



RESIDENTIAL
CAPITAL PARTNERS



AMERICAN
ASSOCIATION
of PRIVATE LENDERSTM



PAUL JACKSON
CEO & PRESIDENT

TED C. JONES, PhD
CHIEF ECONOMIST – SENIOR VICE PRESIDENT

THE 3 R's

OF REAL ESTATE AND THE ECONOMY



REINVENT

Vesper sushi place



RECHARGE



REIGNITE

Ted C. Jones, PhD
Chief Economist SVP

WEATHER
ON THE 15

10 SEASONS OF WISCONSIN

■ FALL (1 WEEK)

■ 1ST WINTER

■ 2ND FALL (1 WEEK)

■ 2ND WINTER

■ POLAR WINTER

✓ FAKE SPRING

■ 3RD WINTER

■ REAL SPRING

■ SUMMER

■ CONSTRUCTION

SHEROYGAN

6:53 37

SPECTRUM
NEWS

00

ICH SAYS EVEN THOUGH BE A SEXIST IF HE DOESN'T SUPPORT HER PROPOSALS. OPPONENTS SAY

LG

NAME A PLOW CONTEST

Plow Bunyan

**Duck Duck
Orange Truck**

**Ope, Just Gonna
Plow Right Past Ya**

Darth Blader

**The Truck
Formerly Known
As Plow**

**Plow
McPlowFace**

**Snowbi
Wan Kenobi**

**F. Salt
Fitzgerald**



6:15 46°





HOW MUCH WINE TO BUY

SUNDAY-MONDAY

Springfield







CHANGE ORDER
VIRGINIA BEACH, VA



2020
Year
of
the
Pandemic





COVID-19

2021
Year
of
the
Taco











2021
Year
Of
The
Taco

100 FREE TAGOS

WITH THE
PURCHASE
OF THIS HOME



INFOBOX

SIGNAL
Realtors

701-852-3505

#WeAreSignalRealtors

NATHAN STREMICK
Call 701-500-3890

FREE TACOS

WITH PURCHASE OF HOME

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CALL
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REALTOR ERIC MCKENNA

2021
Year
of
the
Taco

615

**Days Since
Pandemic
Commenced**

Takeaways 2021-2022

- Housing Highest Intrinsic Value Ever
- Accelerating Pre-Existing Trends
- Permanent Changes *66 Days Average*
- Refi is Wrapping Up.....
- Industrial & Multifamily BIG Winners
- Multifamily Record Sales Q3 2021

\$2.7

Trillion

**How Much More
Cash US Households
Have Today Vs
February 2020**



Ted C. Jones

@DrTCJ



Since the 1st of the year, apartment rents are up a “staggering” 13.8% with monthly gains of 2.5% & 2.1% in July & August, respectively per the Apartment List National Rent Report

While San Francisco rents are down 12% vs March 2020, Boise ID rents are up 39%

@ApartmentList

9:52 AM · Aug 31, 2021 · Twitter for iPad



DrTCJ



Ted C. Jones
@DrTCJ



Rents on newly signed apartment leases jumped 17% in July 2021 in the US up from what the prior tenant paid. This is up from a 14.6% gain year-over-year in June 2021 when occupancy rates hit 96,5% - matching the previous high in 2000

@AnalyticsRP
@bloomberg

8:19 AM · Aug 31, 2021 · Twitter for iPad



DrTCJ



Ted C. Jones

@DrTCJ

...

Though there are an estimated 3.5 million households behind on \$17 billion of rent (having been protected until the SCOTUS overturned the President's eviction moratorium), Goldman Sachs estimates that just 750,000 will be evicted by year end

@business

@GoldmanSachs

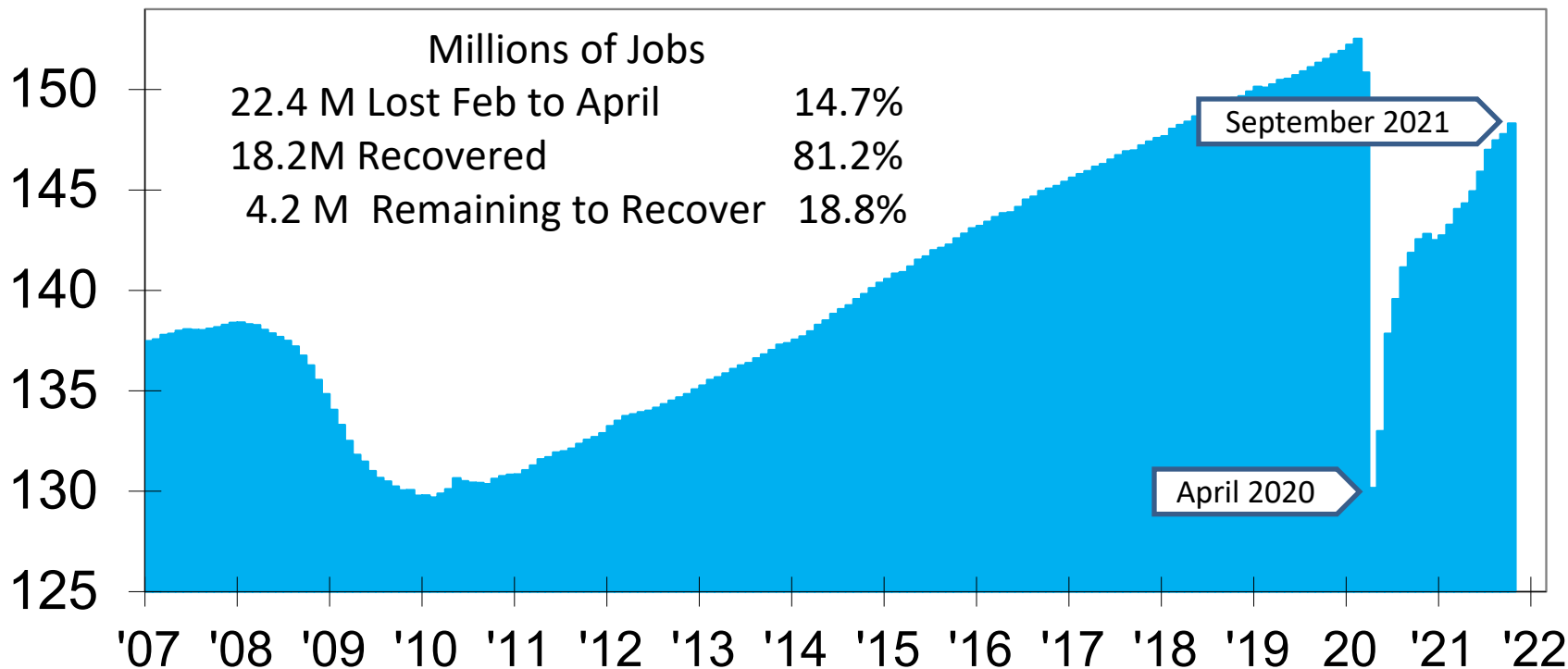
8:13 AM · Aug 31, 2021 · Twitter for iPad



