

and the

# BEAT GOES ON

STEWART

**stewart**

Ted C. Jones, PhD  
Chief Economist  
Stewart Title

**An Economic Outlook on What Changes,  
What Stays the Same and What's to Come**

Recorded by *SONNY* and *CHER* on Atco Records

# THE BEAT GOES ON

Words and Music by *SONNY BONO*



1967 – Theme  
For An Economic  
Forecast for  
2020

**The beat goes on, the beat goes on  
Drums keep pounding a rhythm to the brain  
La de da de de, la de da de da**

**Sonny & Cher**

**Charleston was once the rage, uh huh  
History has turned the page, uh huh  
The mini skirts, the current thing, uh huh  
Teenybopper is our newborn king, uh huh**

**Sonny & Cher**

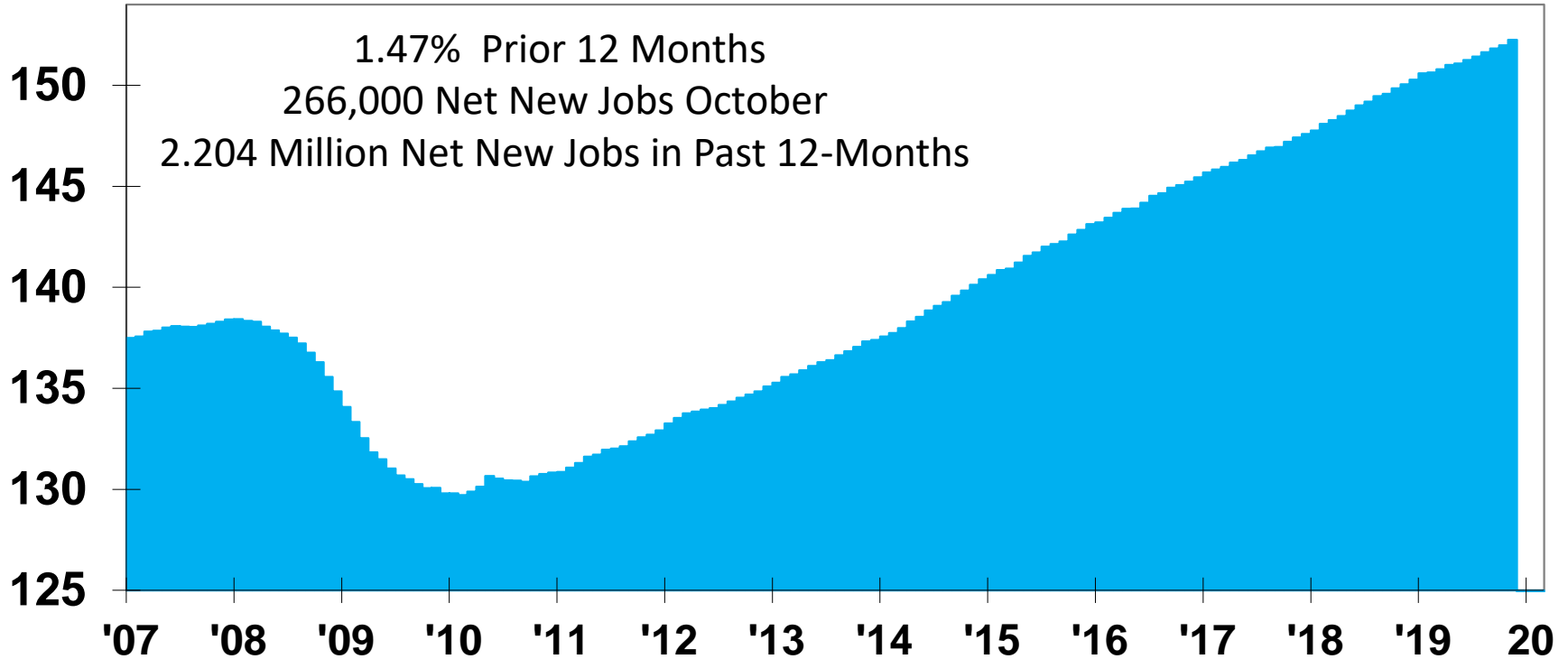
**The grocery store's the super mart, uh huh  
Little girls still break their hearts, uh huh  
And men still keep on marching off to war  
Electrically they keep a baseball score**

**Sonny & Cher**

# U.S. Jobs

More Jobs Than Anytime  
In History

Jobs (Millions) *Seasonally Adjusted*



# Compound Annual Job Growth Rate

**1.47%**

**November 2019**

**1.31%**

**Past 40-Years**

**12.2%**

**Better  
Than  
Average**

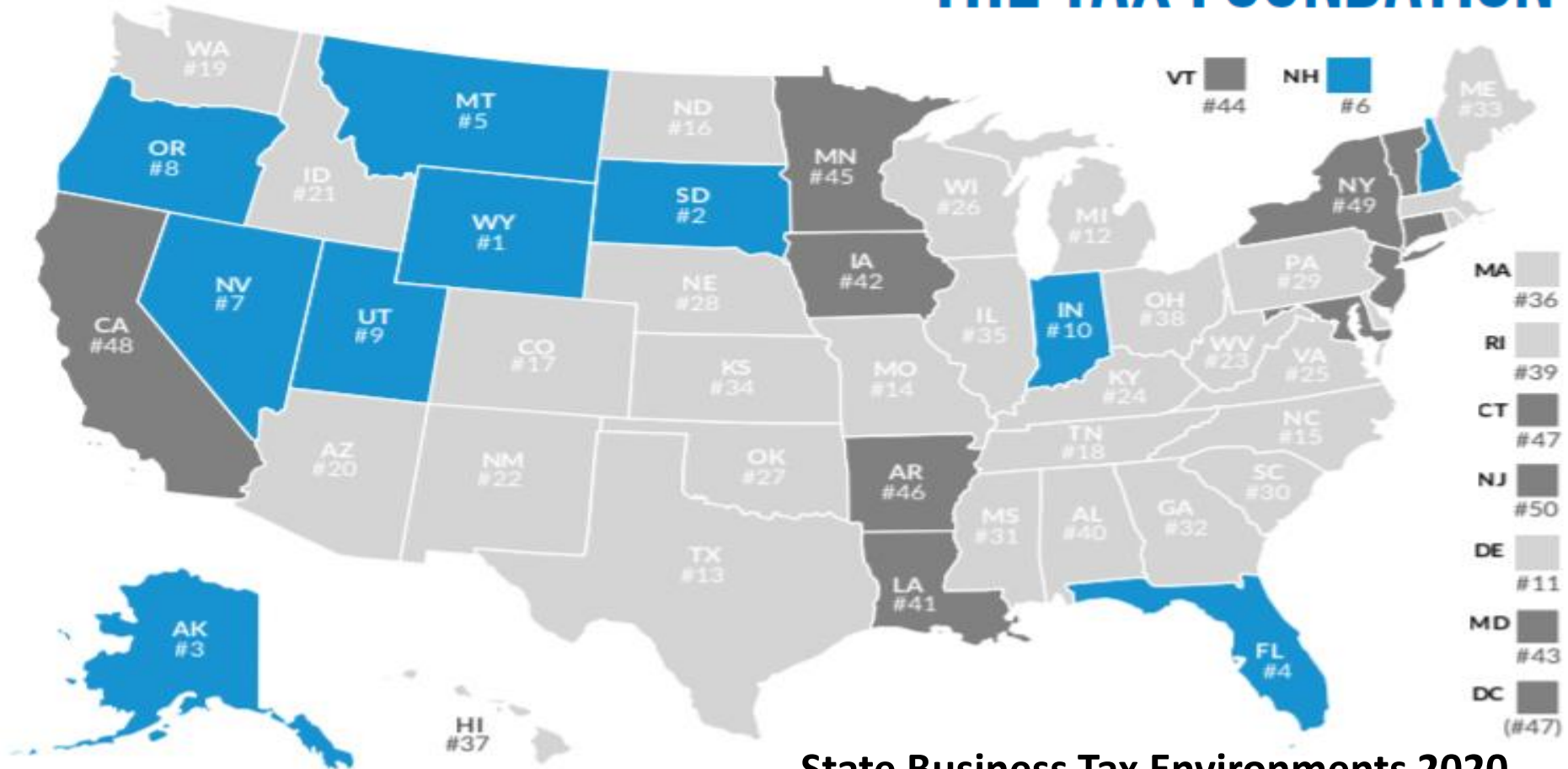
# U.S. Supersector Job Growth Analysis -- November 2019

