

Property Crime in Massachusetts

June 2011

Massachusetts Executive Office of Public Safety and Security, Office of Grants and Research
Drei Munar, Research Analyst, Research and Policy Analysis Division

The purpose of the *Crime Policy Brief Series* is to increase knowledge about crime in Massachusetts through improved dissemination of crime data. In partnership with the State Police Crime Reporting Unit (CRU), the Executive Office of Public Safety and Security, Research and Policy Analysis Division hopes to provide an overview of crime in Massachusetts in order to better understand the trends, nature, and context of crime in the State.

Highlights

- The Massachusetts property crime rate decreased 3% between 2008 and 2009.
- When looking at rates for each UCR Part I property crime individually, motor vehicle theft decreased 13%, burglary decreased 5%, and larceny decreased 2%.

Massachusetts Property Crime Rates: Percent Changes 2008 to 2009

Offense	Percent Change
Total Property Crime	- 3%
Motor Vehicle Theft	- 13%
Burglary	- 5%
Larceny	- 2%

Data Source: Massachusetts State Police, Crime Reporting Unit

Background

Uniform Crime Reporting Program

The National Uniform Crime Reporting (UCR) program began in 1930 when Congress authorized the Federal Bureau of Investigation (FBI) to collect crime statistics from local police departments across the nation. The goal of the UCR program is to produce reliable statistical information on the magnitude and trends of crime for use by law enforcement agencies (FBI 2004). Over the years the utilization of the program has increased and today the general public, media, legislators, criminologists, and others use the UCR data to track the rise and fall of crime levels and rates (FBI 2004).

In the 1970's, the FBI changed responsibility for data collection to state-run UCR programs (FBI 2004). Now local law enforcement agencies report data to a state-operated program that then forwards the information to the national program. In Massachusetts, the State Police CRU is the liaison between state, local, and campus police departments and the national program.

Data

Offense Classifications

There are seven main offense classifications that are used to measure the prevalence of crime in the nation. Violent crime includes murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. Property crime includes burglary, larceny-theft, and motor vehicle theft¹. In 1979 a congressional mandate added arson to the property crime classification (FBI 2004).

Counts and Rates

Volume and rates are often used in crime reports to illustrate the amount of crime in a locality. Volume of crime refers to "raw" numbers or counts of offenses. Rates are the number of offenses divided by the population. Rates allow for the comparison of the amount of crime between localities by controlling for population. Crime rates are calculated as a rate per 100,000 persons in this *Crime Policy Brief Series*.

For purposes of this *Crime Policy Brief Series*, U.S. Census Bureau population estimates for the years 2001 through 2008 were used to calculate rates. Decennial Census counts were used for 1980, 1990, and 2000 and for the respective years in between. The Appendix provides the raw counts, rates, and population figures for Massachusetts and the nation that were used in this report.

This brief includes data voluntarily submitted by local agencies to the CRU. In 2009, 304 (87%) Massachusetts cities/towns submitted crime data to the CRU. The CRU's estimation method used within this report only includes agencies that have submitted at least three months of data for any given year. For agencies which submitted at least three months of data but less than 12 months of data, estimates were calculated for the missing months for each crime category except murder. Estimates were calculated as follows: $(\text{Count of Crimes} / \text{Number of Months Data Submitted}) \times 12$.

The volume of crime included in this policy brief is based on counts from the CRU as of July 2010. The data may not reflect the exact figures published by the CRU or the FBI due to submission of late and/or adjusted data.

¹ Definitions of violent and property offenses are identified in the FBI UCR Crime Handbook: <http://www2.fbi.gov/ucr/handbook/ucrhandbook04.pdf>.

How much property crime is there in Massachusetts?

Massachusetts crime data from 1980 through 2009 is analyzed in this report.

An analysis of the volume of property crime in Massachusetts over the last 30 years (1980 to 2009) reveals that property crime has been consistently declining. The highest volume of property crime in Massachusetts was reported in 1980 (276,803) and the lowest was reported in 2005 (147,871) (Figure 1). Since the 28 year low in 2005, the volume of property crime in the state has increased minimally (2% to 150,820).

Nationally, the highest volume of property crime was reported in 1991 (12,961,100) and the lowest was reported in 2009 (9,320,971) (Figure 2).

