April 2016

# *Houston economic outlook*

Presented by:
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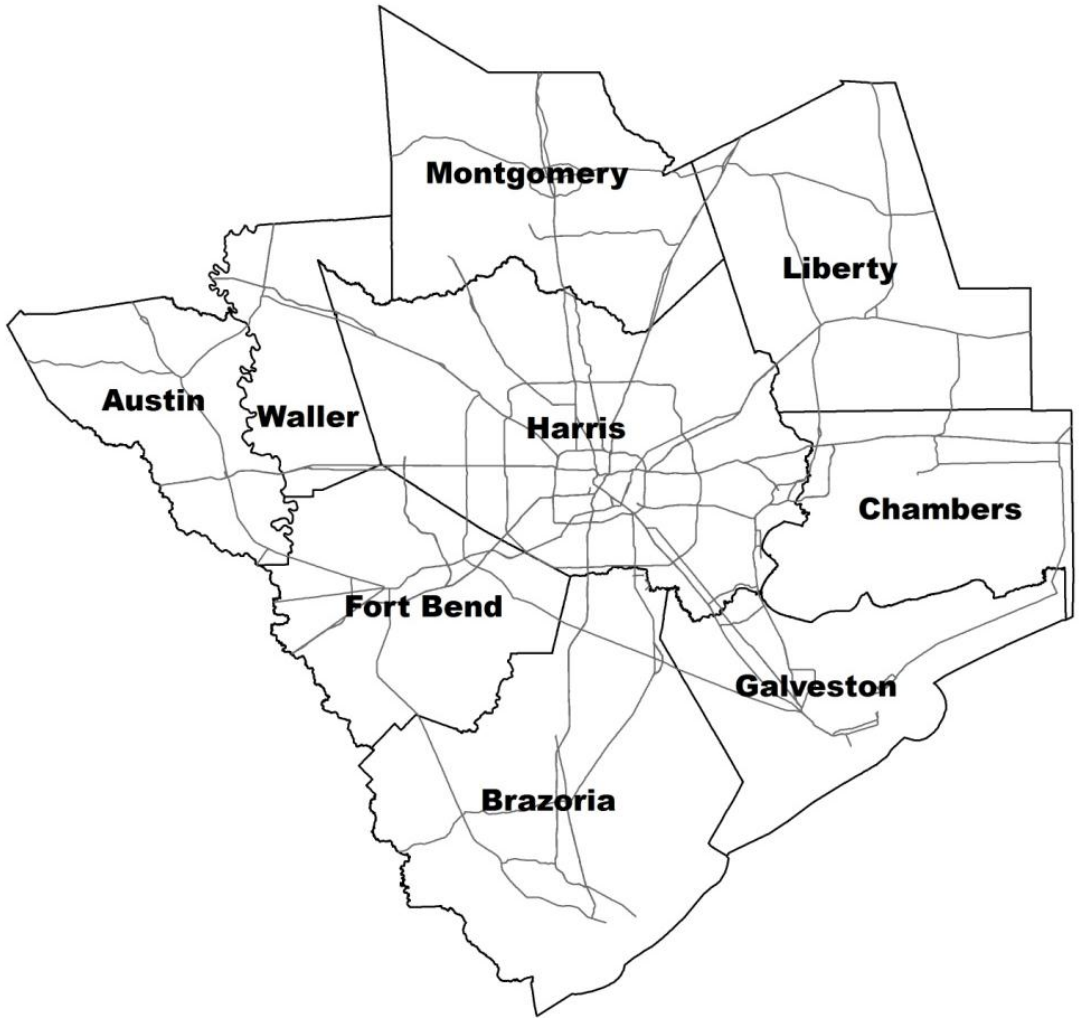
Greater Houston Partnership

GREATER HOUSTON
PARTNERSHIP

# Houston Area Profile

- 9 Counties
- 125+ Cities and towns
- Most Populous
  - Harris County
  - City of Houston



# Fourth Most Populous City

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## Population Estimates, U.S. Cities

| Rank | Metro Area | Residents July 1, 2014 | Residents added 7/1/13 to 7/1/14 |
|---|---|---|---|
| 1 | New York, NY | 8,491,079 | 52,700 |
| 2 | Los Angeles, CA | 3,928,864 | 30,924 |
| 3 | Chicago, IL | 2,722,389 | 82 |
| **4** | **Houston, TX** | **2,239,558** | **35,752** |
| 5 | Philadelphia, PA | 1,560,297 | 4,245 |
| 6 | Phoenix, AZ | 1,537,058 | 24,616 |
| 7 | San Antonio, TX | 1,436,697 | 24,931 |
| 8 | San Diego, CA | 1,381,069 | 21,225 |
| 9 | Dallas, TX | 1,281,047 | 20,322 |
| 10 | San Jose, CA | 1,015,785 | 11,964 |

Source: U.S. Census Bureau

# Fifth Most Populous Metro

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## Population Estimates, U.S. Metros

| Rank | Metro Area | Population As of 7/1/15 | Change Since 4/1/10 |
|---|---|---|---|
| 1 | New York | 20,182,305 | 614,895 |
| 2 | Los Angeles | 13,340,068 | 511,231 |
| 3 | Chicago | 9,551,031 | 89,926 |
| **4** | Dallas-Fort Worth | 7,102,796 | 676,582 |
| 5 | **Houston** | **6,656,947** | **736,531** |
| 6 | Washington | 6,097,684 | 461,452 |
| 7 | Philadelphia | 6,069,875 | 104,532 |
| 8 | Miami | 6,012,331 | 447,696 |
| 9 | Atlanta | 5,710,795 | 424,067 |
| 10 | Boston | 4,774,321 | 221,919 |

Source: U.S. Census Bureau

# Fourth Largest Economy

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**Gross Domestic Product- 2014**

| Rank | Metro Area | $ Billions |
|---|---|---|
| 1 | New York | 1,558.5 |
| 2 | Los Angeles | 866.7 |
| 3 | Chicago | 610.6 |
| **4** | **Houston** | **525.4** |
| 5 | Dallas-Fort Worth | 504.4 |
| 6 | Washington D.C. | 471.6 |
| 7 | San Francisco | 412.0 |
| 8 | Philadelphia | 391.1 |
| 9 | Boston | 382.5 |
| 10 | Atlanta | 324.9 |

Source: U.S. Bureau of Economic Analysis

# Third in Fortune 500 HQs

## Fortune 500 Companies Headquartered In Houston

| Company (Rank) | Revenues ($ billions) | Company (Rank) | Revenues ($ billions) |
|---|---|---|---|
| Phillips 66 (7) | 149.4 | Apache (218) | 13.9 |
| ConocoPhillips (51) | 55.9 | Marathon Oil (227) | 13.3 |
| Enterprise Products Partners (59) | 47.9 | Cameron International (275) | 10.8 |
| Sysco (61) | 46.5 | Group 1 Automotive (291) | 9.9 |
| Plains GP Holdings (67) | 43.5 | CenterPoint Energy (313) | 9.2 |
| Halliburton (96) | 32.9 | Targa Resources (329) | 8.6 |
| Occidental Petroleum (115) | 25.9 | Calpine (353) | 8.0 |
| Baker Hughes (119) | 24.6 | FMC Technologies (357) | 7.9 |
| National Oilwell Varco (127) | 23.1 | Quanta Services (361) | 7.8 |
| Anadarko Petroleum (162) | 18.5 | Buckeye Partners, LP (406) | 6.6 |
| EOG Resources (167) | 18.0 | KBR (424) | 6.4 |
| Kinder Morgan (193) | 16.2 | MRC Global (448) | 5.9 |
| Waste Management (217) | 14.0 | Spectra Energy (449) | 5.9 |

Source: Fortune, June 2015

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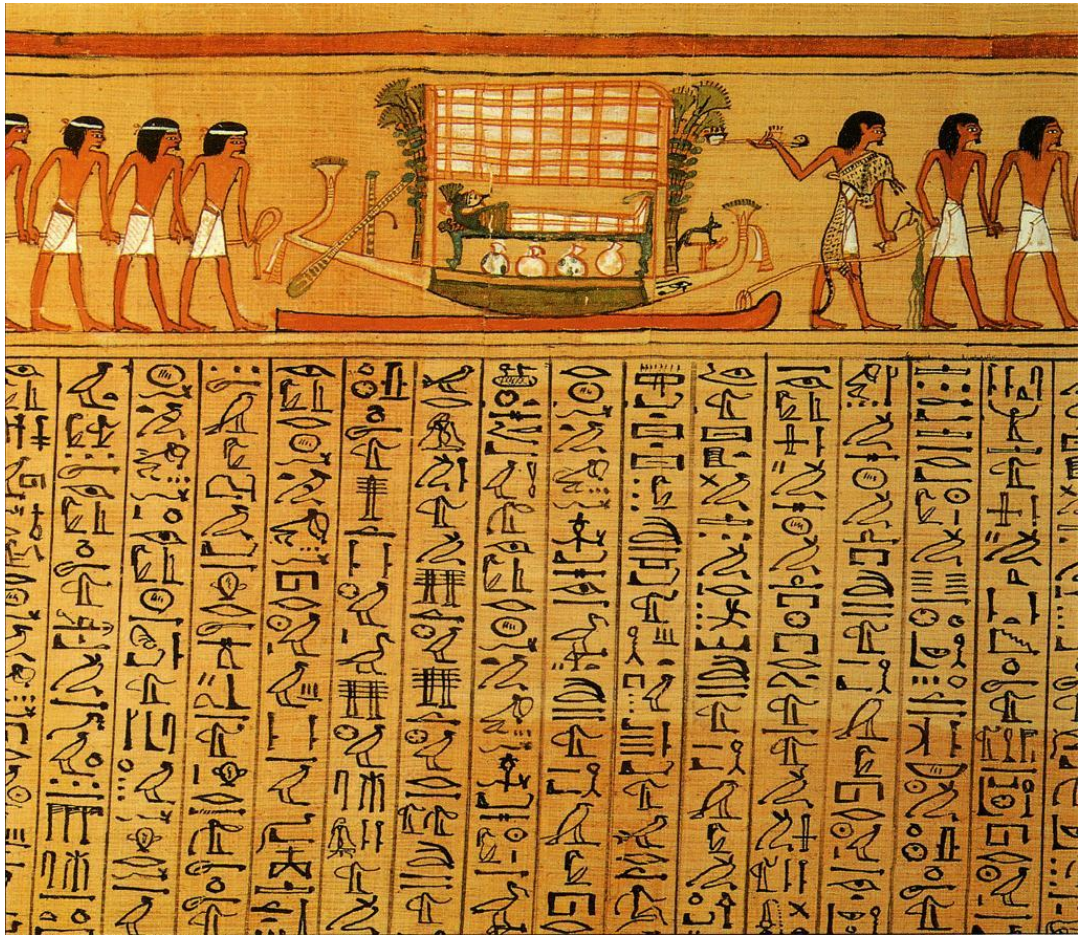
# Recent Economic History



