# State Fiscal Pressures and CRE

Spring 2018

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## EXECUTIVE SUMMARY

- The Praedium Group and Ten-X Research have jointly produced this report, which analyzes the potential impact on real estate demand from the build-up of federal, state and local tax pressures influencing US population migration patterns. This report follows up on earlier studies (beginning in 2010) that Praedium and Ten-X have performed on this subject, which has subsequently become an issue that has received considerable media attention.

- In our view, the level of state and municipal taxes, as well as potential issues caused by unfunded pension liabilities and other committed liabilities could become an important factor in future regional growth patterns, thereby influencing commercial and residential real estate trends. We recognize that such trends will be impacted by other market attributes as well, such as specific real estate supply and demand factors, which will continue to play a role in regional growth patterns.

- Our initial state screening analysis consisted of several layers to take into account multiple factors, with each layer building upon the prior analysis. This primary analysis rated the states by their current tax burden, pension liabilities and projected investment potential.

- We subsequently expanded our initial analysis by evaluating specific economic and real estate factors, incorporating: cyclical recovery dynamics for individual markets in order to capture supply-side issues; property market-specific differences; and other economic issues that include long-term factors other than taxation.

- **We view this analysis as a thought-provoking exercise that can help inform real estate investors in their strategies as they navigate the next real estate cycle. The following states emerge from this analysis as potential targets of opportunity:**

Florida
North Carolina
Arizona
Utah
Georgia
Indiana
New York
Tennessee
Texas
Oregon
Virginia
Washington

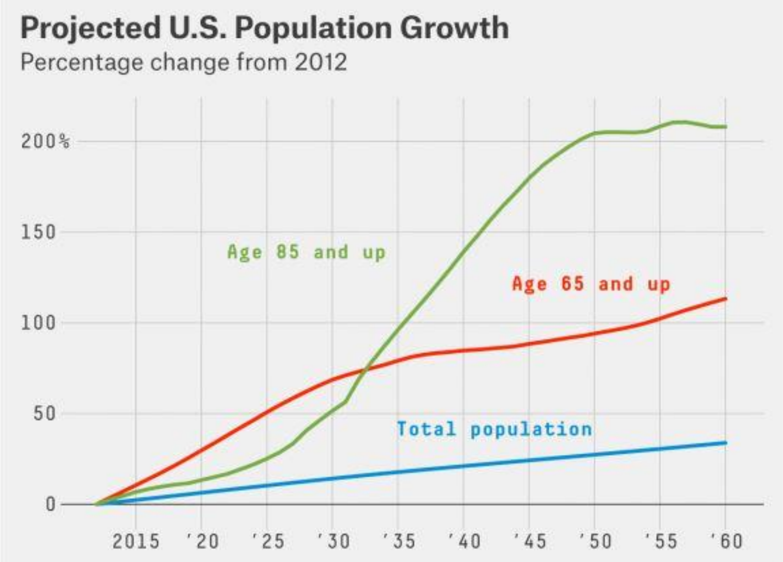
## US State and Local Fiscal Pressures

In 2010 and 2012, in earlier stages of the United States recovery from the Great Recession and financial crisis, Praedium and Ten-X Research published joint reports analyzing the fiscal pressures on state governments and how the resulting responses to those fiscal pressures may affect demographic patterns, economic growth trajectories and commercial real estate demand.

Pension funding across the nation continues to struggle with several issues including an aging baby boomer population, optimistic expectations for investment returns, and significant benefit promises. Many state and local governments have and continue to kick this can down the road rather than getting a handle on runaway costs, prompting some to view pension liabilities as one of the stressors possibly accelerating the next financial crisis.

A significant portion of the US population is growing older, and that is a simple but persistent issue facing pension funds which will continue to exacerbate the problem. As baby boomers age, they begin to outweigh contributions of the currently employed younger generations, placing more stress on pensions generally.

An Aging US Population Will Intensify Pension Issues




*Sources: FiveThirtyEight, US Census Bureau*

Benefit commitments and optimistic assumptions on investment returns have also fueled rising pension problems. One example comes from the City of Dallas, where in 1993 lawmakers sweetened police and firefighter pensions with benefits that included individual savings accounts guaranteeing 8.5% annual interest at retirement age. The fund also made a series of precarious investments that included the real estate bubble, South African timber, Asian infrastructure, and oil and gas; further, the City held its 8.5% investment return assumption through 2014 (since lowered to 7.25%). In what should come as no surprise, the Dallas Police and Fire Pension system had a $3.3 billion shortfall and a funded ratio of 45% in 2015. While legislation including benefit cuts, increased worker contributions, and contributions from the City was recently passed, the pension remains underfunded. This scenario is playing out across the country and is more pronounced in states where Texas' actions are illegal due to the "California Rule" which prevents reducing public pension benefits. The pension problem is even seen in the private sector, as GE's reported $31 billion deficit in its pension plan further complicates a turnaround.

State and local tax conditions could be more important now than ever in the current climate of tax reform. One of the major takeaways from the tax reform bill signed in December is limiting state and local tax (SALT) deductions to $10,000, which would disproportionately affect states with higher tax burdens. While some of these states are exploring ways to circumvent the deduction limit, these tactics are not certain to work and will likely lead to significant legal battles. States with the highest average SALT deductions are aligned closely with the most burdensome personal taxes, typically coastal states with higher personal incomes. If the SALT deductions hold, this could accelerate state migration flows as residents seek tax relief from even higher burdens.

