000	-25.0%
School Nurses*	\$160,000	\$1,374,034	\$1,576,933	\$162,298	1.4%
Total without School Nurses	\$8,994,624	\$8,795,504	\$8,402,658	\$8,317,224	-7.5%
Total	\$9,154,624	\$10,169,538	\$9,979,591	\$8,479,522	-7.4%

^{*} Prior to FY03, the City of Worcester funded the school nurse program.

Source: Worcester Public Schools Budget Office



these funds to municipalities according to a formula based on local demographics, the City determines local distribution and programming through grants applied for by eligible agencies. CDBG, LLEBG, and ESG funds are used to provide a mix of ongoing, temporary, and one-time support to a wide array of programs through a variety of City departments and nonprofit agencies. **Table B** lists programs that have been funded through the City's CDBG, LLEBG, and ESG allocations for FY02 through FY05.

Annually, from FY02 to FY05, park improvements have comprised the greatest share of the total grant funds- ranging from 50% to 69%- listed in **Table B**. Funding for park services increased by 6% from FY02 to FY05 (from \$300,000 to \$317,769), while funding for

non-parks youth services decreased by 29% (from \$297,645 to \$211,155) during the same period.

While this report examines the performance of municipally-funded youth programs, it is important to note that municipally-funded programs represent only a portion of all youth-serving programs in Worcester. Many of the other youth services provided throughout the City (e.g., Boys and Girls Clubs, the Greater Worcester YMCA and YWCA, and YOU, Inc.) may receive support from the state and Federal governments, private donations and foundations, as well as support from agencies such as United Way of Central Massachusetts and the Greater Worcester Community Foundation.

Table B: Worcester Municipal Youth Funding From Community Development Block Grants, Local Law Enforcement Block Grants, and Emergency Services Grants

						% Change
Program	Program Type	FY02	FY03	FY04	FY05	FY02 to FY0
Black FBI (Fighting Back with Intellect)	Education & Skill training	\$40,000	\$0	\$0	\$0	-100%
Community Schools/Mock Trial	Education	\$25,000	\$0	\$0	\$0	-100%
Community Schools	Education & Recreation	\$50,000	\$0	\$0	\$0	-100%
Friendly House	Education & Recreation	\$39,478	\$37,478	\$36,478	\$63,544	61%
Great Brook Valley Health Center	HIV/AIDS Prevention	\$32,594	\$30,594	\$29,618	\$28,729	-12%
HLW Community Center	HIV/AIDS Education & Outreach	\$17,474	\$15,474	\$15,473	\$20,357	16%
Juvenile Firesetters	Fire Prevention	\$7,500	\$7,500	\$7,500	\$7,500	0%
Park Improvements	Facilities	\$300,000	\$400,000	\$350,000	\$317,769	6%
Project Light	HIV/AIDS Prevention	\$35,303	\$35,000	\$33,884	\$32,867	-7%
Project Safe Place	Health & Safety	\$7,700	\$7,700	\$7,420	\$6,678	-13%
Rachel's Table	Food Pantry	\$7,000	\$7,000	\$6,746	\$12,013	72%
Worcester Youth Center	Education & Recreation	\$5,000	\$7,000	\$7,000	\$10,000	100%
YMCA	Domestic Violence Shelter	\$3,682	\$3,682	\$6,746	\$6,072	65%
Youthnet	Education & Recreation	\$26,914	\$24,914	\$24,119	\$23,395	-13%
Total Youth Services Funding		\$597,645	\$576,342	\$524,984	\$528,924	-11%

Source: Executive Office of Neighborhood Services, City of Worcester

Health & Behavior

Why is it important?

Teenagers' health can affect their physical, emotional, intellectual, and social development. Health affects adolescents' ability not just to attend school and participate in extracurricular activities, but to focus and learn while they are there. Preventive health care, including regular visits to a primary care physician, promotes good health. Also, patients who receive preventive medical care are less likely to require expensive emergency room care.¹

Teenagers sometimes make choices that adversely impact the rest of their lives. Teenage pregnancy limits future opportunities. Teen mothers are less likely to finish high school (only one-third of teen mothers obtain a high school diploma) and are more likely to be unemployed and living in poverty.² Fifty-two percent of mothers currently receiving Temporary Assistance to Needy Families (TANF) had their first child as a teenager, and almost 80% of teen mothers have received TANF at some point in their lives.³ Babies born to adolescents are more likely to have low birth weight and to experience cognitive and developmental delays compared to babies born to older mothers.⁴ Children born to teen mothers are more likely to repeat a grade, and the daughters of teen mothers are 22% more likely to become a teen parent themselves.^{5,6}

In addition to teen pregnancy, sexual activity can result in the spread of sexually transmitted diseases (STDs). As noted by the Centers for Disease Control (CDC), STDs that result from these early encounters are preventable, often symptomatically unrecognizable to the patient, and can affect one's health for a lifetime.⁷

Drug and alcohol abuse also result in short- and long-term health problems. Behavioral problems such as teen pregnancy, STDs, and drug and alcohol use, are related; participation in one high-risk behavior makes teens more likely to participate in other high-risk forms of behavior as well.⁸

- ¹ Massachusetts League of Community Heath Centers, "Strategic Solutions for Maximizing Health Access, Quality and Savings," April 28, 2004, via http://www.massleague.org/press/04Facts.pdf accessed March 8, 2005.
- ² Source: National Campaign to Prevent Teenage Pregnancy, Fact Sheet via www.teenpregnancy.org, updated February 2004. Website accessed April 2005.
- ³ Ibid.
- Institute for Educational Leadership, "School-based and School-linked Programs for Pregnant and Parenting Teens and Their Children," November 1997 sponsored by the US Dept of Education via http://www.ed.gov/PDFDocs/teenparent.pdf
- ⁵ Colorado Children's Campaign, "2004 KidsCount in Colorado!" 2004, via http://www.coloradokids.org/kidscount.html

What is the trend for Worcester?

