But the Numbers Keep Changing:

Why Accountants Don't "Get" Economists (and vice versa)

Current Global, National, and Local Economic Conditions

Association of Government Accountants

Dallas Chapter Professional Development Training Seminar

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Obligatory Disclaimer Notification

The following presentation is the view of the presenter, and does not necessarily reflect the official policy or position of:

- City of Dallas
- Office of Economic Development
- U.S. Army
- Bureau of Labor Statistics
- Bureau of Economic Analysis
- National Association for Business Economics (NABE)
- Council for Community and Economic Research (C_2ER)
- Dr. Frazer, Dr. Stewart, Dr. Crowder, Dr. Hissong, Dr. Anjomani, COL Flaivin or any other influential mathematics, economics, urban planning or policy analyst professor I have learned from
- My Mom, Godmother and Grandmother or any other influential person who tried to teach me how to behave in public (sorry y 'all)

BLUF – Bottom Line Up Front

The focus is on economic data; their sources and the reasons why they periodically change

- The national and regional economic recovery remains mixed
- Yet, the local economic recovery is steady
- Today's intent is to provide understanding of what, how, and why certain economic indicators "do what they do"

Presented Through

- Key Statistics, Tables and Charts, Maps

Let's Start with a Quiz

- To get us in an "economic" frame of mind

2017 U.S. Economic Growth (Preliminary)

(Note: 2016 values when 2017 values not available; previous year values in parenthesis)

- 3.1% (2.8%)
- 4.4% (4.9%)
- 153.3M (151.4M)
- 62.9% (62.8%)
- 60.1% (59.7%)
- 2.4% (5.0%)
- 2.6% (4.5%)
- 2.1% (1.3%)

Sources: Bureau of Labor Statistics and Bureau of Economic Analysis

2017 U.S. Economic Growth (Preliminary)

(Note: 2016 values when 2017 values not available; previous year values in parenthesis)

- Q3 Real Gross Domestic Product Growth 3.1% (2.8%)
- Annual Unemployment Rate 4.4% (4.9%)
- Annual Number Employed 153.3M (151.4M)
- Labor Force Participation Rate 62.9% (62.8%)
- Employment-Population Ratio 60.1% (59.7%)
- 2016 Personal Income Growth 2.4% (5.0%)
- 2016 Disposable Personal Income 2.6% (4.5%)
- Annual inflation 2.1% (1.3%)

Sources: Bureau of Labor Statistics and Bureau of Economic Analysis

Regional Economy

Texas' Real GDP fell by 0.3% in 2016 vs. U.S. GDP Growth of 1.5% during the same time

- Texas employment preliminarily estimated at 1.7 M above 2008 pre-recession high
- Total Retail Sales Tax grew by 24% over the last five years

Texas Added More People than Any Other State

- Population grew by nearly 433,000 from 2015 to 2016.
- 8.6% of the nation's population, but accounted for over 19% of national population growth.

Sources: Dallas Federal Reserve Bank, Bureau of Labor Statistics and Bureau of Economic Analysis

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2017 Local Economic Growth (Preliminary)

(Note: 2016 values when 2017 values are not available)

- DFW Real Gross Domestic Product Growth (2016) %
- COD Unemployment Rate %
- COD Employed Residents
- COD Labor Force Participation Rate (2016) %
- COD Employment-Population Ratio (2016) %
- DFW Personal Income Growth (2016) %
- DFW Annual inflation %

Sources: Bureau of Labor Statistics, Census, and Bureau of Economic Analysis

2017 Local Economic Growth (Preliminary)

(Note: 2016 values when 2017 values are not available)

- DFW Real Gross Domestic Product Growth (2016) 3.0%
- COD Unemployment Rate 3.9%
- COD Employed Residents 652,833
- COD Labor Force Participation Rate (2016) 68.9%
- COD Employment-Population Ratio (2016) 65.6%
- DFW Personal Income Growth (2016) 2.1%
- DFW Annual inflation 2.5%

Sources: Bureau of Labor Statistics, Census, and Bureau of Economic Analysis

The Main Event:
Accounting vs. Economics

(a friendly discussion, please)

"What do you mean y'all don't do the same thing baby; y'all both deal with money, right?"

My grandmother trying to understand the difference between my job as an Economist and my niece's job as a CPA (***important note: don't talk shop at family reunions***).

While both accountants and economists assist businesses and governments to make sound financial decisions:

- Accounting deals with principles of relevance, timeliness, reliability, comparability and consistency of information or reports within globally accepted standards. It facilitates a general understanding of a financial situation at a point in time. – ***IT IS ALL ABOUT RECORDING PROCESS***

- Economics deals with understanding how economies operate in relation to variables such as population and resources. It compares, identifies and forecasts trends and outliers over time. – ***IT IS ALL ABOUT PATTERN RECOGNITION AND PROJECTION***

"What It Is" versus "What It Is Doing"

Yes, But Some Of Those Numbers Are Not What We Have Seen Earlier

Data Differences and Changes

Accounting data is very direct (***note: I did not say simple nor easy***) because it utilizes certain principles to support its actions – measure / observe the values, confirm the values, record the values. But being a “fairly straight forward “ endeavor does not mean it is easy.

Economic data has a tendency to change over time and space, and even can have two numbers representing the same thing at the same time. Economics makes use of assumptions in order to simplify (***or attempt to simplify***) certain situations. This requires data in the form of, adjusted by, or resulting from:

- Estimates
- Revision
- Indexing
- Seasonal Adjustment
- Spatial Grouping
- Inflationary Adjustment
- Temporal Grouping
- Demographic Grouping

Economic Data Forms

Why Estimates

Because it takes too long to count certain numbers in order to have a value for timely decisions. Sometimes the “count” is not just not available at that time

Example: **Employment by Place of Work** (aka payroll employment or jobs)

- Current Employment Statistics (CES):
  - Monthly survey over of 143,000 businesses & government establishments. Resulting estimated findings are reported one month after collection.
- Quarterly Census of Employment & Wages (QCEW):
  - Quarterly count of employment and wages reported by employers covering 98 percent of U.S. jobs. Findings are reported six months after collection.

Markets and policy makers cannot wait one half of a year to make a decision on many issues. Yet estimates are **often revised** as additional information is available.

Source: Bureau of Labor Statistics

Economic Data Forms

Why Revisions

Since the public wants accurate data as soon as possible, early estimates are based on partial data. While not complete, it provides an fairly accurate general picture of economic activity

Example: **Gross Domestic Product (GDP)**

- Advance Estimate:
  - Released four weeks after quarter's end
  - Estimate is based 45% on initial surveys (not counts)
  - Lacks information from third month (inventories, trade, & services consumer spending)
- Second Estimate:
  - New data for the third month and revised data for earlier months
- Third Estimate:
  - Only 17% of the GDP estimate is based on monthly and quarterly surveys
- Other Revisions:
  - Annual revisions in July; more complete and detailed data for GDP for the past 3 years.
  - Every 5 years a "comprehensive" revision to the entire series going back to 1929

Source: Bureau of Economic Analysis

Economic Data Forms

Why Indexes (Indices)

It allows comparisons between time periods, places, or industries. Indexes are statisticians' expressions of the difference between two measurements by designating one number as the "base" (valued at 100) and expressing the second number as a percentage of the first:

Index = (Current Value / Base Value)

Example: **Consumer Cost / Price Comparisons**

- Consumer Price Index (CPI)
  - Prices changes paid by MSA consumers for a basket of goods & services
  - The percentage growth of an index over time is know as Inflation [***Time***]
- C_2ER Cost of Living Index (COLI)
  - City-to-city comparisons of key consumer costs
  - Prices collected at a specified time over multiple cities [***Place***]
  - Consists of 60 items grouped into six major categories: grocery, housing, utilities, transportation, health care, & miscellaneous goods / services

Source: Bureau of Labor Statistics and C2ER

Economic Data Forms

Why Seasonality

For time interval data, regular and predictable changes can repeat. Predictable patterns recurring on a one-year period are called seasonal. This dynamic makes it hard to interpret an underlying trend. Statistical adjustments can remove seasonal components.

Example: **2017 National Unemployment Rates** (preliminary)

Non-Seasonally Adjusted (NSA)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	5.1	4.9	4.6	4.1	4.1	4.5	4.6	4.5	4.1	3.9	3.9	3.9

Seasonally Adjusted (SA)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	4.8	4.7	4.5	4.4	4.3	4.3	4.3	4.4	4.2	4.1	4.1	4.1

Remember, economic data can have different numbers representing the same thing at the same time in the same place.

Source: Bureau of Labor Statistics

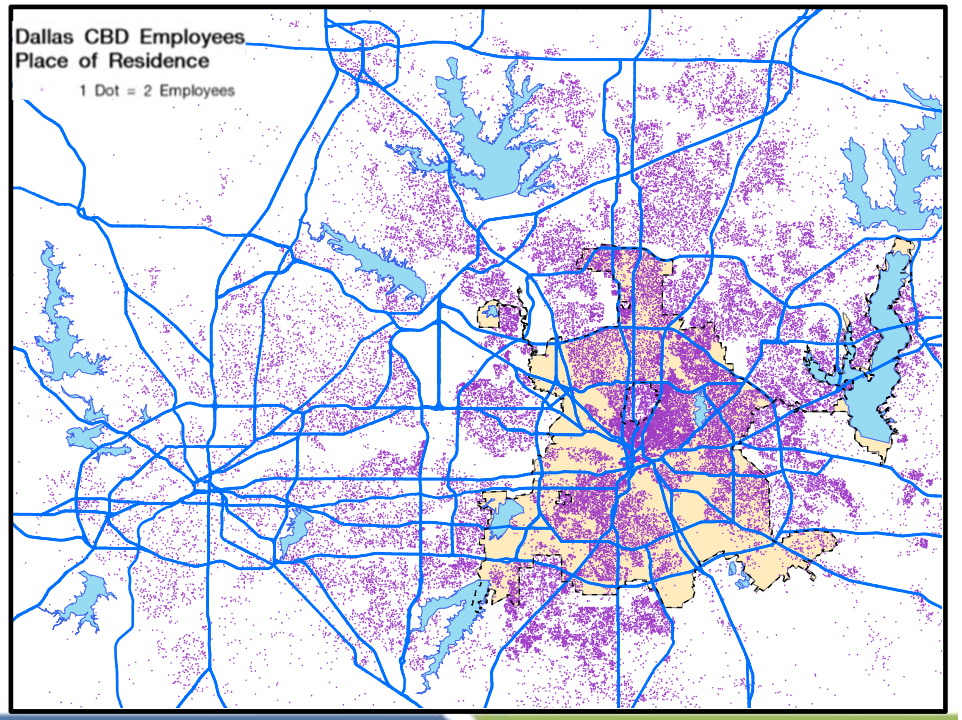
Economic Data Forms

Why Spatial Grouping

Examining economic activities by location, distribution and geographic organization. Also known as economic geography, it interconnects issues of industry location, agglomerative economies, transportation, demography, labor, & economic growth.

Example: **Downtown Dallas Labor Shed 2015**

A labor shed is where workers live relative to a user-defined work selection area. It determine where a labor market draws its commuting workers. This impacts area workforce development, site selection & transportation decisions.



The Downtown Dallas workforce:

- 54.4% live in Dallas County
- 10.3% live in Tarrant County
- 10.0% live in Collin County
- 6.6% live in Denton County
- Remaining 18.8% from other counties

Source: Longitudinal Employer-Household Dynamics, US Census Bureau 2015

City of Dallas

Economic Data Forms

Why Inflationary Adjustment

Dollar values are often presented as the amount at a point in time (current or nominal dollars). Yet purchasing power changes over time due to inflation. Constant dollars (***aka Real***) are adjustments to nominal values so that dollar values over multiple periods are comparable. It measures purchasing power over time.

Example: **Nonresidential Fixed Investment**

(Nonresidential Fixed Investment is the part of Gross Domestic Product (GDP) that consists of purchases by firms of both commercial real estate, equipment and software)

- In 2016, it equaled $3,022.1 Billion
- But in REAL terms it was $2,210.4 Billion (base year 2009)

Think of it this way – with the amount of CASH you have NOW can you buy as much STUFF as you could have LAST YEAR?

Again, economic data can have two numbers representing the same thing at the same time in the same place.

Source: Bureau of Economic Analysis

Economic Data Forms

Why Temporal Grouping

Economic and fiscal activity occurs over time. Yet all organizations do not adhere to the same calendar (recognizing this audience knows this fact better than I). While a calendar year runs from 1 Jan to 31 Dec, a fiscal year is any twelve-month period that begins and ends differently than the calendar. This causes differences in data values tracked over time.

Example: **City of Dallas 2017 Unemployment Rate** (preliminary)

- In the Calendar Year (CY), the average COD Unemployment Rate was 3.9%

CY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2017	4.2	4.5	4.5	4.1	4.0	4.2	3.9	4.1	3.5	3.1	3.3	3.3

- But in the Fiscal Year (FY), the average COD Unemployment Rate was 4.1%

FY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2017	4.0	3.8	3.8	4.2	4.5	4.5	4.1	4.00	4.2	3.9	4.1	3.5

The added problem is all “FYs” are not the same. While the City matches the Federal government’s fiscal year calendar, it does not match Texas’ nor other local agencies like the Dallas Central Appraisal District (both 1 Sep to 31 Aug).