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U.S. Jobs

Jobs (Millions) *Seasonally Adjusted*



Average Hourly Wages - All Employees

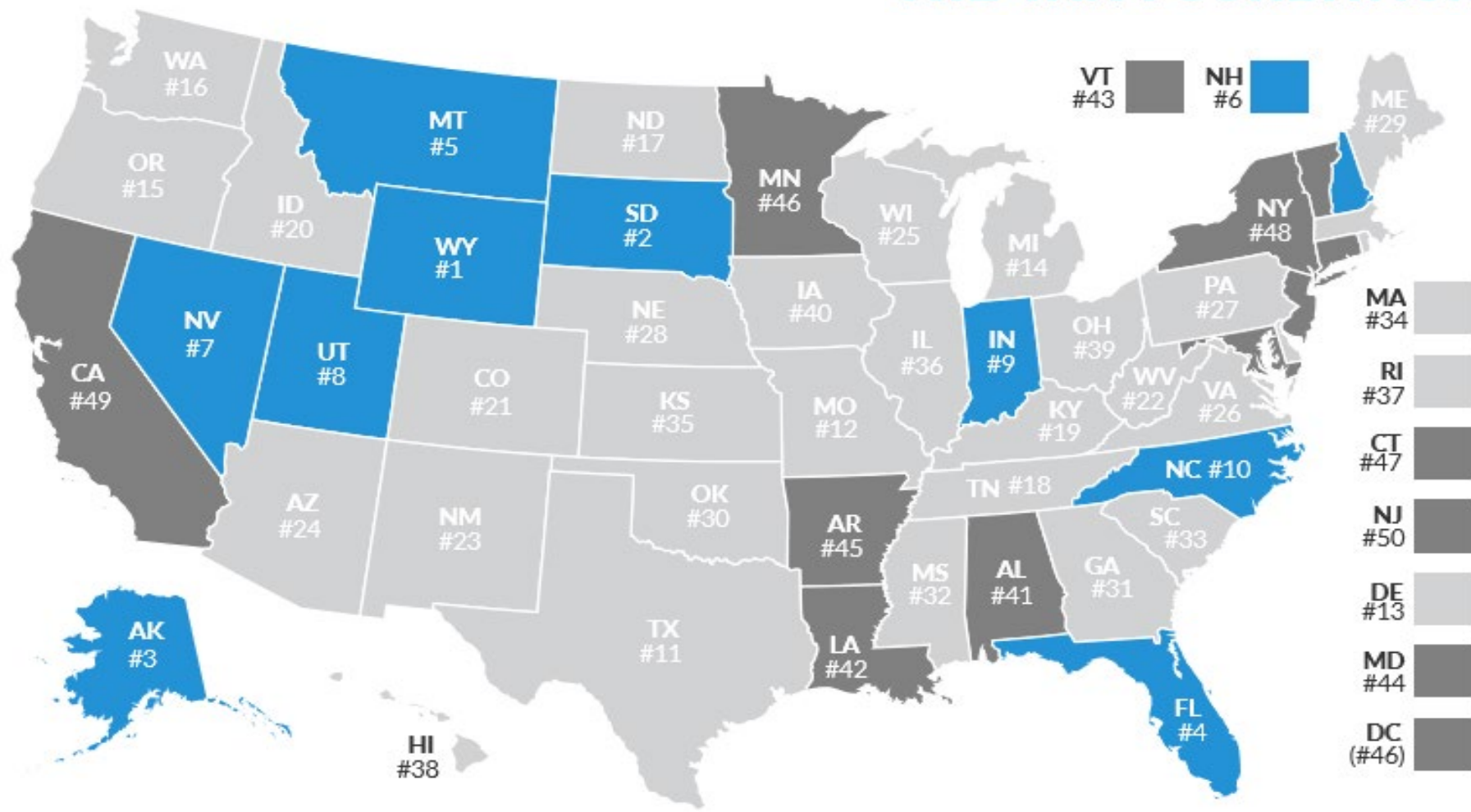
Seasonally Adjusted



Supersector	October			Percent Change	
	2019	2020	2021	2019 to 2021	2020 to 2021
Total	28.24	29.52	30.96	9.6%	4.9%
Mining & Logging	34.53	34.89	35.56	3.0%	1.9%
Construction	31.00	31.87	33.38	7.7%	4.7%
Manufacturing	27.93	28.86	30.15	7.9%	4.5%
Trade-Transport-Utilities	24.41	25.41	26.65	9.2%	4.9%
Information	42.38	44.77	44.55	5.1%	-0.5%
Financial Activities	36.21	38.66	40.57	12.0%	4.9%
Professional & Business Service	34.07	35.38	37.40	9.8%	5.7%
Education & Health Services	27.83	28.72	30.41	9.3%	5.9%
Leisure & Hospitality	16.71	17.12	19.04	13.9%	11.2%
Other	25.37	26.51	27.58	8.7%	4.0%

2021 State Business Tax Climate Index

THE TAX FOUNDATION



Change in Jobs - Februry 2020 to September 2021



Utah	3.0%	Colorado	-2.8%	Rhode Island	-5.3%
Idaho	1.5%	Kansas	-2.9%	Illinois	-5.4%
Arizona	-0.7%	Oklahoma	-3.0%	New Jersey	-5.4%
Texas	-0.9%	Iowa	-3.3%	North Dakota	-5.5%
South Dakota	-1.1%	Indiana	-3.3%	California	-5.6%
Montana	-1.3%	Kentucky	-3.8%	Wyoming	-5.7%
Nebraska	-1.4%	West Virginia	-3.9%	Massachusetts	-5.8%
Arkansas	-1.7%	Maryland	-3.9%	New Mexico	-5.8%
Georgia	-1.9%	Virginia	-4.0%	Pennsylvania	-5.9%
Tennessee	-1.9%	New Hampshire	-4.0%	Vermont	-5.9%
Alabama	-2.0%	Delaware	-4.0%	Michigan	-6.1%
Mississippi	-2.1%	Wisconsin	-4.0%	Dist of Columbia	-6.4%
South Carolina	-2.2%	Minnesota	-4.2%	Nevada	-6.5%
Washington	-2.2%	Maine	-4.4%	Alaska	-7.4%
North Carolina	-2.3%	Ohio	-4.5%	Louisiana	-8.8%
Florida	-2.3%	Oregon	-4.7%	New York	-8.9%
Missouri	-2.8%	Connecticut	-5.1%	Hawaii	-13.0%

Top Outbound 2020



1. New Jersey

2. New York

3. Illinois

4. Connecticut

5. California

6. Kansas

7. North Dakota

8. Massachusetts

9. Ohio

10. Maryland

<https://www.unitedvanlines.com/newsroom/movers-study-2020>

Top Inbound 2020



1. Idaho
2. South Carolina
3. Oregon
4. South Dakota
5. Arizona

6. Florida

7. North Carolina
8. Tennessee
9. Alabama
10. Arkansas

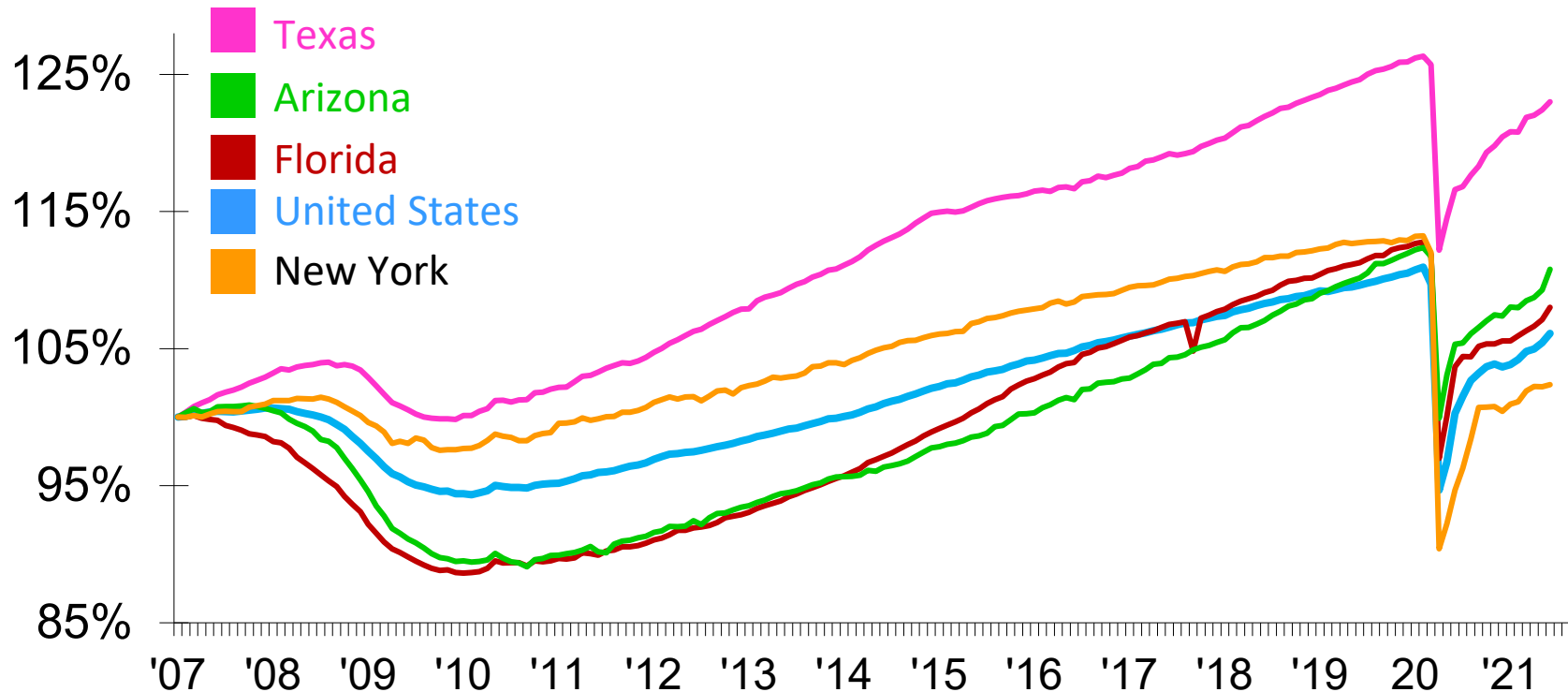
- 1 Wilmington NC
- 2 Sarasota-Bradenton FL
- 3 Boise ID
- 4 Huntsville AL
- 5 Ft Myers-Cape Coral FL
- 6 Knoxville TN
- 7 Melbourne-Titusville-Palm Bay FL
- 8 Austin-San Marcos TX
- 9 Nashville TN
- 10 Ft Collins-Loveland CO
- 11 Charleston SC
- 12 Santa Fe NM
- 13 Charlotte-Gastonia NC-SC

- 14 Phoenix AZ
- 15 West Palm Beach-Boca Raton FL
- 16 Daytona Beach FL
- 17 Fayetteville-Springdale AR
- 18 Portland-Vancouver OR-WA
- 19 Seattle WA
- 20 Grand Rapids MI
- 21 Boulder-Longmont CO
- 22 Jacksonville FL
- 23 Orlando FL
- 24 Greensboro-Winston Salem NC
- 25 Tampa-St Pete-Clearwater FL



Job Performance Relativity

January 2007 = 100 *Seasonally Adjusted*



U.S. Entered 2020 4.2 to 7.2 Million Dwellings Short

U.S. Net New Jobs and Newly Permitted Dwellings

Year	Single Family	Multif Family	Total New Dwelling Units	Net New Jobs	New Jobs Per Dwelling
2010	448,771	157,321	606,092	1,034,000	1.71
2011	420,737	205,887	626,624	2,074,000	3.31
2012	521,516	311,391	832,907	2,176,000	2.61
2013	625,225	370,090	995,315	2,301,000	2.31
2014	640,606	411,872	1,052,478	3,004,000	2.85
2015	696,000	486,584	1,182,584	2,720,000	2.30
2016	750,802	455,846	1,206,648	2,318,000	1.92
2017	820,133	462,001	1,282,134	2,175,000	1.70
2018	856,382	473,495	1,329,877	2,318,000	1.74
2019	862,299	523,970	1,386,269	2,011,000	1.45
Total			10,500,928	22,131,000	2.11

