



# and the **BEAT GOES ON**

**Pandemics & Seismic Events**

**stewart<sup>®</sup>**

Ted C. Jones, PhD  
Chief Economist  
Stewart Title

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



Hard Rock  
CAFE  
Anchorage

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

# **THE BEAT GOES ON**

Words and Music by **SONNY BONO**



## **1967 – An Economic Forecast for 2020**

**What Changes,  
What Stays  
the Same  
What's to  
Come**

**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**

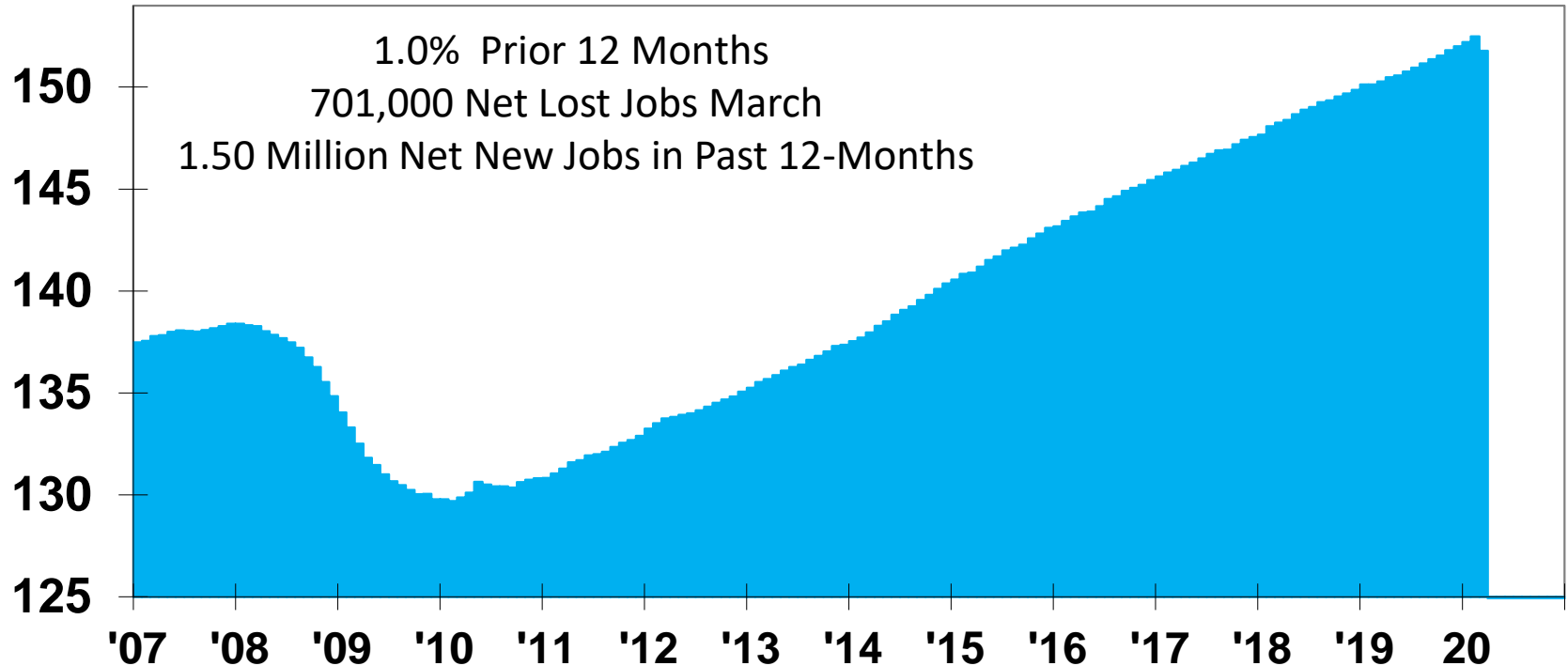
**Charleston was once the rage, uh huh  
History has turned the page, uh huh  
The mini skirts, the current thing, uh huh  
Teenybopper is our newborn king, uh huh**

