

**II**  
**THE VARIETY OF**  
**URBAN EXPERIENCES**

## The Texas Triangle: An Emerging Metropolitan Model in the Lone Star State

*J. H. CULLUM CLARK*

The metropolitan areas that form the “Texas Triangle”—Austin, Dallas–Fort Worth, Houston, and San Antonio—are emerging as distinctive models of 21st-century urbanism. The four Texas metros are all more growth oriented, horizontally expansive, polycentric, and diverse in their populations and industries than most peers. This Texas model has sparked inbound migration and economic vitality largely unmatched in today’s America.

Successful cities enable productivity and quality of life for their residents. But in these inflationary times they also need to succeed in containing high costs of living and doing business. The Triangle metros stand out for above-average productivity and incomes but below-average living costs. By contrast, America’s richest Northeastern and West Coast cities face intractable housing affordability problems, while most metros with more affordable housing have below-average incomes.

This chapter argues that a virtuous circle of pro-growth policy, outward expansion, and demographic and industrial diversity accounts for the Triangle’s success. Competition among localities on each metro’s outer edge has ensured robust housing growth, supporting affordability throughout the region. Competition also reinforces Texas’s tradition of business-friendly tax and regulatory policies. And the Triangle model counters the tendency of modern cities to become what Harvard University economist Edward Glaeser calls “urban rent extraction machines” protecting incumbent firms, homeowners, and other insiders at the expense of newcomers and dynamic change.<sup>1</sup>

The Triangle has tremendous momentum that will likely propel it forward through the 2020s, despite physical, financial, and ecological sustainability challenges. Numerous metros elsewhere—such as Atlanta,

Nashville, and Raleigh—are growing in similar ways, suggesting the Texas Triangle is a harbinger of how other parts of metropolitan America will develop in coming decades.

### Texas Boomtowns

The combined population of the Triangle metros reached 19.7 million in 2020, rising 21.7 percent since 2010. The Triangle, comprising 35 of Texas's 254 counties, accounts for 68 percent of the state's population and 88 percent of its 2010–20 growth (Figure 1).<sup>2</sup>

Dallas–Fort Worth and Houston ranked first and second among US metros for absolute growth from 2010 to 2020, while Austin and San Antonio were eighth and 12th (Table 1). Measured by percentage growth rates, the Austin metro ranked first by far among the nation's 50 largest, growing 32.9 percent. Some demographers argue for combining the Austin and San Antonio metros for census purposes, since they're growing into each other. Together, they would rank third for absolute growth and first among the 50 largest metros for percentage growth.<sup>3</sup>

Texas will soon have four cities among America's 10 largest (Houston at number four, San Antonio at number seven, Dallas at number nine, and Austin at number 10), the first time one state will have four of the top 10 cities. By 2040, the four-metro population will grow to 40.7 million, based on Texas Demographic Center projections. The Dallas–Fort Worth and Houston metros will then be America's third and fourth largest, passing Chicago, while a combined Austin–San Antonio area would rank between sixth and eighth.<sup>4</sup>

The principal driver of the Triangle's growth is net migration from elsewhere in the United States. Each metro ranks among the top 10 for net domestic in-migration from 2010 to 2020, with Dallas–Fort Worth first. This reflects diverse populations voting with their feet. Dallas–Fort Worth and Houston ranked first and second for Hispanic population growth between 2010 and 2020, while San Antonio and Austin ranked eighth and 11th. Dallas–Fort Worth and Houston ranked second and third for black growth over the same period, after Atlanta.<sup>5</sup> Houston and Dallas–Fort Worth have also been magnets for immigration, ranking fifth and seventh for net immigrant inflows.<sup>6</sup>

**Figure 1. Metro Areas of the Texas Triangle**

Note: For this chapter, the Texas Triangle consists of the 35 counties contained in the Austin, Dallas–Fort Worth, Houston, and San Antonio metropolitan statistical areas, as defined by the US Census. Source: The map is reproduced from Henry Cisneros et al., *The Texas Triangle: An Emerging Power in the Global Economy* (College Station, TX: Texas A&M University Press, 2021), ix. It was created by artist William Tipton.

The Texas Triangle has seen a tremendous influx of corporate relocations and people. Businesses moving to Dallas–Fort Worth between 2010 and 2020 include McKesson, Toyota Motor North America, Jacobs Engineering Group, and CBRE Group. Hewlett Packard Enterprise relocated to Houston in 2020, while Tesla and Oracle moved to the Austin area in 2021. More than 50 Fortune 500 firms now have headquarters in the Triangle.<sup>7</sup>

The Triangle’s evolution into an integrated mega-region will likely further enhance its corporate appeal. Together, the Triangle metros enjoy powerful positions in the US economy: the leading technology center between

