

Here Today, Better Tomorrow:

The Decline and Recovery of the
Texas and Houston Labor
Markets & How Total Rewards
Pros can glean information from
trends to be more agile in 2017



Richard Froeschle
rich@richfroeschle.com
(512) 585-8231

What Do Economists Really Know About the Future?

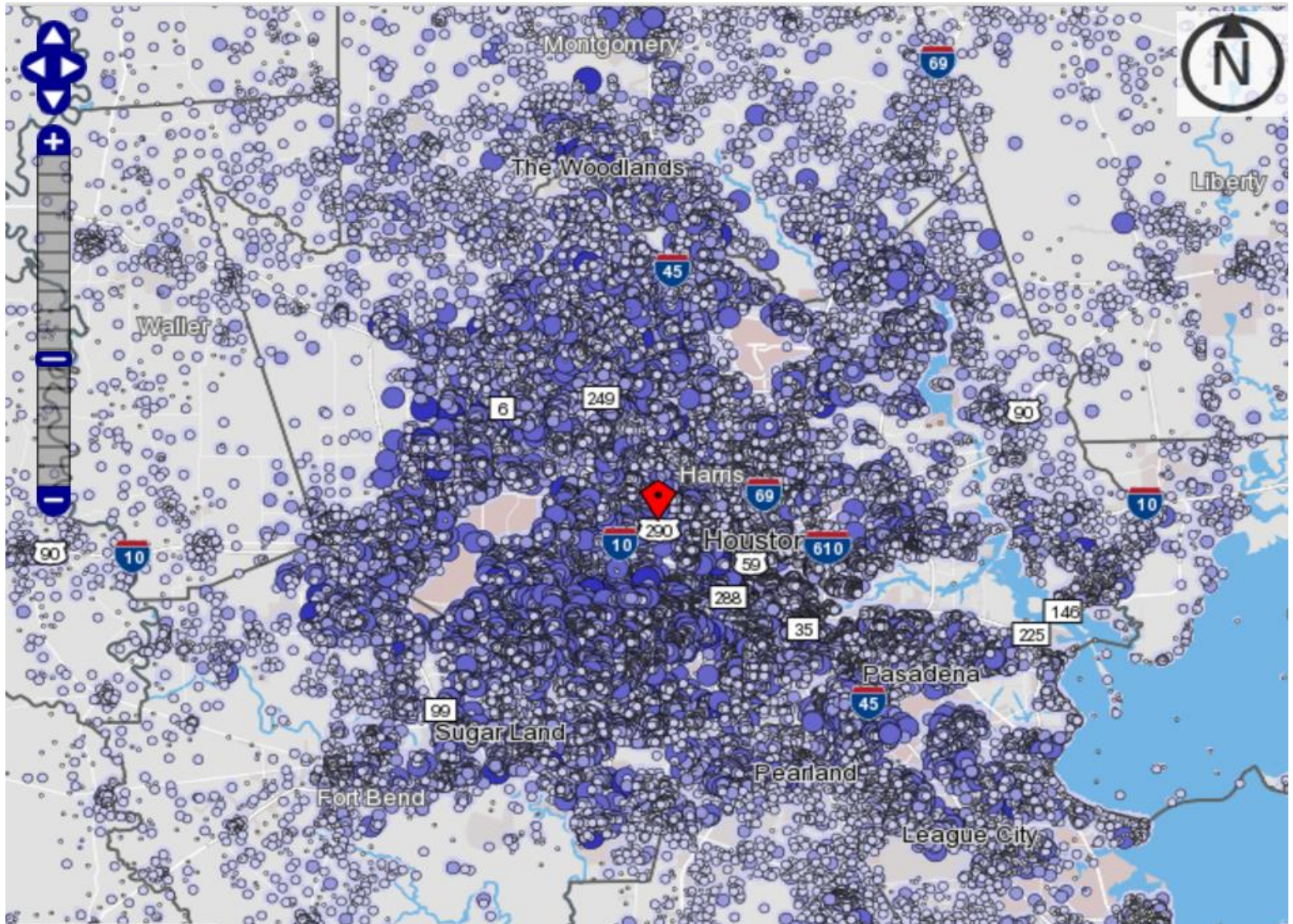
“Experts have been confounded by economic trends that in some ways defy economic history.” **Maury Obstfeld, Chief Economist IMF**

“[E]conomists have at times been baffled by the economy's refusal to comply with their expectations.”
Janet Yellen, Federal Reserve

“All my economists say -- on the one-hand, on the other hand – what I really need is a one-handed economist.”
Harry Truman



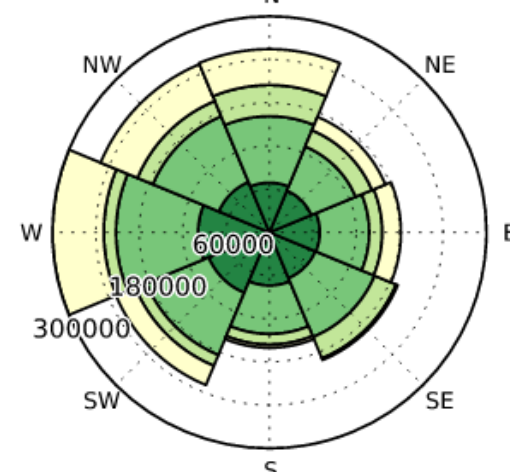
If you work in Houston City, this is where you live



Living and Working in Houston City: Commuting Patterns Change Over Time 2004-2014

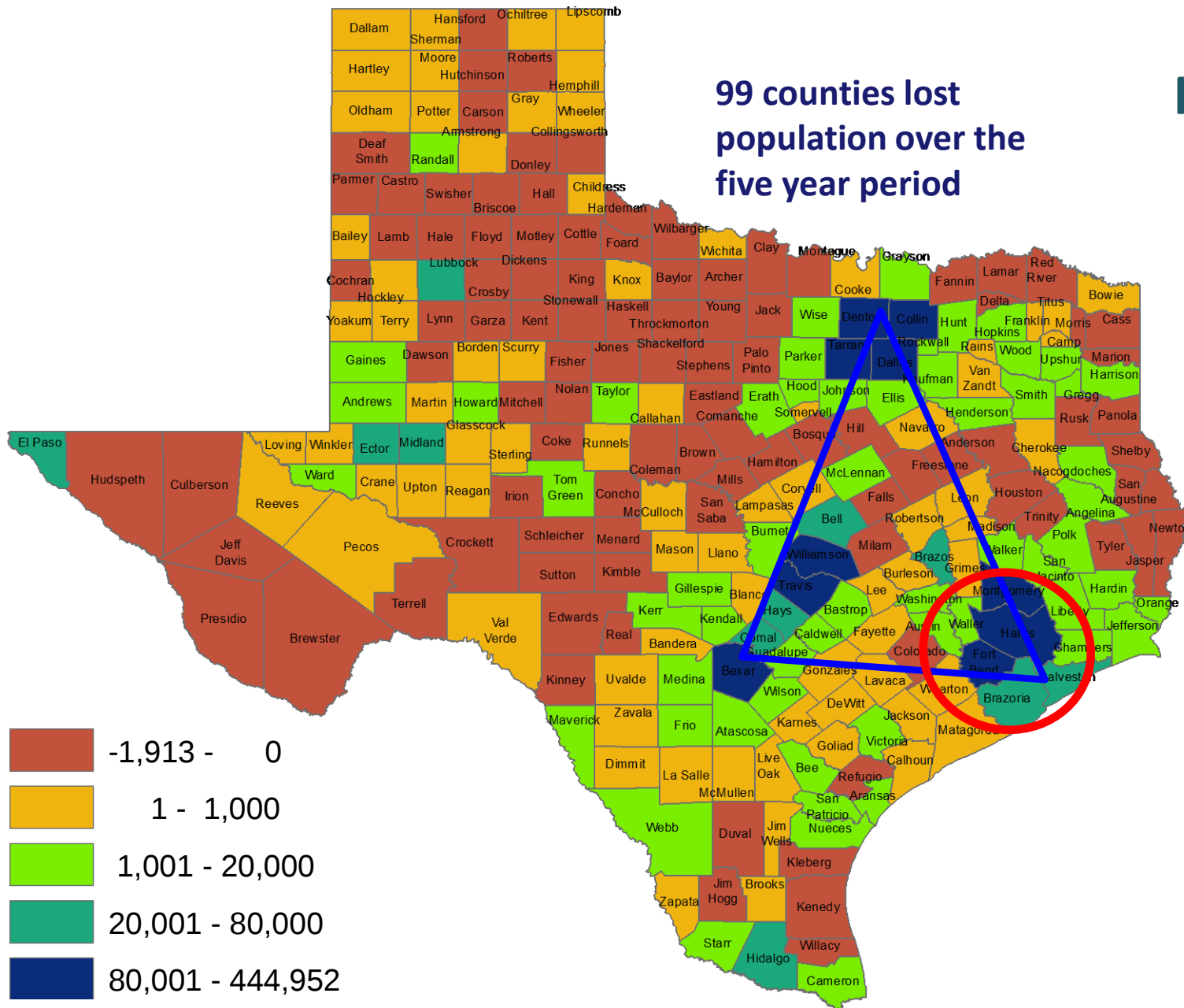
	Count 2004	Share 2004	Count 2014	Share 2014
Employed in Houston City	1,417,698	100.0%	1,743,552	100.0%
Employed in Houston City but Living Outside (96.7%)	772,951	54.5%	1,088,033	62.4%
Employed and Living in Houston City	644,747	45.5%	655,519	37.6%
Living in Houston City	876,817	100.0%	909,000	100.0%
Living in Houston City but Employed Outside	232,070	26.5%	299,980	33.0%
Living and Employed in Houston City	644,747	73.5%	609,020	67.0%

