

# MODESTO-CA DATA LIBRARY AND FORECAST December 2008

PRICES	JOBS	PERMITS
<b>CURRENT PRICE IS \$160,000, AND 2009 PRICES ARE EXPECTED TO BE - 20.5% THAN 2008</b>	<b>CURRENT JOB GAIN OF -900, AND JOBS ARE PROJECTED TO DECLINE BY -6,000 NEXT YEAR</b>	<b>CURRENTLY AT 745 TOTAL PERMITS, AND 600 ARE PROJECTED FOR NEXT YEAR</b>



## AFFORDABILITY

	December 2008	Avg. 2008P*	Avg. 2009P*	Avg. 2010P*	Avg. 2011P*	Avg. 2012P*
Median Resale Home Price	\$160,000	\$195,000	\$155,000	\$145,000	\$140,000	\$144,000
1-Year Appreciation Rate	-43.7%	-37.1%	-20.5%	-6.5%	-9.7%	-7.1%
Median Household Income	\$49,297					\$51,892
Fixed Mortgage Rate (30yr)	6.0%					7.5%
Housing Cost / Income Ratio						18.6%
Mortgage Payment Amortized Down Payment	18.6%					7.9%
Total	27.9%					26.6%
Housing Cycle Barometer™	1.0					0.5

SAMPLE

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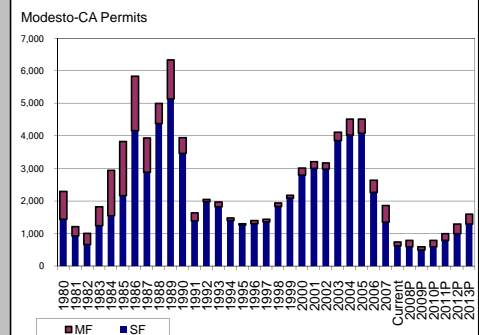
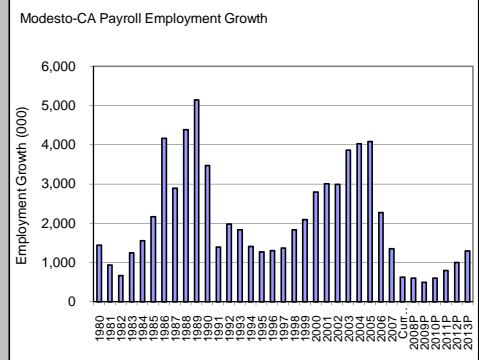
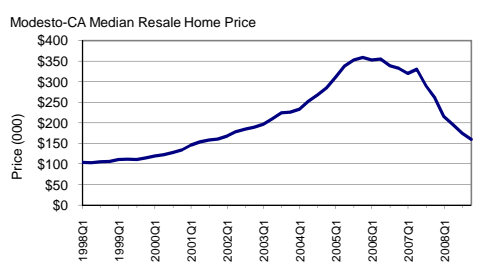
## DEMAND

<b>Payroll Employment</b>	<b>158,100</b>	<b>157,000</b>	<b>151,000</b>	<b>149,000</b>	<b>150,000</b>	<b>151,500</b>
Employment Growth	-900	-3,000	-6,000	-2,000	1,000	1,500
Employment Growth Rate	-0.6%	-1.9%	-3.8%	-1.3%	0.7%	1.0%
<b>Total Employment</b>	<b>211,600</b>	<b>207,900</b>	<b>202,900</b>	<b>203,900</b>	<b>206,900</b>	<b>211,900</b>
Employment Growth	800	-3,000	-5,000	1,000	3,000	5,000
Employment Growth Rate	0.4%	-1.4%	-2.4%	0.5%	1.5%	2.4%
Unemployment Rate	11.8%	N/A	N/A	N/A	N/A	N/A

## SUPPLY

Single-Family Permits	628	600	500	600	800	1,000
Multifamily Permits	117	200	100	200	200	300
<b>Total Permits</b>	<b>745</b>	<b>800</b>	<b>600</b>	<b>800</b>	<b>1,000</b>	<b>1,300</b>

P\* - Projections are averages, medians or totals for the calendar year. Please see limiting conditions in Section 5.  
Projections as of: December 2008



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### MODESTO-CA DEFINITION:

#### CountyName

STANISLAUS, CA

### RELATED SERVICES

#### Customized Services

We specialize in customizing and analyzing information to help executives make decisions with more confidence, including land acquisition, market expansion and strategic planning decisions. We can analyze all types of information pertinent to your decisions - from demographics, psychographics and focus groups to demand / supply models and financial analysis.

#### Retainer Services

We are on retainer with a number of companies to monitor housing market conditions in their markets, and to help them refine their strategies in an ever-changing environment. We have built the tools, including mapping tools, to collect and analyze the data efficiently so you save time and money. Contact us at (949) 262-3228 or sales@realestateconsulting.com.