**Sonny & Cher**

# U.S. Jobs

Jobs (Millions) *Seasonally Adjusted*

More Jobs Than Anytime  
In History



# Weekly Unemployment Claims

**695,000 October 1982** *Prior Record*

**3.307 Million March 25, 2020** *4.7X*

**6.648 Million April 2, 2020** *2X*

**6.606 Million April 9, 2020**

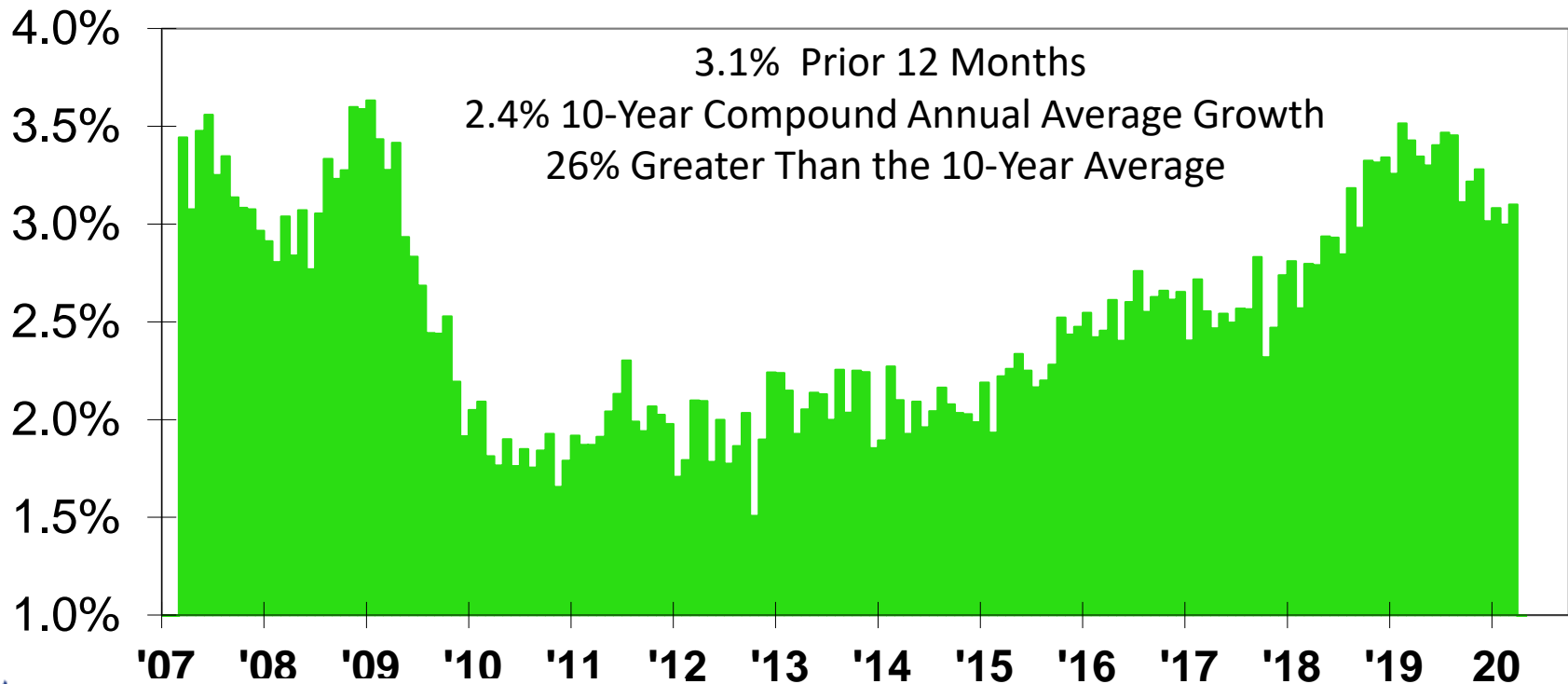
**5.245 Million April 16, 2020**



# U.S. Hourly Wage Growth

2019 – Best Wage Increases  
in a Decade

Percent Change – *Prior 12 Months Seasonally Adjusted*





# Recession

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

**FORECAST**

**3.1%**

Q1 2019

**2.0%**

Q2 2019

**2.1%**

Q3 2019

**2.1%**

Q4 2019

Goldman  
Sachs

**-9%**

Q1 2020

**-34%**

Q2 2020

**+19%**

Q3 2020

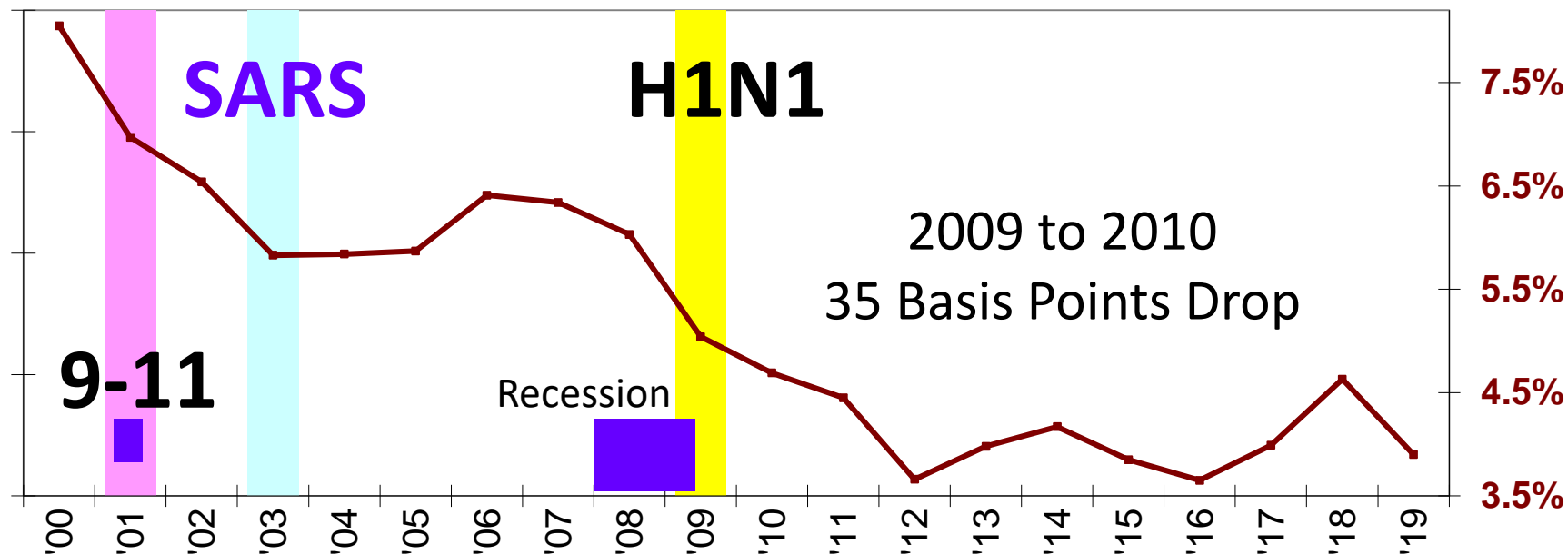
**-6.2%**

2020

# 30-Year Conventional Mortgage Interest Rates

Major Pandemics-Seismic Events

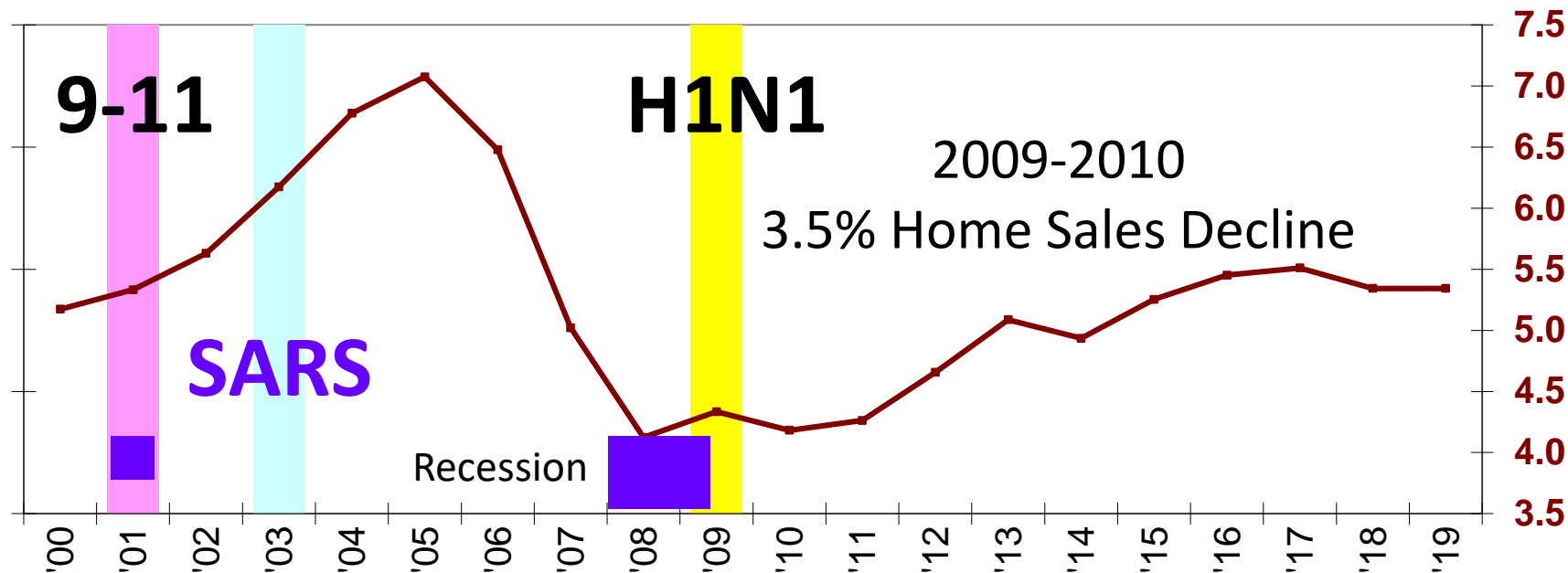
Percent



# Annual Existing Home Sales

Major Pandemics-Seismic Events

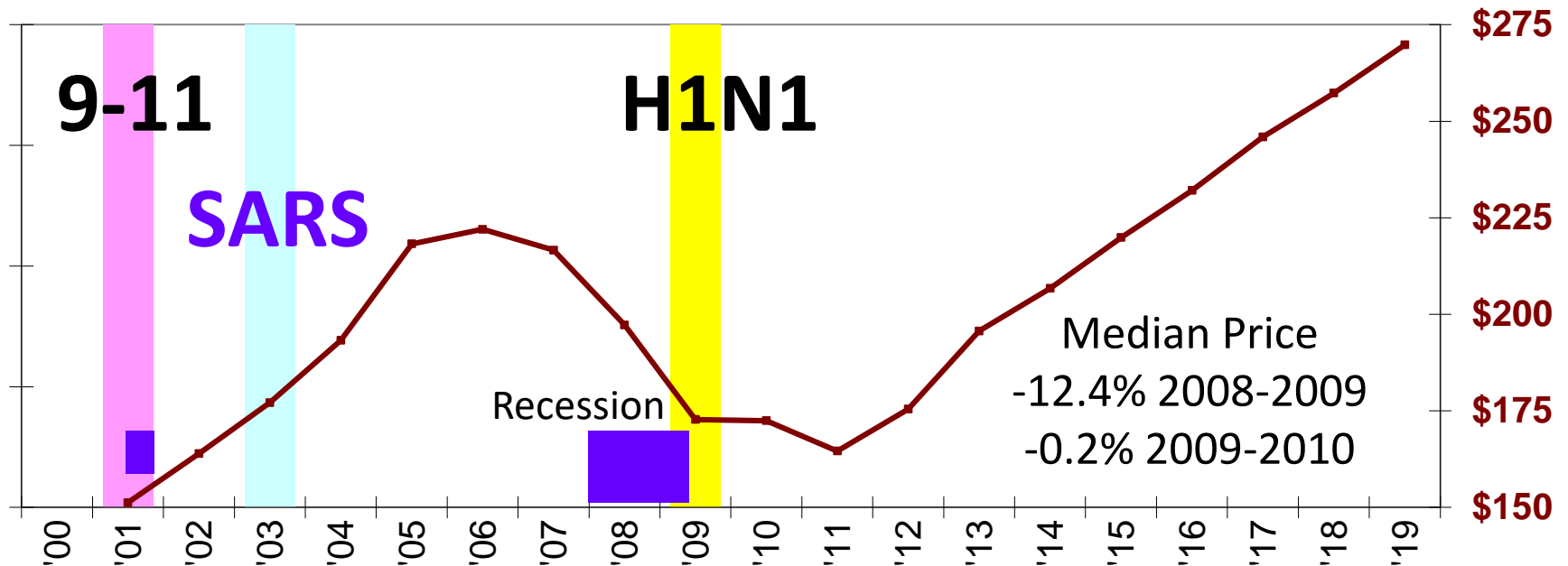
Millions



*Actual Annual Sales – Not Seasonally Adjusted*

# Median Price - Existing Home Sales

Major Pandemics-Seismic Events



*Annual Average of Monthly Median Prices*



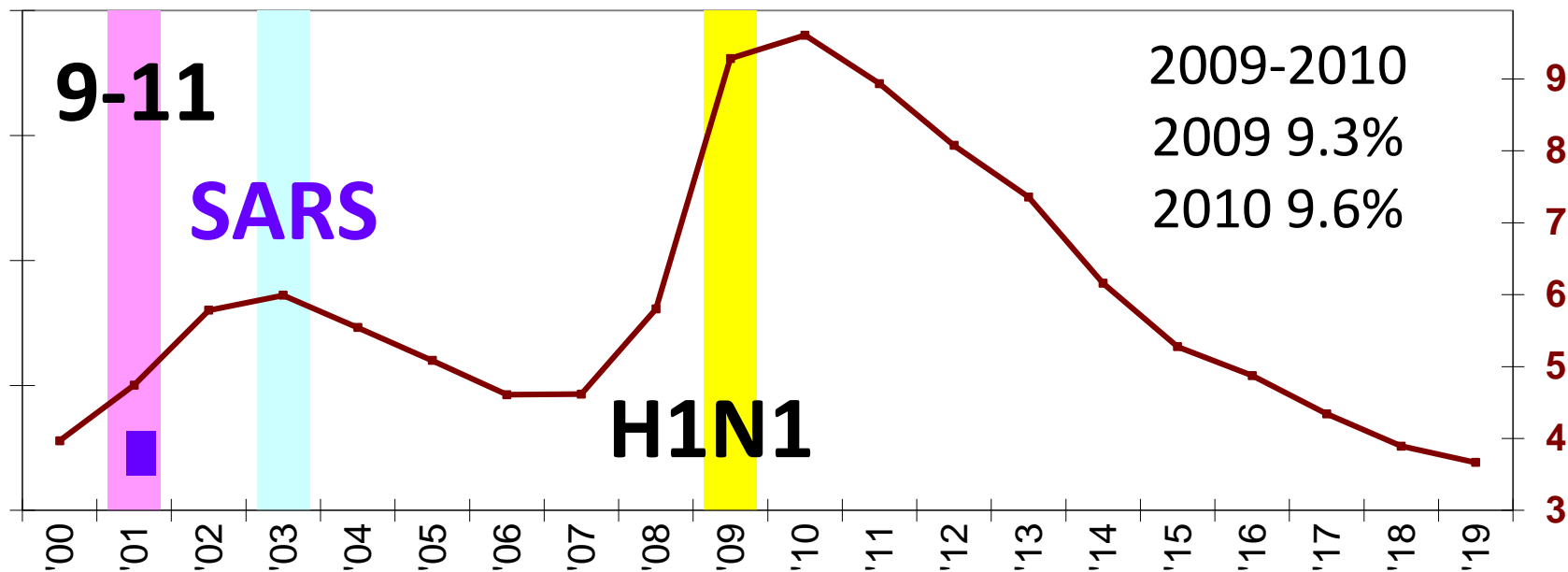
NATIONAL  
ASSOCIATION of  
REALTORS®

stewart