Source: Bureau of Labor Statistics

Economic Data Forms

Why Demographic Grouping

People, having different characteristics, can be grouped in multiple ways.

Example: **2017 DFW MSA Employment (Household & Payroll)**

- Household Employment (HH EMP)
  - Estimate of employed households - residential demographic focus

HH EMP	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
(000s)	3,588.8	3,604.7	3,615.9	3,626.6	3,623.4	3,620.5	3,641.3	3,623.9	3,676.9	3,660.4	3,689.6	3,696.2

- Payroll Employment
  - Estimate of establishment employees - business demographic focus

Payroll	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
(000s)	3,557.9	3,572.4	3,584.6	3,590.8	3,612.1	3,624.0	3,608.9	3,608.4	3,625.3	3,654.8	3,683.3	3,685.3

Economic data from the same place but different demographic focus. Note the use of both "people" Grouping (residents vs. workers) & "geographic" Grouping (MSA - metropolitan statistical area).

Source: Bureau of Labor Statistics

Economic Data Forms

The "So What" of all this

Keep these "data forms" in mind as we look at specifics of the U.S., regional, & City economies

- RBLNUF – Repeated Bottom Line Not-So-Much Up Front:
  - The national and regional economic recovery remains mixed
  - Yet, the local economic recovery is steady
  - Important Note: Many of the "data forms" can occur together
- The Economy Examined Through Various Statistics:
  - Gross Domestic Product (GDP)
  - Unemployment Rate
  - Labor Force & Labor Force Participation Rate
  - Housing Market
  - Payroll Employment (Jobs)

“New Normal” Recovery- A Reminder

- By academic definition we had a recession (National Bureau of Economic Research)
  - Started in December 2007 (announced December 2008)
  - Ended in June 2009 (announced in September 2010)
  - Expansion just has to be improvement, not “recovery”
- Nation is experiencing the aftermath of a burst asset bubble
- This recovery differs from most
  - GDP (modest) growth with very little wage / income growth
  - Little to no increase in worker productivity
  - Decreasing labor market participation rates
- Negative effect varies across regions
- Dallas is doing better than most peer cities

Has the U.S. Economy Recovered????

- Growth in Annual U.S. Real GDP has been Sluggish
  - 2.9% in 2015 and 1.5% in 2016
  - Current forecasts for 2017 GDP range from 2.3% to 2.6%
  - Forecasts for 2018 GDP range from 2.6% to 2.9%
- Employment Creation Results Mixed
  - 2017 preliminary unemployment rate 4.4% (down from 2016)
  - Unemployed level fell to 7.0 M
  - Labor force participation rate stagnates at low levels
  - Concerns regarding discouraged workers
  - Long-term (26+ wks) unemployed fall to pre-recession levels
  - Wages slow to increase (0.8% over ten years)
  - CBO estimates labor market slack will dissipate, leading to higher wages

- Further signs of economic restructuring
  - From Production to Knowledge Based economy (or some mix)
  - Technology causing greater work productivity (less need for "bodies")

Source: Bureau of Economic Analysis and Bureau of Labor Statistics

Data Forms: Inflation Adjustment, Estimate

City of Dallas

Harvard Business School (HBS) Survey 2015

U.S. Business Environment vs. Other Advanced Economies

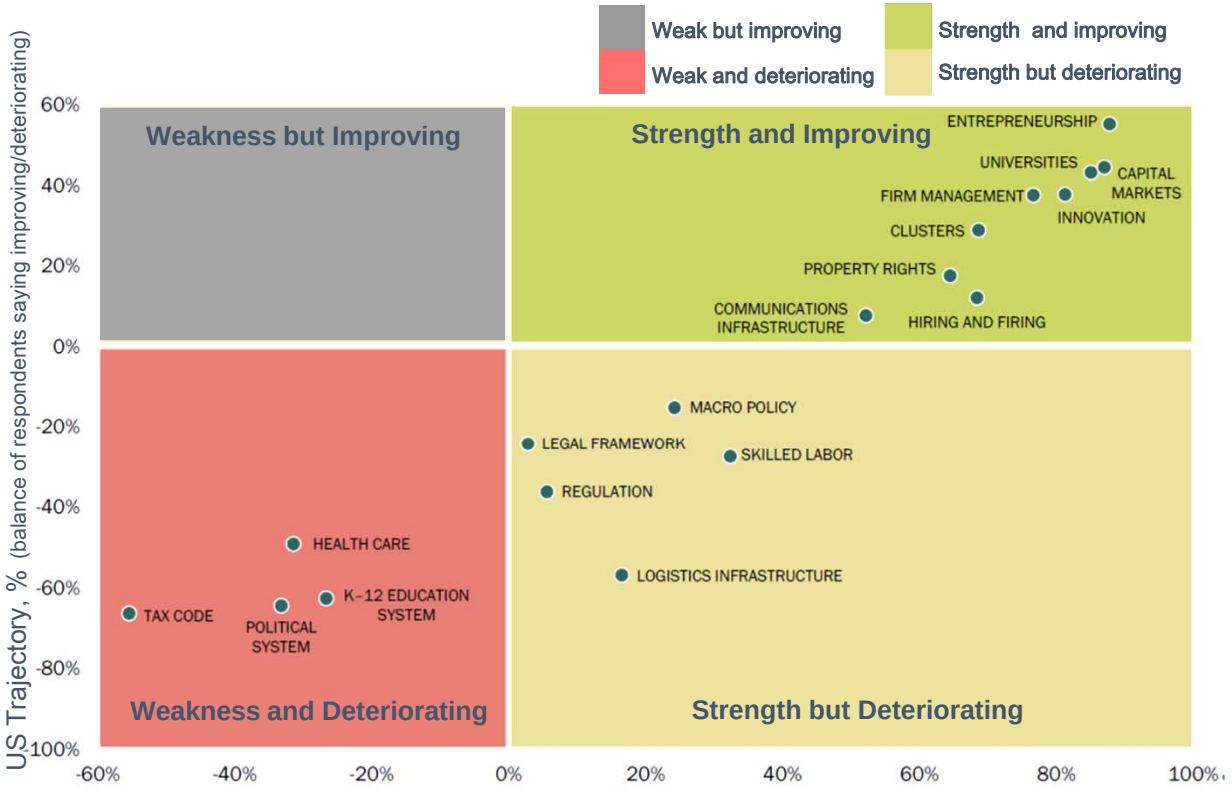
"The Challenge of Shared Prosperity"

Update to 2011 Study

Conclusions:

- Improvements
  - Macro Policy
  - Legal Framework
  - Communication Infrastructure
- Declining Strengths
  - Logistics Infrastructure
  - Workforce Skills
- Worsening Weaknesses
  - Political System
  - Tax Code
  - Primary Education System
  - Health Care System
- Major Concern

Limited Economic Mobility Becoming a Business / Productivity Issue – Not Just a Social Issue



Current U.S. position compared to other advanced economies

HBS finds the greatest promise in policies focused on local, cross-sector investment in the "commons": education, workforce skills, entrepreneurial support, R&D, and infrastructure.

Please remember this slide

Source: Harvard Business School's 2015 "Survey on US Competiveness"

Data Forms: Demographic, Estimate (Survey)

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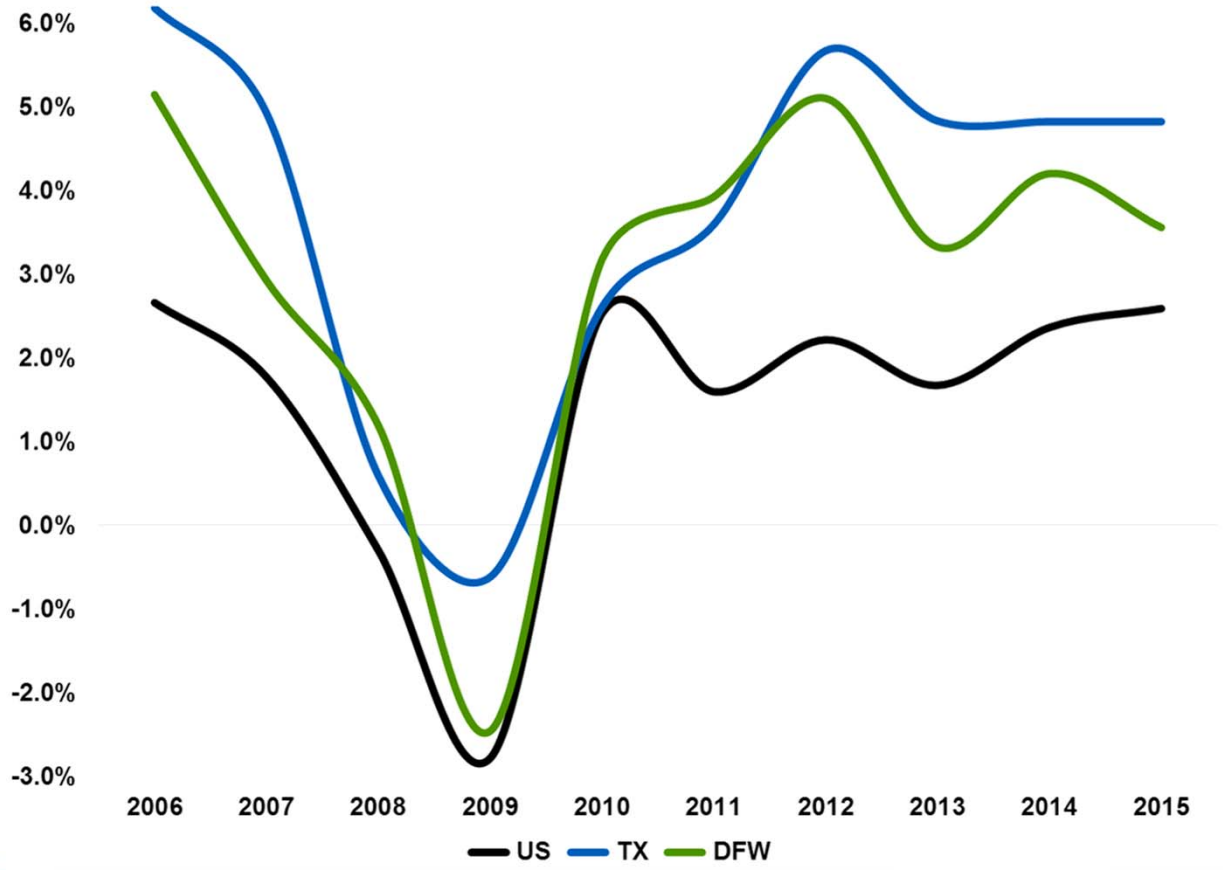
Growth Comparisons

(US, Texas, DFW Real GDP)



Both Texas and the region have outperformed the U.S. despite the drop in oil prices due to a more diversified and balanced industrial mix

Source: Bureau of Economic Analysis

Data Forms: Geographic, Inflation Adjustment, Estimate, Revision

City of Dallas

COD Continued Strengths – Another Reminder

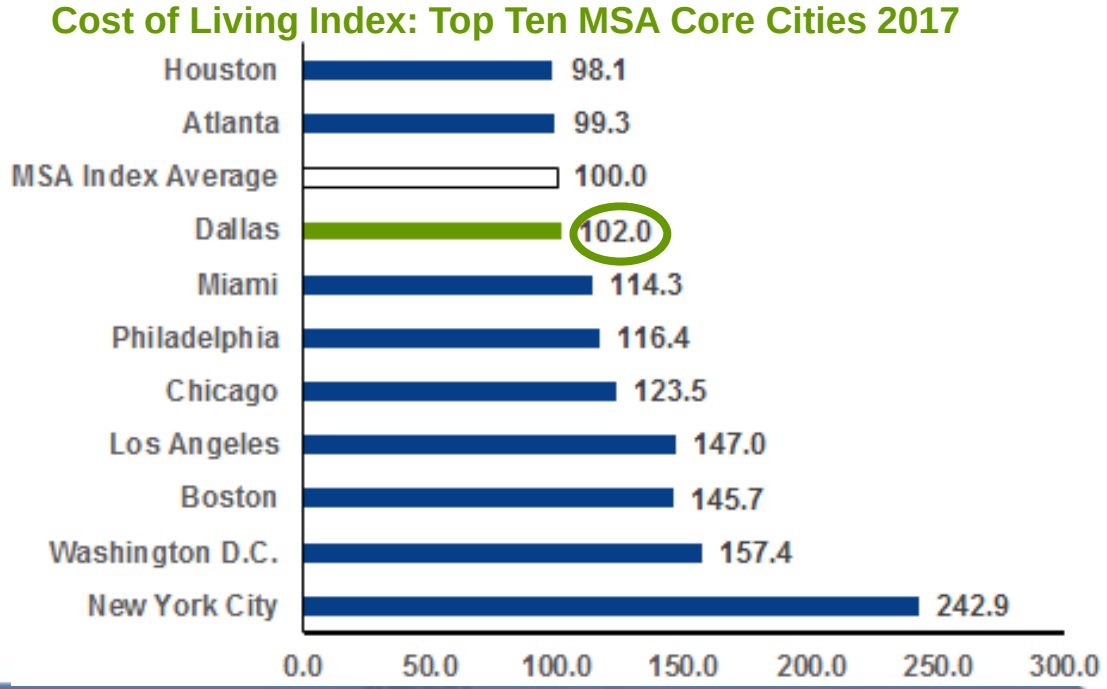
Dallas is better positioned than the nation and peer cities:

- Diverse business base
- Regulatory and tax environments
  - No income tax
  - Low overall tax burden (compared to MANY OTHER locations)
- Geography and location
  - No geographic constraints
  - Central U.S. location
- Urban dynamic
  - Relatively young city (newer infrastructure)
  - Relatively effective urban redevelopment investments

Remember the HBS study (just two slides ago) – the city is doing better in most of the “Strength but Deteriorating” & “Weakness and Deteriorating” issues than other areas

Dallas Outperforming the Nation

- DFW's 2016 Real GDP is fifth largest in the nation at $449B.
- Dallas has 3rd lowest cost of living of top 10 metro economies (2.0 percentage points above nation average).