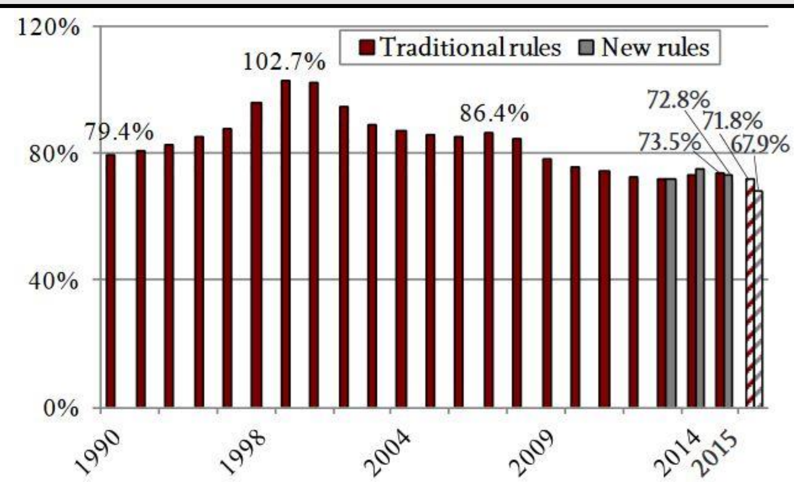
## States with the Highest SALT Deductions, 2014

| State | Average Size of SALT Deduction | % of Filers with SALT Deduction |
|---|---|---|
| New York | $21,038.02 | 34.1% |
| Connecticut | $18,939.72 | 41.0% |
| New Jersey | $17,183.33 | 41.0% |
| California | $17,148.35 | 33.9% |
| Washington, D.C. | $15,452.40 | 39.2% |
| Massachusetts | $14,760.99 | 36.7% |
| Illinois | $12,877.51 | 32.3% |
| Maryland | $12,442.78 | 45.0% |
| Rhode Island | $12,138.75 | 32.8% |
| Vermont | $11,843.95 | 27.4% |

*Sources: SmartAsset, IRS, Ten-X Research*

According to the Center for Retirement Research at Boston College, state and local pension funded ratios have been in decline for nearly two decades since peaking at 102.7%. Regardless of whether these percentages are recently measured under traditional or new GASB standards, the ratio dipped below 80% in 2009 for the first time since 1990 and continues to dwindle to new lows. The persistent decline is further troubling as economic growth has not provided relief over the past 20 years or hope that this is merely a cyclical trend.

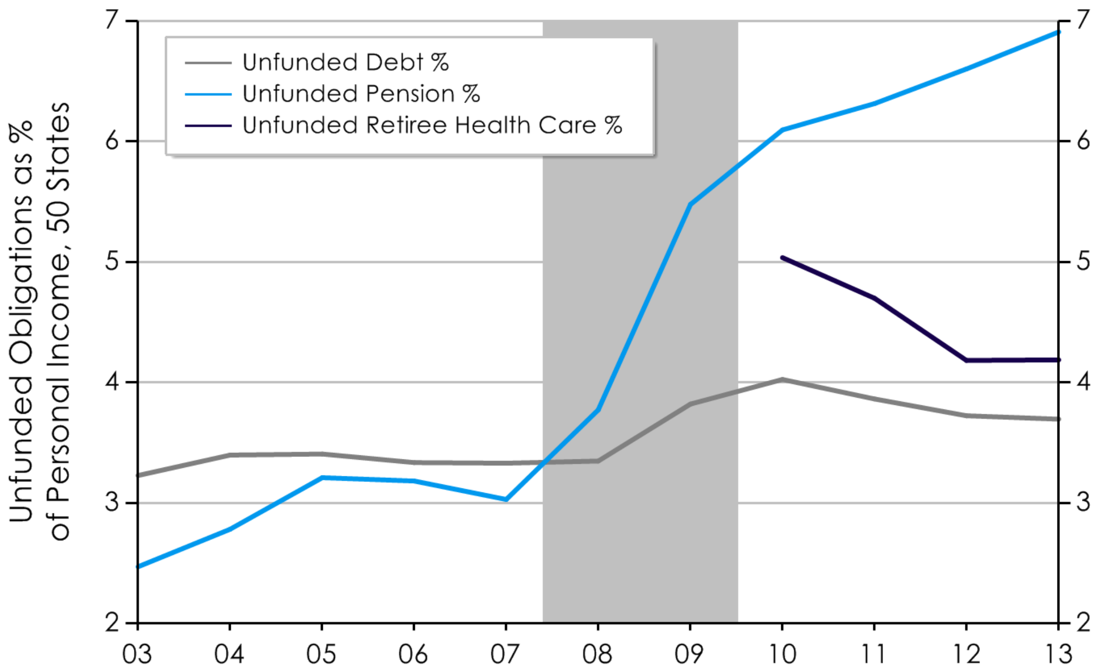
## State and Local Pension Funded Ratios Have Been in Decline For Two Decades




*Sources: Center for Retirement Research at Boston College, Public Plans Database, Zorn*

Pew data also underscores how pension funding in particular is becoming a rising concern when calculated as a share of state personal income. For all 50 states, debt as a share of personal income has been relatively constant from 2003-2013, hovering between 3-4% each year. Unfunded retiree health care costs are higher than debt, though its share has dipped from 5% in 2010 (earliest data available) to 4.2% in 2013. Not only does the share of unfunded pension costs tower at 6.9% in 2013, but this figure has soared from just 2.5% in 2003. This high share and sustained rise even as economic fundamentals have improved since the recession points to a secular problem that may not be poised to abate soon.

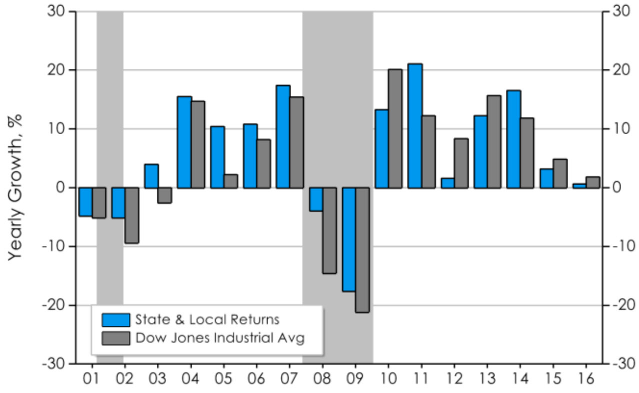
Share of Unfunded Pension Costs Have Been on the Rise Since the Recession




