



HOME PRICE EXPECTATIONS SURVEY RESULTS: First Quarter 2018

Panelist	Title	Affiliation	Response Date	Estimated Home Price Performance (Dec/Dec)					Cumulative				
				2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Scott Anderson	Chief Economist	Bank Of The West	2/9/2018	5.00%	4.20%	3.90%	3.20%	2.90%	5.00%	9.41%	13.68%	17.31%	20.72%
Daniel Bachman	Senior Manager, U.S. Economics	Deloitte Services, LP	2/8/2018	5.40%	3.10%	2.50%	3.00%	3.20%	5.40%	8.67%	11.38%	14.73%	18.40%
Alex Barron	Founder & Senior Research Analyst	Housing Research Center	2/9/2018	4.00%	2.00%	1.00%	1.00%	1.00%	4.00%	6.08%	7.14%	8.21%	9.29%
Bob Baur	Chief Global Economist	Principal Global Investors	1/29/2018	6.50%	5.00%	2.00%	-1.00%	0.00%	6.50%	11.83%	14.06%	12.92%	12.92%
Nariman Behravesh	Chief Economist	HS Global Insight	2/9/2018										
Eli Beracha	Assistant Professor	Yishu International University	1/30/2018	3.00%	2.50%	2.50%	2.00%	2.00%	3.00%	5.58%	8.21%	10.38%	12.59%
David Berson	Chief Economist	Nationwide Insurance	2/8/2018	5.30%	4.30%	3.30%	3.00%	3.00%	5.30%	9.83%	13.45%	16.86%	20.36%
Vijay Bhasin	Chief Risk Officer	Essent U.S. Holdings	2/2/2018	4.00%	4.00%	4.00%	3.00%	2.00%	4.00%	8.16%	12.49%	15.86%	18.18%
Daren Blomquist	Senior Vice President	ATTOM Data Solutions	2/5/2018	3.60%	2.10%	-1.00%	-3.00%	-5.00%	3.60%	5.78%	4.72%	1.88%	-3.50%
Kathy Bostjancic / Gregory Daco	Head of U.S. Macro Investors Service / Head of U.S. Macroeconomics	Oxford Economics	2/7/2018	5.90%	4.50%	2.00%	3.50%	3.50%	5.90%	10.67%	12.88%	16.38%	20.92%
Mark Boud	Chief Economist	Metrostudy	1/29/2018	4.00%	2.00%	1.20%	-0.20%	-1.50%	4.00%	6.08%	7.35%	7.14%	5.53%
Beth Ann Bovino	Chief U.S. Economist	Standard & Poor's	2/9/2018										
Victor Calanog	Chief Economist	Reis, Inc.	1/29/2018										
Beata Caranci	Chief Economist	TD Bank Group	2/11/2018	5.30%	4.50%	3.80%	3.50%	3.50%	5.30%	10.04%	14.22%	18.22%	22.36%
Michael Carliner	Housing Economist	Independent Consultant	2/9/2018	4.50%	2.75%	2.75%	2.75%	2.75%	4.50%	7.37%	10.33%	13.36%	16.48%
Paul Carrillo	Professor of Economics	George Washington University	1/30/2018										
Sherwood Clements	Instructor of Real Estate	Culverhouse College of Commerce	2/5/2018	4.00%	3.50%	3.00%	3.00%	4.00%	4.00%	7.64%	10.87%	14.20%	18.76%
Mike Cosgrove	Principal	The Economist	2/2/2018	4.30%	3.50%	3.00%	2.80%	2.50%	4.30%	7.95%	11.19%	14.30%	17.16%
Marsha Courchane	Director, Financial Economics	CRA International	1/29/2018										
Kevin Cummins	Senior U.S. Economist	NatWest Markets	2/12/2018	4.50%	4.00%	4.00%	3.50%	3.00%	4.50%	8.68%	13.03%	16.98%	20.49%
Ralph DeFranco	Global Chief Economist	ARC Capital Services Inc.	2/9/2018	6.50%	6.50%	6.00%	3.00%	3.00%	6.50%	13.42%	20.23%	23.83%	27.55%
Rajeev Dhawan	Director, Economic Forecasting Center	Georgia State University	2/6/2018	7.30%	4.50%	3.60%	2.20%	4.50%	7.30%	12.13%	16.17%	18.72%	24.06%
John Dolan	President	Second Order Strategies, Inc.	2/9/2018	4.50%	3.50%	2.50%	2.00%	2.00%	4.50%	8.16%	10.86%	13.08%	15.34%
