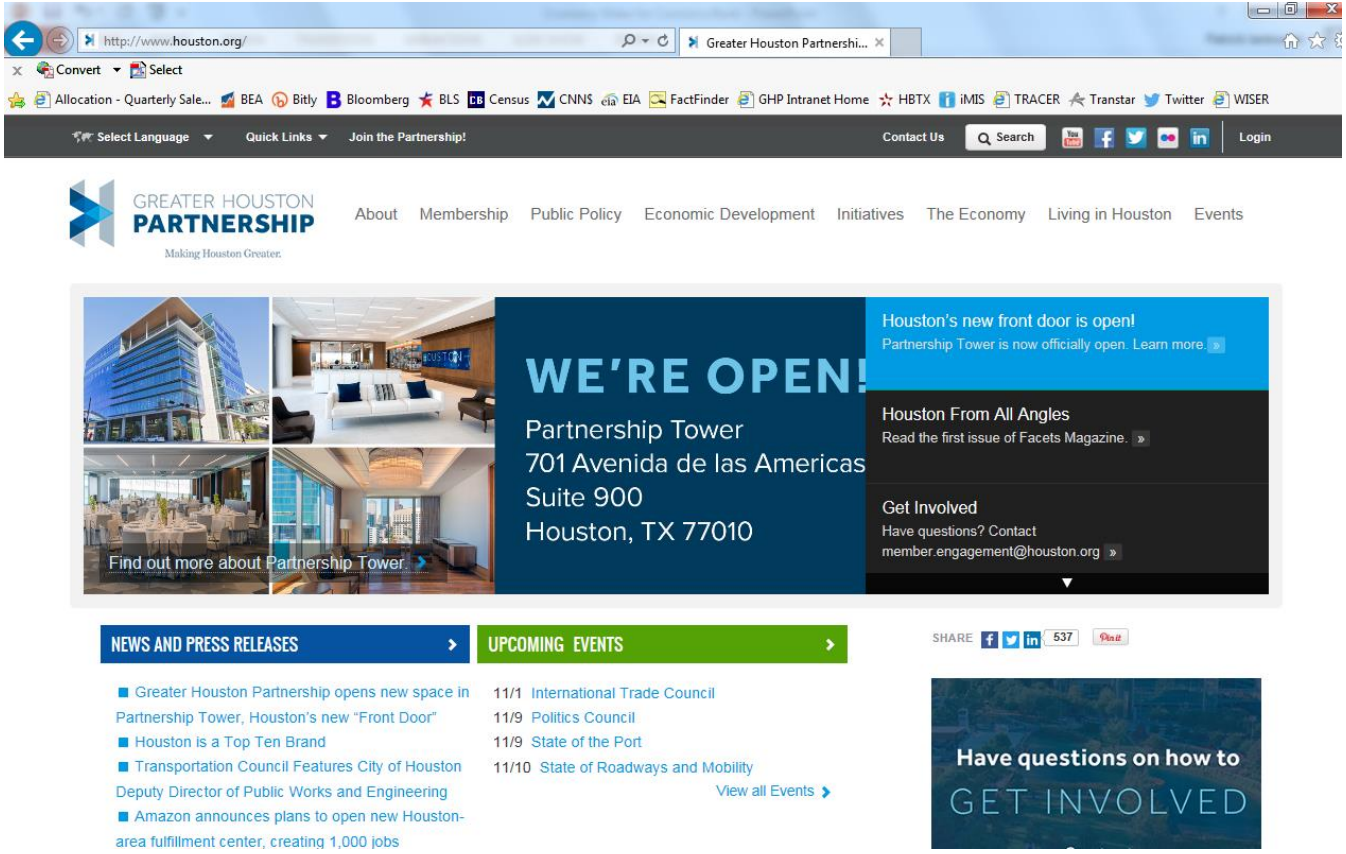
’17 Houston Galveston Economic Outlook

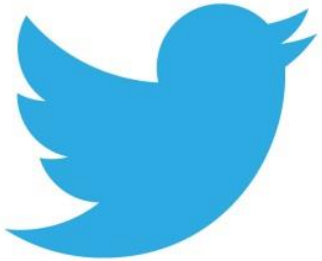
Patrick Jankowski

GREATER HOUSTON
PARTNERSHIP

Making Houston Greater.

GREATER HOUSTON
PARTNERSHIP





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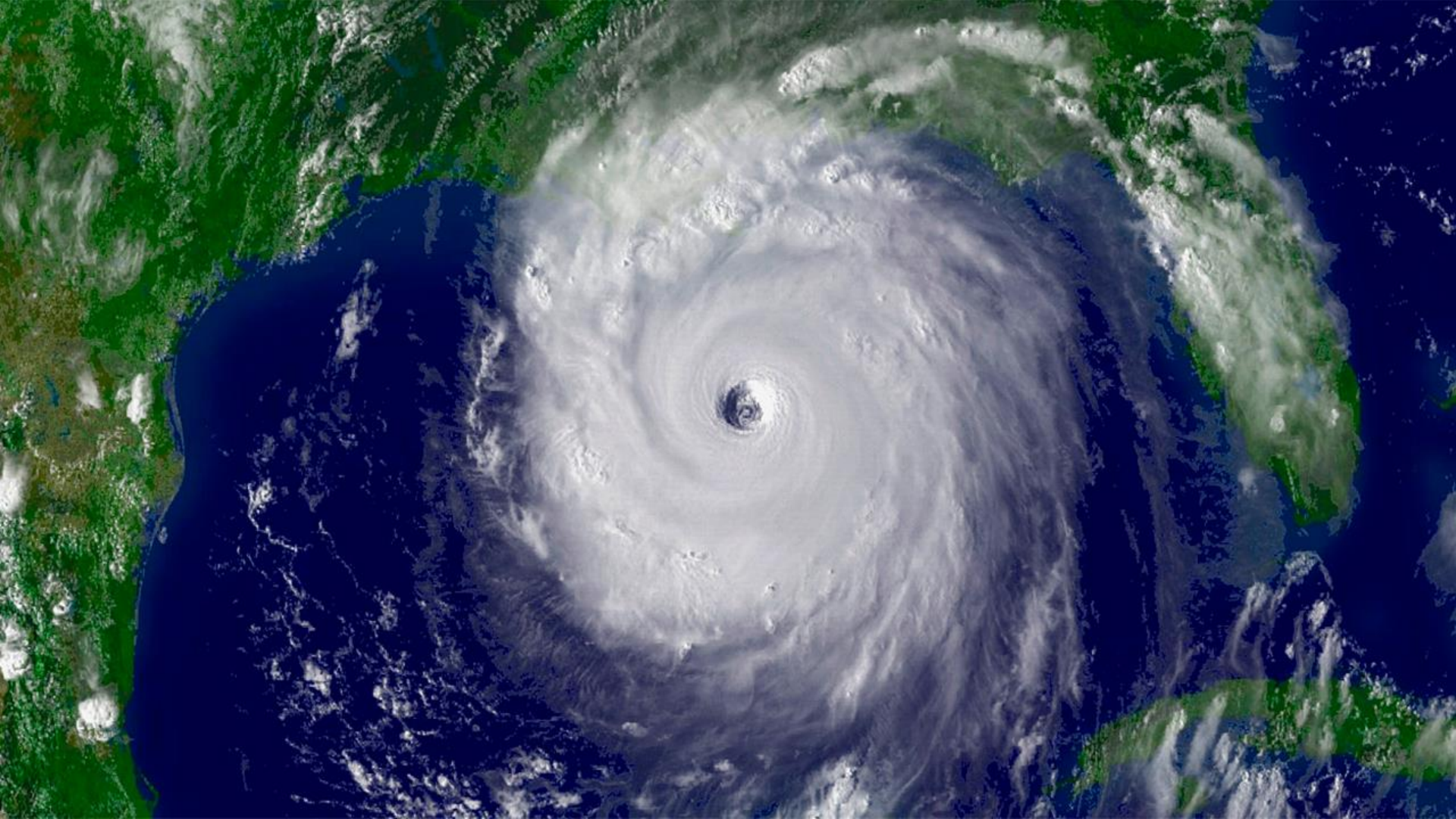

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Eye of the Storm

Sector	Jobs Lost Dec '14 – Dec '16	%
Exploration & Production	-5,400	-9.9%
Oil Field Services	-19,600	-35.1
Fabricated Metal Products	-12,100	-18.3
Equipment Manufacturing	-18,600	-30.7
Engineering	-11,700	-15.4
Total Losses	-67,400	-21.5%

Source: Texas Workforce Commission

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Away from the Eye

Sector	Jobs Lost Dec'14 – Dec '16	%
Wholesale Trade	-3,800	-3.1%
Transportation Services	-2,400	-1.7
Employment Services	-6,800	-8.1
Total Losses	-13,000	-3.2%

Source: Texas Workforce Commission

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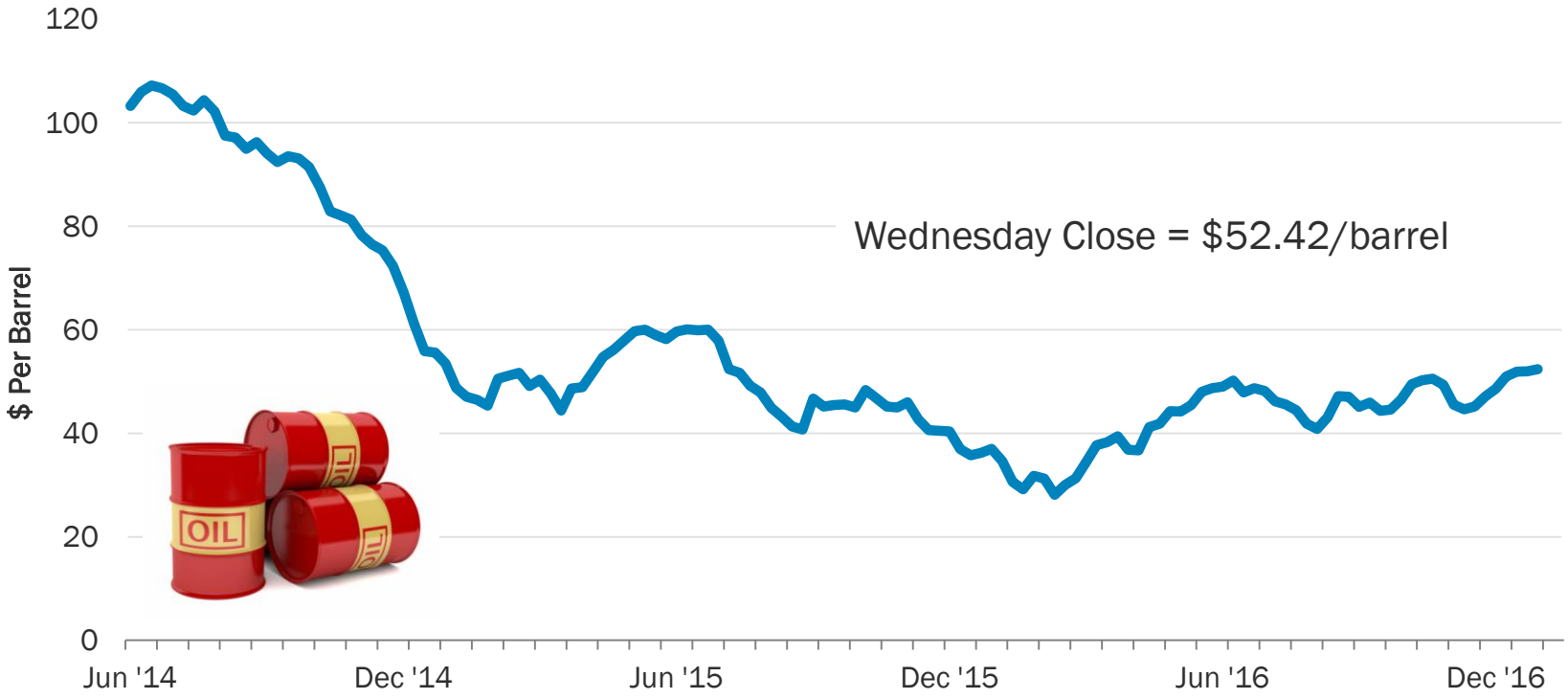
Dry Side of the Storm