# Strong GDP Growth

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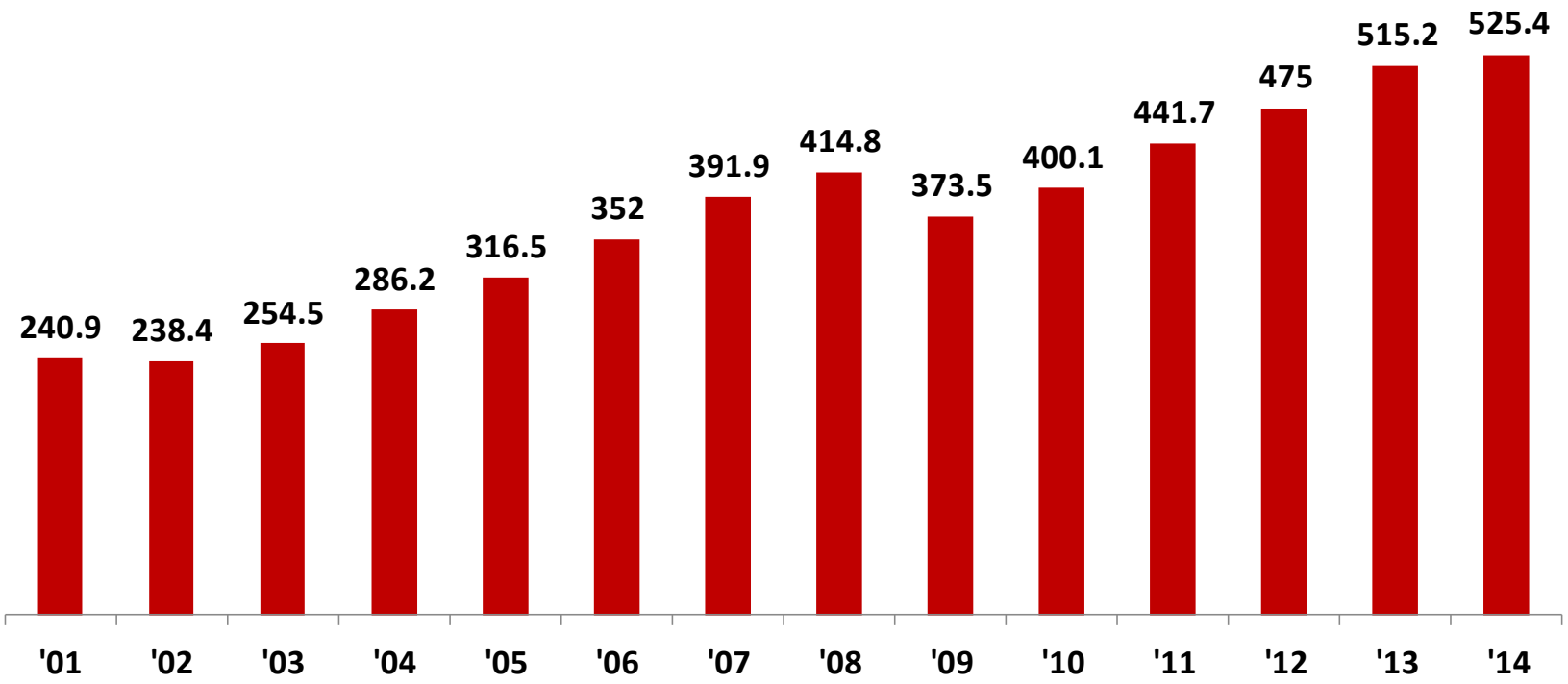
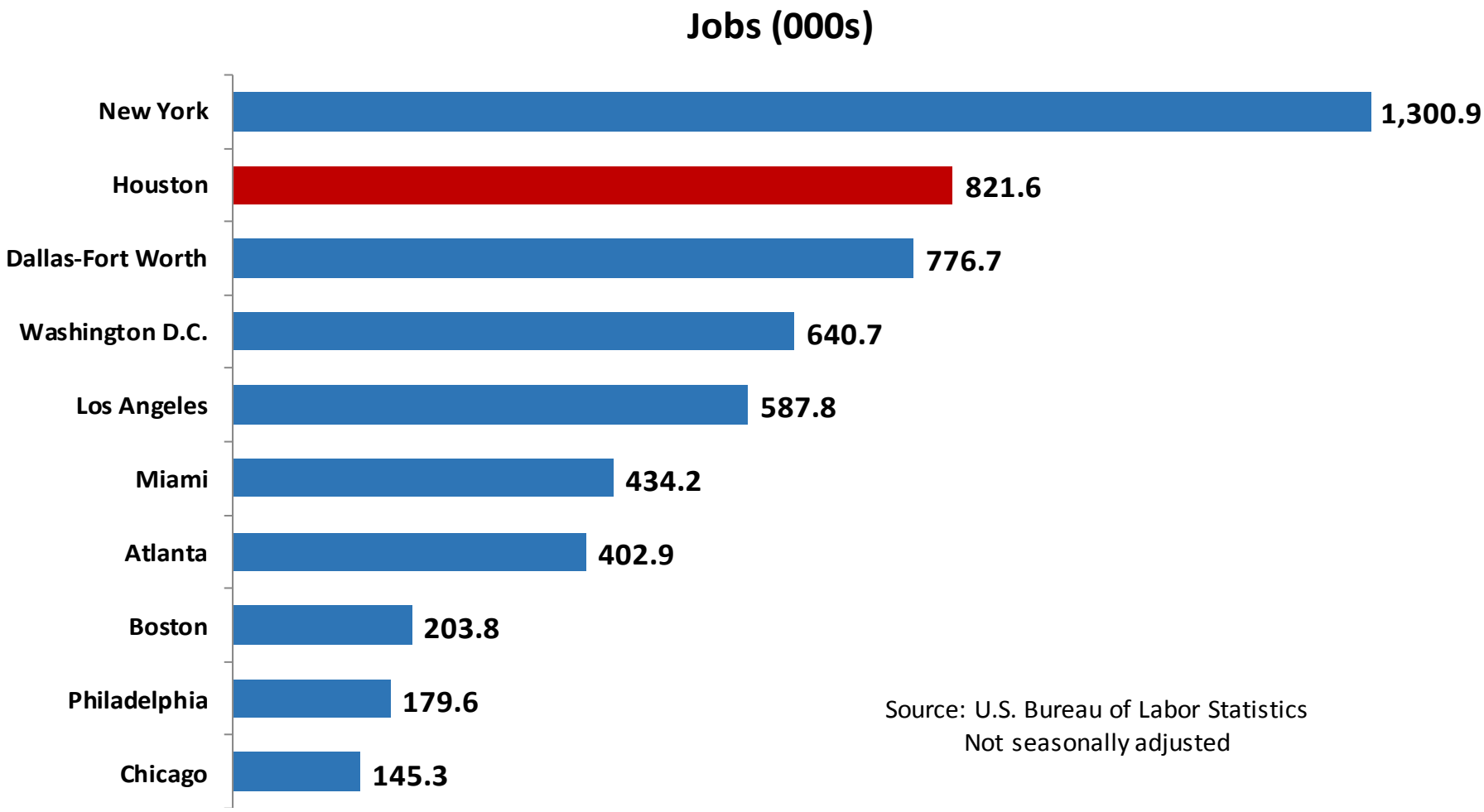
## Metro Houston GDP – $ Billions (Nominal)