# Unemployment Rate

Major Pandemics-Seismic Events

Unemployment  
Rate

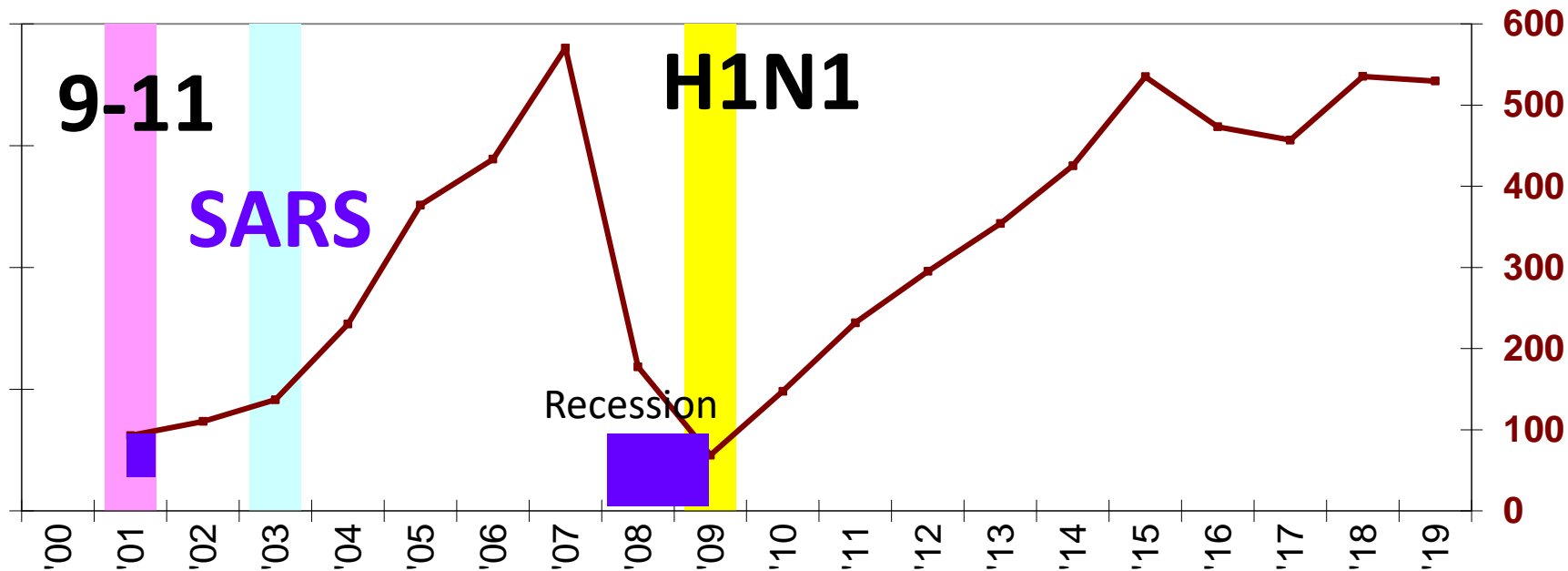


*Average Annual Unemployment Rate – Not Seasonally Adjusted*

# Commercial Real Estate Sales Volume

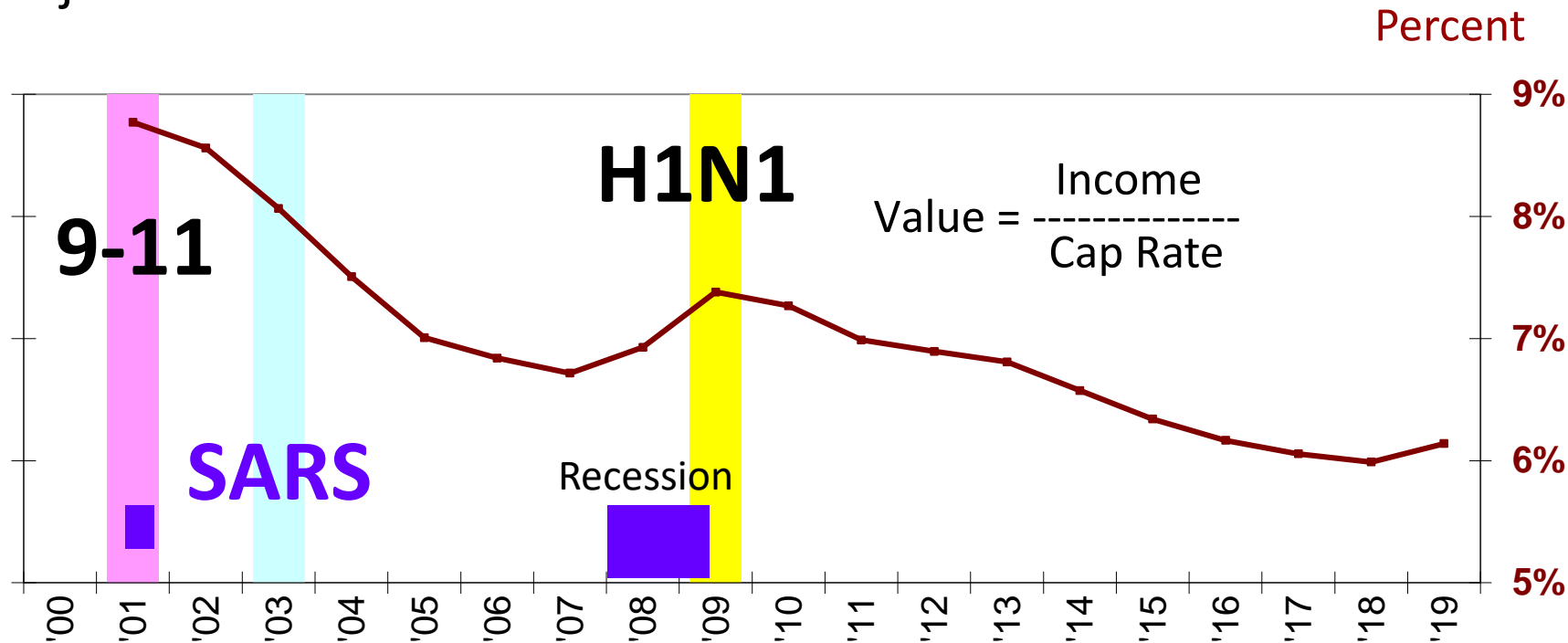
Major Pandemics-Seismic Events

\$ Billions



# Commercial Real Estate Capitalization Rates

Major Pandemics-Seismic Events





# H1N1 *aka Swine Flu*

**United States 2009**

**60.8 Million Cases**

**274,304 Hospitalizations**

**12,469 Deaths** *284,000 world*

Probably  
Forgot  
or  
Never  
Knew



Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives, Protecting People™

<https://www.worldometers.info/coronavirus/>

**U.S. 307 Million vs World 6.85 Billion – U.S. 4.5%**

# 61,000

**U.S. Flu Deaths Fall of 2017  
Spring of 2018 Flu Season**

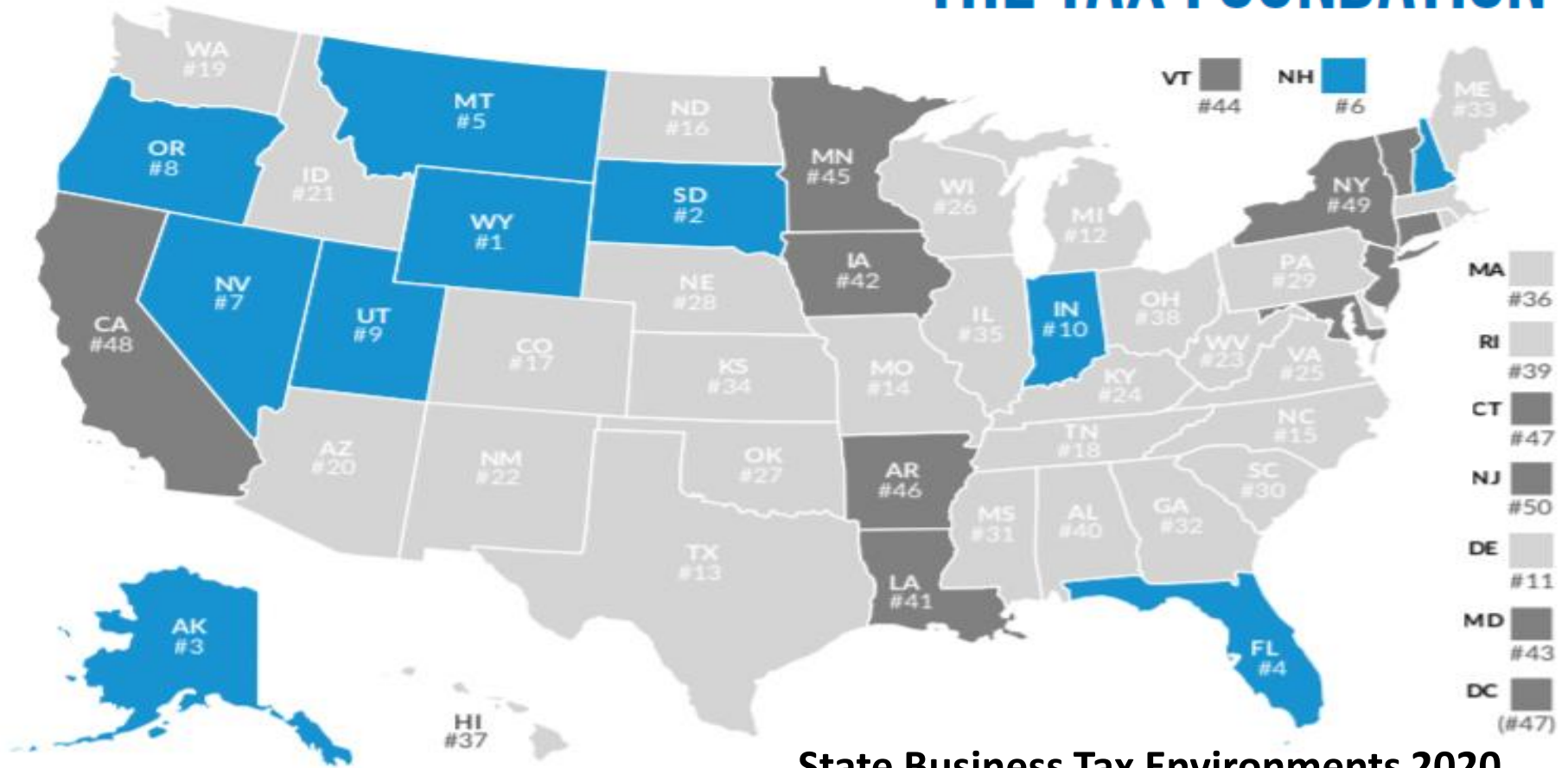
## State Job Growth -- 12 Months Ending March 2020

Utah	2.61%
Arizona	2.21%
Idaho	2.20%
Texas	1.91%
Washington	1.88%
Tennessee	1.71%
New Mexico	1.67%
Montana	1.65%
Colorado	1.60%
Florida	1.32%
South Carolina	1.27%
South Dakota	1.04%
Nebraska	0.90%
California	0.83%
Georgia	0.79%
Oregon	0.77%
Kansas	0.65%

Alabama	0.61%
Delaware	0.59%
North Carolina	0.54%
Dist of Columbia	0.50%
Virginia	0.50%
New Jersey	0.38%
Nevada	0.35%
Maryland	0.34%
Connecticut	0.31%
New York	0.18%