Not Seasonally Adjusted

Employment Supersector	Total Jobs Thousands Nov 2019	Percent of All Jobs		12-Months		5 Years	
		Today	5-Years Ago	Net New Jobs Thousands	Percent Change	Net New Jobs Thousands	Percent Change
Total	153,624.0	100.0%	100.0%	2,249.0	1.5%	12,293.0	8.7%
Mining & Logging	747.0	0.5%	0.6%	(4.0)	-0.5%	(157.0)	-17.4%
<b><i>Mining &amp; Logging + Construction</i></b>	<b><i>8,349.0</i></b>	<b><i>5.4%</i></b>	<b><i>5.1%</i></b>	<b><i>141.0</i></b>	<b><i>1.7%</i></b>	<b><i>1,080.0</i></b>	<b><i>14.9%</i></b>
Construction	7,602.0	4.9%	4.5%	145.0	1.9%	1,237.0	19.4%
Manufacturing	12,862.0	8.4%	8.7%	79.0	0.6%	579.0	4.7%
Trade-Transport-Utilities	28,500.0	18.6%	19.1%	113.0	0.4%	1,460.0	5.4%
Information	2,865.0	1.9%	1.9%	11.0	0.4%	117.0	4.3%
Financial Activities	8,728.0	5.7%	5.7%	119.0	1.4%	694.0	8.6%
Professional and Business Service	21,869.0	14.2%	13.8%	425.0	2.0%	2,372.0	12.2%
Education and Health Services	24,784.0	16.1%	15.5%	695.0	2.9%	2,911.0	13.3%
Leisure & Hospitality	16,601.0	10.8%	10.3%	419.0	2.6%	2,014.0	13.8%
Other	5,942.0	3.9%	3.9%	83.0	1.4%	363.0	6.5%
Government	23,124.0	15.1%	15.9%	164.0	0.7%	703.0	3.1%



# THE TAX FOUNDATION



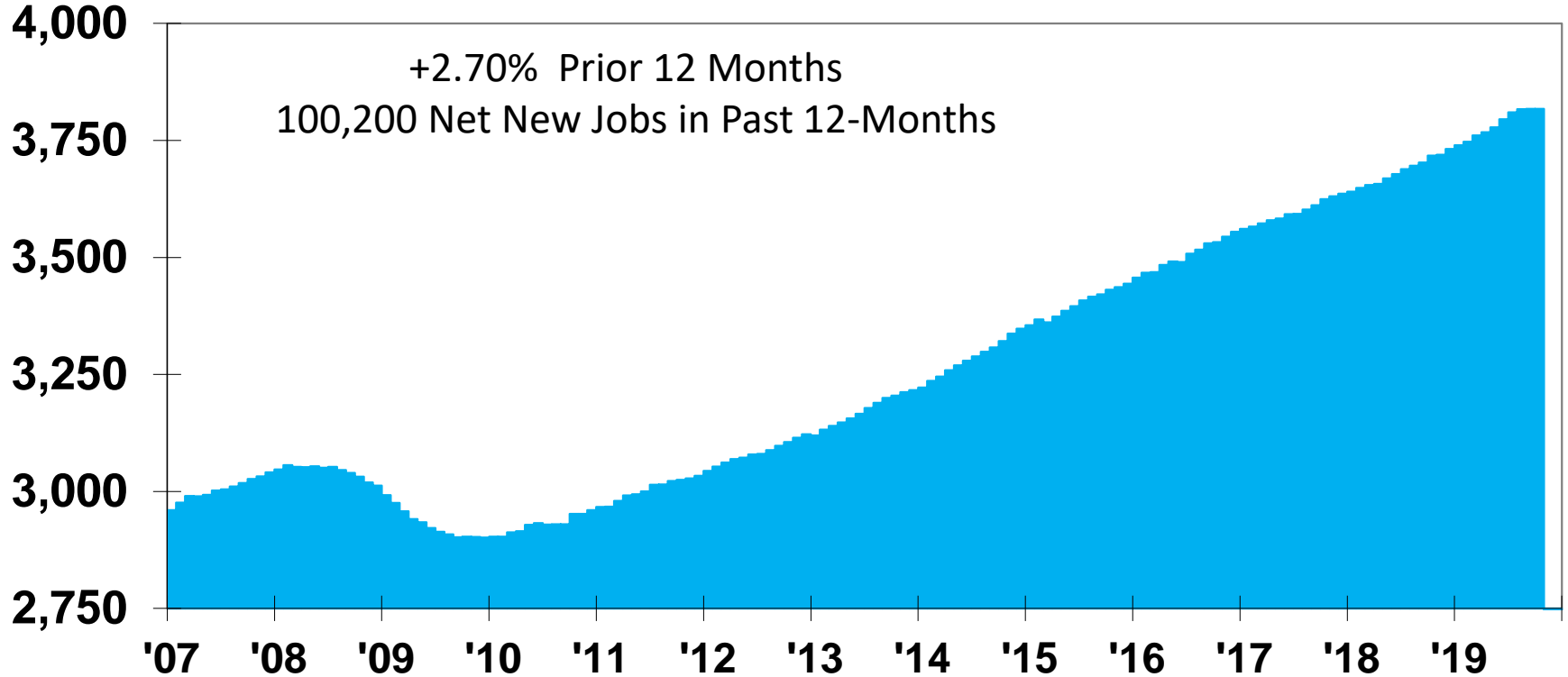
State Business Tax Environments 2020

## State Job Growth -- 12 Months Ending October 2019

Utah	3.19%	Nebraska	1.57%	Virginia	0.74%
Florida	2.58%	South Carolina	1.43%	New Jersey	0.72%
Arizona	2.45%	Massachusetts	1.42%	Wisconsin	0.56%
Texas	2.36%	Arkansas	1.42%	Indiana	0.54%
Washington	2.25%	Delaware	1.32%	Iowa	0.49%
Idaho	2.21%	Montana	1.32%	Pennsylvania	0.48%
Nevada	2.19%	Kansas	1.27%	West Virginia	0.44%
New Mexico	2.05%	Tennessee	1.26%	Ohio	0.35%
Alabama	2.03%	Missouri	1.20%	Alaska	0.33%
North Carolina	2.02%	New Hampshire	1.13%	Minnesota	0.33%
Colorado	1.92%	Maryland	1.09%	Vermont	0.32%
South Dakota	1.86%	New York	1.07%	Connecticut	0.28%
Rhode Island	1.79%	Maine	1.04%	Oklahoma	0.26%
California	1.78%	Mississippi	1.01%	Wyoming	0.24%
Oregon	1.70%	Dist of Columbia	0.97%	Louisiana	0.18%
Kentucky	1.61%	Illinois	0.93%	North Dakota	0.00%
Georgia	1.59%	Hawaii	0.85%	Michigan	-0.05%

# Dallas-Ft Worth-Arlington MSA Jobs

Jobs (Thousands) *Seasonally Adjusted*



# Dallas-Ft Worth-Arlington MSA Supersector Job Growth Analysis -- October 2019

## Not Seasonally Adjusted

Employment Supersector	Total Jobs Thousands Oct 2019	Percent of All Jobs		12-Months		5 Years	
		Today	5-Years Ago	Net New Jobs Thousands	Percent Change	Net New Jobs Thousands	Percent Change
Total	3,828.6	100.0%	100.0%	98.7	2.6%	493.2	14.8%
Mining & Logging							
<b><i>Mining &amp; Logging + Construction</i></b>	<b>240.3</b>	<b>6.3%</b>	<b>6.0%</b>	<b>17.1</b>	<b>7.7%</b>	<b>41.6</b>	<b>20.9%</b>
Construction							
Manufacturing	283.6	7.4%	7.9%	2.0	0.7%	20.4	7.8%
Trade-Transport-Utilities	805.2	21.0%	20.8%	12.6	1.6%	110.2	15.9%
Information	81.9	2.1%	2.4%	-	0.0%	1.5	1.9%
Financial Activites	319.1	8.3%	8.1%	14.4	4.7%	49.5	18.4%
Professional and Business Service	645.5	16.9%	16.5%	13.9	2.2%	94.7	17.2%
Education and Health Services	469.0	12.2%	12.2%	13.3	2.9%	63.2	15.6%
Leisure & Hospitality	403.4	10.5%	10.1%	15.5	4.0%	66.2	19.6%
Other	128.7	3.4%	3.6%	3.6	2.9%	10.1	8.5%
Government	451.9	11.8%	12.5%	6.3	1.4%	35.8	8.6%