Data from the Youth Risk Behavior Survey (YRBS) administered by the DOE, which provided valuable data in the past, were unavailable this year because WPS did not participate in the most recent (2003) survey. Also, a previously administered student questionnaire attached to the MCAS exam was shortened for 2004, eliminating all questions regarding health and behavior. Instead, we relied on data from school-based health centers (SBHC), which cover the middle and high school population of the WPS, and the Massachusetts Department of Health.

There are three Massachusetts League of Community Health Centers (CHC): Great Brook Valley Health Center, the Family Health Center of Worcester, and UMass Memorial Hospital, operating SBHCs in collaboration with WPS middle and high schools. The SBHCs are staffed by nurse-practitioners who provide a full array of primary care services to students who enroll with parental consent.

Among students registered with SBHCs in 2003-2004, approximately 32% had private health insurance, 39% had MassHealth (Medicaid) coverage, and 29% were uninsured. By comparison, during the 2002-2003 school year, approximately 40% of students registered with SBHCs had private health insurance, 33% had MassHealth coverage, and 27% were uninsured. The number of uninsured youth in the City was not available. However, data estimates indicate that 2.8% of children ages 0-18 in Worcester County, and 3.2% of children ages 0-18 in Massachusetts, did not have health insurance in 2004.

- ⁶ Source: National Campaign to Prevent Teenage Pregnancy, "Not Just Another Single Issue: Teenage Pregnancy Prevention's Link to Other Critical Social Issues", February 2002
- Yource: Centers for Disease Control, topic Sexually Transmitted Diseases website via http://www.cdc.gov/node.do/id/0900f3ec80009a98
- Massachusetts Department of Education, "2001 Massachusetts Youth Risk Behavior Survey Results," September 2002.



From 2002-03 to 2003-04, student enrollment in SBHCs increased from 45% to 56%, which was an increase of 1,100 students. In 2002-03, 61% of those enrolled sought services from SBHC at least once compared to 86% in 2003-04. The leading reasons students visited SBHCs were: asthma, abdominal pain/GI upset, cold/sore throat, earache, depression, first-aid, headache, immunizations (hepatitis B vaccine and tetanus vaccine), menstrual problems, musculoskeletal problems (including fractures, sprains and strains), physical exams (well-child and physicals for sports and work), sinusitis, and upper respiratory infection. Staff at the SBHCs also referred students in need of dental health, mental health, orthopedic, and reproductive health services to other providers.

Data about the number of teenage pregnancies and STDs are confidential and are tracked through health care providers and reported to the State Department of Public Health. From 1999 to 2004, the number of reported cases of chlamydia in the City increased by 37% (from 131 to 191) and statewide, the number increased by 48% (from 2,889 to 4,266). Reported cases of gonorrhea among Worcester's youth fell 28% between 1999 and 2004 (from 29 reported cases in 1999 to 21 reported cases in 2004). In comparison, the number of reported cases of gonorrhea among youth statewide has dropped only 11% since 1999 (with 651 reported cases in 2004).

In 2003 (the most recent year for which data are available), the teen birth rate in Worcester (38.0 per 1,000 15- to 19-year olds) was higher than the state's (22.6 per 1,000 15- to 19-year olds); Worcester's teen birth rate ranked 16th among cities and towns in the state. In Worcester, there were 263 teen births in 2003; 78% of the teen mothers relied on publicly-funded prenatal care.

What does this mean for Worcester?

To help teen parents complete high school, South High School and Burncoat High School provide day care services for teen parents who are enrolled full-time and are Worcester residents. Day care is provided for children between 3 months and 2 years 9 months of age. Parent education classes and social services information are also provided. Thirty-three students during the 2002-2003 school year and 43 students in 2003-2004 participated in this program. South High School's Teen Parent Support program served 24 teen parents in 2002-2003 and 21 teen parents in 2003-04, and the Teen Care Program at Burncoat High School served 9 teen parents in 2002-2003 and 22 teen parents in 2003-04. In addition, in 2004, the teen parent programs received a three-year grant (\$20,000 per year) to fund the Break the Cycle of Poverty (BCP) program which provides counseling services during a six-week summer program. The BCP program targets 10 teen parents from South and Burncoat High Schools.

It would be useful for the WPS to participate regularly in the YRBS in order to track use of alcohol, tobacco and drugs among youth to know whether programs that target abuse of these substances are working.



⁹ Data based on approximations.

