

# **Is Now A Good Time To Buy A House?**

## California Housing Market Analysis



IBM Applied Data Science Capstone Presentation

# Executive Summary

## Introduction

## Objective

- To provide a comprehensive analysis of the current real estate market, empowering potential homebuyers to make informed decisions.

## Data Collection

- Utilizing data from trusted sources, including California housing report , Zillow and local MLS listings.
- Rigorous data cleaning and preprocessing to enhance the quality of our dataset.

## Exploratory Data Analysis

- Conducted an in-depth EDA, revealing critical insights into property prices, number of bedrooms, and more.

# Executive Summary

## Interactive Visual Analytics

- Utilized interactive dashboards for a user-friendly exploration of real estate data.

## Predictive Analysis

- Employed machine learning to predict property prices, providing a glimpse into future market trends.

## Key Findings

## Conclusion

- An informed answer to the pivotal question: "Is Now A Good Time To Buy A House?"

## Recommendations and Things to Consider

- Actionable advice for prospective homebuyers, considering both market conditions and individual preferences.

# Introduction

## **Business Problem: Is Now A Good Time To Buy A House?**

- Housing market has calmed down after pandemic
- Mortgage rates have increased significantly since then, making the mortgage not affordable anymore, but helping slow down demand
- Layoffs happen a lot in industries
- it's crucial to carefully consider whether now is the right moment to make one of the most significant investments of your life
- .

# Objectives

This report will explore the key factors that can help you decide whether it's the right time to purchase a house. We'll weigh the pros and cons and provide you with the insights you need to make an informed decision.

# Exploratory Data Analysis

We will consider market conditions, financial factors, and personal circumstances to answer the question: Is now a good time to buy a house?

# Data Collection and Data Wrangling Methodology

## Data Sources

- Collected data from multiple reliable sources to provide a comprehensive view of the real estate market.
- Primary data sources included:
  - Zillow: A trusted online real estate platform providing property listings and market trends.
  - MLS (Multiple Listing Service): A database used by real estate professionals, containing detailed property information.
  - Government Housing Reports: Official government publications and reports on housing and economic indicators.
  - <http://www.realestateapi.com/>
  - <https://www.rentcast.io/api>
  - The California Association of Realtor© September housing report
  - RedFin Report California

# Data Collection and Data Wrangling Methodology

## Data Gathering

- Web scraping was employed to extract the most up-to-date property listings from platforms like Zillow.
- MLS data was obtained through authorized access, ensuring the accuracy of property information.
- Government reports were retrieved from official websites and publications.

## Data Cleaning

- Extensive data cleaning was performed to address missing values, duplicates, and inconsistencies.