Ted's Metric
Need 1.25
to 1.5 Net
New Jobs
Per New
Dwelling
Unit

Florida is Different – Retirees Do Not Need a Job

Florida Net New Jobs and Newly Permitted Dwellings

Year	Single Family	Multi Family	Total New Dwelling Units	Net New Jobs	New Jobs Per Dwelling
2010	106,447	48,822	155,269	69,100	0.45
2011	118,702	48,333	167,035	102,900	0.62
2012	128,719	56,712	185,431	167,900	0.91
2013	156,852	56,715	213,567	212,200	0.99
2014	187,463	68,430	255,893	272,700	1.07
2015	207,939	77,919	285,858	298,600	1.04
2016	146,236	57,002	203,238	240,000	1.18
2017	70,030	32,521	102,551	167,900	1.64
2018	38,709	22,333	61,042	197,700	3.24
2019	26,636	8,693	35,329	184,800	5.23
Total			1,665,213	1,913,800	1.15

Florida Past
3 Years

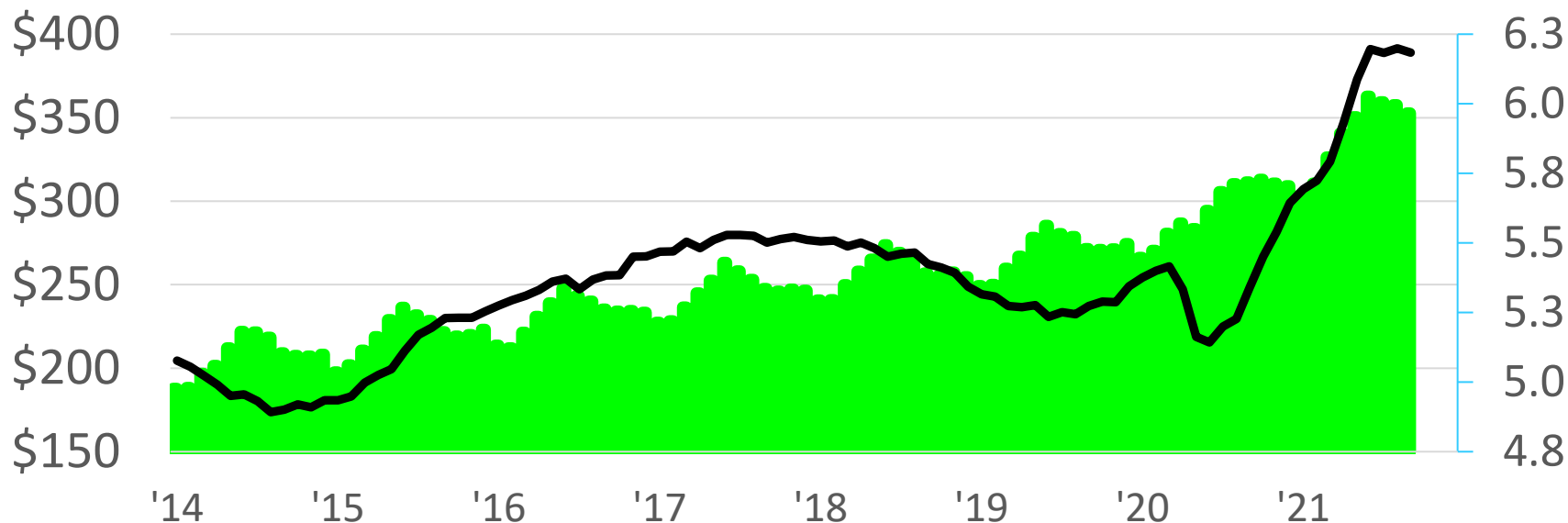
500,400 Jobs
198,900 Dwellings
2.8 Jobs Per
New Dwelling