Sources: Bureau of Economic Analysis and Council for Community and Economic Research (C2ER)

Data Forms: Geographic, Indexing, Inflation Adjustment, Estimate

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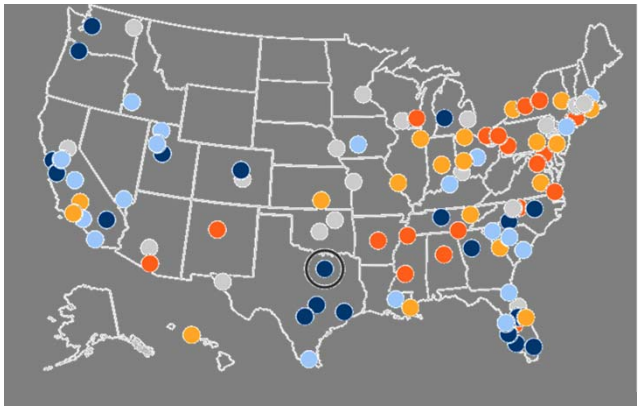
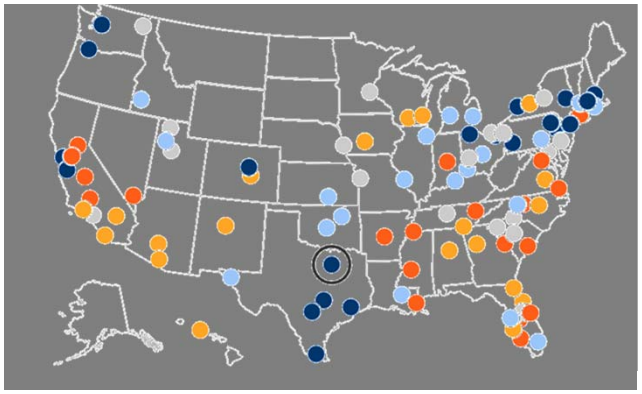
Dallas Ranking vs Other Major MSAs

Growth Change in the 100 largest metro areas 2013-2014
DFW – 6th

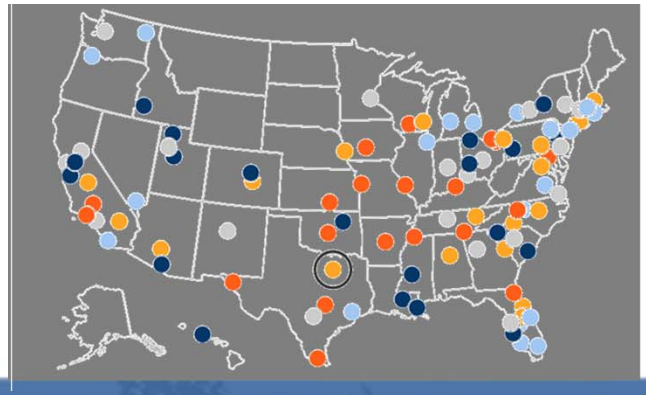


Brookings Biannual Metro Monitor report of the 100 largest MSAs shows that the Dallas-Ft. Worth ranked in the top ten on its "Growth" and "Prosperity" indicators but near the bottom on its "Inclusion" indicators. The Inclusion indicators measure how the benefits of growth and prosperity in a metropolitan economy are distributed among people.

Prosperity Change in the 100 largest metro areas 2013-2014
DFW – 6th



Inclusion Change in the 100 largest metro areas 2013-2014
DFW – 73rd



Metro areas are ranked from 1 to 100; 1 indicates the best performance

1st–20th | 21st–40th | 41st–60th | 61st–80th | 81st–100th

Source: Brookings Metro Monitor 2016

Data Forms: Geographic, Indexing, Revision

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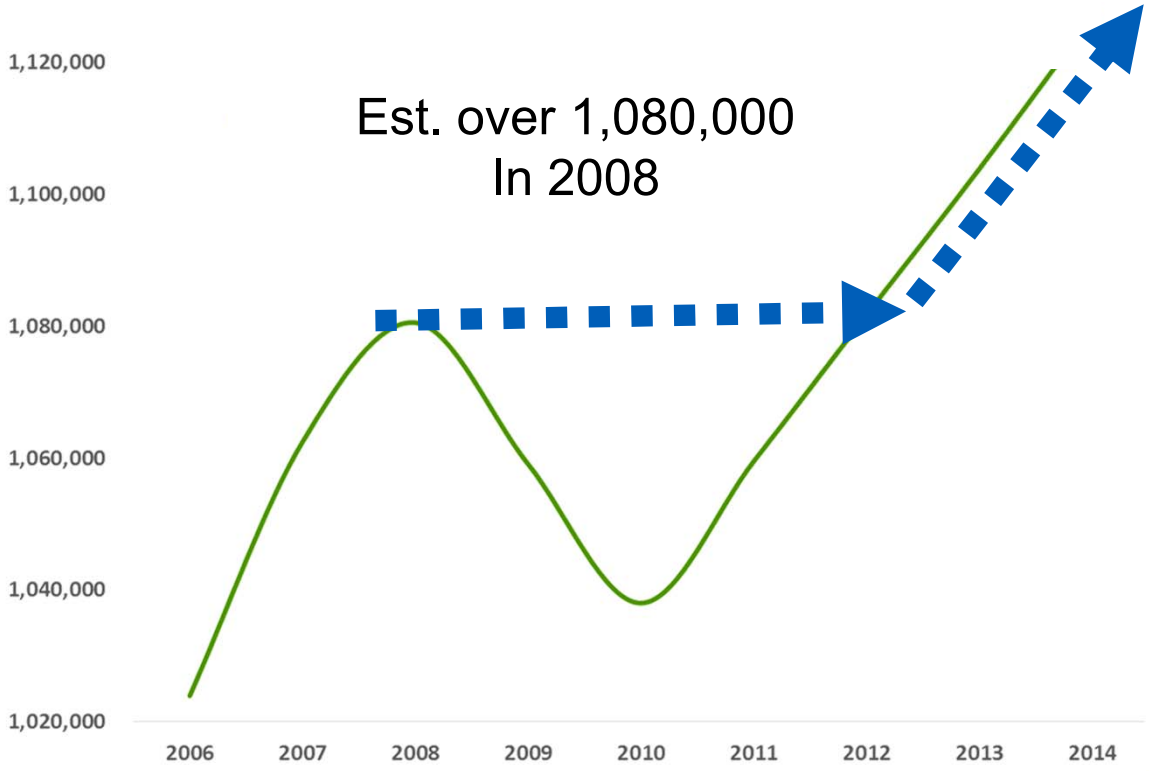
City Workplace Employment has Recovered

Employment by Place of Work Estimate
(Wage & Salary Jobs + Self Employed)



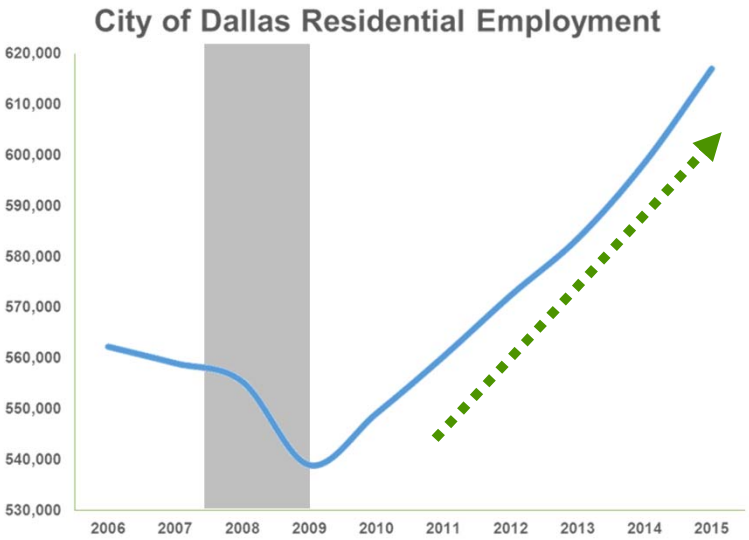
Recent jobs recovery well past pre-recession high

Source: City of Dallas Office of Economic Development estimates based on BLS and LEHD data, NCTCOG estimates. Employment as defined by Bureau of Economic Analysis (BEA)

Data Form: Estimate

City of Dallas

Resident employment may be recovering



More and more City residents are gaining employment since the recession …

But decreasing percentages of employable residents are participating in the job market since the recession

Sources: Bureau of Labor Statistics and U. S. Census

Data Form: Geographic, Demographic, Estimate

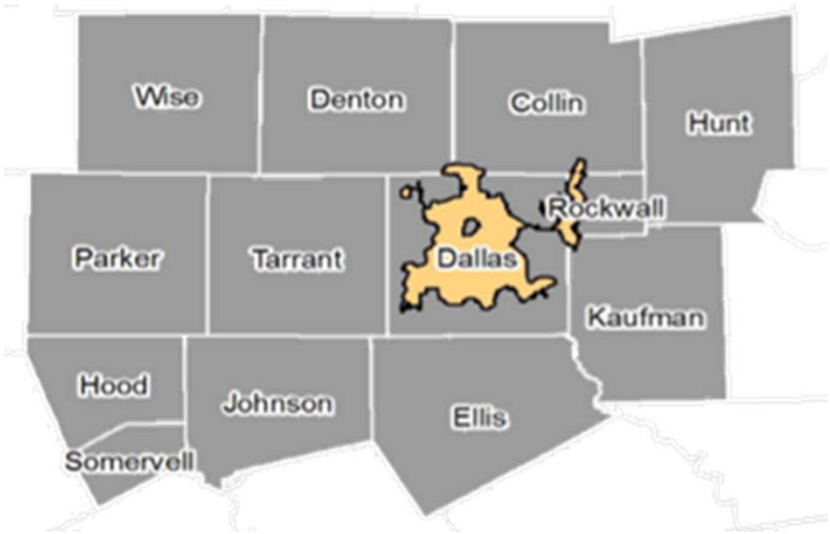
City of Dallas

Area Labor Market

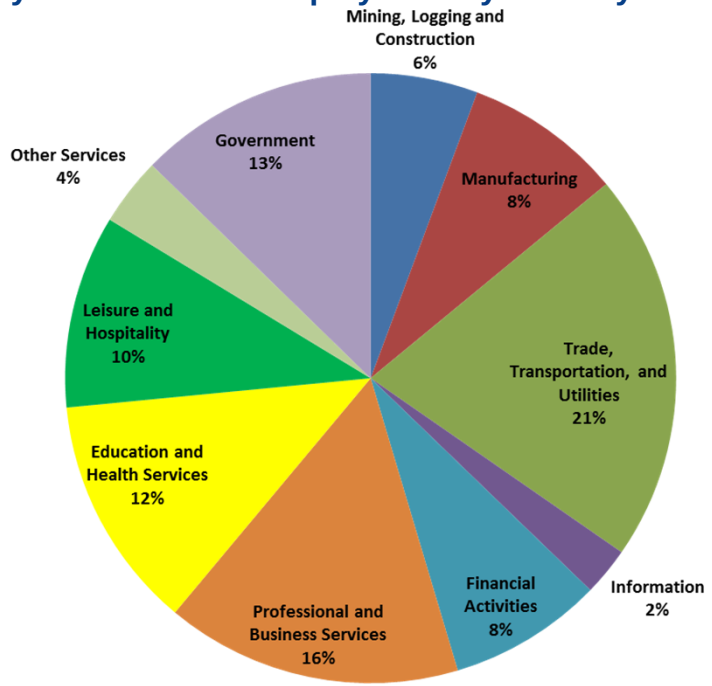
Dallas-Fort Worth businesses draw on a 3.1 million-strong workforce

815,700 in professional-business services, finance & information
895,600 in trade, transportation, utilities and manufacturing
330,200 in education and health services

DFW MSA = Labor Market



City of Dallas 2016 Employment by Industry Estimate



The Texas Workforce Commission projects Dallas County's employment to grow 18.2 percent between 2010 and 2020.