## U.S. Vs Dallas-Ft Worth-Arlington Supersector Employment Analysis

Not Seasonally Adjusted

Employment Supersector	Percent of All Jobs		12-Month Job Growth	
	DFW	U.S.	DFW	U.S.
Mining & Logging		0.5%		-0.5%
<b><i>Mining &amp; Logging + Construction</i></b>	<b><i>6.3%</i></b>	<b><i>5.4%</i></b>	<b><i>7.7%</i></b>	<b><i>1.7%</i></b>
Construction		4.9%		1.9%
Manufacturing	7.4%	8.4%	0.7%	0.6%
Trade-Transport-Utilities	21.0%	18.6%	1.6%	0.4%
Information	2.1%	1.9%	0.0%	0.4%
Financial Activities	8.3%	5.7%	4.7%	1.4%
Professional and Business Service	16.9%	14.2%	2.2%	2.0%
Education and Health Services	12.2%	16.1%	2.9%	2.9%
Leisure & Hospitality	10.5%	10.8%	4.0%	2.6%
Other	3.4%	3.9%	2.9%	1.4%
Government	11.8%	15.1%	1.4%	0.7%

Source: U.S. Bureau of Labor Statistics, Stewart Title Guaranty Company

**DFW**

**MSA**

**3.1**

**Percent**

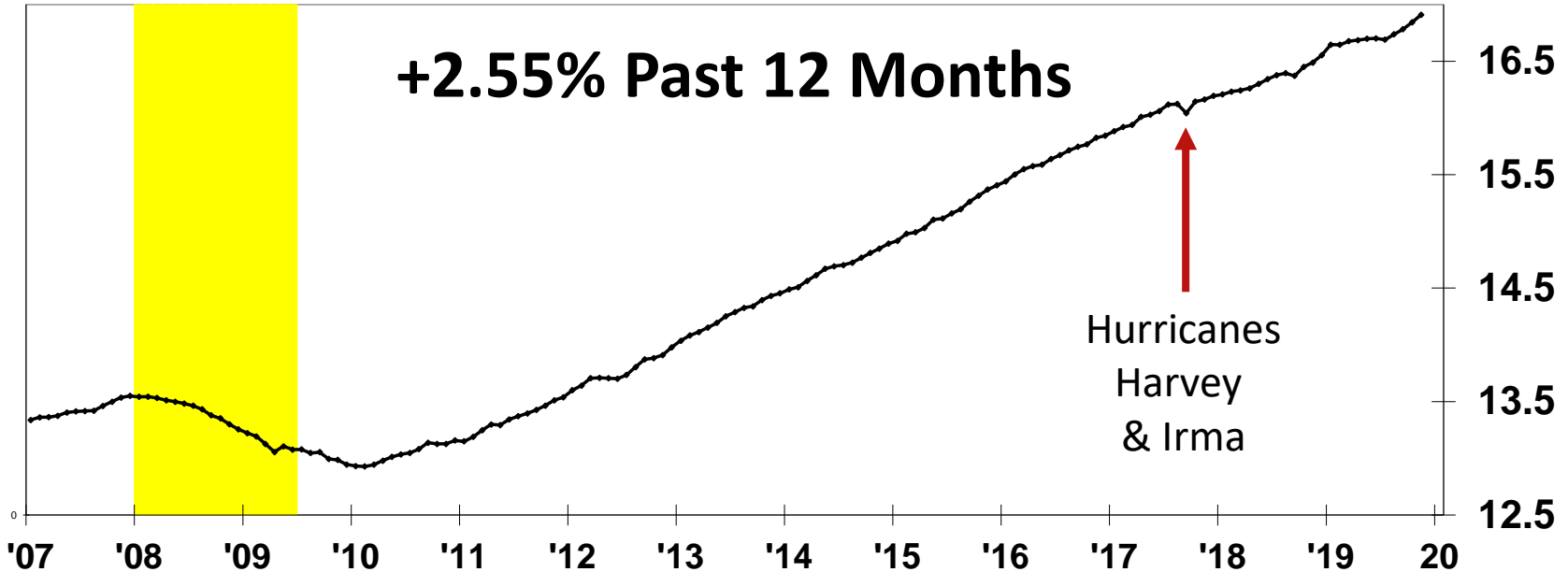
**Unemployment Rate**

# U.S. Leisure & Hospitality Jobs

The Blood Pressure Test of the U.S. Economy

Millions of Jobs  
Seasonally-Adjusted

 Recession



# Recession

Recession is Defined as Two or More  
Quarters of Negative GDP Growth

**3.1 Percent Q1 2019 GDP Growth Rate**

**2.0 Percent Q2 2019 GDP Growth Rate**

**1.9 Percent Q3 2019 GDP Growth Rate**

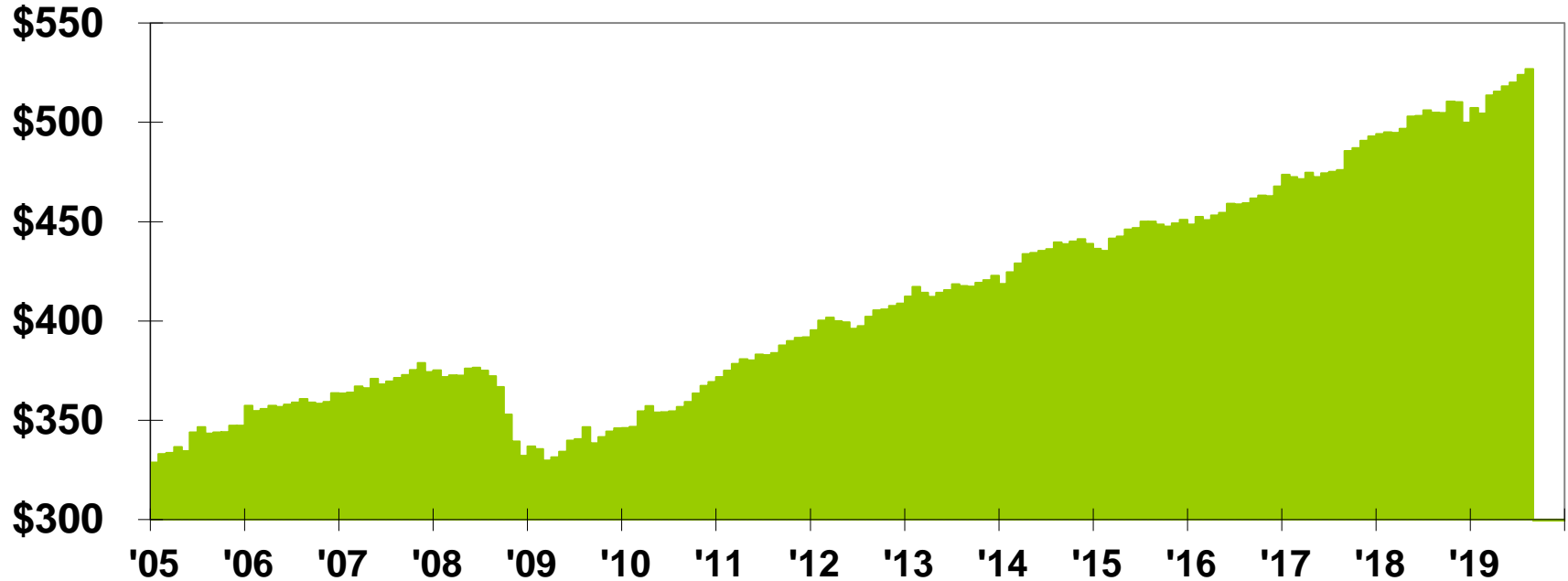


# Retail Sales Say No Recession

Retail sales (which make up approximately 68% of GDP) were up 4.53% in 12-months ending September 2019