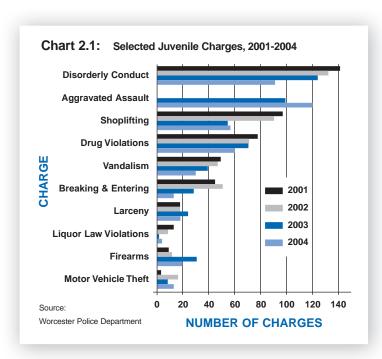
Nource: Massachusetts Executive Office of Health and Human Services; http://www.mass.gov/Eeohhs2/docs/dhcfp/pdf/survey_res_2004_map_0to18.pdf

¹¹ The highest teen birth rates among Massachusetts cities and towns in 2003 were Holyoke, Lawrence, Springfield, Southbridge, and Chelsea, all of which had teen birth rates above 60 per 1,000.

Arrests & Safety

Why is it important?

For a city to be attractive as a place to live and work, its residents must feel safe at home, at school, commuting to work and school, and in public places. For children, growing up in fear of crime can affect their ability to concentrate and perform in school. Crime not only affects the safety and well-being of the victims but has a lasting effect on the perpetrators as well. According to the Office of Juvenile Justice and Delinquency Prevention, juveniles who had been arrested were more likely than those who had not been arrested to commit more serious crimes later in life. The report also found that many juveniles who had been arrested were themselves victims of violence.



- Bilchik, Shay, "OJJ Research: Making a Difference for Juveniles"
 Office of Juvenile Justice and Delinquency Prevention (1999):
 5, via http://www.ncjrs.org/pdffiles1/177602.pdf
- For more information about crime in Worcester, see CCPM's publication 05-01, Benchmarking Public Safety in Worcester: 2005 available at www.wrrb.org
- ³ It is important to note that these arrest data include youth arrested for failure to appear in court and a warrant was issued for their arrest.
- ⁴ There were 694 juvenile arrests in 2001 and 575 juvenile arrests in 2004. Of those juveniles arrested, 1,103 charges were filed in 2001 and 933 charges were filed in 2004.
- ⁵ Because data for aggravated assault were collected differently prior to 2003, earlier data are not presented.

What is the trend for Worcester?

While we know the number and types of crimes reported to law enforcement, we do not know what proportion are committed by juveniles.² Instead, we use arrest data as an indicator of the relative level of criminal activity among youth. (The arrest data do not include all illegal juvenile activity in Worcester, since these data do not include unreported crimes or incidents in which no arrest was made.) Juvenile (defined in Massachusetts as less than 17 years old) arrest data are available through the Worcester Police Department (WPD).

In 2004, WPD made 575 arrests of youth under 17 years of age. Sixty-six percent (382) were boys and 33% (191) were girls. Fifteen percent (88) of the juveniles arrested in 2004 were repeat offenders; there were 454 different individuals arrested.³ In total, 933 charges were filed against the 454 youth arrested in 2004 (as a single arrest may result in multiple charges). Between 2001 and 2004, the total number of arrests decreased by 17% and the number of charges decreased by 15%.4 As shown in **Chart 2.1**, the majority of charges against juveniles in Worcester were for disorderly conduct, aggravated assault, shoplifting, and drug violations. Approximately 15% (124) of the juvenile charges filed were for violent crimes. (Violent crimes involve force or threat of force and include murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault.) Aggravated assault accounted for 97% of reported violent juvenile crimes in Worcester in 2004. The number of aggravated assault charges rose 21% (from 99 to 120) between 2003 and 2004.5 Of the 124 juveniles arrested for violent crimes, 42 (35%) were charges against girls, all of which were aggravated assault.

While boys represent two-thirds of the arrests in 2004, the type of criminal behavior and charges filed differ between boys and girls. **Chart 2.2** shows the distribution of juvenile charges filed against boys and girls. Aggravated assault and shoplifting account for almost a third of all charges filed against girls (20% and 11% respectively). Of the 599 charges brought against boys, 13% (78) were for aggravated assault and 6% (33) were for shoplifting. Fourteen percent of charges filed against boys were motor vehicle-related crimes, 13% of charges were for disorderly conduct, and 9% were for drug violations.

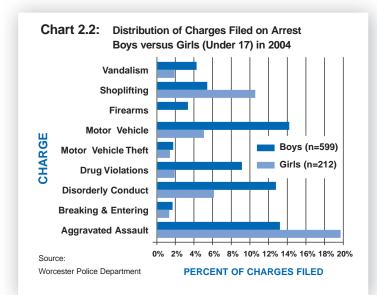


Under Massachusetts General Laws, parents/guardians, schools, and the police may petition Juvenile Court to obtain services to assist youth who are engaging in activities that, while not illegal, are detrimental to the child's well-being. A child engaging in one or more of the following may be the subject of a CHINS petition:

- 1) regularly running away from home;
- 2) constantly disobeying the commands of a parent or guardian;
- 3) missing school on a regular basis; and
- 4) constantly failing to follow the rules of his/her school.⁶ Youth designated as CHINS receive supervision from the court system to manage their behavior through counseling (individual and family), probation, and other individually tailored forms of intervention.

In Worcester County in 2004 there were 1,539 applications filed for CHINS (700 boys and 757 girls) resulting in 908 petitions (422 boys and 486 girls). Truancy was the most frequently cited behavior problem, although often youth demonstrated multiple behavior problems. A study by the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention suggests that early truancy is an indicator of future delinquency problems.