Wisconsin	0.13%
North Dakota	0.12%
Pennsylvania	0.10%
Massachusetts	0.01%
Kentucky	-0.04%
Michigan	-0.07%
New Hampshire	-0.19%

Mississippi	-0.20%
Missouri	-0.30%
Rhode Island	-0.30%
Minnesota	-0.36%
Maine	-0.42%
Alaska	-0.44%
Arkansas	-0.45%
Hawaii	-0.45%
Indiana	-0.46%
Wyoming	-0.46%
Ohio	-0.54%
Iowa	-0.59%
Illinois	-0.66%
Oklahoma	-0.72%
Louisiana	-1.02%
West Virginia	-1.62%
Vermont	-2.20%

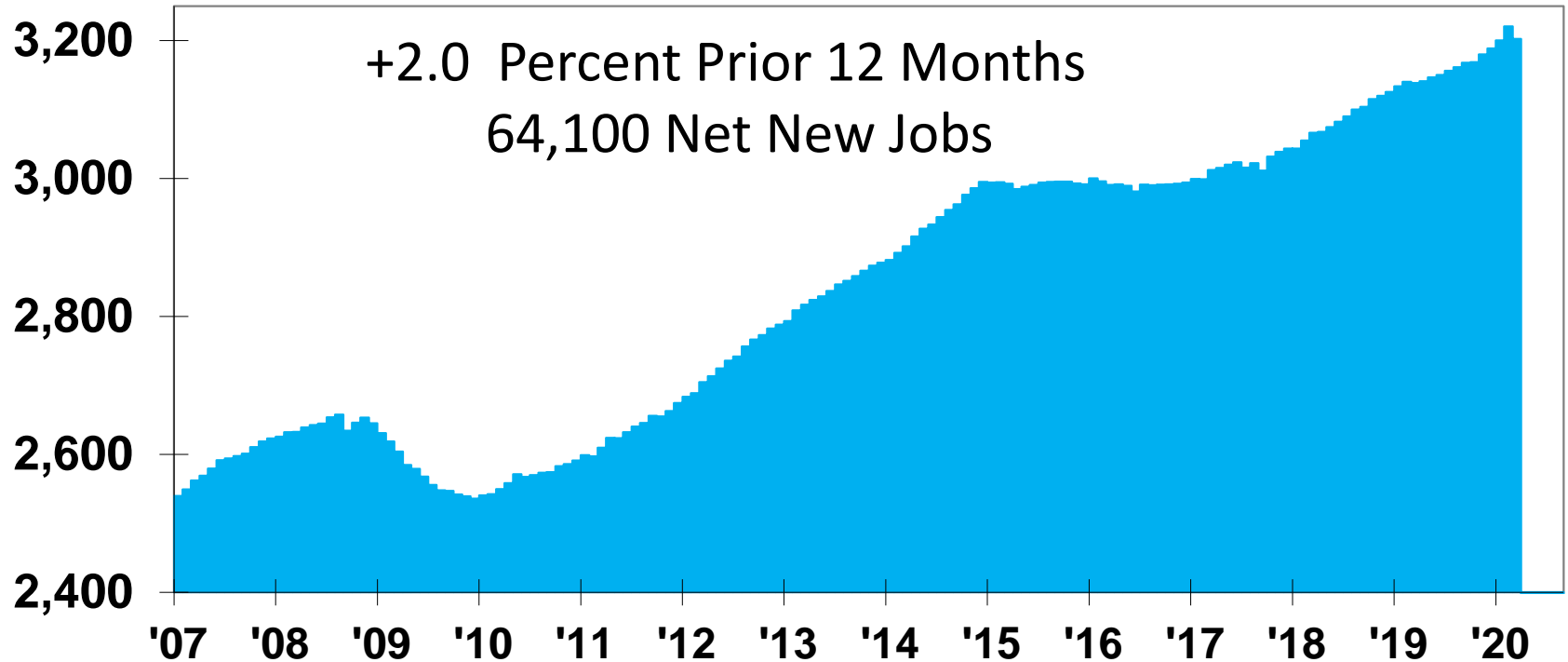
# THE TAX FOUNDATION



State Business Tax Environments 2020

# Houston-The Woodlands-Sugar Land MSA Jobs

Jobs (Thousands) *Seasonally Adjusted*



# Unemployment Rate

*March 2020 - Not Seasonally Adjusted*

**4.5%**

**U.S.**

**4.7%**

**Texas**

**3.9%**

**Houston  
MSA**

## **Smallest State Unemployment Increase Since Coronavirus**

**Weeks Ending March 21 & 28, April 4 & 11**

<b>Rank</b>	<b>State</b>	<b>Week Ending April 11</b>	<b>Last 4 Weeks</b>	<b>Percent of Workforce</b>
<b>1</b>	South Dakota	6,152	22,852	4.9%
<b>2</b>	West Virginia	14,595	47,148	5.8%
<b>3</b>	Florida	181,293	653,975	6.2%
<b>4</b>	Utah	24,171	105,433	6.4%
<b>5</b>	Connecticut	33,962	125,753	6.6%
<b>6</b>	Texas	273,567	1,020,345	7.1%
<b>7</b>	Wyoming	4,904	21,496	7.3%
<b>8</b>	Colorado	105,073	233,011	7.3%
<b>9</b>	Nebraska	16,391	83,870	8.1%
<b>10</b>	Oregon	50,930	191,270	9.1%