Sector	Jobs Gained Dec '14 – Dec '16	%
Hotels, Restaurants, Bars	+30,600	+11.8%
Health Care	26,500	8.7
Public Education	13,500	5.7
Retail Trade	19,700	6.4
Services to Buildings	5,900	12.3
Total Gains	+96,200	+8.3%

Source: Texas Workforce Commission

“Hurricane Oil” is now
in the rearview mirror.

NYMEX WTI Spot Price



Source: U.S. Energy Information Administration

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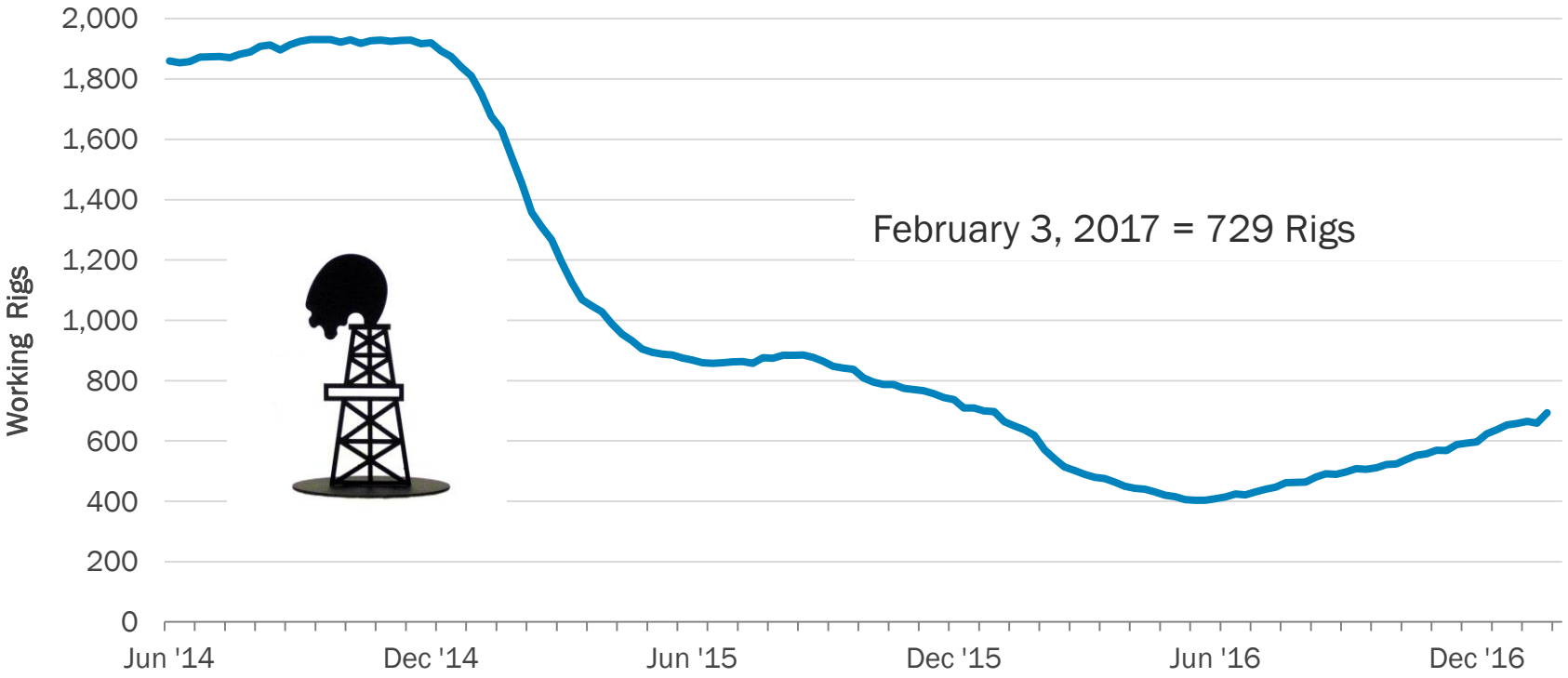
U.S. Rig Count



Source: Baker Hughes

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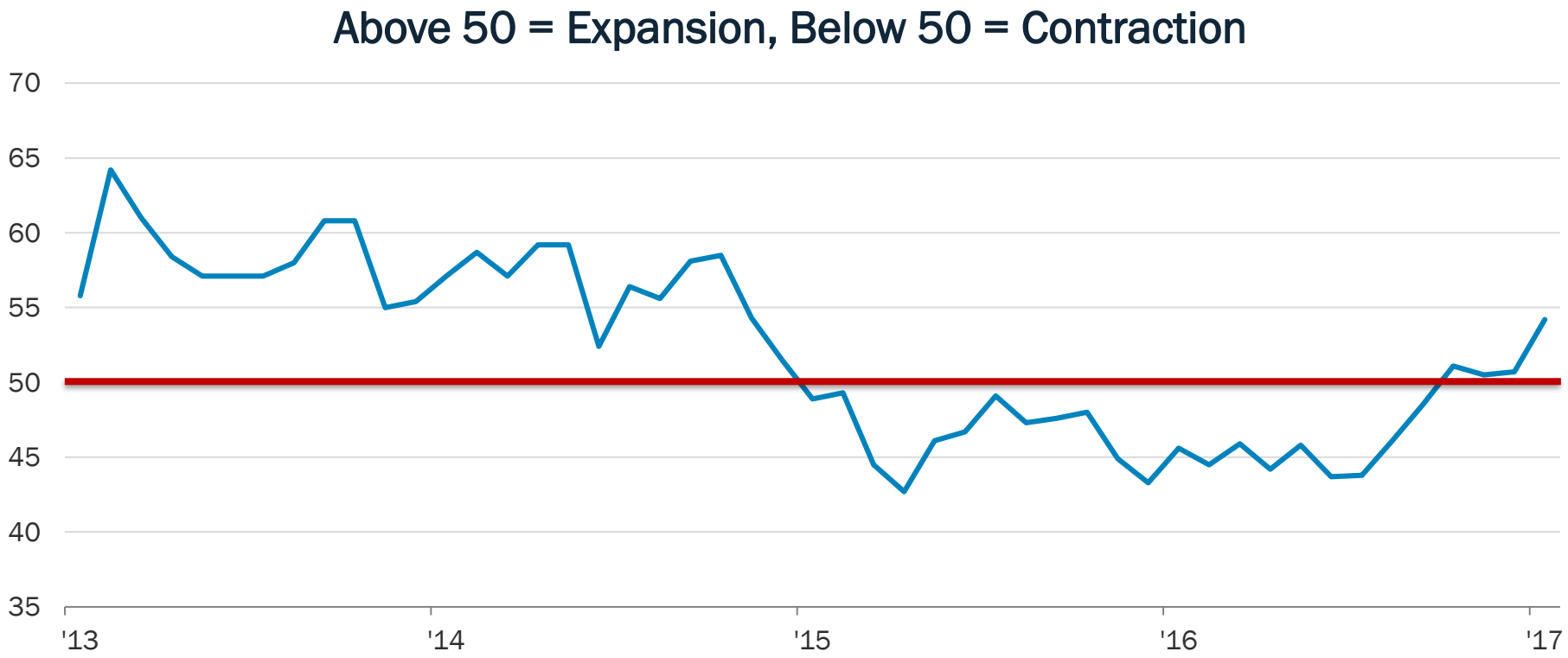
Purchasing Managers Index



