

HOME PRICE EXPECTATIONS SURVEY

Top-10 Rankings for 2022

1-Year Horizon (Dec 2022 / Dec 2021)				Benchmark: US ZHVI 10.77%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2022	Q2 2022	Q3 2022	Q4 2022
2022 Expectations	1	Marc Halle	Chief Investment Officer	10.00%	12.00%	11.00%	10.00%
	2	David Berson	Chief U.S. Economist	9.50%	9.90%	9.50%	10.80%
	3	Michael Moran	Chief Economist	10.00%	11.50%	13.00%	10.80%
	4	Issi Romem	Chief Economist	10.00%	9.50%	9.50%	10.00%
	5	Matthew Fienup / Dan Hamilton	Executive Director / Director of Economics	8.50%	10.10%	10.30%	10.00%
	6	Rajeev Dhawan	Director, Economic Forecasting Center	9.00%	10.40%	9.50%	9.30%
	7	Larry Roberts	Chief Economist	10.00%	10.00%	8.50%	12.00%
	8	Norm Miller	Hahn Chair of Real Estate Finance	7.50%	12.00%	10.50%	10.20%
	9	Joel Prakken	Chief U.S. Economist	9.90%	13.50%	9.00%	10.60%
	10	Donald Haurin	Professor of Economics, Finance, and Public Policy	11.10%	12.40%	13.00%	9.20%

2-Year Horizon (Dec 2022 / Dec 2020)				Benchmark: US ZHVI 32.46%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2021	Q2 2021	Q3 2021	Q4 2021
2021 Expectations	1	Stan Humphries / Svenja Gudell	Chief Analytics Officer / Chief Economist	19.11%	24.15%	31.13%	32.65%
	2	Alex Villacorta	ResiShares, LLC	15.02%	25.40%	31.01%	33.24%
	3	Steven Katz	Chief Investment Officer and EVP, Residential Financing	12.61%	32.16%	38.00%	34.40%
	4	Edward Pinto	Resident Fellow	18.81%	25.38%	26.03%	29.29%
	5	Carlos Garriga	Senior Economist	25.43%	29.38%	18.43%	23.19%
	6	Chris Stroud	Co-founder, Chief of Research	16.52%	23.51%	25.86%	34.48%
	7	James Smith	Chief Economist	13.62%	16.15%	27.93%	27.93%
	8	David Berson	Chief U.S. Economist	13.10%	19.81%	22.40%	29.48%
	9	Brian Wesbury / Robert Stein	Chief Economist / Senior Economist	12.54%	19.21%	23.78%	29.19%
	10	Donald Haurin	Professor of Economics, Finance, and Public Policy	12.35%	18.47%	24.02%	29.88%

*Presently, Humphries is Zillow emeritus and Gudell is Chief Economist at Indeed

2020 Expectations				Benchmark: US ZHVI 32.46%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2020	Q2 2020	Q3 2020	Q4 2020
1	John Silvia	CEO and Founder	Dynamic Economic Strategy	11.51%	16.74%	11.09%	5.47%
2	Jim Kleckley	Economic & Business Consultant	Independent	10.62%	9.78%	9.57%	12.89%
3	Raymond Hodgdon	CEO	Enlightened Economics	17.72%	4.35%	9.73%	10.46%
4	Barry Habib	CEO	MBS Highway	8.15%	10.77%	10.45%	10.46%
5	Amy Crews Cutts	Chief Economist	AC Cutts & Associates	8.63%	8.78%	9.83%	12.14%
6	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	10.25%	9.20%	11.30%	8.16%
7	Michael Englund	Chief Economist	Action Economics LLC	9.73%	8.99%	9.10%	10.56%
8	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	8.37%	9.20%	8.68%	11.72%
9	James Smith	Chief Economist	Parsec Financial Management	7.02%	8.26%	8.26%	13.62%
10	Stephen Stanley	Chief Economist	Amherst Pierpont Securities	9.52%	9.20%	9.20%	9.20%