# **EDA and Interactive Visual Analytics Methodology**

# The Real Estate Landscape

# Home Prices for California Counties

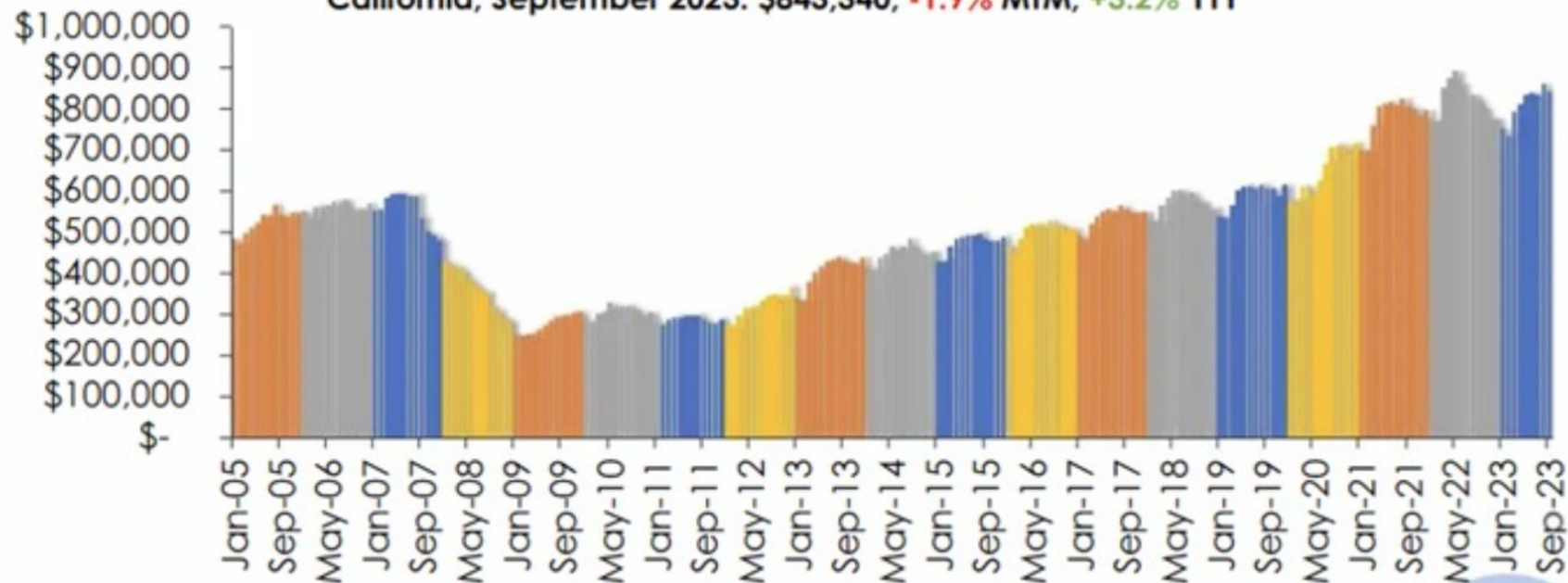
Based on the California Association of Realtor© September housing report, in the Bay Area, house prices rose 3.2% to a new median price of \$1,300,000. Sales however, continue to fall, this time by 9.6% from August. Sales are down 23.7% from last year.

September-23	Median Sold Price of Existing Single-Family Homes					Sales	
State/Region/County	Sep-23	Aug-23	Sep-22	Price MTM% Chg	Price YTY% Chg	Sales MTM% Chg	Sales YTY% Chg
CA SFH (SAAR)	\$843,340	\$859,800	\$817,150	-1.9%	3.2%	-5.4%	-21.5%
CA Condo/Townhomes	\$650,000	\$657,000	\$620,000	-1.1%	4.8%	-16.8%	-18.7%
Los Angeles Metro	\$780,000	\$792,500	\$750,000	-1.6%	4.0%	-10.7%	-20.8%
Central Coast	\$950,000	\$950,000	\$920,000	0.0%	3.3%	-6.3%	-20.8%
Central Valley	\$481,000	\$485,000	\$465,000	-0.8%	3.4%	-9.8%	-22.5%
Far North	\$385,000	\$369,000	\$379,740	4.3%	1.4%	-15.4%	-22.3%
Inland Empire	\$550,000	\$569,990	\$562,240	-3.5%	-2.2%	-12.8%	-24.8%
S.F. Bay Area	\$1,300,000	\$1,260,000	\$1,220,000	3.2%	6.6%	-9.6%	-23.7%
Southern California	\$820,000	\$830,000	\$783,380	-1.2%	4.7%	-12.4%	-21.7%