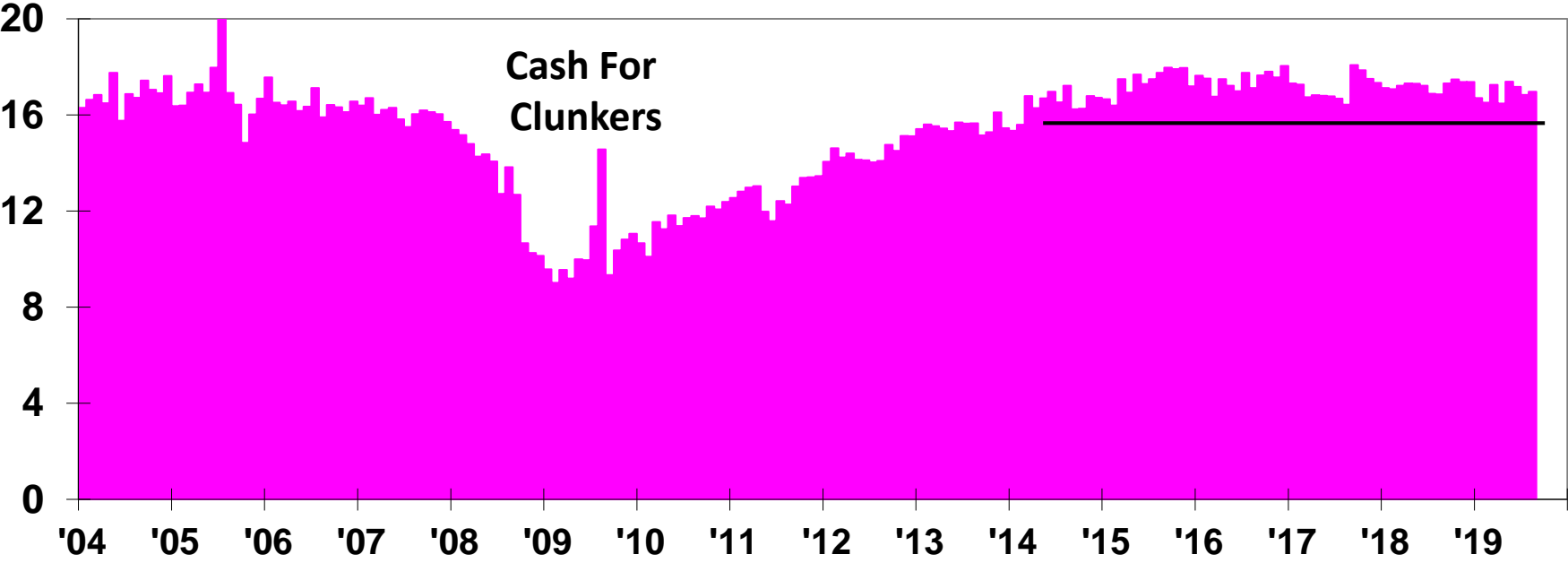
# U.S. Real Retail & Food Service Sales

*\$ Billions – Seasonally Adjusted*



# Light Weight Vehicle Sales

Millions – *Seasonally Adjusted Annual Rate*



“The flattening and [inverted yield curve](#) has been an accurate predictor of economic recessions. A yield curve inversion along the 2-year and 10-year spread has come before the last seven recessions.”

**ACCURATE?**

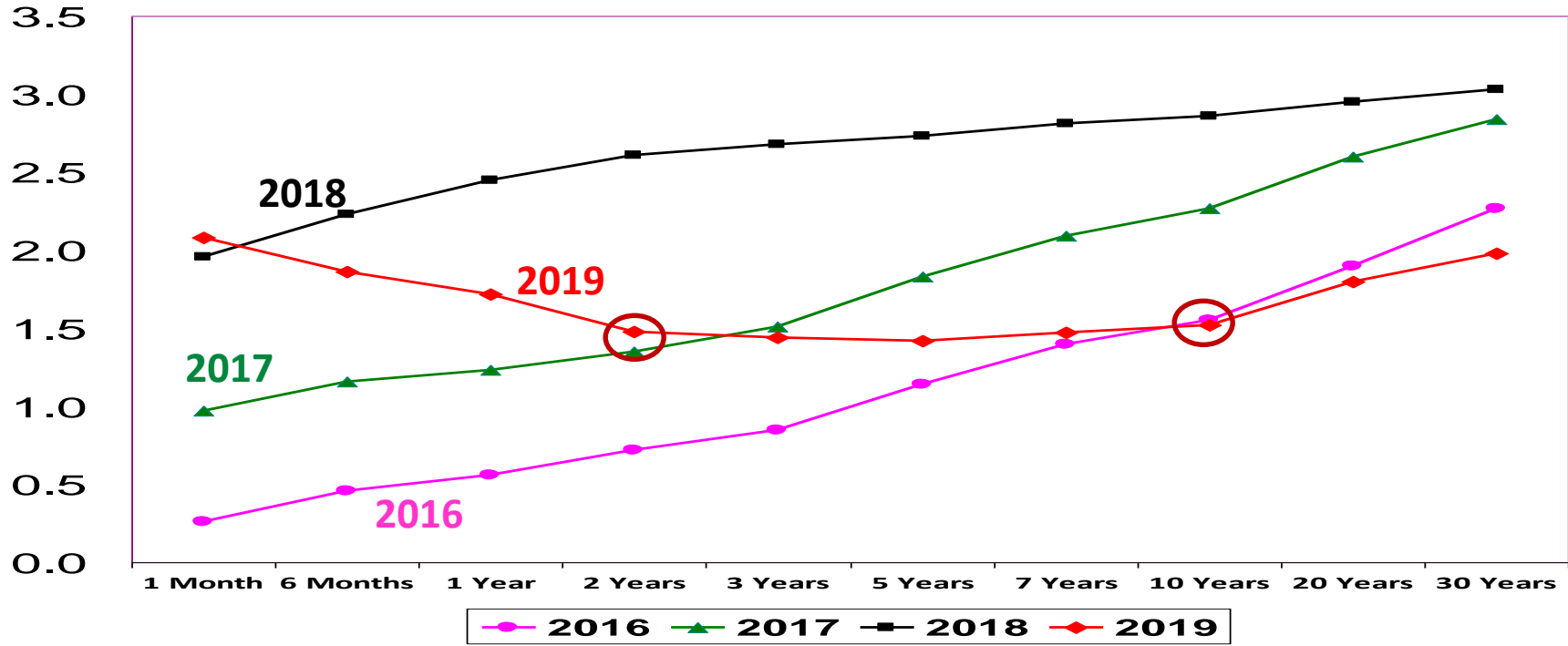
*Market***Watch**

# **Yield Curve Inversion**

## **May 1998**

# Treasury Yield Curves

Percent Yield -- August 15



## Stock Market Performance – Post Inverted Yield Curve

Date of first 2/10-year inversion	3 months later	6 months later	1 year	2 years	3 years
8/17/1978	-10.14%	-6.10%	3.06%	19.64%	24.88%
8/20/1980	13.44%	2.27%	5.59%	-8.69%	32.49%
12/9/1988	6.10%	17.93%	25.87%	18.31%	36.54%
5/26/1998	-0.90%	8.49%	19.26%	25.96%	16.81%
12/30/2005	4.16%	1.76%	13.62%	18.44%	-28.65%
Average	2.53%	4.87%	13.48%	14.73%	16.41%