**SECTION 2  
BUILDING PERMIT HISTORY FOR ALL COUNTIES / CITIES / PLACES  
MODESTO-CA**

**2-1. METRO AREA BUILDING PERMIT HISTORY SINCE 1980**

**METRO SELECTED:**

(All)

SurveyYear	Data		Table P-1
	SF Permits	MF Permits	Total Permits
1980	1,443	862	2,305
1981	936	280	1,216
1982	666	351	1,017
1983	1,250	582	1,832
1984	1,558	1,395	2,953
1985	2,172	1,664	3,836
1986	4,164	1,674	5,838
1987	2,894	1,044	3,938
1988	4,385	622	5,007
1989	5,143	1,195	6,338
1990	3,471	486	3,957
1991	1,397	241	1,638
1992	1,983	72	2,055
1993	1,831	146	1,977
1994	1,409	74	1,483
1995	1,272	38	1,310
1996	1,303	98	1,401
1997	1,370	72	1,442
1998	1,838	113	1,951
1999	2,095	88	2,183
2000	2,799	224	3,023
2001	3,011	204	3,215
2002	2,991	182	3,173
2003	3,868	251	4,119
2004	4,027	494	4,521
2005	4,085	440	4,525
2006	2,271	373	2,644
2007	1,352	513	1,865
Current	628	117	745
2008P	600	200	800
2009P	500	100	600
2010P	600	200	800
2011P	800	200	1,000
2012P	1,000	300	1,300
2013P	1,300	300	1,600

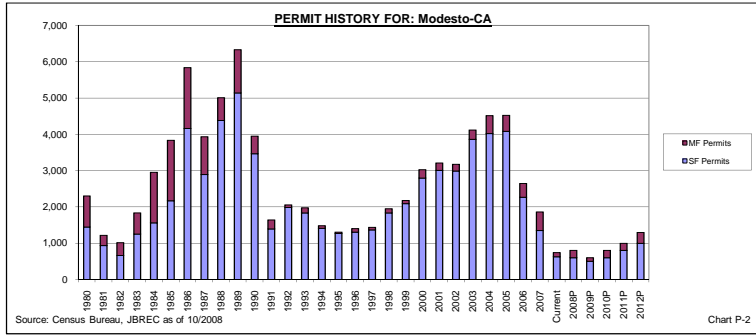


Chart may be customized by changing years and type of permit in the pull down menus above the table at left.

Note: Current year data is the most recent 12 months ending 10/2008

**2-2. COUNTY BUILDING PERMIT HISTORY AND LOOKUP CAPABILITY SINCE 1980**

**LOOKUP CAPABILITY: SELECT COUNTY FROM DROP DOWN BOX BELOW:**

(All)

SurveyYear	Data		Table P-3
	SF Permits	MF Permits	Total Permits
1980	1,443	862	2,305
1981	936	280	1,216
1982	666	351	1,017
1983	1,250	582	1,832
1984	1,558	1,395	2,953
1985	2,172	1,664	3,836
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2001	3,011	204	3,215
2002	2,991	182	3,173
2003	3,868	251	4,119
2004	4,027	494	4,521
2005	4,085	440	4,525
2006	2,271	373	2,644
2007	1,352	513	1,865
2008-10	628	117	745

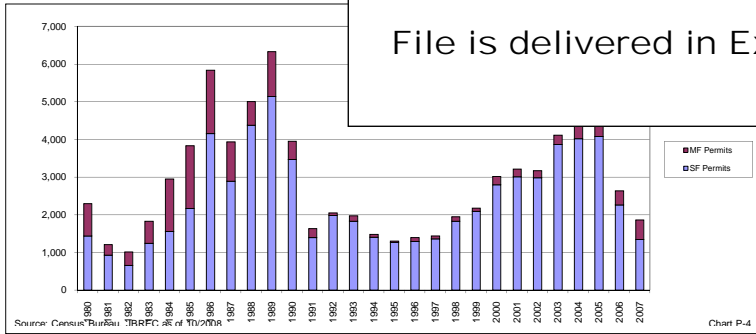


Chart may be customized by changing years and type of permit in the pull down menus above the table at left.