Source: Institute for Supply Management- Houston

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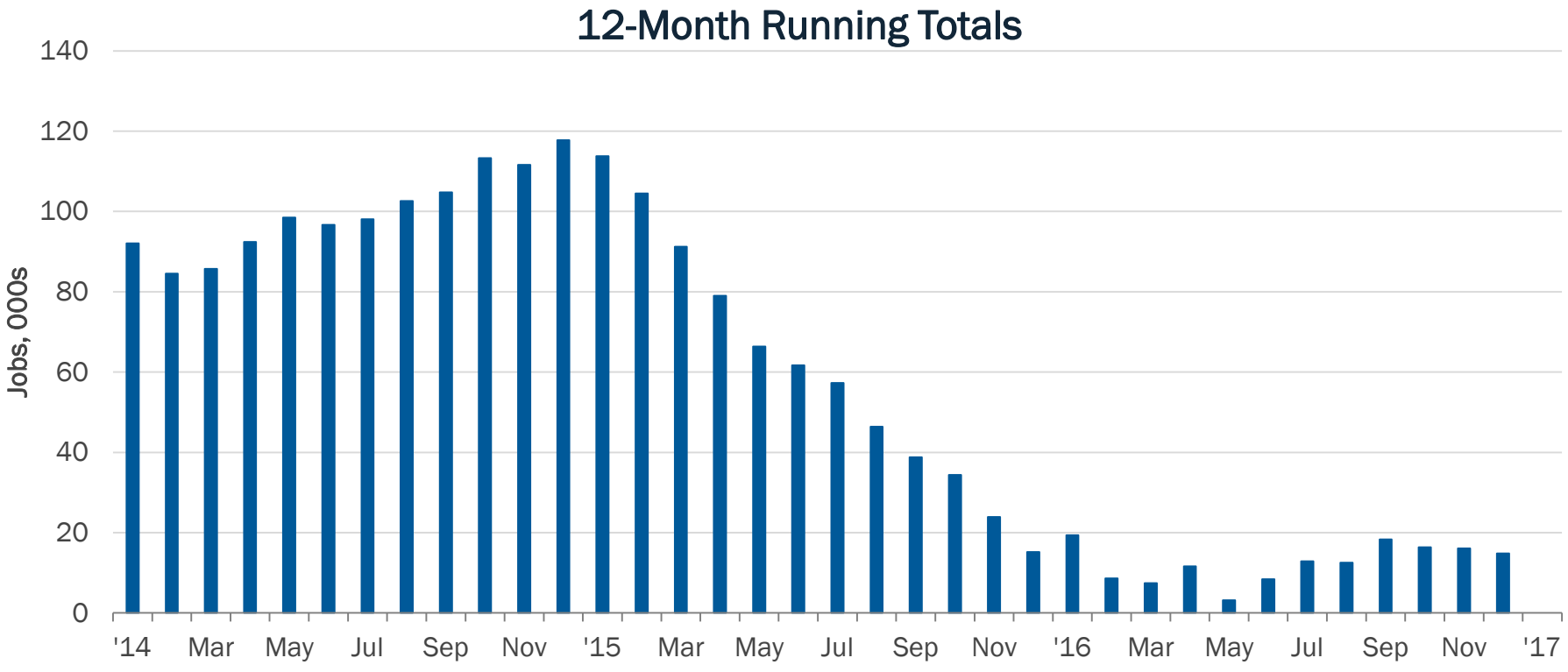
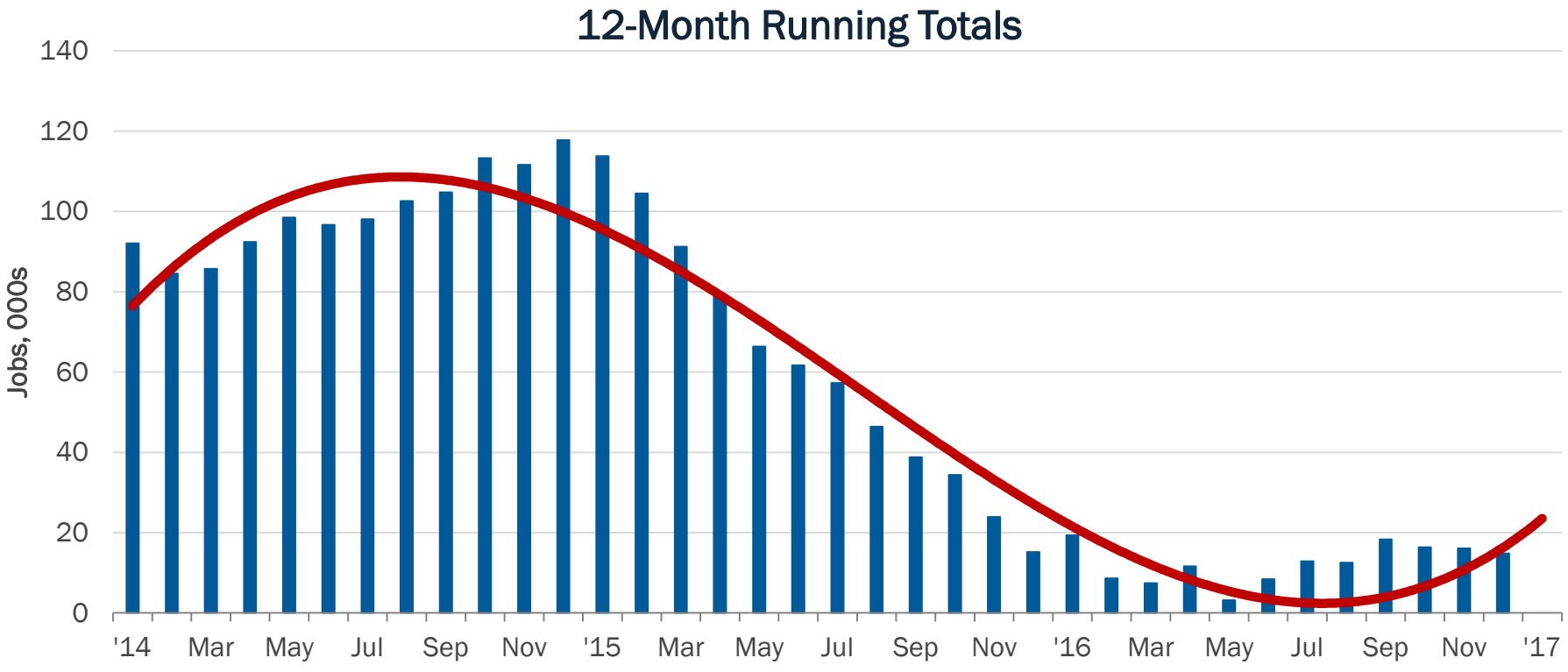
Regional Employment, Net Change



Source: Texas Workforce Commission

GREATER HOUSTON PARTNERSHIP

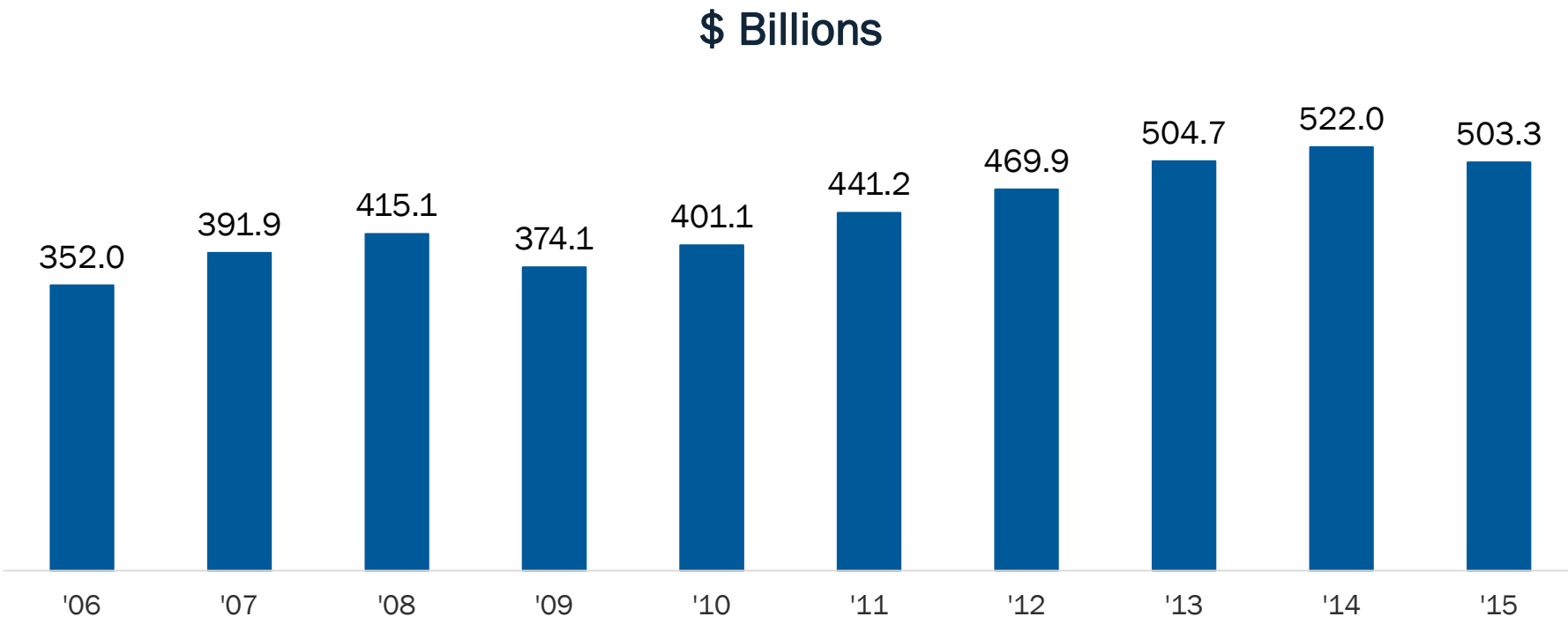
Regional Employment, Net Change



Source: Texas Workforce Commission

How much damage was done?

Gross Domestic Product – Metro Area



Source: U.S. Bureau for Economic Analysis

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Gross Domestic Production – U.S. Metros, 2015

Rank	Metro Area	$ Billions
1	New York	1,602.7
2	Los Angeles	930.8
3	Chicago	640.7
4	Houston	503.3
5	Washington, D.C.	491.0
6	Dallas-Fort Worth	485.7
7	San Francisco	431.7
8	Philadelphia	411.2
9	Boston	396.5
10	Atlanta	339.2

Source: U.S. Bureau of Economic Analysis

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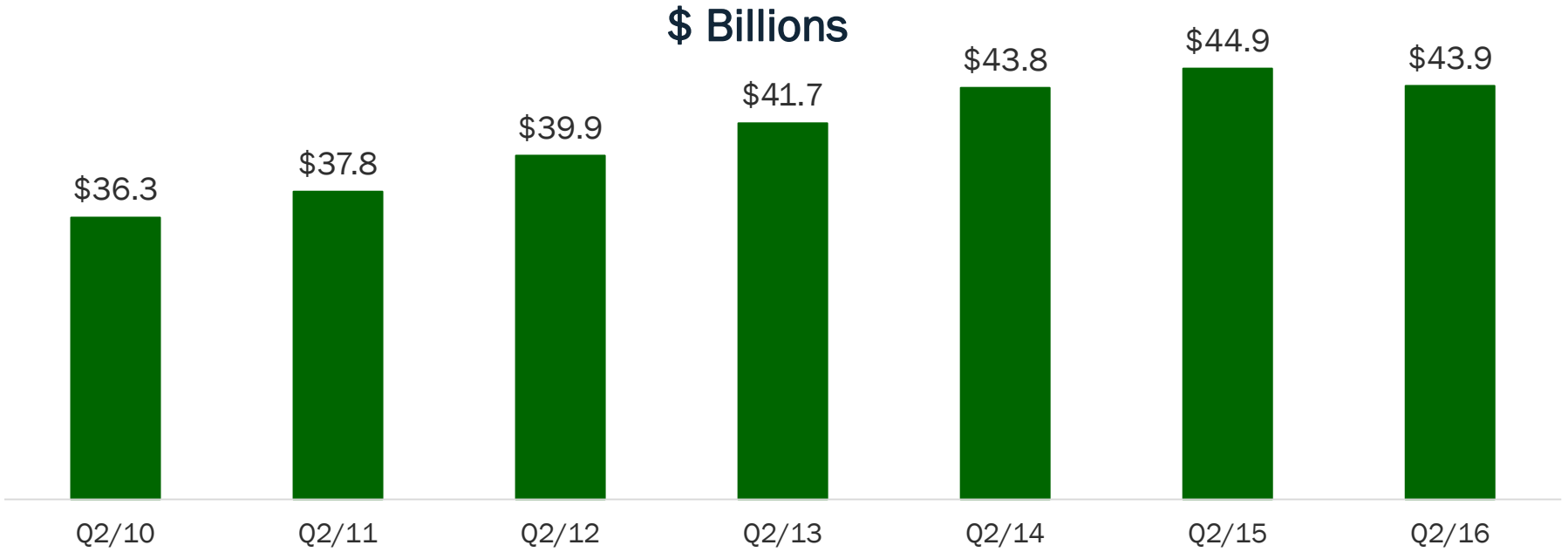
Total Wages Paid, Second Quarter