Table 1. Growth of the Texas Triangle Metros

Metropolitan Statistical Area (MSA)	POPULATION			NET DOMESTIC IN-MIGRATION			NET IMMIGRATION		
	2010	2020	Percentage Growth	Absolute Net Migration	Percentage of 2010 Population	Rank Among All MSAs	Absolute Net Migration	Percentage of 2010 Population	Rank Among All MSAs
Dallas-Fort Worth	6,392,097	7,694,138	20.4%	507,082	7.9%	1	256,511	4.0%	7
Houston	5,947,185	7,154,478	20.3%	286,697	4.8%	5	357,316	6.0%	5
San Antonio	2,153,021	2,590,732	20.3%	240,407	11.2%	8	46,566	2.2%	31
Austin	1,727,514	2,295,303	32.9%	342,570	19.8%	4	67,765	3.9%	21
<b>Average: Top 50 MSAs</b>			<b>9.9%</b>		<b>1.9%</b>			<b>3.3%</b>	
<b>Average: All MSAs</b>			<b>6.2%</b>		<b>1.2%</b>			<b>1.9%</b>	

Source: US Census data.

the coasts (Austin), dominant centers for energy and space plus the world's largest medical complex (Houston), and leading heartland centers for engineering, transportation, and business services (Dallas–Fort Worth).<sup>8</sup>

### The Texas Triangle Way of Urbanism

The Triangle metros share many key commonalities, despite their differences. First, each stands out for growth-oriented policies. This heritage reflects small-government traditions deeply embedded in Texas politics and pragmatic political styles in each city. All five core cities emerged from the 1960s as New South metropolises where dominant business establishments moved past Confederate nostalgia and promoted investment in infrastructure and education.<sup>9</sup>

Today, each metro ranks in the top 25 percent of America's 50 largest on a Southern Methodist University economic freedom index measuring tax, spending, and labor policies.<sup>10</sup> Each ranks among the top third for permissive housing policies, based on a University of Pennsylvania land-use index.<sup>11</sup> Houston, famous for its lack of zoning, loosened land-use rules further in 1999, even as cities elsewhere were tightening restrictions.<sup>12</sup>

Growth-friendly policies have allowed development to keep up with demand better than in most metros. All four metros rank high for housing permits per resident between 2010 and 2019 and lower-than-average home-price-to-income ratios, though price pressures grew from 2012 to 2021.<sup>13</sup>

Second, the Triangle metros are more horizontally expansive than most comparable areas. Development and population growth have leaned toward each metro's expanding edge rather than infill development near downtown. Nine of the 20 US counties over 50,000 people experiencing the fastest 2010–20 growth rates were suburban counties in the Triangle, including top-ranked Hays County (in the Austin metro) and runner-up Comal County (in the San Antonio metro). (See Table 2.) Collin and Denton counties, north of Dallas, are together now home to over two million people, more than all but four US cities. By contrast, the principal core counties of the Dallas–Fort Worth and Houston metros, Dallas and Harris counties, experienced modest net domestic *outflows* between 2010 and

**Table 2. America's 20 Fastest-Growing Counties with a Population over 50,000**

Rank	County	Metropolitan Statistical Area	Population		
			2010	2020	% Growth
1	Hays County, TX	Austin, TX	158,086	241,365	52.7%
2	Comal County, TX	San Antonio, TX	109,311	164,812	50.8%
3	Sumter County, FL	The Villages, FL	94,286	139,018	47.4%
4	St. Johns County, FL	Jacksonville, FL	191,268	278,715	45.7%
5	Dallas County, IA	Des Moines, IA	66,751	96,963	45.3%
6	Williamson County, TX	Austin, TX	426,568	617,855	44.8%
7	Osceola County, FL	Orlando, FL	269,841	385,315	42.8%
8	Fort Bend County, TX	Houston, TX	590,177	839,706	42.3%
9	Forsyth County, GA	Atlanta, GA	176,736	250,847	41.9%
10	Lincoln County, SD	Sioux Falls, SD	45,185	63,019	39.5%
11	Rockwall County, TX	Dallas–Fort Worth, TX	78,971	109,888	39.1%
12	Walton County, FL	Crestview–Fort Walton Beach, FL	55,214	76,648	38.8%
13	Denton County, TX	Dallas–Fort Worth, TX	665,833	919,324	38.1%
14	Brunswick County, NC	Wilmington, NC	108,070	149,039	37.9%
15	Kaufman County, TX	Dallas–Fort Worth, TX	103,880	143,198	37.8%
16	Montgomery County, TX	Houston, TX	459,223	626,351	36.4%
17	Collin County, TX	Dallas–Fort Worth, TX	787,102	1,072,069	36.2%
18	Horry County, SC	Myrtle Beach, SC	270,295	365,449	35.2%
19	Loudoun County, VA	Washington, DC	315,486	422,784	34.0%
20	Washington County, UT	St. George, UT	138,397	184,913	33.6%

Source: US Census data.

2020.<sup>14</sup> (They still grew moderately, thanks to immigration and natural increase.) In the Dallas–Fort Worth and San Antonio metros, virtually all office space under construction today is in exurban job centers.<sup>15</sup>

Austin is a special case: The capitol building and the University of Texas flagship campus have ensured vitality in the urban core. But even there,

the fastest growth is occurring along the metro's edge. Tesla is building its new headquarters and eight-million-square-foot "Gigafactory" in Austin's extraterritorial jurisdiction, outside city limits.