In 2004, 60 juveniles (under 17 years old) and 209 young adults (ages 17-19) were arrested on drug-related charges.⁹ Typically, delinquent activity for women changes after age 17. Although there were no charges for prostitution, liquor law charges, or operating under the influence of alcohol for girls under 17, such arrests begin occurring for women ages 17-19.¹⁰



The WPD's Gang Unit works closely with at-risk juveniles and young adults, particularly those identified as gang members. The Gang Unit uses three methods to combat gang violence: intelligence (identifying at-risk juveniles), intervention (youth programs), and suppression (arrests and charges).

To identify at-risk juveniles, police meet monthly with liaisons from each of the middle and high schools, the Department of Youth Services, Juvenile Court, the District Attorney's Office, District Court, and other agencies serving youth. The school liaison from each school, often the Vice Principal, provides a list of at-risk youth. Once youth who are suspected of gang involvement are known to WPD, officers in the Gang Unit monitor their activities by contacting the individual and his family. Youth with known gang ties may also be referred to one of several intervention programs, such as the Police Athletic League and a summer camp mentoring program (funded by Community Development Block Grants and the Federal Weed and Seed Program), as well as other community-based programs.

What does this mean for Worcester?

The total number of juvenile arrests in Worcester has decreased by 17% since 2001; however, there was an increase in the number of juveniles arrested for drug violations, firearms, and aggravated assault.

While the WPD Gang Unit is working to reduce gang involvement among Worcester youth, there are currently no data available to track the results, since much of the activity that it tracks occurs before juveniles actually commit crimes. When an arrest is made or police are called to an incident, police officers can note whether criminal activity was thought to be gang-related. This information could be used to estimate the proportion of criminal activity in the City that might be gang-related and, over time, show changes in perceived gang-related violence.

- ⁶ MGL Chapter 119, Sections 39E through 39I.
- Ource: Massachusetts Court System, Fiscal Year 2004 Statistics for the Juvenile Court Department via http://www.mass.gov/courts/courtsandjudges/courts/juvenilecourt/2004stats.html
- ⁹ Bilchik, Shay, "Community Assessment Centers: A Discussion of the concept's efficacy," Office of Juvenile Justice and Delinquency Prevention, 1995.
- ⁹ Source: Worcester Police Department.
- ¹⁰ In 2004, of women ages 17-19, 8 women were arrested on prostitution charges, 3 women were arrested for operating a motor vehicle under the influence of alcohol, and 25 women were arrested for liquor law violations. Source: Worcester Police Department, Crime Analysis Unit.

Employment & College Preparation

Why is it important?

Many of today's jobs require post-secondary training or a college degree. Hence, specialized training and education beyond high school have become increasingly important to ensure an individual's economic well-being. Post-secondary education increases career options and earning power. According to multiple studies, the U.S. economy is facing a substantial disconnect between the level of preparedness of its workforce and the actual needs of its employers. The current college graduation rate is not high enough to meet projected general demand for new college graduates. According to the National Science Foundation, a sizeable shortfall is in science and engineering graduates.

In order to meet this challenge, the WPS, in conjunction with other organizations, provide a variety of programs to encourage students to continue their education after high school graduation or to develop the skills they need to enter the workforce.

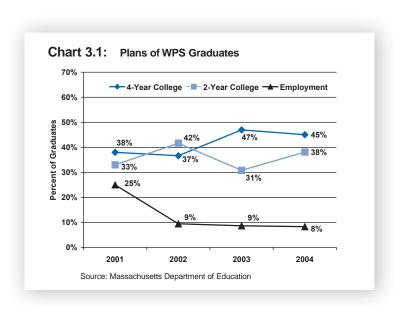
These programs consist of in- and out-of-class learning experiences through which students can better understand different career options, training in pre-employment skills (such as how to write a resume), and counseling to determine the post-secondary education needed for specific career choices.

- ¹ "Higher Learning = Higher Earnings, What You Need To Know About College and Careers," Center on Education Policy, American Youth Policy Forum, September 2001.
- ² "Help Wanted: Workforce Development and the New Economy," Public Forum Institute, January 2002; *The American Workplace 2003; Realities, Challenges and Opportunities*, Employment Policy Foundation, 2003.
- ³ "An Emerging and Critical Problem of the Science and Engineering Labor Force," National Science Board of the National Science Foundation, NSB 04-07, 2004.
- ⁴ The Worcester Public Library has Advanced Placement practice tests, a business writing help center, and practice college entrance exams.
- WPS that participate in AVID are Burncoat Middle, Forest Grove Middle, Sullivan Middle, Worcester East Middle, Burncoat High, Doherty High, North High, South High, Worcester Vocational, Accelerated Learning Lab, and the Comprehensive Skills Center.
- ⁶ AVID, "AVID 101," AVID website http://www.avidonline.org/info/?tabid=1&id=549
- AVID, "AVID at a Glance", AVID website www.avidonline.org/info/?tabid=1&ID=548
- 8 Source: Worcester Public Schools, Program-Based Budget Data, AVID, FY 04-05.
- ⁹ The AVID membership fee covers AVID certification, data collection, website use, reproduction of AVID materials, the AVID yearbook and academic journal, electronic newsletters, and resource support from AVID.

What is the trend for Worcester?