49,700 to
99,500 Dwellings
Short

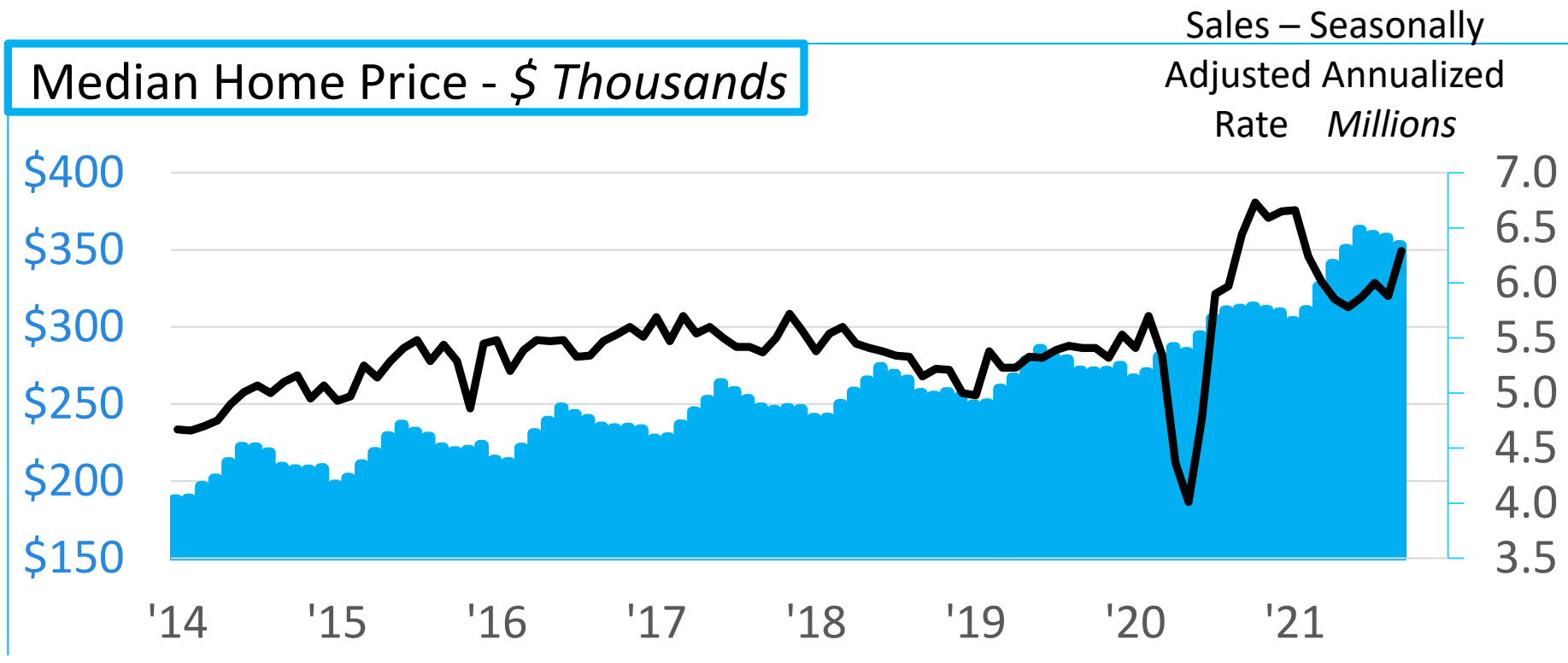
US Existing Home Sales & Median Prices

Median Home Price - \$ Thousands

Sales – Prior 12 Months *Millions*



US Existing Home Sales & Median Prices



U.S. Existing Single-Family Sales

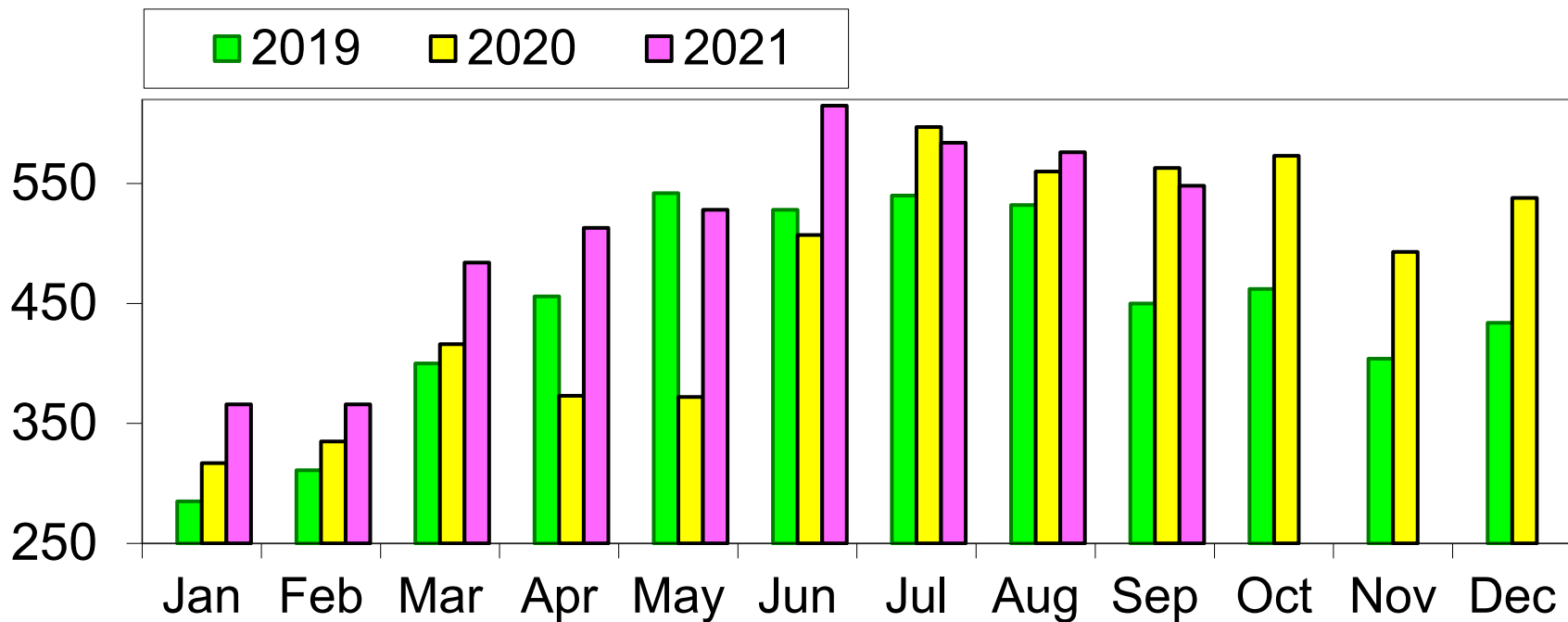
September 2021

Price Range <i>Thousands</i>	Sales Distribution	Change in Sales Vs September 2020	Median Days On The Market
\$0 to \$100	4.3%	-21.2%	19
\$100 - \$250	24.7%	-22.7%	9
\$250 - \$500	43.5%	3.0%	8
\$500 - \$750	15.8%	21.4%	11
\$750 - \$1 Million	5.8%	26.6%	12
Great than \$1 Million	5.9%	20.5%	15

Based on a Non-Seasonally Adjusted Sample

U.S. Existing Home Sales

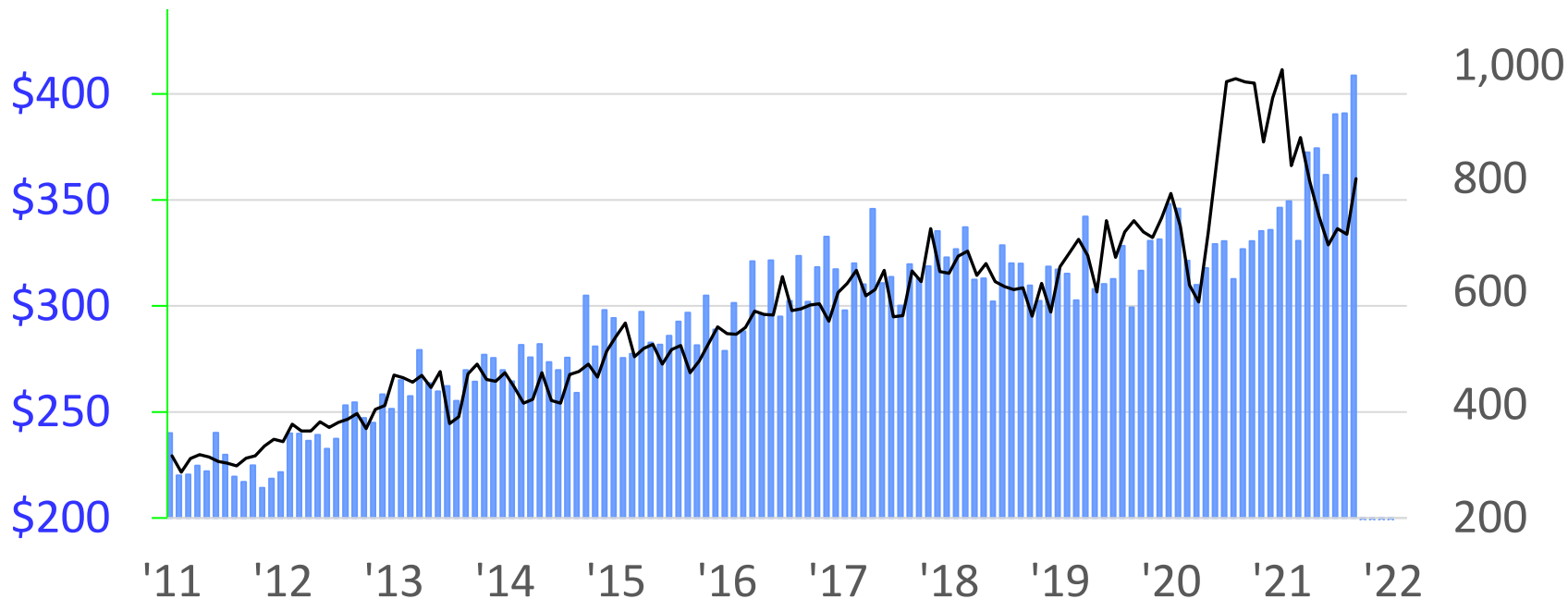
Monthly Sales – *Not Seasonally Adjusted* - Thousands



New Home Sales

Median Price - \$ *Thousands*

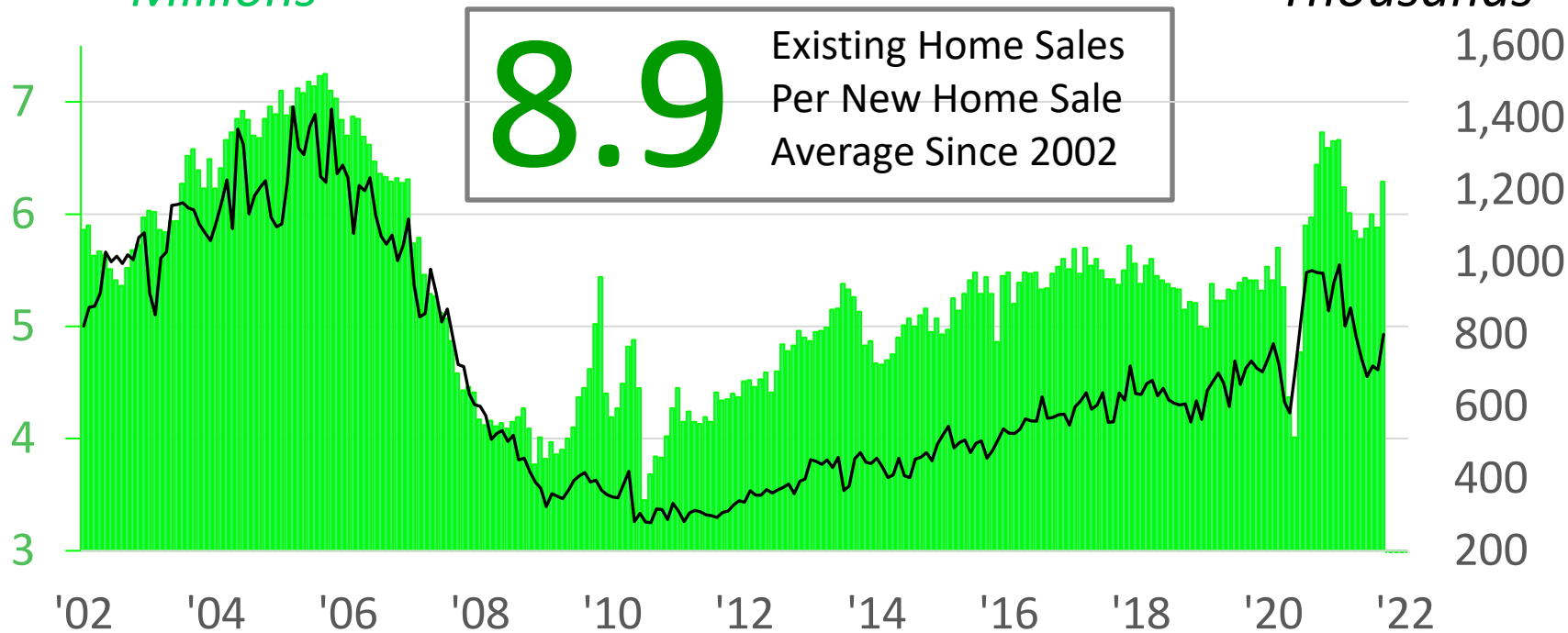
Sales – SAAR *Thousands*



New & Existing Home Sales

Existing Home Sales
Millions

New Home Sales
Thousands



Existing Home Sales Forecast

2021

Sales -- Thousands SAAR

	2020	2021	2022
Fannie Mae	5,640	5,977	5,642
MBA	5,678	6,074	6,423
Average	5,659	6,026	6,033

Percent Change - Year-Over-Year

Fannie Mae	5.6%	6.0%	-5.6%
MBA	6.5%	7.0%	5.7%
Average	6.1%	6.5%	0.1%

Existing Home Median Price Forecast

Median Price -- \$ Thousands

	2020	2021	2022
Fannie Mae	\$ 295.0	\$ 351.0	\$ 391.0
MBA	\$ 295.4	\$ 344.6	\$ 355.3
Average	\$ 295.2	\$ 347.8	\$ 373.2

Percent Change - Year-Over-Year

Fannie Mae	8.5%	19.0%	11.4%
MBA	7.6%	16.7%	3.1%
Average	8.0%	17.8%	7.3%

Residential Lending Forecast

Oct 2021

Purchase Lending \$ Billions

	2020	2021	2022	Percent Change Prior Year		
	2020	2021	2022	2020	2021	2022
Fannie Mae	\$1,572.0	\$1,851.0	\$2,012.0	18.6%	17.7%	8.7%
MBA	\$1,482.0	\$1,587.0	\$1,725.0	21.0%	7.1%	8.7%
Average	\$1,527.0	\$1,719.0	\$1,868.5	19.7%	12.6%	8.7%