Third, the Triangle metros are extraordinarily polycentric, in both political organization and built environment. Politically, they are organized in a kaleidoscopic variety of governance forms. Collin County has more than 30 cities and towns. Harris County contains 2.1 million people living in unincorporated areas, more than 43 percent of the county's population, with services provided by diverse municipal utility districts and other entities.<sup>16</sup> Each metro contains multiple urbanizing suburbs—places fulfilling all of a core city's functions from schools to job centers and recreation. Some of these cities—such as Frisco, Georgetown, Katy, McKinney, New Braunfels, and Sugar Land—are among America's fastest growing.<sup>17</sup>

As for the built environment, each metro consists of widely dispersed town centers and other walkable developments—and relatively small traditional downtowns. In each metro, the downtown core accounts for a smaller share of total office space than in most peer metros. A few suburban centers, such as the Katy Highway Energy Corridor and West Plano, rival their downtown counterparts for daytime working populations.<sup>18</sup>

Fourth, the Triangle metros are exceptionally diverse in their demographic and industrial composition. Houston and Dallas rank as the first and third most socio-ethnically diverse cities in the United States, based on a 2019 WalletHub study.<sup>19</sup> Each metro but Houston has an unusually diverse employer base, according to Moody's. Even Houston, long the world's energy capital, has a more diverse economy than the Los Angeles, New York, San Francisco, or Seattle metros do.<sup>20</sup> The popular image of a Texas economy dominated by oil and cattle ranching is outdated.

These features of the Triangle model have proved mutually reinforcing. Pro-growth policies allow rapid expansion, which acts as a pressure valve containing housing prices throughout each metro.

Better-than-average affordability promotes diversity. High housing and business costs can crowd out all but the highest value-added industries and wealthiest residents, as the exodus of non-technology businesses and middle-income people from Silicon Valley demonstrates. Affordability is an underappreciated force for countering tendencies toward monoculture.<sup>21</sup> Commerce-friendly policies also foster diversity, since excessive



regulations affect lower value-added industries and minority-owned firms more than large companies that can absorb the costs.<sup>22</sup>

Expansion has created an array of midsize cities from what were once country towns. These cities often have been more successful than larger peers in sustaining support for continued growth and countering NIMBYism. Citizens have more reason to believe they will enjoy quality-of-life amenities made possible by rising tax revenues and not just suffer the congestion.<sup>23</sup> Polycentric political geography creates intense competition for people and businesses, promoting investment in schools, roads, and green space and reinforcing commerce-friendly policies.<sup>24</sup>

Finally, midsize Triangle suburbs have successfully nurtured civic engagement and trust among citizens, perhaps because people have more opportunities to engage in decision-making than they do in large cities, contributing to social capital. Strong social capital bolsters support for investment in schools and other public goods and contributes to low crime rates.<sup>25</sup> Ideologically driven narratives attributing the Triangle's success to anti-government sensibilities generally pay inadequate attention to these civic benefits from polycentric geography.

The polycentric built environment also helps contain commuting times and congestion, since most residents commute to relatively nearby suburban job centers on well-maintained roads. Mean commuting times remain in line with national averages, despite the Triangle metros' large population and expanse—sustaining support for growth-oriented policies.<sup>26</sup>

### **Advantages of Texas Urbanism**

Historically, successful cities have always been places that achieve strong agglomeration economies—productivity and innovation benefits arising from people and ideas coming together in concentrated locations. It helps, as the Texas cities demonstrate, to have large, well-educated populations and top-tier knowledge-generating institutions.<sup>27</sup> Urbanist Jane Jacobs argued that it also helps to have diverse industries, since innovation often arises from serendipitous collisions of ideas from disparate fields—a prediction verified by abundant research.<sup>28</sup> Prosperous cities have always benefited from enterprising newcomers, including immigrants.<sup>29</sup> And

they ensure that people, goods, and ideas can move efficiently around the city.<sup>30</sup>

As economies grow more knowledge-centric, greater specialization means cities must have increasingly large, diverse workforces to generate strong agglomeration benefits. This means growing upward or outward. In practice, virtually all have primarily grown horizontally in recent decades. Improving transportation and preferences for greater space have resulted in cities becoming physically larger and less dense in their cores.<sup>31</sup> Meanwhile, information technology has reduced the need for dense centers like lower Manhattan.<sup>32</sup>

COVID-19 has amplified the advantages of polycentric geography, strengthening preferences for moderate density and reducing benefits from living near traditional downtowns. Migration into the Triangle has accelerated, while employment in most coastal cities remains below pre-pandemic levels.<sup>33</sup>

The Triangle metros have succeeded better than most in accommodating big, diverse workforces by growing large but remaining relatively manageable for moving people and goods. They've also become more diverse economies over time, even as large coastal metros have tended toward monoculture.

The Triangle metros perform above average for living standards, as measured by 2018 median incomes adjusted for housing and other costs, based on George W. Bush Institute–Southern Methodist University Economic Growth Initiative studies (Table 3).<sup>34</sup> Living standards are 20 percent above the US metro average in the Austin metro, 14 percent ahead in Dallas–Fort Worth, 9 percent ahead in Houston, and 5 percent ahead in San Antonio.