*Sources: Pew Charitable Trusts, BEA, Moody's, Ten-X Research*

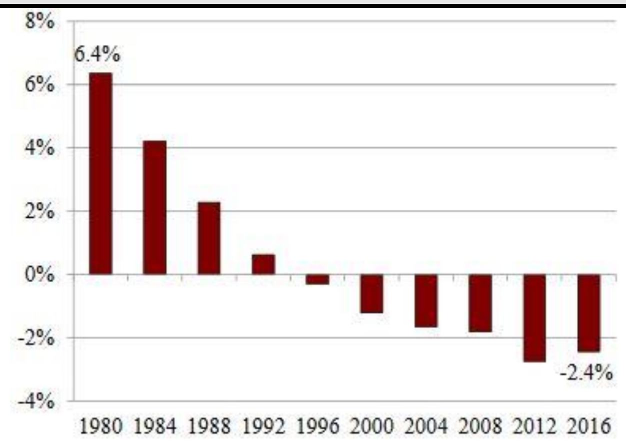
As discussed by The Center for Retirement Research at Boston College, the two key components of pension assets are investment returns and cash flows (contributions minus benefits). Investment returns tend to be cyclical as they generally track the stock market, with a strong correlation ($R^2 = 0.805$) between annual state and local returns and Dow gains from 2001-16. Pension funding ideally should have also taken advantage of this economic growth period as recessions have usually led to losses on investment returns; however, pension funded ratios have not seen marked improvement in recent years. State and local cash flows saw a remarkably consistent decline for more than three decades since recording a 6.4% gain in 1980, first turning negative in 1996 and most recently posting a 2.4% loss in 2016 as benefits continue to outweigh contributions. With cash flows battling sizeable demographic shifts, they are likely to continue to struggle without changes to contributions and benefits.

State & Local Returns Tend to Share Stock Market Volatility, Sputtering in 2015-16




*Sources: Center for Retirement Research at Boston College, PPD, Ten-X Research*

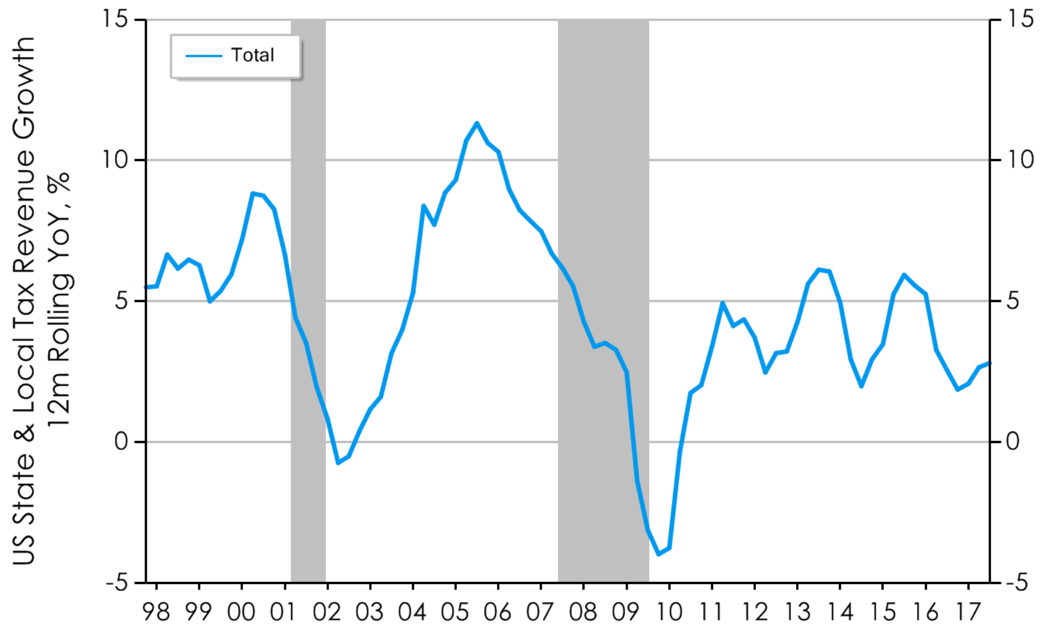
State & Local Cash Flows Becoming Increasingly Negative




*Sources: Center for Retirement Research at Boston College, US Census Bureau*

The 12-month rolling total of state and local tax revenue has seen year-over-year growth oscillate between 2% and 6% through much of this cycle. Despite these rising revenues, pension funded ratios have been on the decline, highlighting the stresses facing pension funds as they face long-term struggles that go beyond tax revenues. Of particular concern is the late stage of the current economic cycle and the possibility of an economic downturn as previous recessions have often caused state and local tax revenue and investment returns to tumble. This could apply further pressure to pension funded ratios in the coming years.

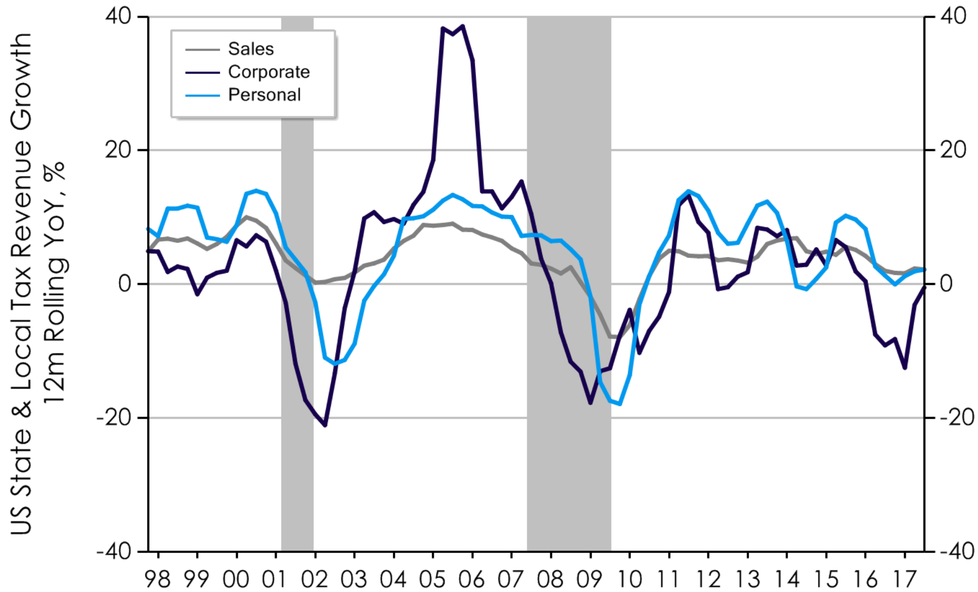
Pension Funded Ratios Deteriorate Even as State & Local Tax Revenues Continue to Rise




*Sources: Rockefeller Institute of Government, US Census Bureau, Ten-X Research*

Personal and sales taxes have oscillated but have seen year-over-year growth through much of this cycle. Though corporate taxes represent a smaller slice of overall state and local tax revenue, their recent declines are noteworthy particularly in comparison to growth in the previous cycle, and are likely to continue falling in the wake of recent tax reform. Additionally, competition to land key employers has become a widespread practice that cuts corporate tax revenue in hopes of spurring local economic growth. This is highlighted by some of the substantial tax packages currently being offered to draw in Amazon's HQ2, while other companies have taken notice and have begun to demand similar tax incentives.