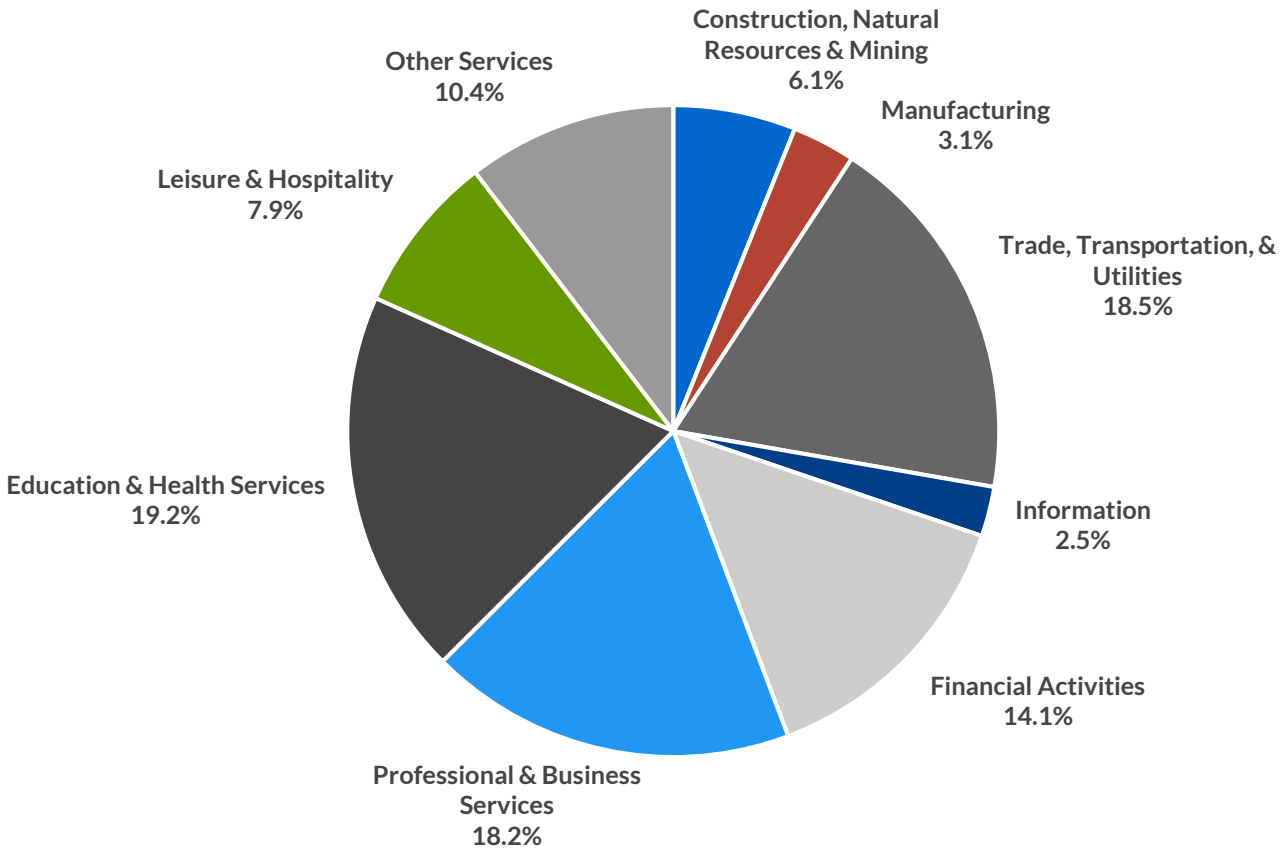
Source LEHD, Census and Bureau of Labor Statistics

Data Forms: Geographic, Demographic, Estimate, Revision

City of Dallas

Small Business

City of Dallas 2016 Small Business Share by Industry Estimate



Almost 90 percent of businesses, nearly 58,000, in Dallas are classified as small. Small businesses account for a significant number of jobs and play a key role in growing real and business personal property tax revenue. Small businesses generally are defined as having fewer than 500 employees. The U.S. Small Business Administration definition are industry-specific and are applied to the City's businesses to calculate shares.

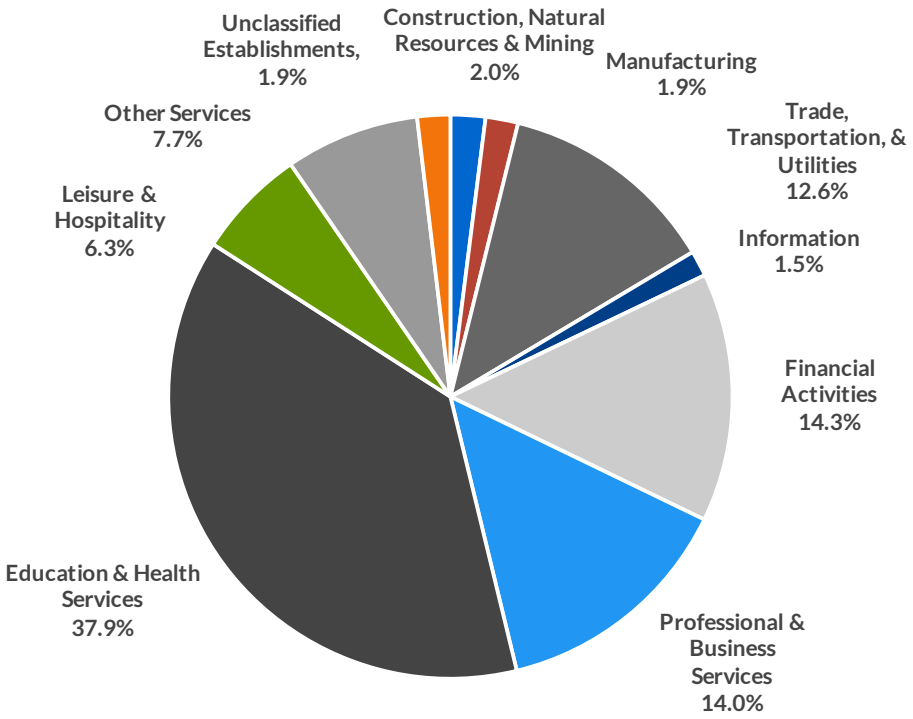
Source U.S. Small Business Administration 2016, InfoUSA 2016.

Data Form: Geographic, Estimate

City of Dallas

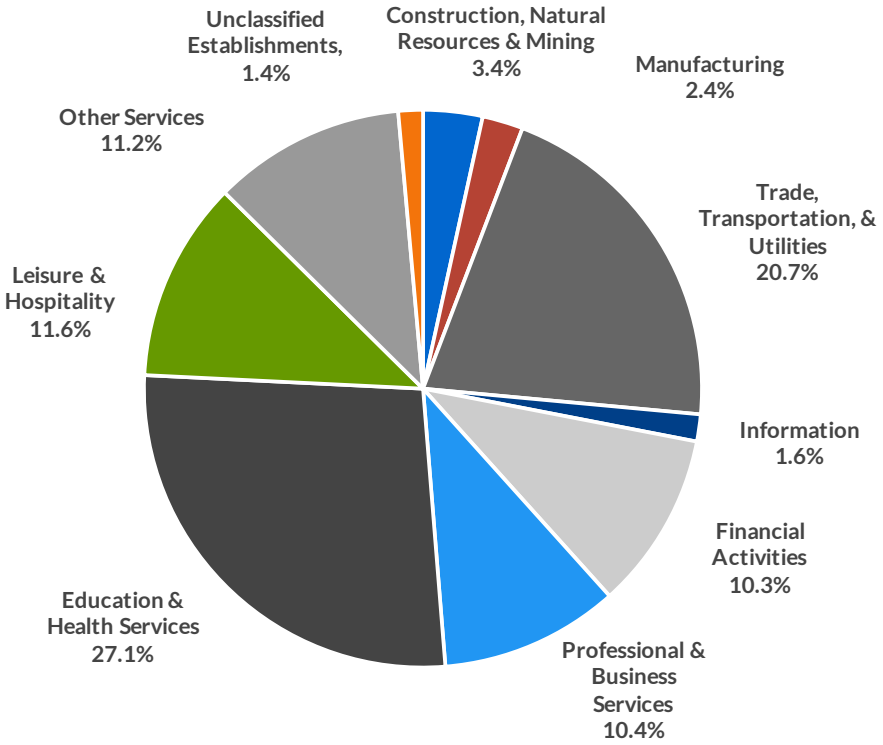
Women & Minority Owned Business

City of Dallas 2016 Women-Owned Businesses by Industry



In 2016, women-owned businesses were most represented in the education and health services, financial activities, and professional and business services industries.

City of Dallas 2016 Minority-Owned Businesses by Industry



In 2016, minority firm ownership was most prominent in the education and health services and the trade, transportation, and utilities industries, comprising over 47 percent of all minority-owned business.

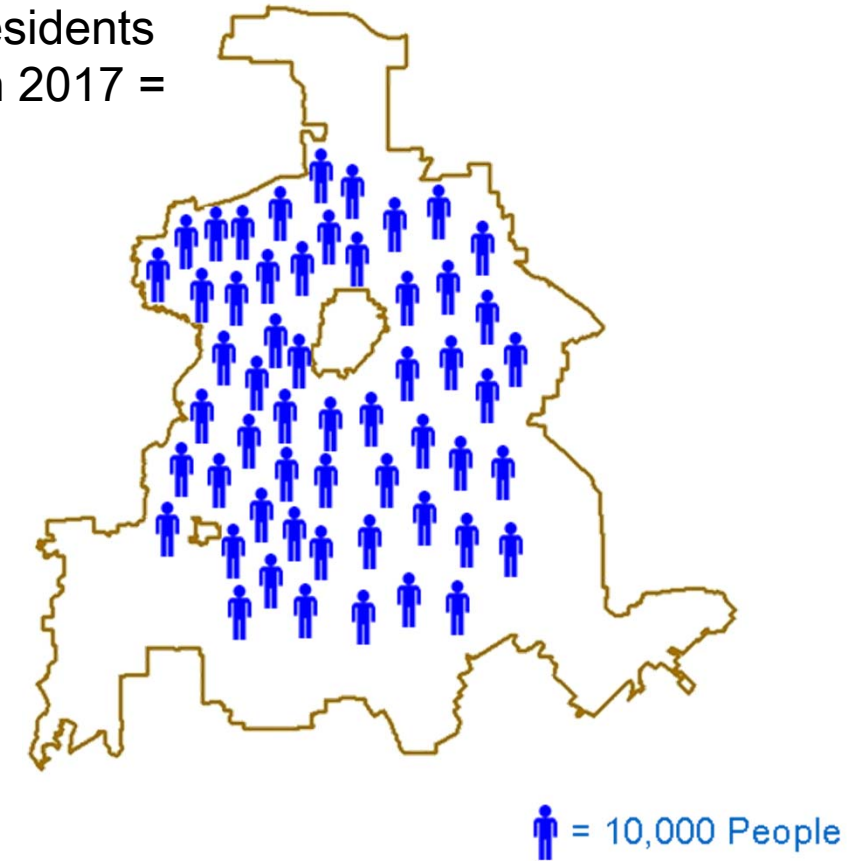
Source InfoUSA 2016.

Data Forms: Geographic, Demographic, Estimate

City of Dallas

Dallas Household Employment

Average number of residents who were employed in 2017 = 652,833.



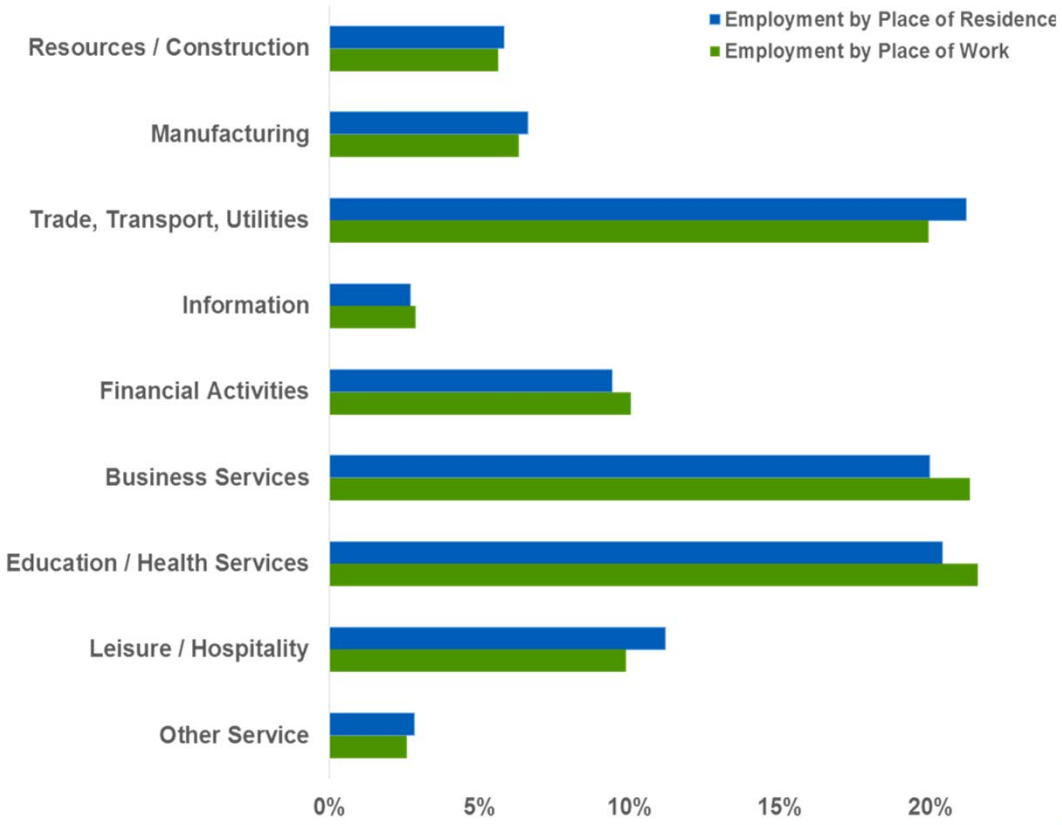
Source LEHD, Census, Texas Workforce Commission and Bureau of Labor Statistics