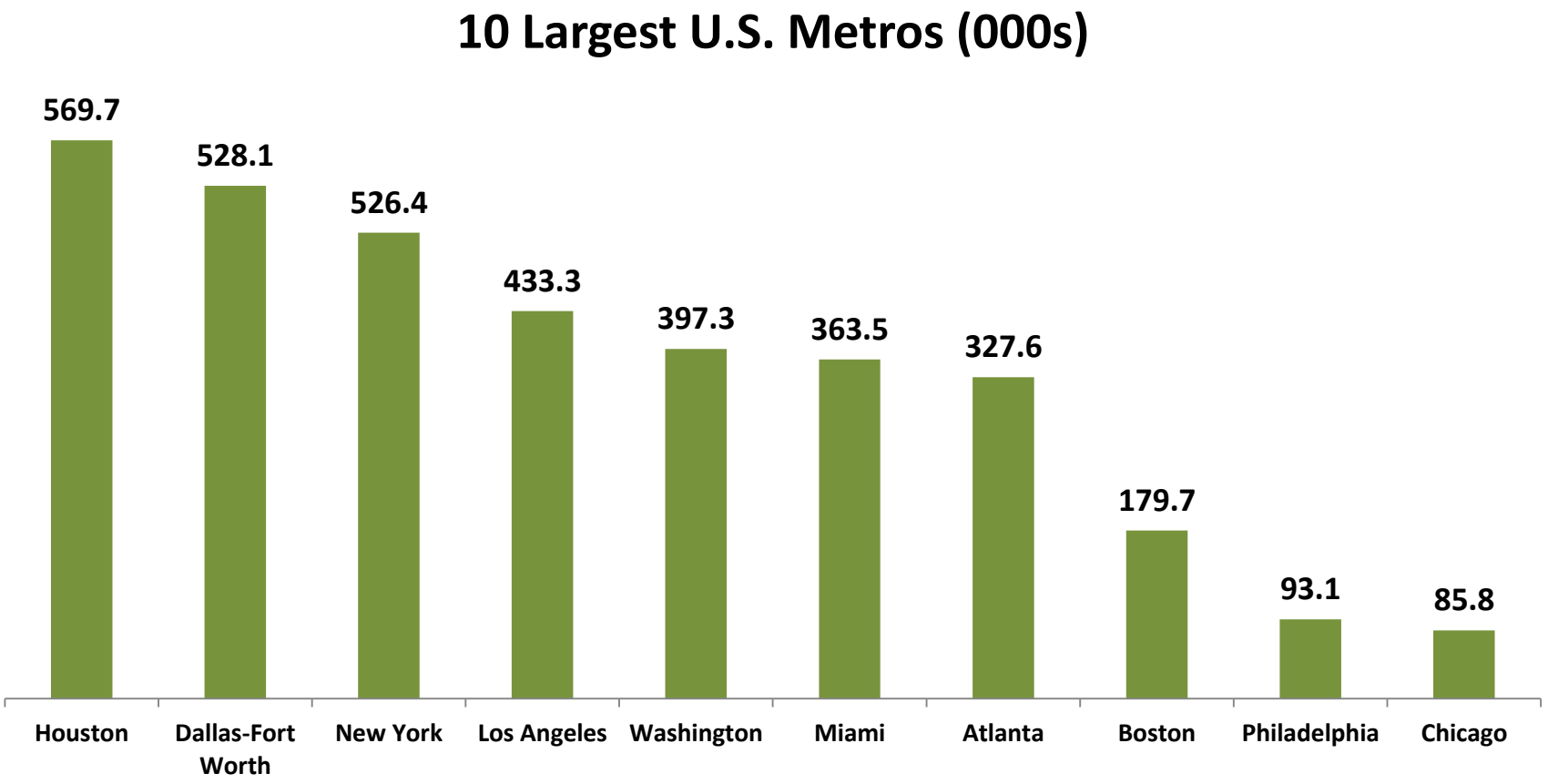

Source: U.S. Bureau of Economic Analysis

# Jobs created Jan ’00 – Dec ’15




Source: U.S. Bureau of Labor Statistics
Not seasonally adjusted

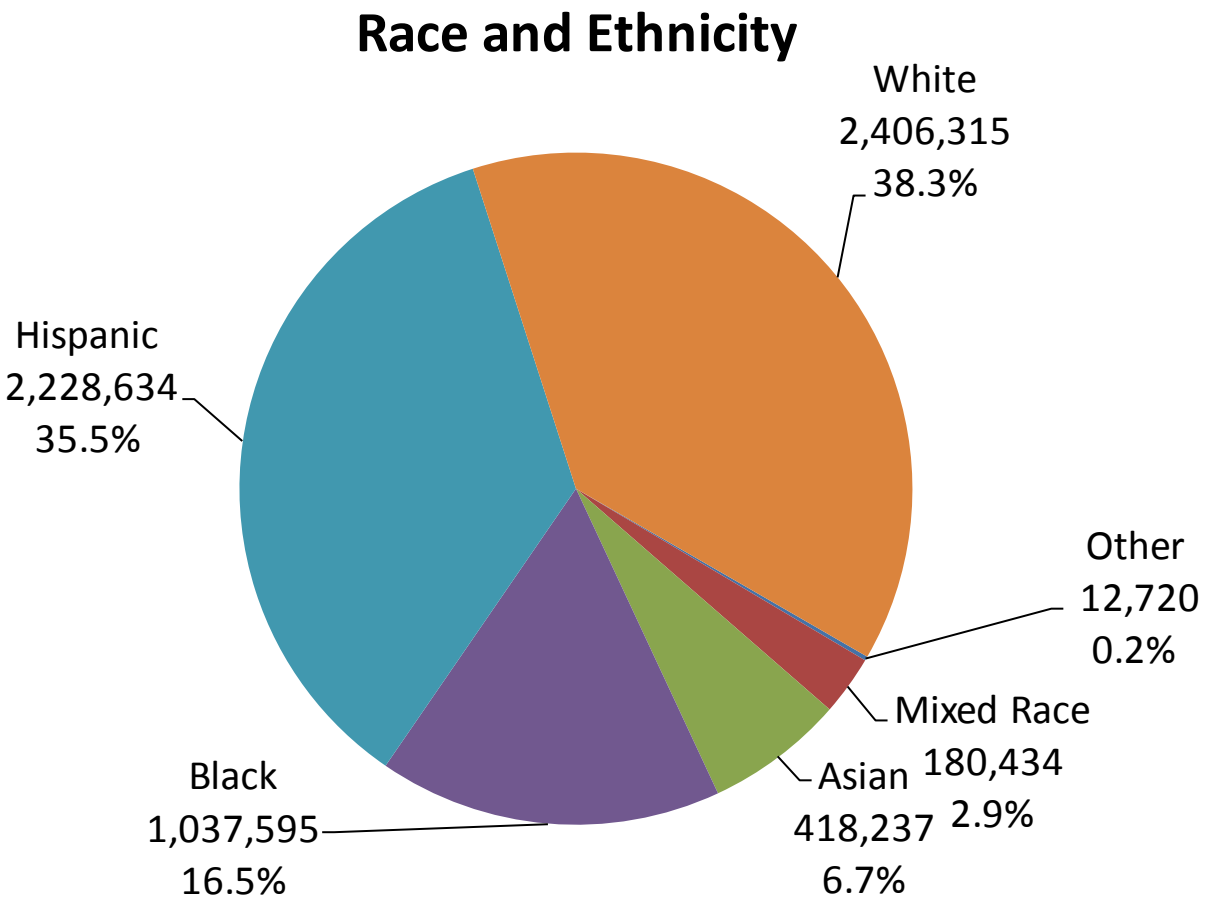
# Population Growth 4/10 – 7/15




Source: U.S. Census Bureau

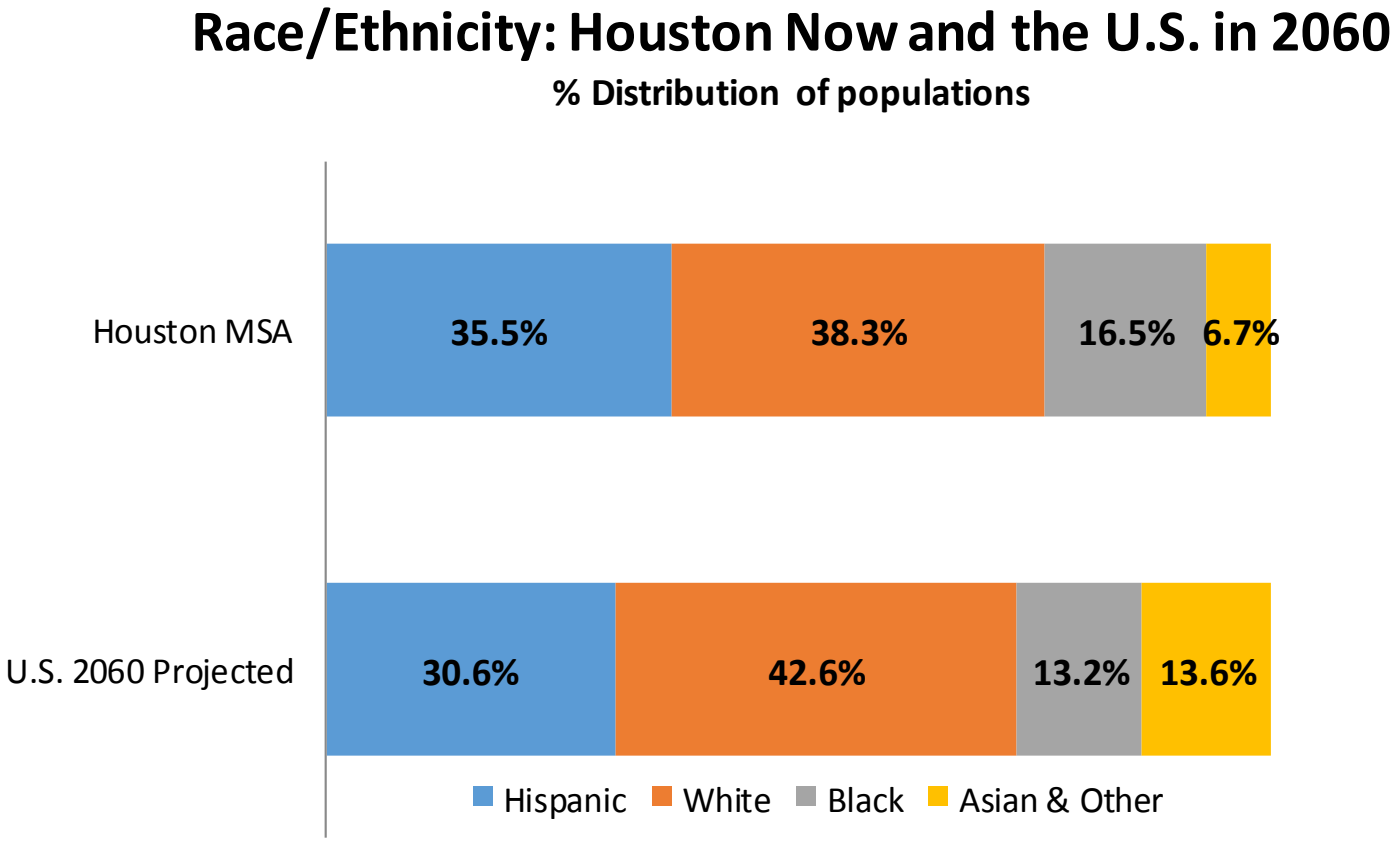
# A Few Words About Population

# A Diverse Population



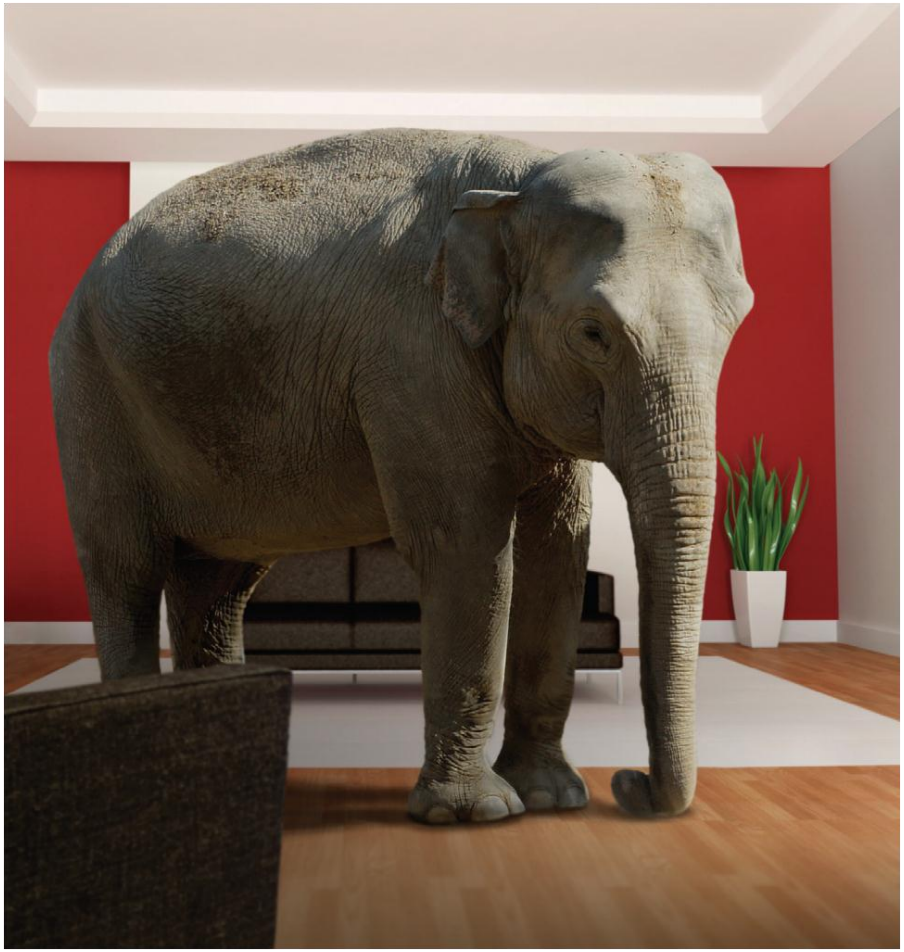

Source: U.S. Census Bureau