Before examining the career and educational resource programs available to WPS students, we examined the educational attainment levels of parents of WPS students. Parents with post-secondary education experience may be better able to assist their children with the application process and help them develop skills needed to pursue higher education. According to the 2000 Census, 30% of the parents of WPS students earned only a high school degree, while 23% did not graduate from high school or obtain an equivalency degree. Thus, children of these parents are more likely in need of other resources, such as career and skill development programs and the Worcester Public Library, to provide preparatory training for a post-secondary education.

Chart 3.1 shows the post-graduation plans for WPS high school seniors. In 2004, 45% of WPS high school students said they planned to attend a four-year college after graduation, while 38% planned to attend a two-year college. Only 8% planned to enter the workforce directly after graduation. While the relative percentages of students who planned to pursue either four-year or two-year college programs, have fluctuated since 2001, the total proportion of WPS high school graduating seniors planning a post-secondary education (two- and four- year programs combined) rose from 71% in 2001 to 83% in 2004.





COLLEGE AND EMPLOYMENT PREPARATION PROGRAMS

A. AVID

One college preparation program administered by WPS is Advancement Via Individual Determination (AVID).5 AVID is a national college preparatory program "designed to help students in the 'middle' increase their level of academic achievement." 6 The AVID program targets average students (with B, C and sometimes D grades).7 It provides intensive in-school support through an elective class. This class provides writing instruction, assistance with academic classes, notetaking skills, study skills, and direction with career planning. In 2004-2005, the WPS allocated \$98,000 of grant funds and in-kind services for the AVID program.8 Included in the program costs are an AVID membership fee of \$2,250 per site (each high school funds this cost and the WPS pays for middle schools) and the cost of operating the program (between \$5,000 and \$7,000 each year at each location). The salaries of teachers and staff are not included in the \$98,000 in grant funds.9

Students are referred into the AVID program by their 6th grade teachers. ¹⁰ Ideally, students remain enrolled in the AVID elective continuously from 7th grade through 12th grade; however, students may enter the program after 7th grade at the beginning of another school year. The program is voluntary, and students do not always enroll in the elective class all six years. ¹¹

Table 3.1 shows the enrollment in the AVID program in each grade. Students are tracked only as long as they are enrolled in the AVID elective. AVID measures the number of students who apply for college. This makes the success of the program difficult to measure since students may benefit from the program, but their success is captured only if the student graduates high school while enrolled in the AVID program. There has not yet been a graduating class of students at WPS whose cohort completed the six-year skill-building program. The first cohort of students who will complete the six-year AVID program is expected to graduate in 2007. Therefore, the success of the program in Worcester is still unknown. Nationally, however, the program appears to be successful; 95% of AVID students enrolled in college and 89% of AVID students remained in college after two years. 12

Table 3.1: Worcester Public School Student Enrollment in AVID Program

	2002-2003	2003-2004
7th Grade	129	135
8th Grade	201	152
9th Grade	208	202
10th Grade	182	118
11th Grade	56	99
12th Grade	81	4
Total	857	710

Source: AVID, AVID District Report via http://www.aviddata.org/reports/

Besides AVID, the WPS has two major providers of college and employment preparation programming: The Colleges of Worcester Consortium (COWC) and Junior Achievement of Central Massachusetts (JACM). Both are non-municipal, nonprofit organizations. The former receives funding from the Federal government, while the latter receives the bulk of its support from private corporations and foundations. The COWC partners with WPS to offer a variety of programs that include career exploration, curriculum enrichment programs, and tutoring. These programs provide Worcester youth an opportunity to enhance career-focused skills and college preparatory training.

Continued on next page 🗢

The basis for recommendation for the AVID program includes, but is not limited to eligibility for free/reduced price lunch, minority status, the desire to attend a 4-year college, and the potential to succeed in a more rigorous academic environment.

Although it is an atypical situation, students may re-enroll in the AVID program once they chose not to enroll in the AVID elective. Students may also be removed from the program at the end of each year. There are several reasons why: advanced science classes for 11th and 12th graders require students to take science lab as their elective class, AVID teachers must teach core classes before allotting time to AVID electives (budget cuts eliminated all AVID classes at South High School for the 2004-2005 school year), and some students do not wish to continue in the AVID program.

Powell-McMillian, Linda, The AVID Center and College Board Collaborative, Professional Development in Teaching, Learning, and Leading, A Model for School Reform, AVID, June 2004.

Employment & College Preparation (cont.)

B. GEAR UP

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) at Worcester East Middle School (WEMS) and North High School (NHS) is a Federally-funded collegepreparation program run by COWC. GEAR UP aims to "promote and increase college awareness and readiness." 13 Started in 1999 with 7th graders at WEMS, GEAR UP provides services to students, parents, and guidance counselors such as workshops on college and career awareness, MCAS tutoring, financial planning for college, field trips to colleges, and summer enrichment activities.¹⁴ Beginning in 2001, GEAR UP offered continuing services to those WEMS students who went on to NHS, in conjunction with the Educational Talent Search Program (ETS) program described below. Since the first cohort of GEAR UP students have not graduated from high school, there are no outcome measures showing how many of these participants go on to college. Chart 3.2 shows the growth in GEAR UP's participation since its inception.