Source: Texas Workforce Commission

* '16 Constant Dollars

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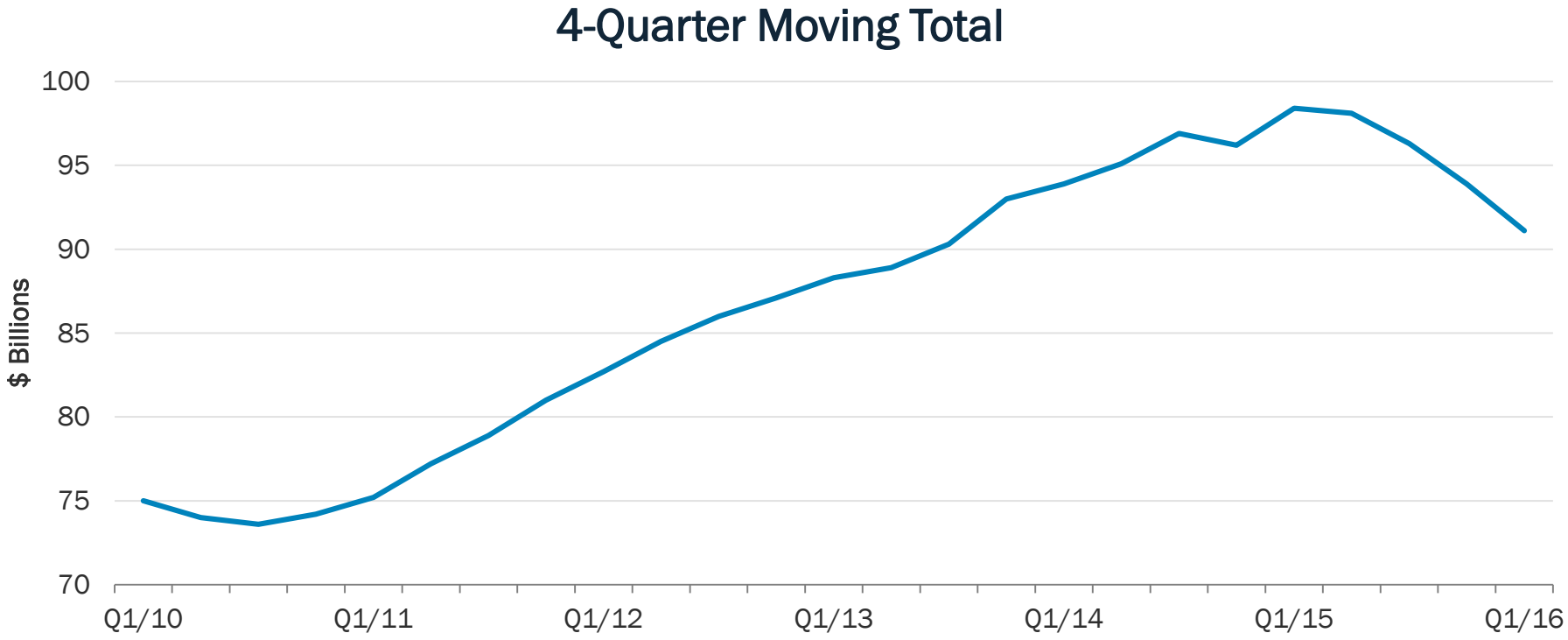
Metro Retail Sales w/o Gasoline



Source: Texas Comptroller of Public Accounts

The recovery has begun.

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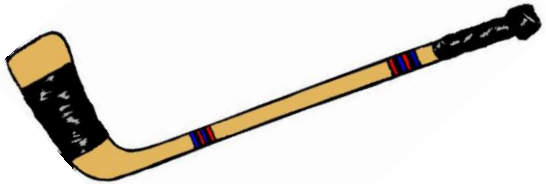
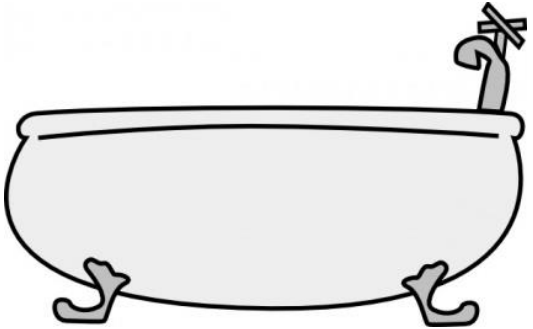
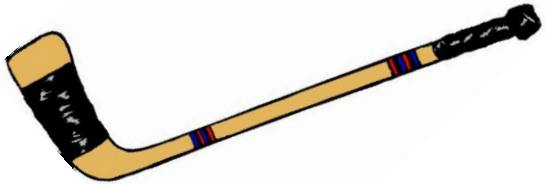
What Will the Recovery Look Like?



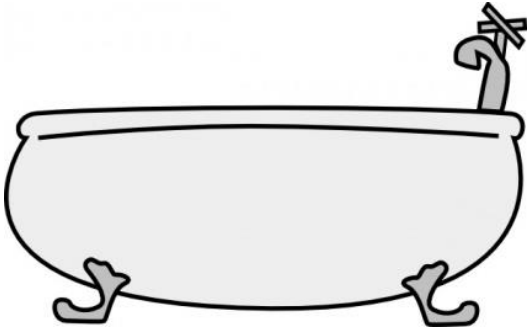


What Will the Recovery Look Like?

Quick Rebound



Slow, Gradual Rebound

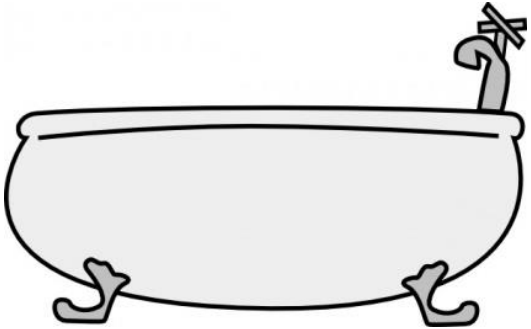


Wide Bottom, Then Quick Rebound

What Will the Recovery Look Like?

Quick Rebound

Slow, Gradual Rebound



Wide Bottom, Then Quick Rebound

Bathtub Recovery

- Energy still losing money

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Earnings Per Share, Fully Diluted, Q3/16

Exploration	EPS	Services	EPS
Anadarko	-$1.61	Baker Hughes	-1.00
Apache	-1.51	FMC	0.59
Chevron	0.68	Halliburton	0.01
ConocoPhillips	-0.84	NOV	-3.62
EOG	-0.35	Oceaneering	-0.12
ExxonMobil	0.63	Oil States	-0.22
Hess	-1.12	Schlumberger	0.13
Marathon	-0.23	Tesco	-0.47
Occidental	-0.31	Weatherford	-0.05
Shell	0.17	Wood Group	-1.98

Source: Securities and Exchange Commission

Still Losing Money

Earning a Profit

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Bathtub Recovery

- Energy still losing money
- 30,000+ manufacturing workers unemployed

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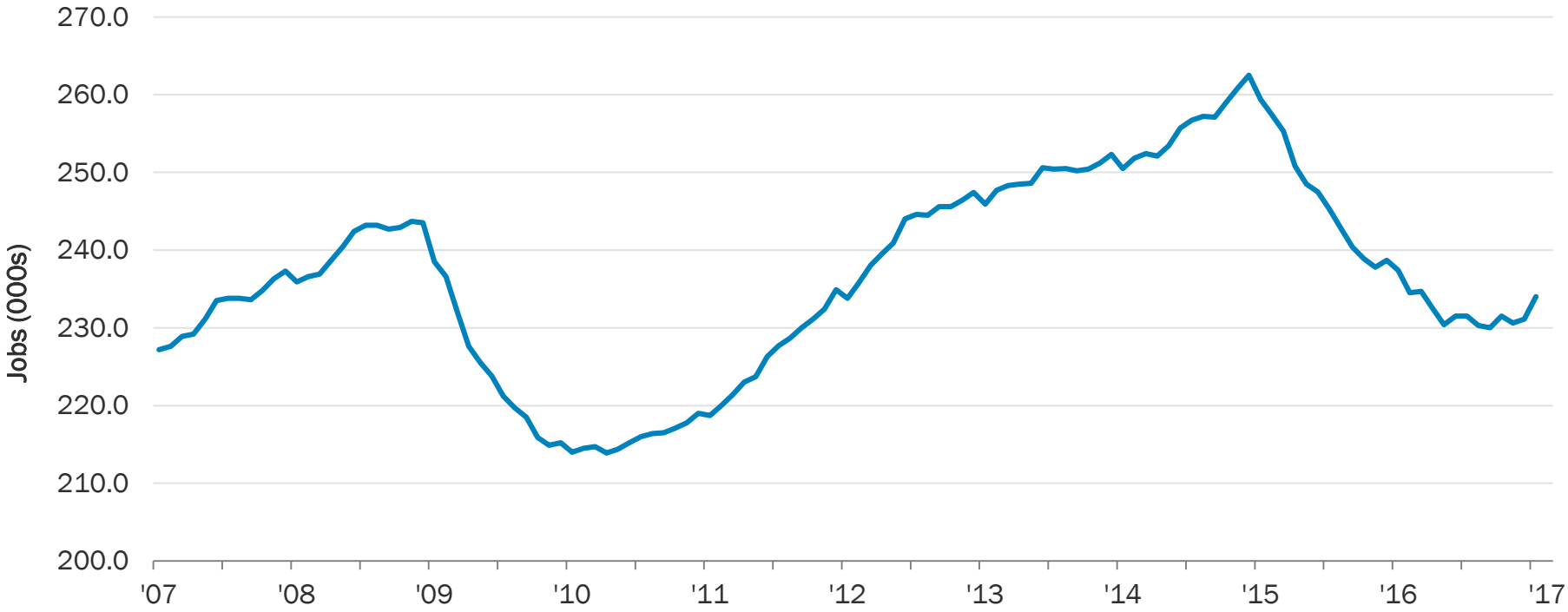
Houston Manufacturing Employment



Source: Texas Workforce Commission

GREATER HOUSTON PARTNERSHIP

Bathtub Recovery

- Energy still losing money
- 30,000+ manufacturing workers unemployed
- Rig count 1/3 its previous peak
-
-