Note: Current year data is the most recent 12 months ending 10/2008

**SAMPLE**  
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**2-3. CITY / PLACE BUILDING PERMIT HISTORY AND LOOKUP CAPABILITY SINCE Placename**

**LOOKUP CAPABILITY: SELECT CITY/PLACE FROM DROP DOWN BOX BELOW**

(All)

SurveyYear	Data		Table P-5
	SF Permits	MF Permits	Total Permits
1980	1,443	862	2,305
1981	936	280	1,216
1982	666	351	1,017
1983	1,250	582	1,832
1984	1,558	1,395	2,953
1985	2,172	1,664	3,836
1986	4,164	1,674	5,838
1987	2,894	1,044	3,938
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1995	1,272	38	1,310
1996	1,303	98	1,401
1997	1,370	72	1,442
1998	1,838	113	1,951
1999	2,095	88	2,183
2000	2,799	224	3,023
2001	3,011	204	3,215
2002	2,991	182	3,173
2003	3,868	251	4,119
2004	4,027	494	4,521
2005	4,085	440	4,525
2006	2,271	373	2,644
2007	1,352	513	1,865
2008-10	501	117	618

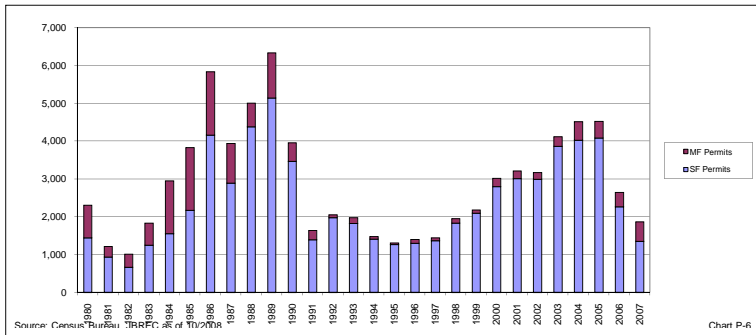


Chart may be customized by changing years and type of permit in the pull down menus above the table at left.

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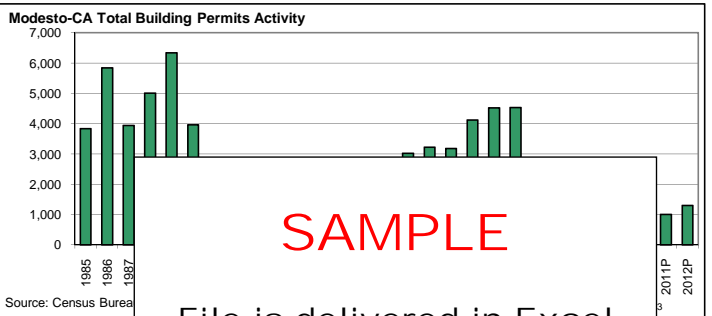
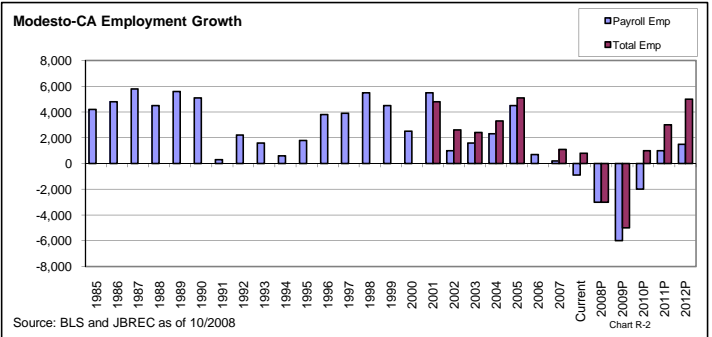
### SECTION 3 EMPLOYMENT GROWTH / BUILDING PERMIT RATIOS MODESTO-CA