Job Counts by Distance/Direction in 2014
All Workers
N



Texas Population Change Between 2010 and 2015

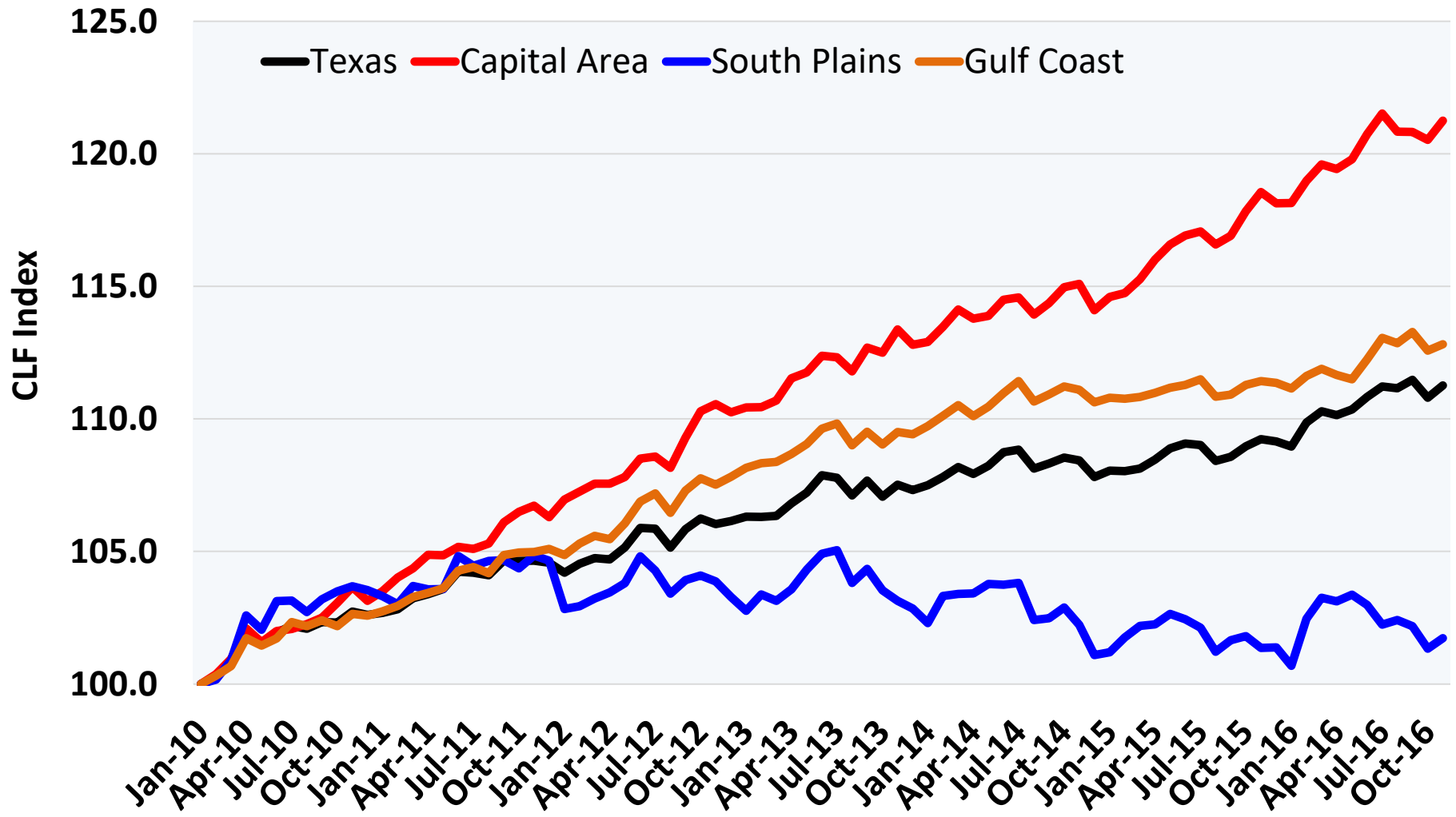
99 counties lost
population over the
five year period



Texas Counties Population **Absolute** Growth 2010-15

County (Major City)	Change	County (Major City)	Change
1. Harris (Houston)	429,841	12. Hays (San Marcos)	36,464
2. Dallas (Dallas)	179,921	13. El Paso (El Paso)	31,955
3. Bexar (San Antonio)	174,764	14. Brazoria (Pearland)	31,814
4. Tarrant (Ft. Worth)	165,970	15. Galveston (Galveston)	29,687
5. Travis (Austin)	146,127	16. Midland (Midland)	24,087
6. Ft Bend (Sugarland)	125,506	17. Ector (Odessa)	22,358
7. Collin (Plano)	125,498	18. Bell (Killeen)	21,963
8. Denton (Denton)	113,650	19. Comal (Seguin)	19,749
9. Williamson (Round Rock)	82,026	20. Nueces (Corpus Christi)	19,401
10. Montgomery (Woodlands)	78,223	21. Brazos (College Station)	19,351
11. Hidalgo (McAllen)	63,161	22. Lubbock (Lubbock)	19,197

Gulf Coast Civilian Labor Force (CLF) Growth 2010-2016



Harris County Migration Patterns

Harris County (Houston), Texas

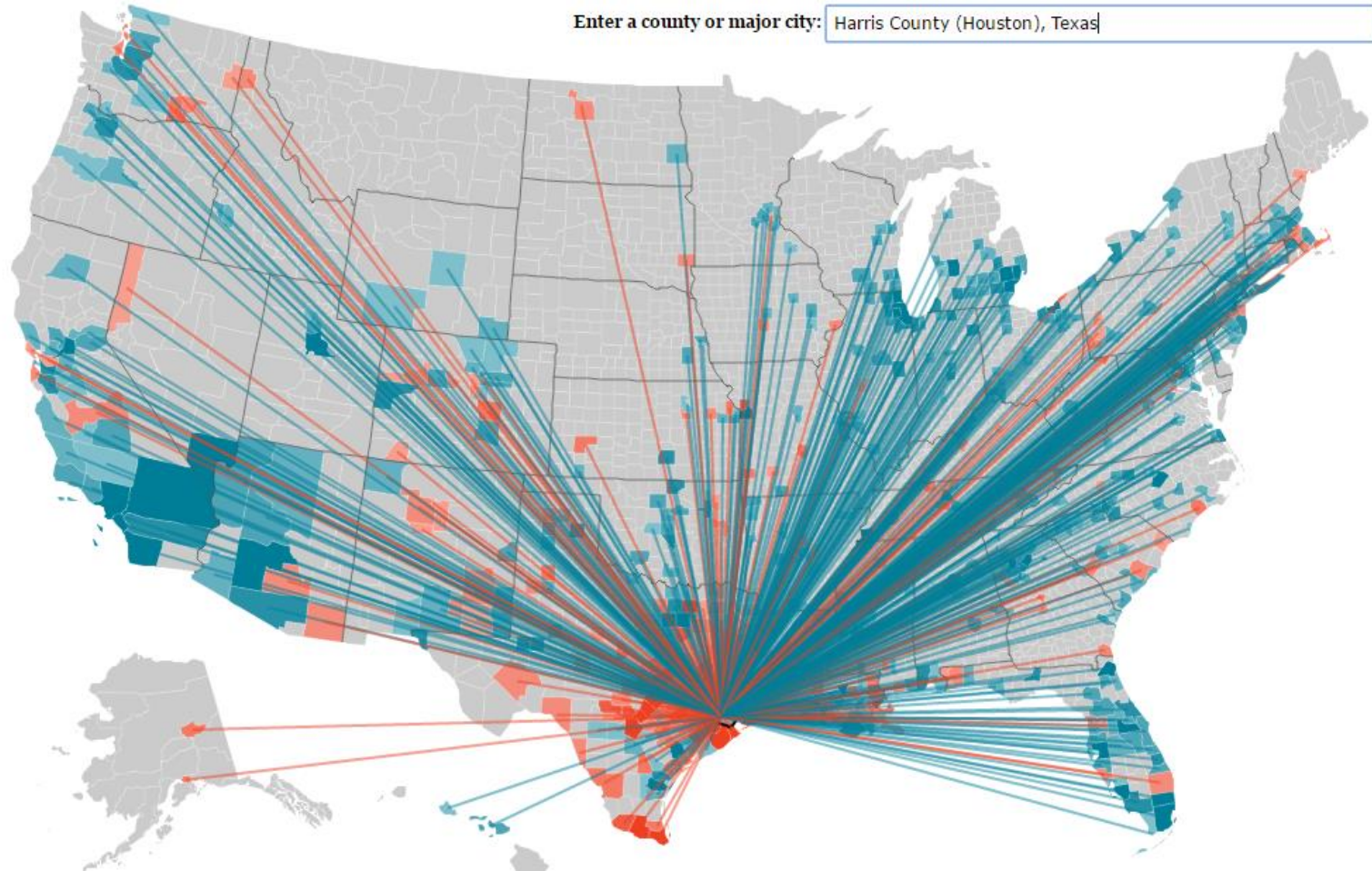
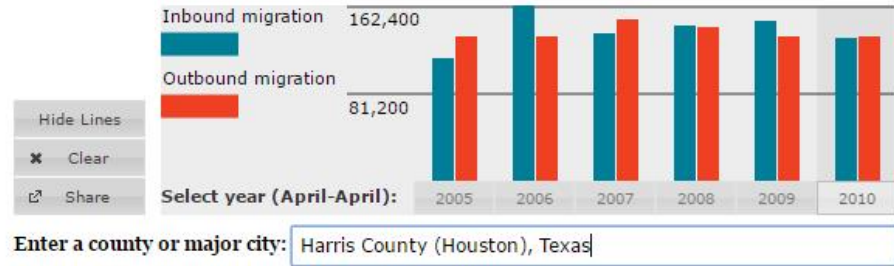
Population (2010): 4,092,459

Population (2005): 3,681,829

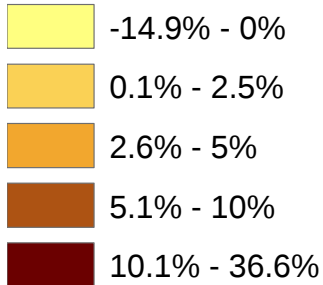
Inbound income per cap. (2010): \$23,600

Outbound income per cap. (2010): \$26,400

Non-migrant income per cap. (2010): \$25,000



Influence of Oil & Gas Boom on Percent Change of Texas County Population 2010 to 2015



Here Today, Better Tomorrow

Texas and Houston Job Growth

Four Major Economic Tent Poles



- 1. Exports & Globalization**
- 2. Population Serving Sectors**
- 3. Oil & Gas Cluster**
- 4. Professional & Business Services**



Where does the U.S. Fit Into an Increasingly Globalized Economy?

