

American Community Survey, Census Population Estimates & Cambridge Demographic Update

January 11, 2010

Cambridge Demographic Brown Bag

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Census Population Estimates Program

- Estimates are based on a variety of sources
 - The household population derives from births, deaths, IRS tax returns and Medicare enrollment as well as ACS data on international immigration
 - The group quarters population derives from 2000 Census data and a group quarters registry maintained by each state
- Produced annually by Census Bureau
- Each year's estimate is a different "vintage"
- "Vintages" can show significant differences from one another, so always try to use the most recent estimate available
- Local area estimates are released on July 1 of every year.
- Local area estimates are for total population only
- Estimates for larger areas such as counties and states include estimates by age, race, sex and Hispanic origin, as well a housing unit estimate

Cambridge Population Estimates

	2008 Vintage	2007 Vintage	Difference	Cumulative Net Housing Unit Change
2008	105,596	--	--	3,976
2007	104,026	101,388	2,638	3,886
2006	102,720	101,396	1,324	3,264
2005	102,273	100,375	1,898	2,335
2004	101,853	101,059	794	1,818
2003	101,908	101,753	155	1,344
2002	102,961	102,317	644	1,044
2001	102,742	102,501	241	1,012
2000	101,643	101,613	30	821

The American Community Survey

- The American Community Survey (ACS) replaces the Census Bureau's long form questionnaire, used to collect socioeconomic data about persons and households as part of the decennial census.
- The ACS surveys 1 in 40 households each year, over 5 years 1 in 8 households. In contrast, the decennial census long form surveyed 1 in 6 households.
- ACS data is released in 1, 3 and 5 year increments. In 2010 the Bureau will use ACS to make detailed socioeconomic information available down to the blockgroup level on an annual basis.
- Places with more than 65,000 residents – including Cambridge - have new ACS data released every year, as well as three and five year estimates.
- Places with 20,000 or more residents have estimates released every 3 and 5 years.
- Smaller places, including all census tracts and blockgroups, have estimates released every 5 years

ACS - Issues to Consider

- **Margin of Error:** Because the ACS is a survey with more limited sampling than the long form Census questionnaire, all ACS data is released with 10% margins of error
- **Definition of Residence:** Decennial census asks for your current residence as of the date of the Census - April 1 of census year. ACS asks for your usual residence over the past two months
- **Point vs. Period Estimates:** ACS estimates represent average values over a period of time, not beginning, mid-point or end values
Traditional decennial census estimates are largely point estimates; they estimate the value of a variable on Census Day
- **Income - Special Considerations**
- **Data Suppression** affects the data available to the public
- **Comparison of Estimates:** Several issues to consider.
- **Choosing which ACS Data Set to Use**

How ACS and Estimates Connect

- ACS figures at county level are controlled to the latest Census Bureau population estimate for calendar year in which the ACS data is released.
- Sub-county estimates are not controlled to the sub-county population estimates. At sub-county level the county population is apportioned based on the share counted by the ACS. This process leads to underestimation of population in larger places.

Example - Cambridge Population	
Census 2000	101,355
Census Bureau 2007 Population Estimate	105,596
2008 ACS	96,695
2006-2008 ACS	93,635

- ACS data is more useful when looking at measures of characteristics, such as proportions, or figures that do not rely on population counts, like median income or average household size.

Where to find ACS data and Estimates

- Both ACS data and population estimates are available through the Census Bureau's American Factfinder web site:
- http://factfinder.census.gov/home/saff/main.html?_lang=en
- The Factfinder website is a good resource for several Census data sets, including Census 2000 and the Economic Census.
- There are several different types of data tables available from the ACS: Data Profiles, Subject Tables and Detailed Tables.
- For more information about the ACS:
 - Census Bureau ACS web site:
<http://www.census.gov/acs/www/index.html>
 - <http://mcdc2.missouri.edu/pub/data/acs/Readme.shtml>
 - http://mcdc2.missouri.edu/pub/data/acs/prbThe_American_Community.pdf

Population by Age

	2006-2008 ACS			
	2000 Census Value	Value	10% Margin of Error	Z Value
Median Age	30.8	31.8	0.6	2.75
Population Under 5	4.1%	4.7%	0.6%	1.65
Population 5-17	9.2%	8.9%	0.9%	0.55
Population Under 18	13.1%	13.2%	1.0%	0.11
Population 55 to 64	6.8%	9.9%	0.9%	5.62
Population 65+	9.2%	10.2%	0.7%	2.36

Z values of 1.65 or greater indicate that there is a 90% or greater chance that the difference between the 2000 Census value and the 2006-2008 ACS value represents a real difference and not an artifact of sampling. Such values are shown in red.