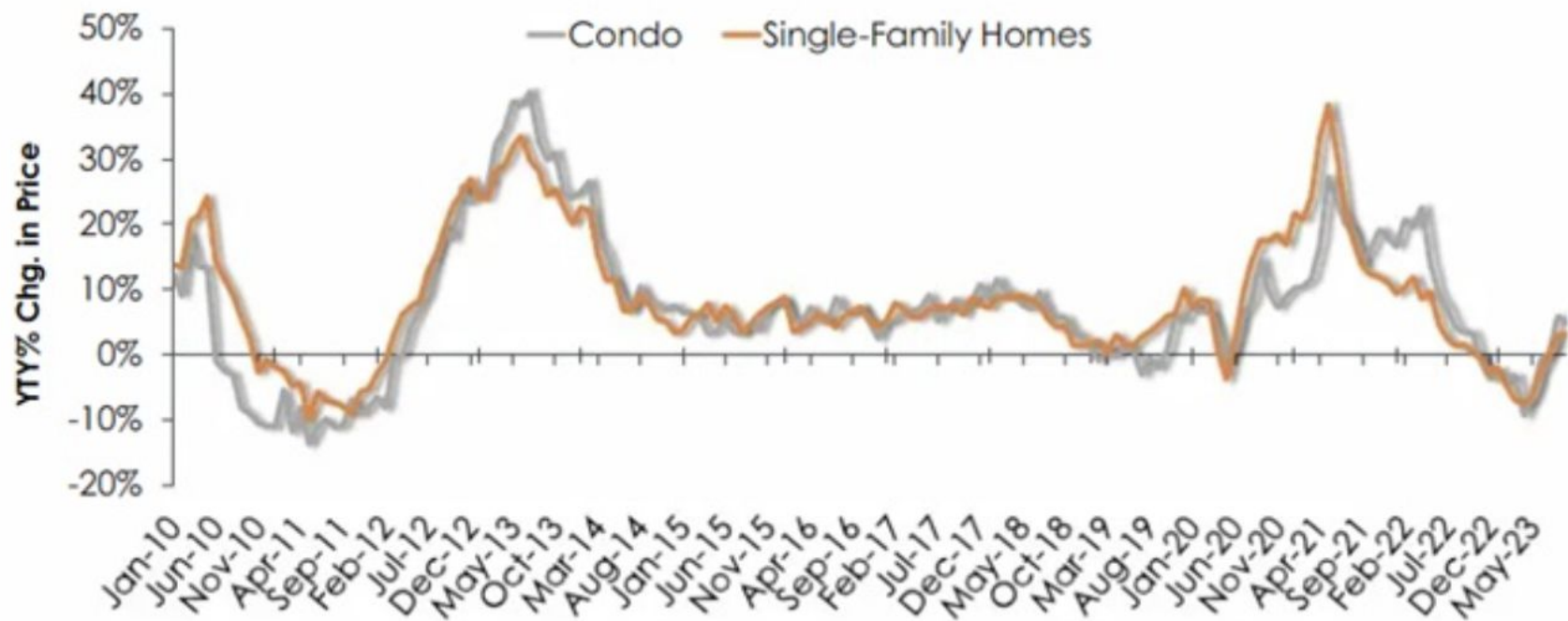
California Home Prices September 2023. Screenshot courtesy of CAR.