**3.1%**

**12-Month Income  
Increase**

**Inflation 1.8%**

**2019 Best Wage  
Gains in 10 Years**

**3.5%**

**Unemployment  
Rate**

**Lowest in  
50-Years  
1969**



**61.5%**

**Percent of  
Workers  
Confident in  
Finding a New  
Job if  
They Lost Their  
Current One**

**FEDERAL RESERVE BANK *of* NEW YORK**

# 90%

Pay Less  
Taxes



# \$80

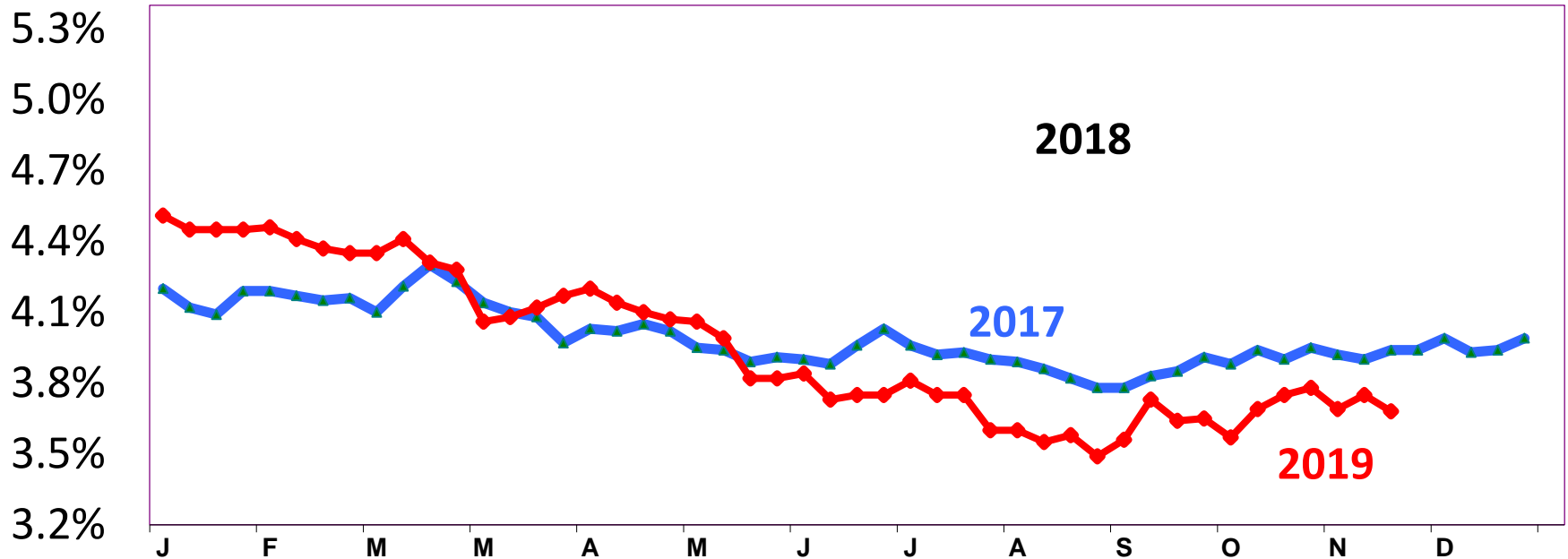
# Billion

Extra Money Spent  
on Real Estate Annually  
Due to Tax Cuts



# 30-Year Conventional Residential Mortgage Rates

Percent





# Existing-Home Sales Climb 1.9% in October

The Midwest and South regions of the U.S. saw sales growth, while the Northeast and the West reported a drop in sales.

# US October Housing Sales

**2019      463,000**

**2018      446,000**

Up 3.8 Percent

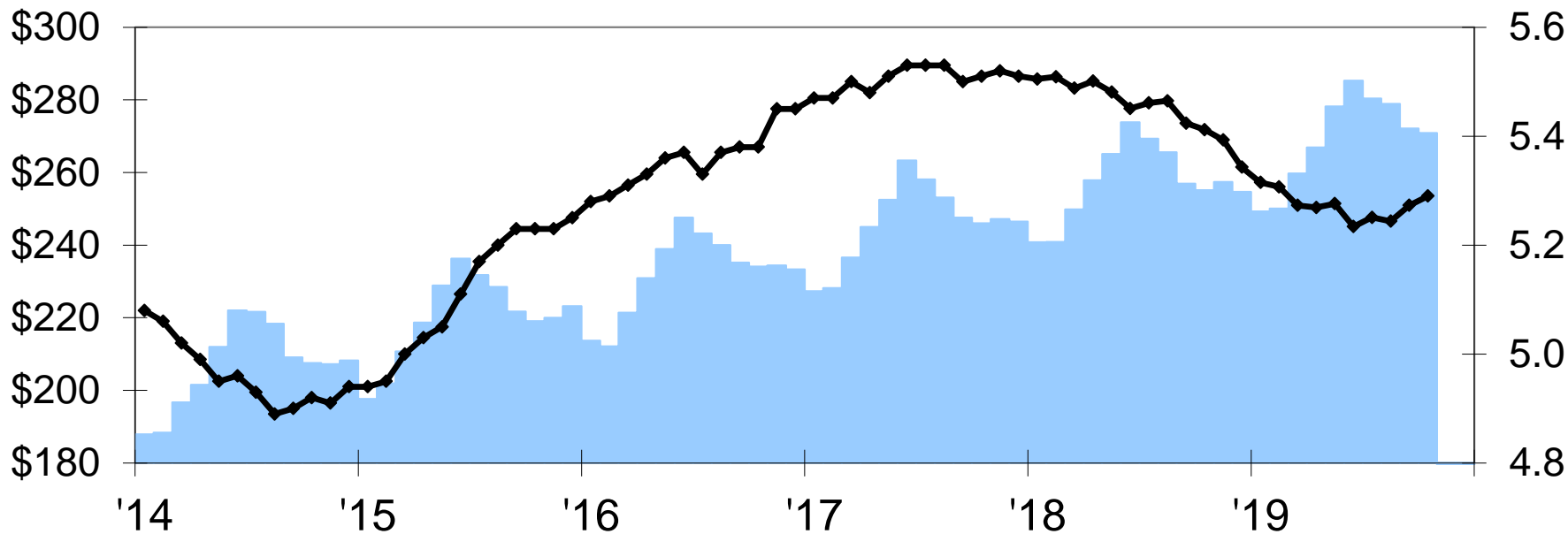


# U.S. Existing Home Sales & Median Prices

## Sales Trailing 12 Months

Median Price \$ Thousands

Home Sales 12-Months Millions



Median Price

Homes Sales

**1 in Every 8 Occupied  
Residential Dwellings  
Will Hit the Market  
From 2017-2027  
As Boomers Pass Away**

**9**

**Million  
Homes**

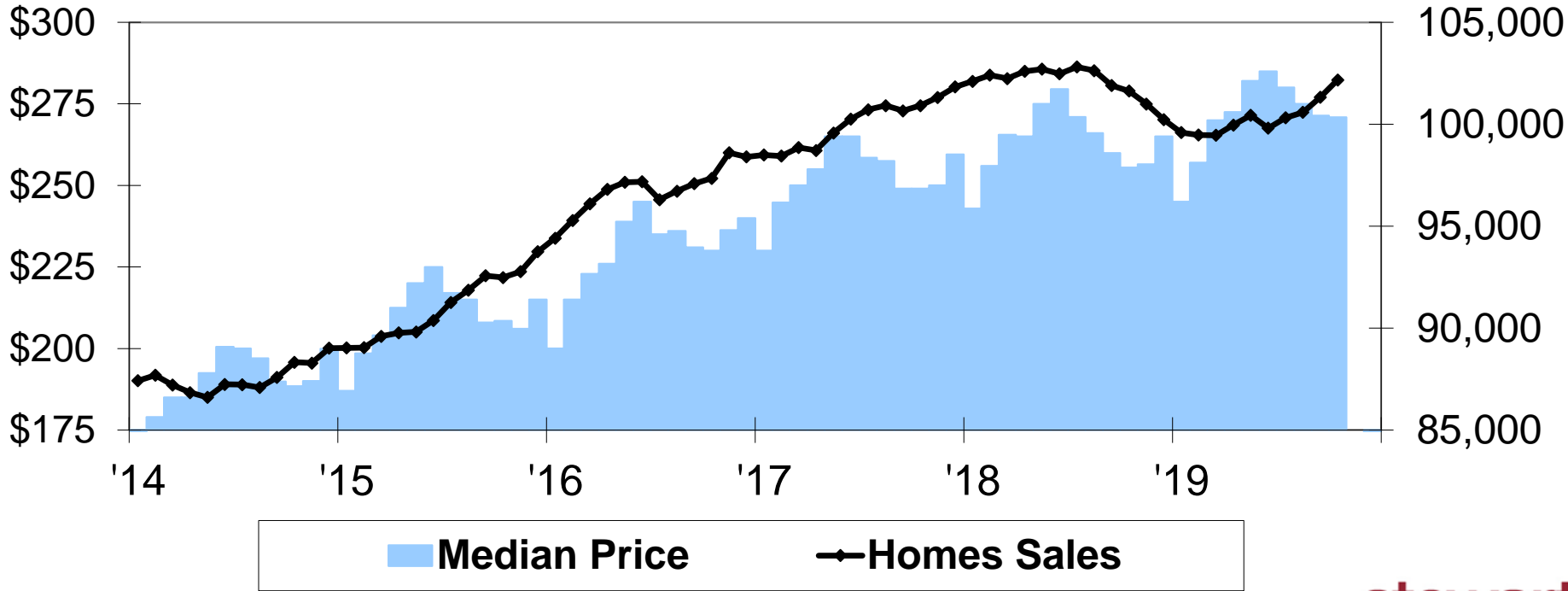
**THE WALL STREET JOURNAL.**

# DFW Home Sales & Median Prices

Sales Trailing 12 Months

Median Price \$ Thousands

Home Sales 12-Months





# Jobs & Residential Dwelling Unit Permits

## Dallas-Ft Worth-Arlington

Year	Net New Jobs	Dwelling Unit Permits	Jobs Per New Dwelling
2013	94,100	40,364	2.33
2014	131,200	43,994	2.98
2015	96,400	57,146	1.69
2016	110,500	55,800	1.98
2017	81,400	62,524	1.30
2018	96,000	63,893	1.50
<b>Total</b>	<b>609,600</b>	<b>323,721</b>	<b>1.88</b>