2019 Expectations				Benchmark: US ZHVI 32.46%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2019	Q2 2019	Q3 2019	Q4 2019
1	Raymond Hodgdon	CEO	Enlightened Economics	14.17%	14.38%	15.56%	14.70%
2	Jim Kleckley	Economic & Business Consultant	Independent	11.82%	11.82%	11.04%	10.62%
3	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	11.30%	10.25%	10.25%	12.36%
4	Marsha Courchane	Director, Financial Economics	CRA International	11.09%	10.25%	10.67%	11.83%
5	Grant Thrall	President	Business Geography Advisors	11.30%	11.30%	13.10%	6.09%
6	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	9.20%	9.20%	12.63%	9.73%
7	John Silvia	CEO and Founder	Dynamic Economic Strategy	6.09%	10.25%	10.97%	13.21%
8	Don Rissmiller	Chief Investment Strategist	Strategas Research Partners LLC	7.12%	8.16%	10.25%	12.36%
9	Amy Crews Cutts	Chief Economist	AC Cutts & Associates	9.94%	9.94%	9.20%	8.78%
10	Michael Englund	Chief Economist	Action Economics LLC	9.10%	9.31%	9.31%	9.52%

2018 Expectations				Benchmark: US ZHVI 32.46%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2018	Q2 2018	Q3 2018	Q4 2018
1	Jim Kleckley	Economic & Business Consultant	Independent	12.84%	14.24%	11.78%	11.82%
2	Grant Thrall	President	Business Geography Advisors	8.99%	17.72%	14.76%	8.58%
3	Raymond Hodgdon	CEO	Enlightened Economics	12.25%	13.96%	6.50%	14.28%
4	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	12.89%	8.68%	12.89%	9.72%
5	Matthew Fienup	Economist, Economic Forecasting and Research Center	California Lutheran Univ. Ctr for Economic Forecasting & Research	8.26%	9.94%	11.62%	10.99%
6	Michael Englund	Chief Economist	Action Economics LLC	9.62%	10.35%	10.35%	9.10%
7	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	10.25%	8.16%	10.78%	9.73%
8	Paul Carrillo	Professor of Economics	George Washington University	8.16%	10.25%	10.25%	9.73%
9	Barry Habib	CEO	MBS Highway	8.06%	8.68%	9.26%	11.41%
10	Nathaniel Karp	Chief U.S. Economist	BBVA Research	6.61%	10.04%	13.21%	7.33%

HOME PRICE EXPECTATIONS SURVEY

Top-10 Rankings for 2022

3-Year Horizon (Dec 2022 / Dec 2019)				Benchmark: US ZHVI 43.47%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2020	Q2 2020	Q3 2020	Q4 2020
1	Jim Kleckley	Economic & Business Consultant	Independent	15.60%	14.61%	14.39%	21.70%
2	Raymond Hodgdon	CEO	Enlightened Economics	27.14%	7.48%	15.87%	15.10%
3	John Silvia	CEO and Founder	Dynamic Economic Strategy	17.31%	21.99%	16.09%	9.38%
4	Amy Crews Cutts	Chief Economist	AC Cutts & Associates	12.81%	13.35%	14.77%	19.88%
5	Michael Englund	Chief Economist	Action Economics LLC	15.21%	13.24%	13.79%	18.08%
6	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	16.87%	12.48%	16.87%	13.57%
7	James Smith	Chief Economist	Parsec Financial Management	12.26%	11.29%	11.29%	24.53%
8	Barry Habib	CEO	MBS Highway	14.21%	8.34%	16.75%	18.08%
9	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	12.59%	11.38%	14.11%	18.76%
10	Stephen Stanley	Chief Economist	Amherst Pierpont Securities	14.23%	10.84%	13.57%	17.06%