Data Forms: Estimate, Revision

City of Dallas

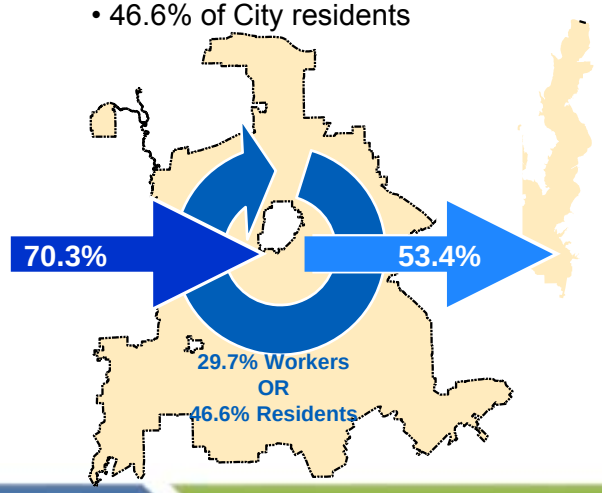
Workers and Jobs Begin to Align

(Place of Residence and Place of Work Employment In-Out Flow by Industry)



While the percentages for Residents and Jobs are similar across industries, most of the City workers do not live here and a large number of residents do not work here:

- 70.3% of City workers reside outside of the City
- 53.4% of employed City residents work outside of the City
- Those that "Live, Work & (hopefully) Play":
  - 29.7% of City workers &
  - 46.6% of City residents



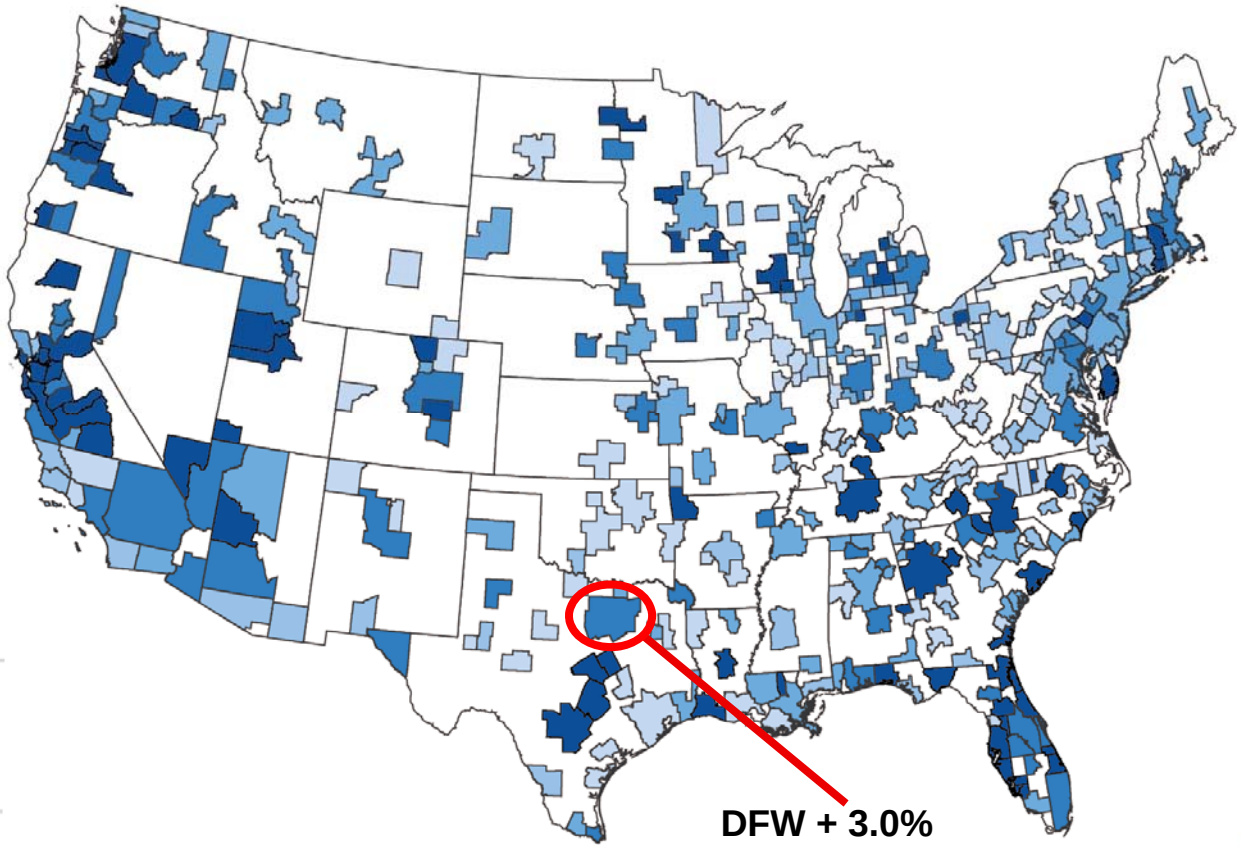
Source: OED Analysis and LEHD- 2015.

Data Form: Geographic

City of Dallas

2016 MSA Gross Domestic Product

(Percent GDP Growth by Metropolitan Statistical Area)



U.S. Metropolitan Areas = 1.7 percent

- 3.0 to 8.1
- 2.0 to 3.0
- 0.7 to 2.0
- -0.9 to 0.7
- -13.3 to -0.9
- Nonmetropolitan Areas

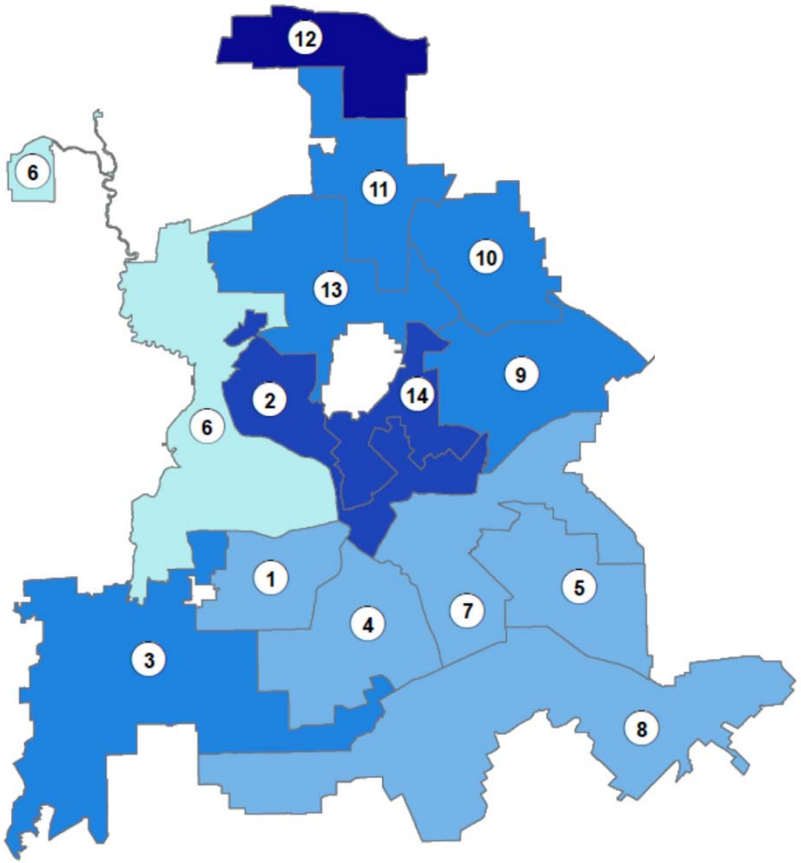
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Data Forms: Geographic, Estimate

City of Dallas

Labor Force Estimates

(City of Dallas Council District Breakouts 2016)



District	District Labor Force	District Unemployment Rate	Employed District Residents (Household Employment)	Total Jobs In District (including Government)
1	41,089	4.6%	39,114	28,814
2	59,004	3.6%	56,775	202,345
3	45,955	4.0%	44,013	42,089
4	36,039	5.4%	34,043	13,548
5	37,426	4.7%	35,583	11,844
6	33,287	5.9%	31,254	186,442
7	40,912	4.5%	38,987	34,864
8	38,560	4.8%	36,635	22,918
9	49,641	3.5%	47,822	22,478
10	53,540	3.0%	51,816	51,582
11	51,362	3.2%	49,610	121,499
12	68,778	2.3%	67,036	30,585
13	46,215	2.9%	44,802	99,203
14	59,071	2.8%	57,295	258,165

< 35K | 35K-45K | 45K-55K | 55K-65K | > 65K

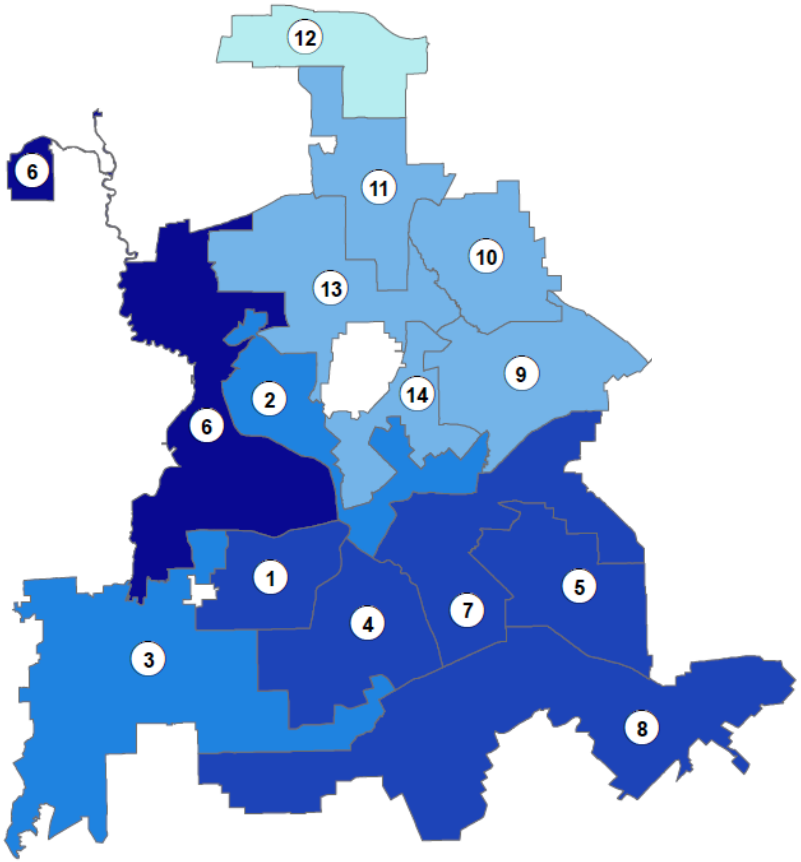
Source: City of Dallas Office of Economic Development estimates based upon data from BLS, LEHD, eSite Analytics, CoStar Commercial Real Estate, and Moody's Economy.Com data

Data Forms: Geographic, Demographic, Estimate

City of Dallas

Unemployment Rate Estimate

(City of Dallas Council District Breakouts 2016)



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14	59,071	2.8%	57,295	258,165

< 2.5%	2.5%-3.5%	3.5%-4.5%	4.5%-5.5%	> 5.5%

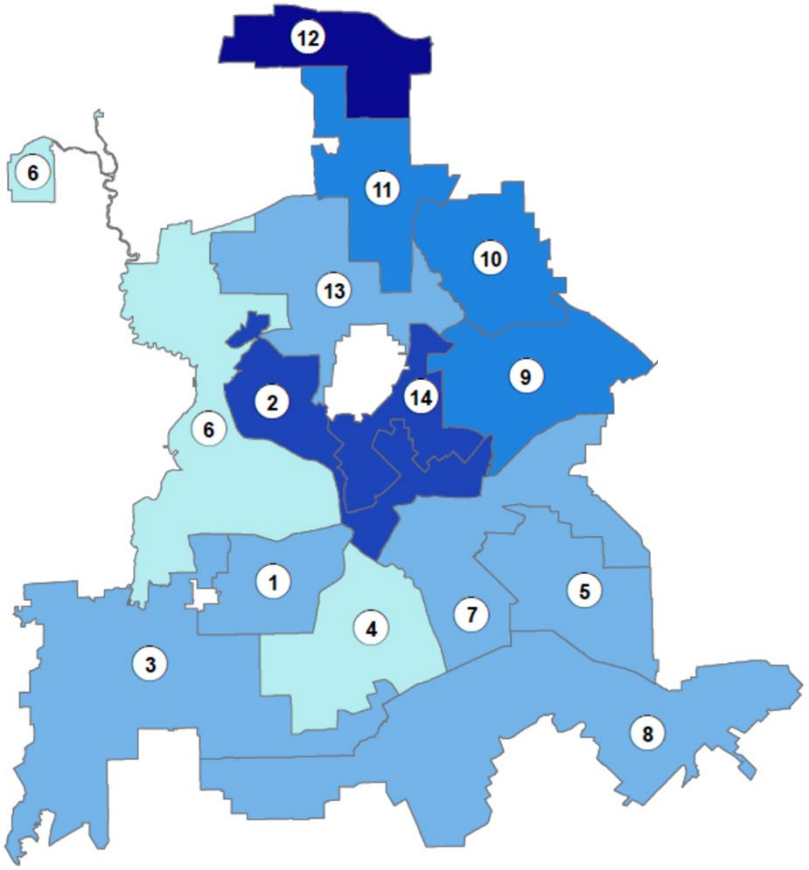
Source: City of Dallas Office of Economic Development estimates based upon data from BLS, LEHD, eSite Analytics, CoStar Commercial Real Estate, and Moody's Economy.Com data