But the Triangle's edge becomes more pronounced when one disaggregates data by ethnicity, a crucial factor in the future of American cities. Living standards in the Triangle metros range from 18 percent to 32 percent above all-metro averages for black residents, 6 percent to 15 percent ahead for Hispanics, 5 percent to 33 percent ahead for Asian Americans, and 20 percent to 32 percent ahead for whites.<sup>35</sup>

The Triangle metros have managed trade-offs between investing in public goods and maintaining moderate tax burdens better than most peers. The common narrative that they've succeeded by winning a “race to the

**Table 3. High Living Standards in the Texas Triangle**

MSA	Standard of Living				
	Overall	Black	Hispanic	Asian	White
Dallas–Fort Worth	1.14	1.18	1.09	1.30	1.26
Houston	1.09	1.18	1.06	1.23	1.32
San Antonio	1.05	1.32	1.10	1.05	1.20
Austin	1.20	1.26	1.15	1.33	1.25
<b>Average: Top 50 MSAs</b>	<b>1.08</b>	<b>1.05</b>	<b>1.03</b>	<b>1.12</b>	<b>1.13</b>
<b>Average: All MSAs</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>

Note: The mean for all 382 metros for each specific group is 1. Data are from 2018.

Source: Author's analysis of US Census data. See also J. H. Cullum Clark, *The New Geography of Opportunity: Case Studies from a Changing Economic Landscape*, George W. Bush Institute–Southern Methodist University Economic Growth Initiative, January 2022, [https://gwbceneter.imgix.net/Publications/Reports/gwbi\\_New\\_Geography\\_of\\_Opp\\_2.2.pdf](https://gwbceneter.imgix.net/Publications/Reports/gwbi_New_Geography_of_Opp_2.2.pdf).

bottom” on taxes doesn’t hold up.<sup>36</sup> The Triangle metros have invested more successfully than most in public goods, from road infrastructure to premier medical institutions like Houston’s MD Anderson Cancer Center and Dallas’s University of Texas Southwestern Medical Center. The Triangle’s adult population share with a bachelor’s degree or higher is middle of the pack among America’s top 50 metros—hardly evidence of a race to the bottom—though the Triangle is unusually dependent on importing skilled workers from elsewhere.<sup>37</sup>

Also, high-tax metros don’t necessarily deliver better-than-average outcomes. Of the 26 top 50 metros in states with above-average tax burdens, 12 have below-average population shares with a bachelor’s or higher, and 14 have below-average living standards.<sup>38</sup> High tax and regulatory burdens can just as easily translate to large transfers to rent-seeking special interests, as Glaeser argues.<sup>39</sup>

While high-tax, high-amenity models have proved appealing to top-level professionals in the largest coastal cities and retirees in certain localities, the Triangle metros are thriving because they offer an attractive mix of opportunity, living costs, and amenities to a wide variety of working people.

## Challenges

One distinctive challenge facing the Triangle is separation between booming job centers and vast left-behind areas in core cities. In places like Southern Dallas, home to approximately 600,000 mostly black and Hispanic people, accessible jobs are scarce. Weak transit systems constrain opportunities for people without automobiles.<sup>40</sup> The Triangle's core cities—especially Austin and Dallas—suffer from dysfunctional housing markets and explosive price appreciation. Educational outcomes remain below US averages for the Triangle's Hispanic population, reflecting insufficient English-as-a-second-language instruction and side effects of poverty.<sup>41</sup>

The Triangle also depends on continuing expansion, since housing growth in outer-edge suburbs plays a pivotal role in preserving cost-of-living advantages. The Triangle experiment may falter if growing suburbs turn against development or if Texas fails to address these areas' complex infrastructure needs. Another challenge is building infrastructure that suburban tax bases will sustainably support so suburbs can maintain competitive tax rates and amenities.<sup>42</sup>

Finally, the horizontally expansive Triangle model poses ecological sustainability issues. The mega-region's suburbs are paving over vast acres of grasslands and, in Houston's case, sensitive wetlands. Inadequate attention to green space may undermine the appeal of these cities as they age. Water supplies might fail to keep up with growth.<sup>43</sup> Carbon taxes could undermine the case for living in outer-edge suburbs.

### A Harbinger of Metropolitan America's Future?

Texas urbanism is more applicable to conditions facing most US cities than the models represented by leading Northeast and West Coast metros. It's easier to pursue growth-oriented policies and outward expansion than to re-create world-leading technology or finance centers. Smaller versions of the model are emerging across the Sunbelt and in midwestern metros such as Columbus and Indianapolis. Some urbanizing suburbs elsewhere—such as Apex, North Carolina; Carmel, Indiana; Leesburg, Virginia; and New Albany, Ohio—are growing rapidly too.

At the same time, it's unlikely that Triangle-style urbanism will take root beyond several dozen metros. One limiting factor is that the model generates superior living standards only in metros large enough to achieve strong agglomeration economies. Very few metros below one million people with low tax rates and home prices but only moderate educational attainment—including in Texas—deliver above-average living standards. In the meantime, numerous large metros outside the Sunbelt are moving toward even more restrictive regulatory policies.<sup>44</sup>

Still, more than 20 percent of Americans live in metros that broadly fit the Triangle model—and they're all booming.<sup>45</sup> Whether they sustain high living standards and rapid growth will profoundly influence 21st-century urbanism. The eyes of America are on the Texas Triangle, the new model of urban growth for coming decades.