Sale and Personal Taxes Continue to Rise, Though Corporate Tax Revenue Has Been in Decline

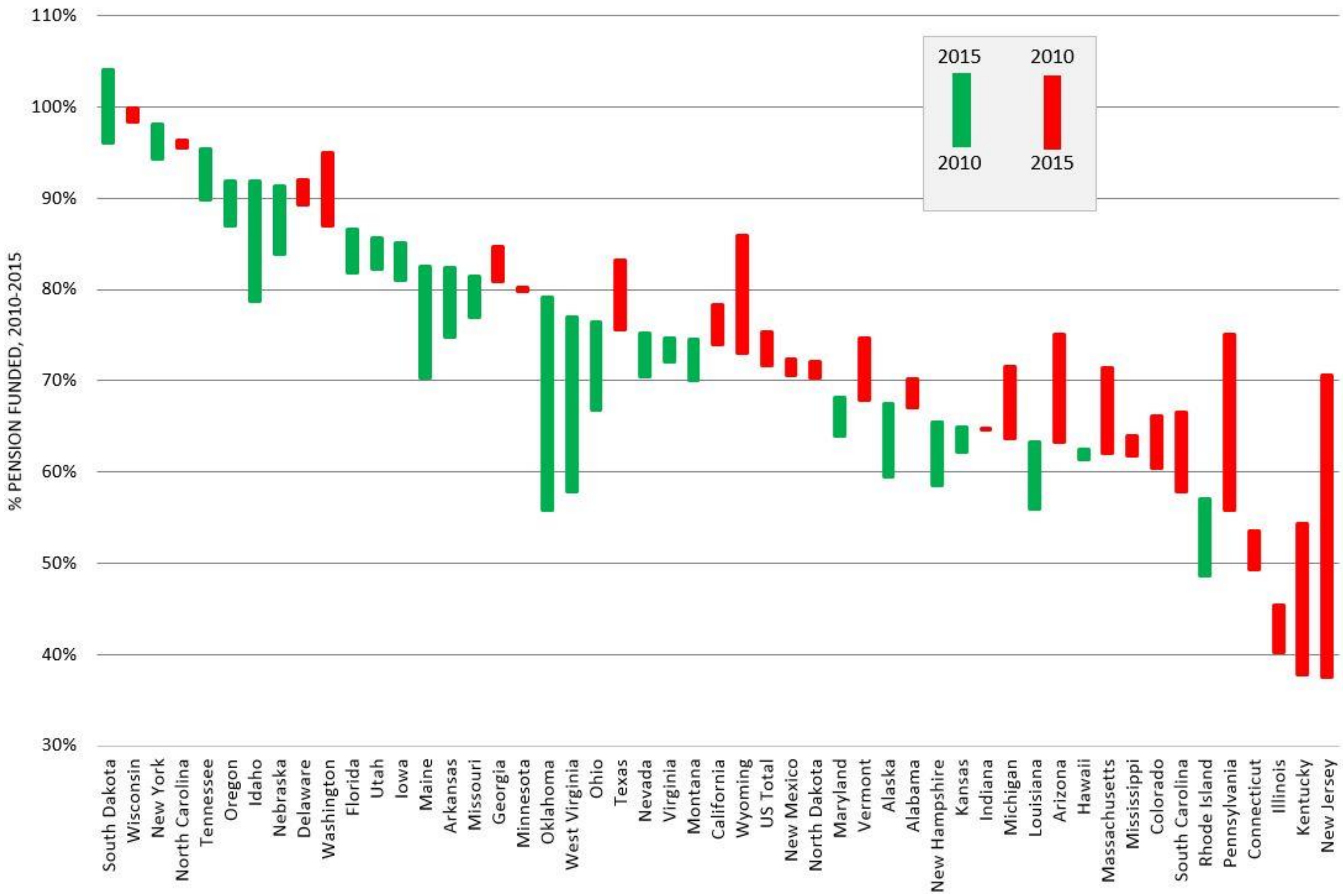



*Sources: Rockefeller Institute of Government, US Census Bureau, Ten-X Research*

## Pension Funding by State

In our last version of this report, the majority of states saw pension funding ratios decline between 2010 and 2012. While data through 2015 now reveals that while more states have raised their pension funding ratios since 2010 as economic conditions have improved, only half have increased their pension funding ratios despite revitalized market conditions, and nearly all remain underfunded. Five states have seen double digit improvement between 2010 and 2015 (Oklahoma, West Virginia, Idaho, Maine, Ohio), with Oklahoma and West Virginia leading the way with 23.3% and 19% improvements, respectively. These two states likely saw disproportionate gains in part due to the recovery in oil prices over that time frame, though low oil prices over the past few years could spell trouble for more recent and future funding ratios. On the other hand, five states have seen double digit declines between 2010 and 2015 (New Jersey, Pennsylvania, Kentucky, Wyoming, Arizona), with New Jersey leading the way with a 33.1% fall. This trend may likely be exacerbated if the economic cycle turns and investment returns and tax revenues dip.