David Downs	Real Estate Finance Professor	Virginia Commonwealth University	2/8/2018	3.50%	2.75%	2.50%	2.75%	3.00%	3.50%	6.35%	9.00%	12.00%	15.36%
Doug Duncan	Chief Economist	Fannie Mae	2/2/2018										
Michael Englund	Chief Economist	Action Economics LLC	1/29/2018	5.90%	5.40%	5.00%	4.80%	4.60%	5.90%	11.62%	17.20%	22.83%	28.48%
Craig Evers	Economist	Brewan Howard	1/30/2018										
Gus Faucher	Chief Economist	The PNC Financial Services Group	1/30/2018	2.00%	1.67%	2.22%	2.41%	2.51%	2.00%	3.70%	6.01%	8.56%	11.29%
Christy Fields	Director, Real Estate Consulting	Pension Consulting Alliance, Inc.	2/9/2018	5.50%	5.00%	4.50%	4.00%	3.00%	5.50%	10.78%	15.76%	20.39%	24.00%
Matthew Flienup	Economist, Economic Forecasting and Research Center	California Lutheran Univ. Ctr for Economic Forecasting & Research	2/5/2018	5.90%	5.30%	4.60%	4.20%	3.90%	5.90%	11.51%	16.64%	21.54%	26.28%
Maria Fiorini Ramirez	Chief Executive Officer	MFR, Inc.	1/29/2018										
Mark Fleming	Senior Vice President, Chief Economist	First American Financial Corporation	1/30/2018										
James Gaines	Chief Economist	Texas A&M University Real Estate Center	2/8/2018	6.50%	6.00%	4.00%	3.00%	4.00%	6.50%	12.89%	17.41%	20.93%	25.76%
Bodhi Ganugali	Senior Economist	Dun & Bradstreet, Inc.	2/12/2018	2.70%	2.20%	2.00%	2.30%	2.50%	2.70%	4.96%	7.06%	9.52%	12.26%
Matthew Gardner	Chief Economist	Widemere Real Estate Company	2/5/2018	3.60%	3.30%	3.00%	3.20%	3.00%	3.60%	7.02%	10.23%	13.76%	17.17%
Carlos Garriga	Senior Economist	Federal Reserve Bank of St. Louis	2/9/2018	4.50%	2.00%	-1.00%	-1.00%	2.50%	4.50%	6.59%	4.46%	3.41%	6.00%
Timothy Ghnskey	Chief Investment Strategist	Iverness Counsel LLC	2/9/2018	6.00%	4.00%	2.00%	3.00%	4.00%	6.00%	10.24%	12.44%	15.82%	20.45%
Alex Grassino	Senior Analyst, Capital Markets and Strategy	Manulife Asset Management	2/8/2018										
Barry Habib	CEO	MBS Highway	4/7/2018	3.70%	3.70%	6.10%	3.80%	4.10%	4.70%	8.57%	15.20%	19.57%	24.48%
Marc Halle	Chief Investment Officer and Senior Portfolio Manager	PGIM Real Estate	2/12/2018	1.50%	1.50%	2.00%	3.00%	3.00%	1.50%	3.02%	5.08%	8.24%	11.48%
Donald Haurin	Professor of Economics, Finance, and Public Policy	Ohio State University	1/29/2018	5.90%	5.50%	5.00%	4.80%	4.60%	5.90%	11.72%	17.31%	22.94%	28.60%
Andrea Heuson	Professor of Finance	University of Miami	1/29/2018	6.00%	5.00%	5.00%	4.00%	4.00%	6.00%	11.30%	16.87%	21.54%	26.40%
Raymond Hodgdon	CEO	Enlightened Economics	2/9/2018	6.20%	5.70%	5.40%	5.70%	6.20%	6.20%	12.25%	18.32%	25.06%	32.81%
Douglas Holtz-Eakin	President	American Action Forum	1/31/2018	6.50%	5.50%	5.00%	4.50%	4.00%	6.50%	12.36%	17.98%	23.28%	28.22%
Timothy Hopper	Managing Director	Marcus Fund Advisors	2/2/2018	6.50%	6.00%	5.00%	4.00%	4.00%	6.50%	12.89%	18.53%	23.28%	28.21%
Stan Humphries / Aaron Terrazas	Chief Analytics Officer / Principal Economist	Zillow	2/5/2018	5.20%	4.00%	3.00%	3.20%	3.50%	5.20%	9.41%	12.69%	16.30%	20.37%
Brad Hunter	Chief Economist	HomeAdvisor	1/29/2018	3.50%	2.90%	3.10%	3.00%	3.10%	3.50%	6.50%	9.80%	13.10%	16.60%