A Global Economy: Country GDP Growth (billions \$\$\$)

2000		2008		2015	
U.S.	\$10,285	U.S.	\$14,719	U.S.	\$17,947
Japan	\$4,731	Japan	\$4,849	China	\$10,866
Germany	\$1,947	China	\$4,558	Japan	\$4,123
UK	\$1,549	Germany	\$3,747	Germany	\$3,356
France	\$1,368	France	\$2,923	UK	\$2,849
China	\$1,205	UK	\$2,792	France	\$2,422

Ford to Invest \$1.8B in China research

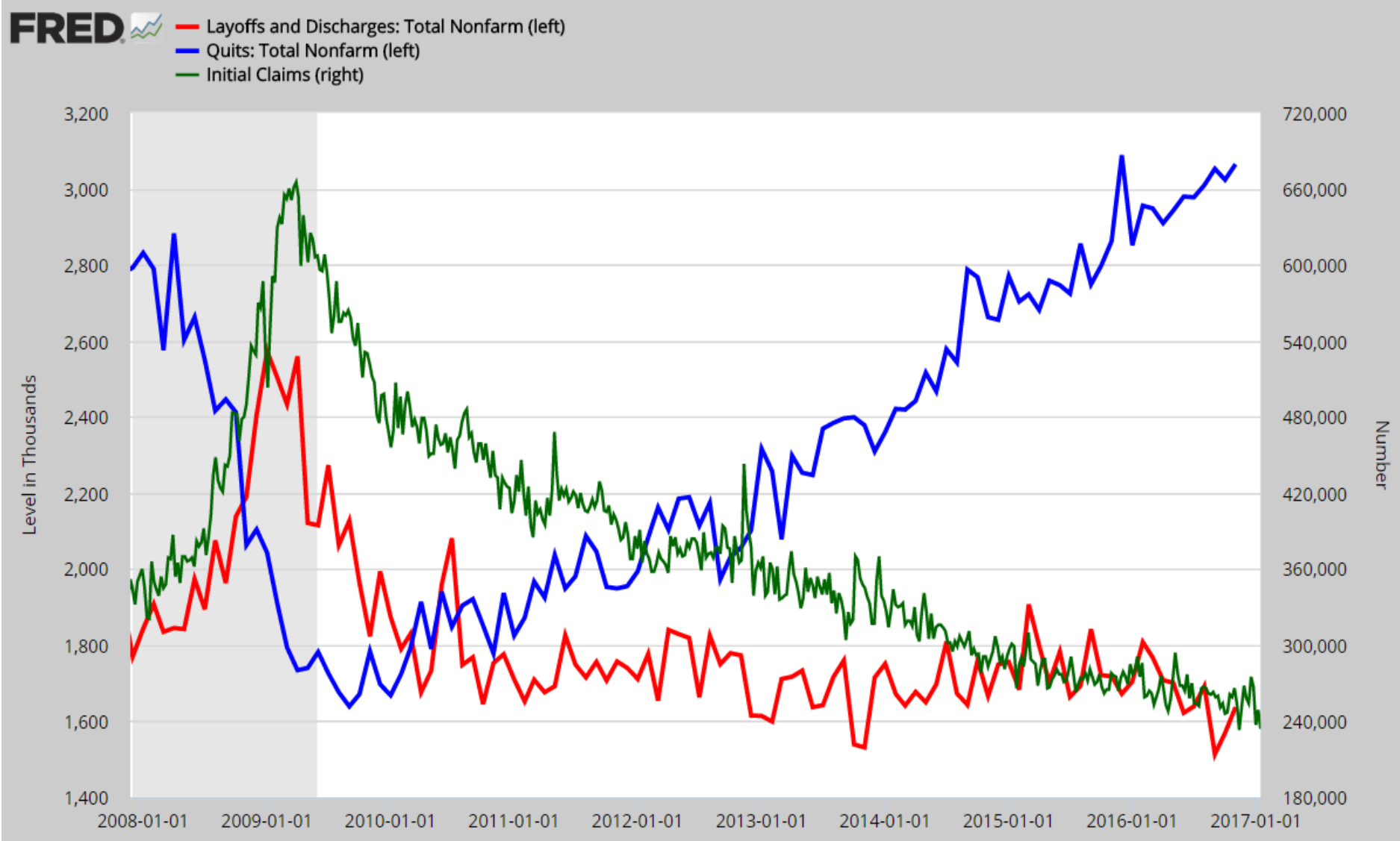
“Ford Motor Co. is investing \$1.8 billion to develop technologies aimed at attracting Chinese car buyers, underlining China’s importance to automakers despite slowing sales growth.”

“In July, General Motors Co. announced a \$5 billion initiative with its main Chinese partner to develop vehicles to be sold in China, Brazil, India and Mexico.”

Austin Statesman, October 13, 2015

Auto Industry \$1 million supports 8.81 jobs
Thus \$6.8 billion could support 59,880 jobs