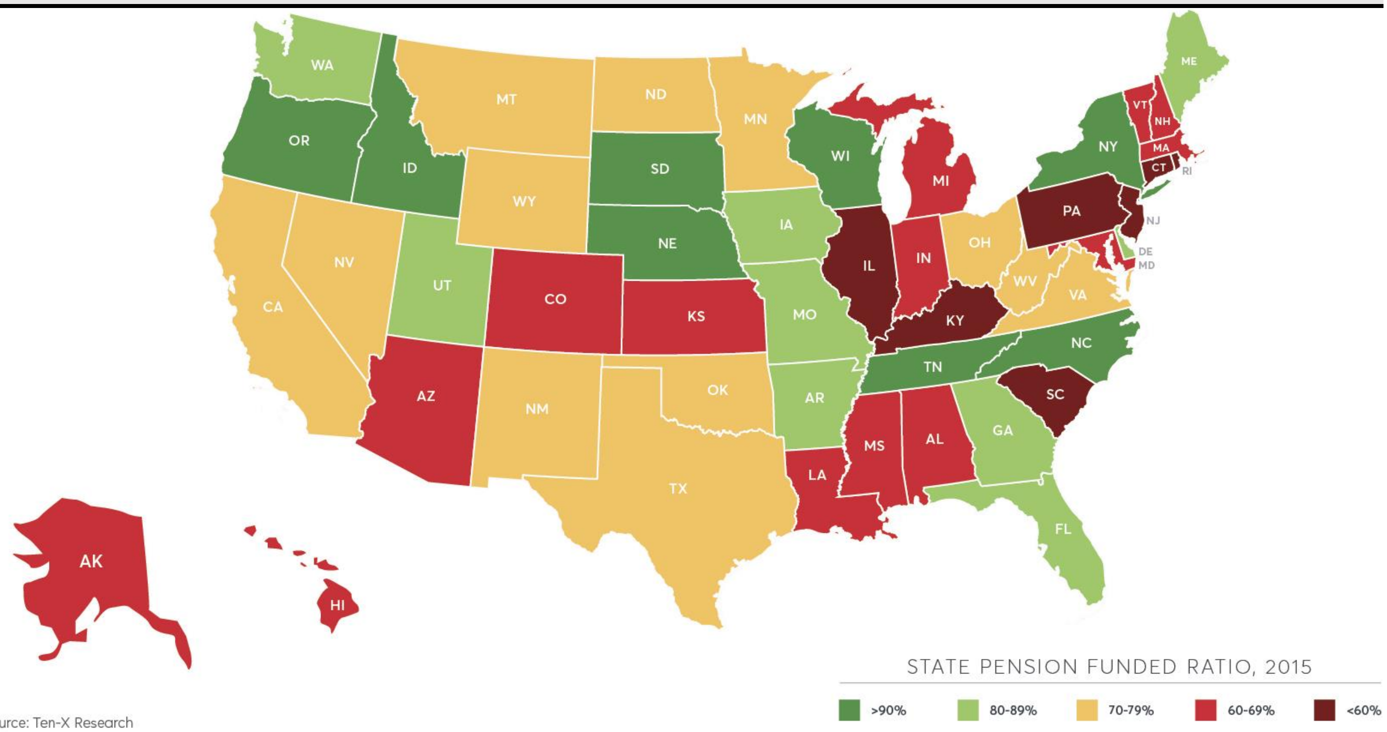
Some Pension Funding Gaps Have Improved Since 2010 on Higher Returns, But Nearly All Underfunded




*Sources: Pew Charitable Trusts, Ten-X Research*

Only 17 states had pension funded ratios greater than the widely recommended 80% in 2015, just one more than in 2010 despite broader economic improvement. South Dakota is now the lone state with a ratio above 100%, with only seven others north of 90%. 21 states still have ratios below 70%, including seven that are below 60%: South Carolina (57.8%), Rhode Island (57.1%), Pennsylvania (55.8%), Connecticut (49.4%), Illinois (40.2%), Kentucky (37.8%), and New Jersey (37.5%). These are situations that may hamstring future growth, particularly if they are addressed with harsher tax conditions, benefit cuts, or higher contributions that discourage future economic and demographic gains.

As of 2015, More Than Half of US States Still Have Pension Funded Ratios Below 80%

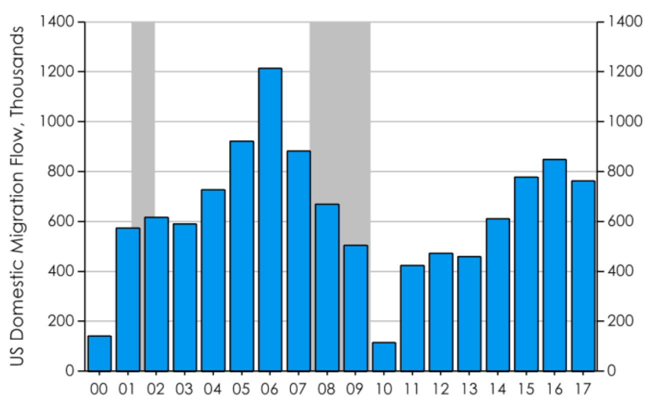



*Sources: Pew Charitable Trusts, Ten-X Research*

## Geographic Implications

US domestic migration flows dropped to historic lows in the aftermath of the housing bust, but have been on the rise since bottoming out in 2010. As we expected, interstate migration has continued to pick up while the country has climbed out from under the shadow of the housing market bust. While the housing market recovery has certainly enabled much of this migratory rebound, a notable inventory shortage has led to suboptimal liquidity in the housing market and capped migration short of pre-recession peaks, mirroring recent trends in US home sales.

