

Dallas Booms Through Texas Oil Bust

By Michael Weiss, Pia Orrenius and Laila Assanie

ABSTRACT: The Dallas metropolitan division's economy, buttressed by business relocations and consolidations, has expanded steadily since 2010, following the Great Recession. Growth sectors, which included business and financial services, defense and security, and transportation, powered Dallas and helped it pace the Texas economy after the energy price collapse.

As the price of West Texas Intermediate crude oil began its collapse from more than \$107 per barrel in June 2014 to less than \$30 eight months later, the Texas economic outlook seemed uncharacteristically clouded. With diminished prospects for even nonoil-patch metros such as Dallas, many analysts forecast a state recession.

State job growth fell below the national average in 2015, the first time Texas had trailed the U.S. since 2003. Still, the state economy kept expanding, albeit slowly, with the once-buoyant energy sector laying off tens of thousands and exerting a marked drag.

The Dallas–Plano–Irving metropolitan division was in part the reason the state managed to continue growing. Coming out of the Great Recession in 2010, the greater Dallas metro area has been a consistent source of strength, benefiting from expanding business and financial services, defense and security, transportation, recreation and food services, health, construction and retail (*Chart 1*).¹

These are all large “star” industries, denoted by their high location quotients—their relatively large local presence compared with their standing in the national economy—and rapid growth during the 2010–15 period. Dallas employment expanded by more than 3.5 percent annually—from 2 million jobs in January 2010 to 2.5 million by December 2016. This outsized performance continued in the oil bust years even as growth stalled in the state’s other formerly booming metros, such as Houston, and slowed significantly in Fort Worth (*Chart 2*).

Relocations, Expansions

The Dallas-area’s spurt has been fed by expansion as well as business relocations and consolidations into the area. Toyota moved its U.S. operations to Plano from Southern California, while State Farm and Liberty Mutual

insurance companies pulled together operations into new locations in North Texas. Dallas-based AT&T expanded beyond its telecommunications roots when it acquired satellite program provider DirecTV.

Mergers within the airline industry boosted the headquarters presence of Southwest Airlines following its 2011 acquisition of AirTran Airways. American Airlines emerged from bankruptcy, retaining its name and metroplex headquarters to become the world’s largest carrier following its purchase by US Airways in 2015.

The new and expanded operations helped expand a growing network of support services and businesses that aided Dallas metro growth. The area’s job growth rate led the state in 2015–16, a feat made possible by high rates of in-migration of workers primarily from other states but also from other countries (*Chart 3*).

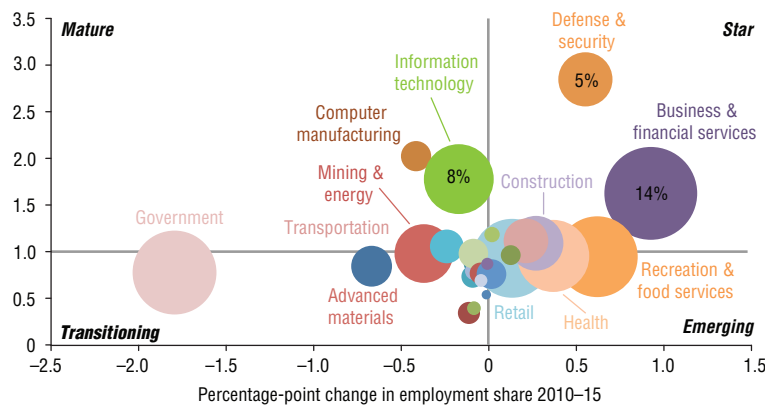
Over the last five years, net domestic migration into the Dallas metropolitan division has averaged 32,276 and international arrivals an additional 17,441. Added to rates of natural increase, the population is averaging about 2.1 percent annual growth, over twice the national average but slower than rates attained prior to the Great Recession. Migration picked up in 2015 despite the spreading malaise from the oil bust.

Broad-Based Growth

Part of the secret behind Dallas’ recent economic boom is a diversified industrial base. Since the energy bust, Dallas employment expansion has been broad based, and every major sector outpaced the state and nation over the two-year period from December 2014 to December 2016. Trade, transportation and utilities; professional and business services; and leisure and hospitality each grew at a more than 4 percent annual rate during the period (*Chart 4*).