Figure 1: Volume of Massachusetts Property Crime 1980 to 2009

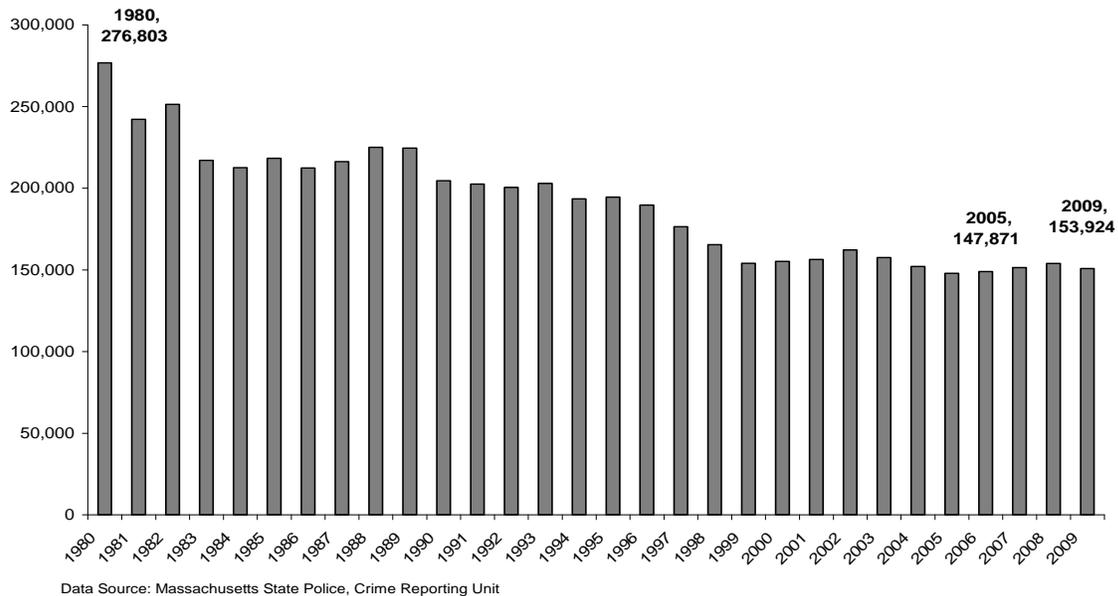
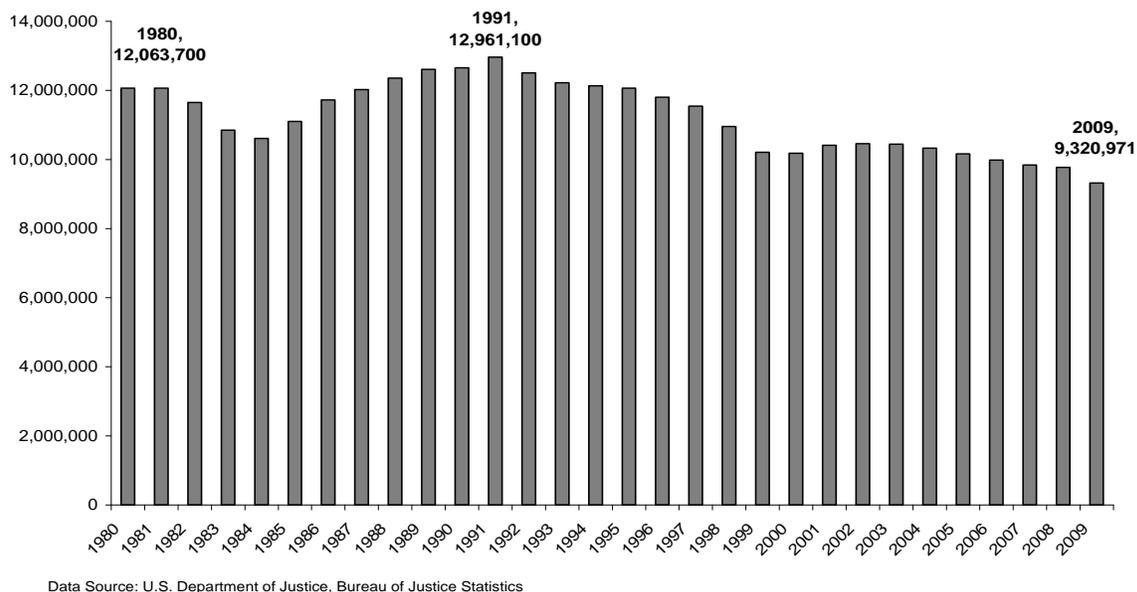
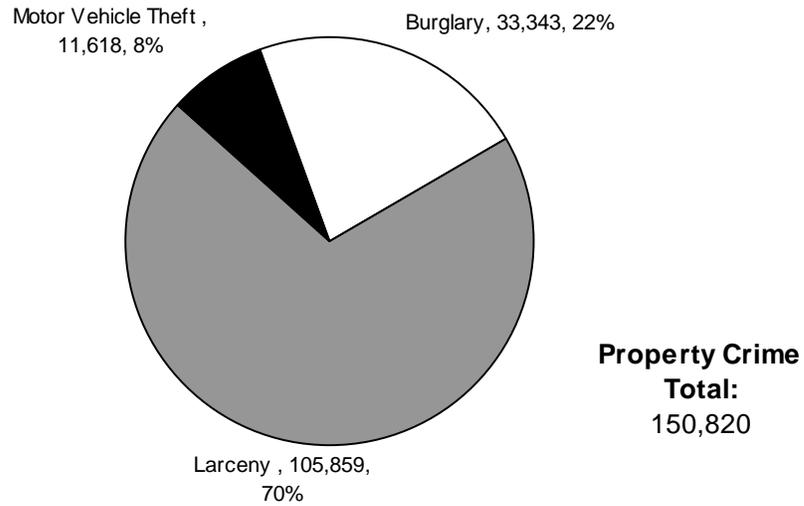


Figure 2: Volume of Property Crime in the Nation 1980 to 2009



As noted earlier, in 2009 there were 150,820 reported property crimes in Massachusetts (Figure 3). The majority of property crimes in 2009 were larceny (70%), followed by burglary (22%), and motor vehicle theft (8%).