3-Year Horizon (Dec 2022 / Dec 2019)				Benchmark: US ZHVI 43.47%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2019	Q2 2019	Q3 2019	Q4 2019
1	Raymond Hodgdon	CEO	Enlightened Economics	22.16%	22.50%	24.58%	23.19%
2	Marsha Courchane	Director, Financial Economics	CRA International	17.76%	18.19%	17.31%	19.88%
3	Jim Kleckley	Economic & Business Consultant	Independent	19.10%	18.81%	17.42%	16.09%
4	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	17.98%	16.87%	16.87%	19.10%
5	Grant Thrall	President	Business Geography Advisors	18.53%	18.53%	21.13%	9.06%
6	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	14.12%	15.75%	19.38%	15.76%
7	Don Rissmiller	Chief Investment Strategist	Strategas Research Partners LLC	11.40%	13.57%	16.87%	19.10%
8	John Silvia	CEO and Founder	Dynamic Economic Strategy	12.56%	14.77%	12.75%	19.78%
9	Michael Englund	Chief Economist	Action Economics LLC	14.33%	14.66%	14.66%	15.10%
10	Carlos Garriga	Senior Economist	Federal Reserve Bank of St. Louis	14.99%	21.02%	8.21%	14.11%

3-Year Horizon (Dec 2022 / Dec 2019)				Benchmark: US ZHVI 43.47%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2018	Q2 2018	Q3 2018	Q4 2018
1	Jim Kleckley	Economic & Business Consultant	Independent	19.97%	22.41%	19.03%	19.10%
2	Grant Thrall	President	Business Geography Advisors	13.95%	29.49%	23.36%	13.46%
3	Raymond Hodgdon	CEO	Enlightened Economics	18.32%	22.50%	10.44%	21.93%
4	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	20.79%	14.11%	20.23%	15.21%
5	Matthew Fienup	Economist, Economic Forecasting and Research Center	California Lutheran Univ. Ctr for Economic Forecasting & Research	13.24%	15.76%	17.98%	16.98%
6	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	16.31%	13.57%	16.87%	15.76%
7	Douglas Holtz-Eakin	President	American Action Forum	14.11%	15.75%	16.84%	15.76%
8	Michael Englund	Chief Economist	Action Economics LLC	15.10%	16.42%	16.42%	14.23%
9	Paul Carrillo	Professor of Economics	George Washington University	12.49%	15.76%	15.76%	15.21%
10	Nathaniel Karp	Chief U.S. Economist	BBVA Research	10.87%	16.31%	21.25%	10.76%

4-Year Horizon (Dec 2022 / Dec 2018)				Benchmark: US ZHVI 48.72%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2019	Q2 2019	Q3 2019	Q4 2019
1	Raymond Hodgdon	CEO	Enlightened Economics	31.20%	31.45%	34.54%	32.06%
2	Marsha Courchane	Director, Financial Economics	CRA International	25.29%	27.64%	25.99%	28.87%
3	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	25.65%	23.88%	23.88%	27.44%
4	Jim Kleckley	Economic & Business Consultant	Independent	27.55%	26.53%	24.47%	21.32%
5	Grant Thrall	President	Business Geography Advisors	27.90%	27.90%	29.85%	11.90%
6	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	19.82%	21.54%	25.95%	21.55%
7	Michael Englund	Chief Economist	Action Economics LLC	20.28%	21.54%	21.54%	22.01%
8	Carlos Garriga	Senior Economist	Federal Reserve Bank of St. Louis	22.17%	30.09%	10.38%	21.52%
9	John Silvia	CEO and Founder	Dynamic Economic Strategy	20.67%	20.74%	15.23%	27.20%
10	Don Rissmiller	Chief Investment Strategist	Strategas Research Partners LLC	16.98%	19.25%	23.88%	22.67%