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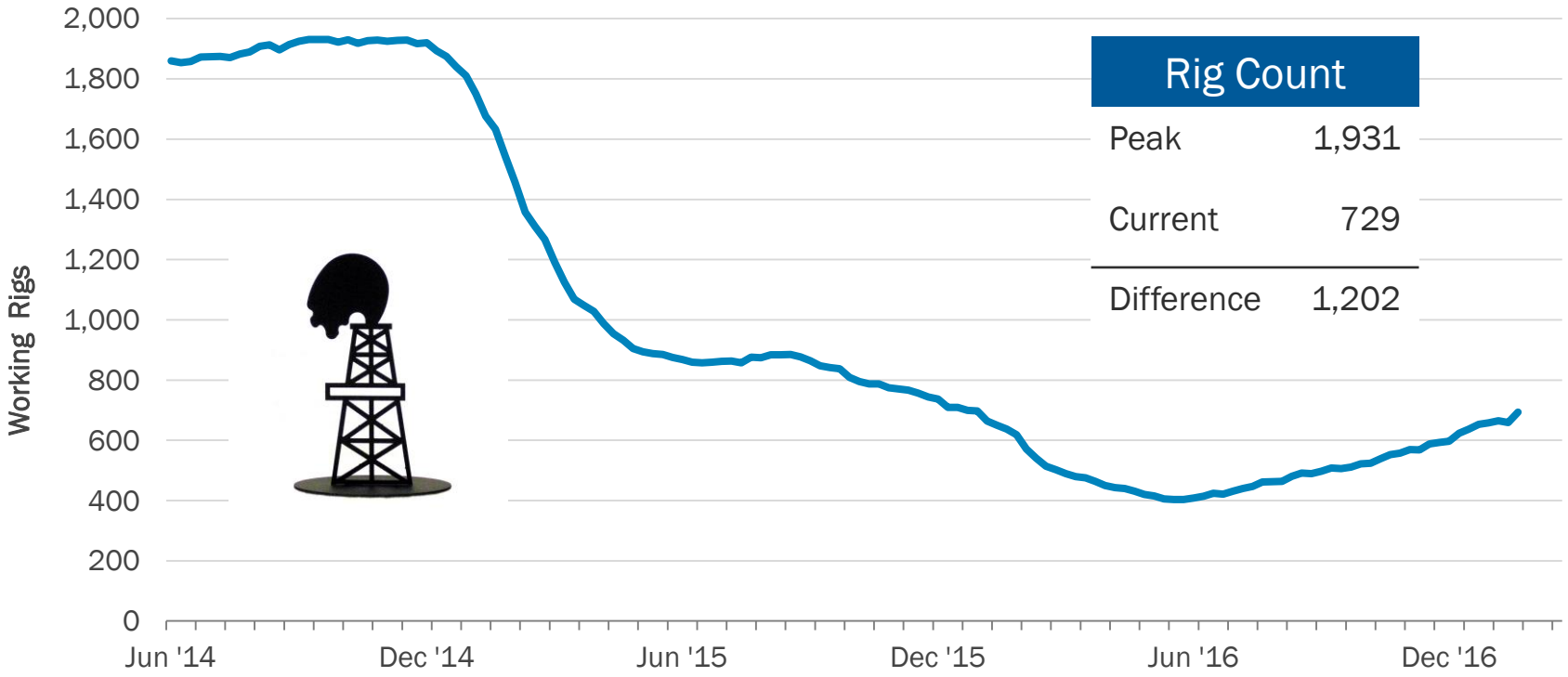
Rig Count Remains Low



Source: Baker Hughes

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Bathtub Recovery

- Energy still losing money
- 30,000+ manufacturing workers unemployed
- Rig count 1/3 its previous peak
- Office vacancy rate exceeds 20 percent
-

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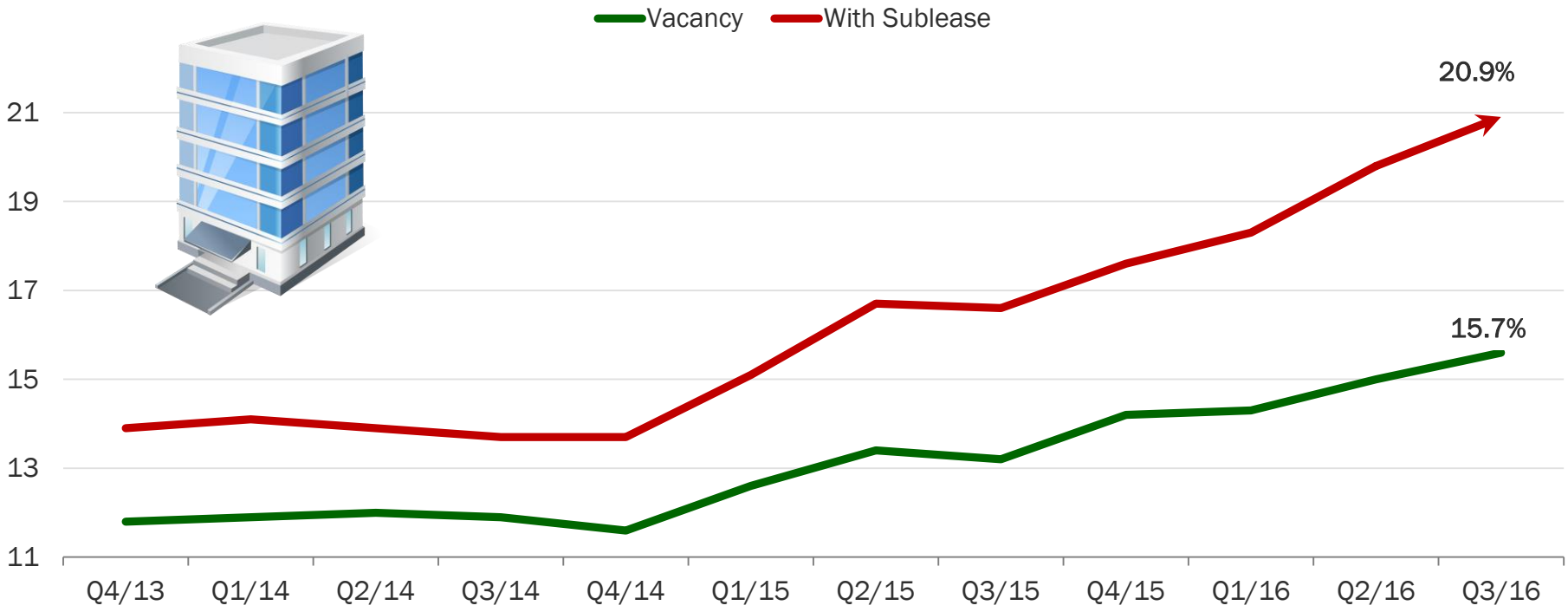
Office Vacancy Rates



Source: CBRE

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Bathtub Recovery

- Energy still losing money
- 30,000+ manufacturing workers unemployed
- Rig count 1/3 its previous peak
- Office vacancy rate exceeds 20 percent
- Construction winding down

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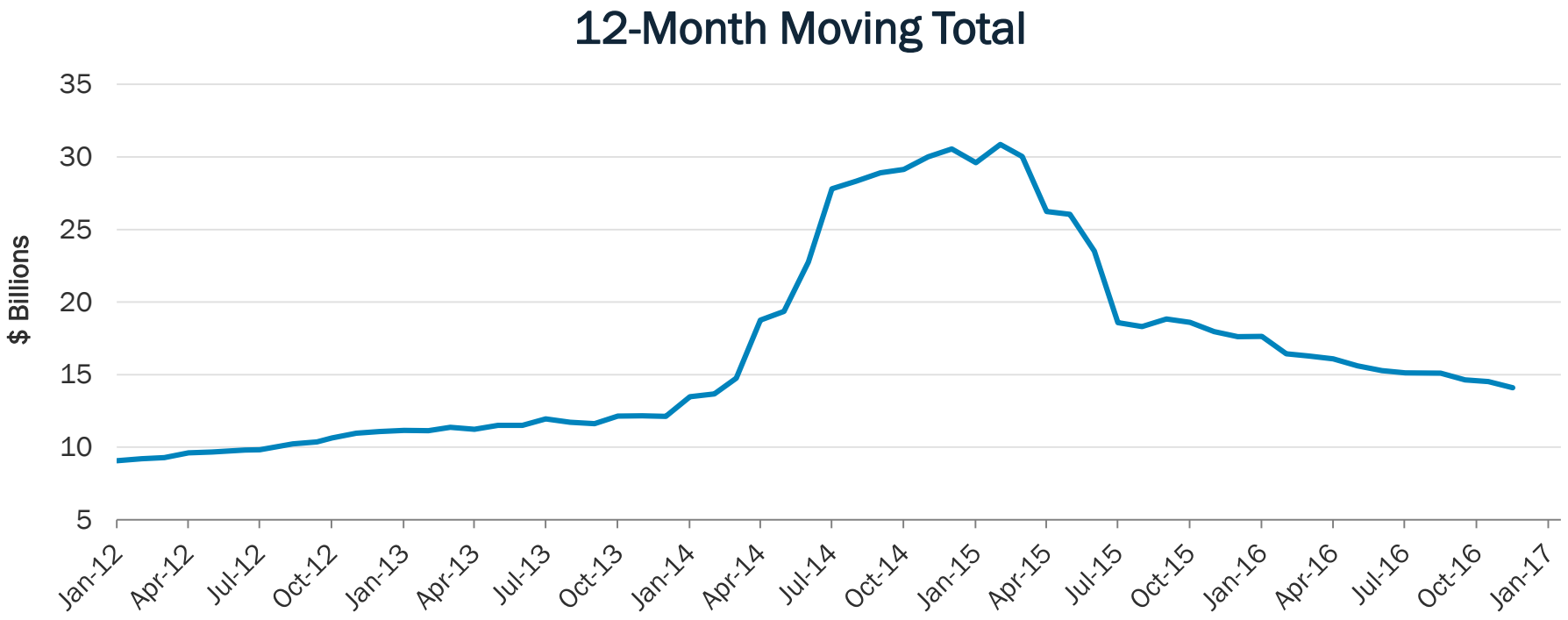
Construction Starts, Metro Area



Source: Dodge Data and Analytics

Three sectors to cut jobs in ’17.