#### 3-1. EMPLOYMENT GROWTH AND BUILDING PERMIT HISTORY SINCE 1984

Table R-1

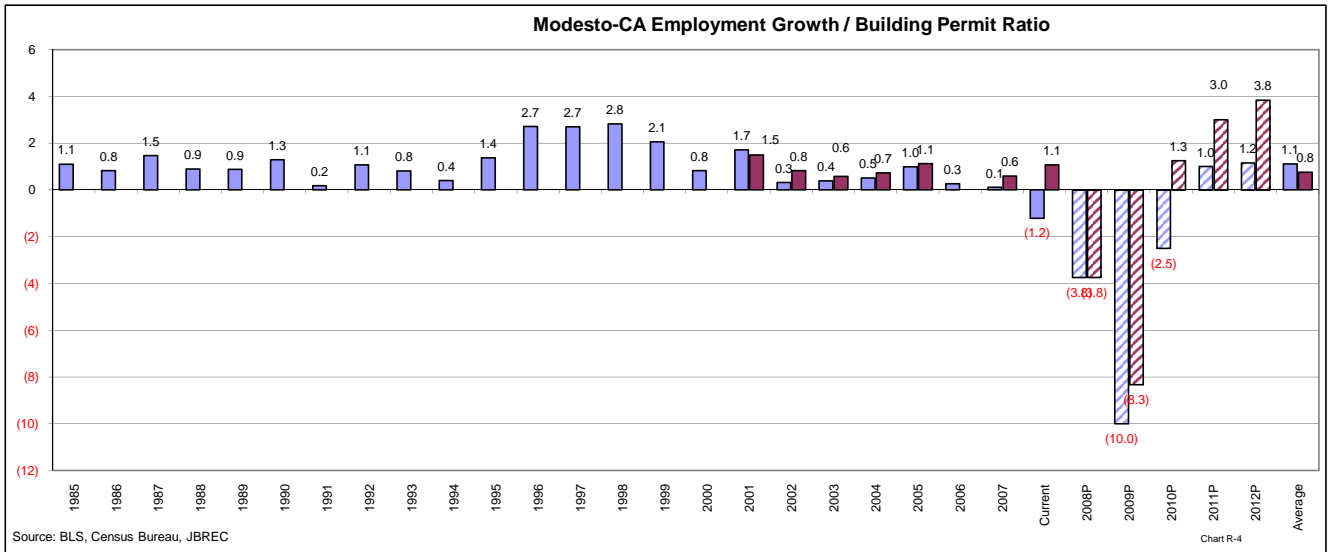
Year	Total Permits	Payroll E/P Ratio		Total E/P Ratio	
		Payroll Employment Growth	Payroll Employment Growth / Permit Ratio	Total Employment Growth	Total Employment Growth / Permit Ratio
1984	2,953				
1985	3,836	4,200	1.09		
1986	5,838	4,800	0.82		
1987	3,938	5,800	1.47		
1988	5,007	4,500	0.90		
1989	6,338	5,600	0.88		
1990	3,957	5,100	1.29		
1991	1,638	300	0.18		
1992	2,055	2,200	1.07		
1993	1,977	1,600	0.81		
1994	1,483	600	0.40		
1995	1,310	1,800	1.37		
1996	1,401	3,800	2.71		
1997	1,442	3,900	2.70		
1998	1,951	5,500	2.82		
1999	2,183	4,500	2.06		
2000	3,023	2,500	0.83		
2001	3,215	5,500	1.71	4,800	1.49
2002	3,173	1,000	0.32	2,600	0.82
2003	4,119	1,600	0.39	2,400	0.58
2004	4,521	2,300	0.51	3,300	0.73
2005	4,525	4,500	0.99	5,100	1.13
2006	2,644	700	0.26	0	0.00
2007	1,865	200	0.11	1,100	0.59
Current	745	-900	(1.21)	800	1.07
2008P	800	-3,000	(3.75)	(3,000)	(3.75)
2009P	600	-6,000	(10.00)	(5,000)	(8.33)
2010P	800	-2,000	(2.50)	1,000	1.25
2011P	1,000	1,000	1.00	3,000	3.00
2012P	1,300	1,500	1.15	5,000	3.85
Average	3,100	3,152	1.1	2,757	0.8

Note: Current year data is 12 months change ending 10/2008



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#### 3-2. EMPLOYMENT GROWTH / BUILDING PERMIT RATIO HISTORY SINCE 1984



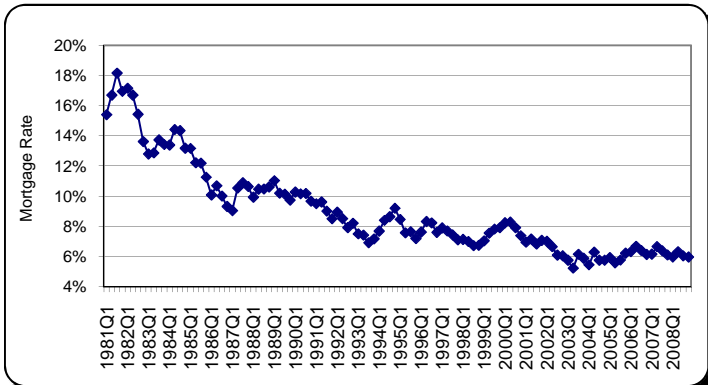
Projections are averages, medians or totals for the calendar year. Please see limiting conditions in Section 5.