### Acknowledgments

I'm grateful to Henry Cisneros, David Hendricks, and William Fulton, with whom I wrote *The Texas Triangle: An Emerging Power in the Global Economy* (Texas A&M University Press, 2021), and to Joel Kotkin, with whom I wrote "Big D Is a Big Deal," on which this chapter draws.<sup>46</sup>

### Notes

1. John H. Cochrane, "The Future of Cities. A Conversation with Harvard's Ed Glaeser," October 28, 2020, in *The Grumpy Economist*, podcast, <https://johnhcochrane.blogspot.com/2020/10/podcast-with-ed-glaeser.html>. See also Edward Glaeser and David Cutler, *Survival of the City: Living and Thriving in an Age of Isolation* (New York: Penguin Press, 2021), 3–24.

2. Author's calculations based on data from the US Census Bureau, Population Estimates Program, 2010 and 2020.

3. Author's calculations based on data from the US Census Bureau, Population Estimates Program, 2010 and 2020; and Henry Cisneros et al., *The Texas Triangle: An Emerging Power in the Global Economy* (College Station, TX: Texas A&M University Press, 2021), 184.

4. Author's calculations based on data from the US Census Bureau, Population Estimates Program, 2010 and 2020; and Texas Demographic Center projections cited in Cisneros et al., *The Texas Triangle*, 258–60.

5. Author's calculations based on data from the US Census Bureau, Population Estimates Program, 2010 and 2020.

6. Author's calculations based on data from the US Census Bureau, Population Estimates Program, 2010 and 2020. For analysis of data on immigrant inflows into US cities, see also Joel Kotkin et al., "The Emergence of the Global Heartland," Heartland Forward, May 26, 2021, <https://heartlandforward.org/case-study/the-emergence-of-the-global-heartland>; and Charles Blain et al., *Upward Mobility*, Urban Reform Institute, October 2020, [https://urbanreforminstitute.org/wp-content/uploads/2020/10/URI-Upward-Mobility-Report\\_2020.pdf](https://urbanreforminstitute.org/wp-content/uploads/2020/10/URI-Upward-Mobility-Report_2020.pdf).

7. Hartman Income REIT Management, "Corporate Relocations to Texas on the Rise," July 2022, <https://www.hi-reit.com/moving-to-texas>.

8. Cisneros et al., *The Texas Triangle*, 84. Houston's Texas Medical Center is the world's largest contiguous medical complex. Texas Medical Center, "About Us," <https://www.tmc.edu/about-tmc>.

9. Stephen Harrigan, *Big Wonderful Thing: A History of Texas* (Austin, TX: University of Texas Press, 2019); Darwin Payne, *Dallas Citizens Council: An Obligation of Leadership* (Dallas, TX: Dallas Citizens Council, 2008); Stephen L. Klineberg, *Prophetic City: Houston on the Cusp of a Changing America* (New York: Avid Reader Press, 2020); and Michael Oluf Emerson and Kevin T. Smiley, *Market Cities, People Cities: The Shape of Our Urban Future* (New York: New York University Press, 2018).

10. Author's analysis of data from Southern Methodist University Bridwell Institute for Economic Freedom, provided by Bridwell Institute researchers. See Dean Stansel, *U.S. Metropolitan Area Economic Freedom Index*, Reason Foundation, January 2019, <https://reason.org/wp-content/uploads/us-metropolitan-area-economic-freedom-index.pdf>; and Imran Arif et al., "Economic Freedom and Migration: A Metro Area-Level Analysis," *Southern Economic Journal* 87, no. 1 (2020): 170–90, <https://www.uwlax.edu/globalassets/centersprograms/menard/economic-freedom-and-migration.pdf>.

11. Joseph Gyourko, Albert Saiz, and Anita Summers, "A New Measure of the Local Regulatory Environment for Housing Markets: The Wharton Residential Land Use Regulatory Index," *Urban Studies* 45, no. 3 (2008): 693–729, <https://journals.sagepub.com/doi/10.1177/0042098007087341>.

12. Emerson and Smiley, *Market Cities, People Cities*, 50.

13. Permit data are from Texas A&M University, Texas Real Estate Research Center, "Building Permits," <https://www.recenter.tamu.edu/data/building-permits>. Median house price to median household income ratios are from Wendell Cox, *Demographia International Housing Affordability: 2021 Edition*, Urban Reform Institute and Frontier Centre for Public Policy, February 2021, <http://www.demographia.com/dhi2021.pdf>. See also annual Demographia reports for previous years at Demographia, website, <https://www.demographia.com>.

14. Author's calculations based on data from the US Census Bureau, Population Estimates Program, 2010 and 2020.

15. Data from market reports from Transwestern, “Market Reports,” <https://transwestern.com/market-reports?citys=&PropertyType=>.

16. Harris County Office of Management and Budget, “Population Report—January 2019,” [https://budget.harriscountytexas.gov/doc/Budget/fy2020/approved\\_budget/FY20\\_Population\\_Report.pdf](https://budget.harriscountytexas.gov/doc/Budget/fy2020/approved_budget/FY20_Population_Report.pdf).