## Largest State Unemployment Increase Since Coronavirus

Weeks Ending March 21 & 28, April 4 & 11

Rank	State	Week Ending April 11	Last 4 Weeks	Percent of Workforce
1	Hawaii	34,693	145,205	21.7%
2	Michigan	219,320	1,040,215	21.0%
3	Rhode Island	22,805	114,695	20.6%
4	Pennsylvania	238,357	1,298,125	19.8%
5	Nevada	60,180	303,705	19.3%
6	Kentucky	115,763	395,910	19.1%
7	Louisiana	80,045	350,504	16.7%
8	Georgia	317,526	853,618	16.5%
9	New Hampshire	23,936	123,895	15.9%
10	Washington	150,516	634,526	15.9%

## Orlando MSA Vs U.S. Supersector Employment Analysis - March 2020

Not Seasonally Adjusted	Percent of All Jobs			12-Month Job Growth	
Employment Supersector	Orlando	U.S.		Orlando	U.S.
Mining & Logging	0.0%	0.5%		0.0%	-4.7%
<i><b>Mining &amp; Logging + Construction</b></i>	<i><b>6.8%</b></i>	<i><b>5.3%</b></i>		<i><b>6.9%</b></i>	<i><b>0.9%</b></i>
Construction	6.8%	4.9%		6.9%	2.2%
Manufacturing	3.7%	8.5%		2.2%	0.1%
Trade-Transport-Utilities	18.0%	18.2%		0.8%	0.4%
Information	1.9%	1.9%		1.2%	1.7%
Financial Activities	6.0%	5.8%		4.3%	1.7%
Professional and Business Service	17.3%	14.1%		-0.8%	1.5%
Education and Health Services	12.5%	16.3%		5.1%	2.2%
Leisure & Hospitality	20.6%	10.6%		-0.1%	-0.6%
Other	3.4%	3.9%		1.3%	0.8%
Government	9.7%	15.3%		0.5%	0.9%

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

## Houston MSA Vs U.S. Supersector Employment Analysis - March 2020

Not Seasonally Adjusted	Percent of All Jobs		12-Month Job Growth	
Employment Supersector	Houston	U.S.	Houston	U.S.
Mining & Logging	2.4%	0.5%	-5.5%	-4.7%
<b><i>Mining &amp; Logging + Construction</i></b>	<b><i>9.0%</i></b>	<b><i>5.3%</i></b>	<b><i>0.0%</i></b>	<b><i>0.9%</i></b>
Construction	7.5%	4.9%	2.1%	2.2%
Manufacturing	7.1%	8.5%	-3.7%	0.1%
Trade-Transport-Utilities	19.9%	18.2%	1.8%	0.4%
Information	1.0%	1.9%	1.2%	1.7%
Financial Activities	5.2%	5.8%	1.8%	1.7%
Professional and Business Service	16.1%	14.1%	3.2%	1.5%
Education and Health Services	13.0%	16.3%	3.6%	2.2%
Leisure & Hospitality	10.6%	10.6%	1.9%	-0.6%
Other	3.8%	3.9%	7.1%	0.8%
Government	13.4%	15.3%	1.8%	0.9%

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

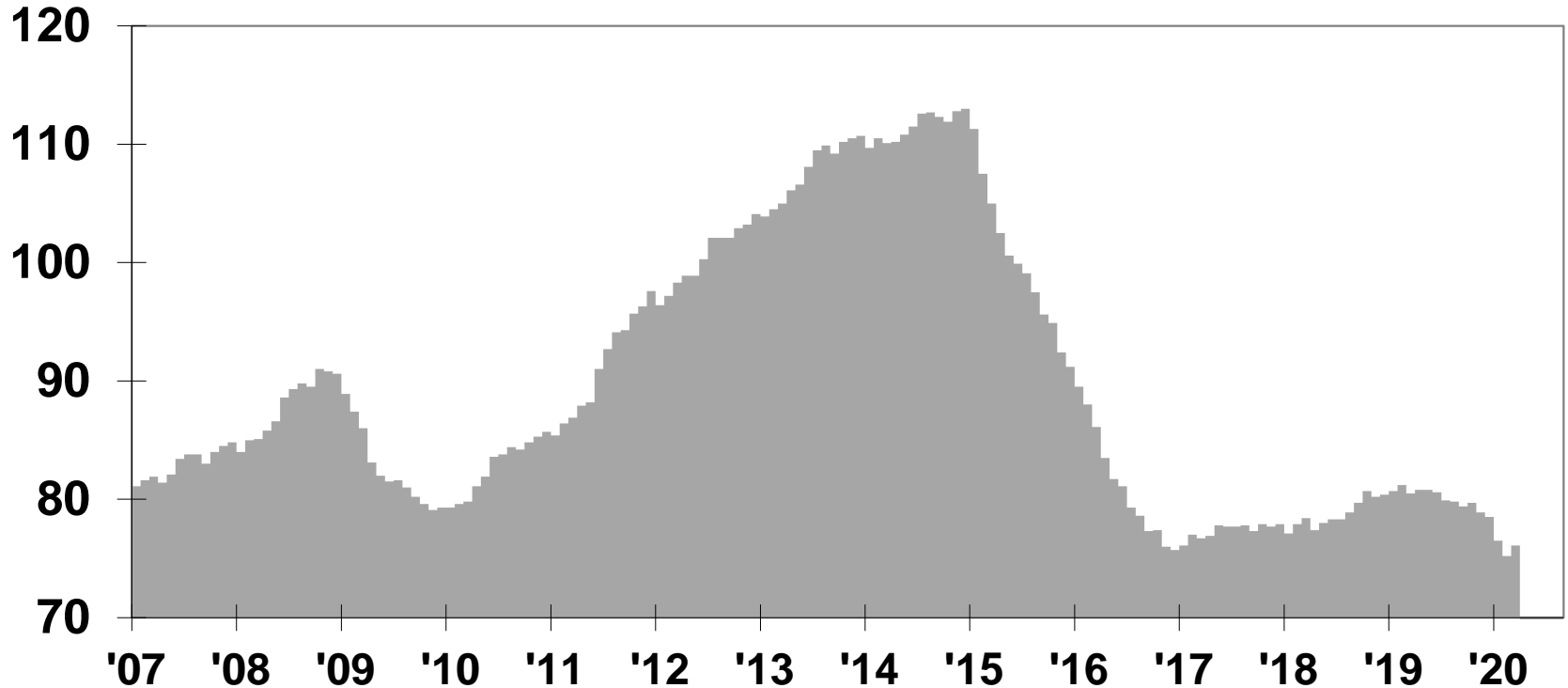
# Houston-The Woodlands-Sugar Land MSA SuperSector Job Growth Analysis -- March 2020

Not Seasonally Adjusted

Employment Supersector	Total Jobs Thousands Mar 2020	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	3,195.7	100.0%	100.0%	59.0	1.9%	206.9	6.9%
Mining & Logging	76.1	2.4%	3.5%	(4.4)	-5.5%	(28.9)	-27.5%
<b><i>Mining, Logging and Construction</i></b>	<b>287.5</b>	<b>9.0%</b>	<b>9.6%</b>	<b>-</b>	<b>0.0%</b>	<b>-</b>	<b>0.0%</b>
Construction	239.1	7.5%	7.2%	4.9	2.1%	24.2	11.3%
Manufacturing	227.4	7.1%	8.5%	(8.8)	-3.7%	(28.0)	-11.0%
Trade-Transport-Utilities	635.0	19.9%	20.1%	11.4	1.8%	32.9	5.5%
Information	32.6	1.0%	1.1%	0.4	1.2%	0.6	1.9%
Financial Activities	167.2	5.2%	5.0%	2.9	1.8%	17.1	11.4%
Professional and Business Service	515.8	16.1%	15.8%	16.1	3.2%	44.2	9.4%
Education and Health Services	415.0	13.0%	12.1%	14.5	3.6%	52.2	14.4%
Leisure & Hospitality	337.3	10.6%	9.8%	6.4	1.9%	43.3	14.7%
Other	122.6	3.8%	3.6%	8.1	7.1%	15.9	14.9%
Government	427.6	13.4%	13.2%	7.5	1.8%	33.4	8.5%

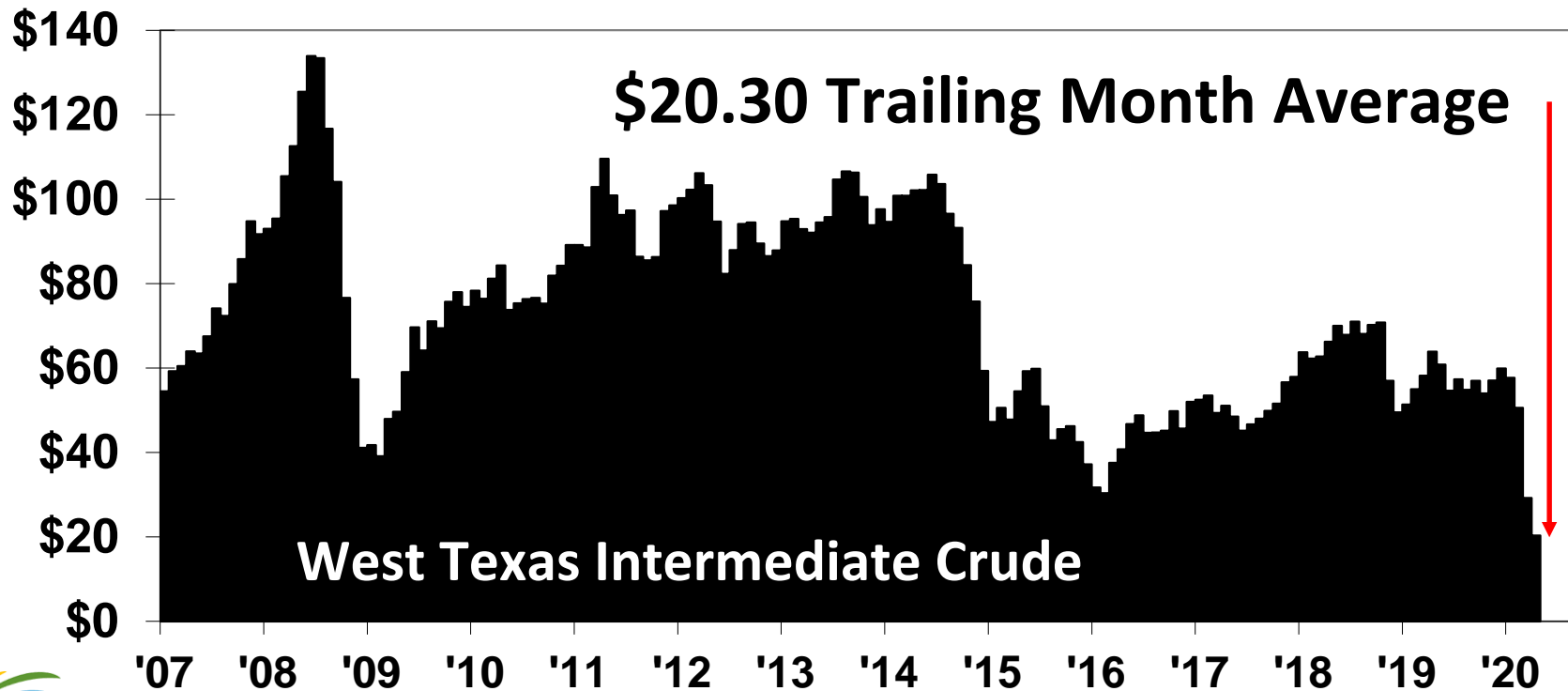
# Houston-The Woodlands-Sugar Land MSA Jobs