U.S. Labor Market Indicators are Strong

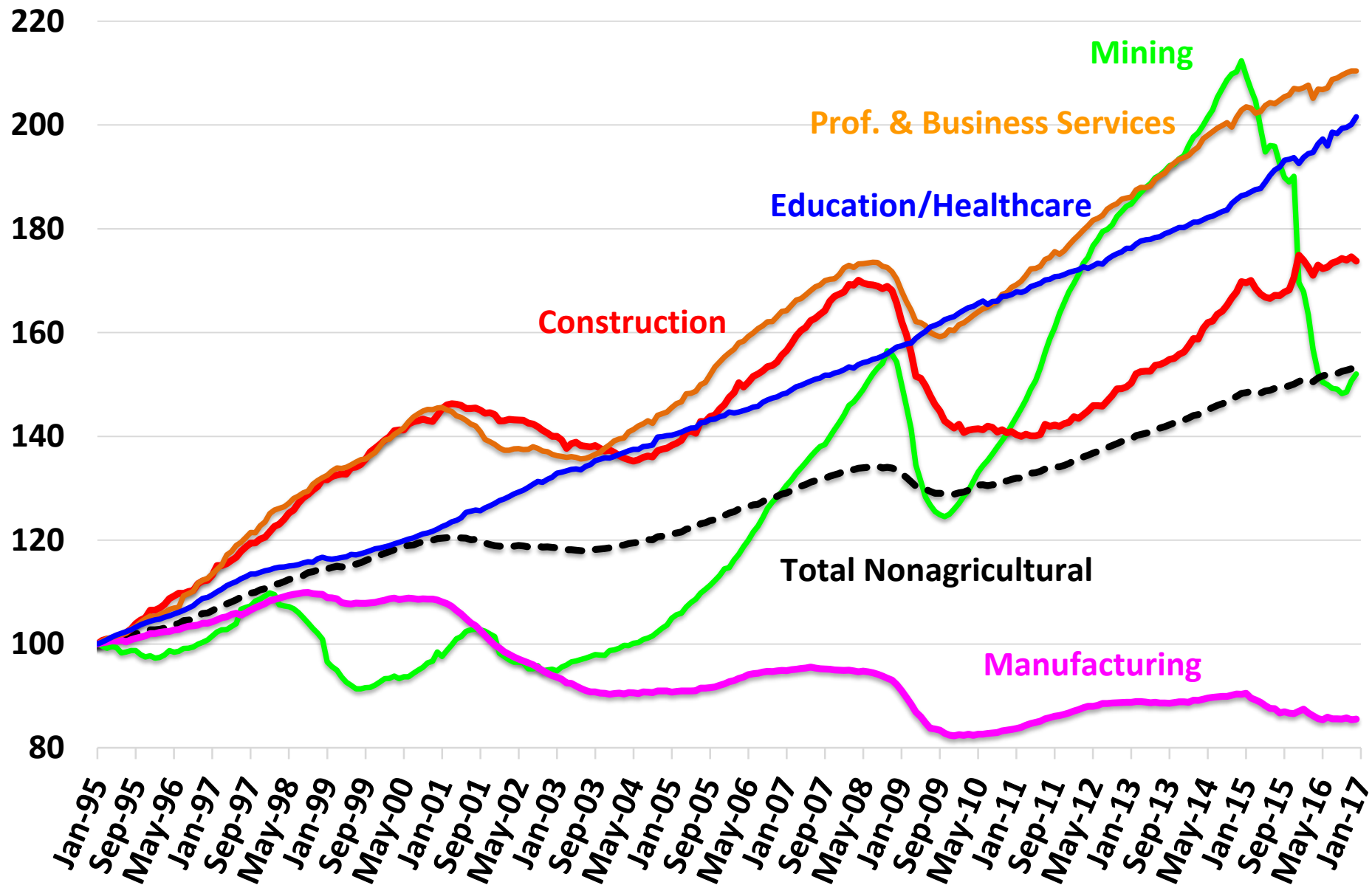


Here Today, Better Tomorrow

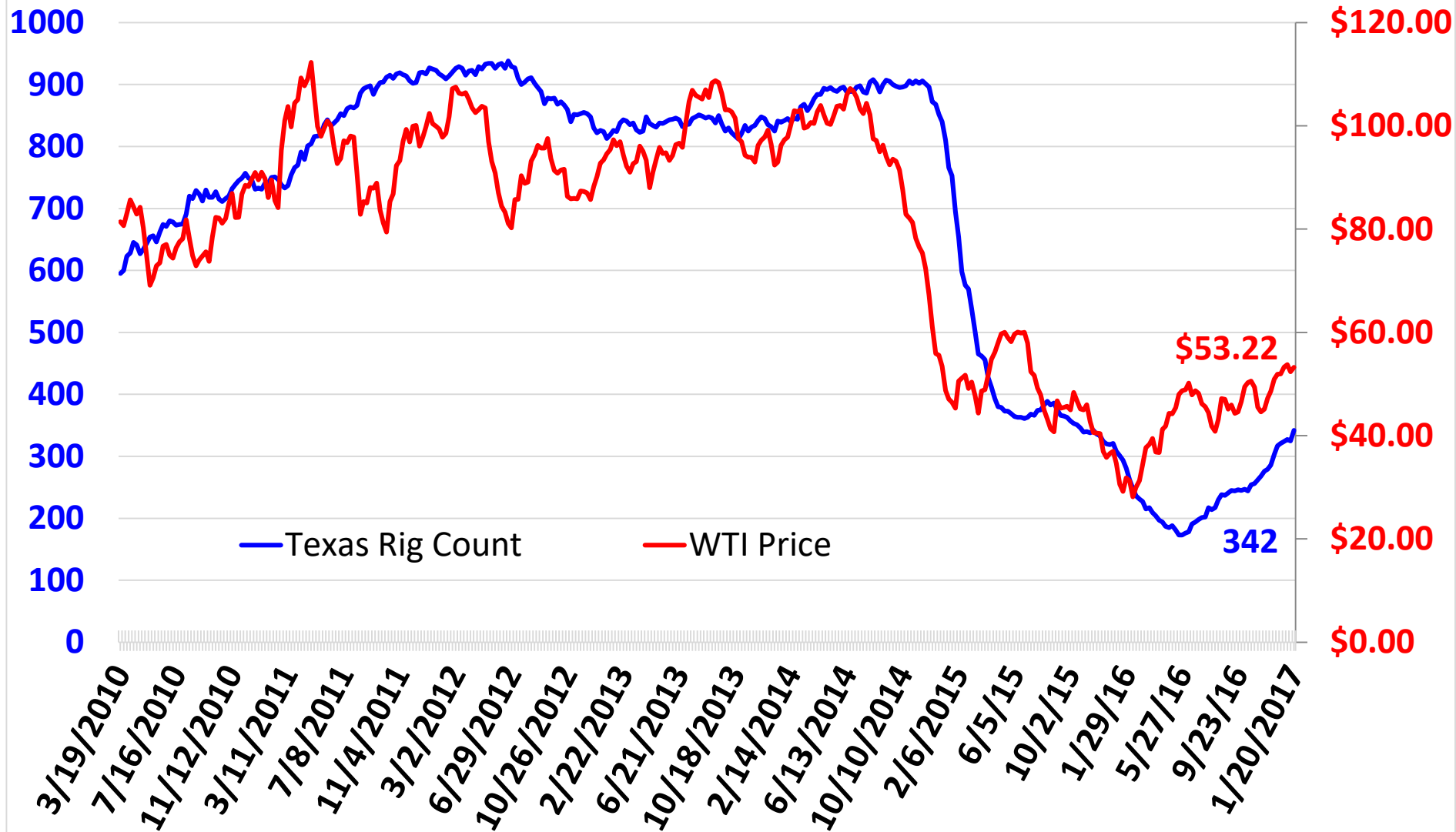
Low Unemployment: Texas MSA December 2016 (actual)

MSA	2016	MSA	2016
Amarillo	3.2	United States	4.5
Austin-Round Rock	3.2	Laredo	4.5
Lubbock MSA	3.2	Texas	4.6
Bryan-College Station	3.4	Texarkana	4.6
Sherman-Denison	3.6	El Paso	4.9
D/FW-Arlington	3.7	Victoria	4.9
San Antonio	3.7	Houston/Woodlands	5.3
Abilene	3.8	Odessa	5.4
Midland	3.8	Longview	5.8
Waco	3.9	Corpus Christi	6.1
San Angelo	4.1	Brownsville-Harlingen	7.3
Wichita Falls	4.2	Beaumont-Port Arthur	7.4
Killeen-Temple	4.3	McAllen-Edinburg	8.2
Tyler	4.4		

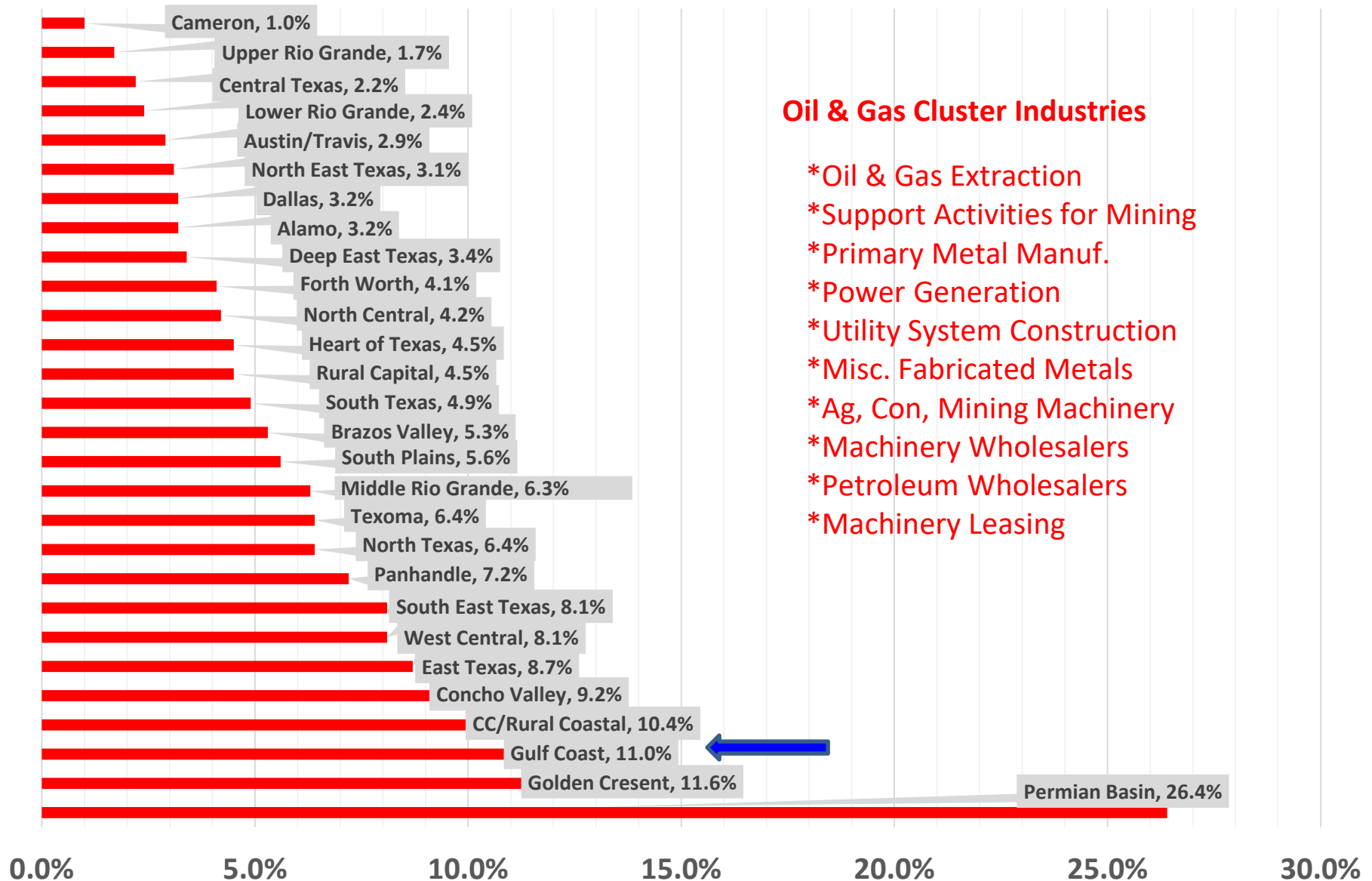
Texas Industry Employment Momentum 1995-2016



Texas Weekly Rig Count vs. WTI \$\$\$ Prices



Oil and Gas Cluster as Percent of Texas Economy by LWDA



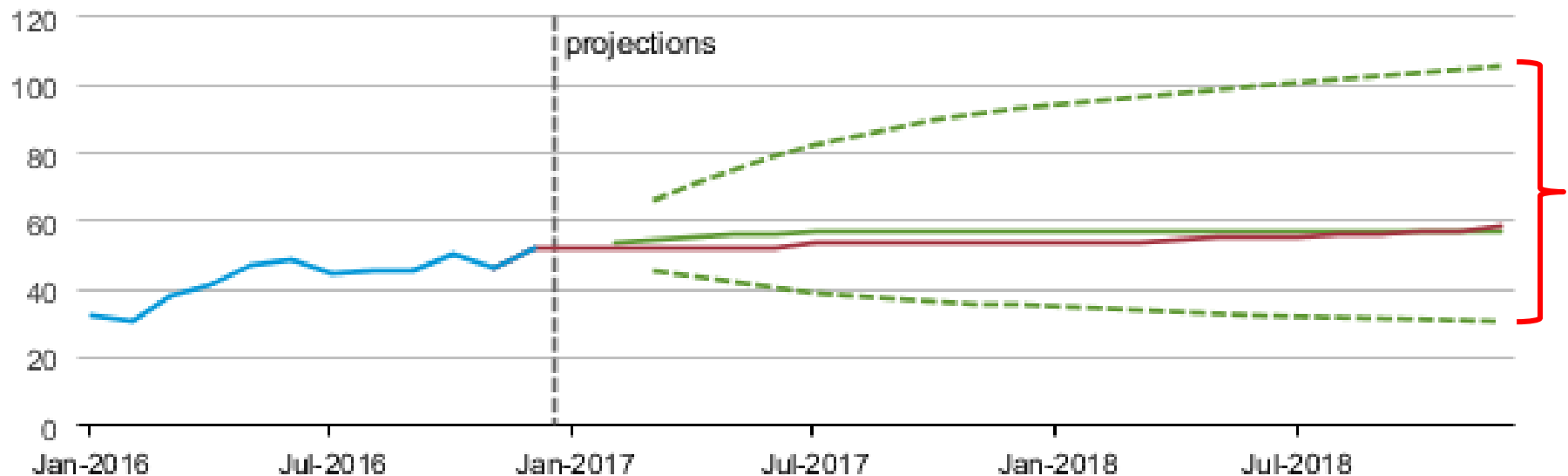
The Future of Oil Prices

“At \$50 a barrel, there is more breathing room, but companies with weak balance sheets remain vulnerable, and a number have missed payments, filed for bankruptcy, or publicly warned of bankruptcy”.