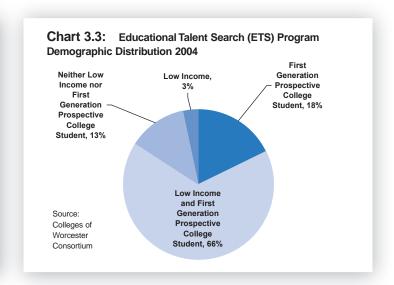
- ¹³ Colleges of Worcester Consortium, GEAR UP website via www.cowc.org/GUWorcester.html
- ¹⁴ Each year since 1999 an additional grade (cohort) was added to the GEAR UP program. The first year of high school graduates from the GEAR UP program will be the class of 2005.
- ¹⁵ Colleges of Worcester Consortium, Educational Talent Search, "College Planning and Access" via www.cowc.org

GEAR UP Middle and High School Participants Chart 3.2: (7th - 12th grades) 2000 1534 1496 1414 **Number of Students** 1149 869 1000 438 500 2000 2001 2002 2003 2004 2005* Source: Colleges of Worcester Consortium, *As of April 2005

C. ETS

The COWC also runs Educational Talent Search (ETS), another Federally-funded program in the public schools. The ETS program enrolled 269 students at Burncoat Senior High School and South High Community School during the 2003-2004 school year in formal programming and offered similar general college counseling to approximately 450 students and their families at the other three high schools (Doherty High, North High, and Worcester Vocational High School). ETS focuses on students who are "educationally and economically disadvantaged" to encourage them to "graduate from high school and successfully enroll in a post-secondary program appropriate to their interest and abilities." 15 Two-thirds of the students enrolled in ETS must be either low-income or first-generation prospective college students, and other students who are not in this group can be recommended by a guidance counselor or request to participate in the ETS program. The program follows students from grades 9 through 12 and engages them in a variety of career awareness, academic assistance, and college advising activities. Chart 3.3 shows the proportion of "educationally and

economically disadvantaged" students in the ETS program in 2003-2004. One of COWC's outcome measures for ETS is that a minimum of 90% of ETS graduates will be admitted to a college. In 2003-2004, 96% of the 269 WPS seniors participating in the Federally-funded ETS program were admitted to college; the ETS program was also successful in 2002-2003, when 98% of seniors were admitted to college.





D. E-GUIDANCE PROGRAM

In addition to these individualized services to students, the COWC also provides group programming to all 9th and 10th graders in the five Worcester public high schools to promote career awareness among students through the E-Guidance Program. E-Guidance is a web-based, career interest inventory program that provides detailed career information based on students' interests and has a search engine for the college selection process.

E. CAREERS PLUS

The Careers Plus program is a COWC program serving low-income students with the potential for post-secondary education at Worcester's Vocational High School. It is funded by a Massachusetts Board of Higher Education grant, which pays for a full-time adviser who provides guidance with career exploration and advancement, course selection, college admission, and financial aid.

F. JUNIOR ACHIEVEMENT

The WPS also contracts with Junior Achievement of Central Massachusetts (JACM) to assist with pre-employment preparedness. Junior Achievement is a national organization that provides economic literacy and pre-employment skills curricula, and trains volunteers to deliver the programs. These programs are designed to support components of the Massachusetts mathematics and science curriculum frameworks, educate students about various aspects of the economy and job market, and bring adult role models from the local workforce into the classroom. During the 2003-2004 school year, JACM offered 37 classes (each class consists of 6-10 one-hour sessions) to approximately 668 middle and high school students. During the current 2004-2005 school year, JACM has offered 41 classes to approximately 738 middle and high school students. In addition, JACM organizes an annual Groundhog Job Shadow Day during which middle-school students spend a morning observing a mentor at work with a local employer. Groundhog Job Shadow Day 2005 connected 609 7th and 8th grade students' to on-the-job learning experiences - a 28% increase from Groundhog Job Shadow Day 2003 (475 students). This year JACM started a new program called the Junior Achievement Titans (JA Titans). JA Titans is a computer-based online marketing and business simulation in which approximately

18 high school students (primarily college-bound) form marketing teams and 'play' against other marketing teams across the country.¹⁷

In addition to providing programs to educate students about the professional world, WPS also helps students obtain paid and unpaid internships. The Accelerated Learning Lab School (ALL) requires all of its 9th through 12th graders (157 in the 2003-2004 school year) to serve 3.5 hours per week in an unpaid internship assignment. The assignments are rotated on a regular basis so that students are able to experience a variety of job types and duties before they graduate. Also, eight seniors are selected for the ALL Apprentice Program, in which students work 16 hours a week during the academic year for 2 credits. An internship assignment entails a reduction in academic coursework. Table 3.2 shows the level of participation in school-based and other programs available to WPS students.

Table 3.2: WPS Enrollment in College and Employment Programs (Grades 7-12)

College Preparation Programs	2002-2003	2003-2004
AVID	857	710
Careers Plus	120	120
ETS (Federally funded)	269	269
ETS (WPS funded)	300	450
GEAR UP	1,534	2,054
Total College Programs	1,546	1,549
Employment Preparation Programs	2002-2003	2003-2004
ALL School	161	205
	161 400	205 668
ALL School		
ALL School JACM	400	
ALL School JACM WPS Internships	400 2,341	668

Source: Colleges of Worcester Consortium, Junior Achievement Central Massachusetts, Worcester Public School District

- ¹⁶ Any WPS teacher may request a JACM class. JACM classes are also offered in afterschool programs. A business may sponsor a specific school by volunteering staff.
- Nationally, approximately 300 school districts participate in JA Titans, and although 2004-2005 was first year for WPS, North High School took 5th place for the northeast division. So far only NHS participated this past fall and Burncoat High School is participating in the spring.
- ¹⁸ Some examples of ALL School internships sponsors include law offices, colleges and universities, theaters, convenience stores, markets, retail, hair salons, auto shops, restaurants, and youth centers.