Still Losing Money

Earning a Profit

- Energy
  - Still restructuring
  - No hiring when losing money

- 3,500 jobs

- Energy
  - Still restructuring
  - No hiring when losing money

- 3,500 jobs

Industry needs $60 oil

- ↓ Petrochem
- ↓ Office
- ↓ Industrial
- ↓ Residential
- ↑ Health care
- ↑ Government

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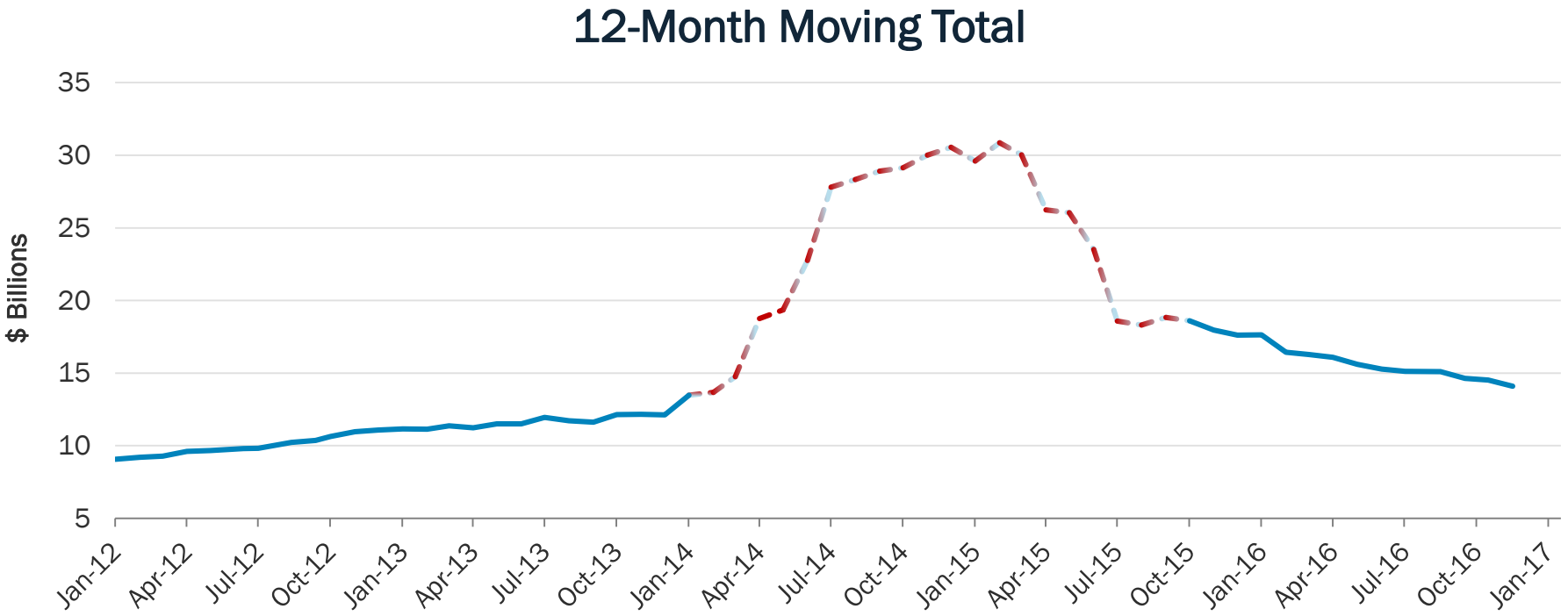
Construction Starts, Metro Area



Source: Dodge Data and Analytics

- Petrochem
- Office
- Industrial
- Residential
- Health care
- Government

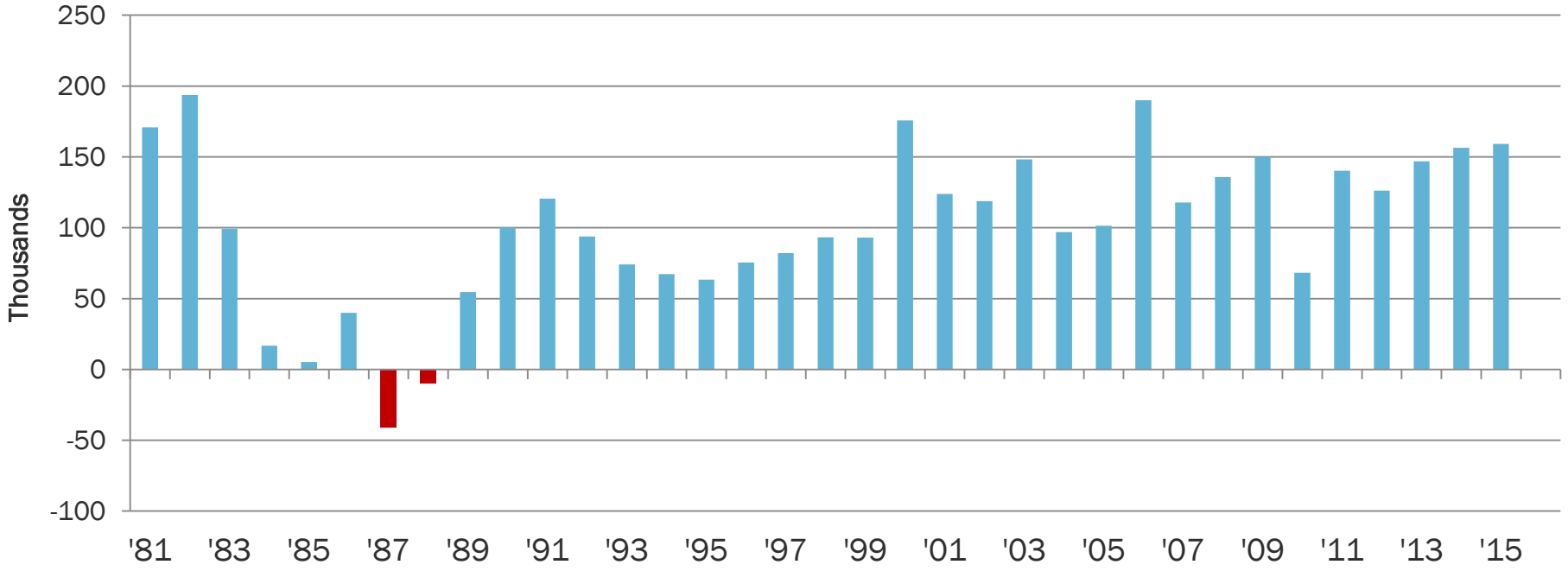
- 16,000 jobs

- Information
  - Long-term decline continues

- 200 jobs

Where will job growth come from?

Annual Change, Houston MSA Population



Source: U.S. Census Bureau

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National Economy

- Gross Domestic Product
  - Expected to grow 2% or better in ’17
- Employment
  - Averaging 180,000 per month

Health Care

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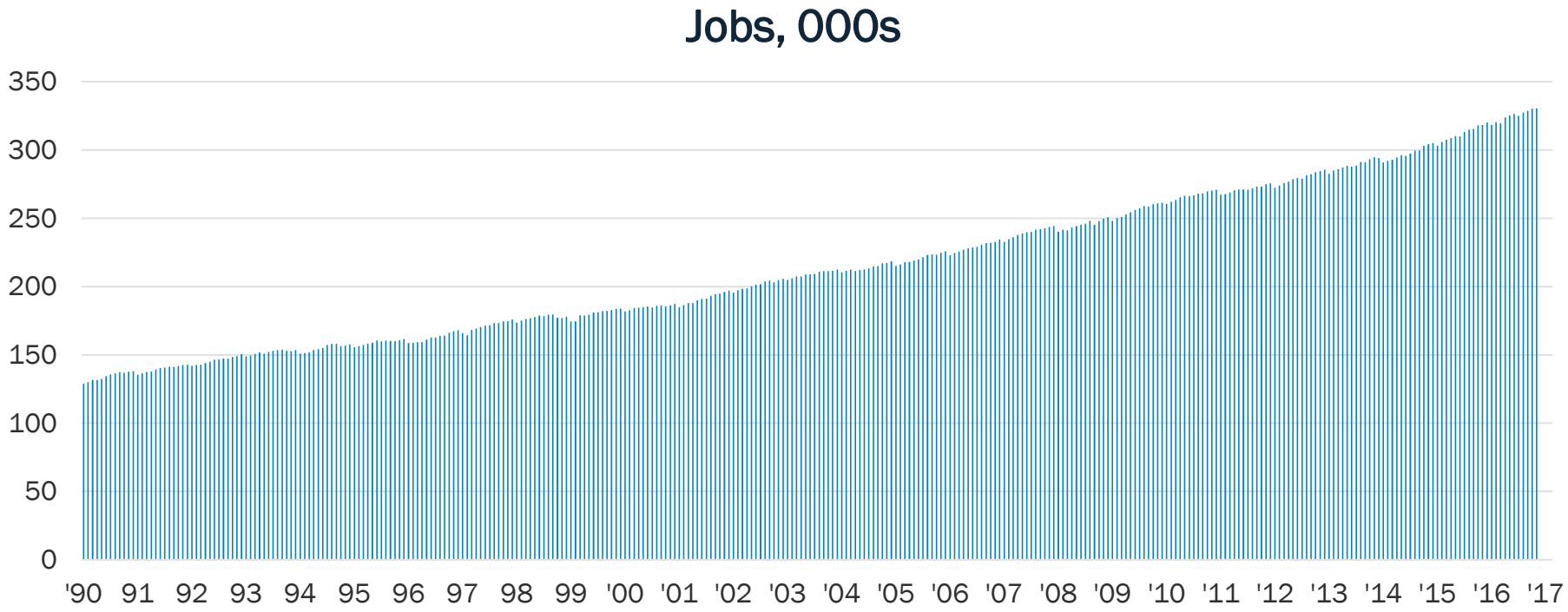
Houston Health Care Employment



Source: Texas Workforce Commission

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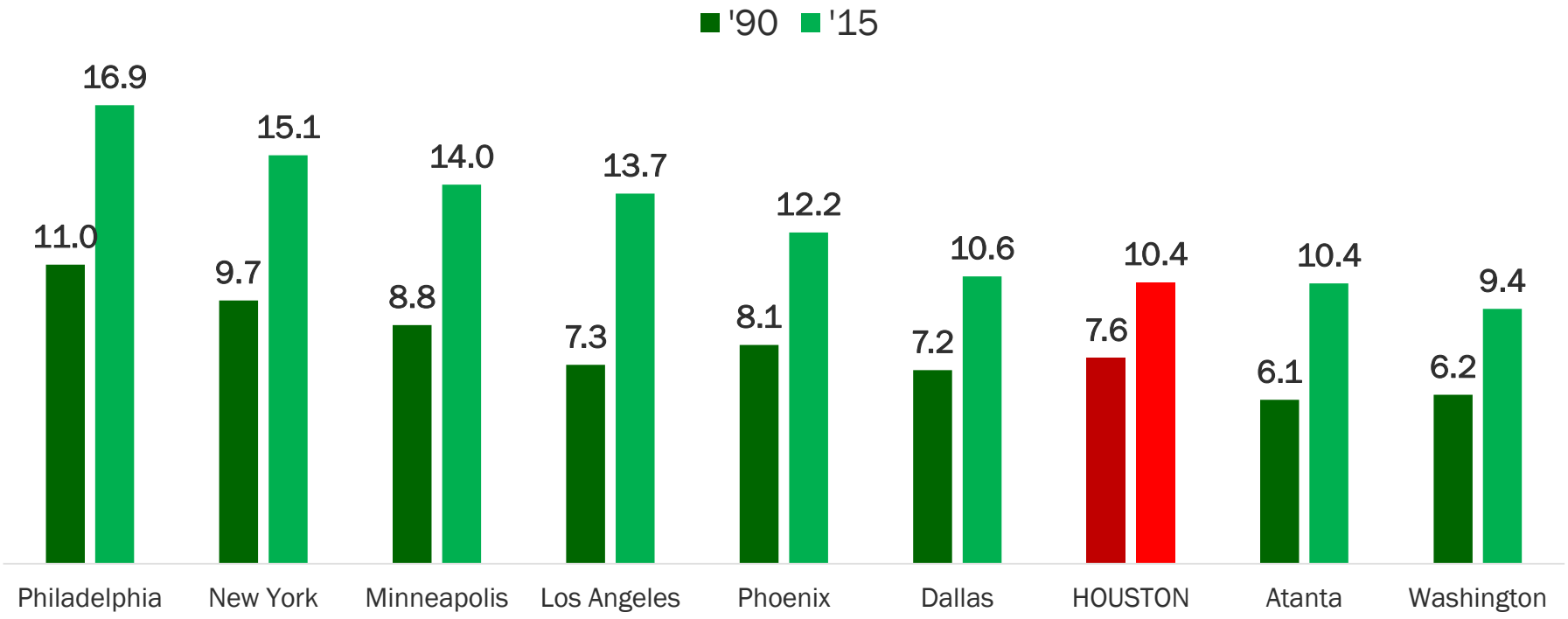
Health Care as % of Total Employment