Steven Woods, Moody’s

West Texas intermediate (WTI) crude oil price

dollars per barrel



Texas Industry Growth December 2015-16 (SA)

Industry	Dec. 2016	ABS CHG – Nov-Dec	ABS CHG Dec-Dec	Y-O-Y PER CHG
Total Nonfarm	12,141,300	800	210,200	1.8%
Goods Producing	1,766,500	-2,000	-45,700	-2.5%
Service Providing	10,374,800	2,800	255,900	2.5%
Health Care & Social Assistance	1,477,100	4,900	62,100	4.4%
Trade, Wholesale & Retail	1,959,100	2,800	45,700	2.4%
Leisure and Hospitality	1,320,500	3,900	44,400	3.5%
Government	1,904,600	2,700	37,600	2.0%
Professional & Business Services	1,634,800	-2,000	27,700	1.7%
Financial Activities	746,700	-900	18,300	2.5%
Educational Services	202,600	2,400	13,200	7.0%
Other Services	431,800	2,000	17,517 (1.8%)	(2015-16)
Information	201,500	-2,000	14,642 (1.5%)	(2014-15)
Transportation, Warehousing, Utilities	496,100	-11,000	35,033 (3.7%)	(2013-14)
Construction	693,700	-4,100	24,800 (2.7%)	(2012-13)
Manufacturing	844,000	1,400	30,158 (3.4%)	(2011-12)
Mining and Logging	228,800	7,000		

Monthly Jobs

Houston MSA Industry Growth Dec 2015-16 YOY (actual)

Industry Title	Dec. 2016	ABS CHG – Nov-Dec	ABS CHG Dec-Dec	Y-O-Y PER CHG
Total Nonfarm	3,036,100	400	14,800	0.5%
Goods Producing	534,400	1,900	-23,000	-4.1%
Service Providing	2,501,700	-1,500	37,800	1.5%
Leisure and Hospitality	321,900	-1,800	12,900	4.20%
Trade, Wholesale & Retail	497,200	4,500	12,800	2.60%
Healthcare/Social Assistance	331,600	1,900	11,500	3.60%
Government	400,600	-700	9,000	2.30%
Educational Services	59,800	-200	2,400	4.20%
Financial Activities	153,300	800	1,200	0.80%
Admin Support, Waste Mgmt.	210,500	-5,200	-2	Monthly Jobs 1,233 (CY2016) 1,267 (CY2015) 9,817 (CY2014) 7,483 (CY2013) 9,883 (CY2012)
Profess. & Technical Services	215,000	-800	-4	
Manufacturing	234,000	2,900	-4	
Mining & Logging	87,200	-100	-7	
Construction	213,200	-900	-11	

Houston MSA Detailed Industry Growth 2013-2016

Detailed Industry (4D)	2013	2016	ABS CHG
Restaurants and Other Eating Places	202,444	232,673	30,229
Elementary and secondary schools	168,588	185,889	17,301
Corporate HQ/Company mgmt.	24,020	35,975	11,955
General medical & surgical hospitals	82,655	92,328	9,673
Individual & family services	19,413	25,448	6,035
Building equipment contractors	41,801	47,792	5,991
Grocery stores	52,194	58,058	5,864
Colleges and universities	49,735	55,293	5,558
Building foundation contractors	18,368	23,890	5,522
Outpatient care centers	9,294	14,196	4,902
Services to buildings & dwellings	47,102	51,427	4,325
Nonresidential building construction	38,972	42,985	4,013
Automobile dealers	23,964	27,972	4,008
Warehousing and storage	10,151	14,097	3,946

Houston MSA Growth Industries 3rdQTR 2013-2016

NAICS	ABS CHG	AWW	NET \$\$\$ CHG
Top 13 Growth Industries	148,735	\$1,040	\$154,724,501
Food services & drinking places	31,561	\$375	\$11,835,375
Educational services	25,452	\$956	\$24,332,112
Specialty trade contractors	15,580	\$1,145	\$17,839,100
Ambulatory health care services	14,742	\$1,018	\$15,007,356
Corporate HQ/company mgmt.	11,955	\$2,768	\$33,091,440
Hospitals	10,884	\$1,441	\$15,683,844
Social assistance	8,074	\$509	\$4,109,666
Food and beverage stores	6,501	\$477	\$3,100,977
Construction of buildings	6,190	\$1,697	\$10,504,430
Motor vehicle and parts dealers	4,886	\$1,076	\$5,257,336
Amusements, gambling, recreation	4,513	\$412	\$1,859,356
Professional and technical services	4,451	\$1,901	\$8,461,351
Warehousing and storage	3,946	\$923	\$3,642,158

Houston MSA Declining Industries 3rdQTR 2013-2016

NAICS	ABS CHG	AWW	NET \$\$\$ CHG
Total Bottom 13 Industries	-68,306	\$2,021	-\$138,071,865
Machinery manufacturing	-14,928	\$1,892	-\$28,243,776
Support activities for mining	-14,100	\$2,326	-\$32,796,600
Fabricated metal manufacturing	-13,774	\$1,233	-\$16,983,342
Oil and gas extraction	-9,883	\$3,669	-\$36,260,727
Computer/electronics manuf.	-3,945	\$1,715	-\$6,765,675
Petroleum products manufacturing	-2,545	\$2,549	-\$6,487,205
Clothing & accessories stores	-1,675	\$426	-\$713,550
Electronic markets & brokers B2C	-1,589	\$1,852	-\$2,942,828
Transportation equipment. Manuf.	-1,433	\$1,403	-\$2,010,499
Primary metal manufacturing	-1,393	\$1,114	-\$1,551,802
Telecommunications	-1,025	\$1,392	-\$1,426,800
General merchandise stores	-1,011	\$446	-\$450,906
Credit intermediation activities	-1,005	\$1,431	-\$1,438,155

Texas Job Gainers and Losers June 2015-June 2016

Top Job Gainers	Jobs Gained	Bottom Job Losers	Jobs Lost
Food Services & Drinking Places	39,600	Support Activities for Mining	-32,500
Ambulatory & Home Health Srvces	31,100	Ag, Con, Mining Machinery Mfg	-15,400
Local Government	26,800	Fabricated Metal Manufacturing	-12,000
Amusement/Gambling/Recreation	18,900	Oil and Gas Extraction	-10,600
State Government	14,500	Truck Transportation	-6,700
Merchant Wholesalers Grocery/Chemicals	13,300	Employment Services	-6,100
Computer Systems Design Services	10,500	Arch. and Engineering Services	-5,000
Mgmt, Scientific & Tech Consulting	9,800	Computer & Electronics Manuf.	-4,800
General Merchandise Stores	9,400	Rental and Leasing Services	-4,500
Educational Services	8,800	Transport Terminal Operations	-3,400
Grocery and Beverage Stores	8,600	Specialty Trade Contractors	-3,100
Social Assistance & Child Care	8,400	Transportation Equipt. Manuf.	-2,700
Hospitals	8,200	B2B Electronic markets	-2,500
Motor Vehicle Dealers & Car Parts	8,100	Gasoline Stations	-2,100

Industries Offer Unique Occupational Opportunity: Growth

Food Services & Drinking Places (AWW \$375)	Median Wage TX	Ambulatory Health Care (AWW \$1,018)	Median Wage TX
Combined Food Prep Workers	\$18,002	Personal Care Aides	\$17,442
Waiters & Waitresses	\$19,255	Medical Secretaries	\$28,638
Cooks, Restaurant	\$20,615	Medical Assistants	\$26,552
Supervisor, Food Prep Workers	\$28,918	Home Health Aides	\$19,831
Cooks, Fast Food	\$17,477	Registered Nurses	\$64,624
Bartenders	\$20,294	LPN & LVN	\$41,904
Food Preparation Workers	\$19,205	Dental Assistants	\$30,949
Dishwashers	\$17,868	Nursing Assistants	\$22,789
Host/Hostess, Restaurant/Bar	\$18,156	Office Clerks, General	\$27,873
Dining Room/Cafeteria Worker	\$18,061	Dental Hygienists	\$68,932
Cashiers	\$19,250	Billing & Posting Clerks	\$32,228
Driver/Sales Workers	\$24,132	Physicians & Surgeons	\$161,357
Counter Attendants, Cafeteria	\$18,016	Receptionist/Info. Clerks	\$23,973