# SECTION 4 HOME PRICES, INCOME, MORTGAGE RATES, AFFORDABILITY SINCE 1981 MODESTO-CA

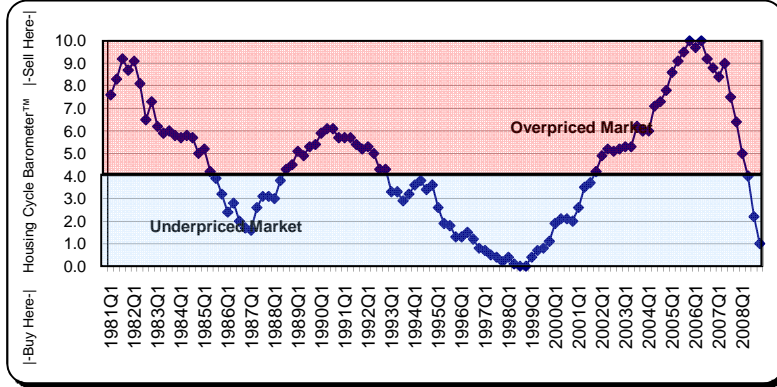
## 4-1. HISTORICAL PRICE, INCOME, AND MORTGAGE DATA

	SF Det. Median Home <u>Price</u>	Median Household Income <u>Income</u>	Median Mortgage Rate <u>Rate</u>	Median Mortgage Payment <u>Payment</u>	Housing Costs / Income <u>Ratio</u>	Housing Cycle <u>Barometer™</u>
1998Q1	\$104,122	\$36,820	7.13%	\$6,738	26.4%	0.4
1998Q2	\$103,435	\$37,103	7.00%	\$6,606	25.8%	0.1
1998Q3	\$105,578	\$37,519	6.72%	\$6,554	25.5%	0.0
1998Q4	\$106,864	\$38,116	6.74%	\$6,647	25.4%	0.0
1999Q1	\$110,897	\$38,841	7.04%	\$7,112	26.5%	0.4
1999Q2	\$111,636	\$39,500	7.55%	\$7,530	27.1%	0.7
1999Q3	\$111,427	\$39,939	7.82%	\$7,715	27.3%	0.8
1999Q4	\$114,984	\$40,101	7.91%	\$8,030	28.2%	1.1
2000Q1	\$120,001	\$40,301	8.24%	\$8,647	30.0%	1.9
2000Q2	\$123,040	\$40,726	8.29%	\$8,907	30.5%	2.1
2000Q3	\$128,335	\$41,391	7.91%	\$8,963	30.5%	2.1
2000Q4	\$134,623	\$42,079	7.38%	\$8,931	30.4%	2.0
2001Q1	\$146,349	\$42,480	6.95%	\$9,300	31.7%	2.6
2001Q2	\$154,286	\$42,478	7.16%	\$10,014	34.0%	3.5
2001Q3	\$158,604	\$42,210	6.82%	\$9,946	34.3%	3.7
2001Q4	\$160,761	\$41,965	7.07%	\$10,340	35.6%	4.2
2002Q1	\$168,000	\$41,759	7.01%	\$10,741	37.2%	4.9
2002Q2	\$178,750	\$41,741	6.65%	\$11,016	38.6%	5.2
2002Q3	\$185,000	\$41,886	6.09%	\$10,751	38.3%	5.1
2002Q4	\$190,000	\$42,208	6.05%	\$10,995	38.9%	5.2
2003Q1	\$197,000	\$42,691	5.75%	\$11,037	39.0%	5.3
2003Q2	\$210,000	\$43,350	5.23%	\$11,107	39.5%	5.3
2003Q3	\$225,000	\$44,003	6.15%	\$13,159	44.5%	6.2
2003Q4	\$226,250	\$44,442	5.88%	\$12,855	43.5%	6.0
2004Q1	\$233,000	\$44,693	5.45%	\$12,630	43.2%	6.0
2004Q2	\$252,750	\$44,724	6.29%	\$15,003	49.7%	7.1
2004Q3	\$268,250	\$44,764	5.75%	\$15,028	50.7%	7.3
2004Q4	\$285,000	\$45,063	5.75%	\$15,967	53.5%	7.8
2005Q1	\$311,000	\$45,569	5.93%	\$17,766	58.5%	8.6
2005Q2	\$338,000	\$46,281	5.58%	\$18,587	61.0%	9.1
2005Q3	\$353,000	\$47,013	5.77%	\$19,819	63.6%	9.5
2005Q4	\$359,000	\$47,595	6.22%	\$21,153	66.0%	10.0
2006Q1	\$353,000	\$48,084	6.32%	\$21,020	64.7%	9.7
2006Q2	\$355,000	\$48,425	6.68%	\$21,946	66.3%	10.0
2006Q3	\$339,000	\$48,687	6.40%	\$20,356	61.7%	9.2
2006Q4	\$332,500	\$48,875	6.14%	\$19,426	59.2%	8.8
2007Q1	\$320,000	\$49,004	6.16%	\$18,735	56.9%	8.4
2007Q2	\$330,000	\$49,124	6.66%	\$20,358	60.6%	9.0
2007Q3	\$289,500	\$49,207	6.38%	\$17,348	52.1%	7.5
2007Q4	\$260,000	\$49,243	6.10%	\$15,126	45.8%	6.4
2008Q1	\$215,000	\$49,265	5.97%	\$12,335	37.5%	5.0
2008Q2	\$196,000	\$49,302	6.32%	\$11,671	35.0%	4.0
2008Q3	\$175,000	\$49,292	6.04%	\$10,116	30.7%	2.2
2008-11	\$160,000	\$49,297	5.97%	\$9,179	27.9%	1.0
2008P	\$195,000	\$49,303	6.19%	\$11,453	34.5%	4.0
2009P	\$155,000	\$49,271	6.25%	\$9,162	27.6%	0.9
2010P	\$145,000	\$49,910	7.00%	\$9,261	26.9%	0.6
2011P	\$140,000	\$50,970	7.50%	\$9,397	26.3%	0.4
2012P	\$144,000	\$51,892	7.50%	\$9,666	26.6%	0.5