## California median home price increases modestly for 3<sup>rd</sup> month in a row

California, September 2023: \$843,340, -1.9% MTM, +3.2% YTY

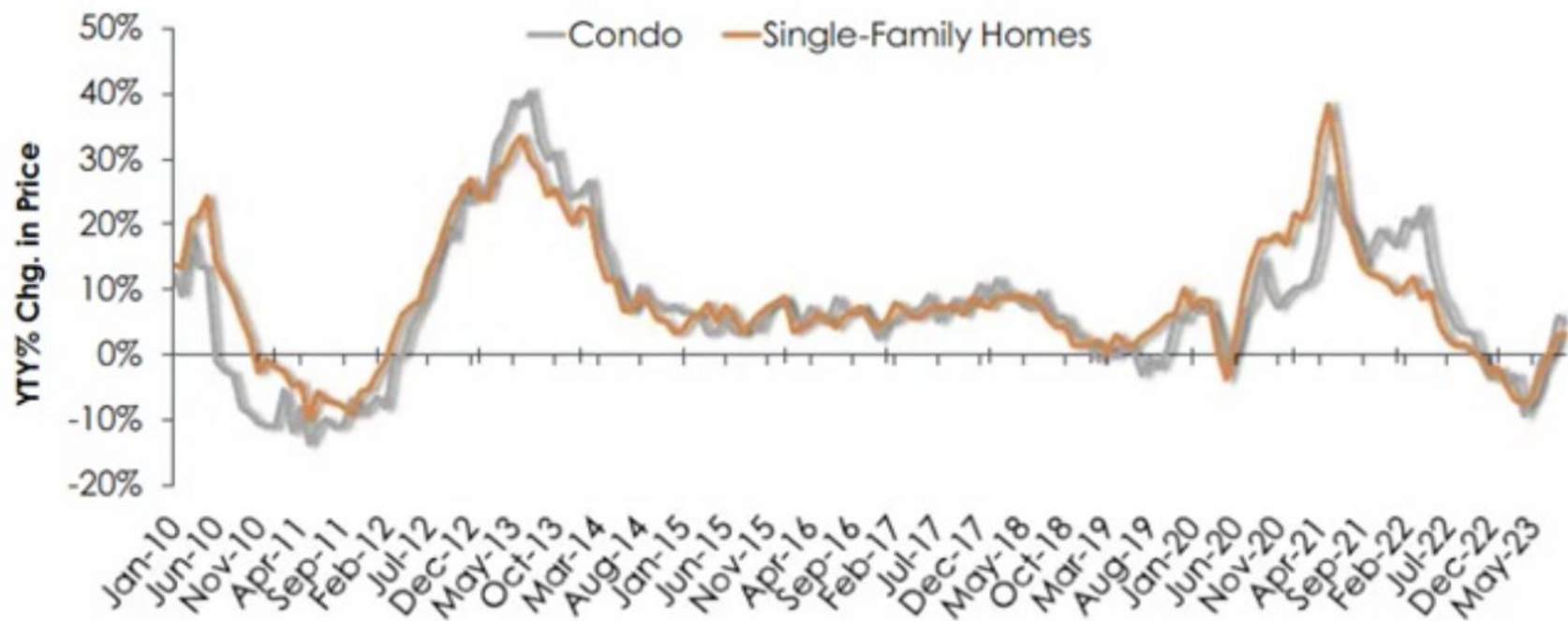


## Price growth for all property types continues upward trend



SERIES: Median Price of Existing SFH & Condo/Townhomes  
SOURCE: CALIFORNIA ASSOCIATION OF REALTORS®

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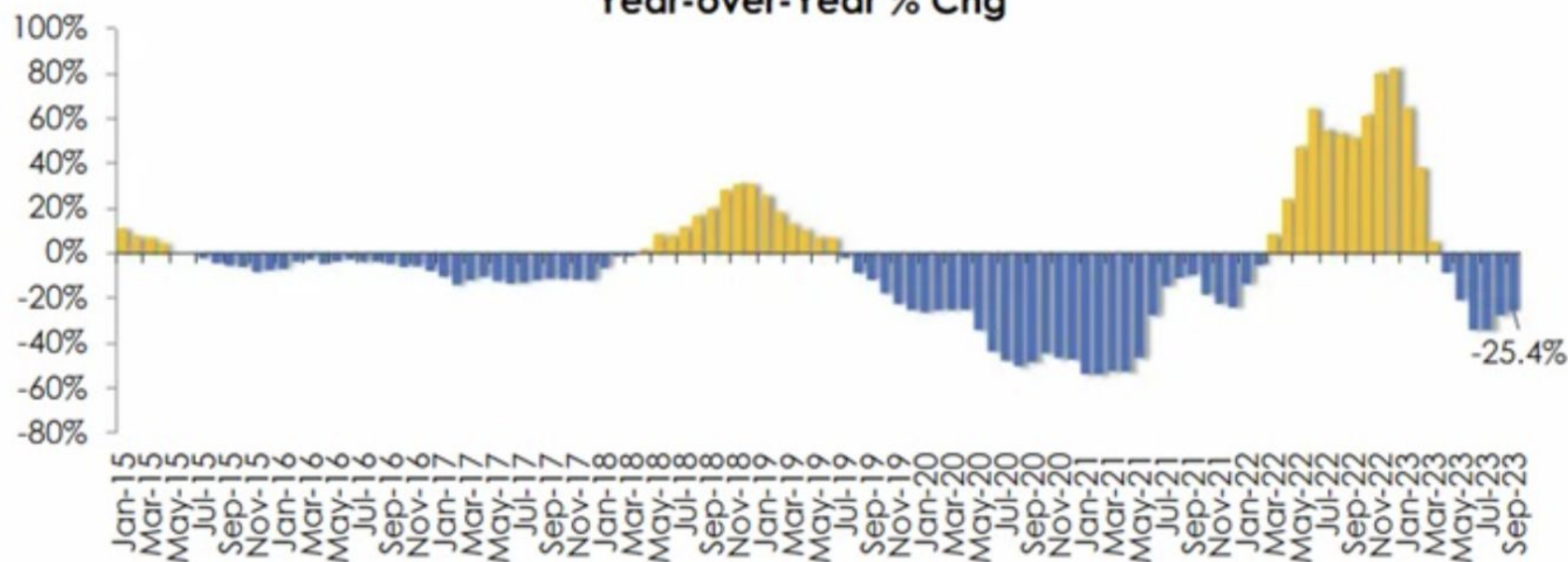