Figure 3: Massachusetts Property Offenses, 2009



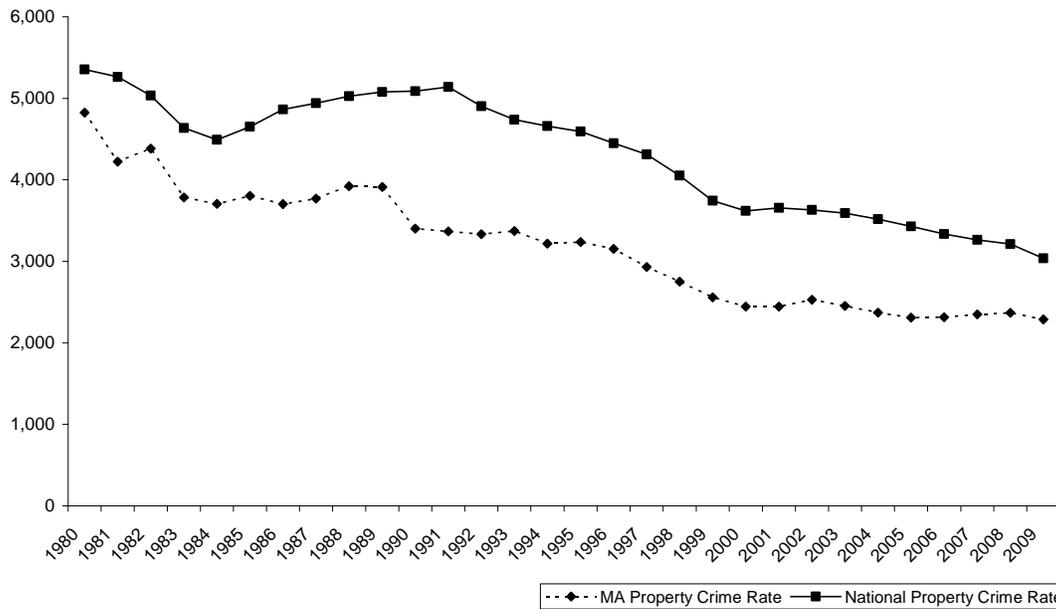
Data Source: Massachusetts State Police, Crime Reporting Unit

What are the trends in property crime rates in Massachusetts?

Massachusetts generally mirrors the national property crime rate trends between 1980 and 2009 (Figure 4). Massachusetts' property crime rates have been consistently below the national rates and have been steadily declining since the early 1980's.

Nationally, the property crime rate decreased 43 percent from 1980 to 2009 (5,353 to 3,036) while the state property offense rate decreased by 53 percent from 1980 to 2009 (4,825 to 2,287).

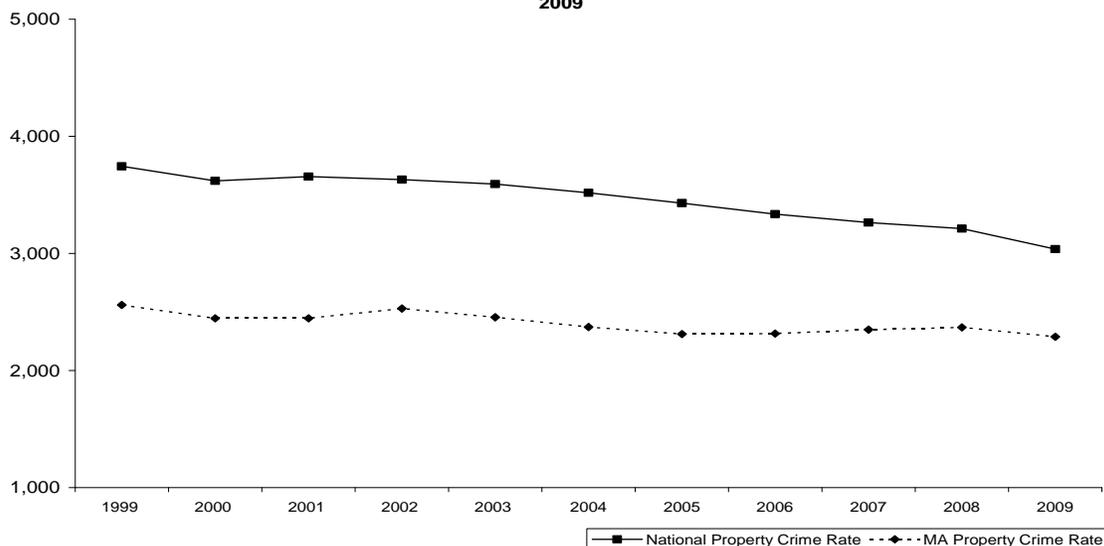
Figure 4: National and Massachusetts Property Crime Rate (per 100,000 persons) 1980 to 2009



Data Source: U.S. Department of Justice, Bureau of Justice Statistics; Massachusetts State Police, Crime Reporting Unit

Focusing on the 11-year period 1999 to 2009, the national property crime rate decreased 19 percent (from 3,744 in 1999 to 3,036 in 2009) and the state property crime rate decreased 11 percent (from 2,559 in 1998 to 2,287 in 2009) (Figure 5).