Data Forms: Geographic, Demographic, Estimate

City of Dallas

Employment By Place of Residence Estimate

(City of Dallas Council District Breakouts 2016)



< 35K	35K-45K	45K-55K	55K-65K	> 65K

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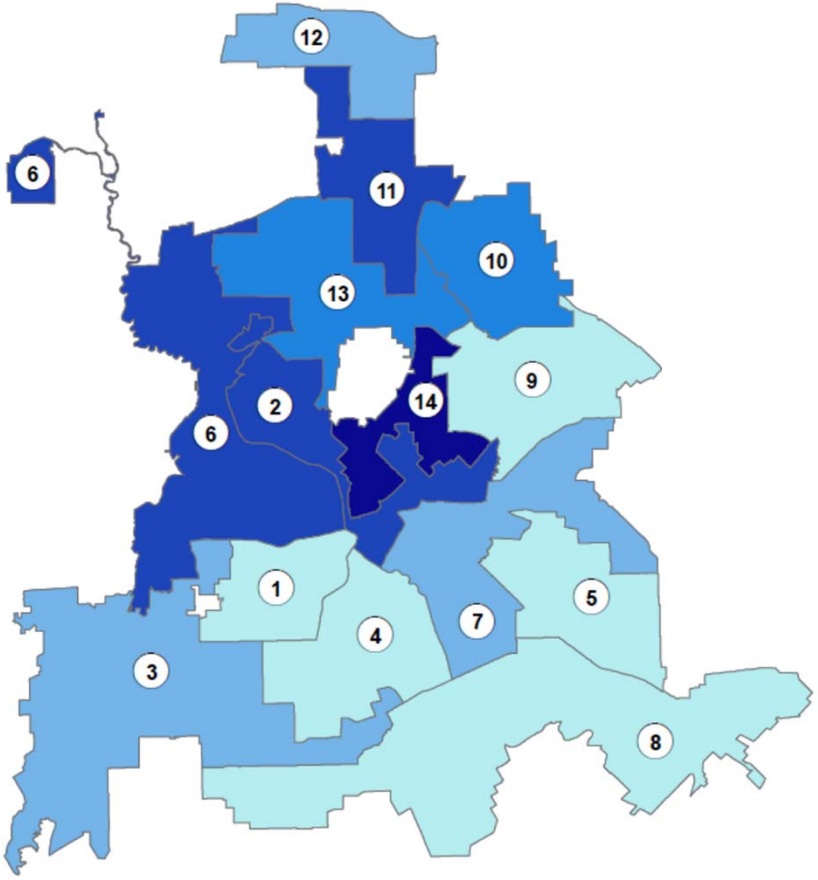
Data Forms: Geographic, Demographic, Estimate

City of Dallas

Employment By Place of Work Estimate

(City of Dallas Council District Breakouts 2016)



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13	46,215	2.9%	44,802	99,203
14	59,071	2.8%	57,295	258,165

< 30K	30K-50K	50K-100K	100K-250K	> 250K

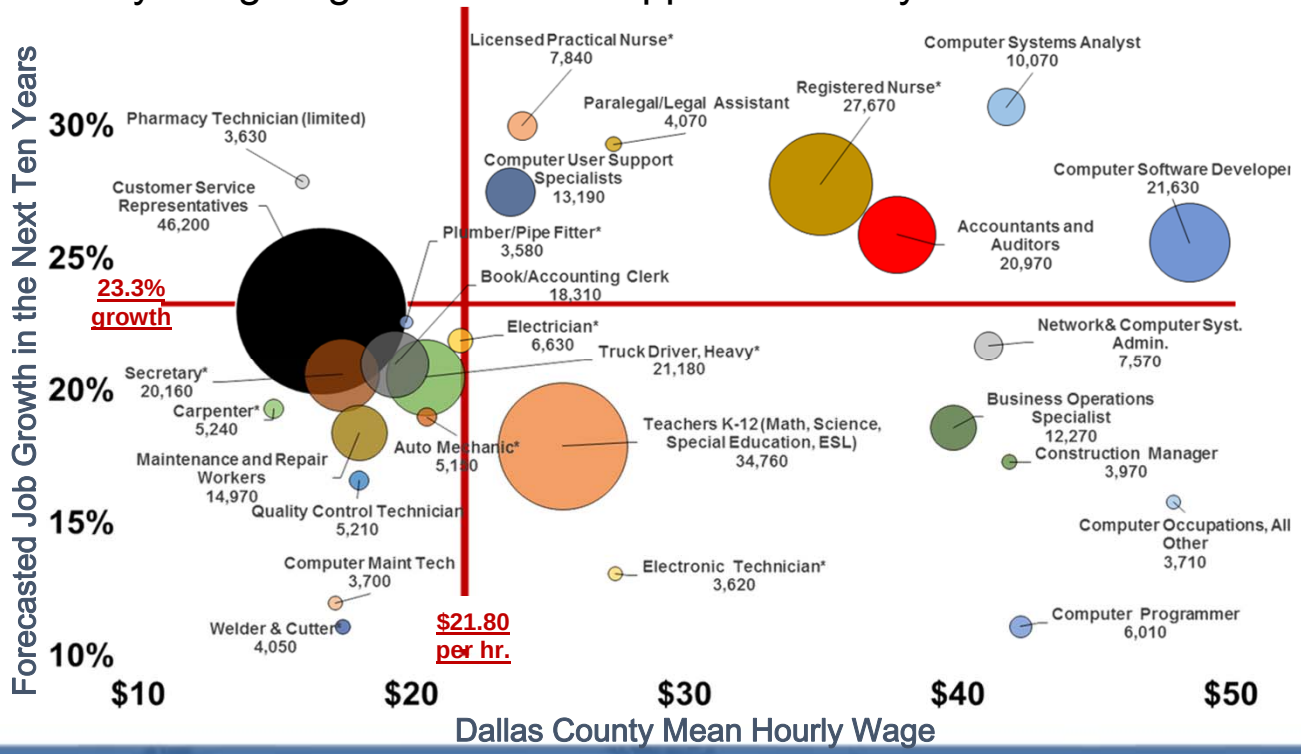
Source: City of Dallas Office of Economic Development estimates based upon data from BLS, LEHD, eSite Analytics, CoStar Commercial Real Estate, and Moody's Economy.Com data

Data Forms: Geographic, Demographic, Estimate

City of Dallas

Skills Training vs. Projected Need

Workforce Solutions Greater Dallas' Targeted Occupations focuses on developing employees within Dallas County. The chart identifies targeted occupations above 3,500 jobs with respect to job growth rate (vertical axis) and mean hourly wage (horizontal axis). Bubble's size is relative to current occupational employment. The hourly living wage is one that supports a family of 1 adult and 1 child ($21.80).



Many Dallas County occupations are projected to provide employment opportunities. Yet, those having above average job growth and providing a small family living wage (upper right quadrant) often requires greater education than the community college level.

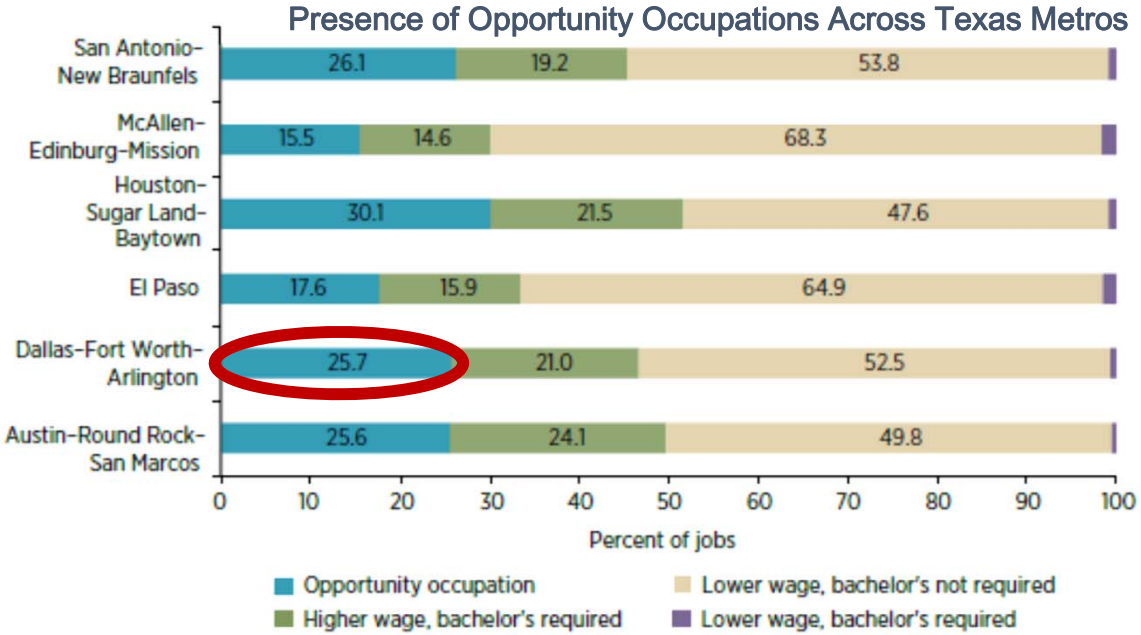
Source: OED analysis based on Workforce Solutions Greater Dallas and Living Wage calculation from Massachusetts Institute of Technology

Data Forms: Geographic, Demographic, Estimate, Revisions

City of Dallas

Skills Training

The Federal Reserve Bank of Dallas published a study on “Regional Talent Pipelines”. Their focus was the identification of high-wage, high-demand occupations that help drive economic growth in a region and the development of career pathway and sector partnerships towards skills training. These “Opportunity Occupations” are those that require more than a high school diploma but less than a bachelor’s degree.



This chart shows the share of jobs that are Opportunity Occupations in each of Texas’ largest MSAs.

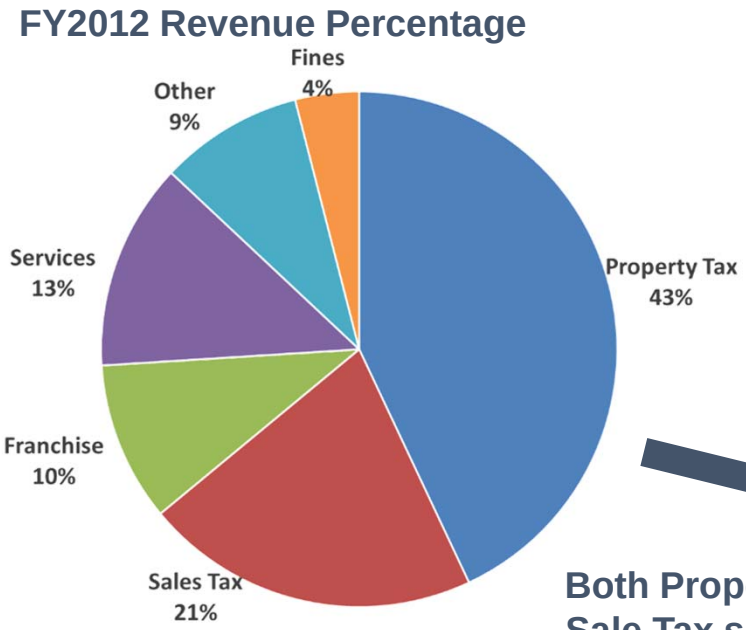
Opportunity Occupations account for over 25 percent of jobs within the Dallas-Fort Worth MSA.