17. According to US Census data, population growth rates from 2010 to 2020 for these cities were as follows: Frisco grew 92.0 percent to 224,566 from 116,989, Georgetown grew 41.7 percent to 67,176 from 47,400, Katy grew 88.7 percent to 26,609 from 14,102, McKinney grew 63.2 percent to 214,035 from 131,117, New Braunfels grew 56.6 percent to 90,403 from 57,740, and Sugar Land grew 49.6 percent to 117,910 from 78,817. For further analysis of urbanizing suburban cities across the United States, see J. H. Cullum Clark, *The New Geography of Opportunity: Case Studies from a Changing Economic Landscape*, George W. Bush Institute–Southern Methodist University Economic Growth Initiative, January 2022, [https://gwbcenter.imgix.net/Publications/Reports/gwbi\\_New\\_Geography\\_of\\_Opp\\_2.2.pdf](https://gwbcenter.imgix.net/Publications/Reports/gwbi_New_Geography_of_Opp_2.2.pdf).

18. As of 2021, central business district office space as a share of total metro-area inventory is as follows: Austin, 19.2 percent; Dallas–Fort Worth, taking both core downtowns together, 13.9 percent; Houston, 21.0 percent; and San Antonio, 13.5 percent. Author’s analysis based on data from third-quarter 2021 Transwestern reports on individual metro areas. Transwestern, “Market Reports.” Central business districts generally account for 25 percent to 40 percent of office space in most large metros covered by Transwestern’s reports.

19. Fort Worth, Austin, and San Antonio ranked 11th, 19th, and 25th, respectively. WalletHub measures diversity across a range of ethnic and socioeconomic variables by the Herfindahl–Hirschman Index, which assigns high scores to cities whose population is spread across a wide variety of groups. Adam McCann, “Most Diverse Cities in the U.S.,” WalletHub, April 19, 2021, <https://wallethub.com/edu/most-diverse-cities/12690>.

20. Data from Moody’s, website, <https://www.moody.com>.

21. Dee Gill, “Silicon Valley Syndrome: Measuring How Nontech Firms and Workers Suffer,” UCLA Anderson Review, January 27, 2021, <https://anderson-review.ucla.edu/silicon-valley-syndrome-measuring-how-nontech-firms-and-workers-suffer>; Doris Kwon and Olav Sorenson, “The Silicon Valley Syndrome” (working paper, Stockholm School of Economics, Stockholm, Sweden, September 13, 2021), [https://www.hhs.se/contentassets/abff8ba8d9b44f108c0cbdb766bfff28/syndrome\\_draft\\_7.pdf](https://www.hhs.se/contentassets/abff8ba8d9b44f108c0cbdb766bfff28/syndrome_draft_7.pdf); and *Economist*, “Silicon Valley Is Changing, and Its Lead over Other Tech Hubs Narrowing,” September 1, 2018, <https://www.economist.com/briefing/2018/09/01/silicon-valley-is-changing-and-its-lead-over-other-tech-hubs-narrowing>.

22. Mary Beth Faller, “ASU Research Shows How Deregulation Could Help Minority Businesses,” Arizona State University, October 21, 2021, <https://news.asu.edu/20211021-arizona-impact-asu-research-shows-how-deregulation-could-help-minority-businesses>; and C. Steven Bradford, “Does Size Matter? An Economic Analysis of Small Business Exemptions from Regulation,” *Journal of Small and Emerging Business Law* 8, no. 1 (2004), <https://www.sec.gov/info/smallbus/acsec/bradford-doessizematter.pdf>. See also Cochrane, “The Future of Cities”; and Glaeser and Cutler, *Survival of the City*, 170, 199–203.

23. Urban planning scholar Nicholas Phelps argues that cities' ability to sustain pro-growth land-use policies rests on an implicit bargain: Homeowners endorse continued growth to provide for improvements to quality-of-life amenities and hold property tax burdens down. The American Enterprise Institute's Howard Husock further argues that small-to-midsize cities can achieve this bargain better than larger cities can because their citizens rationally believe the incremental tax revenues resulting from continued growth will benefit them. Nicholas A. Phelps, "Suburbs in the Metropolitan Economy," in *Infinite Suburbia*, ed. Alan M. Berger and Joel Kotkin (New York: Princeton Architectural Press, 2017), 315–23; and Howard Husock, "Suburban Government and the Virtues of Local Control," in *Infinite Suburbia*, ed. Alan M. Berger and Joel Kotkin (New York: Princeton Architectural Press, 2017), 662–65.

24. Numerous Triangle suburbs have won national accolades for their quality-of-life amenities. For instance, Plano ranks as the best city in the United States for "options for entertainment and relaxation at the right price point," according to a WalletHub survey. In another ranking of America's 150 largest cities for quality of life, Frisco was first, and McKinney was third. Andy Olin, "What Is It About Plano?," Rice University, Kinder Institute for Urban Studies, January 28, 2021, <https://kinder.rice.edu/urbanedge/2021/01/28/wallethub-plano-best-cities-lists>.