Figure 5: National and Massachusetts Property Crime Rate (per 100,000 persons) 1999 to 2009



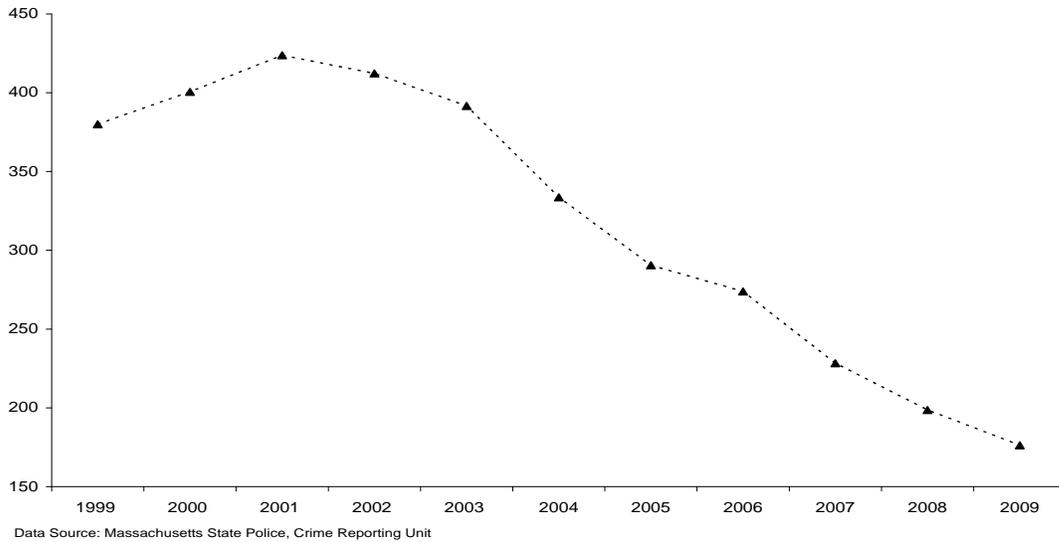
Data Source: U.S. Department of Justice, Bureau of Justice Statistics; Massachusetts State Police, Crime Reporting Unit

A more detailed look at each of the individual offenses that make up the total property crime rate is presented below. As shown in Figure 5, the overall property crime rate has been steadily declining in Massachusetts over the 11-year time period. However, a more detailed look at the total property crime rate shows that each offense does not follow this same pattern.

Motor Vehicle Theft

- Over the 11-year time period the motor vehicle theft rate experienced the greatest percentage decrease (54 percent or 380 to 176) compared to the other individual property crime offenses (Figure 6).
- The motor vehicle theft rate peaked in 2001 (424) and was at an 11-year low in 2009 (176).

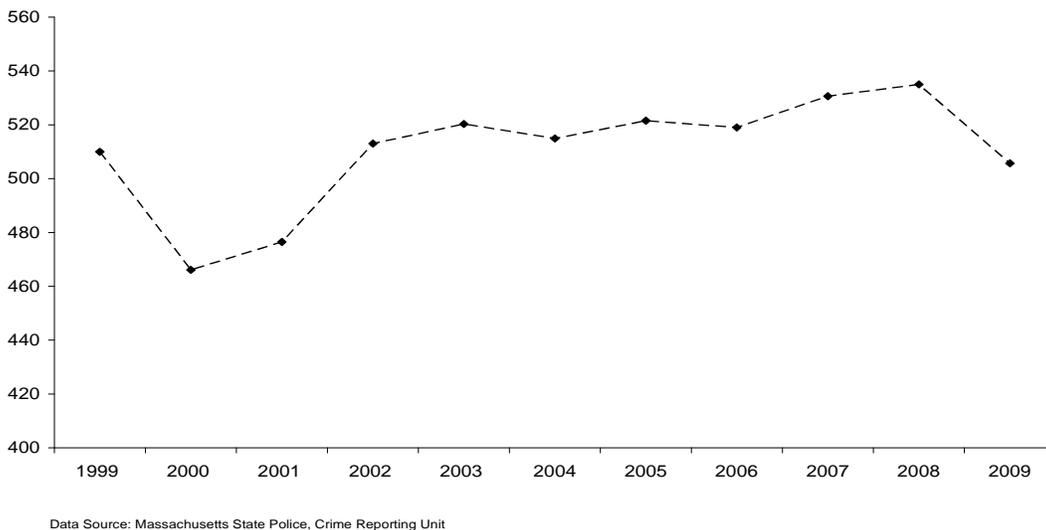
Figure 6: Massachusetts Motor Vehicle Theft Rate (per 100,000 persons) 1999 to 2009



Burglary

- During this same time period, the burglary rate in Massachusetts declined by 1 percent (from 510 to 506) and declined 5 percent from 2008 to 2009 (535 to 506). (Figure 7).
- The burglary rate was at an 11-year low in 2000 (466).
- The burglary rate peaked in 2008, declined in the late 1990's and began to level off in 2002.