Industries Offer Unique Occupational Opportunity: Decline

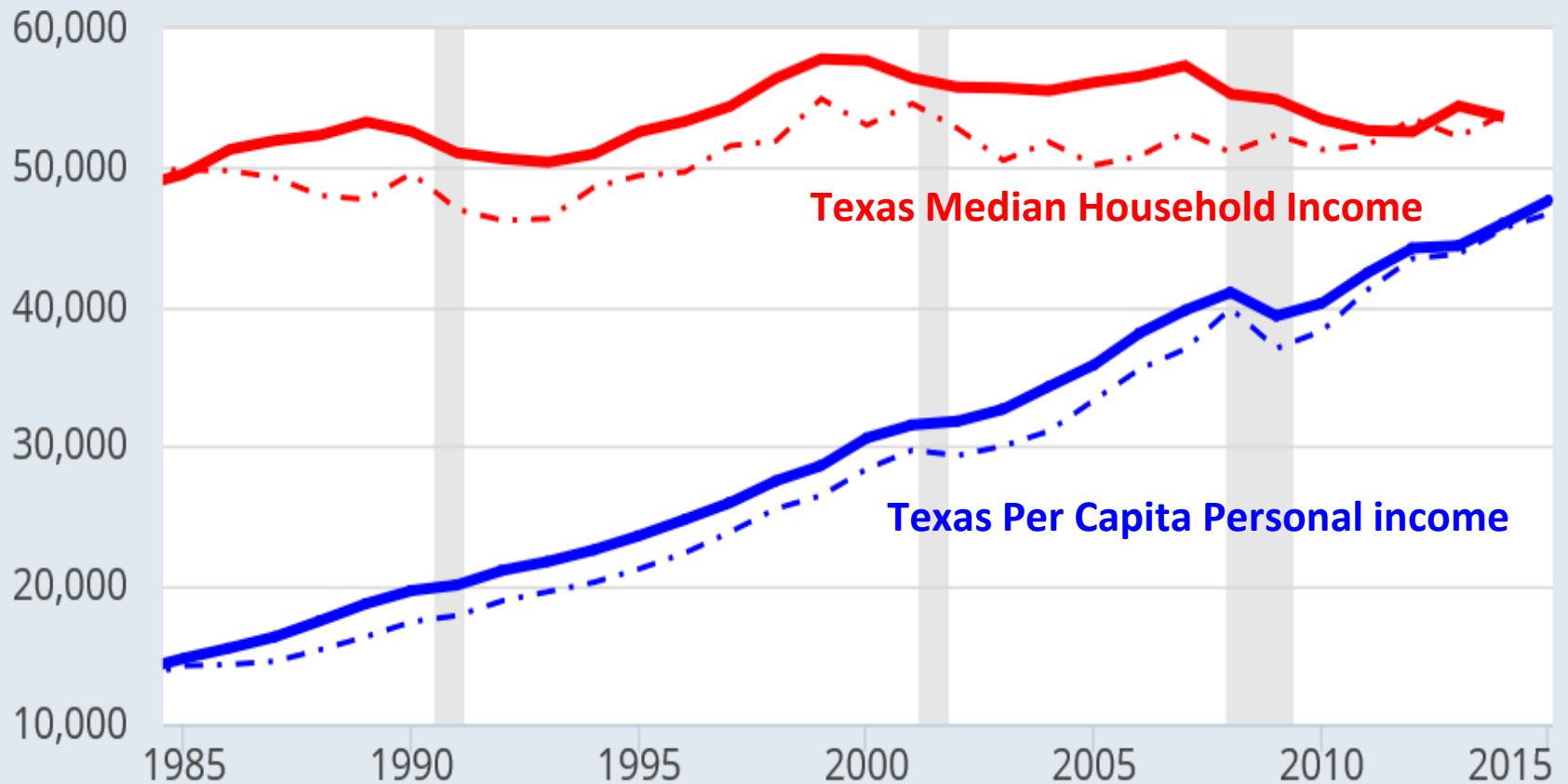
Fabricated Metal Manufacture (AWW \$1,233)	Median Wage TX	Support Activities for Mining (AWW \$2,326)	Median Wage TX
Machinists	\$40,132	Roustabouts, Oil & Gas	\$32,188
Welders, Cutters, Brazers	\$47,523	Service Unit Operator, Oil & Gas	\$44,066
Supervisor, Production Workers	\$67,192	Heavy Truck Drivers	\$35,024
Helpers--Production Workers	\$27,887	Supervisor, Construction Trades	\$55,834
CNC Machine Tool Operators	\$35,003	Rotary Drill Operators, Oil & Gas	\$62,382
Cut/Press Machine Operator	\$27,962	Derrick Operators, Oil & Gas	\$45,985
Inspectors, Testers, Sorters	\$40,954	Helpers--Extraction Workers	\$32,125
Structural Metal Fabricators	\$29,818	Construction Laborers	\$25,708
General & Ops Managers	\$103,909	Industrial Machinery Mechanic	\$46,167
Sheet Metal Workers	\$33,439	General & Ops Managers	\$103,909
Non-technical Sales Rep, Manuf	\$58,543	Office Clerks, General	\$27,873
Laborer/Freight & Stock Movers	\$28,796	Geological & Petroleum Techs	\$54,480
Team Assemblers	\$25,102	Operating Engineers	\$35,835
Office Clerks, General	\$27,873	Helpers--Production Workers	\$27,887

Here Today, Better Tomorrow

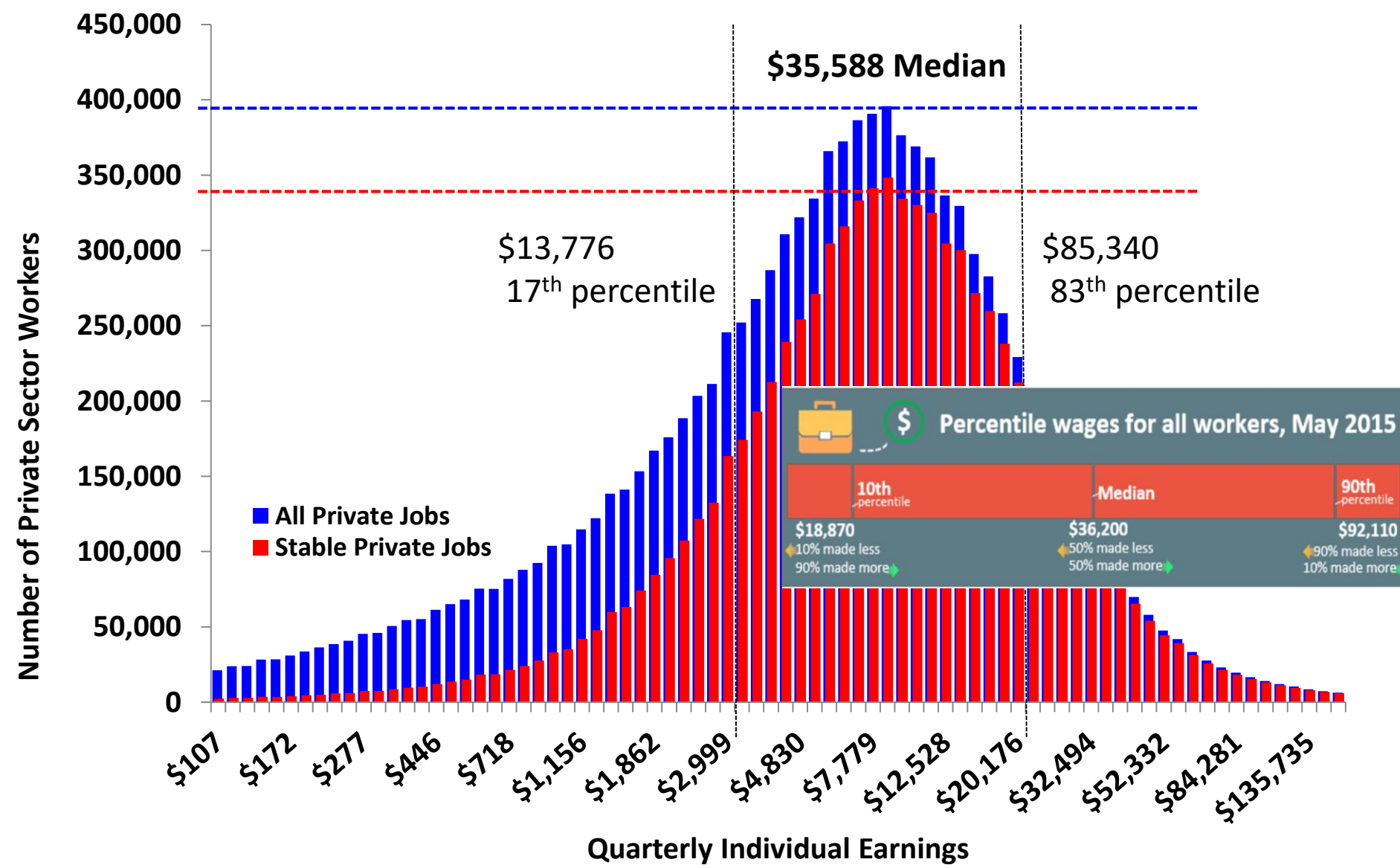
The Real Issue is Slow Growing Income: Median vs. Average

FRED 

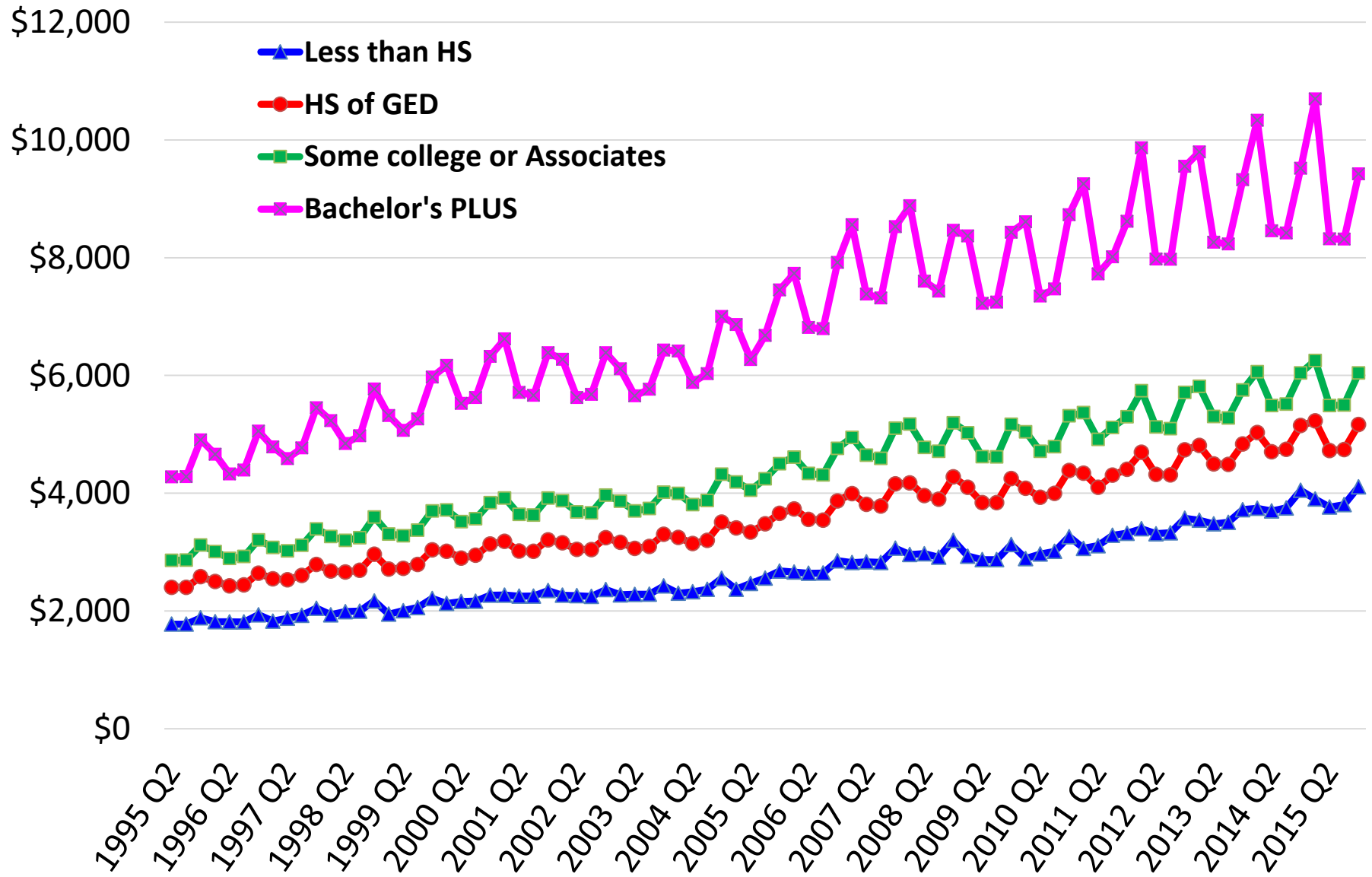
- Real Median Household Income in the United States
- Personal income per capita
- - Real Median Household Income in Texas
- - Per Capita Personal Income in Texas