# Houston is the nation's future

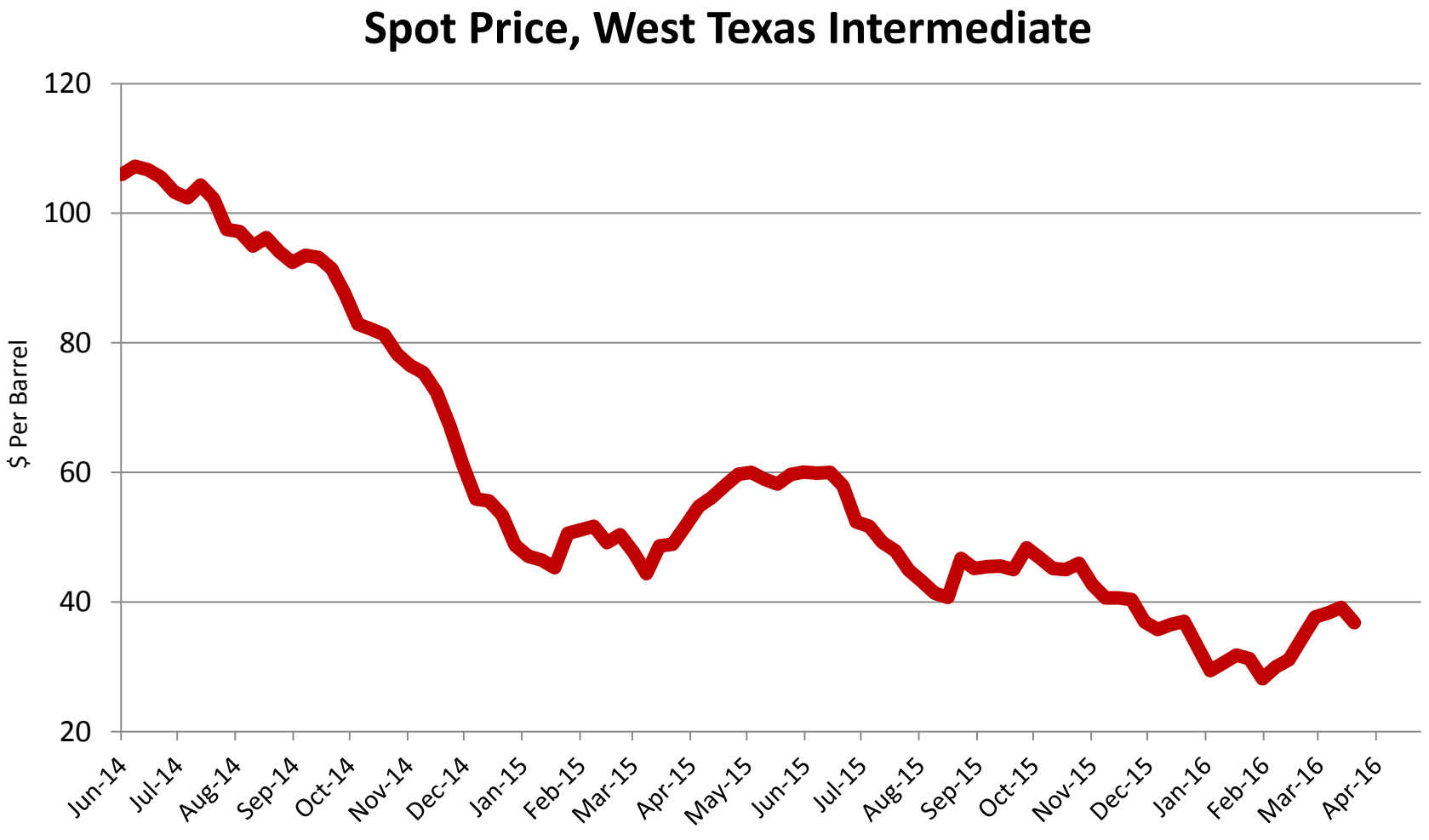



Source: U.S. Census Bureau

# Houston's Current Situation

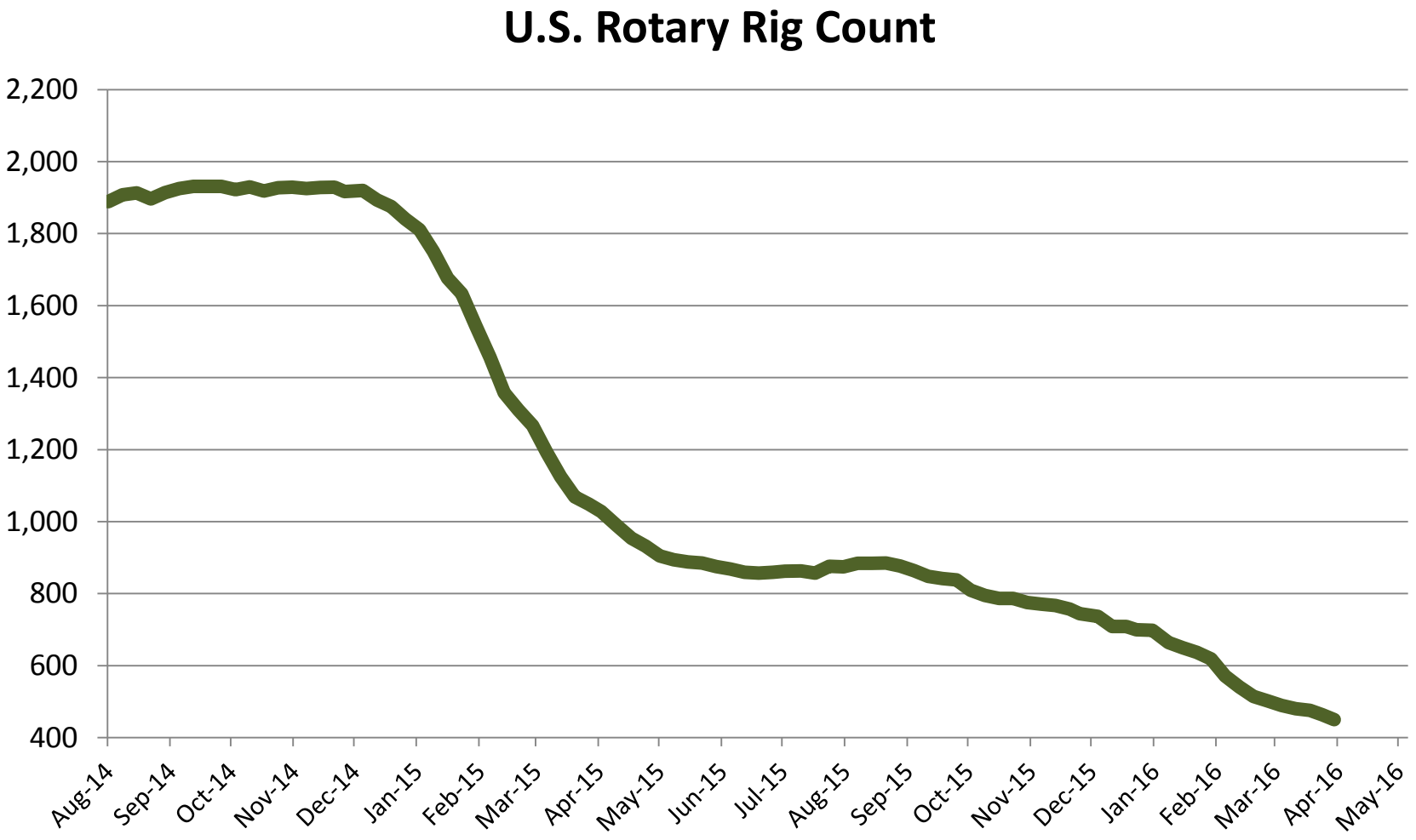


# Crude down $70 from its peak




Source: U.S. Energy Information Administration

# Nearly 1,500 rigs have been idled




Source: Baker Hughes

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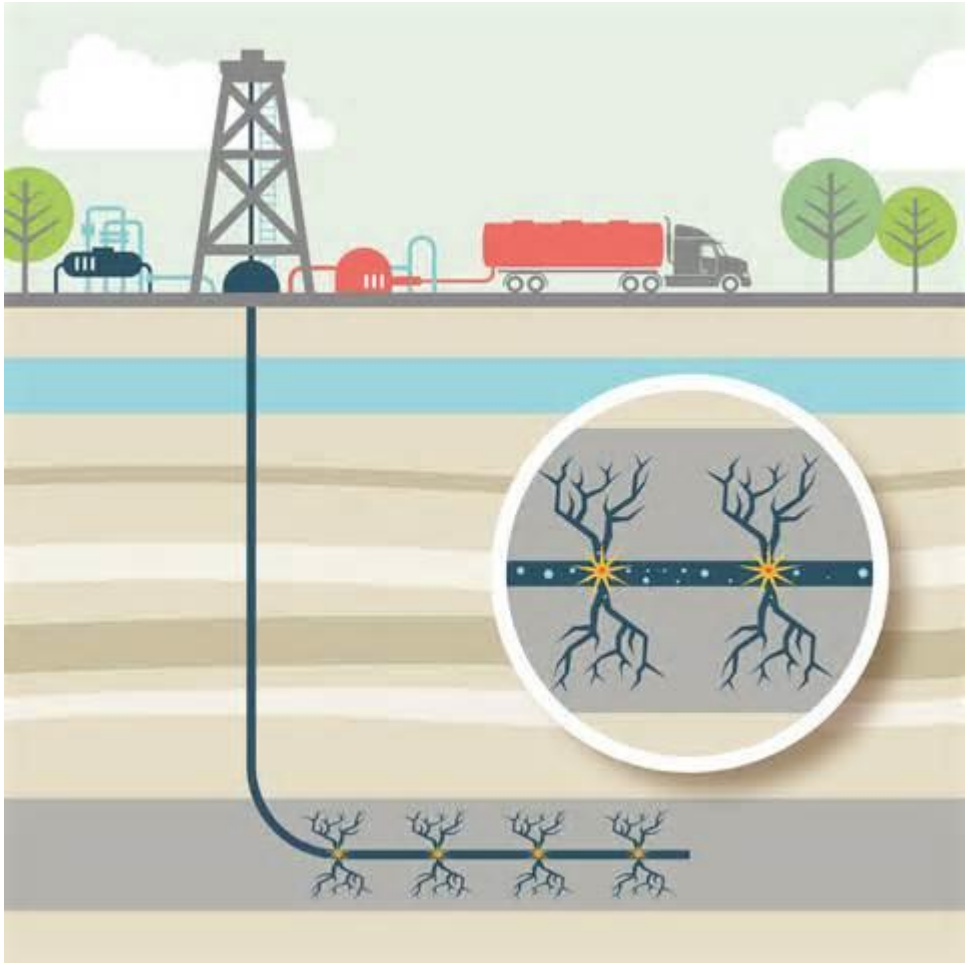
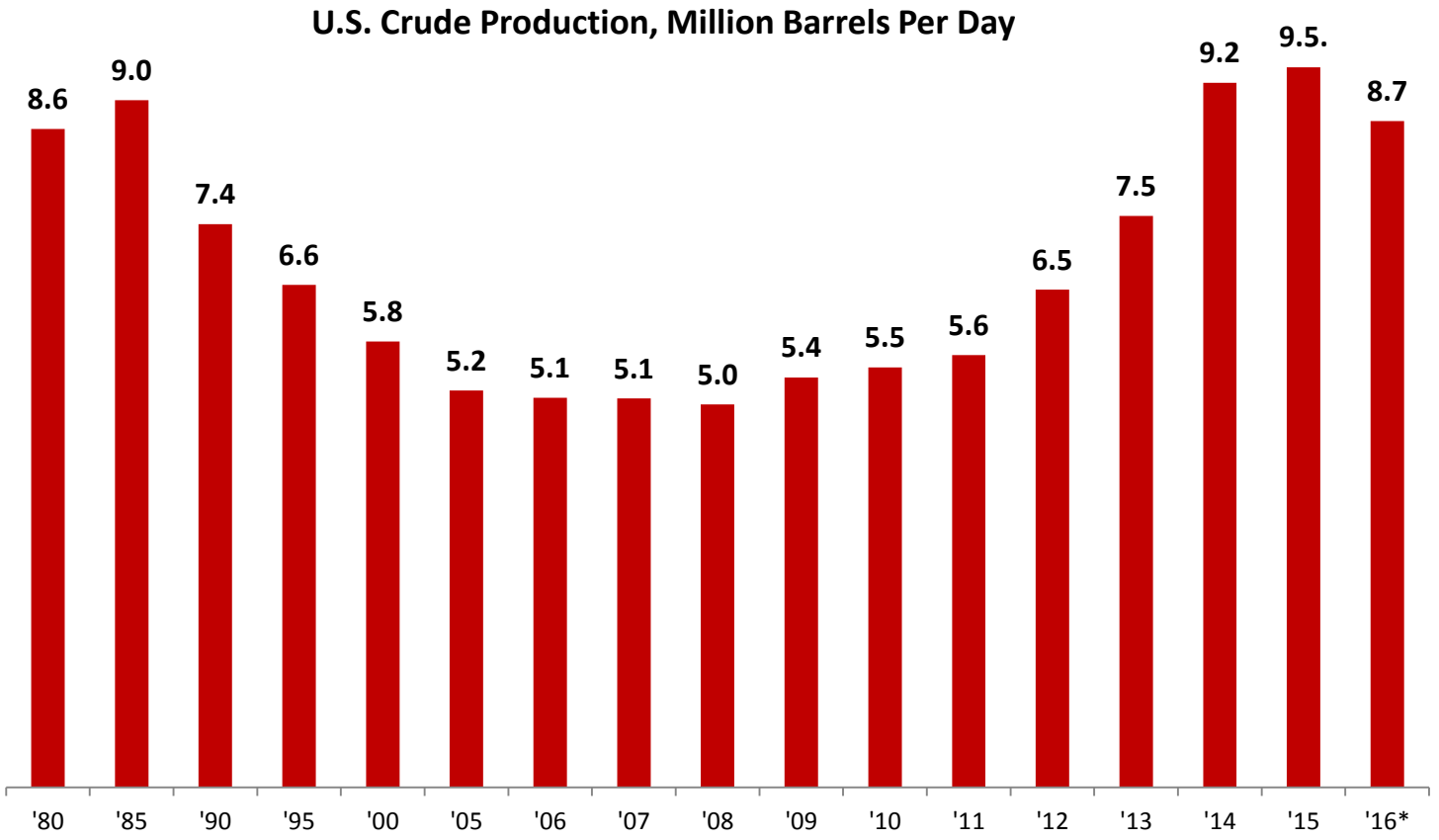
# Directional drilling and fracking