Mining & Logging Jobs (Thousands) *Not Seasonally Adjusted*



# West Texas Intermediate Crude Oil Price

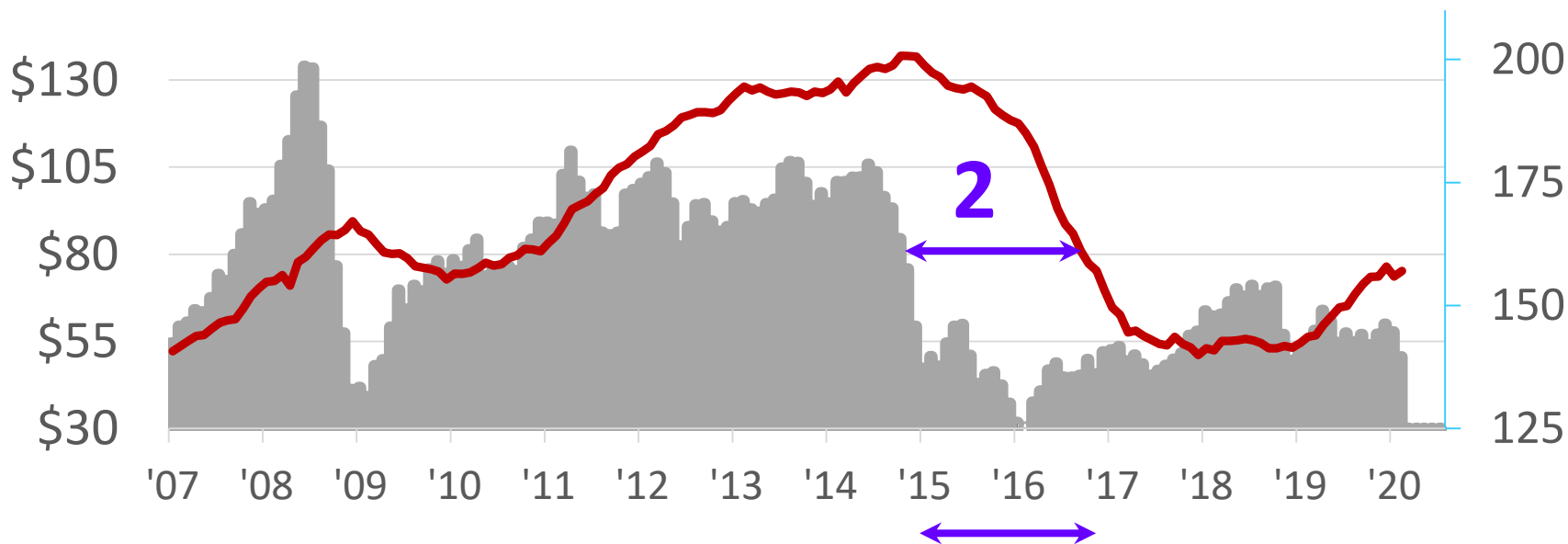
\$ Per Barrel



# Oil Prices - Oil & Gas Extraction Jobs

Crude Oil \$ Per Barrel

Oil & Gas Extraction Jobs - *Thousands*

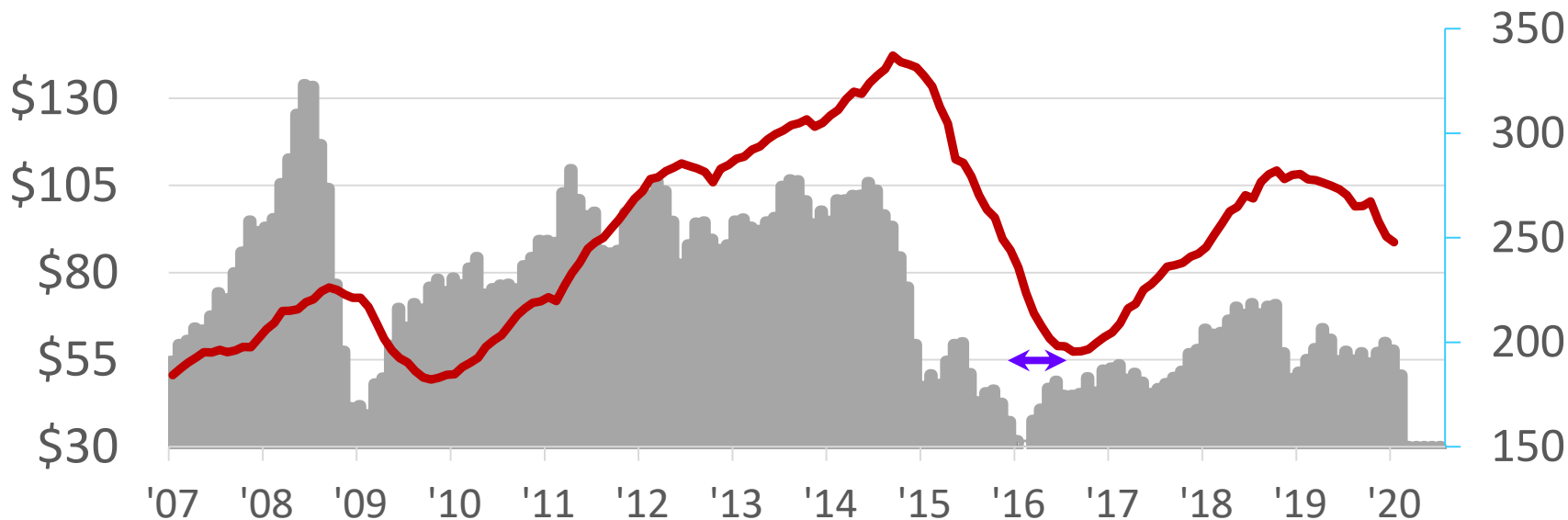




# Oil Prices - Support for Oil & Gas Jobs

Crude Oil \$ Per Barrel

Oil & Gas Support Jobs - *Thousands*





# FORECAST

FEDERAL RESERVE BANK *of* ST. LOUIS  
CENTRAL TO AMERICA'S ECONOMY®

**Q2  
2020**

**47**

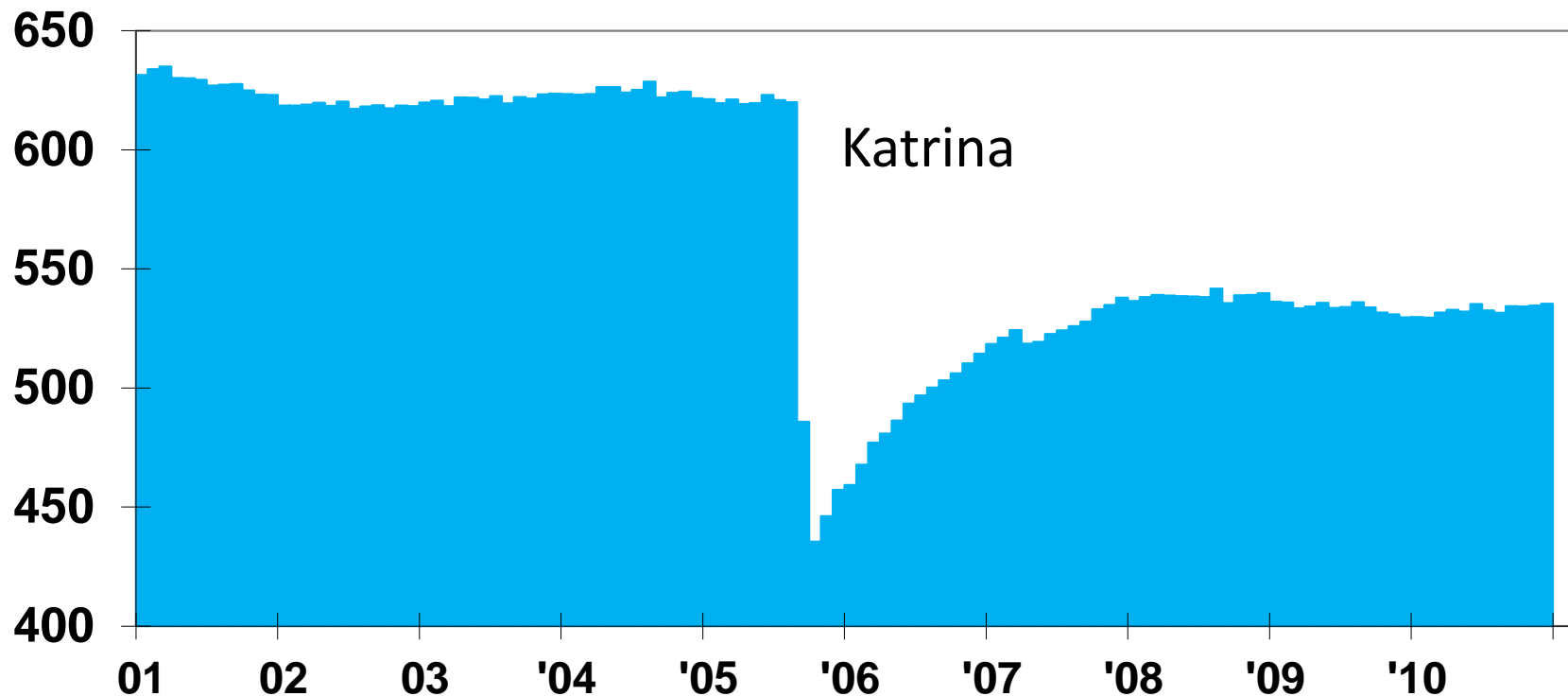
**Million  
Unemployed**

**32.1%**

**Unemployment  
Rate**

# New Orleans MSA Jobs

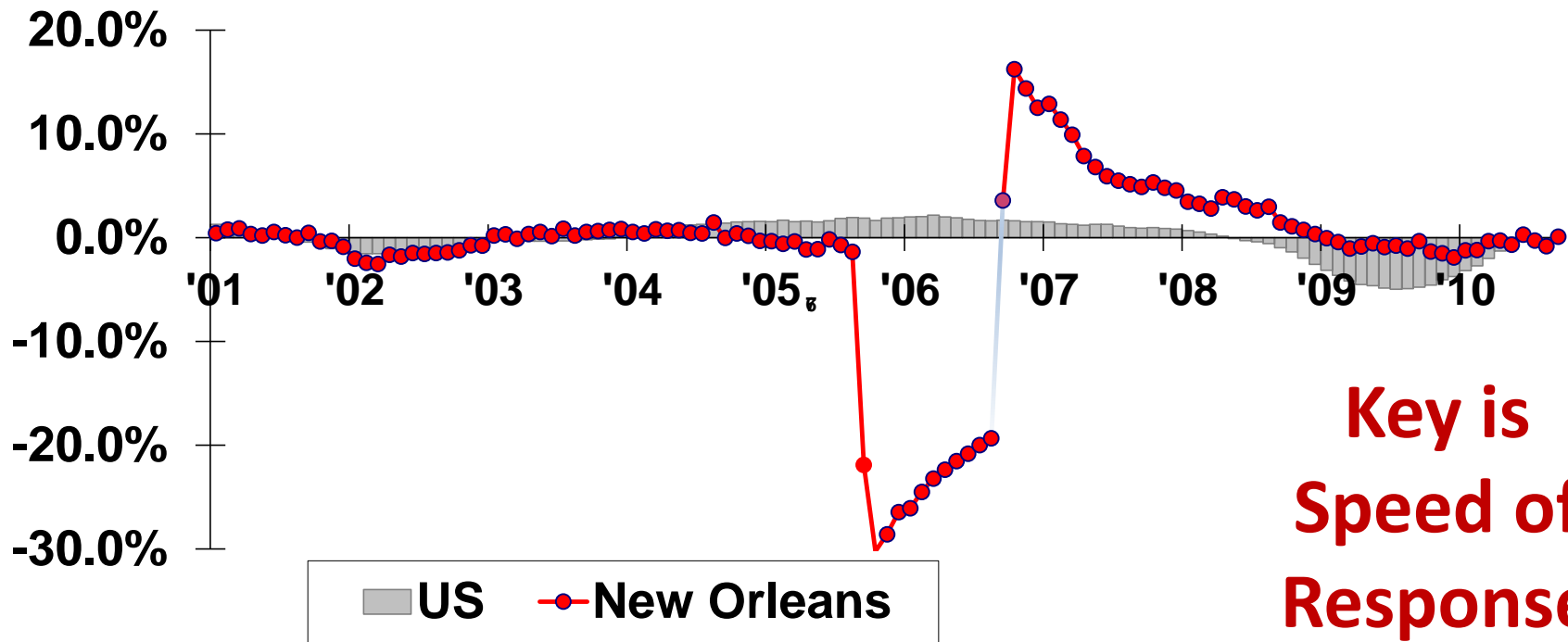
Jobs (Thousands) *Seasonally Adjusted*



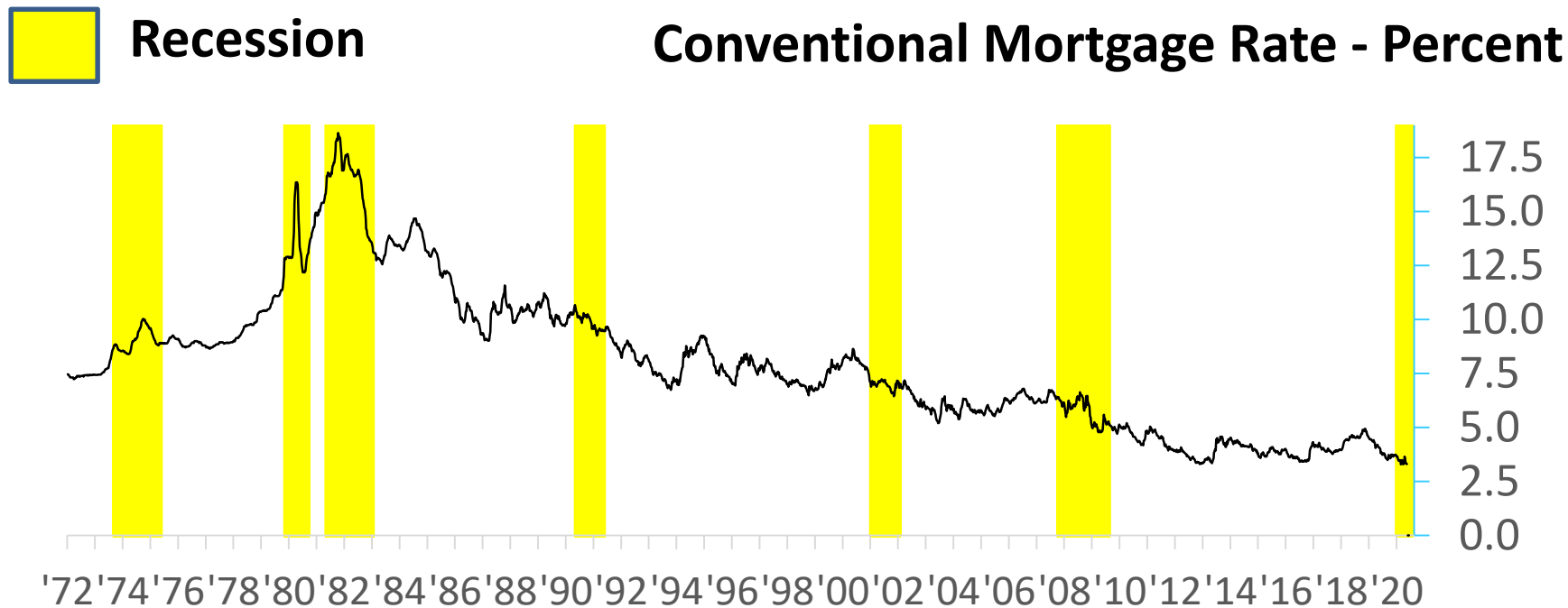
# New Orleans Jobs

*Not Seasonally Adjusted*

Percent Change from Same Month Prior Year

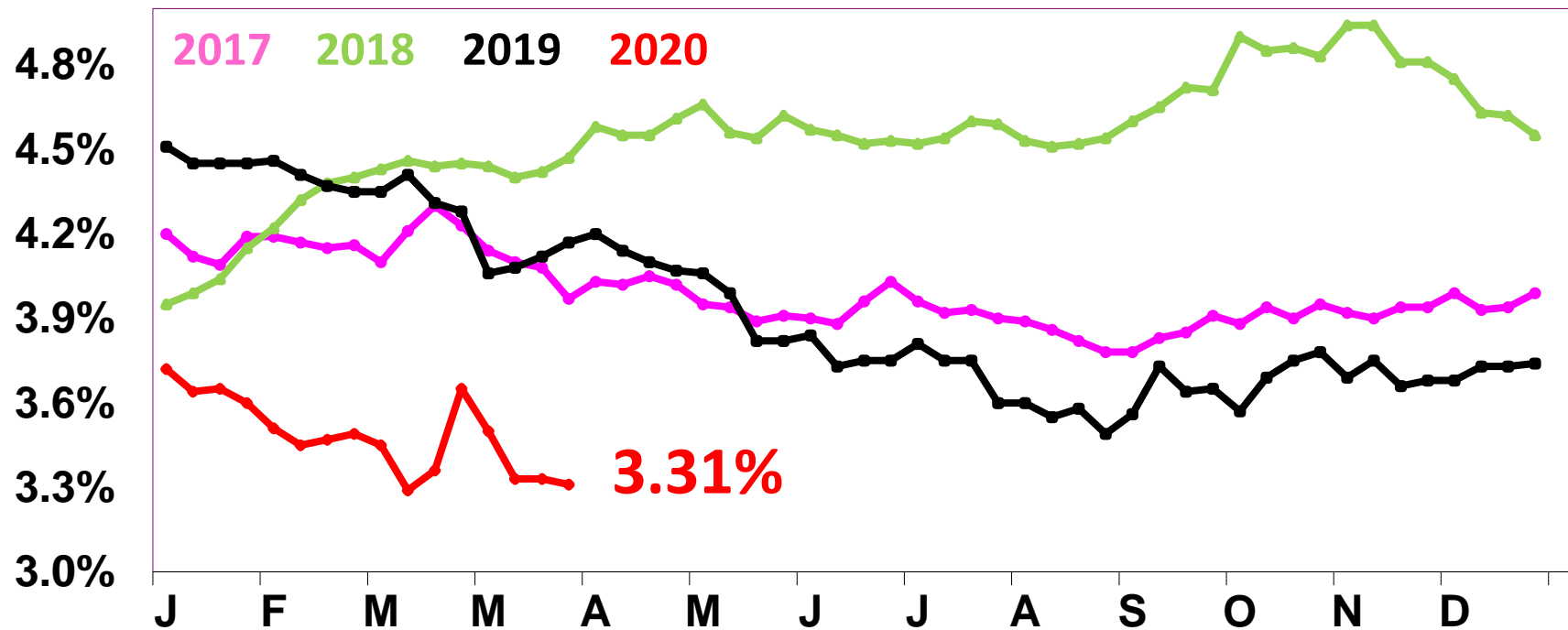


# Residential Interest Rates + Recession



# 30-Year Conventional Residential Mortgage Rates

Percent



# 30-Year Fixed-Rate Loans

<b>2019</b>	<b>3.9%</b>	<b>3.7%</b>	<b>4.0%</b>
<b>2020</b>	<b>3.3%</b>	<b>3.5%</b>	<b>3.3%</b>
<b>2021</b>	<b>3.1%</b>	<b>3.7%</b>	<b>3.1%</b>



Fannie Mae™

**MBA**

MORTGAGE BANKERS ASSOCIATION

FreddieMac



SEDLER

## Treasurys

Last Week

1 Year	0.17%	0.19%
2 Year	0.20%	0.20%
5 Year	0.34%	0.34%
10 Year	0.58%	0.76%
20 Year	0.98%	1.19%
30 Year	1.17%	1.41%

U.S. DEPARTMENT OF THE TREASURY

## Municipal 10-Year Bonds

Last Week

AAA	1.10%	1.25%
AA	1.20%	1.40%
A	1.40%	1.55%

fmsbonds, Inc.

## Commercial Cap Rates Q4 2019

Overall	6.22%
Apartments	5.32%
Hotels	8.52%
Industrial	6.14%
Offices	6.48%
Retail	6.56%
Senior Housing	7.18%