Chart 1 Dallas Area Established as Business and Financial Services Center for State

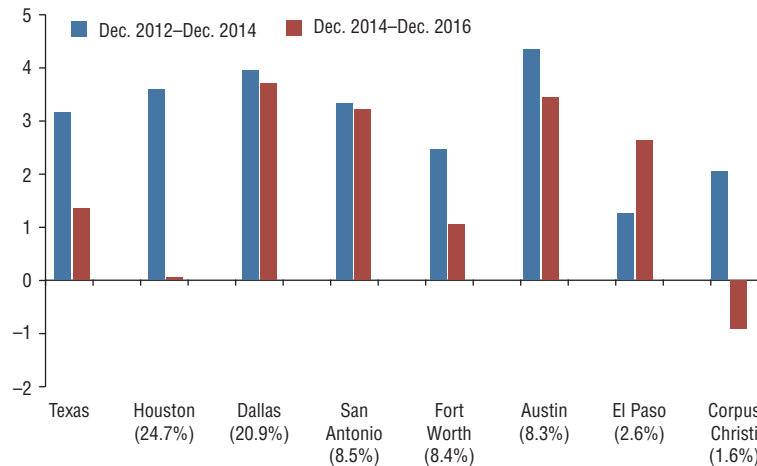
Location quotient in 2015



NOTE: Bubble size represents industry share of metropolitan statistical area employment. For more information on constructing industry clusters, see *At the Heart of Texas: Cities Industry Clusters Drive Growth*.
SOURCES: Texas Workforce Commission; Bureau of Labor Statistics.

Chart 2 Dallas Metro Leads in Job Growth in Oil Bust Years

Average annual growth rate*



*Seasonally adjusted.

NOTE: Percentage change from December 2012 to December 2014 and from December 2014 to December 2016 at an annual rate; each metro's share of employment in December 2016 in Texas shown in parentheses.

SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; seasonal and other adjustments by the Federal Reserve Bank of Dallas.

While manufacturing employment increased 2 percent in Dallas, it declined by more than 3 percent statewide. Sector performance reflected weakness in energy and a strengthening Texas trade-weighted value of the dollar that made state exports more expensive abroad. Construction and energy expanded by 3.5 percent in

Dallas, while jobs in that sector fell by nearly 4 percent statewide on an annual basis.²

Educated Workforce

The emergence of professional sectors is reflected in Dallas' proportion of college graduates and those with graduate or professional degrees;

together they make up over 35 percent of adults, which exceeds education levels in the state as a whole and mirrors the national average.³ Still, Dallas trails Austin, the most highly educated metropolitan statistical area in Texas, where more than 40 percent of adults have at least a college degree (Chart 5).

Migrants, both domestic and international, also contribute disproportionately to the Dallas area's skilled workforce. About 50 percent of recent international migrants hold a college degree or higher and about 53 percent of domestic migrants do so; it would be impossible to grow the high-end service industry in Dallas without the influx of workers from elsewhere.⁴

California is the No. 1 origin of domestic migrants who move to Texas, followed by Florida, New York and Illinois. South central Asia (predominantly India) and eastern Asia (largely China) are the two most important origins of college-educated international migrants to Dallas.

Mirroring National Trends

The Dallas area's sectors of employment growth and the region's relative education attainment mirror national trends. They indicate a possible future path of economic expansion as outlined in a study conducted by the Pew Research Center and Markle Foundation.⁵

As of 2015, 36 percent of the nation's employed workers had completed a four-year college program nationally. The college educated accounted for just more than half of jobs requiring higher analytical skills or higher social skills. These are also the areas that experienced the greatest growth—up 77 percent for analytical skills jobs and 83 percent for social skills positions from 1980 to 2015.

The skill sets involved in higher-level jobs are deployed in computer technology or positions requiring analytical, management and interpersonal abilities. By comparison, jobs requiring a higher set of physical skills, machinery operation or tool skills rose a relatively small 18 percent over the period. Overall employment rose 50 percent from 1980 to 2015.

Residential Expansion

Resembling the flourishing local economy, the overall Dallas–Fort Worth real estate market has also boomed. The skyline has changed amid a burst of multifamily housing and office construction for expanding and relocating businesses, much of it in the northern Dallas suburbs. With about 50,000 apartments currently being built, DFW ranks first among the 100 largest U.S. metro areas in multifamily construction, according to data from MPF Research.

