



**2022 CRYSTAL BALL AWARD WINNERS**

*In Recognition of Outstanding Performance in The Home Price Expectations Survey*

FIRST PLACE - OUTSTANDING PERFORMANCE			
Horizon	Year Expectations Were Formulated	Panelist	Affiliation
5 Year (2018-2022)	2018	Grant Thrall	Business Geography Advisors
	2019	Grant Thrall	Business Geography Advisors
4 Year (2019-2022)	2018	Raymond Hodgdon	Enlightened Economics
	2019	Raymond Hodgdon	Enlightened Economics
	2020	Raymond Hodgdon	Enlightened Economics
3 Year (2020-2022)	2018	Jim Kleckley	Independent Economic and Business Consultant
	2019	Raymond Hodgdon	Enlightened Economics
	2020	Jim Kleckley	Independent Economic and Business Consultant
	2021	Jim Kleckley	Independent Economic and Business Consultant
2 Year (2021-2022)	2018	Raymond Hodgdon	Enlightened Economics
	2019	Raymond Hodgdon	Enlightened Economics
	2020	John Silvia	Dynamic Economic Strategy
	2021	John Silvia	Dynamic Economic Strategy
1 Year (2022)	2022	Stan Humphries / Svenja Gudell	Zillow emeritus / Indeed
		Marc Halle	AFRE Capital, LLC

OUTSTANDING CONSISTENCY					
<i>For the 11 performance categories:</i>					
Number of #1 Rankings	Number of Top-3 Rankings*	Number of Top-5 Rankings*	Number of Top-10 Rankings*	Panelist	Affiliation
3	6			Raymond Hodgdon	Enlightened Economics
3	5	1		Jim Kleckley	Independent Economic and Business Consultant
2	2	3		Grant Thrall	Business Geography Advisors
	2	1	6	Stacy Sirmans	FSU Center for Real Estate Education & Research
		4	5	Mark Fleming	First American Financial Corporation
		1	8	Michael Englund	Action Economics LLC

\*Excludes number of placements in higher-rank categories

**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 2021 award pertaining to expectations made in 2018, a panelist would have had to submit forecast data for each of the four quarterly surveys that Pulsenomics conducted in 2018).

**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
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 Zillow U.S. Home Value Index.

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).