25. For evidence that the suburban counties of the Triangle have relatively high stocks of "social capital," see US Congress, Joint Economic Committee, "The Geography of Social Capital in America," April 11, 2018, <https://www.jec.senate.gov/public/index.cfm/republicans/2018/4/the-geography-of-social-capital-in-america>. Husock points to the advantages of small-to-midsize cities in nurturing social capital in Husock, "Suburban Government and the Virtues of Local Control." For evidence that communities with strong social capital are better able to solve collective action problems and sustain support for investment in public goods, see Edward L. Glaeser, "The Formation of Social Capital," Organisation for Economic Co-operation and Development, <https://www.oecd.org/innovation/research/1824983.pdf>; Tammy Leonard, Rachel T. A. Croson, and Angela C. M. de Oliveira, "Social Capital and Public Goods," *Journal of Socio-Economics* 39, no. 4 (August 2010): 474–81, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2485547#](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2485547#); Steven N. Durlauf and Marcel Fafchamps, "Social Capital" (working paper, National Bureau of Economic Research, Cambridge, MA, May 2004), <https://www.nber.org/papers/w10485>; and Robert Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon and Schuster, 2000).

26. Author's analysis of data from the US Census Bureau, American Community Survey, 2020 five-year estimates.

27. Paul Krugman, "Increasing Returns and Economic Geography," *Journal of Political Economy* 99, no. 3 (1991): 483–99, [https://pr.princeton.edu/pictures/g-k/krugman/krugman-increasing\\_returns\\_1991.pdf](https://pr.princeton.edu/pictures/g-k/krugman/krugman-increasing_returns_1991.pdf); Paul Krugman and Anthony J. Venables, "Globalization and the Inequality of Nations" (working paper, National Bureau of Economic Research, Cambridge, MA, April 1995), <https://www.nber.org/papers/w5098>; Glenn Ellison and Edward L. Glaeser, "Geographic Concentration in U.S. Manufacturing Industries: A Dartboard Approach" (working paper, National Bureau of Economic Research, Cambridge, MA, August 1994), <https://www.nber.org/papers/w4840>; Enrico Moretti, "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level



Production Functions,” *American Economic Review* 94, no. 3 (June 2004): 656–90, <https://www.aeaweb.org/articles?id=10.1257/0002828041464623>; Edward Glaeser, *The Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier* (New York: Penguin Books, 2011); Enrico Moretti, *The New Geography of Jobs* (New York: Mariner Books, 2012); and Jorge de la Roca and Diego Puga, “Learning by Working in Big Cities,” *Review of Economic Studies* 84, no. 1 (January 2017): 106–42, <https://academic.oup.com/restud/article/84/1/106/2669971>.

28. Jane Jacobs, *The Economy of Cities* (New York: Vintage, 1970); Edward L. Glaeser et al., “Growth in Cities,” *Journal of Political Economy* 100, no. 6 (December 1992): 1126–52; and Vernon Henderson, Ari Kuncoro, and Matt Turner, “Industrial Development in Cities,” *Journal of Political Economy* 103, no. 5 (October 1995): 1067–90, <https://www.journals.uchicago.edu/doi/abs/10.1086/262013>.

29. For historical perspectives on the role of newcomers, including immigrants, in creating highly productive cities, see Fernand Braudel and Siân Reynold, trans., *Civilization and Capitalism, 15th–18th Century, Vol. II: The Wheels of Commerce* (New York: Harper & Row, 1979), 472–81; Fernand Braudel and Siân Reynold, trans., *Civilization and Capitalism, 15th–18th Century, Vol. III: The Perspective of the World* (New York: Harper & Row, 1984), 30, 130, 186–67; and J. H. Cullum Clark, *The Evolving Geography of Opportunity: Leading Cities of the Past, Present, and Future*, George W. Bush Institute–Southern Methodist University Economic Growth Initiative, January 2022, [https://gwbcenter.imgix.net/Publications/Reports/gwbi\\_Evolving\\_Geography\\_of\\_Opp\\_2.1.pdf](https://gwbcenter.imgix.net/Publications/Reports/gwbi_Evolving_Geography_of_Opp_2.1.pdf). Forthcoming research from the George W. Bush Institute–Southern Methodist University Economic Growth Initiative will document immigrants’ contributions to prosperity and opportunity in contemporary US cities.

30. For an excellent discussion of why cities need to ensure that integrated labor and goods markets can operate efficiently across space, see Alain Bertaud, *Order Without Design: How Markets Shape Cities* (Boston, MA: Massachusetts Institute of Technology Press, 2018).

31. Shlomo Angel et al., “Engaging with the Planet’s Urban Expansion,” in *Infinite Suburbia*, ed. Alan M. Berger and Joel Kotkin (New York: Princeton Architectural Press, 2017), 165–68.

32. For evidence that 20th-century local economies benefited from high density, see Henderson, Kuncoro, and Turner, “Industrial Development in Cities.”

33. Tasha Tsiaperas, “North Texas Bucks National Trend, Gains Jobs During Pandemic,” *Axios Dallas*, December 21, 2021, <https://www.axios.com/local/dallas/2021/12/21/north-texas-gains-jobs-during-pandemic>; and Erica Pandey, “The Wealthy Exodus from Superstar Cities,” *Axios*, May 8, 2021, <https://www.axios.com/where-americans-are-moving-during-pandemic-b1c5b670-22ac-4904-9b4c-414fc2eb3baf.html>.