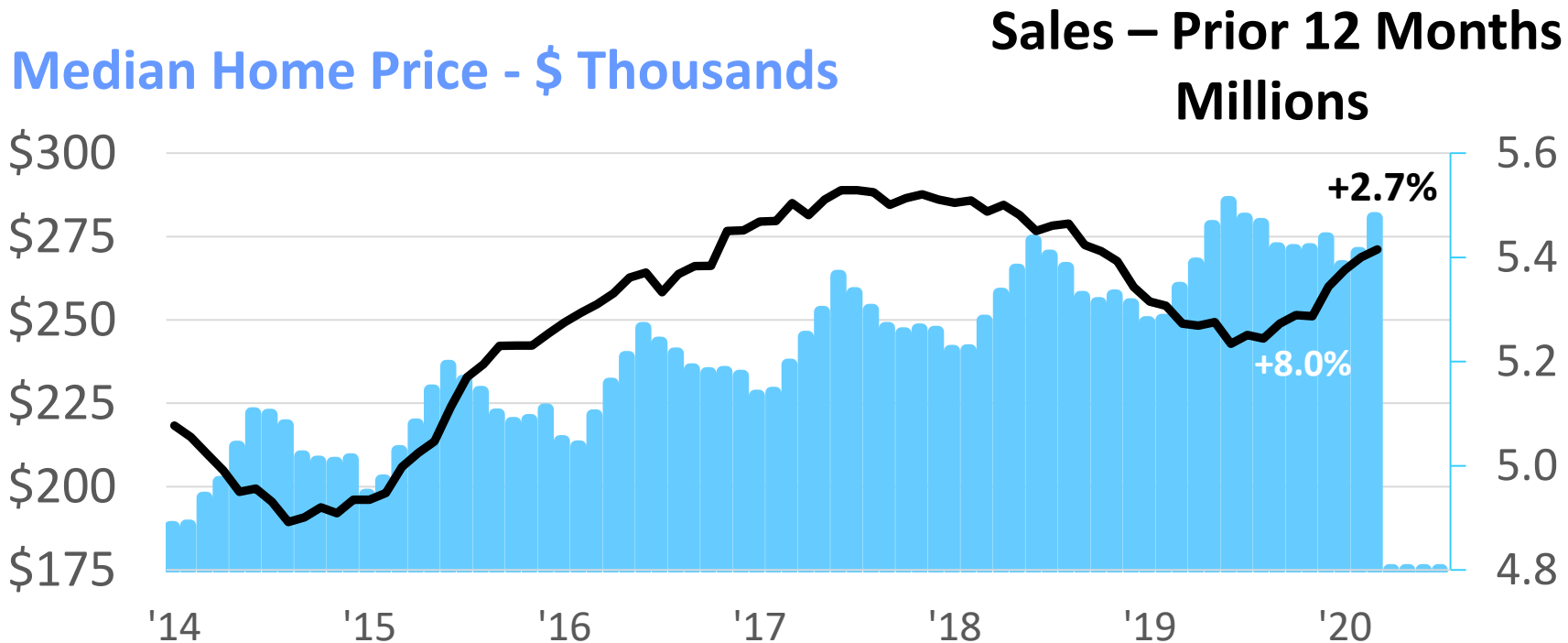
REAL CAPITAL ANALYTICS

## Corporate Bonds

Aaa Corporate	2.36%
Baa Corporate	3.91%

MOODY'S

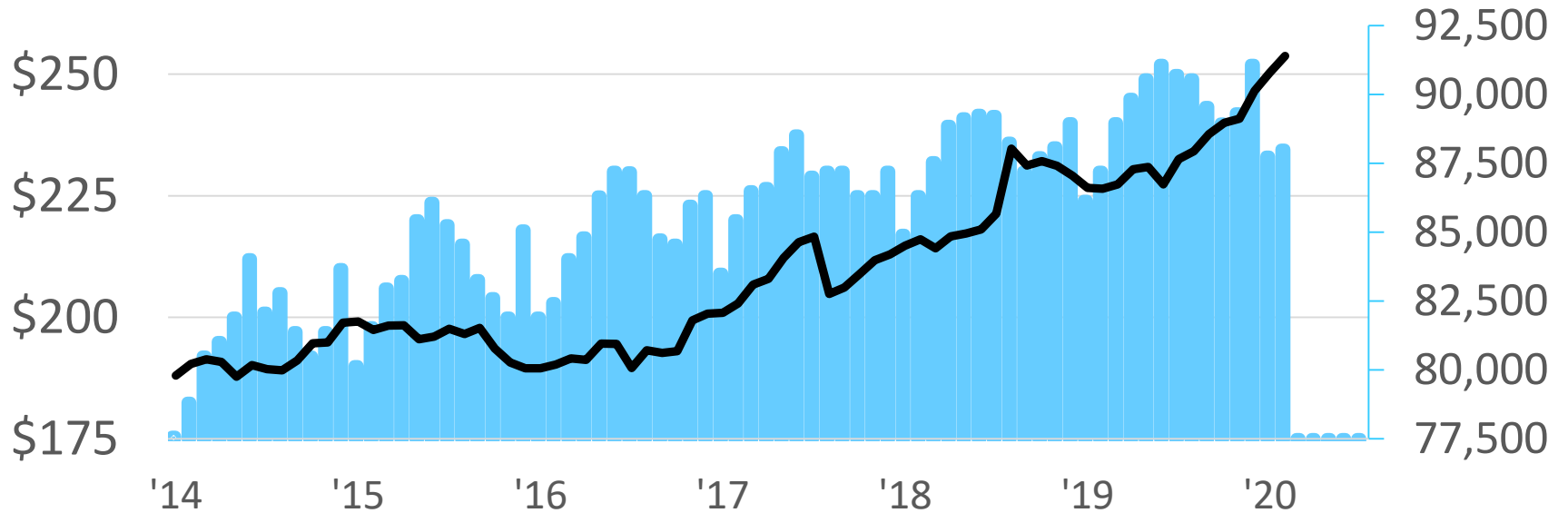
# US Existing Home Sales & Median Prices



# Houston MSA Home Sales & Median Prices

Median Home Price - \$ Thousands

Sales – Prior 12 Months



## Jobs & Residential Dwelling Unit Permits

Houston MSA			
Year	Net New Jobs	Dwelling Unit Permits	Jobs Per New Dwelling
2013	89,900	51,334	1.75
2014	116,800	63,745	1.83
2015	(3,200)	56,901	(0.06)
2016	2,600	44,732	0.06
2017	49,300	42,395	1.16
2018	82,100	57,478	1.43
2019	62,800	61,770	1.02
Total	400,300	378,355	1.06

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

**OVERBUILT**

# Houston Single-Family Existing Home Sales

## Galveston-Ft Bend-Harris-Montgomery Counties



Month	2015	2016	2017	2018	2019	2020
Jan	3,607	3,542	3,583	3,900	3,553	4,030
Feb	3,994	4,207	4,406	4,679	4,646	5,152
Mar	5,462	5,568	6,159	5,931	6,138	6,272

### Percent Change-Year-Over-Year

Month	2015	2016	2017	2018	2019	2020
Jan		-1.8%	1.2%	8.8%	-8.9%	13.4%
Feb		5.3%	4.7%	6.2%	-0.7%	10.9%
Mar		1.9%	10.6%	-3.7%	3.5%	2.2%

**PRELIMINARY**

**SFR Sales**

# Houston Number of New Single-Family Existing Home Listings

Galveston-Ft Bend-Harris-Montgomery Counties



Month	2015	2016	2017	2018	2019	2020
Jan	7,348	8,057	8,229	7,960	9,059	9,517
Feb	7,450	8,546	8,558	8,204	8,858	9,580
Mar	8,430	9,836	11,202	10,671	10,977	10,274

## Percent Change-Year-Over-Year

Month	2015	2016	2017	2018	2019	2020
Jan		9.6%	2.1%	-3.3%	13.8%	5.1%
Feb		14.7%	0.1%	-4.1%	8.0%	8.2%
Mar		16.7%	13.9%	-4.7%	2.9%	-6.4%

**PRELIMINARY**

**SFR New Listings**

## Houston Single Family Home Sales January-March

### Galveston-Ft Bend-Harris-Montgomery Counties

	2014	2015	2016	2017	2018	2019	2020
<b>\$1 to \$499,999</b>	11,998	11,829	12,211	12,869	13,188	13,010	13,983
<b>\$500,000 to \$799,999</b>	795	819	751	835	895	902	1,030
<b>\$800,000 to \$999,999</b>	170	146	135	174	186	174	203
<b>\$1 Million and Up</b>	219	269	220	270	241	251	312
<b>Total</b>	13,182	13,063	13,317	14,148	14,510	14,337	15,528

## Percent Change -2020 vs 2019

<b>\$1 to \$499,999</b>	7.5%
<b>\$500,000 to \$799,999</b>	14.2%
<b>\$800,000 to \$999,999</b>	16.7%
<b>\$1 Million and Up</b>	24.3%



PRELIMINARY

## Single Family Sales - Galveston Ft Bend Harris Montgomery Counties

	2013	2014	2015	2016	2017	2018	2019
<b>\$1 to \$499,999</b>	60,518	60,764	59,209	61,217	62,791	64,969	67,880
<b>\$500,000 to \$799,999</b>	3,681	4,514	4,564	4,401	4,566	5,012	5,377
<b>\$800,000 to \$999,999</b>	847	993	916	844	912	973	1,045
<b>\$1 Million and Up</b>	1,225	1,383	1,418	1,352	1,506	1,593	1,645
<b>Total</b>	66,271	67,654	66,107	67,814	69,775	72,547	75,947

**Oil Price**   \$   97.91   \$93.26   \$48.69   \$43.29   \$50.80   \$65.23   \$56.99





## Single Family Sales - Galveston Ft Bend Harris Montgomery Counties

### Percent Change - Prior Year

	2014	2015	2016	2017	2018	2019
\$1 to \$499,999	0.4%	-2.6%	3.4%	2.6%	3.5%	4.5%
\$500,000 to \$799,999	22.6%	1.1%	-3.6%	3.7%	9.8%	7.3%
\$800,000 to \$999,999	17.2%	-7.8%	-7.9%	8.1%	6.7%	7.4%
\$1 Million and Up	12.9%	2.5%	-4.7%	11.4%	5.8%	3.3%
Total	2.1%	-2.3%	2.6%	2.9%	4.0%	4.7%
Oil Price	-4.7%	-47.8%	-11.1%	17.3%	28.4%	-12.6%



Average Rent	\$ 1,110
Year-Over-Year Change	1%
Average Apartment Size- Sq Ft	879

### **Apartment Mix**

Less Than \$501	
\$501 - \$700	12%
\$701 - \$1,000	41%
\$1,001 - \$1,500	31%
\$1,501 - \$2,000	10%
> \$2,000	5%

# **Houston Apartment Rents**

RENTCafé®

## RENTCafé® Apartment Rents

### Conventional - 20% Down

Average Rent	\$ 1,110
Rate	3.31%
Term	30 Years

*Houston*

Average Price	\$ 244,100
Less 20% Down	(48,820)
<hr/>	
Loan Amount	\$ 195,280
Monthly Payment	(856)
<hr/>	
Residual	\$ 254

**Conventional Loan**

### FHA - 3.5% Down

Average Rent	\$ 1,110
Rate	2.995%
Term	30 Years

*Houston*

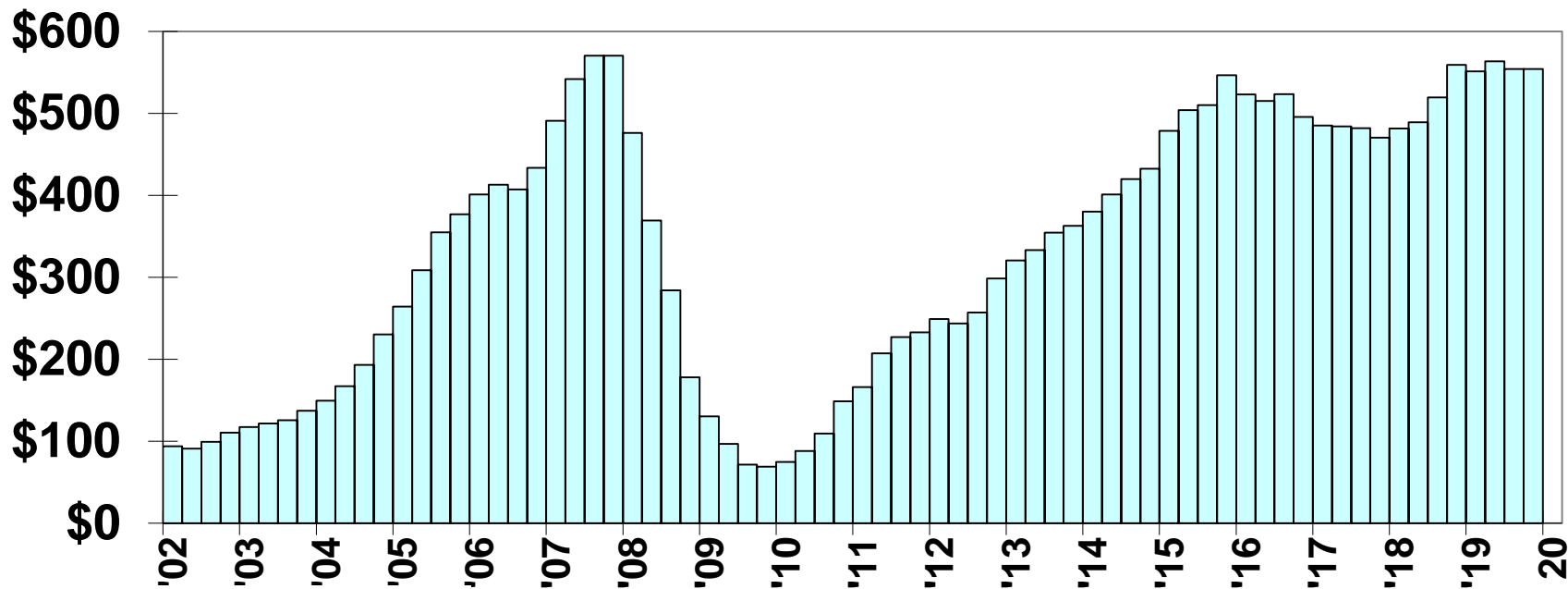
Average Price	\$ 244,100
Less 3.5% Down	(8,544)
<hr/>	
Loan Amount	\$ 235,557
Monthly Payment	(992)
<hr/>	
Residual	\$ 118