Race & Hispanic Origin

	2006-2008 ACS			
	2000 Census Value	Value	10% Margin of Error	Z Value
White Alone	68.1%	68.4%	1.5%	0.33
Black Alone	11.9%	11.7%	1.3%	0.25
Asian Alone	12.0%	13.2%	1.0%	1.98
Hispanic	7.4%	6.8%	1.0%	0.99

Diversity

	2000 Census		2006-2008 ACS		Z Value
	Value	10% MOE	Value	10% MOE	
Foreign Born	25.9%	1.0%	26.8%	1.9%	0.72
Born in Asia	9.1%	0.5%	10.0%	1.0%	1.39
Born in Africa	1.7%	0.2%	3.1%	0.8%	2.80
Born in Latin America or Caribbean	7.4%	0.5%	5.5%	1.0%	2.74
Speak Spanish	6.8%	0.5%	5.9%	1.0%	1.33
Speak French	5.1%	0.5%	4.9%	0.9%	0.35
Speak Chinese	3.7%	0.5%	5.1%	0.9%	2.25
Linguistically Isolated Households	7.0%	0.7%	5.5%	0.8%	2.33

Households

2006-2008 ACS				
	Census Value	Value	10% Margin of Error	Z Value
Families as % of all HHs	41.3%	40.8%	1.6%	0.52
Married Couples w/ Own <18	11.3%	12.5%	1.4%	1.41
Single Parent HHs w/ Own <18	6.3%	4.7%	1.0%	2.64
Married Couples w/o Own <18	17.8%	18.7%	1.2%	1.20
Nonfamily Households	58.7%	59.2%	1.6%	0.52
All Persons Living Alone	41.4%	42.4%	1.9%	0.87
Person 65+ Living Alone	9.2%	10.0%	0.9%	1.47
All Other Households	17.3%	16.8%	1.4%	0.58
All HHs w/ Person(s) <18	18.9%	18.4%	1.4%	0.59
All HHs w/ Person(s) 65+	16.9%	18.3%	1.1%	2.10
Unmarried Partners	6.3%	6.3%	1.0%	0.06
Unmarried Same Sex Partners	1.3%	1.7%	0.5%	1.34

Commuting

	2000 Census		2006-2008 ACS		Z Value
	Value	10% MOE	Value	10% MOE	
Drove Alone	35.0%	1.1%	30.5%	1.7%	3.70
Carpool	5.4%	0.4%	4.7%	0.9%	1.08
Public Transit	24.4%	1.1%	29.5%	1.8%	4.02
Walked	24.4%	1.1%	22.5%	1.8%	1.49
Biked	3.9%	0.4%	5.8%	0.9%	3.15
Other Mode	1.3%	0.2%	0.8%	0.3%	2.09
Worked at Home	5.3%	0.4%	6.2%	0.9%	1.52
Work In Cambridge	46.5%	1.1%	45.4%	2.0%	0.80
Work Outside of Cambridge	53.5%	1.1%	54.6%	2.0%	0.80

Education

	2000 Census		2006-2008 ACS		Median Income	Z Value
	Value	10% MOE	Value	10% MOE		
Less Than High School	10.4%	0.6%	5.7%	0.8%	\$19,909	7.74
High School or Equal	12.2%	0.6%	11.2%	1.4%	\$25,365	1.08
Some College or Associates	12.2%	0.6%	11.4%	1.2%	\$30,007	0.99
Bachelors or Higher	65.2%	1.0%	71.7%	3.4%	--	3.03
Bachelors	26.7%	1.5%	29.0%	2.0%	\$41,666	1.57
Graduate Degree	38.5%	2.6%	42.7%	2.3%	\$53,061	1.96