**Normal  
Is  
1.25 to 1.50  
Net New  
Jobs Per  
New  
Dwelling**

---

**DFW 1.88**

## Dallas Apartment Rents

Average Rent	\$1,240
Year-Over-Year Change	4%
Average Apartment Size - Sq Ft	846

### Apartment Mix

\$501-\$700	4%
\$701 - \$1,000	36%
\$1,001 - \$1,500	39%
\$1,501 - \$2,000	13%
> \$2,000	7%

Owner Occupied	57%
Renter Occupied	42%

RENTCafé®

### Conventional - 20% Down

Average Rent	\$ 1,240
Rate	3.68%
Term	30 Years
Loan Serviced	\$ 241,967
Median Price	\$ 289,000
Less 20% Down	(57,800)
Loan Amount	\$ 231,200
Monthly Payment	(1,047)
Residual	\$ 193

### Conventional Loan

### FHA - 3.5% Down

Average Rent	\$ 1,240
Rate	3.50%
Term	30 Years
Loan Serviced	\$ 247,414
Median Price	\$ 289,000
Less 3.5% Down	(10,115)
Loan Amount	\$ 278,885
Monthly Payment	(1,252)
Residual	\$ (12)

### FHA

# States With the Most People Leaving

- 1 New Jersey 66.8%
- 2 Illinois 65.9%
- 3 Connecticut 62%
- 4 New York 61.5%
- 5 Kansas 58.7%
- 6 Ohio 56.5%
- 7 Massachusetts 55.7%
- 8 Iowa 55.5%
- 9 Montana 55% & Michigan
- 11 California 54.4%



Percent of Van Rentals  
Leaving the State

## Top Desirable Metro Areas Based on Most Influential Homebuying Factors

Rank	MSA	Community Well-Being Rank	Average One-Way Commute Time in Minutes	Regional Price Parity (RPP)	Violent Crimes per 100K Residents
1	El Paso, TX	64.0	23.3	88.7	356.3
2	Portland, OR	63.9	24.7	101.7	127.4
3	Raleigh, NC	63.2	25.4	95.9	259.8*
4	Omaha, NE	61.8	20.2	93.4	384.5
5	Minneapolis, MN	62.9	25.2	102.3	283.0
6	San Antonio, TX	62.8	25.7	94.4	523.9
7	Austin, TX	62.7	26.4	100.0	306.3
8	Louisville, KY	61.3	23.7	91.0	417.7
9	Mesa, AZ	62.8	26.0	97.1	470.6
10	Charlotte, NC	62.2	26.3	93.5	416.2
11	Colorado Springs, CO	62.0	22.7	99.6	431.8

## Top Desirable Metro Areas Based on Most Influential Homebuying Factors

Rank	MSA	Community Well-Being Rank	Average One-Way Commute Time in Minutes	Regional Price Parity (RPP)	Violent Crimes per 100K Residents
12	Columbus, OH	60.8	23.5	93.0	290.7
13	Arlington, TX	62.8	27.8	100.2	369.3
14	Dallas, TX	62.8	27.8	100.2	369.3
15	Fort Worth, TX	62.8	27.8	100.2	369.3
16	Virginia Beach, VA	61.4	24.2	97.9	330.8
17	San Diego, CA	63.8	25.3	116.3	337.1
18	Kansas City, MO	61.7	22.9	93.7	628.3*
19	Jacksonville, FL	62.2	26.3	95.8	480.8
20	Nashville, TN	62.8	27.0	94.4	624.9
21	Tucson, AZ	61.6	24.4	95.8	499.0
22	Phoenix, AZ	62.8	26.0	105.9	470.6

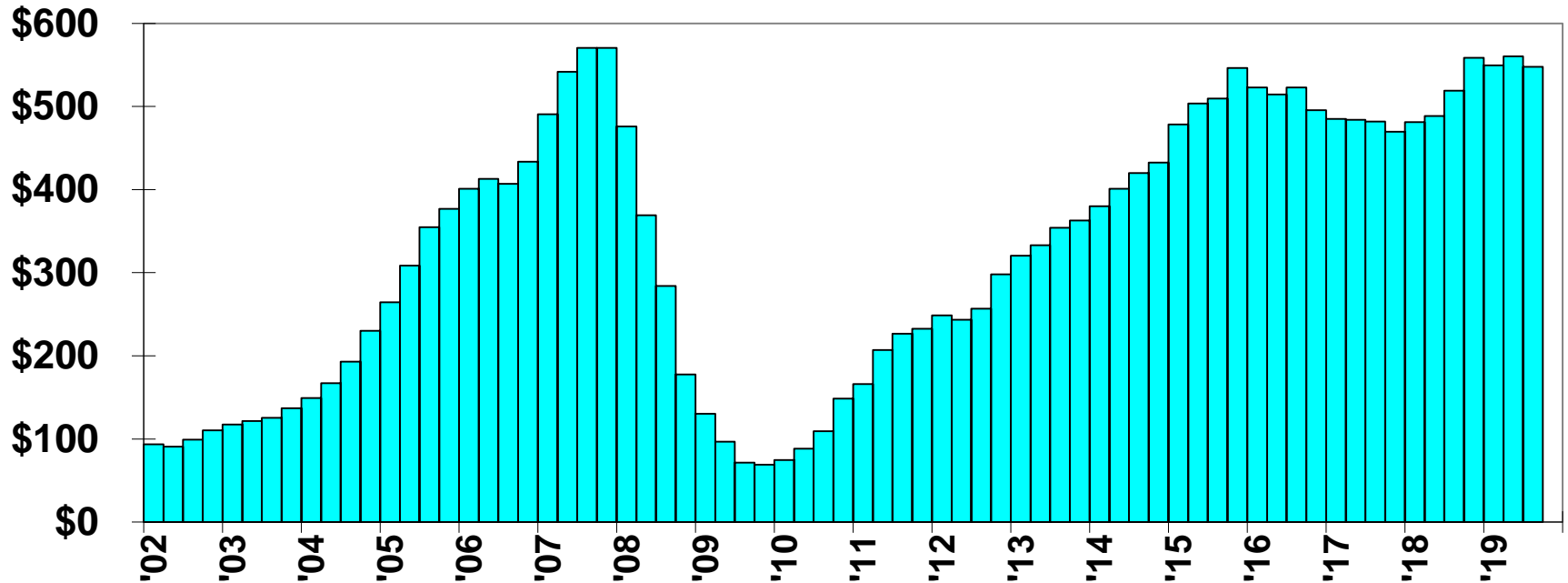
**1.5 Million  
Net New  
Households  
In  
2018**