Source: Federal Reserve Bank of Dallas

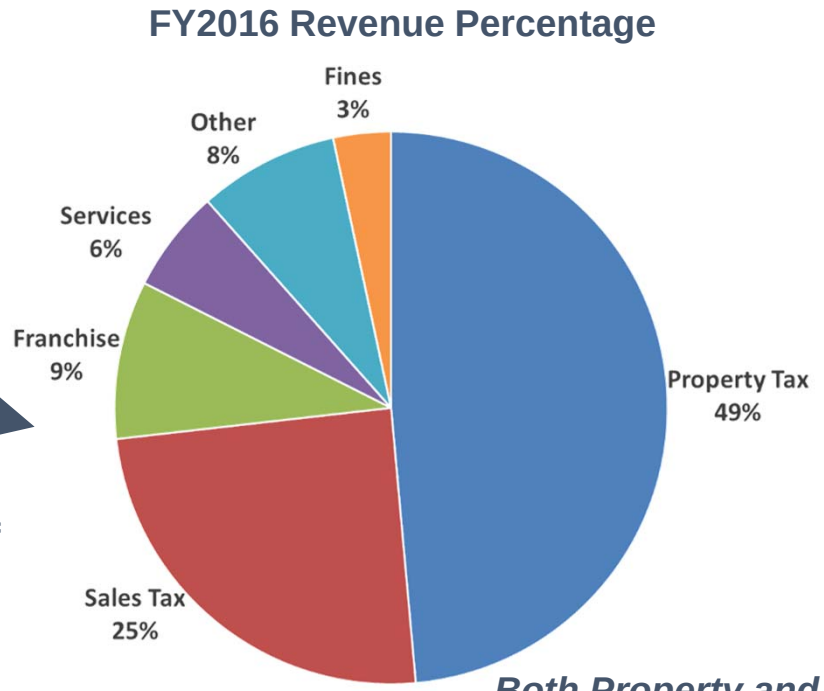
Data Forms: Geographic, Demographic, Estimate, Revisions

City of Dallas

Increase Dependence on Two Big Revenue Sources



Both Property and Sale Tax shares of the total City revenue have increased



Both Property and Sale Tax City revenues becoming volatile

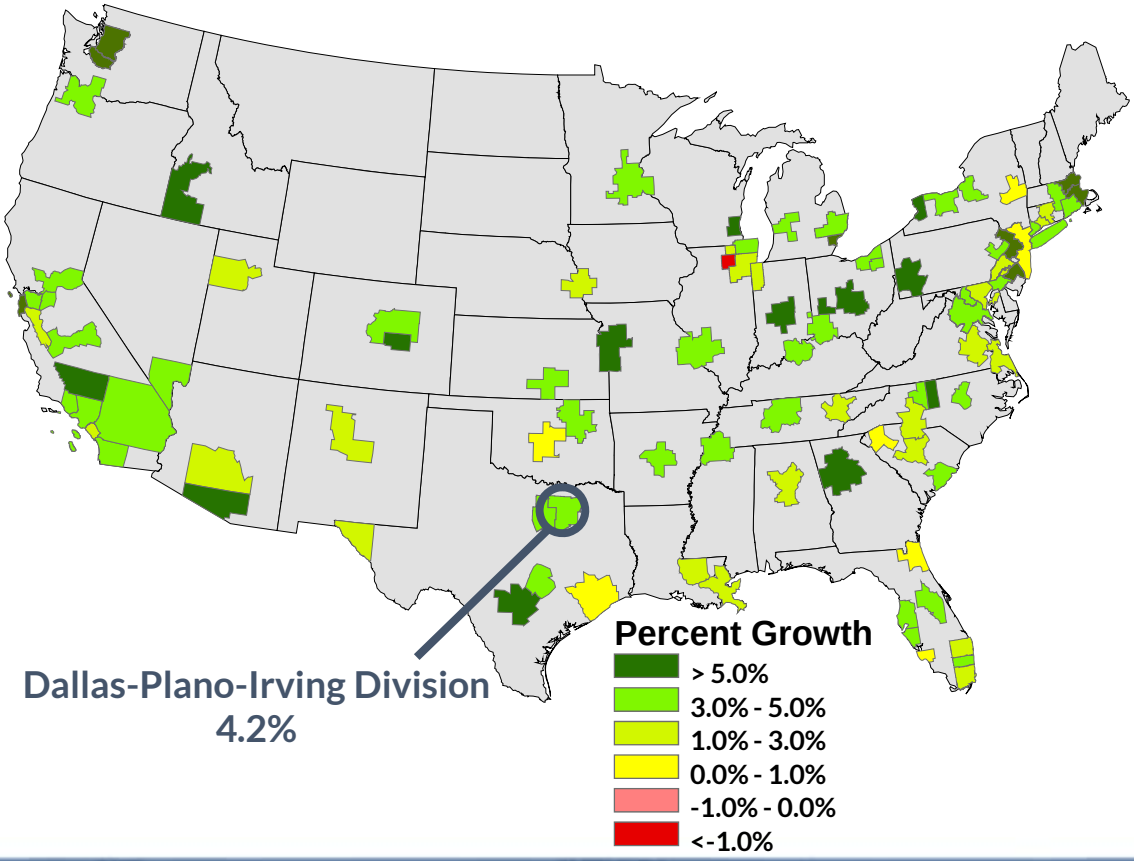
Source: City of Dallas, Office of Financial Services

Data Forms: Geographic

City of Dallas

Relative Housing Conditions Good, But …

Single Family House Price Growth in Top 100 Metros – 2017Q2



Multiple analysts state that the Dallas area is beginning to lose its attractiveness as a low(er) cost place to live.

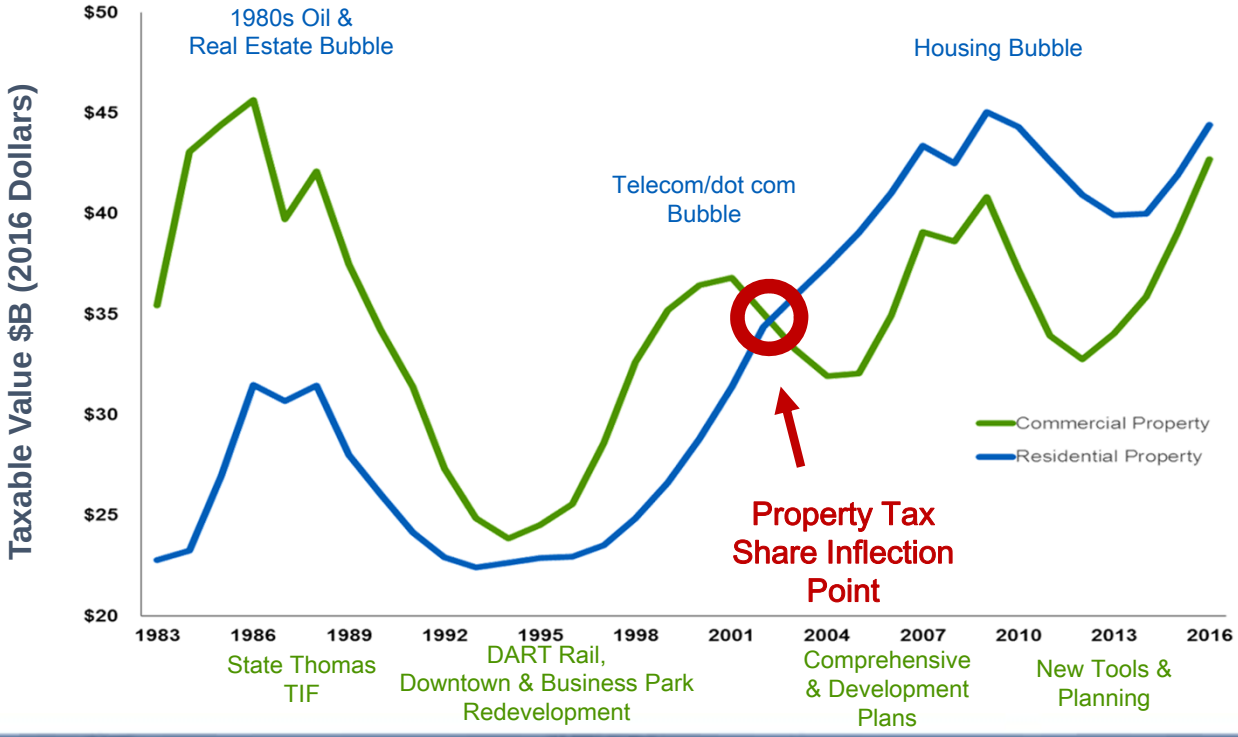
FHFA House Price Index – 2017Q2

Data Forms: Geographic, Demographic, Estimate

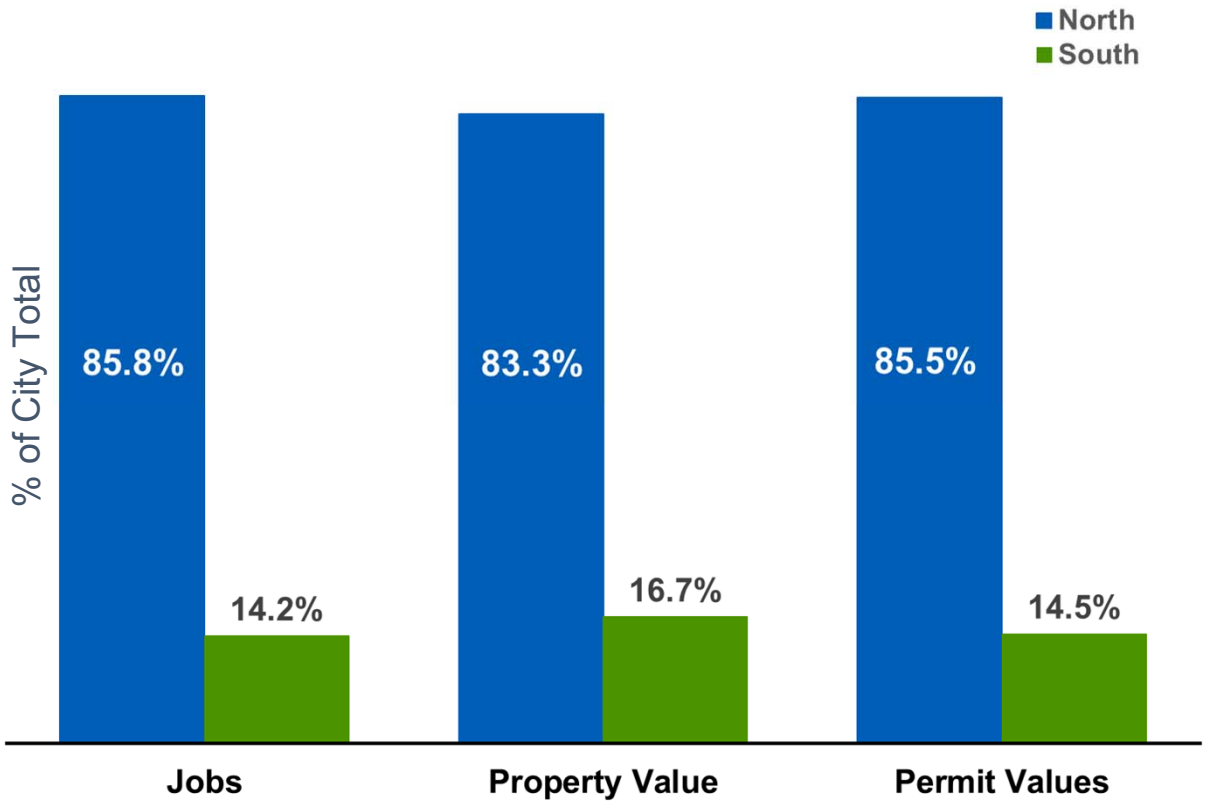
City of Dallas

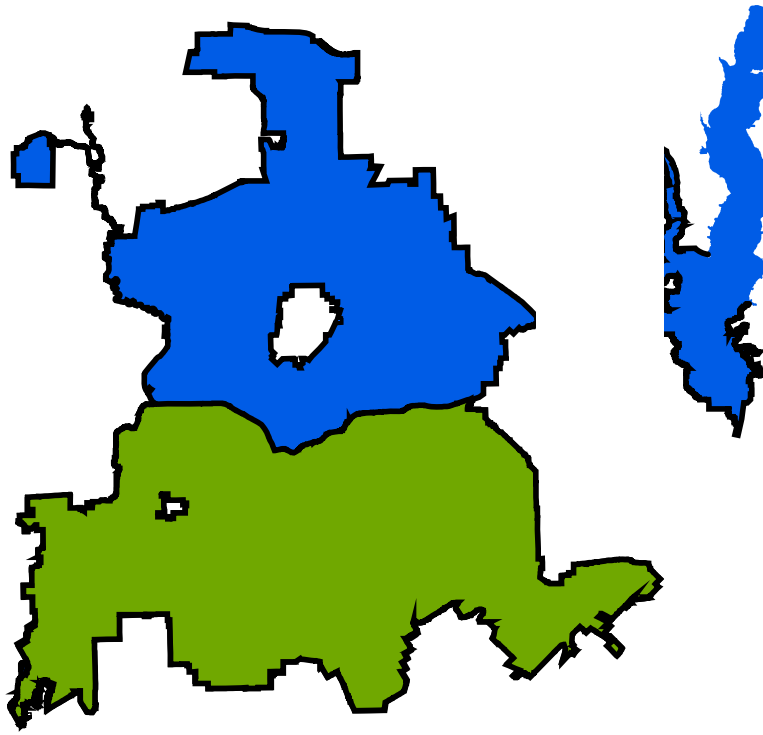
Real Dollar Dallas Property Tax History

- Dallas saw an asset bubble in the office market in the 1980s
- Commercial tax base hasn't recovered in real terms
- Residential became greatest share of tax base in the 2000s