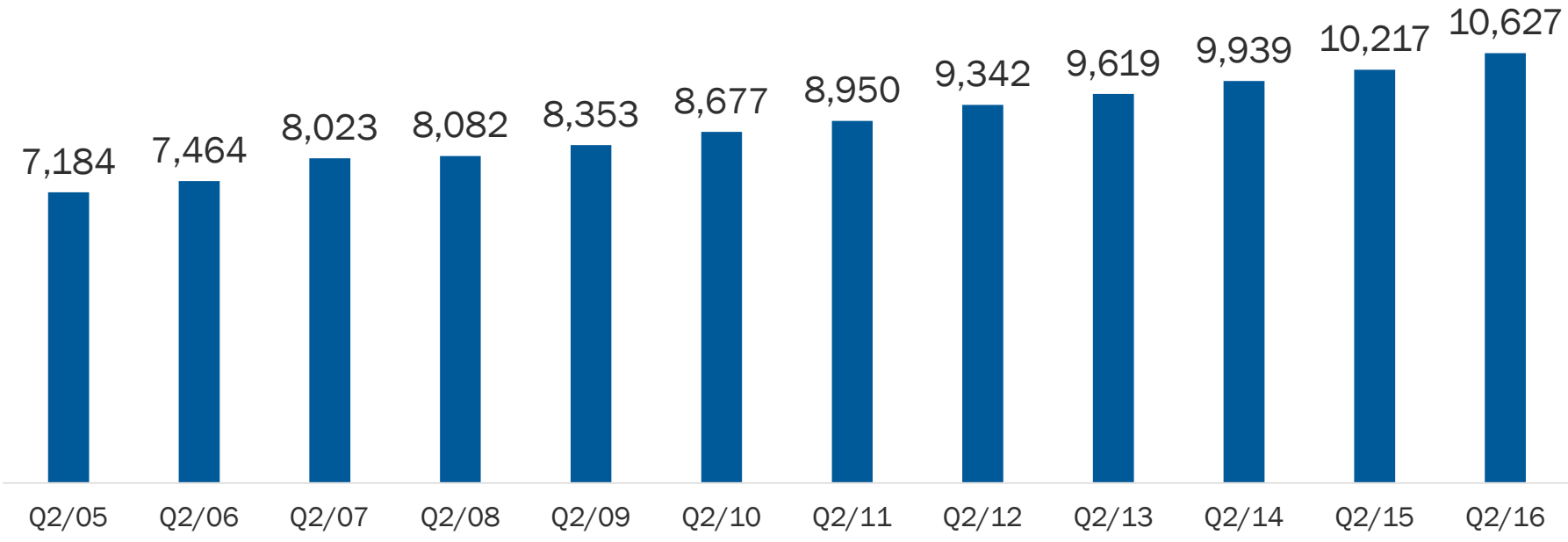
Source: U.S. Bureau of Labor Statistics

Health Care

+ 9,800 Jobs

Hotels, Restaurants and Bars

Houston Area Bars and Restaurants



Source: Texas Workforce Commission

Hotels, Restaurants and Bars

+ 8,700 Jobs

Government

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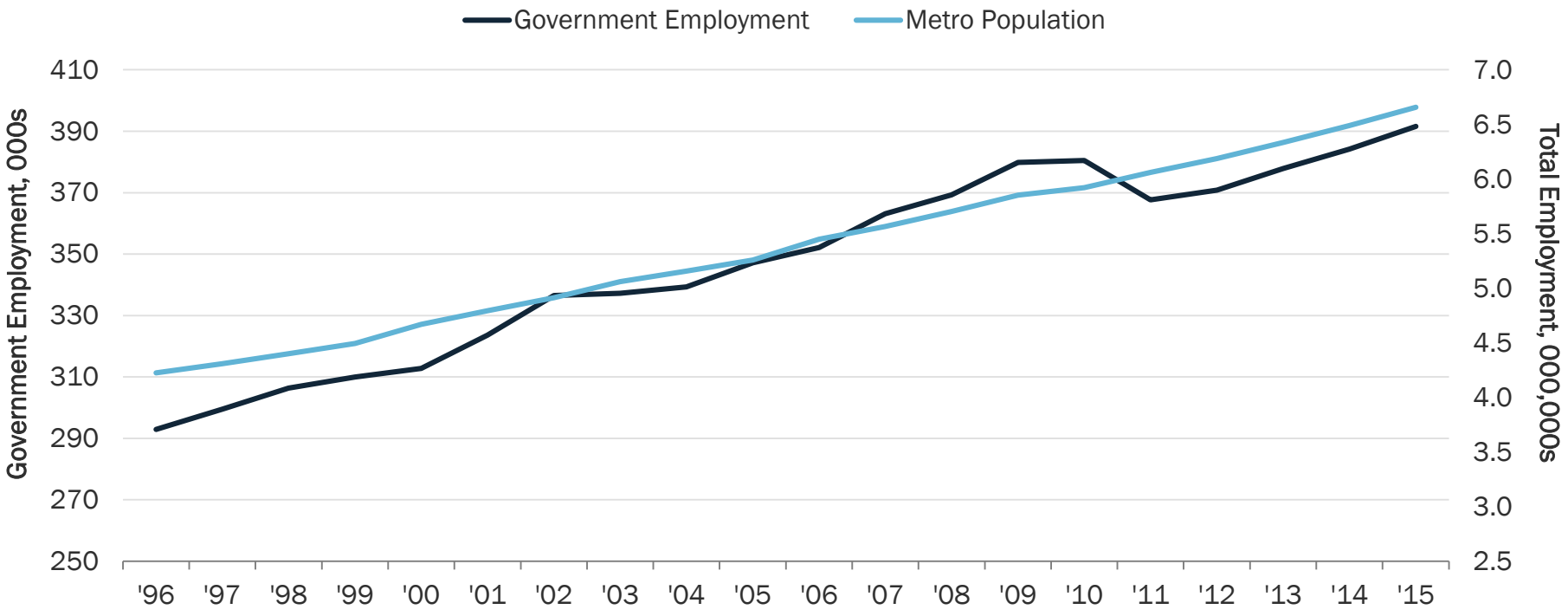
Metro Employment