# Production Growth




Source: U.S. Energy Information Administration

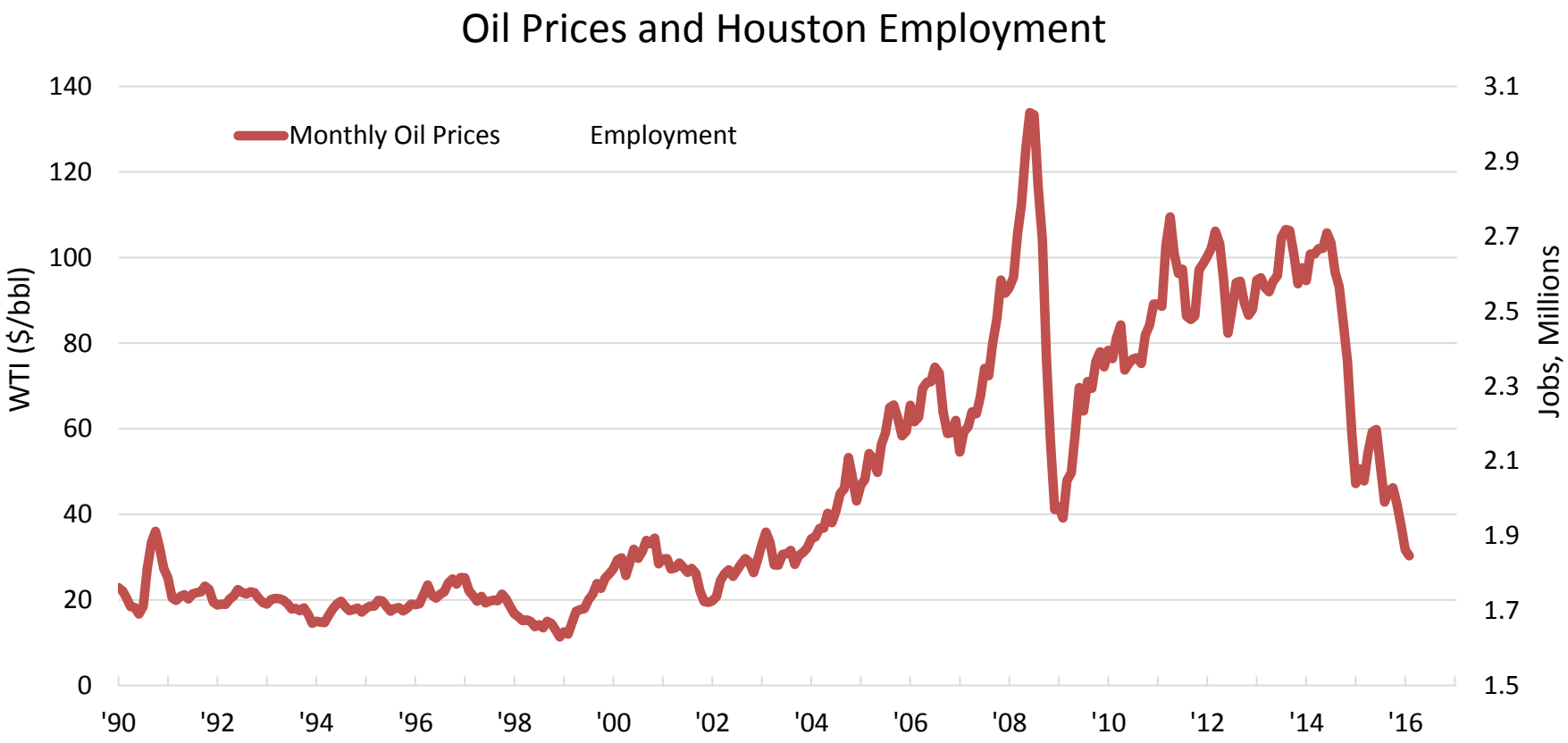
* Projected

# We've been here before

| | Oil Prices | | Losses | |
|---|---|---|---|---|
| Recession | Peak | Trough | Rigs | Energy Jobs |
| Mid-1980s | $30.75 | $12.05 | -3,766 (-83.3%) | -53,600 (-46.3%) |
| Early-1990s | $35.89 | $14.57 | -526 (-46.3%) | -6,800 (-10.8%) |
| 9-11/Enron | $34.55 | $19.53 | -528 (-41.3%) | -4,700 (-7.3%) |
| Great Recession | $136.96 | $39.51 | -1,119 (-44.4%) | -11,900 (-13.6%) |
| Current | $106.31 | $30.32 | -1,488 (-77.0%) | -22,700 (20.2%) |

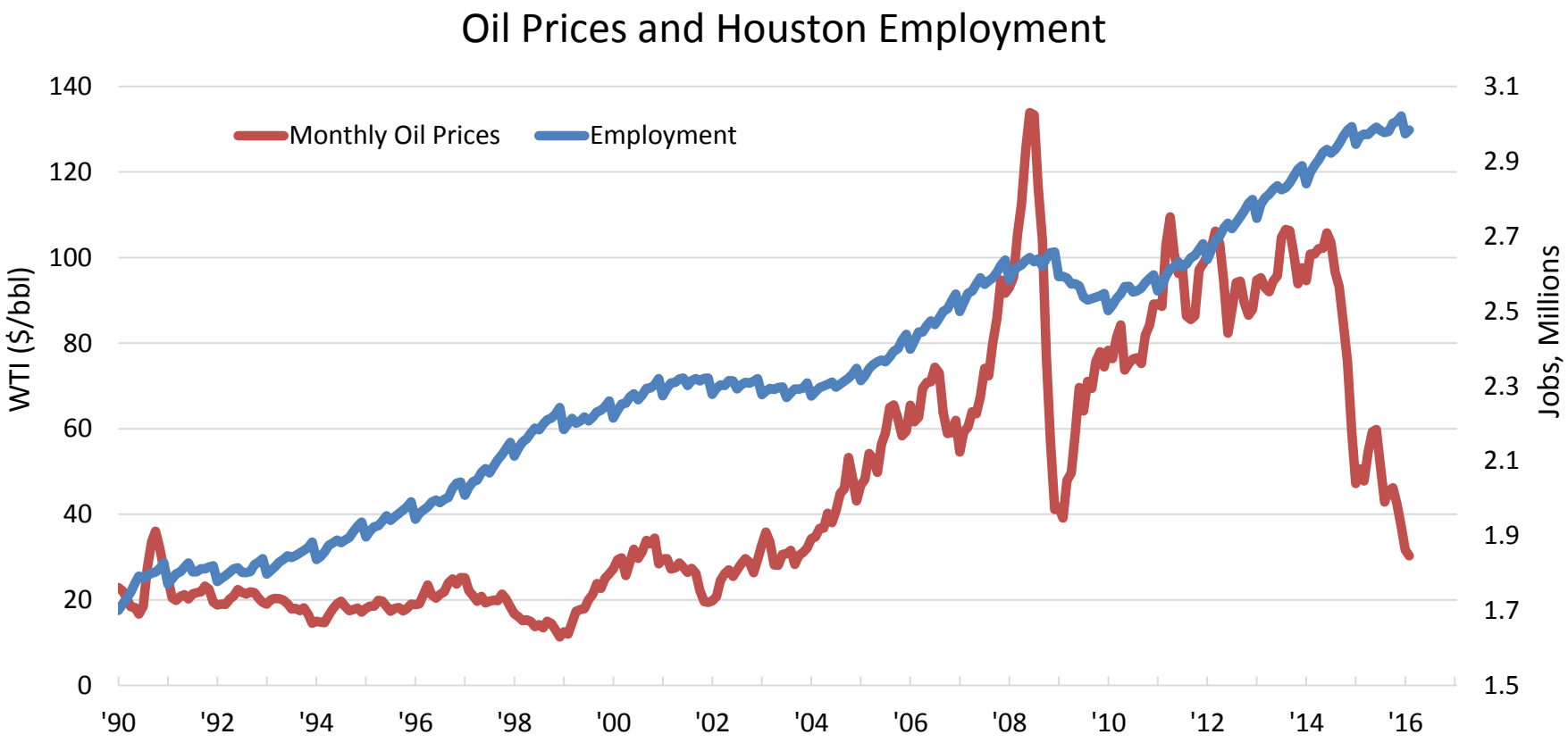
Note: All losses calculated from the monthly average
Sources: U.S. Energy Information Administration, Baker Hughes, U.S. Bureau of Labor Statistics