Buy

Refinance Lending \$ Billions

	2020	2021	2022	2020	2021	2022
Fannie Mae	\$2,802.0	\$2,473.0	\$1,318.0	146.7%	-11.7%	-46.7%
MBA	\$2,625.0	\$2,259.0	\$ 860.0	155.4%	-13.9%	-61.9%
Average	\$2,713.5	\$2,366.0	\$1,089.0	150.8%	-12.8%	-54.0%

Refi

Total Lending \$ Billions

	2020	2021	2022	2020	2021	2022
Fannie Mae	\$4,374.0	\$4,324.0	\$3,330.0	77.7%	-1.1%	-23.0%
MBA	\$4,107.0	\$3,846.0	\$2,585.0	82.3%	-6.4%	-32.8%
Average	\$4,240.5	\$4,085.0	\$2,957.5	79.9%	-3.7%	-27.6%

Total

Purchase Lending - *Percent Change Prior Year*

	2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Fannie Mae	27.4%	43.6%	5.6%	4.6%	1.9%	10.2%	14.8%	6.1%
MBA	20.3%	27.8%	-3.5%	-8.0%	8.1%	7.0%	7.7%	12.3%
Average	24.0%	35.5%	1.3%	-1.5%	4.8%	8.6%	11.6%	8.9%

Refinance Lending - *Percent Change Prior Year*

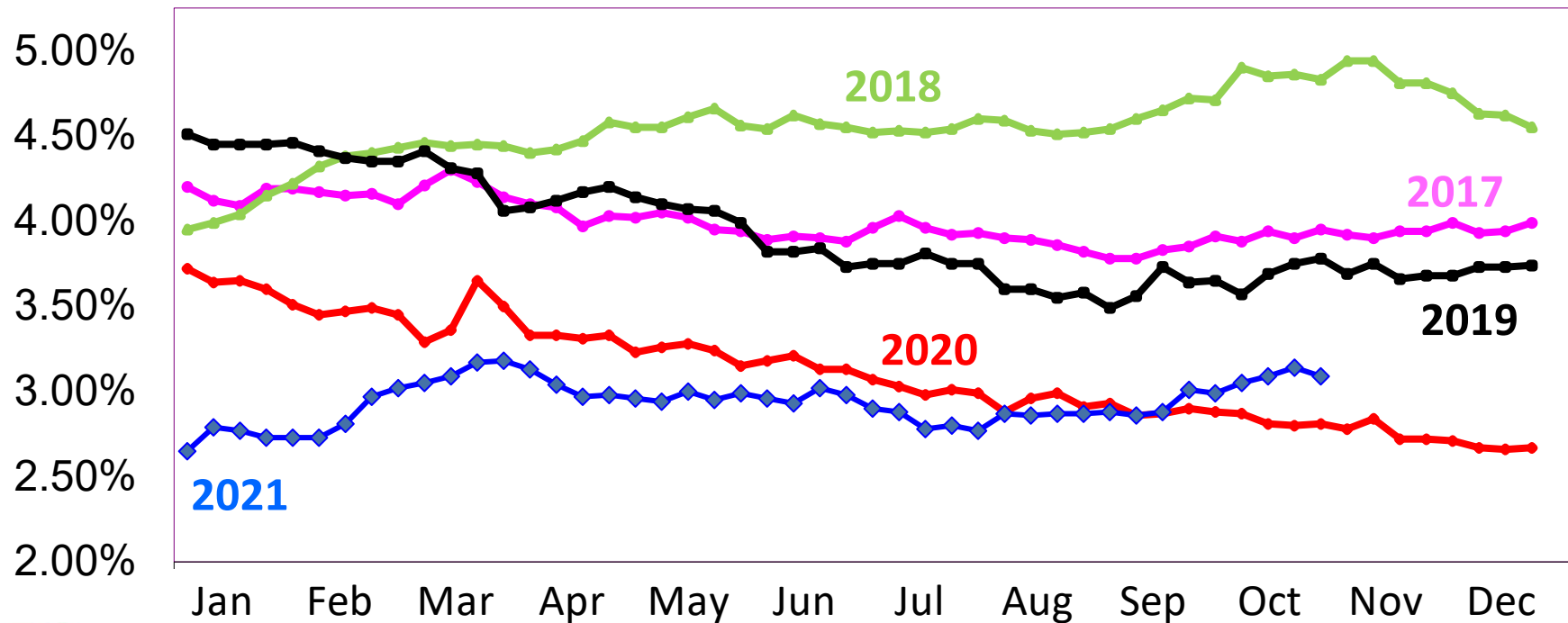
Fannie Mae	94.4%	-10.6%	-30.3%	-52.4%	-61.7%	-48.6%	-41.7%	-17.5%
MBA	131.0%	-7.2%	-30.7%	-57.7%	-60.3%	-65.3%	-64.8%	-56.5%
Average	110.1%	-9.0%	-30.5%	-55.2%	-61.0%	-56.6%	-52.6%	-37.0%

Total Residential Lending - *Percent Change Prior Year*

Fannie Mae	68.2%	7.1%	-16.9%	-32.1%	-42.8%	-22.9%	-15.0%	-4.6%
MBA	82.0%	5.4%	-20.5%	-42.2%	-40.3%	-33.6%	-31.8%	-22.3%
Average	74.4%	6.3%	-18.6%	-37.3%	-41.6%	-28.0%	-22.8%	-13.0%

30-Year Conventional Residential Mortgage Rates

Percent



Residential Interest Rate Forecast

Oct **2021**

30-Year Fixed-Rate Conventional Mortgages

	2019	2020	2021	2022
Fannie Mae	3.9%	3.1%	2.9%	3.3%
MBA	3.7%	2.8%	3.1%	4.0%
Average	3.80%	2.95%	3.00%	3.65%



Ted C. Jones

@DrTCJ



Since the Spring of 2020, the Federal Reserve has been buying \$120 billion per month of Treasury bonds-bills-notes & mortgage-backed securities to keep interest rates low & stimulate the economy. This will taper this year in an attempt to limit inflation

@USATODAYmoney

6:49 AM · Aug 30, 2021 · Twitter for iPad



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Ted's
Biggest
Long-Term
Concern

**Housing
Affordability
Top Concern**



Ted C. Jones
@DrTCJ



Affordability Issues

While US incomes rose 14.2% since 2010, US homes prices exploded up 153.3% in the same period. Other developed countries with greater home gains:

345.7% Israel
165.5% Switzerland
162.0% Germany

14.2%

Income

153.3%

Home Prices

@GlobeStcom
Money.co.uk

9:11 AM · Aug 31, 2021 · Twitter for iPad



DrTCJ

20% Down

Median Home Price Forecast

	Price Forecast		Monthly P&I Payment	
	Fannie Mae	MBA	Fannie Mae	MBA
2020	\$295,000	\$295,400	\$1,007.76	\$971.03
2021	\$351,000	\$344,600	\$1,168.77	\$1,177.20
2022	\$391,000	\$355,300	\$1,369.92	\$1,357.01

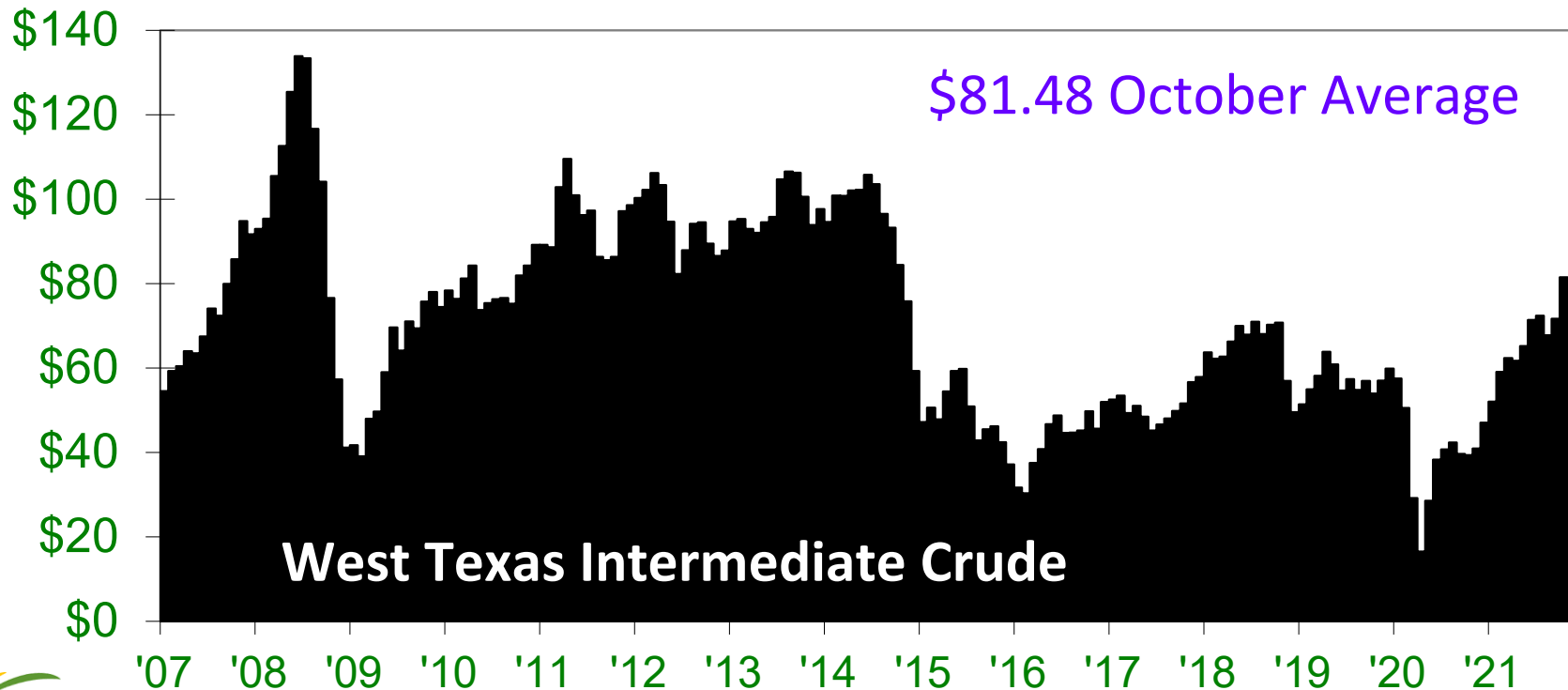
Interest Rate Forecast

	Rate Forecast		Monthly P&I % Change	
	Fannie Mae	MBA	Fannie Mae	MBA
2020	3.1%	2.8%	2020 to 2021	16.0%
2021	2.9%	3.1%	2021 to 2022	15.3%
2022	3.3%	4.0%	2020 to 2022	35.9%