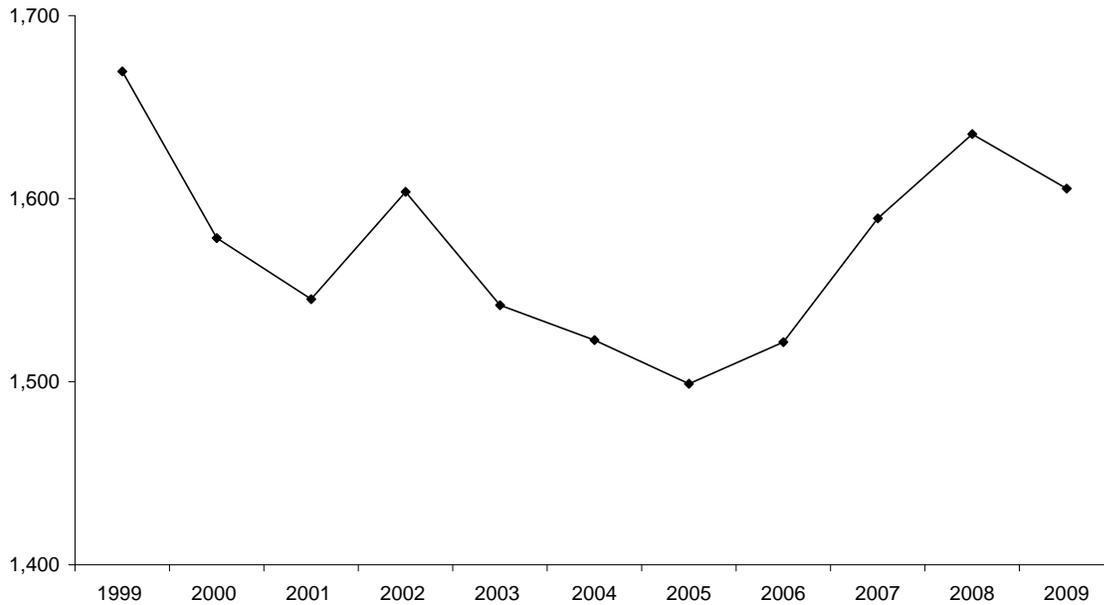
Figure 7: Massachusetts Burglary Rate (per 100,000 persons) 1999 to 2009



Larceny

- The larceny rate decreased 4 percent between 1999 and 2009 (1,670 to 1,606) (Figure 8).
- The larceny rate was at an 11-year low in 2005 (1,499).
- The larceny rate was highest in 1999, experienced a general decline until 2005 and has been slowly increasing. There was a slight decrease of 2 percent from 2008 (1635 to 1605).

Figure 8: Massachusetts Larceny Rate (per 100,000 persons) 1999 to 2009



Data Source: Massachusetts State Police, Crime Reporting Unit

As the previous set of graphs show, individual property offenses (motor vehicle theft, burglary, and larceny) in Massachusetts have steadily declined between 1999 and 2009 (Table 1). Motor vehicle theft experienced the most notable decrease (54%) followed by larceny (4%) and burglary (1%).

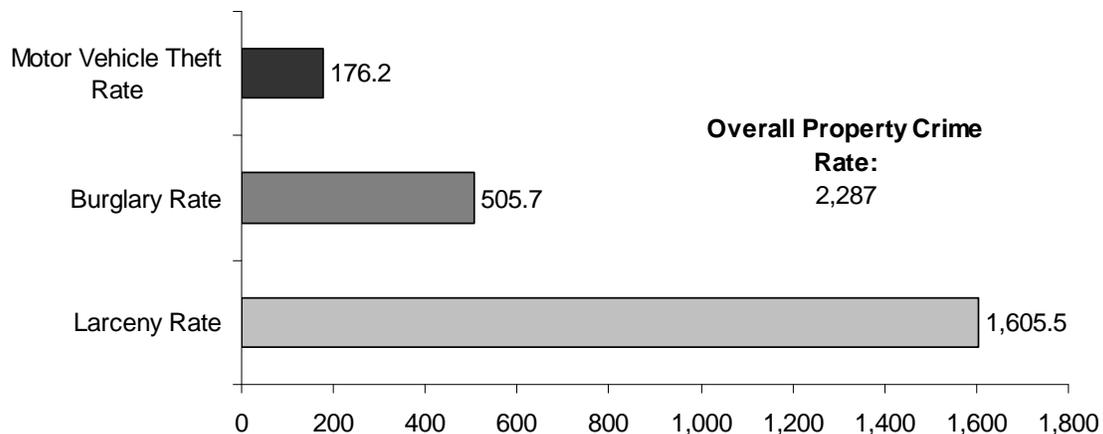
**Table 1: Massachusetts Property Crime Rates:
Percent Changes 1999 to 2009**

Offense	Percent Change
Total Property Crime	- 11%
Motor Vehicle Theft	- 54%
Burglary	- 1%
Larceny	- 4%

Data Source: Massachusetts State Police, Crime Reporting Unit

Turning from changes in rates over time for individual offenses, Figure 9 compares rates across individual offenses in a single year, 2009. In 2009, the property crime rate was 2,287 per 100,000 persons. In terms of rates of individual offenses within the property crime category, larceny had the highest rate, at 1,606. In addition, 506 burglaries and 176 motor vehicle thefts per 100,000 persons were reported in 2009 (Figure 9).