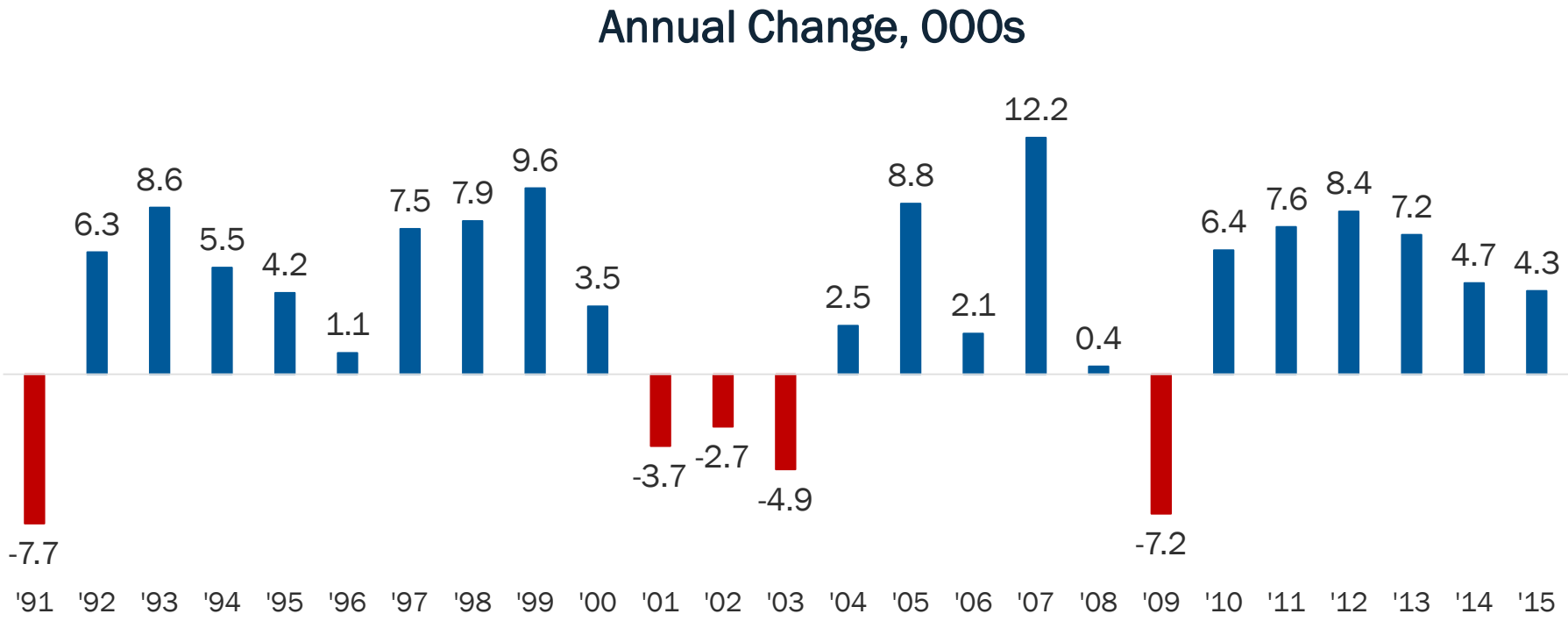
Source: Texas Workforce Commission

Government

+ 6,200 jobs

Retail

Metro Retail Employment



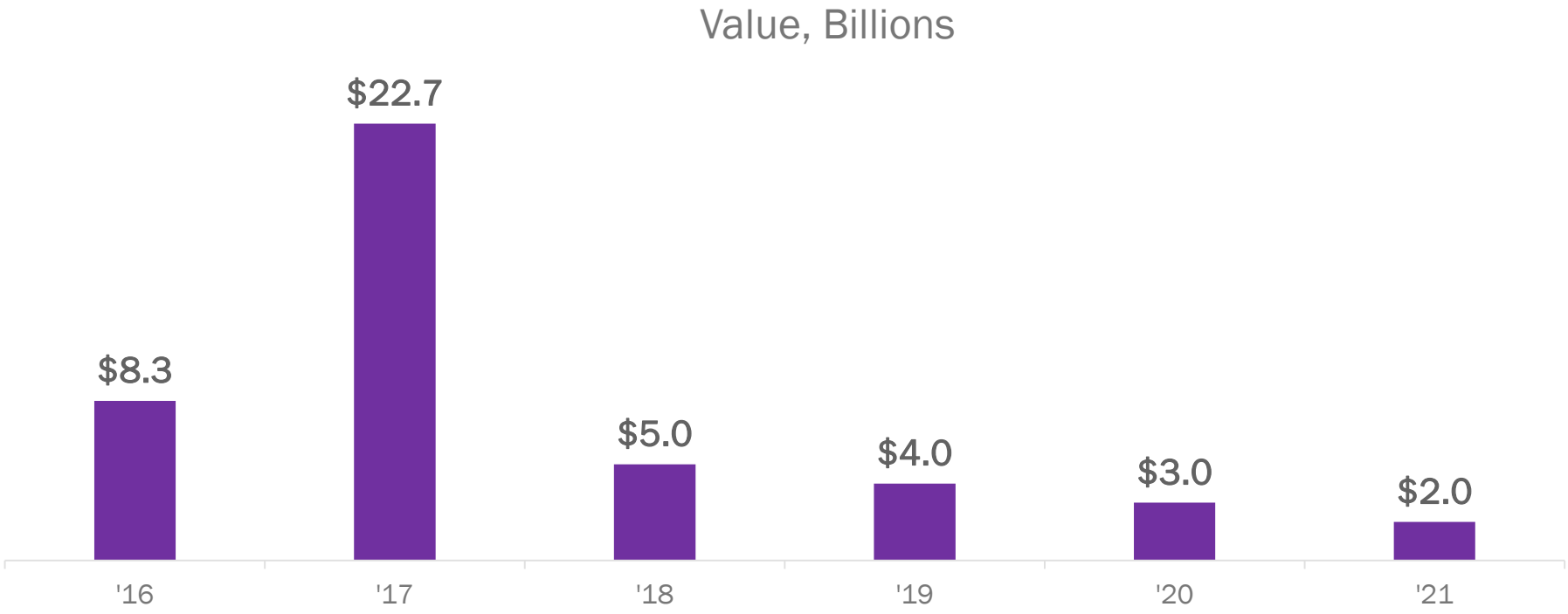
Source: U.S. Bureau Labor Statistics

Retail

+ 4,500 Jobs

Manufacturing

Local Chemical Plant Completions



Source: Institute for Regional Forecasting

Manufacturing

+ 3,000 Jobs

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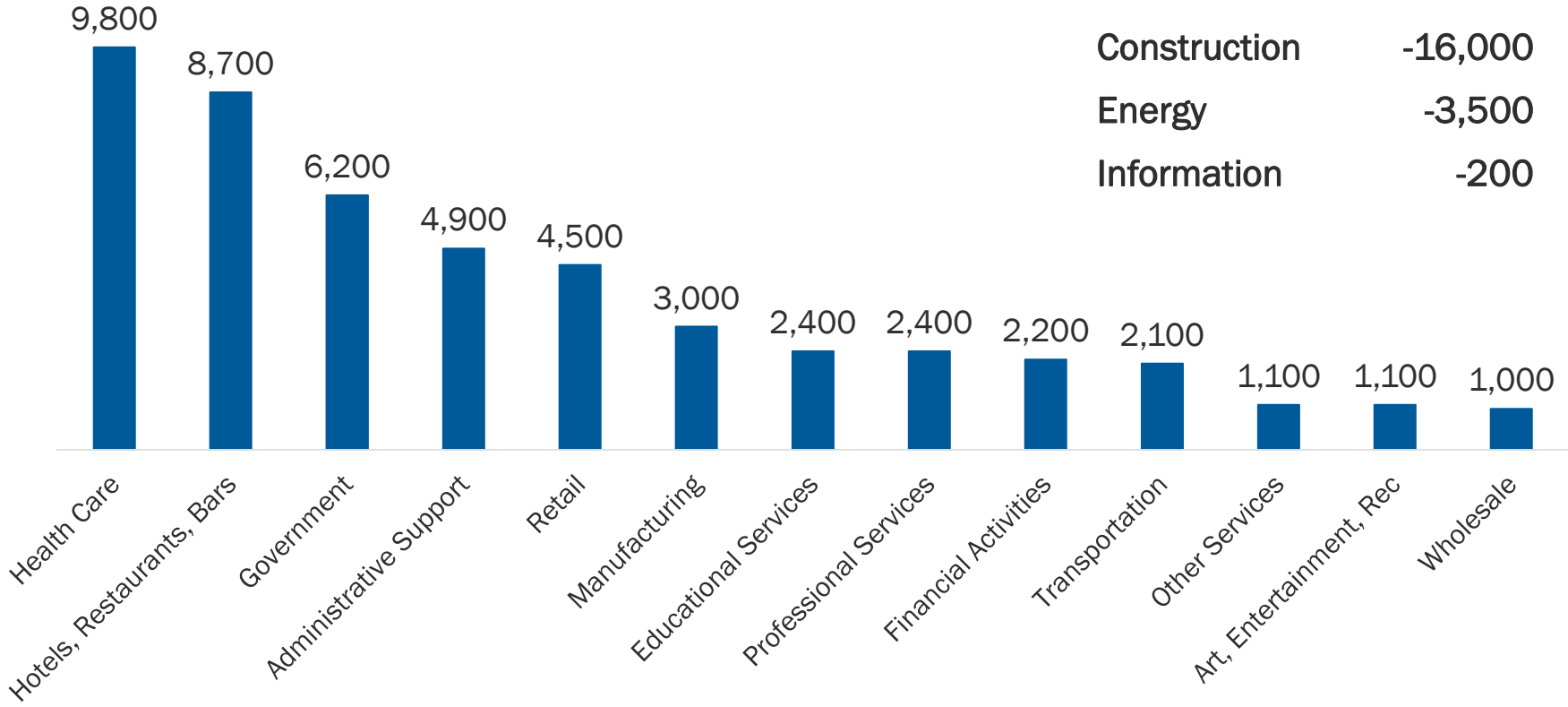
’17 Metro Employment Forecast



Construction	-16,000
Energy	-3,500
Information	-200

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’17 Metro Employment Forecast

+ 29,700 Jobs

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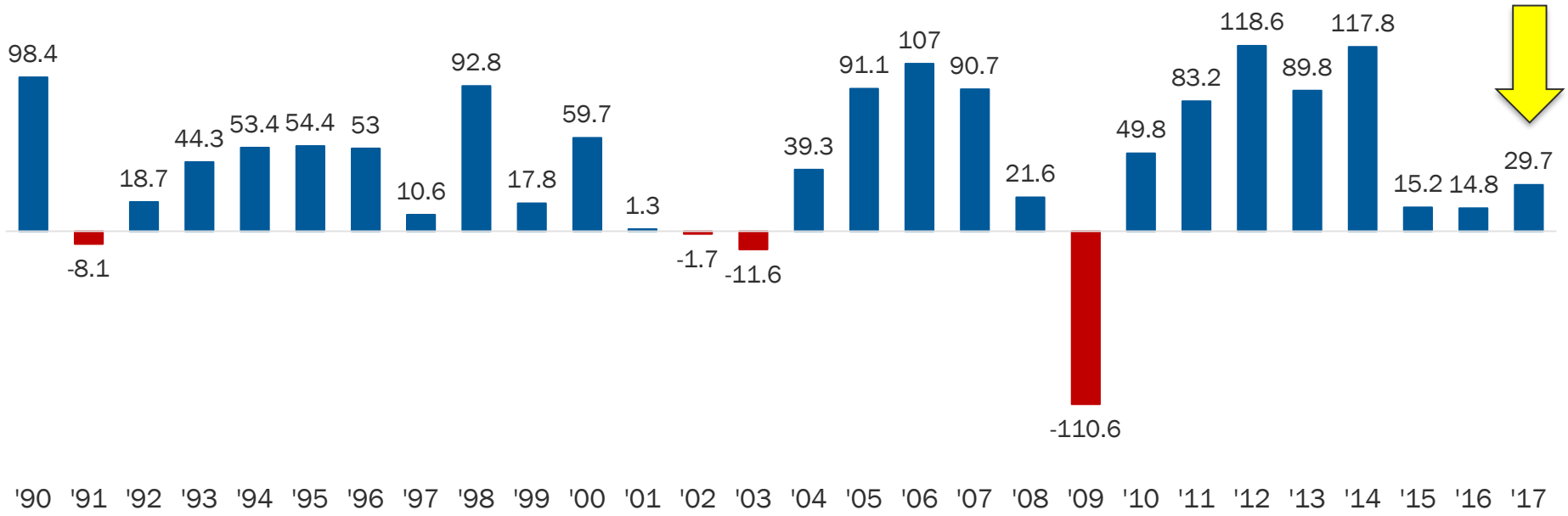
Historic Job Growth

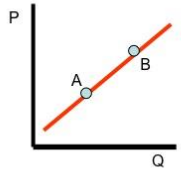
December to December, (000s)



Source: Texas Workforce Commission

Rules of Thumb, Guestimates and Theorems

Elasticity of supply



$$E_s = \frac{\frac{Q_2 - Q_1}{\left(\frac{Q_2 + Q_1}{2}\right)}}{\frac{P_2 - P_1}{\left(\frac{P_2 + P_1}{2}\right)}} = \frac{\%\Delta Q}{\%\Delta P}$$

- $E_s > 1$ Elastic
- $E_s < 1$ Inelastic
- $E_s = 1$ Unitary elastic

The Yahtzee Rule for Measuring Houston Growth

Houston wins when we roll sixes.

Houston wins when we roll sixes.

$60 oil

Houston wins when we roll sixes.

$60 oil

60,000 jobs

Houston wins when we roll sixes.

$60 oil

60,000 jobs

60,000 relocations

Houston wins when we roll sixes.

$60 oil

60,000 jobs

60,000 relocations

60 MPH

Thank you

’17 Houston Economic Outlook

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