Income

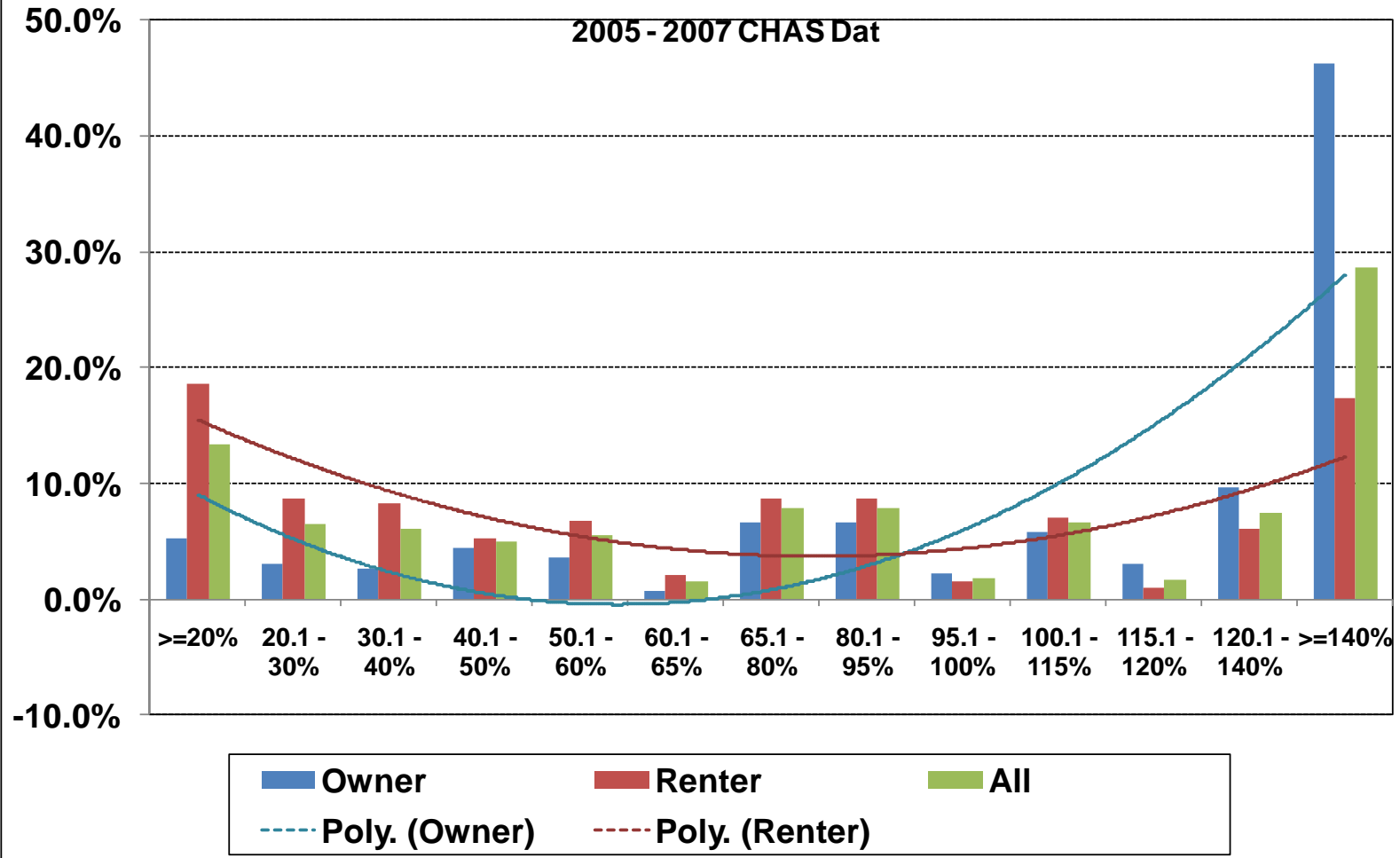
	2000 Census		2006-2008 ACS		Z Value
	Value	10% MOE	Value	10% MOE	
Median Household Income	\$61,998	\$1,924	\$62,062	\$3,795	0.02
Median Family Income	\$76,786	\$3,539	\$85,458	\$6,049	2.04
Per Capita Income	\$40,234	\$850	\$43,624	\$2,567	2.07