Annual rent growth was stunning at 6 percent as of fourth quarter 2016 amid essentially full occupancy (96 percent), despite massive new construction over the past few years.⁶ DFW has added about 90,000 new apartments since early 2010, just shy of the existing-apartment base of a mid-sized U.S. city such as Jacksonville, Florida, or Memphis, Tennessee.⁷

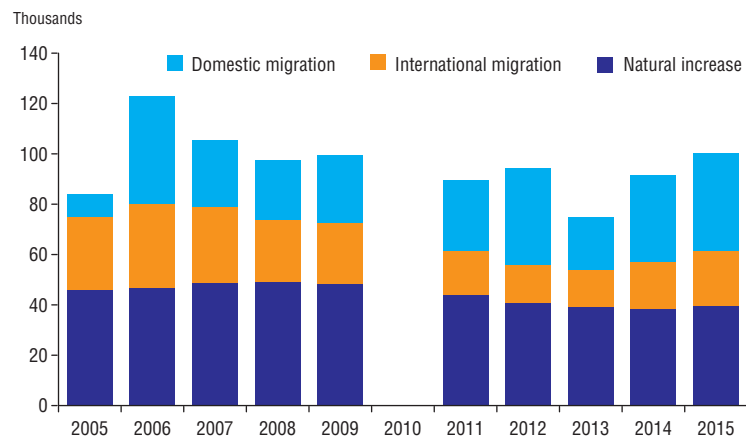
Strong housing demand has boosted single-family home building activity as well, with construction permits issued posting double-digit growth every year from 2012 through 2015, albeit from a low base. While issuance of Texas single-family permits moderated in 2015, DFW experienced breakneck growth of nearly 24 percent (*Chart 6*).

Single-family permits in DFW rose 6.3 percent in 2016 from prior-year levels, while statewide activity rose a modest 2.2 percent. Builders started more than 30,000 homes in 2016, placing DFW in the top spot for annual housing starts nationwide, according to Metrostudy data.⁸

Even as the overall housing stock has increased, the 2.2 months' supply of single-family existing homes is the tightest it has ever been in the Dallas–Fort Worth metroplex, Multiple Listing Service data shows. This compares with 2.5 months in Austin, 3.7 in Houston, 3.5 in San Antonio and 3.7 statewide. Analysts generally regard a six-month inventory as indicating a balanced market.

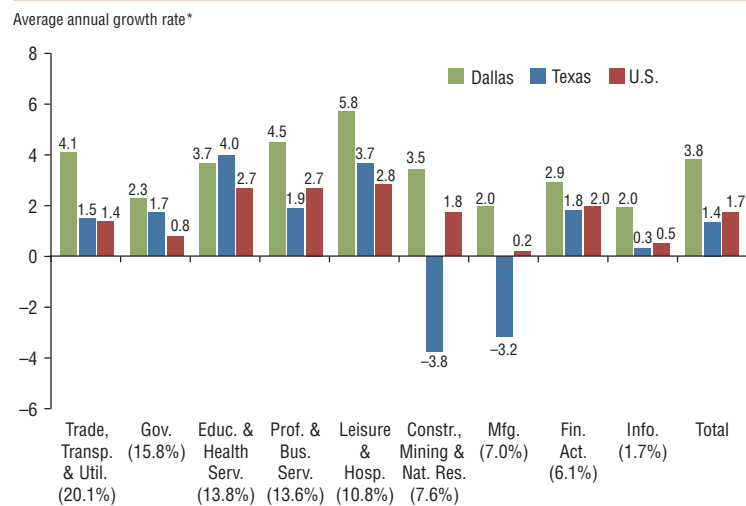
Tightness in the Dallas-area market has driven home prices to record highs. The real median sales price of

Chart 3 Domestic Migration to Dallas Accelerates in 2014, 2015



NOTE: Estimates not available for census years.
SOURCE: Census Bureau.

Chart 4 Texas, U.S. and Dallas Employment Change by Industry, December 2014 to December 2016



*Seasonally adjusted.
NOTES: Percentage change from December 2014 to December 2016 at an annual rate; each sector's share of employment in December 2016 in Texas shown in parentheses.
SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; seasonal and other adjustments by the Federal Reserve Bank of Dallas.

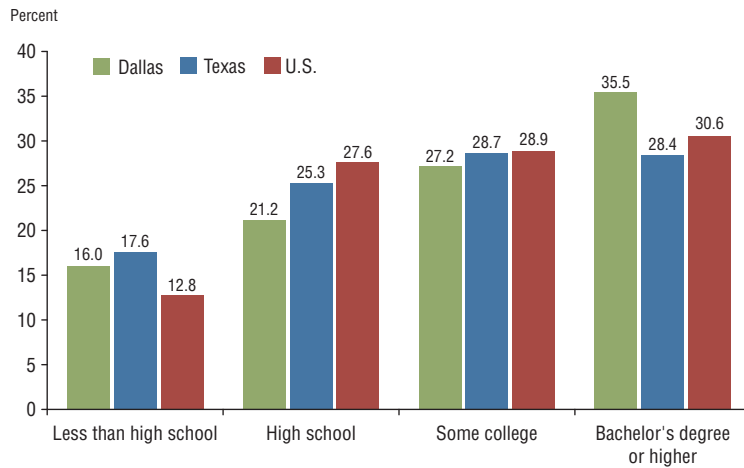
existing homes climbed 34 percent in Dallas (20 percent in Fort Worth) from December 2010 to December 2015, pushing prices in Dallas above the U.S. average for the first time in 2014. In 2016, prices rose another 10.9 percent in Dallas (7.5 percent in Fort Worth). The local increases compare with national figures of 3.2 percent in 2016 and 23 percent from December 2010 to

December 2015. (See “Texas Housing Market Soars to New Highs, Pricing Out Many” on page 15.)