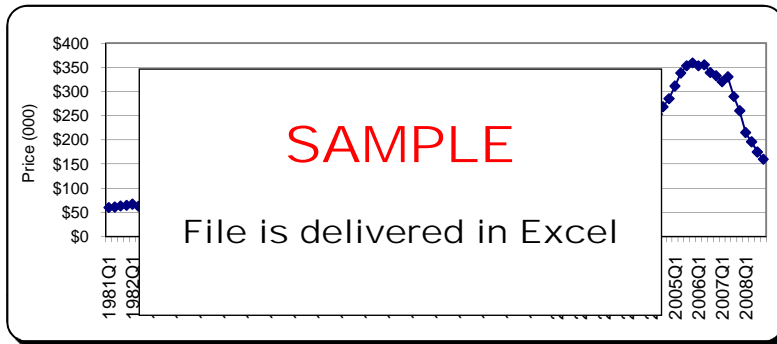
## 4-6. MEDIAN MORTGAGE RATE HISTORY



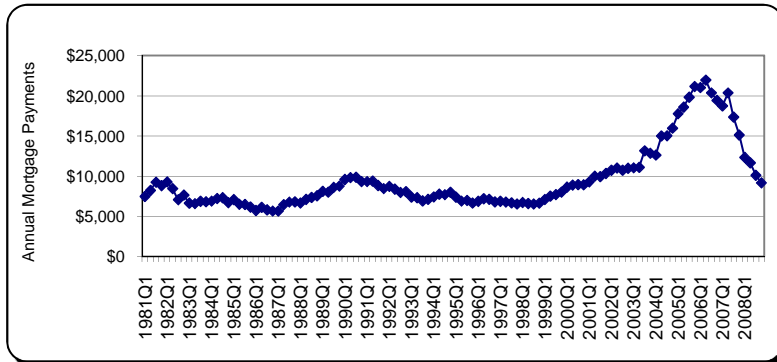
## 4-2. HOUSING CYCLE BAROMETER™



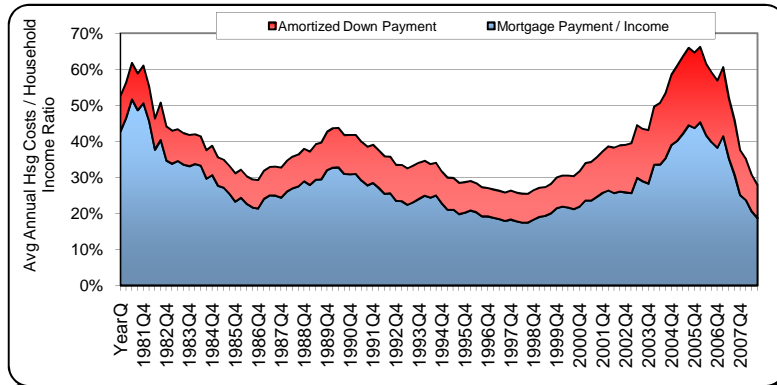
## 4-3. MEDIAN PRICE HISTORY



## 4-4. MEDIAN ANNUAL MORTGAGE PAYMENT



## 4-5. AVERAGE ANNUAL HOUSING COSTS (MORTGAGE PAYMENT + AMORTIZED DOWN PAYMENT) / INCOME HISTORY



Projections are averages, medians or totals for the calendar year. Please see limiting conditions in Section 5.

# SECTION 5 MODESTO-CA INSTRUCTIONS AND METHODOLOGY

## 1. Employment

The “1. Employment” worksheet (Section 1) contains employment data for the metropolitan area, including total nonfarm employment and growth, as well as employment and growth by NAICS Supersector, a categorization of employment that recently replaced the SIC code classification.

**Table E-1** in the “1. Employment” worksheet (Section 1) displays current and historical total nonfarm employment and growth for the metropolitan area. **Chart E-2** below this table exhibits annual employment growth from 1985<sup>1</sup> (market history varies) to present. **Chart E-4** below shows the annual employment growth rate from 1985<sup>1</sup> to present. <sup>1</sup>History varies by market.