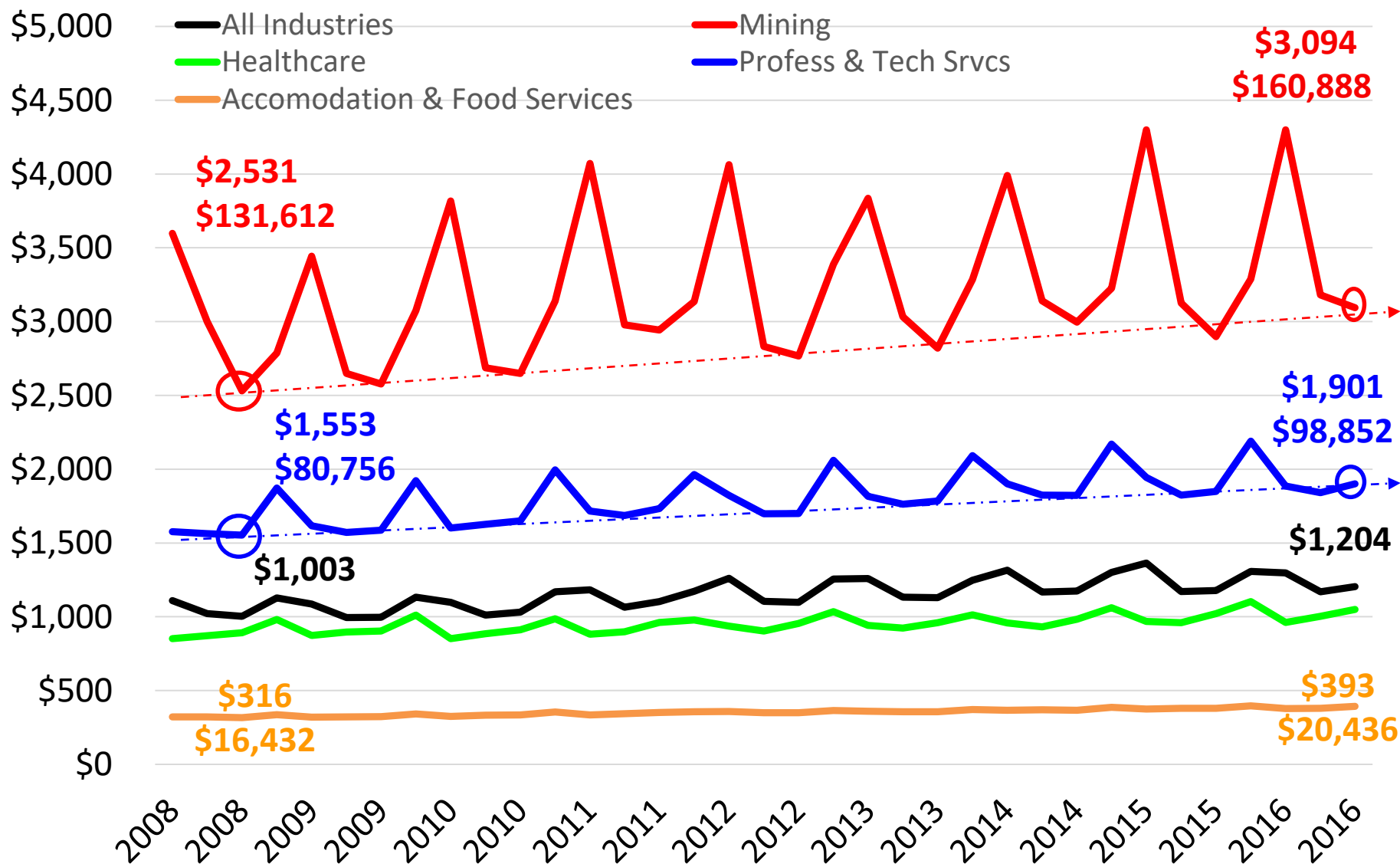
Tough to Get a High Paying Job: Texas Job & Wage Distribution 2015 Q1



Monthly Earnings by Education Houston MSA



Houston MSA Average Weekly Wage Growth 3rdQTR 2008-2016



Houston MSA Monthly Earnings, **All Workers**

Source: Census LED	Less than high school	High school or GED	Some college or Associate's	Bachelor's or Higher
2008 Q1	\$2,958	\$4,176	\$5,173	\$8,885
2009 Q1	\$2,931	\$4,100	\$5,028	\$8,369
2010 Q1	\$2,889	\$4,084	\$5,043	\$8,612
2011 Q1	\$3,063	\$4,340	\$5,369	\$9,256
2012 Q1	\$3,397	\$4,696	\$5,740	\$9,868
2013 Q1	\$3,540	\$4,811	\$5,814	\$9,796
2014 Q1	\$3,743	\$5,030	\$6,065	\$10,332
2015 Q1	\$3,901	\$5,228	\$6,254	\$10,696
2016 Q1	\$4,109	\$5,166	\$6,042	\$9,423
2014-2016	\$366	\$136	-\$23	-\$909
2014-2016	9.8%	2.7%	-0.4%	-8.8%
2008-2016	\$1,151	\$990	\$869	\$538
2008-2016	38.9%	23.7%	16.8%	6.1%

Houston MSA LWDA Monthly Earnings, New Hires

Source: Census LED	Less than high school	H.S. or GED	Some college or Associate's	Bachelor's or Higher
2008 Q1	\$2,158	\$2,641	\$3,073	\$5,056
2009 Q1	\$2,121	\$2,604	\$3,041	\$4,919
2010 Q1	\$2,064	\$2,457	\$2,840	\$4,510
2011 Q1	\$2,238	\$2,713	\$3,144	\$5,083
2012 Q1	\$2,576	\$3,122	\$3,513	\$5,628
2013 Q1	\$2,702	\$3,219	\$3,621	\$5,446
2014 Q1	\$2,812	\$3,335	\$3,764	\$5,500
2015 Q1	\$2,844	\$3,316	\$3,652	\$5,465
2016 Q1	\$3,231	\$3,732	\$4,164	\$5,858
2014-2016 % CHG	14.9%	11.9%	10.6%	6.5%
2008-2016 % CHG	49.7%	41.3%	35.5%	15.9%
% All Workers 2008	73.0%	63.2%	59.4%	56.9%
% All Workers 2016	78.6%	72.2%	68.9%	62.2%

Texas Help Wanted Job Listings: Jan 2016-2017

Occupation	Postings	Usual Education
Heavy Truck Drivers	306,168	Short OJT/CDL
Registered Nurses	96,042	Associate/Bachelors
Retail Salespersons	47,747	HS/Short OJT
Supervisors, Retail Sales Workers	36,321	Related Work EXP
Supervisors, Food Prep & Serving	33,181	Related Work EXP
Customer Service Representatives	32,167	Moderate OJT
Software Developers, Applications	19,765	Bachelor's
Supervisors, Office & Admin Support	19,215	Related Work Exp.
Fast Food Prep & Serving Workers	18,780	HS/Short OJT
General Maintenance & Repair Wrkrs	17,512	HS/Short OJT
Computer User Support Specialists	17,186	Some college, no degree
Light Delivery Services Drivers	16,945	Short OJT/CDL
Network Systems Administrators	15,605	Bachelor's
Web Developers	15,250	Associate's

Houston MSA Online Job Listings: January 2017

Major Group	Occupation	Postings	Wages
Transportation	Heavy/Tractor-Trailer Truck Drivers	7,667	\$40,956
Healthcare	Registered Nurses	4,252	\$76,587
Sales & Related	Retail Salespersons	2,138	\$26,219
Sales & Related	Supervisors, Retail Sales Workers	2,085	\$46,907
Office & Admin	Customer Service Representatives	1,205	\$34,374
Installation & Repair	Gen. Maintenance & Repair Workers	1,056	\$38,281
Office & Admin	Supervisors, Office & Admin Support	1,031	\$63,462
Food Prep & Serving	Supervisors, Food Prep and Serving	965	\$37,067
Sales & Related	Insurance Sales Agents	679	\$66,186
Business & Financial	Accountants	668	\$86,862
Sales & Related	Non-technical Sales Reps, WH & Man	656	\$76,507
Sales & Related	Sales Reps, Services, All Other	642	\$67,623
Protective Service	Security Guards	638	\$27,588
Management	Sales Managers	634	\$146,137

Ubiquitous Degreed Occupations w/Large Openings, High Growth

Occupation (Hirfindal-Hirschman)	HHI	PCT CHG	U.S. AAO	AVG \$\$\$
General and operations managers	7.1	7.1%	688.8	\$97,270
Training and development specialists	9.1	7.5%	80.4	\$57,340
Administrative services managers	9.1	8.2%	77.2	\$83,790
Human resources managers	9.7	8.8%	46.6	\$102,780
Sales representatives, misc. services	11.1	8.3%	252.4	\$51,670
Marketing managers	11.9	9.4%	64.2	\$127,130
Public relations and fundraising managers	12.0	7.1%	27.1	\$101,510
Network & computer systems administrators	12.2	7.9%	79.4	\$75,790
Computer user support specialists	12.7	12.8%	150.5	\$47,610
Meeting, convention, and event planners	12.8	9.9%	21.8	\$46,490
Database administrators	13.2	11.2%	39.2	\$80,280
Financial managers	13.5	6.8%	169.3	\$115,320
Market research analysts/marketing specialists	13.8	18.6%	151.4	\$61,290
Computer network support specialists	14.0	7.5%	36.9	\$61,830
Computer and information systems managers	14.4	15.4%	94.8	\$127,640