**Built  
Less Than  
1.2 Million  
New  
Dwelling  
Units**

# U.S. Commercial Real Estate Sales Volume

\$ Billions – *Trailing 12 Months*

**+6.0% Year-Over-Year**

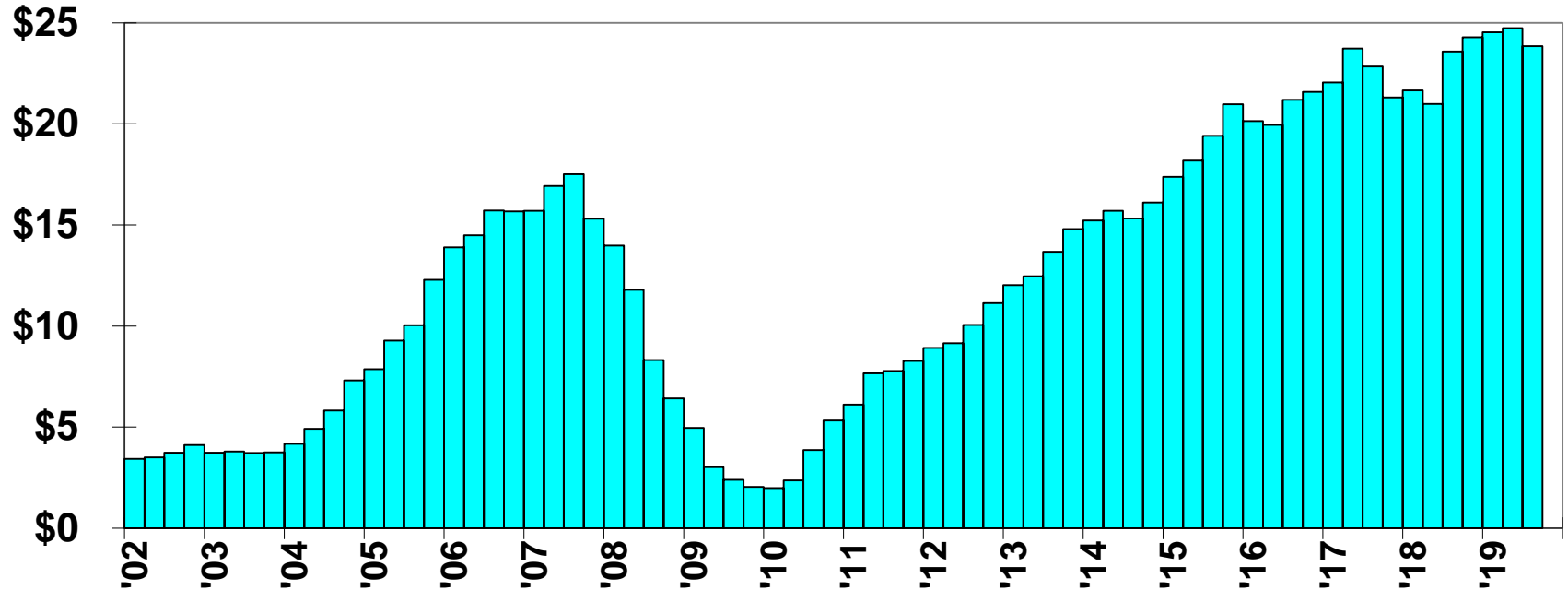




# Dallas Commercial Real Estate Sales Volume

\$ Billions – *Trailing 12 Months*

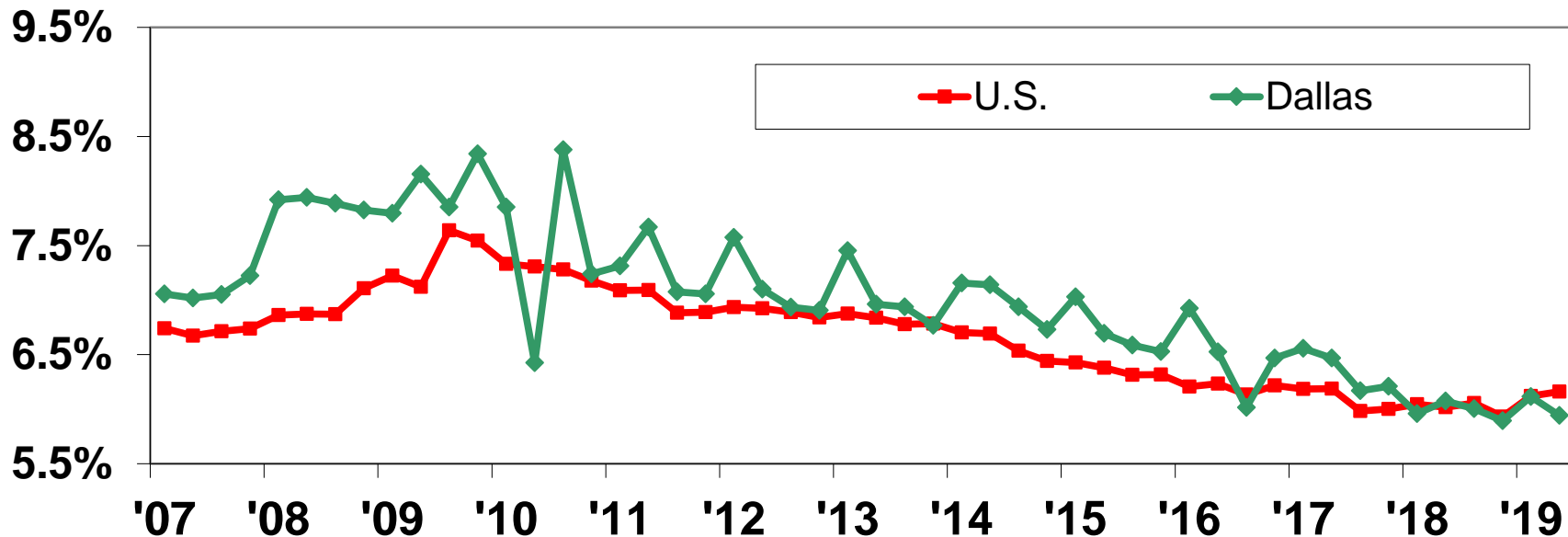
**+1.1% Year-Over-Year**



# U.S. Real Estate Cap Rates

Percent

Property and Portfolio Sales \$2.5 Million and Up

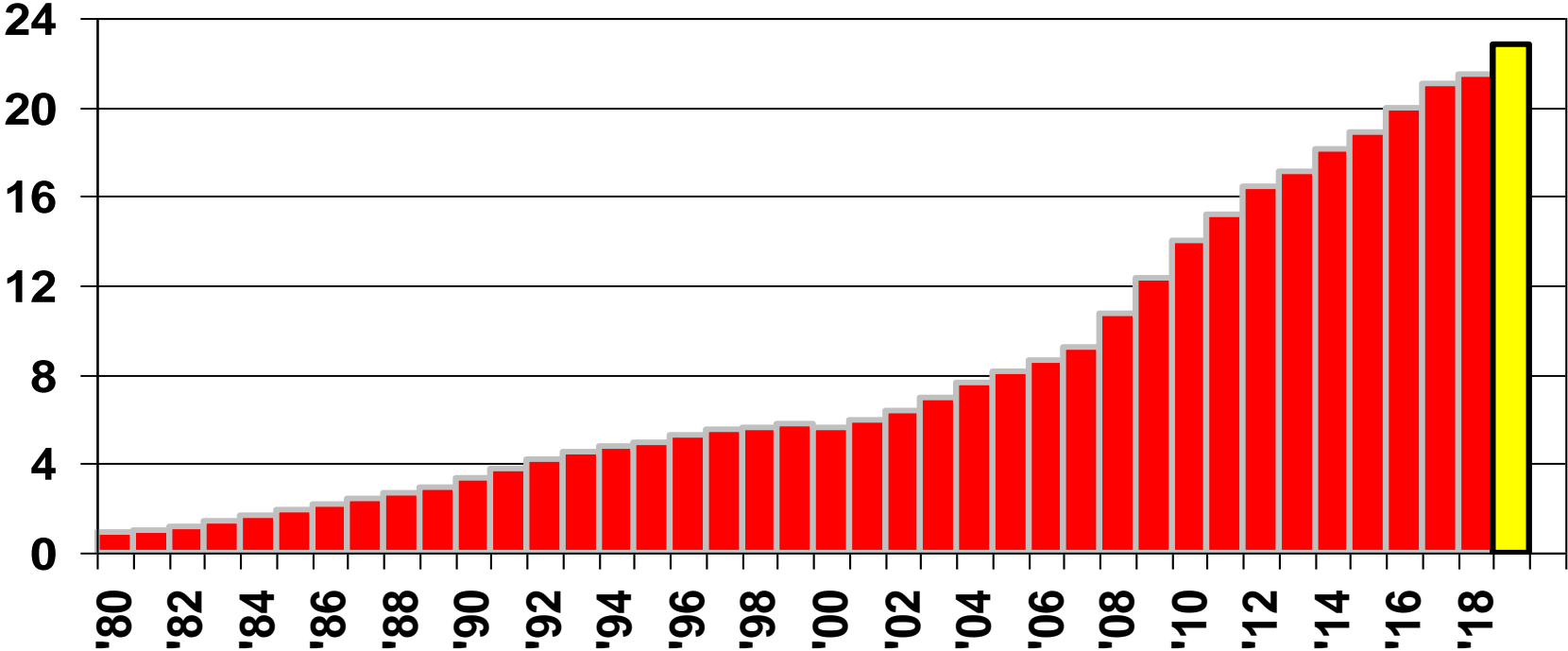


Market	Single Asset Sales Volume (\$m)	YOY Change
Manhattan	17,588	-9%
Los Angeles	16,433	-4%
San Francisco	12,391	
Dallas	11,407	1%
Seattle	10,742	37%
Atlanta	9,455	-1%
Phoenix	9,380	13%
Boston	8,765	26%
Houston	7,172	-19%
San Jose	7,143	14%

Market	Single Asset Sales Volume (\$m)	YOY Change
Chicago	6,685	-33%
Denver	6,109	-12%
No NJ	5,681	19%
<b>Austin</b>	5,289	34%
NYC Boroughs	5,158	-22%
DC VA burbs	5,082	-9%
San Diego	4,927	19%
DC	4,767	13%
Orange Co	4,469	-8%
East Bay	4,206	7%