4-Year Horizon (Dec 2022 / Dec 2018)				Benchmark: US ZHVI 48.72%			
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:			
				Q1 2018	Q2 2018	Q3 2018	Q4 2018
1	Grant Thrall	President	Business Geography Advisors	18.91%	43.74%	33.23%	20.27%
2	Jim Kleckley	Economic & Business Consultant	Independent	27.62%	31.37%	27.35%	27.55%
3	Raymond Hodgdon	CEO	Enlightened Economics	25.06%	32.06%	14.86%	30.47%
4	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	29.85%	20.39%	28.64%	21.55%
5	Douglas Holtz-Eakin	President	American Action Forum	20.39%	23.28%	26.78%	22.71%
6	Matthew Fienup	Economist, Economic Forecasting and Research Center	California Lutheran Univ. Ctr for Economic Forecasting & Research	19.25%	22.59%	24.94%	23.53%
7	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	23.29%	19.81%	23.88%	22.71%
8	Michael Englund	Chief Economist	Action Economics LLC	21.32%	23.41%	23.41%	19.94%
9	Nathaniel Karp	Chief U.S. Economist	BBVA Research	15.75%	23.64%	30.34%	16.63%
10	Paul Carrillo	Professor of Economics	George Washington University	18.11%	21.55%	22.71%	22.12%

HOME PRICE EXPECTATIONS SURVEY

Top-10 Rankings for 2022

5-Year Horizon (Dec 2022/ Dec 2017)				Benchmark: US ZHVI				57.65%
Rank	Panelist	Title	Affiliation	Panelist Expectations, By Survey Edition:				
				Q1 2018	Q2 2018	Q3 2018	Q4 2018	
1	Grant Thrall	President	Business Geography Advisors	24.32%	58.11%	43.89%	27.73%	
2	Jim Kleckley	Economic & Business Consultant	Independent	35.84%	41.23%	36.90%	37.38%	
3	Raymond Hodgdon	CEO	Enlightened Economics	32.81%	42.62%	19.68%	40.12%	
4	Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	40.24%	27.61%	38.29%	28.60%	
5	Douglas Holtz-Eakin	President	American Action Forum	28.22%	31.91%	36.92%	30.68%	
6	Matthew Fienup	Economist, Economic Forecasting and Research Center	California Lutheran Univ. Ctr for Economic Forecasting & Research	26.28%	30.56%	33.56%	31.81%	
7	Nathaniel Karp	Chief U.S. Economist	BBVA Research	22.46%	32.42%	40.90%	24.92%	
8	Michael Englund	Chief Economist	Action Economics LLC	28.48%	32.05%	31.43%	27.73%	
9	Stacy Sirmans	Director	FSU Center for Real Estate Education & Research	30.69%	27.00%	31.31%	30.07%	
10	Paul Carrillo	Professor of Economics	George Washington University	24.61%	28.84%	30.07%	30.67%	

2018 Expectations

Ranking Eligibility

Panelists eligible for a 2022 ranking were those who participated in at least one of the four 2022 quarterly surveys AND in all four of the quarterly surveys that comprise a given year's set of expectations data (e.g., to be eligible for a 2022 award pertaining to expectations made in 2019, a panelist would have had to submit forecast data for each of the four quarterly surveys that Pulsenomics conducted in 2019).

Ranking Methodology

The expectations data submitted by eligible panelists for each of the four survey editions in each calendar year were compared to the actual (Q4/Q4, or Dec/Dec) home price percentage changes for the five time horizons that ended in 2022:

Time Horizon	Expectations Vintage(s)
2022 (1 year horizon)	2022
2021-2022 (2 year horizon)	2018, 2019, 2020, 2021
2020-2022 (3 year horizon)	2018, 2019, 2020
2019-2022 (4 year horizon)	2018, 2019
2018-2022 (5 year horizon)	2018

Rankings are based on a comparison of each panelist's expectations for home price changes to the actual change as measured by the smoothed, seasonally-adjusted Zillow U.S. Home Value Index ("ZHVI", the survey benchmark).

For each time horizon and expectations vintage, the sum of the absolute differences between (a) each of the four sets of quarterly expectations data submitted by eligible panelists in a calendar year and (b) the actual (Dec/Dec) percentage change in the applicable benchmark data was computed. These sums were then sorted in ascending order to generate rankings (i.e., the lowest sum represents the least average error/highest rank).