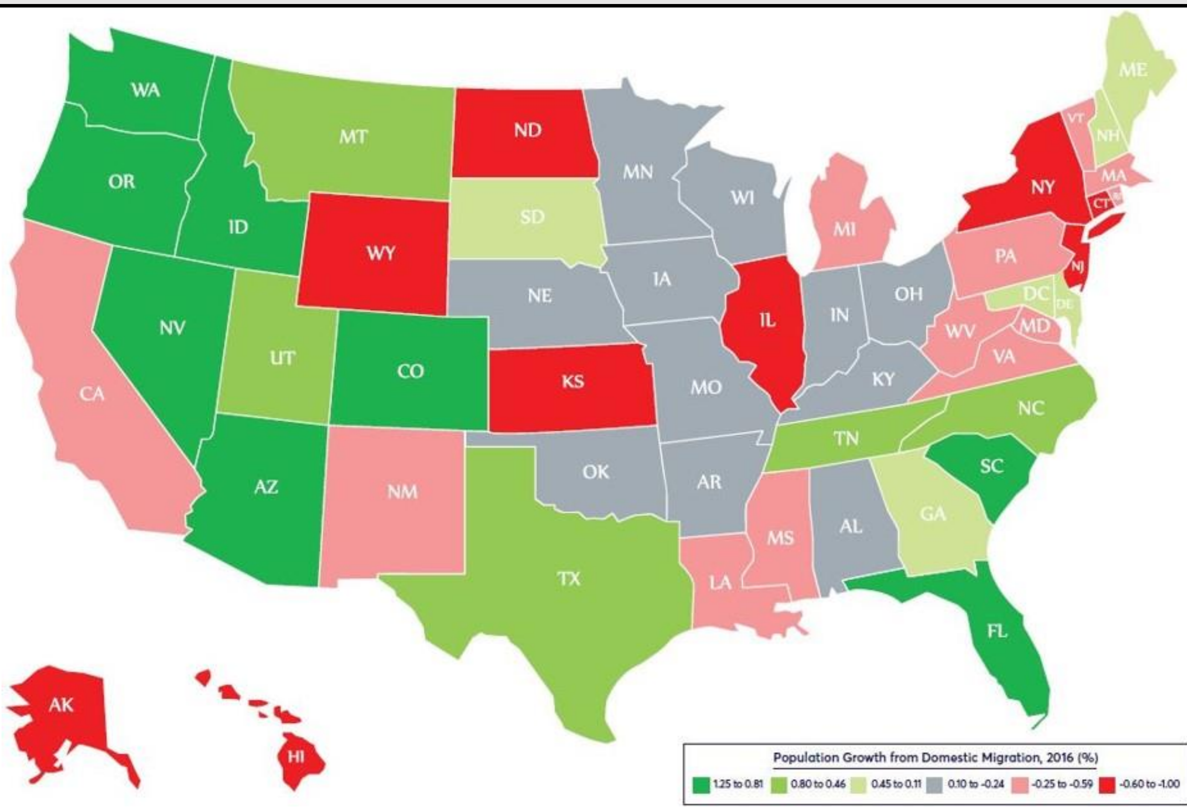
Domestic Migration Flows Picking Up in the Aftermath of the Recession




*Sources: US Census Bureau, Ten-X Research*

With domestic migration picking up across the country, this movement is having a greater demographic impact on states. The Northwest, Southwest, and Southeast regions are the broad beneficiaries of domestic migration, while the majority of the Northeast, Midwest, and California are among those struggling with outflows. These migration flows have a sizeable impact on local economies and their growth potential, and largely reflect the attractiveness of states to workers and businesses. This includes various quality of life measures, though local tax policy can play a considerable role and affect the economic viability that draws in or pushes away workers and businesses.

**Northwest, Southwest & Southeast Seeing Big Gains from Domestic Migration**




*Sources: US Census Bureau, Ten-X Research*

While relative state tax burdens fall far short of a direct correlation with domestic migration across all states, a clear pattern emerges when we look at states at either extreme of the tax spectrum. Eight of the ten most burdensome tax states have suffered domestic outflows across various time windows between 2010-17, while the opposite is essentially true for the ten states with the easiest tax environments. This is not to say that state tax policy solely inspires interstate migration, as there are numerous factors including economic opportunity, affordability, and various quality of life measures to consider, but the numbers indicate that the softest tax states tend to benefit from net in-migration while the most burdensome tax states tend to suffer net outflows.

The Correlation Between Relative State Tax Burdens and Domestic Migration Flows is Strong at Either End of the Spectrum

| State | Tax Rank | Domestic Migration Rate | | |
|---|---|---|---|---|
| | | 2000-17 | 2010-17 | 2013-17 |
| Utah | 1 | 3.5% | 1.6% | 1.6% |
| Florida | 2 | 10.8% | 4.9% | 3.9% |
| Indiana | 3 | -1.2% | -0.9% | -0.5% |
| Montana | 3 | 7.2% | 3.6% | 2.9% |
| Missouri | 5 | -0.3% | -0.9% | -0.5% |
| North Carolina | 5 | 9.5% | 3.2% | 2.4% |
| Wyoming | 5 | 2.3% | -1.5% | -2.4% |
| Arizona | 8 | 14.4% | 4.0% | 3.3% |
| South Dakota | 9 | 2.1% | 1.4% | 0.7% |
| North Dakota | 10 | 2.7% | 5.2% | 2.8% |
| | | | | |
| Pennsylvania | 41 | -2.1% | -1.7% | -1.5% |
| Maine | 42 | 2.3% | 0.3% | 0.5% |
| Rhode Island | 42 | -7.4% | -3.2% | -2.0% |
| Connecticut | 44 | -7.1% | -4.3% | -3.4% |
| Arkansas | 45 | 2.7% | 0.2% | 0.0% |
| Vermont | 46 | -2.1% | -1.6% | -1.2% |
| Illinois | 47 | -10.1% | -5.0% | -3.9% |
| Iowa | 48 | -2.2% | -0.6% | -0.4% |
| Minnesota | 49 | -1.5% | -0.6% | -0.3% |
| New Jersey | 50 | -9.6% | -4.4% | -3.3% |

*Sources: Pew Charitable Trusts, US Census Bureau, Ten-X Research*

## Real Estate Implications

As we stated in our previous reports, in response to the state fiscal imbalances, fiscal and regulatory policies may be a factor in future regional growth patterns and, therefore, commercial and residential real estate trends.

To that end, we have updated the analysis of our previous paper to reflect updated statistics on state fiscal pressures, transaction liquidity and commercial real estate conditions. As before, the thesis is that states facing the most severe structural fiscal imbalances could be forced to address them by increasing taxes, reducing spending on services, or some combination of both.

History has demonstrated that both individuals and businesses respond to a range of issues in making their location decisions. State and local tax burdens, as well as the scope and quality of government services are important influences in these decisions. In this new climate of tax reform and the SALT deduction limit, domestic migration flows could burden state and local budgets, particularly those that already have high taxes. This could make households and businesses acutely aware of the tax burdens they are subjected to.