Ubiquitous Non-Manager Jobs w/Large Openings, High Growth

Occupation (Non-manager jobs)	HHI	PCT CHG	U.S. AAO	AVG \$\$\$
Training and development specialists	9.1	7.5%	80.4	\$57,340
Sales representatives, misc. services	11.1	8.3%	252.4	\$51,670
Network and computer systems administrators	12.2	7.9%	79.4	\$75,790
Computer user support specialists	12.7	12.8%	150.5	\$47,610
Meeting, convention, and event planners	12.8	9.9%	21.8	\$46,490
Database administrators	13.2	11.2%	39.2	\$80,280
Market research analysts/marketing specialists	13.8	18.6%	151.4	\$61,290
Computer network support specialists	14.0	7.5%	36.9	\$61,830
Accountants and auditors	15.8	10.7%	498	\$65,940
Audio and video equipment technicians	16.2	11.8%	21.9	\$41,780
Operations research analysts	16.2	30.2%	43.9	\$76,660
Computer systems analysts	18.2	20.9%	191.6	\$82,710
Statisticians	18.5	33.7%	15.4	\$79,990
Web developers	18.8	26.6%	58.6	\$63,490
Management analysts	20.2	13.6%	208.5	\$80,880

Texas Primo Job Opportunities: Above AVG Prospects thru 2024

Occupational Title	PER CHG	GR/REP Rate	TOT AAO	Typical Education	Annual Wage
Registered Nurses	31.23%	1.3	10,815	Bachelor's	\$69,891
Teacher K-12, ex. Special Ed	24.58%	3.3	14,595	Bachelor's	\$52,813
Accountants & Auditors	23.65%	0.9	6,175	Bachelor's	\$78,488
Computer Systems Analysts	32.11%	2.5	2,635	Bachelor's	\$94,045
Computer User Support Specialists	24.55%	1.9	2,120	Some college	\$51,180
Software Developers, Applications	27.36%	1.9	2,065	Bachelor's	\$99,827
Management Analysts	24.45%	1.8	1,590	Bachelor's	\$96,032
Market Research/Marketing Analysts	32.37%	2.7	1,265	Bachelor's	\$75,383
Software Developers, Systems	23.25%	1.6	1,250	Bachelor's	\$104,176
Paralegals & Legal Assistants	27.14%	1.2	1,095	Associate's	\$53,195
Network & Computer Systems Admins	20.75%	1.6	1,080	Bachelor's	\$85,346
Medical & Health Services Managers	28.80%	1.1	1,070	Bachelor's	\$101,268
Training & Development Specialists	21.83%	0.9	1,055	Bachelor's	\$64,043
Personal Financial Advisors	30.38%	1.2	895	Bachelor's	\$107,263
Computer & Info. Systems Managers	27.52%	2.3	730	Bachelor's	\$148,608

“There’s never been a worse time to be a worker with only ‘ordinary’ skills and abilities to offer, because computers, robots, and other digital technologies are acquiring these skills and abilities at an extraordinary rate.”

The Second Machine Age, Erik Brynjolfsson

Labor Saving Work Transformations through Technology:

Replacement (lose jobs) or **Displacement (change skills)?**

Fast Food Service & Prep Workers
Light Delivery Truck Drivers

Technology
Changes
the Fast
Food
Industry



Here Today, Better Tomorrow



I'm not a Truck DRIVER, I'm a
Truck MONITOR. I don't drive
the truck, I just warn you
before it crashes

Autonomous Vehicles:

Truck drivers

Global positioning

Truck design & assembly

Truck maintenance mechanics

Technology Can Create New Industries: 3-D Printing Applications

Construction
Architecture
Design
Manufacturing
Energy storage

U.S. Department of Energy



Drone technology
Instant product delivery
“Dash” buttons



The Argument for Skills over Occupational Titles: Some New Jobs, Some Combined Jobs & 'Rebranded' Jobs

<u>Job Title</u>	<u>Job Title</u>
1. Business Intelligence Analyst	11. Cyber Security Specialist
2. Cognitive Systems Engineer	12. Agile Project Manager
3. Computer Security Incident Responder	13. Social Media Manager
4. Solar Thermal Technician	14. Drone Pilot
5. Big Data Engineer or Architect	15. Accessibility Design Specialist
6. Strategic Resource Mapping Manager	16. Client Onboarding Specialist
7. Cloud Services Specialist	17. User Experience (UI/UX) Designer
8. Computer Graphics Animator	18. Mobile App Developer
9. Search Engine Optimization Manager	19. Chief Culture Officer
10. Digital Marketing Technologist	20. Talent Aggregator

Texas 2014-2024 Occupational Projections

Largest Employment	Most Net Jobs Added	Fastest Growing	Most Job Openings
Retail Salespersons	Combined Food Prep Wkrs	Statisticians	Retail Salespersons
Office Clerks, General	Retail Salespersons	Occupational Therapy Assistants	Combined Food Prep Workers
Combined Food Prep Wkrs	Personal Care Aides	Nurse Practitioners	Cashiers
Cashiers	Registered Nurses	Diagnostic Medical Sonographers	Waiters & Waitresses
Customer Service Reps	Customer Service Reps	Operations Research Analyst	Office Clerks, General
Personal Care Aides	Office Clerks, General	Interpreters & Translators	Customer Service Reps
Registered Nurses	Waiters and Waitresses	Reinforcing Iron & Rebar Workers	Registered Nurses
Waiters and Waitresses	Janitors & Cleaners	Physical Therapist Assistants	Personal Care Aides
Farm & Ranch Managers	Cashiers	Cardiovascular Technologists	Manual Laborers & Stock Handlers
Secretaries & Admin Assts.	Heavy and Tractor-Trailer Truck Drivers	Physician Assistants	Janitors and Cleaners
Janitors & Cleaners	Cooks, Restaurant	Cartographers & Photogrammetrists	General & Operations Mgrs.

Here Today, Better Tomorrow

Gulf Coast LWDA 2014-2024 Occupational Projections

Largest Employment	Most Net Jobs Added	Fastest Growing	Most Job Openings
Retail Salespersons	Combined Food Prep Wkrs	Wind Turbine Service Techs	Retail Salespersons
Office Clerks, General	Retail Salespersons	Cooks, Restaurant	Combined Food Prep Wkrs
Cashiers	Personal Care Aides	Statisticians	Waiters & Waitresses
Combined Food Prep Wkrs	Waiters & Waitresses	Home Health Aides	Cashiers
Customer Service Reps	Registered Nurses	Nurse Practitioners	Office Clerks, General
Waiters & Waitresses	Office Clerks, General	Helpers: Brick, Stone, Tile Masons	Customer Service Reps
Janitors & Cleaners	Janitors & Cleaners	Diagnostic Medical Sonographers	Registered Nurses
General & Operations Managers	Customer Service Representatives	Reinforcing Iron & Rebar Workers	Manual Laborers
Registered Nurses	Cashiers	Personal Care Aides	Janitors & Cleaners,
Secretaries & Admin Assists	Construction Laborers	Interpreters & Translators	General & Ops Mgrs.
Manual Laborers	Cooks, Restaurant	Cardiovascular Techs	Personal Care Aides

Associate's Degrees w/Consistent One Year Post-Exit Earnings Gains

Two-year schools/4D CIP	Annualized Wages 2015	Gains 2012-15	Gains 2014-15
1. Fire Protection	\$71,201	\$10,685	\$2,619
2. Electromechanical & Instrumentation Technologies	\$60,177	\$14,132	\$2,860
3. Registered Nursing/Nursing Administration	\$56,429	\$6,721	\$5,383
4. Allied Health Diagnostic & Treatment Professions	\$43,349	\$7,494	\$5,578
5. Drafting/Design Engineering Technologies	\$40,905	\$6,414	\$1,588
6. Computer Systems Networking and Telecomm	\$40,010	\$7,813	\$5,492
7. Heating, AC, & Refrigeration Technologies	\$37,280	\$5,156	\$4,082
8. Accounting and Related Services	\$35,177	\$5,038	\$2,880
9. Clinical/Medical Lab Science/Research	\$34,714	\$5,064	\$4,081
10. Funeral Service and Mortuary Science	\$33,790	\$8,204	\$3,314
11. Business Operations Support & Assistant Services	\$31,516	\$8,064	\$6,752
12. Legal Support Services	\$31,033	\$2,135	\$1,438
13. Health and Medical Administrative Services	\$30,208	\$2,858	\$3,547
14. Liberal Arts, General Studies & Humanities	\$26,241	\$3,513	\$1,918
15. Mental & Social Health Services	\$25,958	\$2,333	\$1,347

Bachelor's Degrees w/Largest Post-Exit Earnings Gains 2012-2015

Bachelor's Program	Gains 2012-15	Bachelor's Program	Gains 2012-15
1. Computer Programming	\$23,272	13. Economics	\$7,928
2. Registered Nursing/Administration	\$10,555	14. Mathematics	\$5,808
3. Construction Engineering Technologies	\$10,528	15. Teacher Education/Prof. Development, Specific Subjects	\$7,432
4. Electrical, Communications and Electronic Engineering	\$4,902	16. Marketing	\$4,554
5. General Sales & Merchandising & Marketing	\$9,350	17. Interior Architecture	\$8,128
6. Computer Science	\$4,494	18. Physics	\$8,502
7. Computer & Information Sciences	\$3,934	19. Air Transportation	\$4,273
8. Computer Systems Analysis	\$1,984	20. Public Relations/Advertising	\$2,544
9. Management Information Systems	\$6,144	21. Criminal Justice/Corrections	\$3,152
10. Business Admin, Management and Operations	\$2,618	22. English Language/Literature	\$4,780
11. Finance & Financial Mgmt. Services	\$4,703	23. International/Global Studies	\$3,691
12. Business/Commerce, General	\$7,655	24. Criminology	\$2,589

21 Most Valuable Career Skills Earning Pay Premium



Thank you!

There is much more Texas labor market story to tell, but this version is over!



Richard Froeschle

Labor Market Economist and Speaker Par Excellence

rich@richfroeschle.com

512.585.8231