Employment & College Preparation (cont.)

On the 2004 MCAS questionnaire, 8th graders were asked, "Have you been involved with any programs, classes, or activities designed to help you plan and prepare for continuing your education beyond high school?" Seventy-nine percent of Worcester 8th-grade students taking the MCAS responded to this question.

A majority of the students who responded (56%) were not involved in programs, classes, or activities to help prepare for post-secondary education, but are planning to continue their education. More than one-third of WPS 8th graders who responded are currently participating in college preparatory programs and plan to continue their education past high school. Four percent of respondents did not participate in any programs and do not plan to continue on to post-secondary education.



What does this mean for Worcester?

83% of WPS graduating seniors in the class of 2004 were planning to attend either a two- or four-year college, which exceeded the WPS goal of having 80% of graduates enter post-secondary education. (Data on who actually enrolled is not released, and therefore, cannot be compared with those who planned to enroll.)

This indicator describes a large variety of programs that provide youth college preparatory and pre-employment skills, but there are no available data to evaluate the performance of these programs. There is no single agency coordinating all these programs, determining whether they duplicate one another or whether one is more successful than another. Because WPS programs report to different agencies (various state and/or Federal departments, private service providers) they track information and calculate performance outcomes differently. Establishing performance measures would help the WPS determine which programs are successful and which should be terminated.

The AVID program, for example, only tracks the success of students who are enrolled in the AVID elective class at the time of high school graduation and then measures how many of those students plan to attend college. These data do not capture students who took AVID classes and gained skills from the program, but who are not enrolled in the AVID elective class during their senior year. Should the WPS track the number of students who plan to attend college who were enrolled in the AVID program at any time even though we could not say with any certainty that they went on to college because of participation in AVID?

Civic & Extracurricular Participation

Why is it important?

This indicator examines two forms of community engagement: youth participation in organized after-school programs and youth participation in voting, both of which may prepare youth for community involvement. Extracurricular organized sports provide a venue for youth to participate in activities that promote physical, psychological, and emotional health. Well-run sports teams enable youth to gain athletic skills, engage in regular exercise, and develop peer, adult, and mentor relationships. Other extracurricular activities, both school- and non-school-based, afford youth opportunities for emotional and intellectual development. According to a 2003 Massachusetts DOE report, the more hours students spend in after-school programs, the more likely they are to improve academically.

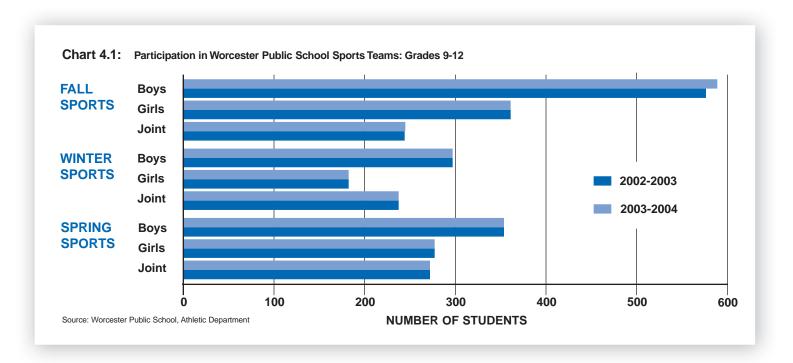
A fundamental goal of the U.S. public education system is to produce an educated and informed citizenry that will actively engage in the democratic process. In addition to students' commitment to service and volunteerism, participation in the electoral process is a measure of a community's civic health. Youth who become involved in political and civic activities contribute to the well-being of the communities in which they live.

What is the trend for Worcester?

Chart 4.1 shows the number of students participating in WPS sports teams during each of the three athletic seasons (Fall, Winter, and Spring) for the 2002-2003 and 2003-2004 school years. During the 2003-2004 school year, of the 6,670 WPS high school students, 1,175 (17%) participated in a Fall sport, 623 (9%) participated in a Winter sport, and 890 (13%) in a Spring sport. The participation levels were almost identical to the prior year's. Student-athletes may participate in only one sport per season; however, during the school year a student may participate in each of the three seasons. Currently, the WPS Athletic Department tracks student participation by season.

Continued on next page 🗢

- Miller, Beth, "Critical Hours: After-School Programs and Educational Success," Nellie Mae Foundation.
- Department of Education, "Building an Outcome Evaluation System, 21st Century Community Learning Centers After School and Out of School Time Programs: Report on Outcomes for FY 2003" via http://www.doe.mass.edu/as/reports/asost_03.pdf.



Civic & Extracurricular Participation (cont.)

In addition to school-based athletic activities, students participate in a wide variety of other types of extracurricular activities.³ The 21st Century Community Learning Centers (CCLC) and After-School and Out-of-School Time (ASOST) grant provides funding for after-school academic and enrichment programs. The program targets students who score a one (failing) or two (needs improvement) on their math or English language arts (ELA) MCAS exams. These programs run either before or after regular school hours and consist of both academic tutoring in math and ELA and a variety of enrichment courses such as cooking, natural science, and art history.