Figure 9: Massachusetts Property Crime Rate (per 100,000 persons) 2009

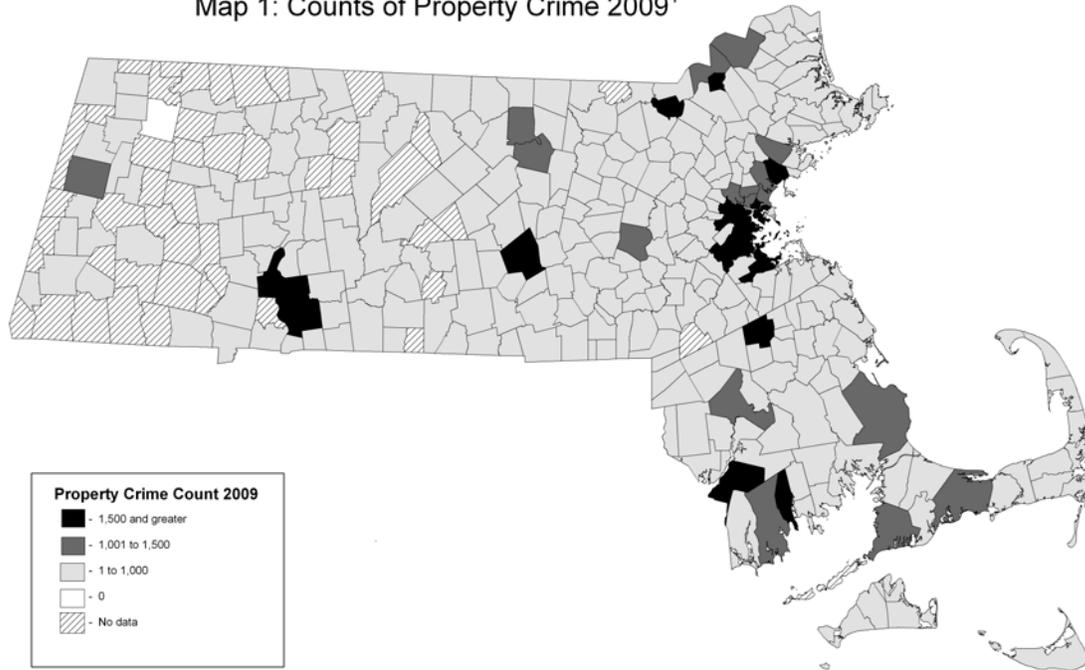


Data Source: Massachusetts State Police, Crime Reporting Unit

Where does property crime occur?

An examination of the volume of property crime at the community level in 2009 illustrates the distribution of property crime across the state (Map 1). Based on property crime counts, the ten communities with the highest number of reported property crimes in descending order are: Boston, Springfield, Worcester, Fall River, Lowell, New Bedford, Brockton, Cambridge, Lynn, and Holyoke. As anticipated, the majority of the communities with the highest number of reported property crimes are some of the largest communities in the state (Table 2).

Map 1: Counts of Property Crime 2009¹



¹ "No Data" indicates that data was missing for a particular community in 2009. Data Source: 2009 Crime Data, Massachusetts State Police, Crime Reporting Unit.

Table 2: Top Ten Communities in Massachusetts by Property Crime Count 2009

Town/City	Property Crime Count	Population	Population Ranking (out of 304 communities)
Boston	20,749	645,169	1
Springfield	8,246	155,575	3
Worcester	6,749	182,421	2
Fall River	3,995	90,885	9
Lowell	3,965	104,400	5
Brockton	3,464	93,529	6
New Bedford	3,282	91,112	7
Cambridge	3,173	108,780	4
Holyoke	2,912	40,005	35
Lynn	2,896	87,532	10

Data Source: 2009 Crime Data, Massachusetts State Police, Crime Reporting Unit. Population from U.S. Census 2009 estimates.

Examining the volume of property crime alone does not allow comparisons across communities as population is not taken into consideration. In order to more accurately compare property crime at the community level, population was used to calculate a property crime *rate* for each community in 2008 (Table 3).² Accounting for population, Worcester, Brockton, Cambridge, and Lynn are no longer in the top ten for 2008 and Saugus, West Springfield, Chelsea, and Barnstable are added to the list. Boston moves down from the community with the highest *number* of property crimes to the tenth community when ranked by property crime *rates*. Conversely, Holyoke moves from the tenth spot when ranked by volume to the first spot when ranked by rate.

Table 2: Top Ten Communities in Massachusetts by Property Crime Rate 2009

Town/City	Property Crime Rate	Population	Population Ranking (out of 304 communities)
Holyoke	7,279	40,005	35
Springfield	5,300	155,575	3
Saugus	4,688	27,946	61
Fall River	4,396	90,885	9
Chelsea	4,106	37,483	41
Falmouth	4,052	32,824	49
Lowell	3,798	104,400	5
Brockton	3,704	93,529	6
Worcester	3,700	182,421	2
New Bedford	3,602	91,112	7

Data Source: 2009 Crime Data, Massachusetts State Police, Crime Reporting Unit. Population from U.S. Census 2009 estimates.