Poverty

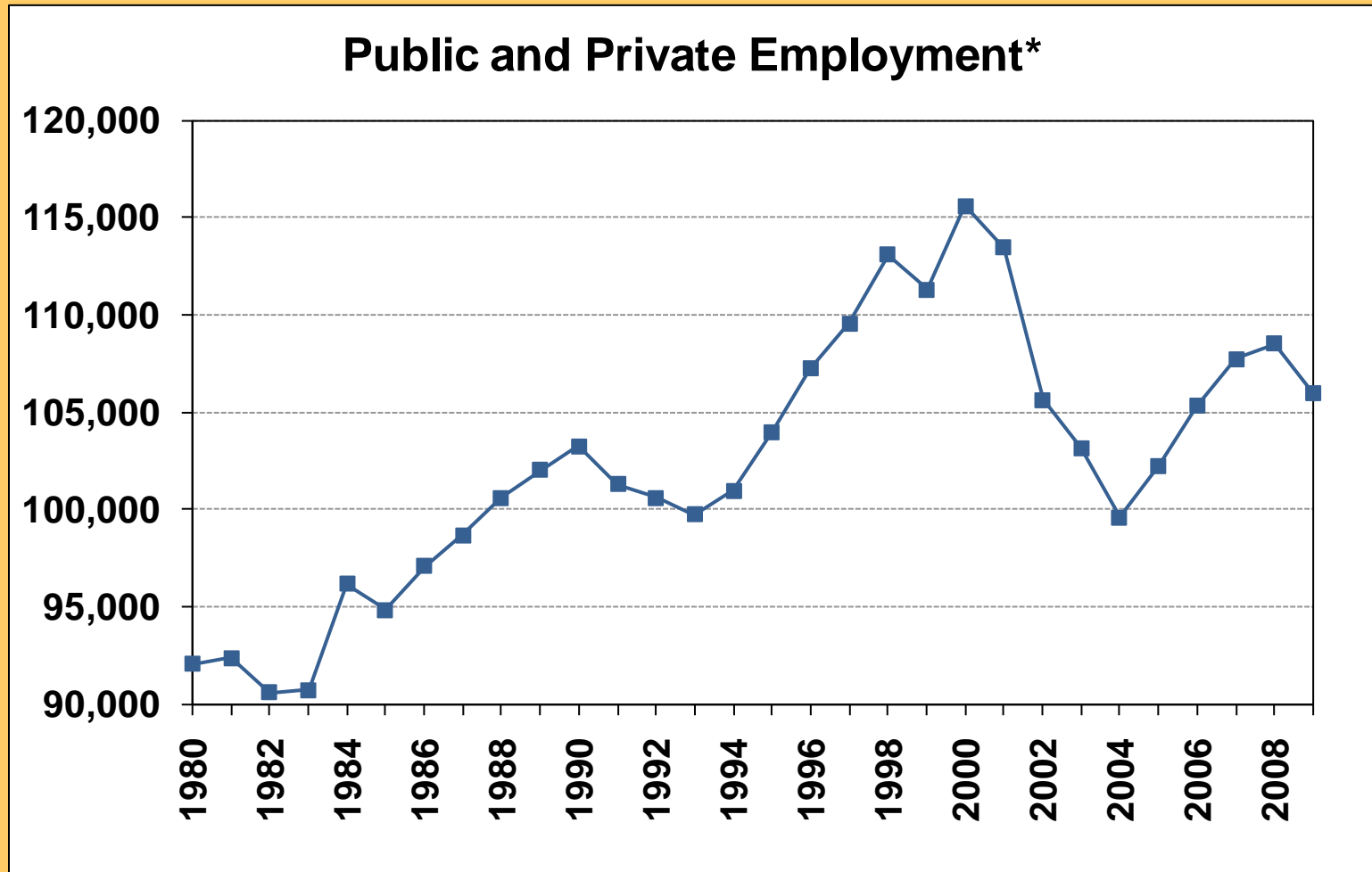
	2000 Census		2006-2008 ACS		
	Value	10% MOE	Value	10% MOE	Z Value
All Families	8.7%	1.0%	9.2%	2.1%	0.35
All Families w/ Children <5	14.3%	1.4%	11.2%	5.7%	0.87
All Families w/ Children <18	14.4%	1.4%	14.7%	3.8%	0.12
Families w/ No Child	--	--	4.7%	1.8%	--
Families w/ 1 or 2 Children	--	--	11.9%	4.0%	--
Families w/ 3 or 4 Children	--	--	39.0%	14.6%	--
All Persons	12.9%	0.7%	15.3%	1.6%	2.27
All Persons <18	15.6%	0.7%	18.5%	4.5%	1.05
All Persons 65+	12.9%	0.7%	12.1%	3.0%	0.43
Unrelated Persons 15+	17.7%	1.0%	21.3%	2.0%	2.66