# We've been here before




Source: Texas Workforce Commission, U.S. Energy Information Administration

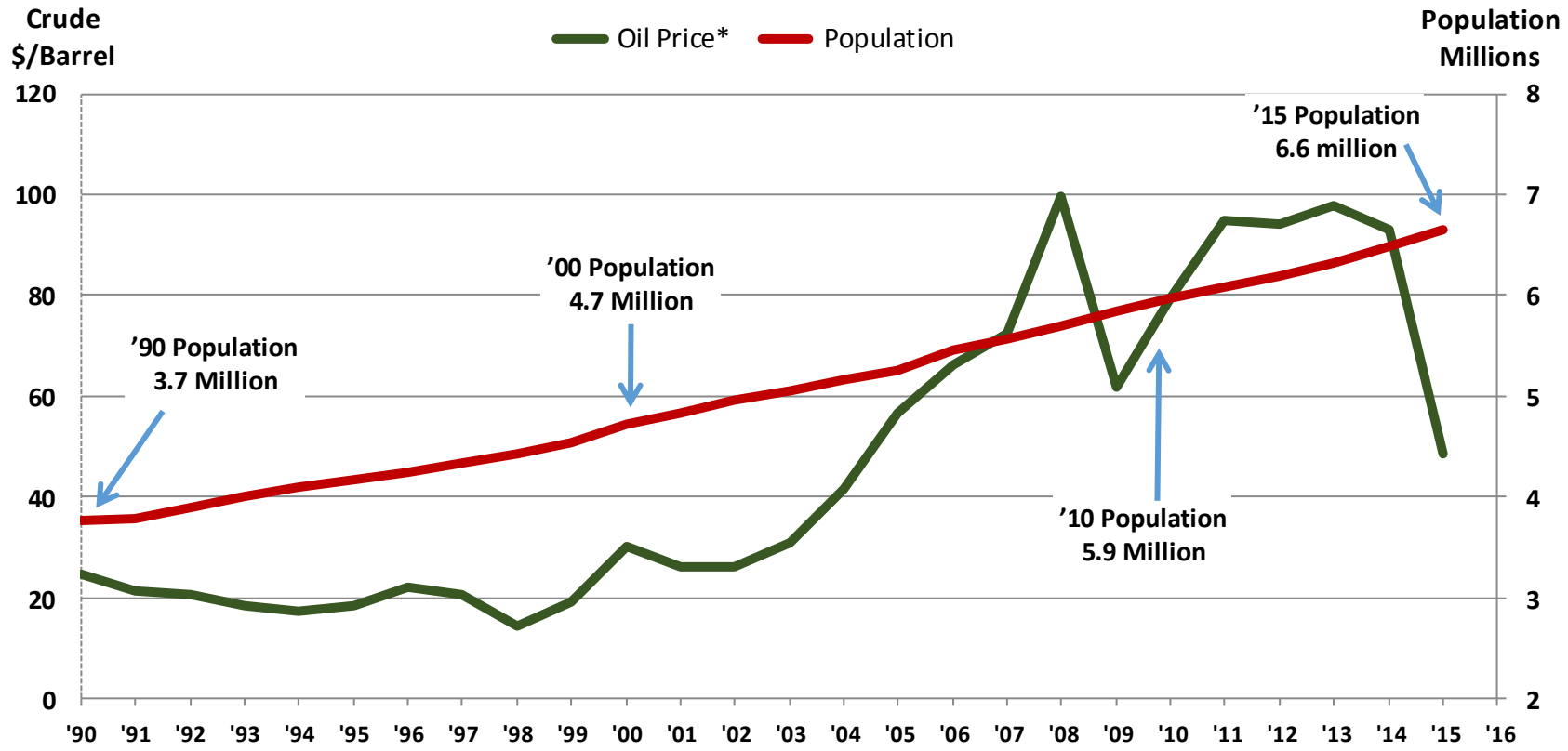
# We've been here before




Source: Texas Workforce Commission, U.S. Energy Information Administration

# We've been here before

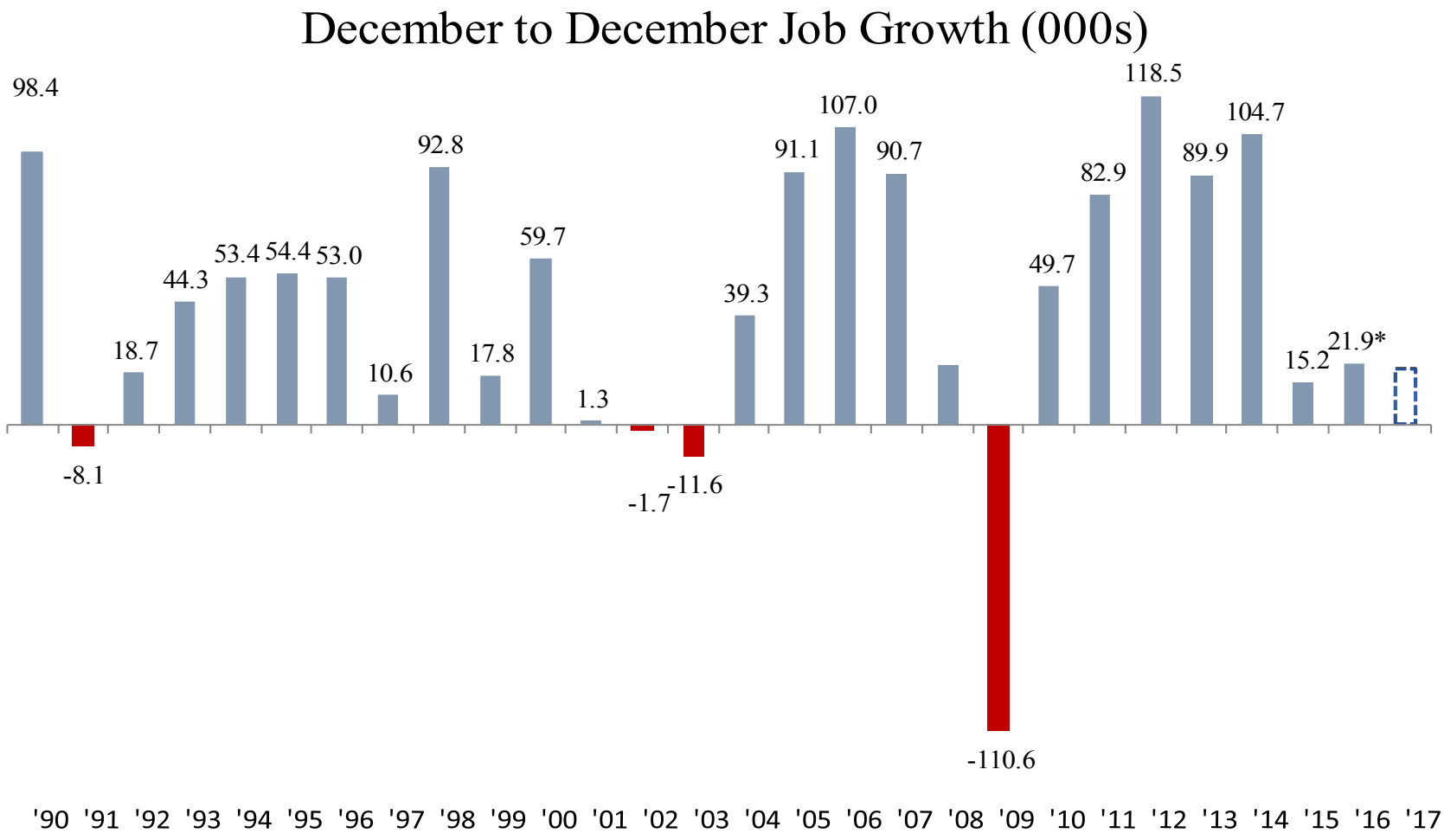
GREATER HOUSTON PARTNERSHIP




Source: U.S. Census Bureau

* West Texas Intermediate, Average Annual Spot Price

# Historic Employment Change




*Source: Texas Workforce Commission*

*Partnership 2016 Forecast

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# Other Drivers of Houston's economy