City Imbalanced Tax Revenue and Employment Base



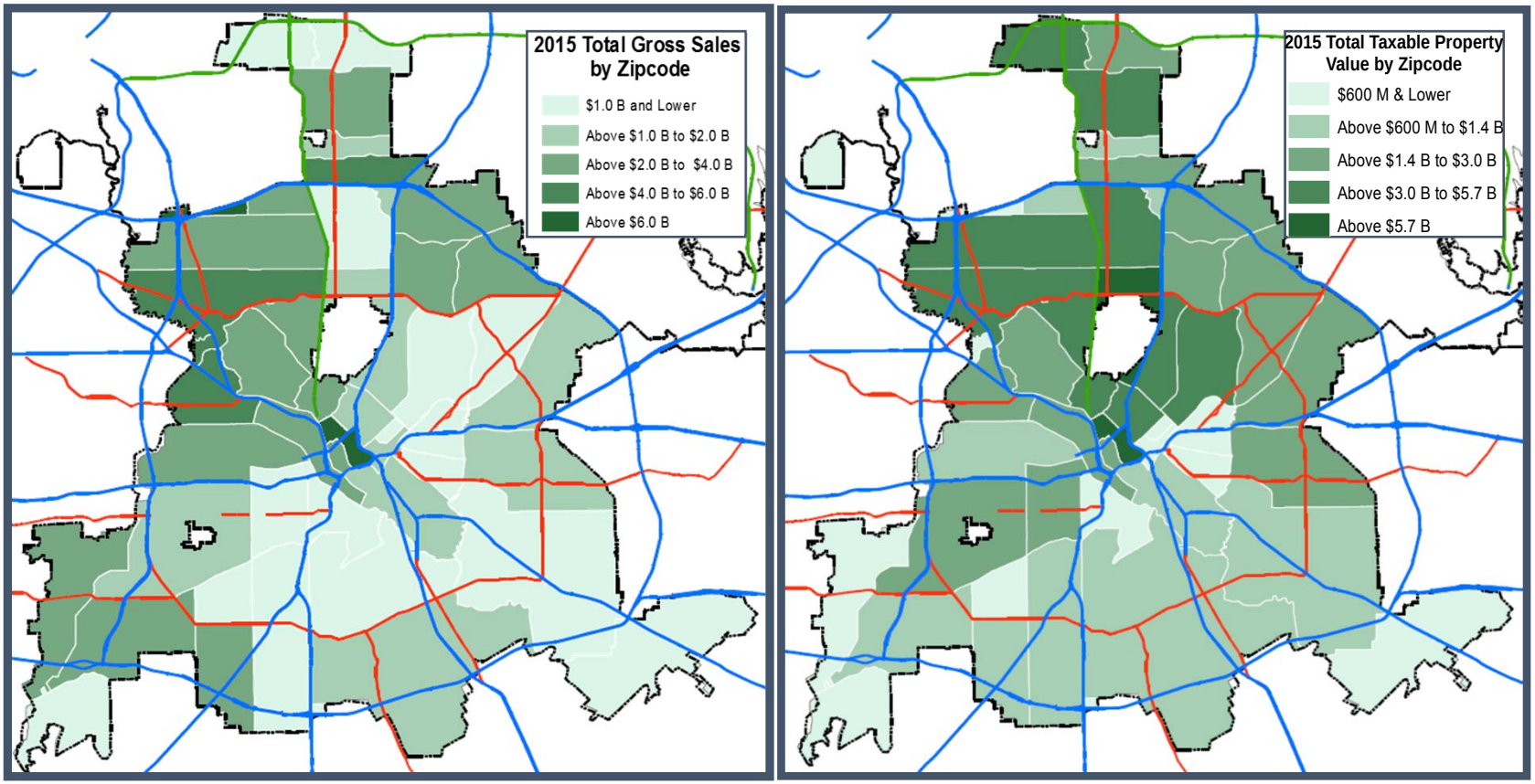


Source: City of Dallas Office of Economic Development analysis of LEHD data (Jobs), and of City of Dallas GIS analysis of 2016 Dallas County Appraisal District and City of Dallas Department of Sustainable Development & Construction, Building Inspection Division 2016 Permit Data.

Data Forms: Geographic, Demographic, Estimate

City of Dallas

City Economic Activity is Still Geographically Concentrated



Sources: Office of The Texas State Comptroller and City of Dallas, GIS
NOTE: Some zip codes are only partially in the City boundaries and ae not fully represented. The data associated with these geographies is for the entire zip code

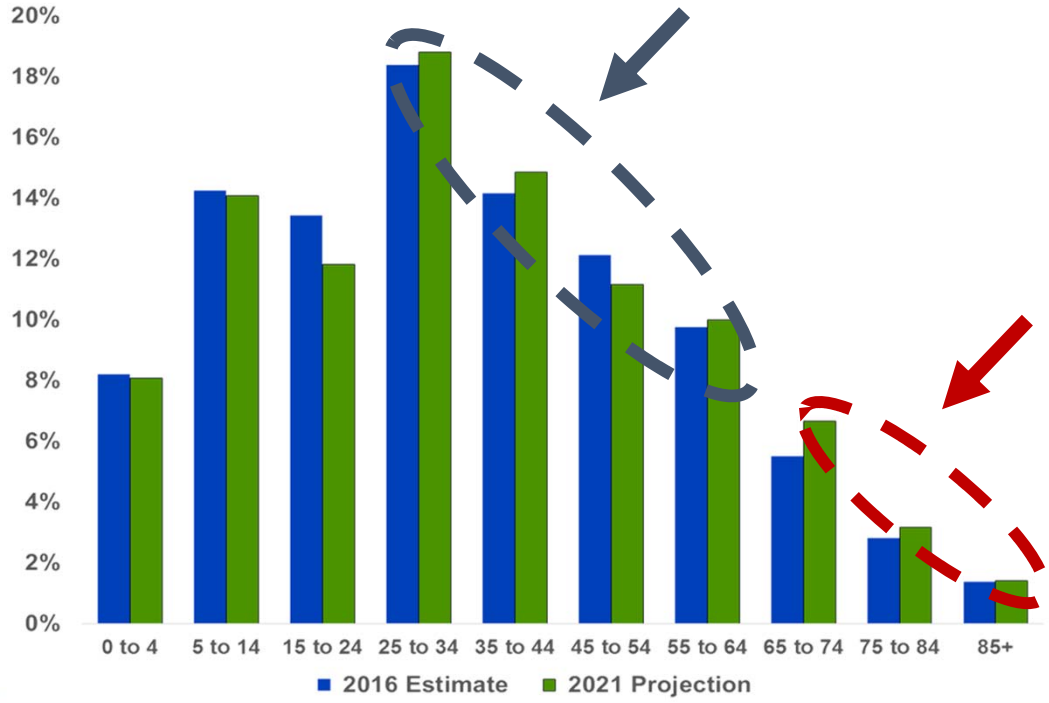
Data Forms: Geographic, Inflation Adjustment, Estimate

City of Dallas

City Population Cohorts

(current estimates & projected)

Overall, the population share of working age residents is projected to grow over the next five years.



But the share of retired age residents also increases in five years. This will impact City issues to include service provision and tax revenue exemptions.

Source: 2016 Alteryx, OED Analysis

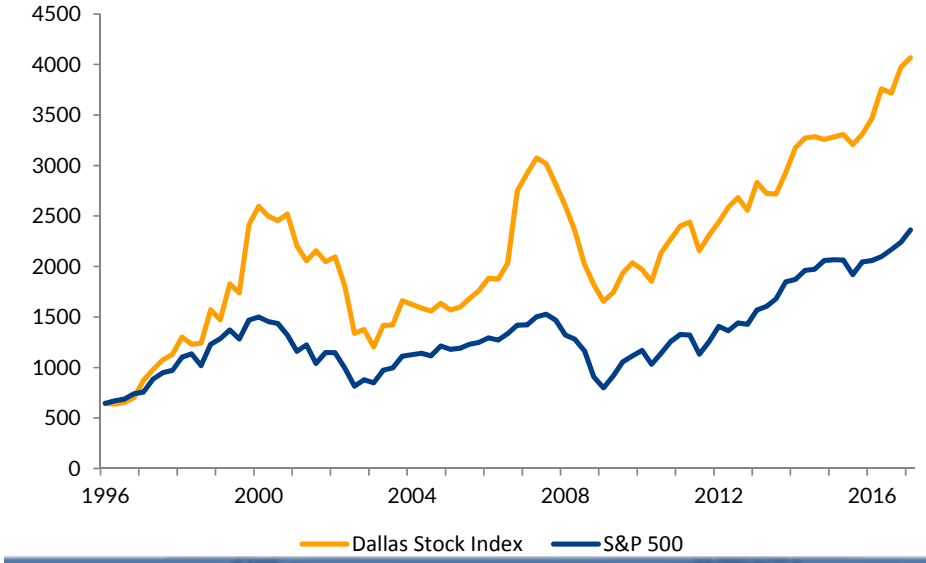
Data Forms: Demographic, Estimate

City of Dallas

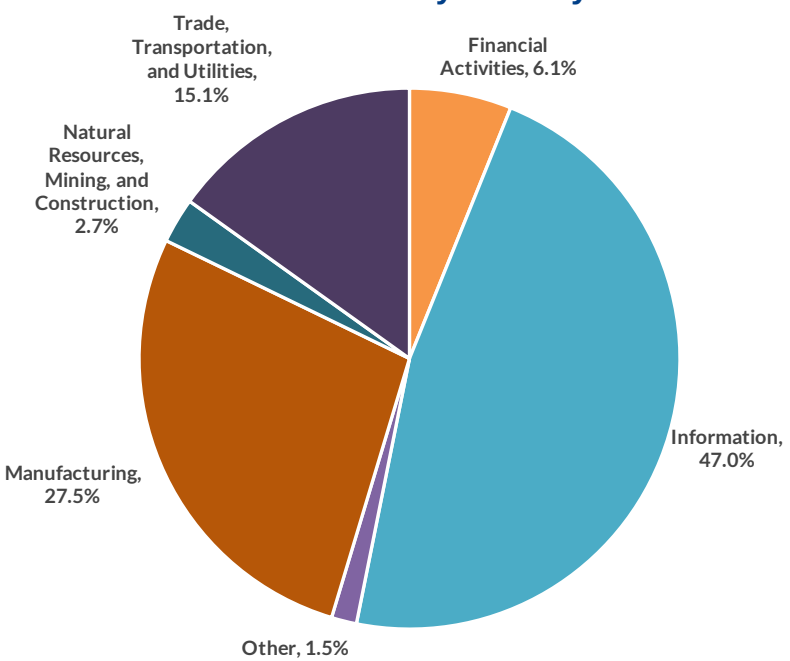
Stock Markets and the City of Dallas

The City of Dallas Stock Index is a capitalization-weighted index that tracks the collective total market value of all publicly traded companies headquartered within the city of Dallas. The total market value of all publicly traded companies within the city of Dallas was more than six times the market value during the first quarter of 1996, which has largely mirrored the performance of the S&P 500.

City of Dallas Capitalization-weighted Stock Index vs. S&P 500



Share of Firms by Industry



The above chart shows the share of publicly traded firms headquartered within the city of Dallas by major industry. The total market value of publicly traded companies within the city of Dallas during 2017 was dominated by firms in the Information, Manufacturing, and Trade, Transportation, and Utilities sectors.

Source: Yahoo! Finance, 2017; City of Dallas, 2017.

Data Forms: Geographic, Indexing

City of Dallas

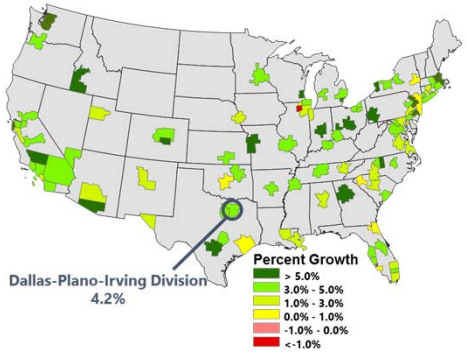
But the Numbers Keep Changing: Why Accountants Don't "Get" Economists (and vice versa)

The Conclusion

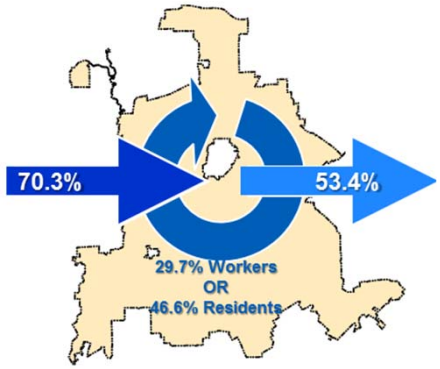
Both Accountants and Economist try to get to the truth – some realization of a situation. Yet Economists' desire to understand "What It Is Doing" requires methods that differs from those needed to find "What It Is".

The Office of Economic Development's Research and Information Division continues use these methods to analyze and identify patterns and projecting trends in order to provide City leadership the best possible counsel toward the continued growth of Dallas.

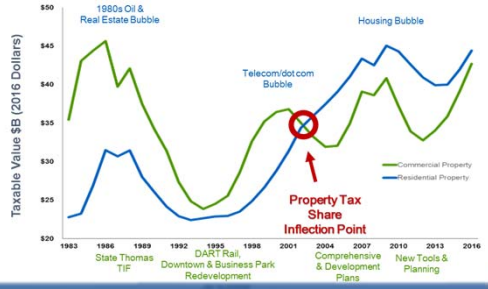
Single Family House Price Growth in Top 100 Metros – 2017Q2



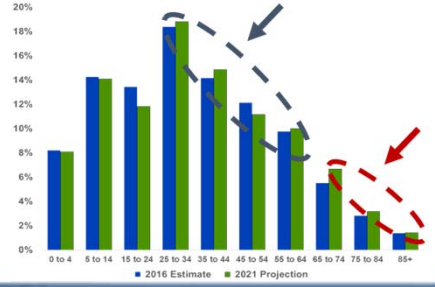
Dallas Resident and Workers In-Out Flow



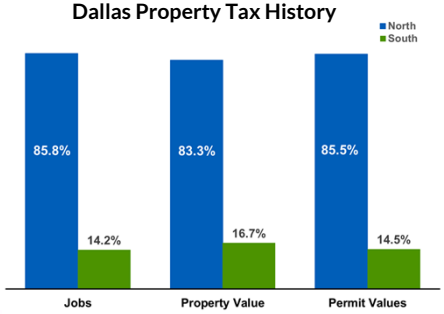
Dallas Property Tax History



City Population Cohorts



Dallas Property Tax History



City of Dallas

Questions

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