The ASOST-funded programs are evaluated by Survey of After-School Youth Outcomes (SAYO). The SAYO is given to a subset of students before the program begins and at the end of the program to determine if their academic performance improved as a result of participation in the program. During the 2003-2004 school year, of 1,276 WPS students participating, 355 were given the SAYO. All students enrolled in the ASOST-funded program either maintained or increased their academic performance.⁴

The Worcester Public Library (WPL) receives municipal funding specifically for youth ages 13 to 17.5 In FY05, 15,626 youth had library cards. This represents 15% of library card holders for all ages.6 In FY04 (the most recent budget data available) the WPL spent \$62,784 on youth programs, which is 1.7% of the its total budget.78 A portion of the budget covers books for the WPS-recommended summer reading program, as well as other programs for youth. In 2004, WPL offered 14 programs; 178 youth participated in these programs. Programs covered a variety of topics, ranging from employment preparation workshops to personal health and hygiene. In addition to providing programs, the library

In the 2003 Benchmarking Youth Services in Worcester 2003 Report we discussed the survey administered to students during MCAS exams. However, this year, there was only a 15% response rate to the question regarding after-school participation, which is inadequate for a data source. provides a quiet place to concentrate on homework and a safe place to go after school.

Participation in the electoral process is considered an indicator of an individual's level of civic commitment. In the City there are approximately 7,419 18- and 19-year-olds (based on 2000 Census data), and of those 2,144 (29%) registered to vote in 2004. Fifty-five percent (1,180) of these registered voters actually voted in the November 2004 election. Chart 4.2 shows the voter turnout rate for each of the City's wards in 2004. Table 4.1 shows the number and percentage of 18- and 19-year-olds who registered and voted in the local elections in 2003 and 2004.

Substantially fewer youth vote in non-presidential election years, compared with presidential election years. About 6% of Worcester's registered 18- and 19-year-olds voted in 2003 compared to 55% in the presidential election year 2004. Of the total population of 18- and 19- year olds in Worcester, 16% voted in the 2004 election and 1% voted in the 2003 election.

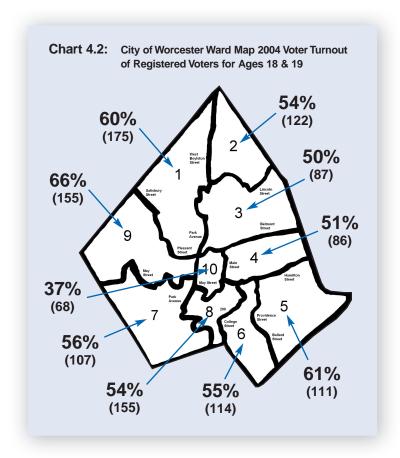




Table 4.1: 2003 and 2004 Voter Turnout for 18 and 19 Year Old Worcester Residents

Ward		Registered	Vote	ed
1	2004	292	175	59.9%
	2003	134	12	9.0%
2	2004	226	122	54.0%
	2003	155	4	2.6%
3	2004	174	87	50.0%
	2003	148	5	3.4%
4	2004	170	86	50.6%
	2003	131	11	8.4%
5	2004	182	111	61.0%
	2003	90	2	2.2%
6	2004	208	114	54.8%
	2003	97	5	5.2%
7	2004	190	107	56.3%
	2003	148	12	8.1%
8	2004	285	155	54.4%
	2003	185	6	3.2%
9	2004	235	155	66.0%
	2003	140	11	7.9%
10	2004	182	68	37.4%
	2003	133	11	8.3%
Total 2004		2,144	1,180	55.0%
Total 200	03	1,361	79	5.8%

What does this mean for Worcester?

The number of students participating in sports teams could represent a substantial number of the school population. However we were unable to obtain an unduplicated count of WPS students who participate in WPS sports. The proportion of students participating on athletic teams in each of the three sports seasons in 2003-2004 is similar to participation during the 2002-2003 school year. We also do not know how many youth are involved in sports outside of school teams such as non-scholastic baseball, basketball, and soccer teams, and swimming and tennis competitions at the YMCA/YWCA and the Jewish Community Center.

More 18- and 19-year-olds registered and voted in 2004 as compared to 2003, as is expected for a Presidential election year. Sixteen percent of all eligible youth voted in the 2004 election, compared with only 1% of those eligible voting in 2003.

⁴ Source: Massachusetts Department of Education

Source: City of Worcester, Election Commission

- 5 The budget specifically for youth does not include the library's resources for the general public, which youth use as well.
- ⁶ Data are unavailable for the number and frequency of youth who actually use library resources.
- ⁷ The \$62,784 WPL budget allocation does not include any staff specially designated for young adults.
- $^{\rm g}$ Source: Worcester Public Library and City of Worcester Comprehensive Financial Report, June 30, 2004.
- $^{\rm 9}\,$ The estimated number of 18- and 19-year-olds (7,419) is taken from the 2000 Census.
- 10 Source: City of Worcester, Election Commission
- $^{\scriptscriptstyle 11}$ In 2003, 18% (1,361) of the City's 18- and 19-year-olds were registered to vote.



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