SERIES: Median Price of Existing SFH & Condo/Townhomes  
SOURCE: CALIFORNIA ASSOCIATION OF REALTORS®



## Active listings have remained below last year for sixth month in a row

### Year-over-Year % Chg





## Median Sale Price (Single Family Homes)

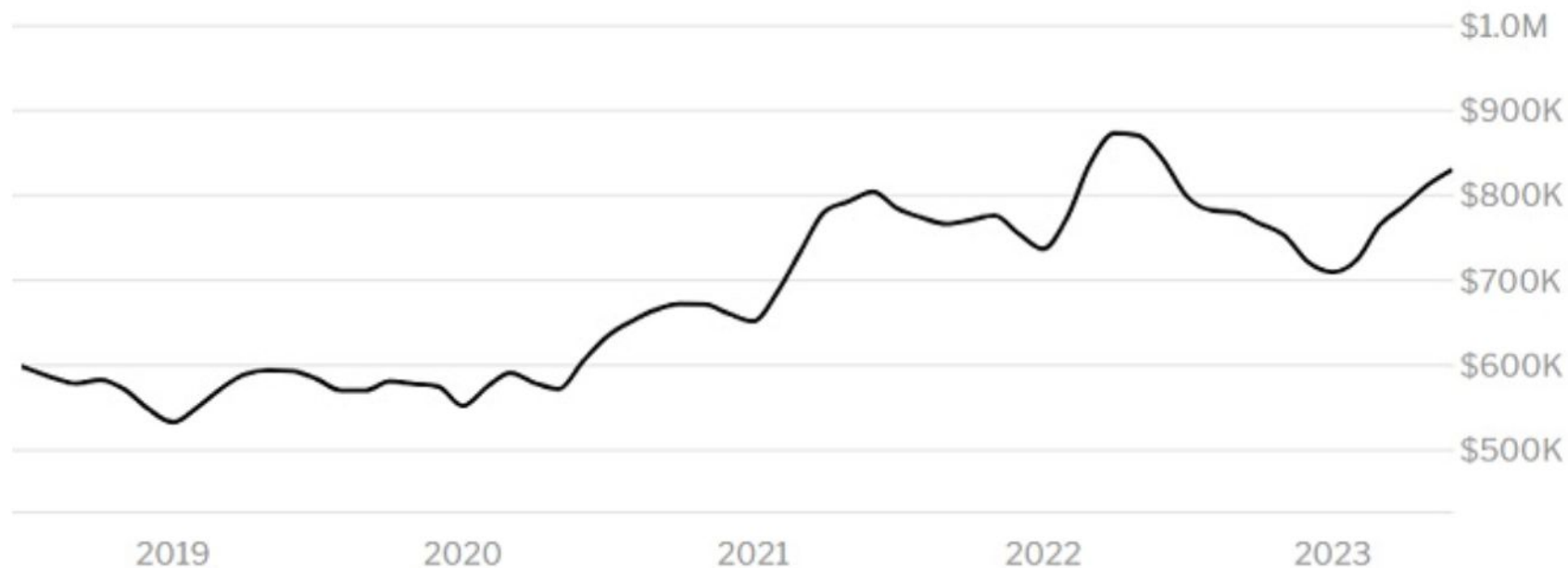
\$830,900

-1.4% YoY | Jun 2023

1y

3y

5y



Based on Redfin calculations of home data from MLS and/or public records.