Deniz Igan	Senior Economist	International Monetary Fund	2/5/2018										
Parul Jain	Chief Investment Strategist	MacroFin Analytics LLC	2/9/2018	3.00%	2.50%	2.30%	2.00%	2.00%	3.00%	5.58%	8.00%	10.16%	12.37%
Ken Johnson	Professor and Associate Dean	Florida Atlantic University College of Business	1/30/2018										
Thomas Julien	U.S. Economist	Natixis	1/29/2018	6.10%	3.20%	3.50%	3.50%	3.50%	6.10%	9.50%	13.33%	17.29%	21.40%
Nathaniel Karp	Chief U.S. Economist	BBVA Research	1/29/2018	5.80%	4.40%	4.00%	3.10%	3.40%	5.80%	10.46%	14.87%	18.43%	22.46%
Stephen Kim	Senior Managing Director, Head of Housing Research	Evercore/ISI	1/31/2018										
Jim Kleckley	Director, Bureau of Business Research	East Carolina University	2/3/2018	6.44%	6.38%	6.32%	6.26%	6.19%	6.44%	13.23%	20.39%	27.92%	35.84%
Jack Kleinhenz	Chief Economist	Kleinhenz & Associates, Inc.	2/4/2018	5.58%	4.00%	3.50%	3.25%	3.00%	5.58%	9.80%	13.65%	17.34%	20.86%
Sibel Korkmaz	Economist	AIG Global Economics	2/9/2018	5.60%	5.50%	5.40%	4.80%	4.40%	5.60%	11.41%	17.42%	23.06%	28.48%
Gerd-Ulf Krueger	Founder and Principal Economist	Krueger Economics	2/9/2018	8.00%	9.00%	4.00%	-2.00%	2.00%	8.00%	17.72%	22.43%	19.98%	22.38%
Peter Linneman	Founder and CEO	American Land Fund	1/29/2018										
Brendan Lawson	Principal, Macroeconomics and Housing	Forest Economics Advisors	2/5/2018	4.80%	4.60%	4.00%	4.00%	2.00%	4.80%	9.62%	14.01%	18.57%	20.94%
Stephen Lmepenzi	Professor, James A. Graaskamp Center for Real Estate	University of Wisconsin School of Business	2/9/2018	-3.00%	0.00%	3.00%	3.00%	3.00%	-3.00%	-3.00%	0.00%	2.91%	5.99%
Chris Mayer	Sr Vice Dean, Paul Milstein Professor of Real Estate	Columbia Business School	2/10/2018										
Bruce McCain	Chief Investment Strategist	Keybank	2/2/2018	4.00%	3.50%	4.00%	4.25%	4.50%	4.00%	7.64%	11.95%	16.70%	21.95%
James Meil	Principal, Industry Analysis	ACT Research	1/30/2018	5.20%	4.90%	4.10%	3.30%	3.30%	5.20%	10.35%	14.88%	18.67%	22.59%
Lynn Michaelis	President	Strategic Economic Analysis	2/3/2018	5.50%	3.00%	2.50%	2.00%	3.50%	5.50%	8.66%	11.38%	13.61%	17.59%
Norm Miller	Hahn Chair of Real Estate Finance	University of San Diego	2/3/2018	4.40%	2.00%	0.00%	0.50%	2.70%	4.40%	6.49%	6.49%	7.02%	9.91%
Michael Moran	Chief Economist	DaWa Capital Markets	2/5/2018	3.60%	3.00%	2.50%	2.50%	2.50%	3.60%	6.71%	9.38%	12.11%	14.91%
Joel Naroff	President	Naroff Economic Advisors Inc	2/8/2018	6.60%	4.70%	2.10%	0.00%	1.90%	6.60%	11.61%	13.95%	13.95%	16.12%
Mark Nielson	Economist	MacroEcon Global Advisors	2/9/2018	5.40%	4.80%	5.20%	4.40%	4.20%	5.40%	10.46%	16.20%	21.32%	26.41%
Gary Painter	Director of Research, Lusk Center for Real Estate	University of Southern California	2/2/2018	5.00%	5.00%	0.00%	-2.00%	-5.00%	5.00%	10.25%	10.25%	8.04%	2.64%
Michael Pento	President	Pento Portfolio Strategies LLC	2/2/2018	3.10%	-3.50%	-8.00%	1.10%	3.20%	3.10%	-0.51%	-8.47%	-7.46%	-4.50%
Lindsey Piegza	Chief Economist	Stifel Financial Corp.	2/5/2018	3.00%	2.50%	1.30%	-2.00%	2.00%	3.00%	5.58%	6.95%	4.81%	6.90%