² For purposes of identifying the top ten communities by property crime rates, communities were not included in the analysis if their 2008 population was less than 25,000.

Data Sources:

Federal Bureau of Investigation, *Crime in the United States, 2007*, September 2008

Federal Bureau of Investigation, *Uniform Crime Reporting Handbook*, 2004.

Massachusetts State Police, Crime Reporting Unit

U.S. Census Bureau, Population Division, *Subcounty Population Estimates, April 1, 2000 to July 1, 2008*, July 7, 2009, (<http://www.census.gov/popest/datasets.html>)

U.S. Census Bureau, Census 2000 Summary Tape File 1 (STF 1); generated using American Factfinder, (<http://factfinder.census.gov/>), February 15, 2006

U.S. Census Bureau, Census 1990 Summary Tape File 1 (STF 1); generated using American Factfinder, (<http://factfinder.census.gov>), February 15, 2006

U.S. Census Bureau, *1980 Census of Population, Number of Inhabitants, Massachusetts*, December 1981, (http://www2.census.gov/prod2/decennial/documents/1980a_maABC-01.pdf)

U.S. Department of Justice, Bureau of Justice Statistics, *FBI, Uniform Crime Reports, Reported Crime in the United States--Total 1980 – 2009*, (<http://www.ojp.usdoj.gov/bjs>)

Appendix

Massachusetts Property Crime, by Counts and Rates (per 100,000 persons)

Year	Population	Property Crime Count	Burglary	Larceny	Motor Vehicle Theft	Property Crime Rate	Burglary Rate	Larceny Rate	Motor Vehicle Theft Rate
1980	5,737,037	276,803	88,684	133,242	54,877	4,824.8	1,545.8	2,322.5	956.5
1981	5,737,037	242,232	75,857	117,588	48,787	4,222.2	1,322.2	2,049.6	850.4
1982	5,737,037	251,397	73,164	127,591	50,642	4,382.0	1,275.3	2,224.0	882.7
1983	5,737,037	217,103	61,388	112,258	43,457	3,784.2	1,070.0	1,956.7	757.5
1984	5,737,037	212,589	58,093	109,614	44,882	3,705.6	1,012.6	1,910.6	782.3
1985	5,737,037	218,262	58,225	114,390	45,646	3,804.4	1,014.9	1,993.9	795.6
1986	5,737,037	212,370	55,045	109,803	47,523	3,701.7	959.5	1,913.9	828.4
1987	5,737,037	216,296	55,616	112,307	48,373	3,770.2	969.4	1,957.6	843.2
1988	5,737,037	225,040	55,076	122,188	47,776	3,922.6	960.0	2,129.8	832.8
1989	5,737,037	224,501	53,377	122,436	48,688	3,913.2	930.4	2,134.1	848.7
1990	6,016,425	204,671	49,116	111,660	43,895	3,401.9	816.4	1,855.9	729.6
1991	6,016,425	202,582	52,161	107,100	43,321	3,367.2	867.0	1,780.1	720.1
1992	6,016,425	200,496	52,472	107,858	40,167	3,332.5	872.1	1,792.7	667.6
1993	6,016,425	202,915	50,066	111,210	41,640	3,372.7	832.1	1,848.4	692.1
1994	6,016,425	193,515	46,194	109,281	38,040	3,216.4	767.8	1,816.4	632.3
1995	6,016,425	194,661	44,379	116,237	34,044	3,235.5	737.6	1,932.0	565.9
1996	6,016,425	189,709	42,672	115,041	31,996	3,153.2	709.3	1,912.1	531.8
1997	6,016,425	176,404	39,667	108,125	28,611	2,932.0	659.3	1,797.2	475.6
1998	6,016,425	165,483	36,199	103,624	25,660	2,750.5	601.7	1,722.3	426.5
1999	6,016,425	153,984	30,683	100,442	22,859	2,559.4	510.0	1,669.5	379.9
2000	6,349,097	155,239	29,592	100,217	25,431	2,445.1	466.1	1,578.4	400.5
2001	6,395,585	156,395	30,474	98,819	27,103	2,445.4	476.5	1,545.1	423.8
2002	6,412,549	162,170	32,897	102,837	26,436	2,528.9	513.0	1,603.7	412.3
2003	6,420,289	157,537	33,404	98,988	25,145	2,453.7	520.3	1,541.8	391.6
2004	6,416,553	152,150	33,038	97,707	21,405	2,371.2	514.9	1,522.7	333.6
2005	6,398,743	147,871	33,371	95,913	18,587	2,310.9	521.5	1,498.9	290.5
2006	6,437,193	148,987	33,408	97,950	17,629	2,314.5	519.0	1,521.6	273.9
2007	6,449,755	151,452	34,223	102,502	14,728	2,348.2	530.6	1,589.2	228.3
2008	6,497,967	153,924	34,763	106,254	12,906	2,368.8	535.0	1,635.2	198.6
2009	6,593,587	150,820	33,343	105,859	11,618	2,287.4	505.7	1,605.5	176.2

Data Source: Massachusetts State Police, Crime Reporting Unit. U.S. Census Bureau estimates are used in 2001 through 2009. Decennial Census counts were used in 1980, 1990, 2000, and the years in between.