**FHA**

**stewart**

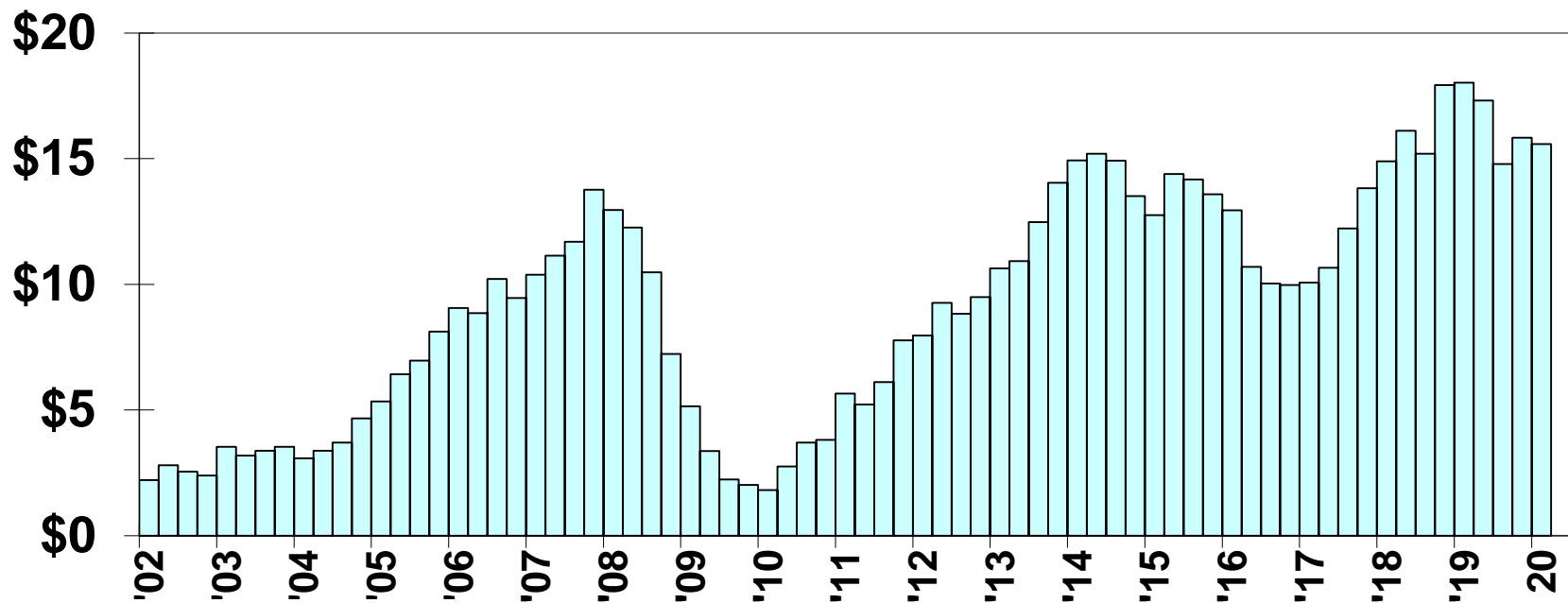
# US Commercial Real Estate Sales Volume

\$ Billions – *Trailing 12 Months*

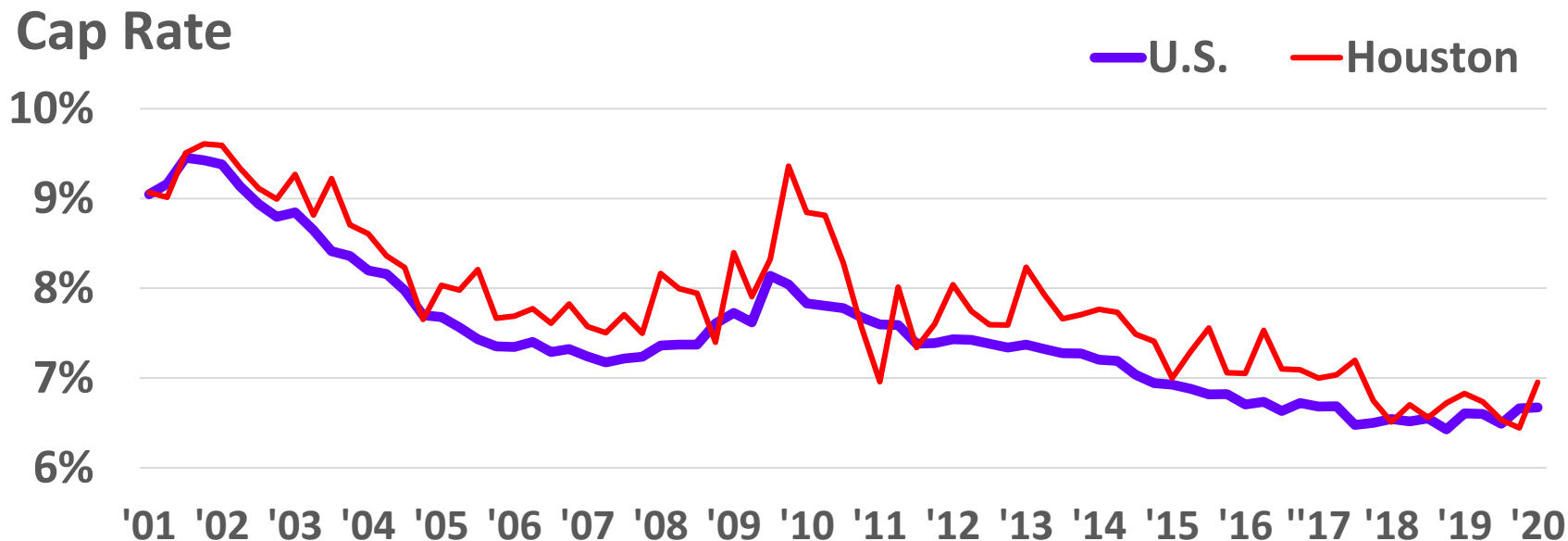


# Houston Commercial Real Estate Sales

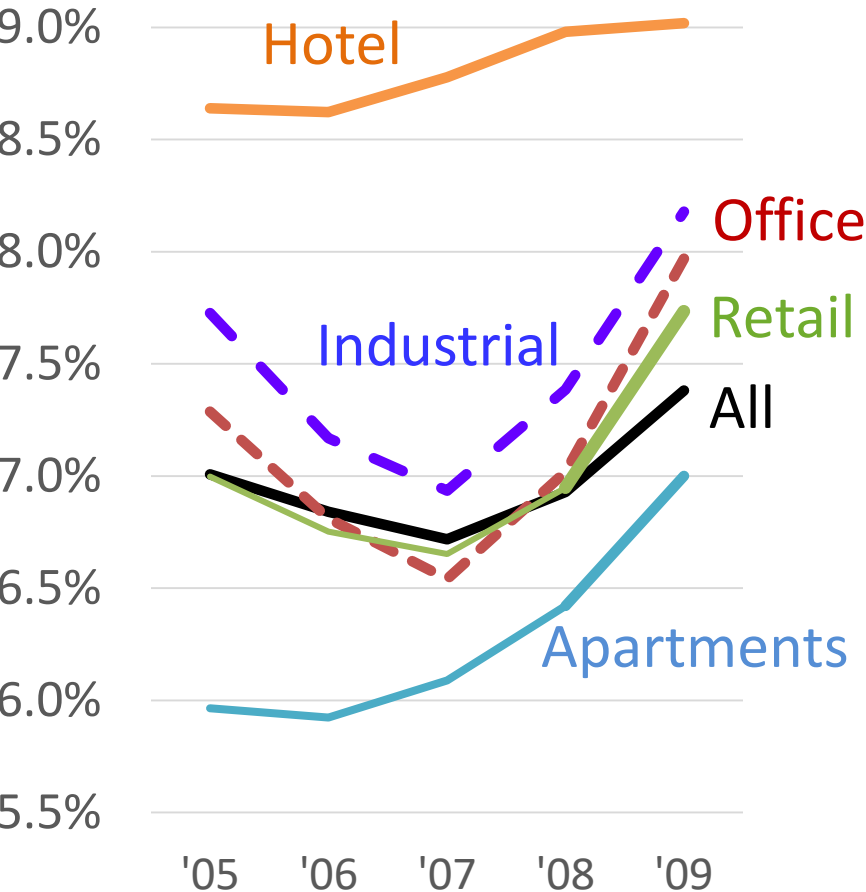
\$ Billions – *Trailing 12 Months*



# U.S. Vs Houston Cap Rates



# Commercial Cap Rates



	Trough	Peak	Gain BP
Hotel	8.62%	9.02%	40
Industrial	6.93%	8.18%	124
Office	6.54%	7.97%	143
Retail	6.65%	7.73%	108
All	6.72%	7.38%	66
Apartments	5.92%	7.00%	108

2005-2009

-10% Value  
Just Cap Rate

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**Tweet**



**Ted C. Jones**

@DrTCJ



April Rent for Small Businesses Up to 50 Employees

Survey with 1,000+ small business owners found:

(approximate)

30% made no rent payment

20% only made a partial rent payment

25% reported their landlord or bank offered a reduction or deferral

[@WSJ](#)

[@Alignable](#)

5:26 AM · Apr 8, 2020 · [Twitter for iPad](#)



# Value Impacts – Commercial Real Estate

- Cap Rates – Risk Component
- Demand – Rent Component
- Vacancy & Collection Loss

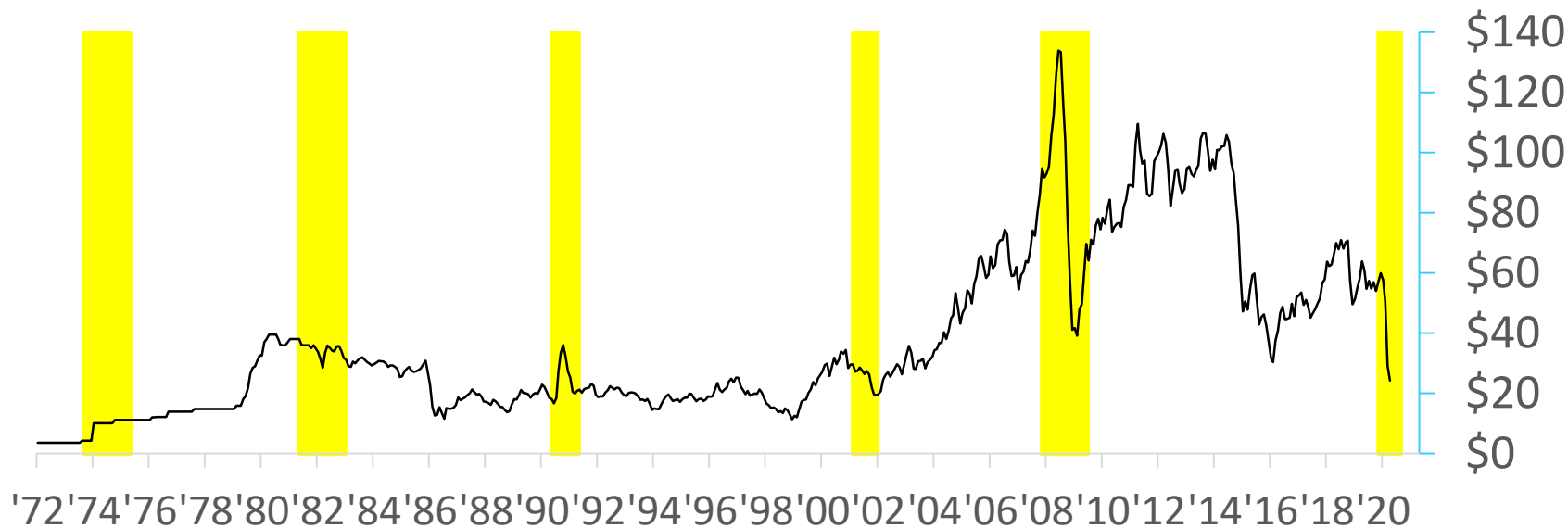
$$\text{Value} = \frac{\text{Income}}{\text{Cap Rate}}$$

# Recessions + Oil Prices



Recession

West Texas Intermediate Crude Oil



# 2020 Economic Outlook *Ted's Take*

**Expected Short Recession, Deep – But Out by Q4**  
**Entered Downturn with Best Wage Growth in 10 Years**  
**Record Low Interest Rates**  
**Cheap Energy** *fuels the economy, helps almost EVERYONE*  
**Manufacturing Comeback** *no college or debt required*  
*replacing China on many fronts – medical, parts*

# McDrive

Autoschalter



Achtung  
Eingeschränkter  
Winterdienst  
Keine Streuung



## Ettwein

Büro + Lagerflächen  
zu vermieten  
Tel. 0172-7628855

# **What's to Come - Permanent** *Ted's Take*

- **U.S. Manufacturing LONGTERM Comeback**
- **Hastening Paperless Real Estate Transaction Process**
- **Remote Everything – Notary, Closings, Appraisals.....**
- **Drive-Thru Everything**
- **Office Demand – Permanently Down**
- **Industrial Property Demand – Permanently Up**
- **Leisure & Hospitality Direct Hit from the Blast + RE**
- **Oil Prices Remain Low – 99.5% of Consumers Win**



DrTCJ

<http://blog.stewart.com>

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# and the **BEAT GOES ON**

**Pandemics & Seismic Events**

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Ted C. Jones, PhD  
Chief Economist  
Stewart Title

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