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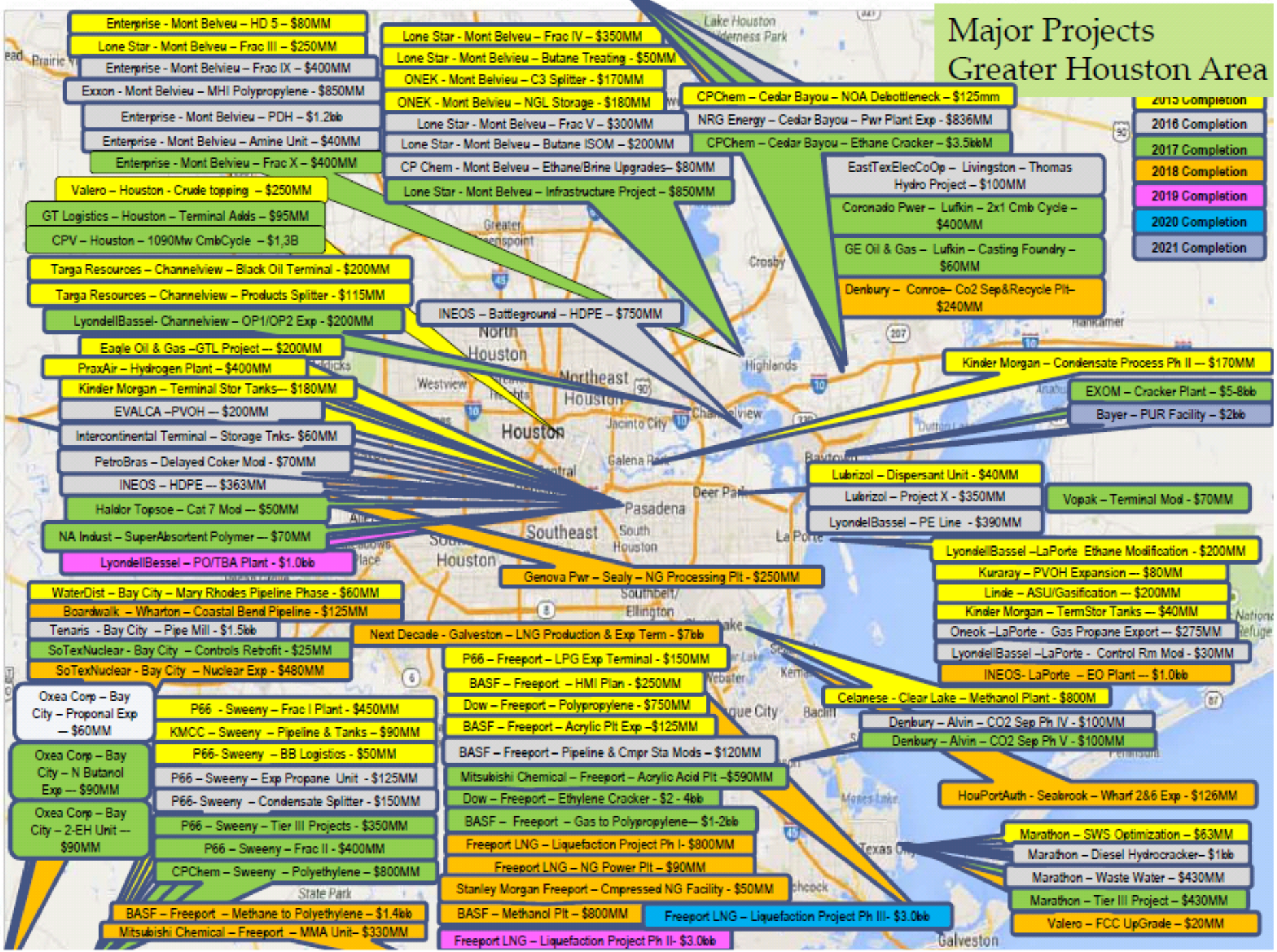
Major Projects
Greater Houston Area
2015 Completion
2016 Completion
2017 Completion
2018 Completion
2019 Completion
2020 Completion
2021 Completion
Enterprise - Mont Belveu – HD 5 – $80MM
Lone Star - Mont Belveu – Frac III – $250MM
Enterprise - Mont Belvieu – Frac IX – $400MM
Exxon - Mont Belvieu – MHI Polypropylene - $850MM
Enterprise - Mont Belvieu – PDH – $1.2bb
Enterprise - Mont Belvieu – Amine Unit – $40MM
Enterprise - Mont Belvieu – Frac X – $400MM
Valero – Houston - Crude topping – $250MM
GT Logistics – Houston – Terminal Adds – $95MM
CPV – Houston – 1090Mw CmbCycle – $1,3B
Targa Resources – Channelview – Black Oil Terminal - $200MM
Targa Resources – Channelview – Products Splitter - $115MM
LyondellBassel- Channelview – OP1/OP2 Exp - $200MM
Eagle Oil & Gas –GTL Project — $200MM
PraxAir – Hydrogen Plant – $400MM
Kinder Morgan – Terminal Stor Tanks— $180MM
EVALCA –PVOH — $200MM
Intercontinental Terminal – Storage Tnks- $60MM
PetroBras – Delayed Coker Mod - $70MM
INEOS – HDPE — $363MM
Haldor Topsoe – Cat 7 Mod — $50MM
NA Indust – SuperAbsortent Polymer — $70MM
LyondellBessel – PO/TBA Plant - $1.0bb
WaterDist – Bay City – Mary Rhodes Pipeline Phase - $60MM
Boardwalk – Wharton – Coastal Bend Pipeline - $125MM
Tenaris - Bay City – Pipe Mill - $1.5bb
SoTexNuclear - Bay City – Controls Retrofit - $25MM
SoTexNuclear - Bay City – Nuclear Exp - $480MM
Oxea Corp – Bay City – Proponal Exp — $60MM
Oxea Corp – Bay City – N Butanol Exp — $90MM
Oxea Corp – Bay City – 2-EH Unit — $90MM
P66 - Sweeny – Frac I Plant - $450MM
KMCC – Sweeny – Pipeline & Tanks – $90MM
P66- Sweeny – BB Logistics - $50MM
P66 – Sweeny – Exp Propane Unit - $125MM
P66- Sweeny – Condensate Splitter - $150MM
P66 – Sweeny – Tier III Projects - $350MM
P66 – Sweeny – Frac II - $400MM
CPChem – Sweeny – Polyethylene – $800MM
BASF – Freeport – Methane to Polyethylene – $1.4bb
Mitsubishi Chemical – Freeport – MMA Unit– $330MM
Lone Star - Mont Belveu – Frac IV – $350MM
Lone Star - Mont Belvieu – Butane Treating - $50MM
ONEK - Mont Belvieu – C3 Splitter - $170MM
ONEK - Mont Belvieu – NGL Storage - $180MM
Lone Star - Mont Belveu – Frac V – $300MM
Lone Star - Mont Belveu – Butane ISOM – $200MM
CP Chem - Mont Belveu – Ethane/Brine Upgrades– $80MM
Lone Star - Mont Belveu – Infrastructure Project – $850MM
INEOS – Battleground – HDPE – $750MM
Genova Pwr – Sealy – NG Processing Plt - $250MM
Next Decade - Galveston – LNG Production & Exp Term - $7bb
P66 – Freeport – LPG Exp Terminal - $150MM
BASF – Freeport – HMI Plan - $250MM
Dow – Freeport – Polypropylene - $750MM
BASF – Freeport – Acrylic Plt Exp –$125MM
BASF – Freeport – Pipeline & Cmpr Sta Mods – $120MM
Mitsubishi Chemical – Freeport – Acrylic Acid Plt –$590MM
Dow – Freeport – Ethylene Cracker - $2 - 4bb
BASF – Freeport – Gas to Polypropylene— $1-2bb
Freeport LNG – Liquefaction Project Ph I- $800MM
Freeport LNG – NG Power Plt – $90MM
Stanley Morgan Freeport – Cmpressed NG Facility - $50MM
BASF – Methanol Plt – $800MM
Freeport LNG – Liquefaction Project Ph III- $3.0bb
Freeport LNG – Liquefaction Project Ph II- $3.0bb
CPChem – Cedar Bayou – NOA Debottleneck – $125mm
NRG Energy – Cedar Bayou – Pwr Plant Exp - $836MM
CPChem – Cedar Bayou – Ethane Cracker – $3.5bbM
EastTexElecCoOp – Livingston – Thomas Hydro Project – $100MM
Coronado Pwer – Lufkin – 2x1 Cmb Cycle – $400MM
GE Oil & Gas – Lufkin – Casting Foundry – $60MM
Denbury – Conroe– Co2 Sep&Recycle Plt– $240MM
Kinder Morgan – Condensate Process Ph II — $170MM
EXOM – Cracker Plant – $5-8bb
Bayer – PUR Facility – $2bb
Lubrizol – Dispersant Unit - $40MM
Lubrizol – Project X - $350MM
LyondellBassel – PE Line - $390MM
Vopak – Terminal Mod - $70MM
LyondellBassel –LaPorte Ethane Modification - $200MM
Kuraray – PVOH Expansion — $80MM
Linde – ASU/Gasification — $200MM
Kinder Morgan – TermStor Tanks — $40MM
Oneok –LaPorte - Gas Propane Export — $275MM
LyondellBassel –LaPorte - Control Rm Mod - $30MM
INEOS- LaPorte – EO Plant — $1.0bb
Celanese - Clear Lake – Methanol Plant - $800M
Denbury – Alvin – CO2 Sep Ph IV - $100MM
Denbury – Alvin – CO2 Sep Ph V - $100MM
HouPortAuth - Seabrook – Wharf 2&6 Exp - $126MM
Marathon – SWS Optimization – $63MM
Marathon – Diesel Hydrocracker– $1bb
Marathon – Waste Water – $430MM
Marathon – Tier III Project – $430MM
Valero – FCC UpGrade – $20MM
Houston
North Houston
Northeast Houston
Southeast Houston
Pasadena
Deer Park
La Porte
Channelview
Highlands
Crosby
Jacinto City
Galena Park
Westview
Greater Greenspoint
Lake Houston Wilderness Park
Baytown
Hankamer
Southbelt/ Ellington
Clear Lake
Webster
Kemah
Bacliff
Seabrook
Galveston
State Park

# Magnet for Foreign Investment

# Other Drivers of Houston's economy

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THE WALL STREET JOURNAL.

## Japan's Daikin to Build $410 Million Air-Conditioner Factory Near Houston

# The World's Largest Medical Center

- 106,000 employees
- 56 institutions
- 7.2 million patient visits

# Other Drivers of Houston's economy

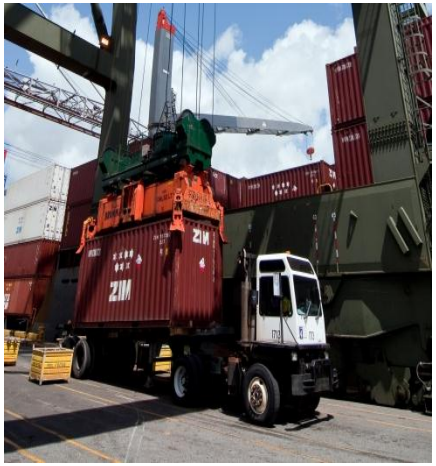
GREATER HOUSTON PARTNERSHIP

HOUSTON CHRONICLE

## Texas Medical Center moves forward with ambitious research project

# A Major Trade Gateway

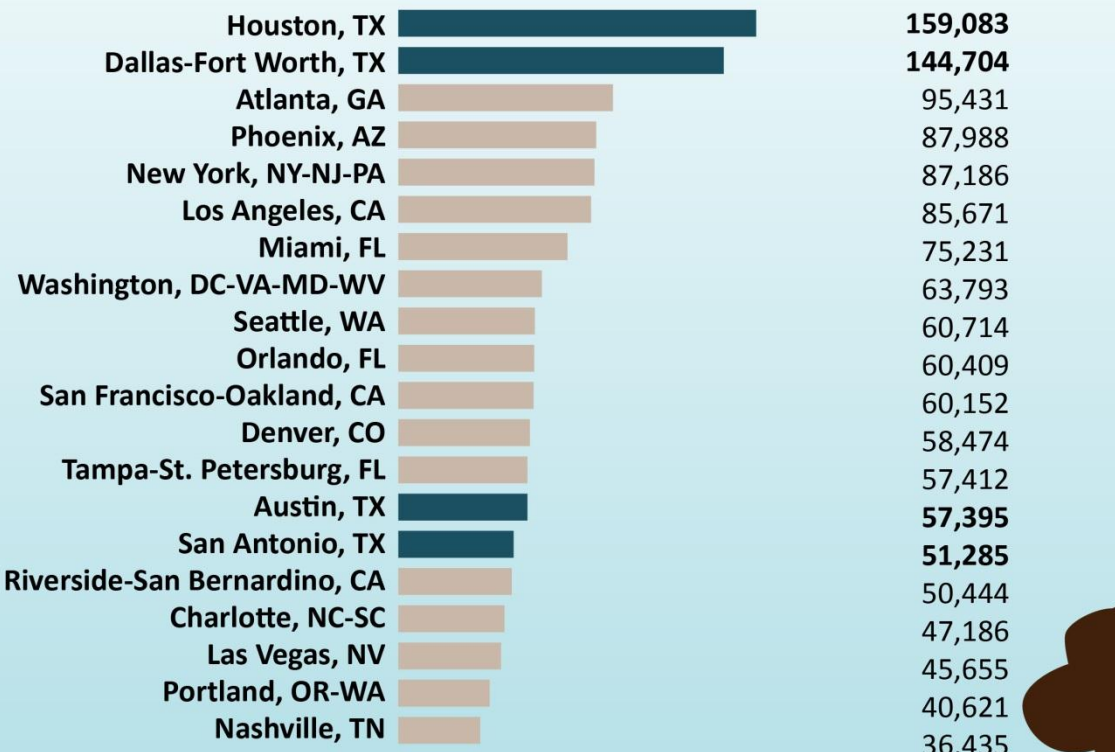
**$196.4 Billion = Value of Exports + Imports in ’15**