Why It Is Going
To Take Years
To Recover All the
Jobs Lost & Why the Jobs
Report Missed *Ted's Opinion*

West Texas Intermediate Crude Oil Price

\$ Per Barrel



Oil Production, Prices & Oil Field Employment

	Average Barrels Per Day <i>Millions</i>	Average Price	Oil Field Jobs Total	Average Rig Counts	
2014	8.789	\$ 93.26	524	2014	1,400
2020	11.308	\$ 39.16	319	2020	335
Change	28.7%	-58.0%	-39.2%	-27.8%	-45.8%

Production +30% Price -60% Jobs -40%



Ted C. Jones

@DrTCJ

AI, Technology & Robotics

A 2020 survey by the World Economic Forum found that 43% of companies planned to reduce their workforce as a result of new technology. Since Q2 2020 business investment in new equipment is up 26%, 2X the growth rate of the economy

[@USATODAYmoney](#)

2:56 AM · Sep 8, 2021 · Twitter for iPad



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\$157

Billion

Credit Card Debt
Paid Off This Year
Thus Far

\$25

Billion

Decline in Credit Card
Interest Payments
In 2021

Minimum Wage Hike



\$15

Per Hour

“A \$15 minimum wage could lift 900,000 out of poverty — and cost 1.4 million jobs by 2025

Deficit Up \$54B



Congressional Budget Office

Nonpartisan Analysis for the U.S. Congress

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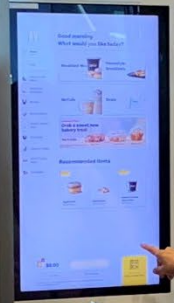
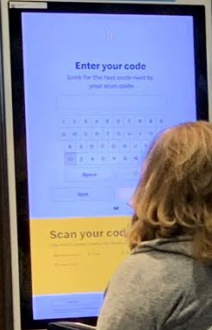
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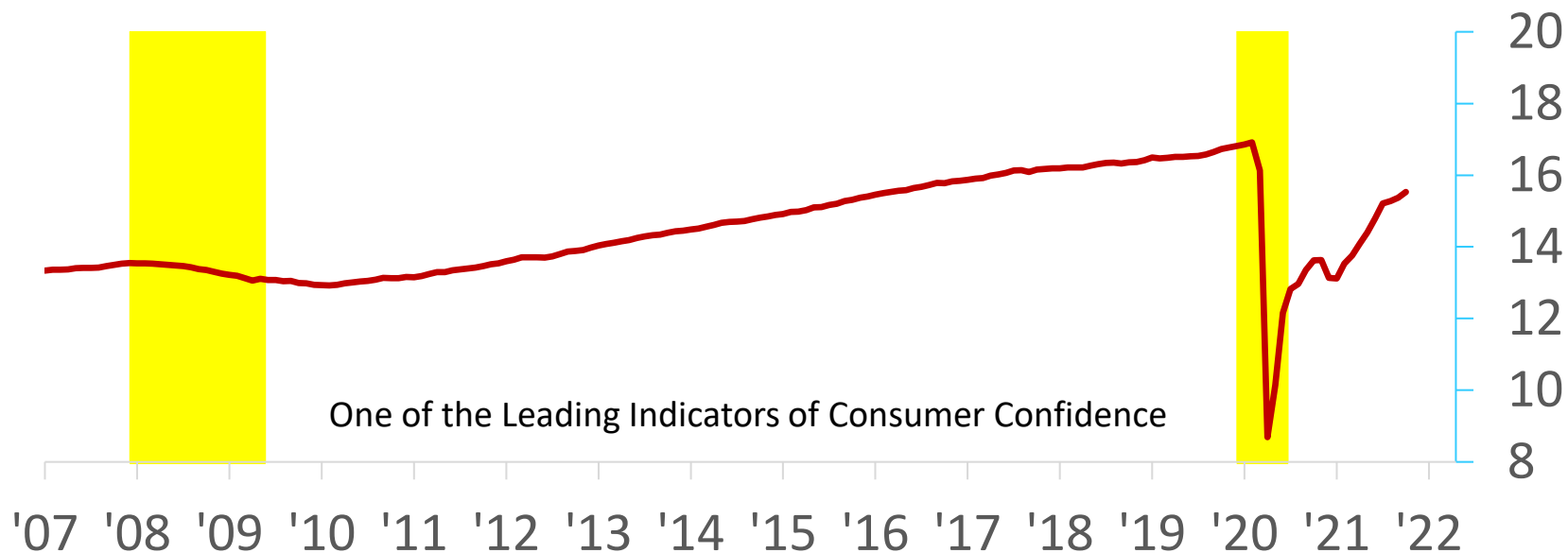