National Property Crime, by Counts and Rates (per 100,000 persons)

Year	Population	Property Crime Count	Burglary	Larceny	Motor Vehicle Theft	Property Crime Rate	Burglary Rate	Larceny Rate	Motor Vehicle Theft Rate
1980	225,349,264	12,063,700	3,795,200	7,136,900	1,131,700	5,353.3	1,684.1	3,167.0	502.2
1981	229,146,000	12,061,900	3,779,700	7,194,400	1,087,800	5,263.8	1,649.5	3,139.7	474.7
1982	231,534,000	11,652,000	3,447,100	7,142,500	1,062,400	5,032.5	1,488.8	3,084.9	458.9
1983	233,981,000	10,850,500	3,129,900	6,712,800	1,007,900	4,637.3	1,337.7	2,869.0	430.8
1984	236,158,000	10,608,500	2,984,400	6,591,900	1,032,200	4,492.1	1,263.7	2,791.3	437.1
1985	238,740,000	11,102,600	3,073,300	6,926,400	1,102,900	4,650.5	1,287.3	2,901.2	462.0
1986	241,077,000	11,722,700	3,241,400	7,257,200	1,224,100	4,862.6	1,344.5	3,010.3	507.8
1987	243,400,000	12,024,700	3,236,200	7,499,900	1,288,700	4,940.3	1,329.6	3,081.3	529.5
1988	245,807,000	12,356,900	3,218,100	7,705,900	1,432,900	5,027.1	1,309.2	3,134.9	582.9
1989	248,239,000	12,605,400	3,168,200	7,872,400	1,564,800	5,077.9	1,276.3	3,171.3	630.4
1990	248,709,873	12,655,500	3,073,900	7,945,700	1,635,900	5,088.5	1,235.9	3,194.8	657.8
1991	252,177,000	12,961,100	3,157,200	8,142,200	1,661,700	5,139.7	1,252.0	3,228.8	658.9
1992	255,082,000	12,505,900	2,979,900	7,915,200	1,610,800	4,902.7	1,168.2	3,103.0	631.5
1993	257,908,000	12,218,800	2,834,800	7,820,900	1,563,100	4,737.7	1,099.2	3,032.4	606.1
1994	260,341,000	12,131,900	2,712,800	7,879,800	1,539,300	4,660.0	1,042.0	3,026.7	591.3
1995	262,755,000	12,063,900	2,593,800	7,997,700	1,472,400	4,591.3	987.1	3,043.8	560.4
1996	265,284,000	11,805,300	2,506,400	7,904,700	1,394,200	4,450.1	944.8	2,979.7	525.5
1997	267,637,000	11,540,300	2,461,100	7,725,500	1,353,700	4,311.9	919.6	2,886.6	505.8
1998	270,296,000	10,951,827	2,332,735	7,376,311	1,242,781	4,052.5	863.0	2,729.0	459.8
1999	272,691,000	10,208,334	2,100,739	6,955,520	1,152,075	3,743.6	770.4	2,550.7	422.5
2000	281,421,906	10,182,584	2,050,992	6,971,590	1,160,002	3,618.3	728.8	2,477.3	412.2
2001	284,796,887	10,412,395	2,109,767	7,076,171	1,226,457	3,656.1	740.8	2,484.6	430.6
2002	287,973,924	10,455,277	2,151,252	7,057,379	1,246,646	3,630.6	747.0	2,450.7	432.9
2003	290,788,976	10,442,862	2,154,834	7,026,802	1,261,226	3,591.2	741.0	2,416.5	433.7
2004	293,655,404	10,328,255	2,143,456	6,947,685	1,237,114	3,517.1	729.9	2,365.9	421.3
2005	296,410,404	10,166,159	2,154,126	6,776,807	1,235,226	3,429.8	726.7	2,286.3	416.7
2006	299,398,484	9,983,568	2,183,746	6,607,013	1,192,809	3,334.5	729.4	2,206.8	398.4
2007	301,621,157	9,843,481	2,179,140	6,568,572	1,095,769	3,263.5	722.5	2,177.8	363.3
2008	304,374,846	9,775,149	2,228,474	6,588,046	958,629	3,211.5	732.1	2,164.5	315.0
2009	307,006,550	9,320,971	2,199,125	6,327,230	794,616	3,036.1	716.3	2,060.9	258.8

Data Source: Bureau of Justice Statistics, FBI, Uniform Crime Reports, prepared by the National Archive of Criminal Justice Data (<http://www.ojp.usdoj.gov/bjs>).
 Note: 2007 data from FBI, Uniform Crime Reports, <http://www.ucrdatatool.gov/>

See the Executive Office of Public Safety and Security's website for additional public safety research publications:

<http://www.mass.gov/eops>