34. In two recent studies, the George W. Bush Institute–Southern Methodist University Economic Growth Initiative calculates “living standards” for all US metro areas by adjusting median household income for local living costs, including costs of homeownership, drawing on US Census data from the American Community Survey for 2019 and a method developed by Wendell Cox of the Urban Reform Institute. J. H. Cullum Clark, *Cities and Opportunity in 21st Century America*, George W. Bush Institute–Southern Methodist University Economic Growth Initiative, November 2020, <http://gwbcenter.imgix>.

net/Publications/Reports/gwbi\_2021\_Cities&Opportunity.pdf; and Clark, *The New Geography of Opportunity*. See also Urban Reform Institute, “2020 Standard of Living Index,” May 2020, <https://urbanreforminstitute.org/2020/05/2020-standard-of-living-index>. The George W. Bush Institute–Southern Methodist University Economic Growth Initiative studies use only American Community Survey data for housing values, while Cox’s method includes other sources, and the George W. Bush Institute–Southern Methodist University Economic Growth Initiative studies extend the method to cover all 382 US metros.

35. Clark, *The New Geography of Opportunity*.

36. For one articulation of this narrative, see *New York Times*, “Race to the Bottom,” December 5, 2012, <https://www.nytimes.com/2012/12/06/opinion/race-to-the-bottom.html>. For a refutation of this narrative, see Steven Malanga, “Gov. Perry and the ‘Race to the Bottom’ Myth,” *RealClearMarkets*, September 7, 2011, [https://www.realclearmarkets.com/articles/2011/09/07/gov\\_perry\\_and\\_the\\_race\\_to\\_the\\_bottom\\_myth\\_99236.html](https://www.realclearmarkets.com/articles/2011/09/07/gov_perry_and_the_race_to_the_bottom_myth_99236.html).

37. In aggregate, 33.9 percent of the Triangle’s population over age 25 had a bachelor’s degree or higher as of 2018. Of the other 46 metros in the nation’s top 50, 24 had higher attainment levels, and 22 had lower. Author’s analysis of data from the US Census Bureau, American Community Survey, 2018 five-year estimates.

38. Author’s analysis of data from the US Census Bureau, American Community Survey, 2018 five-year estimates. The author draws state tax burdens from 2019 Tax Foundation data. Tax Foundation, website, <https://taxfoundation.org>. See also Clark, *Cities and Opportunity in 21st Century America*; and Clark, *The New Geography of Opportunity*.

39. Cochrane, “The Future of Cities”; and Glaeser and Cutler, *Survival of the City*, 3–24.

40. For purposes of this paragraph, the author defines Southern Dallas as the area south of Interstate 30 plus West Dallas north of Interstate 30 and south of the Trinity River. From one location in the heart of Southern Dallas, jobs reachable within a 30-minute one-way commute via public transit declined 17 percent between 2000 and 2017, based on data provided to the author by Cox.

41. Author’s analysis of data from the US Census Bureau, American Community Survey, 2020 five-year estimates; and Cisneros et al., *The Texas Triangle*, 21, 242–47, 269–71.

42. Author and urbanist Charles L. Marohn Jr. argues in his book *Strong Towns: A Bottom-Up Revolution to Rebuild American Prosperity* that fast-growing suburbs risk building a “disposable” infrastructure destined to wear out within several decades without creating sufficient property value per acre to maintain and modernize it. See Charles L. Marohn Jr., *Strong Towns: A Bottom-Up Revolution to Rebuild American Prosperity* (New York: Wiley, 2019).

43. Cisneros et al., *The Texas Triangle*, 106, 162, 254–55, 281.

44. For evidence showing an increase in restrictive land-use rules in numerous metros, see Joseph Gyourko, Jonathan S. Hartley, and Jacob Krimmel, “The Local Residential Land-Use Regulatory Environment Across U.S. Housing Markets: Evidence from a New Wharton Index,” *Journal of Urban Economics* 124 (July 2021), <https://www.sciencedirect.com/science/article/abs/pii/S009411902100019X>. For evidence that growing restrictions are associated with upward pressure on housing prices in local housing

markets, see Joseph Gyourko and Jacob Kimmel, “The Impact of Local Residential Land-Use Restrictions on Land Values Across and Within Single Family Housing Markets” (working paper, National Bureau of Economic Research, Cambridge, MA, July 2021), <https://www.nber.org/papers/w28993>. For evidence that state and local business regulations are increasing in various parts of the United States, see Wolters Kluwer, “Top Regulated States for Business License—What’s Driving Rising Enforcement,” August 3, 2021, <https://www.wolterskluwer.com/en/expert-insights/top-regulated-states-for-business-license-whats-driving-rising-enforcement>; and Leigh Buchanan, “Local Regulations Affecting Businesses Are Increasing Faster Than Ever Before,” Inc., September 4, 2017, <https://www.inc.com/leigh-buchanan/why-local-regulations-are-increasing.html>.

45. For this calculation, the author includes the four Texas Triangle metro areas plus 16 other metros with population over one million: Atlanta, Charlotte, Columbus, Grand Rapids, Indianapolis, Jacksonville, Kansas City, Las Vegas, Nashville, Oklahoma City, Orlando, Phoenix, Raleigh, Richmond, Tampa, and Tucson.

46. Cisneros et al., *The Texas Triangle*; and Joel Kotkin and Cullum Clark, “Big D Is a Big Deal,” *City Journal*, Summer 2021, <https://www.city-journal.org/dallas-fort-worth>.