U.S. Leisure & Hospitality Employment



 Recession

Leisure & Hospitality Employment - *Millions*

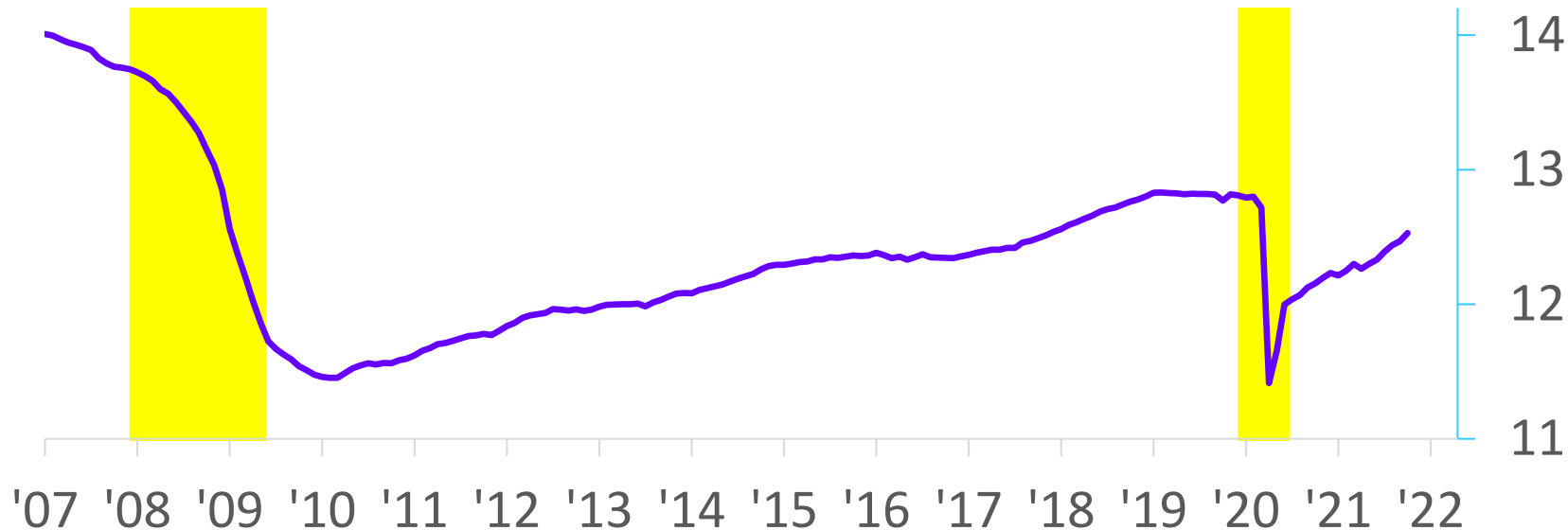


Manufacturing Employment



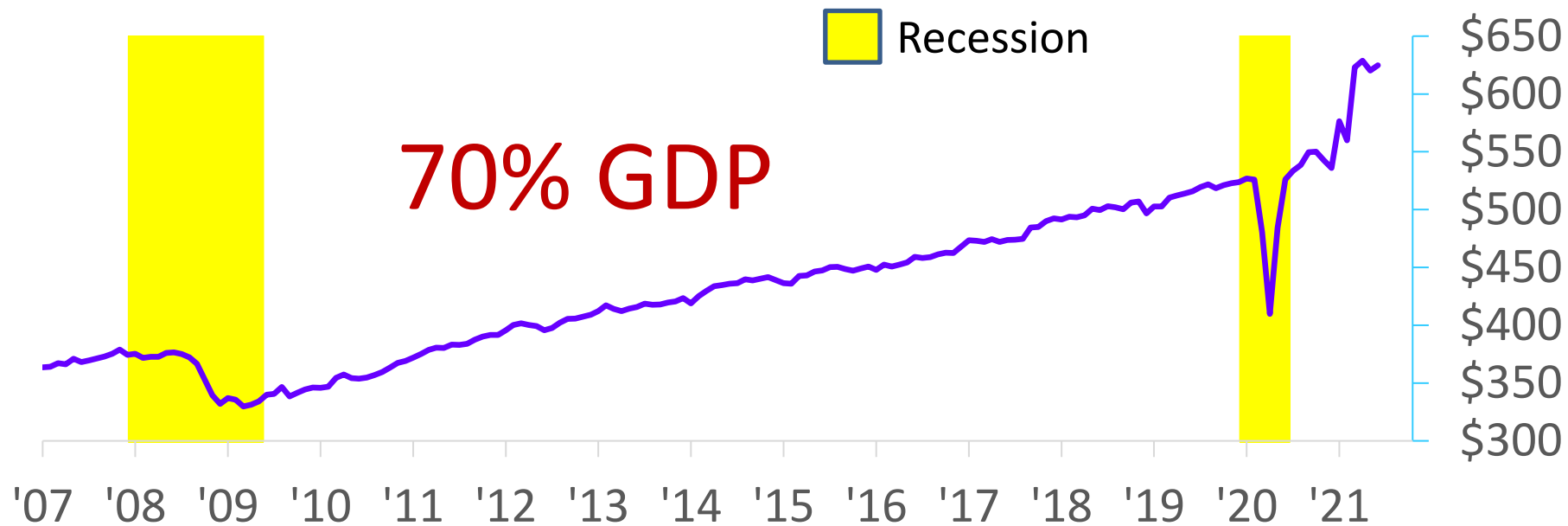
 Recession

Manufacturing Employment - *Millions*



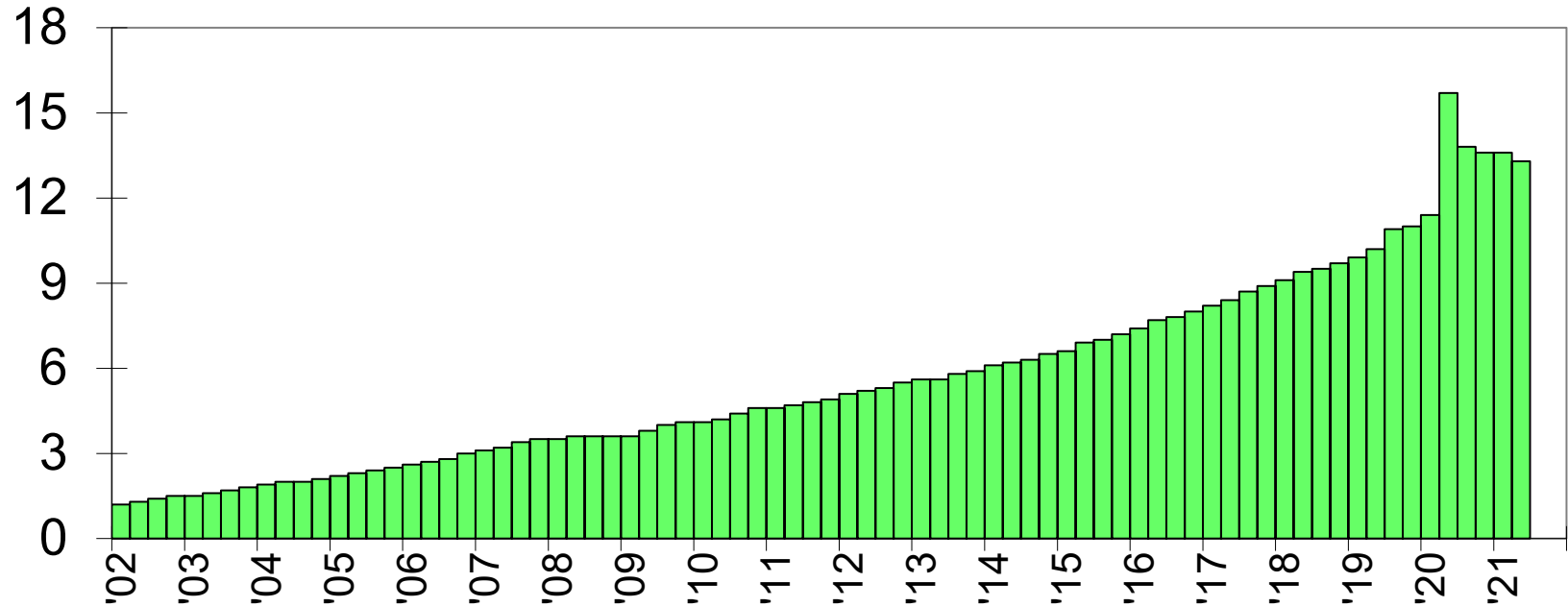
U.S. Real Retail & Food Service Sales

Retail Sales & Food Services – Seasonally Adjusted - *Billions*



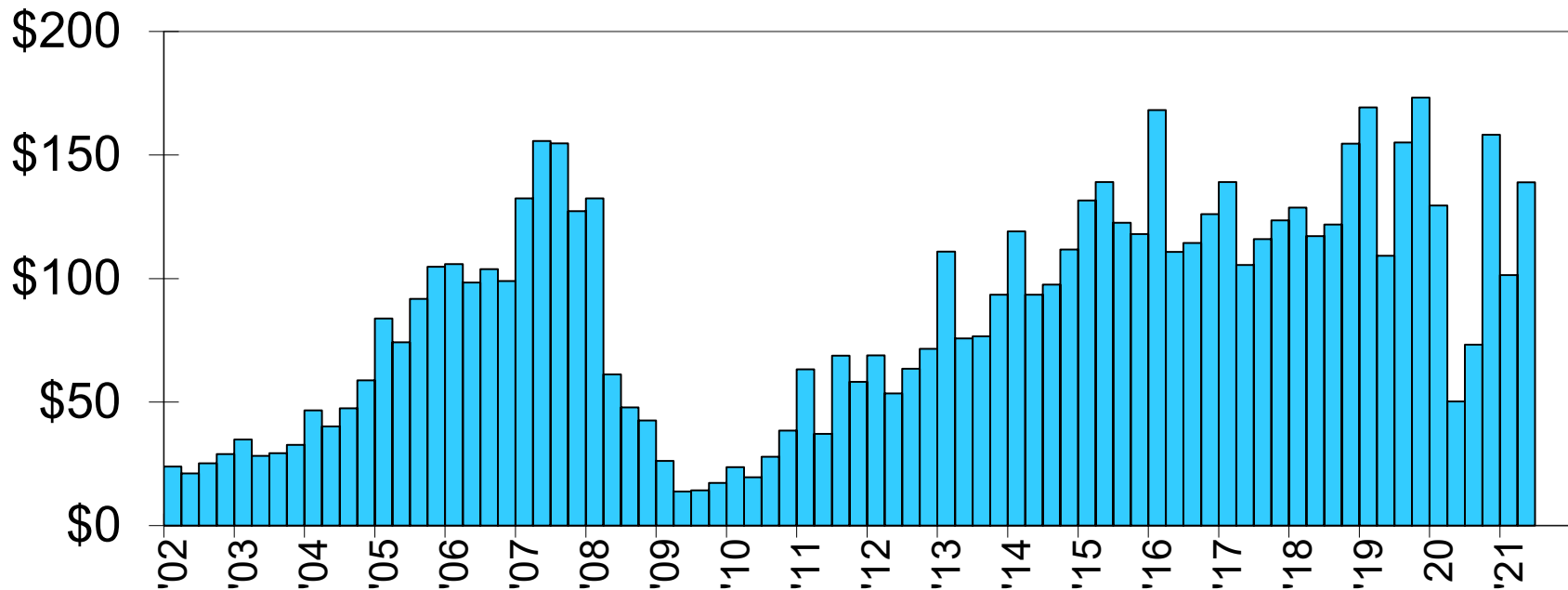
E-Commerce Sales as Percentage of Total Retail