*Magnet States:*
The analysis set out below is an updated attempt to identify developing real estate opportunities and risks by examining current state tax burdens, future burdens in states where pressure for tax increases may be higher due to pension funding shortfalls, and transaction liquidity, along with other real estate specific dynamics. This update to our 2012 report maintains the same methodology as before with all the underlying data updated.

*Layering in Commercial Deal Volume:*
In our layered analysis, we first rate the states by their current tax burden and pension/medical liabilities, along with a variable capturing the depth of the property market that would enable an investor to put investment capital to work. We discuss the variables and methodology in following sections. This initial framework produced a ranking of all the states, of which the best and worst states are depicted in the table below.

Best and Worst States by Taxation and Pension Liabilities, Adjusted for Real Estate Transaction Volume

| | Business Tax Rank | Personal Tax Rank | Percent Pension Funded | Commercial Deal | Overall Rank |
|---|---|---|---|---|---|
| Florida | 5 | 4 | 11 | 4 | *1* |
| North Carolina | 1 | 16 | 4 | 13 | *2* |
| Utah | 6 | 2 | 12 | 29 | *3* |
| Missouri | 3 | 14 | 16 | 23 | *4* |
| New York | 13 | 49 | 3 | 2 | *5* |
| Indiana | 10 | 1 | 36 | 22 | *6* |
| Oregon | 36 | 10 | 6 | 19 | *7* |
| Tennessee | 18 | 32 | 5 | 17 | *8* |
| Arizona | 7 | 21 | 39 | 11 | *9* |
| South Dakota | 15 | 14 | 1 | 50 | *10* |
| | | | | | |
| Iowa | 46 | 36 | 13 | 37 | *41* |
| Pennsylvania | 50 | 21 | 46 | 15 | *41* |
| New Hampshire | 49 | 11 | 34 | 39 | *43* |
| Illinois | 42 | 39 | 48 | 5 | *44* |
| Louisiana | 19 | 46 | 38 | 32 | *45* |
| Connecticut | 26 | 48 | 47 | 26 | *46* |
| Kentucky | 40 | 28 | 49 | 30 | *46* |
| New Jersey | 42 | 50 | 50 | 12 | *48* |
| Vermont | 32 | 47 | 31 | 47 | *49* |
| Rhode Island | 29 | 43 | 45 | 41 | *50* |

*Sources: Pew Charitable Trusts, Tax Foundation, Real Capital Analytics, Ten-X Research*

Florida retained its top spot in the ranking for all three iterations of this report (2010, 2012, 2018). Despite a devastating recession that saw it become a poster child for the housing bust, Florida has managed to keep itself in good shape with a relatively well-funded state pension while maintaining its reputation as a low-tax state. With healthy migration inflows keeping strong thanks to positive quality of life measures and favorable fiscal conditions, Florida is poised to remain one of the highest ranked states. North Carolina and New York sprung into the top ten this time thanks to substantial improvements in their business tax environment, while Tennessee and South Dakota also advanced to this group with stronger pension funded ratios. On the other hand, Washington, Georgia, Virginia, and Texas all fell out of the top ten as business taxes, personal taxes, and pension funding worsened for each. Alabama, Mississippi, and South Carolina also saw double digit falls since 2012 largely due to higher personal tax burdens.

The bottom ten list remained largely unchanged since 2012, though Maine was narrowly replaced by Pennsylvania, which dropped a substantial 15 spots as pension funding rapidly deteriorated and its business taxes slid to the worst in the nation. The Northeast continues to account for a majority of the bottom ten states, which largely struggle with high taxes and weak pension funding. The Midwest and South were also represented by Iowa, Illinois, Louisiana, and Kentucky as their tax climates have become more burdensome. The relative consistency among the bottom ranked states reflects the unrelenting struggle for upward mobility once states suffer from both higher taxes and pension shortfalls, as it is incredibly difficult to improve both scenarios at once.

*Layering in Real Estate Fundamentals:*
As before, our second level of analysis builds on the tax, pension liability and commercial deal volume data by incorporating Ten-X Research's market outlook across the major property segments over the next several years. We have incorporated the regional outlook for supply, the potential for cyclicality in individual markets and what this implies for vacancy rates and rent growth. The result could provide insights into potential differences in how various real estate market performances unfold.

Our top state rankings remain consistent; all but one of the top 10 states from our 2012 ranking make our list this time around, while two new states were added. The focus states continue to be dominated by Sunbelt states and both coasts. As we noted previously, the Sunbelt orientation continues to re-emerge despite containing hard-hit and out-of-favor markets in years past. Florida personifies this as it edged higher to capture the top overall ranking, improving in the aftermath of a severe housing bust while maintaining a beneficial fiscal situation. Utah and North Carolina saw the largest gains within the top 10 as they moved to the top 4, thanks largely to fiscal improvement. Indiana and Tennessee saw the strongest gains overall that vaulted them into the top 10, improving both fiscal and CRE rankings. Texas and Washington saw the biggest drops within the top 10, both making the list but suffering from fiscal downgrades due to weaker tax environments. Colorado slipped just out of the top 10, while Pennsylvania saw the biggest overall drop from 16 to 25 with the worst business tax ranking in the nation and a bottom five pension funding rank, as weak CRE performance in its major metros is likely compounding its state and local funding issues.

A Top-Down Regional Strategy for Potential Investment

| | Business Tax Rank | Personal Tax Rank | Percent Pension Funded | Fiscal Subrank | Commercial Deal Volume Rank | Commercial Property Rank | CRE Subrank | Overall Rank |
|---|---|---|---|---|---|---|---|---|
| Florida | 5 | 4 | 11 | 1 | 4 | 7 | 3 | *1* |
| North Carolina | 1 | 16 | 4 | 3 | 13 | 3 | 4 | *2* |
| Arizona | 7 | 21 | 39 | 10 | 11 | 8 | 6 | *3* |
| Utah | 6 | 2 | 12 | 1 | 29 | 1 | 16 | *4* |
| Georgia | 25 | 37 | 17 | 16 | 6 | 2 | 1 | *4* |
| Indiana | 10 | 1 | 36 | 5 | 22 | 4 | 13 | *6* |
| New York | 13 | 49 | 3 | 9 | 2 | 22 | 10 | *7* |
| Tennessee | 18 | 32 | 5 | 7 | 17 | 11 | 14 | *8* |
| Texas | 41 | 29 | 22 | 20 | 3 | 6 | 2 | *9* |
| Oregon | 36 | 10 | 6 | 6 | 19 | 11 | 16 | *9* |
| Virginia | 24 | 30 | 24 | 14 | 9 | 14 | 8 | *9* |
| Washington | 35 | 30 | 10 | 12 | 8 | 16 | 10 | *9* |

*Sources: Pew Charitable Trusts, Tax Foundation, Real Capital Analytics, Reis, US Census Bureau, BLS, BEA, EPA, NAR, STR, Sperling's BestPlaces, Forbes, Ten-X Research*

We stress, however, that this analysis represents only one tool for helping to formulate investment strategy in a top-down approach. As always, property and market-specific opportunities will be significantly more varied than what these results suggest.