### Top 10 Metros in California with the Fastest Growing Sales Price

1. Newport Beach, CA	14.8%	6. Dublin, CA	11.4%
2. Upland, CA	14.1%	7. Thousand Oaks, CA	11.4%
3. Irvine, CA	13.8%	8. Santa Monica, CA	10.7%
4. Laguna Woods, CA	13.5%	9. Hanford, CA	8.8%
5. Santa Maria, CA	12.8%	10. Huntington Beach, CA	8.0%

# California Rent Prices

Rank	1 Bedroom			2 Bedrooms			
	City	Price	M/M%	Y/Y%	Price	M/M%	Y/Y%
2	San Francisco, CA	\$3,000	3.4%	7.5%	\$3,950	-1.3%	7.0%
3	San Jose, CA	\$2,570	3.6%	19.0%	\$3,130	2.0%	15.9%
6	Los Angeles, CA	\$2,360	0.0%	18.0%	\$3,200	0.6%	16.4%
7	San Diego, CA	\$2,320	-6.1%	20.8%	\$2,910	-6.1%	14.6%
9	Santa Ana, CA	\$2,110	3.4%	24.1%	\$2,770	-3.5%	23.7%
10	Oakland, CA	\$2,100	2.4%	5.0%	\$2,800	1.1%	10.7%
14	Anaheim, CA	\$1,860	-2.6%	12.0%	\$2,470	-6.1%	22.3%
18	Long Beach, CA	\$1,710	-1.7%	6.2%	\$2,280	-5.0%	7.5%
24	Sacramento, CA	\$1,600	0.0%	8.8%	\$1,980	1.0%	7.6%
31	Fresno, CA	\$1,520	6.3%	25.6%	\$1,680	5.0%	15.1%
69	Bakersfield, CA	\$1,060	-1.9%	9.3%	\$1,380	0.7%	15.0%

# Predictive Analysis Methodology

	2017	2018	2019	2020	2021	2022	2023p	2024f
SFH Resales (000s)	424.9	402.6	398	411.9	444.5	342	266.2	327.1
% Change	1.7%	-5.2%	-1.2%	3.5%	7.9%	-23.1%	-22.2%	22.9%
Median Price (\$000s)	\$537.9	\$569.5	\$592.4	\$659.4	\$786.8	\$822.3	\$810.0	\$860.3
% Change	7.1%	5.9%	4.0%	11.3%	19.3%	4.5%	-1.5%	6.2%
Housing Affordability Index*	29%	28%	31%	32%	26%	19%	17%	17%
30-Yr FRM	4.0%	4.5%	3.9%	3.1%	3.0%	5.3%	6.7%	6.0%



# Market Predictions

Unexpectedly for most Realtors, homeowners and home sellers, the debt ceiling crisis may result in upward pressure on interest rates. If rates persist, it could deflate many of the optimistic projections for sales. And prices would likely still rise given the severe housing shortages.

# Will California Home Prices Fall in 2024?

The biggest factors for the housing market forecast:

- high-interest rates and mortgage rates
- home prices appear to be rising although not at the pace of 2022
- supply continues to weaken encouraging prices to rise
- tech sector uncertainty will weaken demand
- China's economic struggles will weigh on GDP and incomes
- exodus of residents and businesses to lower tax states

# Conclusion



## Is it a Good Time to Buy a Home in California?

- According to C.A.R.'s monthly Consumer Housing Sentiment Index, in April 2023, 59% of consumers said it was a good time to sell, up from 55% the previous. Only about 25% feel it is a good time to buy a home, unchanged from last year.
- It can be tricky to navigate the current housing market. But buying a home should be a decision based on your financial situation. Evaluate whether you're buying for the right reasons and determine if you and your budget are ready for this important milestone.

# Questions to ask yourself before shopping for a home

1. Why do I want a house?
2. How long will I be living in the area?
3. Am I financially ready?
  - Do you have an emergency fund?
  - Do you have credit card debt?
  - Are you contributing to your retirement account?
  - What is your credit score?

# Reference

- <https://www.cnbc.com/select/is-now-good-time-to-buy-house>
- <https://managecasa.com/articles/california-housing-market-report/>
- <https://fortune.com/2023/05/23/housing-market-home-price-prediction-by-zillow-2024-real-estate/>
- Zillow: A trusted online real estate platform providing property listings and market trends.
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