CHAS Data

Housing Tenure by Income Range

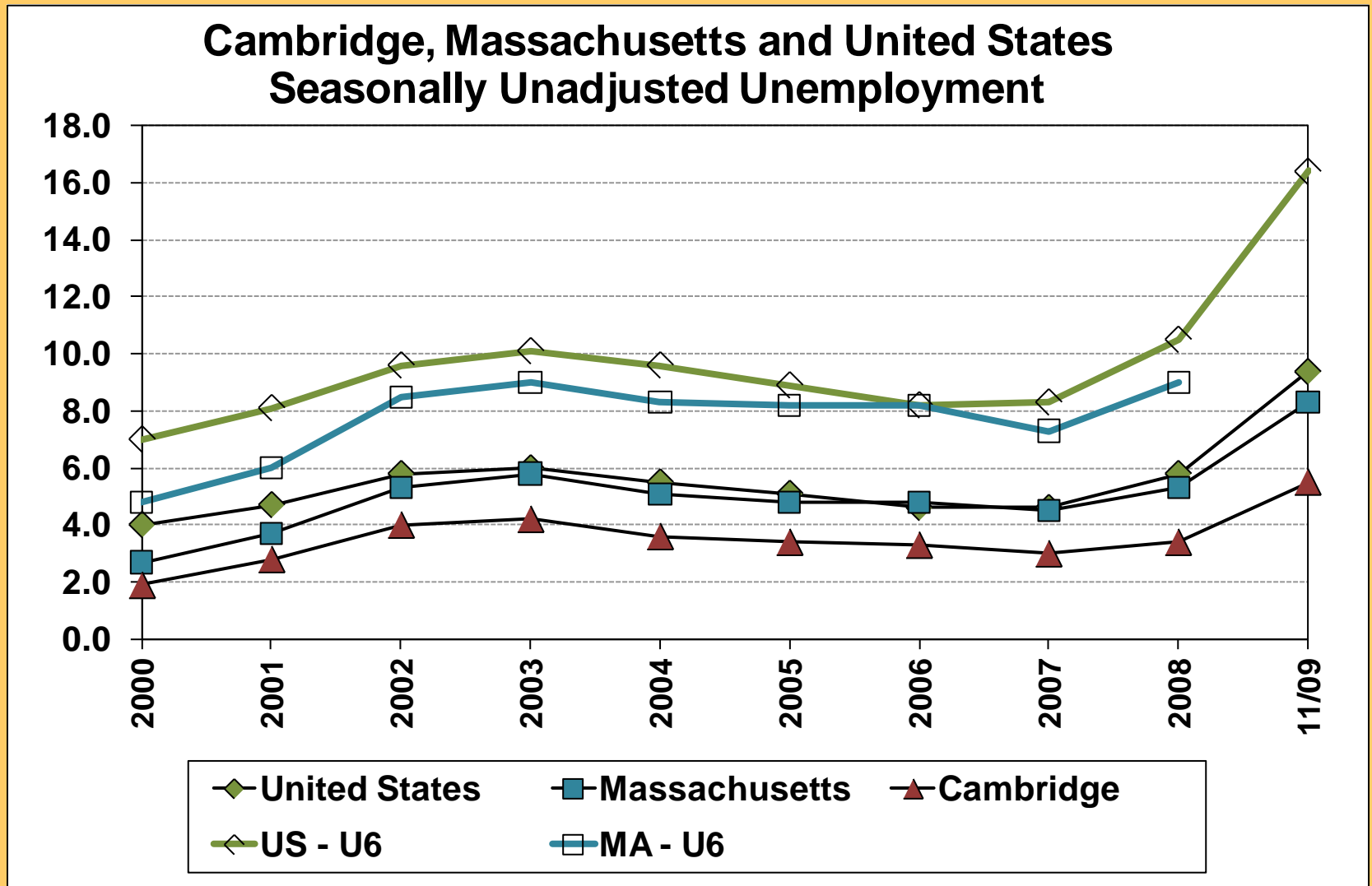


Total Employment



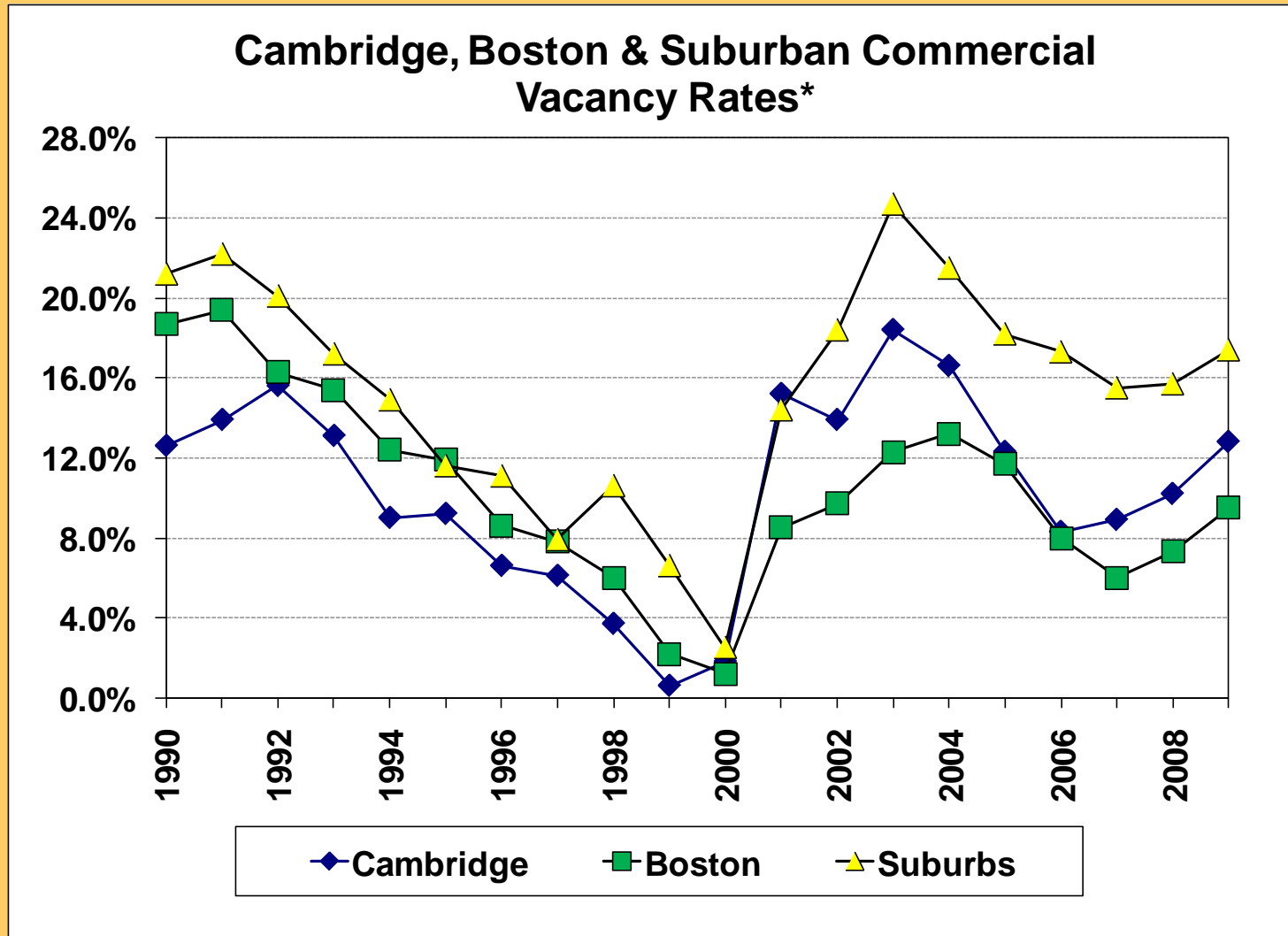
* 2009 data is for first quarter only

Unemployment



*2009 data is for November 2009.

Commercial & Residential Vacancy Rates



* 2009 figures for the end of the 3rd Quarter.

Median Rents