**Table E-3** displays current employment and employment growth by NAICS Supersector. Total employment by Supersector is displayed in **Chart E-5** at the bottom-left of the sheet, and the employment growth by Supersector over the last 12 months is displayed in **Chart E-6** to the right. The distribution of employment by Supersector for the metro is charted against the distribution for the entire U.S. in **Chart E-7** on the bottom-right of the sheet.

### Methodology:

#### **BLS Methodology**

The employment data is provided by the Bureau of Labor Statistics (BLS). The payroll employment data refers to persons on establishment payrolls who receive pay for any part of the month, except for Federal Government employment, persons who were on the payroll but who were not occupied positions on the last day of the month. Persons are counted at their place of residence. Those appearing on more than one payroll are counted only once. Individuals who are self-employed and do not have a payroll are not counted in this survey.

The BLS employment data is based on a survey of a sample of establishments that employ approximately 40% of all non-farm workers. In our survey, we focus on employment at large, established companies.

One limitation of the BLS method is that employment data is partitioned by employer address. This can create a miscount when an employer relocates from one region to another in the middle of the year. Since the BLS partitions employment data based on the employer's address at the beginning of the year, employment for the employer's previous region will be overstated, while employment in the employer's new region is understated.

Labor force (Total Employment) and unemployment estimates are based on telephone surveys of individuals at their place of residence. This survey includes all employed people, including self-employed people. We are displaying the Total Employment data beginning in 2000 due to BLS methodology changes. This data has historically been considered less reliable than the Payroll data, yet it is gaining more credibility since more of the job growth is coming from small companies and self-employed people.

Every six months the BLS will restate history, and at any given point the previous twelve months of data is subject to revision.

More information on BLS methodology can be found on the BLS website: <http://www.bls.gov>.

#### **Employment by Sector:**

The 10 sectors for which we provide data are “Supersectors” defined by the North American Industry Classification System (NAICS), which replaced the now obsolete Standard Industrial Classification (SIC) system. Total nonfarm employment is defined as the sum of these 10 Supersectors. More information on the NAICS system can be found at the official U.S. Government NAICS website: <http://www.census.gov/epcd/www/naics.html>.

## 2. Permits


The “2. Permits” worksheet (Section 2) is interactive and allows you to view permit history for the metropolitan area as well as detail down to county and city/place level.

### Instructions:

**Table P-1** and **Chart P-2** in the “2. Permits” worksheet display the permit history for the entire metropolitan area.


**Table P-3** and **Chart P-4** display permit history for the selected county. You may select any of the counties within the metropolitan area.

How to select a county:

- 1) Click on  in the cell within the county row. This will open a window with a list of counties.
- 2) Highlight the desired county.
- 3) Click OK.

**Table P-5** and **Chart P-6** display permit history for the selected city/place. You may select any of the cities within the metropolitan area.

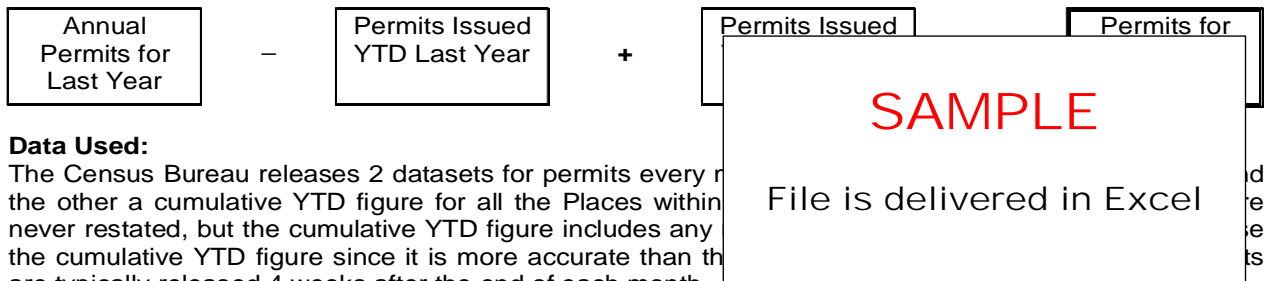
How to select a city:

- 1) Click on  in the cell within the place name row. This will open a window with a list of cities.
- 2) Highlight the desired city.
- 3) Click OK.

### **Methodology:**

#### **Current Year and Prior Year-to-Date Calculation:**

There are 19,000+ permit offices called “places” throughout the country where builders go to get their permits. These places can be incorporated cities, Census Designated Places (CDPs), or unincorporated areas of a county. Some of these places don’t report to the Census Bureau throughout the year, and report only at year-end. We have factored this understatement into our permit calculations. We use the following formula to calculate permits for the last 12 months:



#### **Data Used:**

The Census Bureau releases 2 datasets for permits every month. One is a cumulative YTD figure for all the Places within the metropolitan area, but the cumulative YTD figure includes any revisions to the cumulative YTD figure since it is more accurate than the monthly figures which are typically released 4 weeks after the end of each month.