Benefits of Diversification

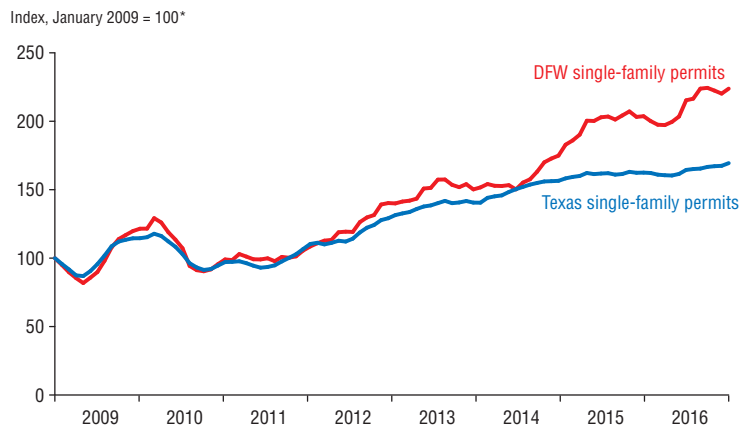
The Dallas area has benefited from its expanding, diversified economy—one that provided opportunities for a range of skill and education levels, particularly those with higher educa-

Chart 5 Share of College Graduates Higher in Dallas Relative to U.S. and Texas



SOURCE: Census Bureau, 2015 American Community Survey one-year estimates.

Chart 6 DFW Single-Family Construction Climbs, While Texas Remains Steady



*Five-month moving average, seasonally adjusted.
NOTE: Last data point is December 2016.
SOURCE: Census Bureau.

tion. The area economy is predominately service-based with little government, so not subject to public spending cycles, while taking advantage of the state's low taxes and flexible labor markets. The energy sector is vibrant but small, which helped Dallas sustain its boom through the state's oil bust, and regulations and planning have facilitated housing construction and expansion of buildings, roads and infrastructure.

The area's economic boom may, however, diminish slightly as other

large states pick up speed, slowing migration to North Texas. With unemployment near 4 percent, the local labor market is tight; difficulty hiring can put the brakes on growth. At the same time, absorption and integration of the financial services, transportation and telecommunications operations new to the Dallas area will take time. Their impact will wane even as some support activity surrounding relocations to the area, such as Toyota, continue to build out. The Dallas Fed employment forecast for the Dallas-Plano-Irving area

anticipates more than 3 percent growth again in 2017.⁹

The re-emergence of the energy sector, with both natural gas and oil prices moving well past lows of 2015 and 2016, will meanwhile provide greater support to other regions of the state, particularly the Houston metropolitan area, which may vie for human and financial resources that have been drawn to Dallas over the past few years.

There remains room for growth within the city of Dallas, which has experienced some of the effects of the region's booming economy but not the full benefits, many of which have taken root in suburbs, such as Plano and Richardson. Development of Dallas' potential could provide key support to the region during the next growth phase.

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Notes

¹ *At the Heart of Texas: Cities' Industry Clusters Drive Growth*, by Laila Assanie, Kristin E. Davis, Pia M. Orrenius and Michael Weiss, Federal Reserve Bank of Dallas, 2016, p. 12.

² Data are unavailable individually for the construction and mining sectors at the metropolitan statistical area level. Hence, they are presented together.

³ See note 1, pp. 28–33.

⁴ Census Bureau, 2015 American Community Survey One-Year Estimates.

⁵ For more information, see "The State of American Jobs: How the Shifting Economic Landscape is Reshaping Work and Society and Affecting the Way People Think About the Skills and Training They Need to Get Ahead," Pew Research Center and the Markle Foundation, October 2016.

⁶ Data are from MPF Research.

⁷ See note 6.

⁸ DFW's top ranking is based on the 42 markets that Metrostudy surveys.

⁹ The forecast is for December-to-December job growth and uses penalized regression techniques, including other state and local economic indicators.