Percent – Seasonally Adjusted



U.S. Commercial Real Estate Sales

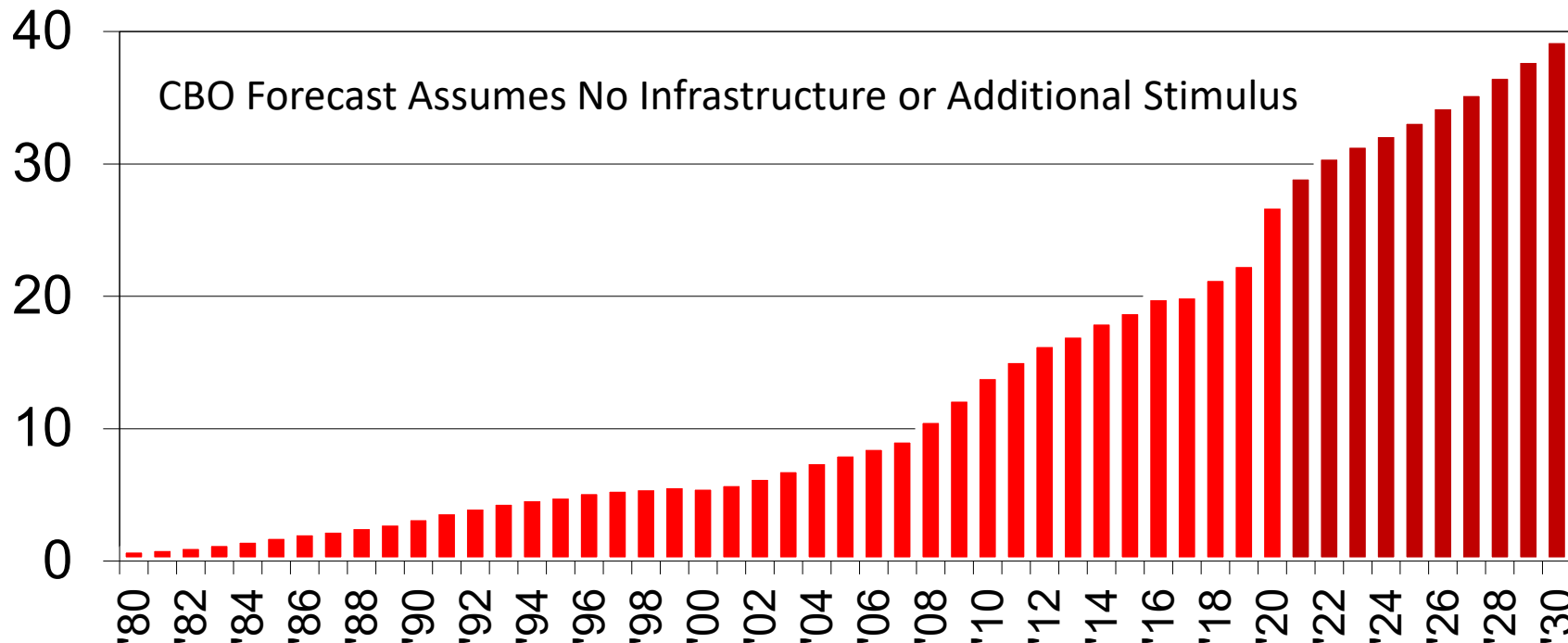
\$ Billions – Quarterly



Federal Debt – Total Public Debt



\$ Trillions



Every 1 Percent Increase
in Interest Rates Increases
the Annual Payment on
U.S. Govt Debt by \$200
Billion Per Year

Hurricanes & New York 1954-1976

1954 Hurricane Hazel

1954 Hurricane Carol *\$460M damages*

1954 Hurricane Edna *9 Inches*

1955 Hurricane Connie *13.2 inches*

1956 Hurricane Flossy

1959 Hurricane Gracie *6 inches*

1960 Hurricane Donna

1961 Hurricane Ester

1962 Hurricane Daisy

1964 Hurricane Gladys

1964 Hurricane Isbell

1969 Hurricane Gerda

1971 Tropical Storm Doria

Flooded NYC Subways

1972 Hurricane Agnes *12 inches*

1976 Hurricane Belle

Green

New

Deal

Science & Physics of Energy

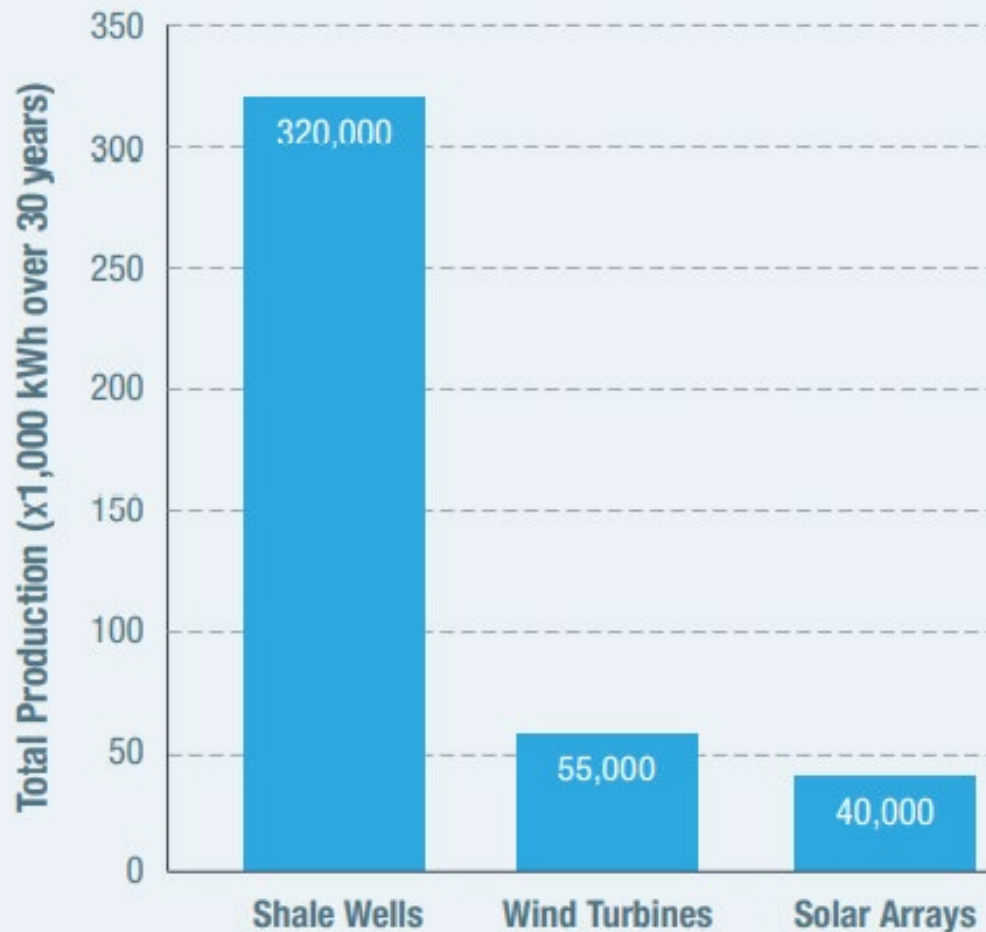


Betz Limit

The limits of capturing the kinetic energy is 59.3%
Modern Wind Turbines Capture 45%

Shockley-Queisser Limit

A Maximum 34% (68% Double Layer) of incoming photons can be converted into electrons, with current state-of-the-art panels achieving 26% conversion efficiency



**\$1 Million in Hardware
1 Million kWh - 30 Years**

**Million
Kilowatt
Hours**

Hardware

320,000

Shale Wells

55,000

Wind Turbines

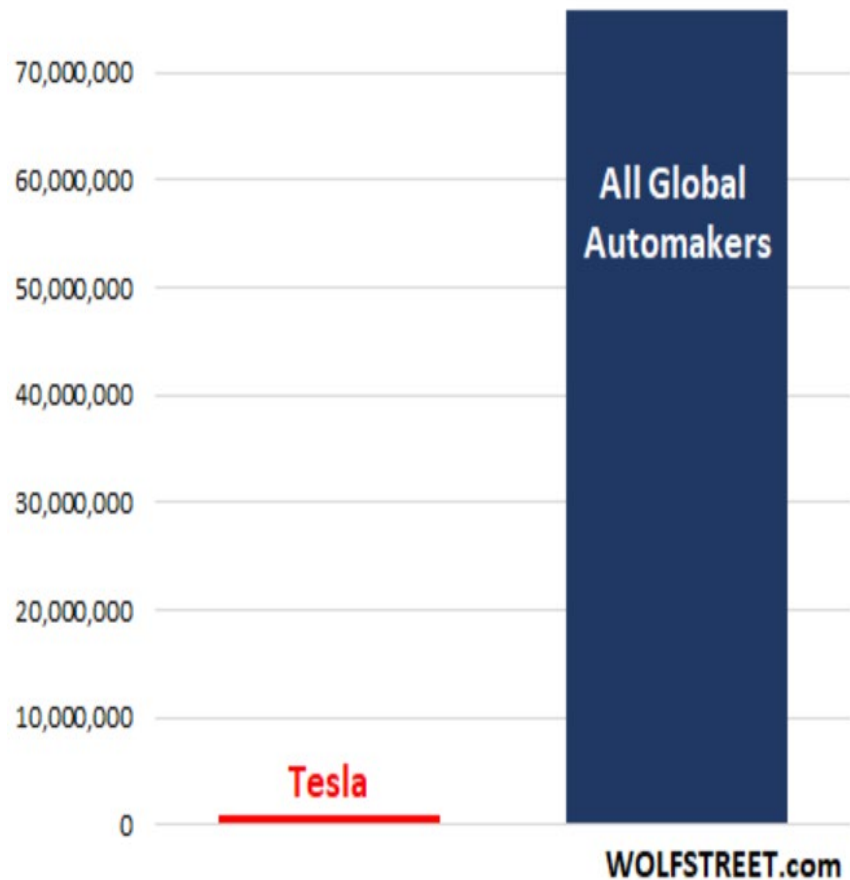
40,000

Solar Arrays

Lizzard-Gulfport Energy-Credit Suisse
Heikkinen-Cabot Oil & Gas

Global Deliveries in 2021 (est.):

Tesla v. All Automakers



Stock
Market
Insanity

3Rs

Reignite

- Travel Coming Back *albeit leisure for now*
- 10.4 Million Job Openings *looking for hires*
- Change Will Continue *winners & losers*
- Great American Reopening Continues



DrTCJ

<http://blog.stewart.com>

stewart.com

Stewart Blog

2010



2020



El Arroyo



DEAR TACO TRUCKS,
PLZ CONSIDER CRUISING
THE NEIGHBORHOODS
LIKE ICE CREAM TRUCKS





ST JOHN

MAGAZINE





THE 3 R's

OF REAL ESTATE AND THE ECONOMY



REINVENT



RECHARGE



REIGNITE

Ted C. Jones, PhD
Chief Economist SVP



ECON 101

IT'S ALL ABOUT
SUPPLY & DEMAND



An Outlook for Real Estate & the Economy

DR. TED C JONES
CHIEF ECONOMIST

THANK YOU



RESIDENTIAL
CAPITAL PARTNERS



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