The Census Bureau also releases an annual figure incorporating all revisions. This dataset is typically released in May of the following year. These are the figures we use for permit history when available. Between the months of January and April (the time between year-end and the release of revised annual figures by the Census Bureau) we use the December cumulative YTD figure for the prior year’s annual total.

## **3. E/P Ratio**

E/P Ratio refers to the ratio of employment growth to building permits issued. **Table R-1** in the “3. E/P Ratio” worksheet (Section 3) shows historical E/P Ratios and their components (employment growth and total permits). The historical E/P Ratio is also shown in chart form in **Chart R-4**. The components of the ratio, employment growth and total permits are charted on **Chart R-2** and **Chart R-3**, respectively.

### **Methodology:**

The ratio of employment growth over permits issued (E/P Ratio) is a popular statistic that many use as a proxy of housing demand in comparison to supply. The theory is that new jobs create demand for new households. This ratio measures the demand for more housing, including apartments.

An E/P Ratio generally above 1 suggests that housing demand is healthy. It shows that job growth is outpacing the growth of the housing stock, as measured by permits issued.

An E/P Ratio generally below 1 is an indication that the growth of the housing stock is outpacing job growth. Supply is building without adequate demand, spurred by job growth, for consumption.

It is important to note that job growth and permits are not the only components of housing demand. There are many instances where housing demand is strong despite an E/P Ratio well below 1. The E/P Ratio is just one of many indicators of housing demand. We have a detailed demand model by life stage and price point if you are interested.

## 4. Affordability

Affordability is measured by John Burns Real Estate Consulting's Housing Cycle Barometer™ and presented in the "4. Affordability" worksheet (Section 4). A value of 0.0 represents the most affordable time in history, a value of 10.0 is the most expensive, and 5.0 is the median. **Section 4-2** shows historical values for the Housing Cycle Barometer™ for the given metro area. **Section 4-3** displays median single-family resale price history for the market. The chart in **Section 4-4** shows the median annual mortgage payment history on a median priced home. **Section 4-5** displays historical values for the housing costs / income ratio, with the 2 components of housing cost, mortgage payment and amortized down payment, displayed in 2 different colors. **Section 4-6** exhibits historical 30-year fixed mortgage rates.

### Calculations

For each metro market, we have collected and will continue to collect historical data since 1981 for

- Fixed, conforming U.S. mortgage rates as reported by Freddie Mac
- Median detached home prices as reported by DataQuick, Texas A+M or National Association of Realtors
- Historical Price Calculation; The reliable sources of data do not have all of the historical data we need, so we use the OFHEO Price Index from the date of last available data to determine what historical median prices were back to 1981. The OFHEO index is a highly reliable source of data that shows home price appreciation by quarter. The OFHEO index is based solely on homes that qualify for FNMA or Freddie Mac financing, so the OFHEO prices are lower than the median prices, but the appreciation rates are valid. The Index was 100 in Q1 of 1995. In some markets, even OFHEO history was not available in the early 1980s, so we used the same price appreciation rate as a nearby metro area or appreciation rates for similar data. Current prices in non-disclosure states are calculated using the median loan amount.
- Median household incomes as reported by Economy.com. sources can lag several years, so income data is subject to significant. Incomes used are 12-month rolling averages seasonal due to dividends, etc.

Using that data, we have calculated the ratio of Annual Housing Costs to 1981, assuming:

- A purchase of the median priced detached home at that time
- By a median income household
- Using a 20% down payment and an 80% mortgage at the prevailing U.S. fixed rate conforming mortgage rate at the time.

From time to time, historical data will be revised to reflect newly available information.

For the most recent calculations, we use the latest available data. Mortgage rate data is always current as of the date the report is produced. Home price data sometimes lags several months.

Annual housing costs are the addition of the annual mortgage payment plus 1/7th of the down payment. Since it is important to include the down payment as a housing cost, we have included 1/7th of the down payment as an annual housing cost, assuming that a typical buyer stays in the home 7 years. We are essentially amortizing the down payment over 7 years.

The Housing Cycle Barometer™ is then calculated using a scale from 0 - 10, with the following values:

- 0 is the least expensive time to buy a home (in relation to income) in each metro since 1981
- 5 is the median ratio of housing costs / income in each metro since 1981
- 10 is the most expensive time to buy a home (in relation to income) in each metro since 1981

## 5. Limiting Conditions

**Projections:** There will usually be differences between projected and actual results, and the differences may be material. We have no liability with respect to the achievement of any projections or forecasts.

**Errors and Omissions:** While we will strive to adequately collect all of the data and address all of the issues, it is your responsibility to identify errors and omissions in this report.

**Liability:** We assume no liability for anything in this report or for decisions made based on information in this report.

SAMPLE

File is delivered in Excel