Edward Pinto	Resident Fellow	American Enterprise Institute	1/30/2018	6.80%	6.50%	6.00%	5.00%	-3.00%	6.80%	13.74%	20.57%	26.59%	22.80%
Matthew Pointon	Property Economist	Capital Economics Ltd	2/7/2018	4.00%	0.00%	2.00%	2.00%	2.00%	4.00%	4.00%	6.08%	8.20%	10.37%
Douglas Poutasse	Head of Strategy and Research	Bentall Kennedy	2/9/2018	4.00%	0.00%	1.00%	3.00%	3.00%	4.00%	4.00%	6.08%	9.26%	12.54%
Lynn Reaser	Chief Economist	Point Loma Nazarene University	2/2/2018	5.00%	3.50%	3.00%	2.00%	1.00%	5.00%	8.67%	11.94%	14.71%	15.32%
Don Rissmiller	Chief Economist	Stratigas Research Partners LLC	2/12/2018										
Larry Roberts	Market Research Manager	Brookfield Residential	1/31/2018	5.00%	4.00%	2.50%	3.50%	4.00%	5.00%	9.20%	11.93%	15.85%	20.48%
Issi Romem	Chief Economist	Bulldozer	2/8/2018	4.00%	1.00%	2.00%	4.00%	4.00%	4.00%	5.04%	7.14%	11.43%	15.88%
Mitch Roschelle	Partner, US Real Estate Advisory Practice Leader	PwC	2/9/2018										
Kenneth Rosen	Chairman	Rosen Consulting Group	2/6/2018	4.80%	3.90%	4.00%	3.10%	2.80%	4.80%	8.89%	13.24%	16.75%	20.02%
Chris Rupkey	Chief Financial Economist	MUFG Union Bank	2/9/2018	6.00%	5.00%	4.00%	4.00%	4.00%	6.00%	11.30%	15.75%	20.38%	25.20%
John Ryding / Conrad DeQuardros	Chief Economist / Senior Economist	RDQ Economics	2/8/2018	5.00%	4.00%	3.00%	3.00%	3.00%	5.00%	9.20%	12.48%	15.85%	19.33%
Albert Saiz	Director	MIT Center for Real Estate	2/8/2018	3.00%	0.50%	-1.00%	0.00%	3.00%	3.00%	3.52%	1.44%	1.44%	4.49%
KC Sanjya	Senior Real Estate Economist	Axiometrics	2/6/2018	4.80%	3.10%	1.90%	2.80%	3.80%	4.80%	8.05%	10.10%	13.18%	17.49%
Andrew Schaffler	Director	Madison International Realty	1/29/2018	3.00%	1.00%	-2.00%	-6.00%	3.00%	3.00%	4.03%	1.95%	-4.37%	-1.29%
Edward Sella	Chief Housing Economist and Director, Mortgage Finance	Summit LLC	1/30/2018	6.00%	4.00%	3.00%	2.50%	2.00%	6.00%	10.24%	13.55%	16.39%	18.71%
Rick Sharga	Executive Vice President	Carrington Mortgage Holdings	1/29/2018	5.00%	3.50%	3.00%	3.00%	3.50%	5.00%	8.67%	11.94%	15.29%	19.33%
Stacy Sirmans	Director	FUSC Center for Real Estate Education & Research	2/8/2018	6.00%	6.00%	5.50%	5.00%	5.00%	6.00%	12.36%	18.54%	24.77%	30.69%
James Smith	Chief Economist	Parsons Financial Management	2/2/2018	6.30%	5.60%	4.90%	3.20%	3.70%	6.30%	12.25%	17.75%	21.52%	26.02%
Komal Sri-Kumar	President	Sri-Kumar Global Strategies, Inc.	2/8/2018	4.00%	-1.00%	3.00%	5.00%	3.00%	4.00%	2.96%	6.05%	11.35%	14.69%
Stephen Stanley	Chief Economist	Amherst Pierpont Securities	2/7/2018	5.70%	5.00%	4.50%	4.00%	4.00%	5.70%	10.99%	15.98%	20.62%	25.44%
Susan Sterne	Chief Economist	Economic Analysis Associates, Inc.	2/2/2018	4.50%	2.00%	3.20%	4.00%	2.10%	4.50%	6.59%	10.00%	14.40%	16.80%
Chris Stroud	Co-Founder, Chief of Research	HouseCanary	2/2/2018	5.00%	3.90%	2.80%	1.40%	0.70%	5.00%	9.09%	12.15%	13.72%	14.52%
Thomas Swift	Chief Economist	American Chemistry Council	1/30/2018	5.80%	5.00%	3.00%	0.00%	0.00%	5.80%	11.09%	14.42%	14.42%	14.42%
Alexis Tichity	Director of Office of Real Estate Research	University of Illinois at Urbana-Champaign	2/9/201										