# New metro export plan

# TEXAS Keeps Getting Bigger

## Lone Star State Metro Areas Lead U.S. in Population Gain

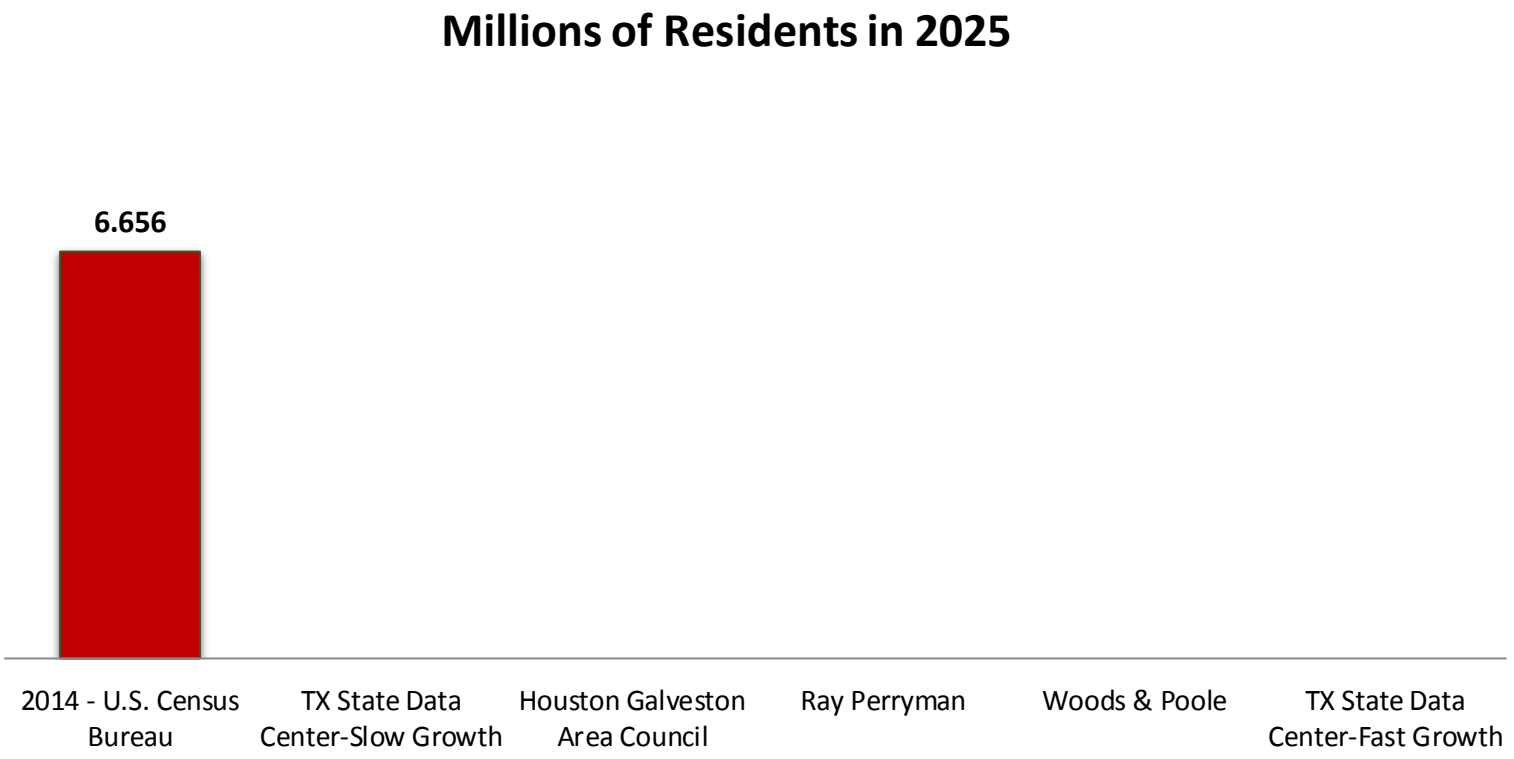



United States Census Bureau

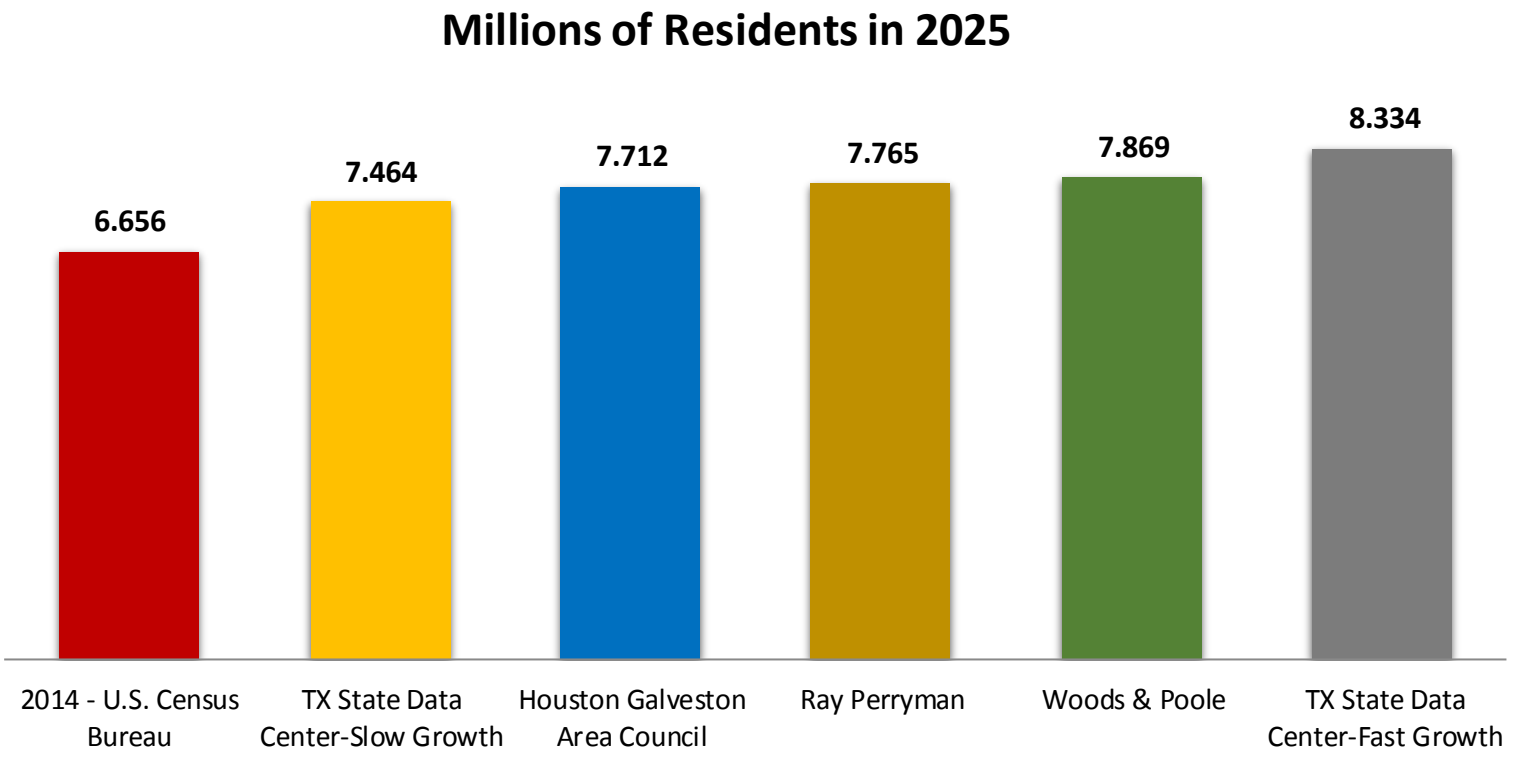
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

Source: Vintage 2015 Population Estimates
Some metro area titles have been abbreviated.
Metro areas are delineated by the Office of Management and Budget as of February 2013.

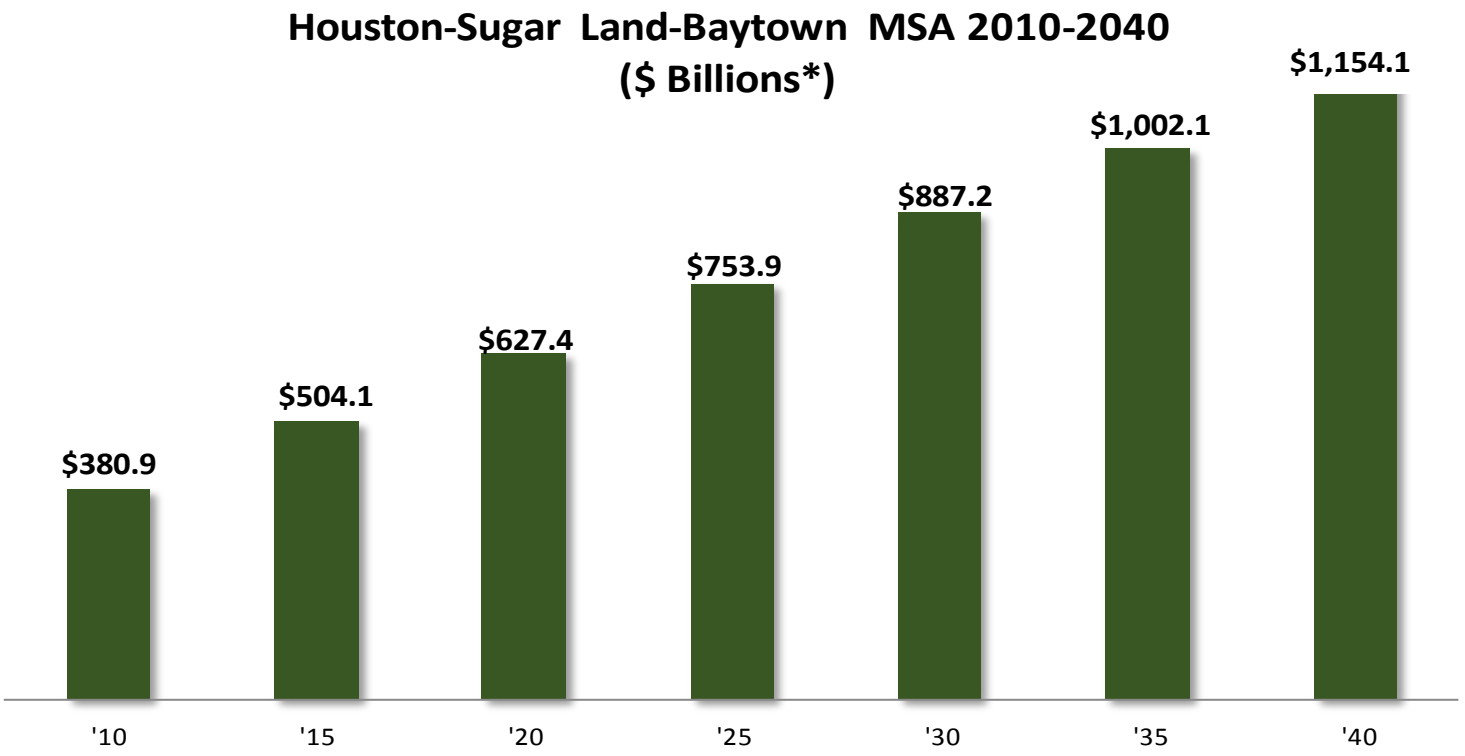
# Metro Houston Population Forecast



# Metro Houston Population Forecast



# Gross Regional Product




* '09 Constant Dollars Source: The Perryman Group, 2015

April 2016

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