# Federal Debt – Total Public Debt

\$ Trillions



# Federal Debt Interest Payments

+30.0% March 2017 Vs 2016

+10.7% March 2018 Vs 2017

+15.5% March 2019 Vs 2018

**+56.2% in 36 Months**

*Debt Up 16.3%*

# Oil Prices

West Texas Intermediate Crude

 Recession

\$ Per Barrel  
Monthly Average



Energy source	Share of total
<b>Total - all sources</b>	
<b>Fossil fuels (total)</b>	★ 63.5%
Natural gas	35.1%
Coal	27.4%
Petroleum (total)	0.6%
Petroleum liquids	0.4%
Petroleum coke	0.2%
Other gases	0.3%
<b>Nuclear</b>	★ 19.3%
<b>Renewables (total)</b>	17.1%
Hydropower	7.0%
Wind	★ 6.6%

## US Electricity Generation 2018

Biomass (total)	1.5%
Wood	1.0%
Landfill gas	0.3%
Municipal solid waste (biogenic)	0.2%
Other biomass waste	0.1%
<b>Solar (total)</b>	★ 1.6%
Photovoltaic	1.5%
Solar thermal	0.1%
Geothermal	0.4%
<b>Pumped storage hydropower<sup>3</sup></b>	-0.1%
<b>Other sources</b>	0.3%



# U.S. energy consumption by source, 2018



**biomass** 5.1%  
*renewable*  
heating, electricity, transportation



**petroleum** 36.5%  
*nonrenewable*  
transportation, manufacturing



**hydropower** 2.5%  
*renewable*  
electricity



**natural gas** 30.6%  
*nonrenewable*  
heating, manufacturing, electricity



**geothermal** 0.2%  
*renewable*  
heating, electricity



**coal** 13.1%  
*nonrenewable*  
electricity, manufacturing



**wind** 2.5%  
*renewable*  
electricity

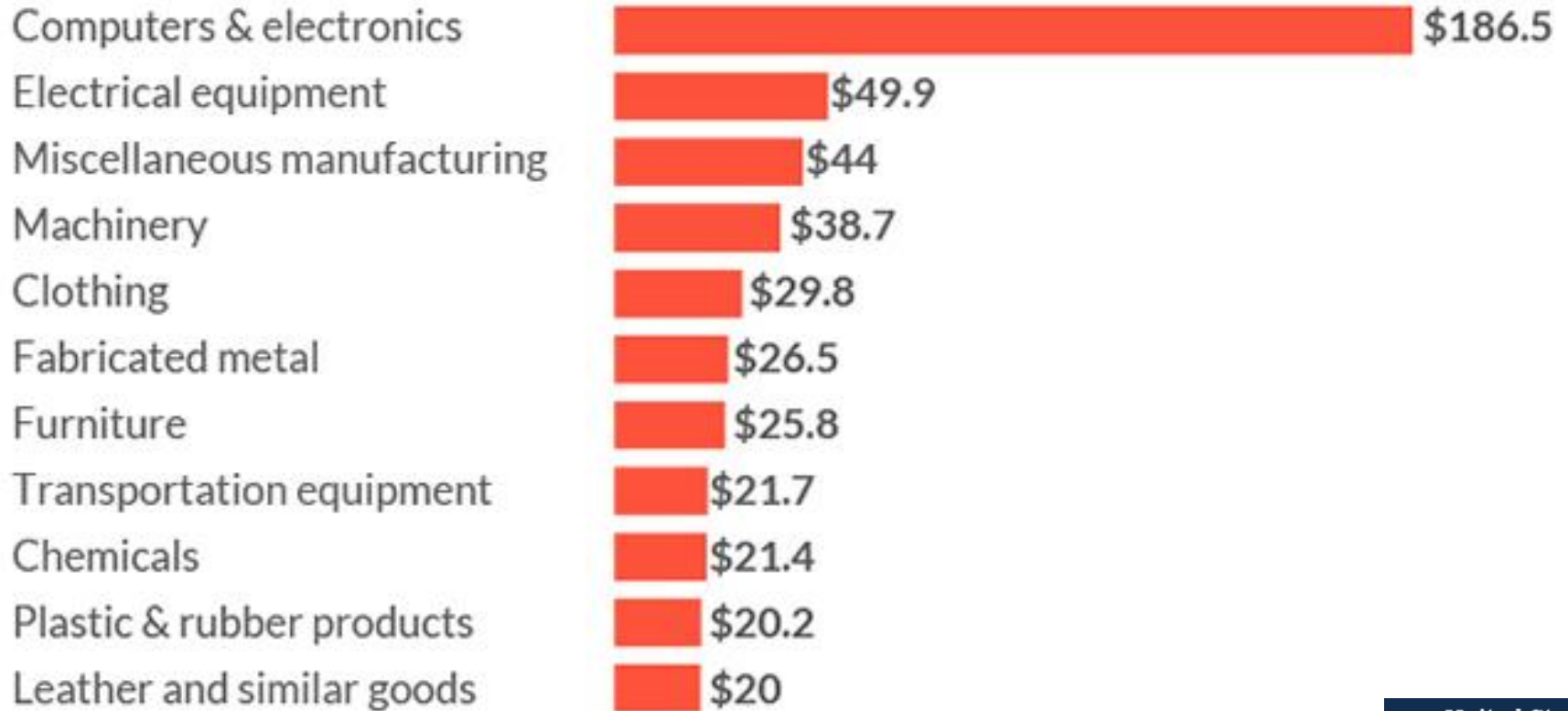


**uranium** 8.3%  
*nonrenewable*  
electricity

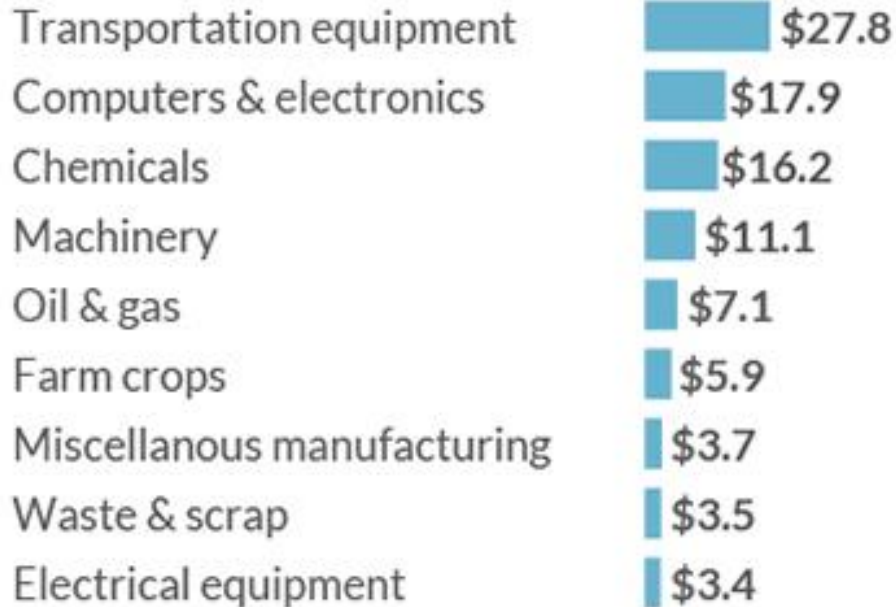


**solar & other** 0.9%  
*renewable*  
light, heating, electricity

# What the U.S. Bought from China in 2018 \$US Billions



# What China Bought from the U.S. in 2018 \$US Billions



## China Trade

\$US Billions

**\$539.0 Imported**

**\$120.3 Exported**

**\$418.7 Deficit**

# **China-U.S. Tariffs – April 9, 2019**

**25.0% Tariff Paid on U.S. Cars in China**

**2.5% Tariff Paid on Chinese Cars in U.S.**



# 2020 Economic Outlook

stewart

**Good Economy** *just so average*

**Growing Jobs & Wages** *best wage growth in 10 years*

**Stable & Low Interest Rates**

**Rising Home Prices** *albeit at a Lower Pace*

**Cheap (But Profitable) Energy** *fuels the economy*

**Manufacturing Comeback** *no college or debt required*

stewart

stewart.com

Stewart Blog

stewart®

<http://blog.stewart.com>

Jones on Real Estate



DrTCJ

***Allergic to Average***

**Ted C. Jones, PhD**

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and the  
**BEAT GOES ON**

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Ted C. Jones, PhD  
Chief Economist  
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**An Economic Outlook on What Changes,  
What Stays the Same and What's to Come**