# APPENDIX

## Ranking Methodology

Our analysis used data from the Tax Foundation to gauge the current state tax levels, levied on both businesses and individuals. For businesses, we examined the corporate income tax rate and the unemployment insurance tax rate. For individuals, we looked at property taxes, individual income taxes and sales taxes. This data enabled us to identify the states for broad tax burden, with the thought that the current relative taxation and upcoming higher tax burdens will generally tend to dampen long-term growth prospects.

Our thesis in 2010 was that states would be forced to reckon with the fiscal imbalances represented by the pension and medical liabilities they were accruing and that the cyclical pressure on revenues would exacerbate the situation and bring it to the forefront. The tax increases, spending cuts and numerous moves to manage pension liabilities, since then, bear this out.

As before, on top of the current tax data incorporated from the Tax Foundation, our analysis used data from the Pew Charitable Trusts, which indicated significant variation across states with respect to the potential extent of the pension-underfunding issue, updated for the most recent figures available.

Since the goal of this analysis is not simply to rank states by their degree of fiscal problems, but rather to map out how these situations may affect real estate markets, we included a measure of 'investability' in our study. We did this by incorporating data on average commercial transaction flow for each state over a multi-year period. This approach de-emphasizes states that do not provide consistent liquidity.

Finally, we incorporated the Ten-X Research forward view of the cyclical dynamics for individual markets within each state. This approach helps to capture current fundamentals, supply-side issues, short-term growth potential, vulnerability for specific property segments amid a modeled downturn scenario, as well as other economic factors that play into the real state outlook, including long-term factors affecting the attractiveness of different areas beyond taxation.

The combination of these analytical screens provides the results summarized above and shown in more detail in the subsequent state rating charts. We applied a 50% weight to each state's tax and pension funding scores and a 50% weight to the real estate outlook and transaction volume. We believe that state and local fiscal issues represent a potentially significant economic event with important implications for regional economic prospects and by extension, the outlook for property markets in individual states.

## Complete State Rankings

The following tables provide the full ratings of the states. The table below shows the rankings using current tax burden, degree of unfunded pension liabilities and investment potential as measured by historical deal volume.

### State Rankings by Current Taxes, Pension Liabilities, and Deal Volume

| | Corporate Tax Index Rate Rank | Unemployment Insurance Tax Index Rank | Business Tax Rank | Individual Income Tax Rank | Sales Tax Rank | Property Tax Rank | Personal Tax Rank | Percent Pension Funded | Commercial Deal | Overall Rank |
|---|---|---|---|---|---|---|---|---|---|---|
| Florida | 19 | 2 | 5 | 1 | 29 | 10 | 4 | 11 | 4 | 1 |
| North Carolina | 3 | 6 | 1 | 13 | 20 | 32 | 16 | 4 | 13 | 2 |
| Utah | 4 | 21 | 6 | 11 | 17 | 5 | 2 | 12 | 29 | 3 |
| Missouri | 5 | 7 | 3 | 28 | 24 | 7 | 14 | 16 | 23 | 4 |
| New York | 7 | 30 | 13 | 49 | 43 | 47 | 49 | 3 | 2 | 5 |
| Indiana | 23 | 10 | 10 | 10 | 9 | 4 | 1 | 36 | 22 | 6 |
| Oregon | 34 | 31 | 36 | 32 | 4 | 18 | 10 | 6 | 19 | 7 |
| Tennessee | 21 | 22 | 18 | 8 | 45 | 29 | 32 | 5 | 17 | 8 |
| Arizona | 13 | 15 | 7 | 18 | 47 | 6 | 21 | 39 | 11 | 9 |
| South Dakota | 1 | 39 | 15 | 1 | 33 | 25 | 14 | 1 | 50 | 10 |
| Montana | 12 | 20 | 9 | 21 | 3 | 9 | 2 | 25 | 46 | 11 |
| Washington | 46 | 17 | 35 | 6 | 48 | 27 | 30 | 10 | 8 | 12 |
| Georgia | 10 | 38 | 25 | 42 | 28 | 23 | 37 | 17 | 6 | 13 |
| Nebraska | 28 | 9 | 13 | 24 | 13 | 40 | 27 | 8 | 38 | 14 |
| Virginia | 6 | 41 | 24 | 40 | 10 | 31 | 30 | 24 | 9 | 15 |
| Delaware | 50 | 3 | 29 | 34 | 1 | 20 | 11 | 9 | 40 | 16 |
| Nevada | 33 | 45 | 42 | 1 | 42 | 8 | 8 | 23 | 16 | 16 |
| Oklahoma | 9 | 1 | 2 | 38 | 36 | 15 | 35 | 19 | 33 | 16 |
| California | 32 | 13 | 22 | 50 | 41 | 13 | 43 | 26 | 1 | 19 |
| Wisconsin | 29 | 40 | 37 | 43 | 7 | 26 | 25 | 2 | 28 | 19 |
| Wyoming | 1 | 33 | 12 | 1 | 6 | 34 | 5 | 27 | 49 | 21 |
| Texas | 49 | 26 | 41 | 6 | 37 | 37 | 29 | 22 | 3 | 22 |
| Idaho | 25 | 46 | 38 | 23 | 26 | 3 | 9 | 7 | 42 | 23 |
| Colorado | 18 | 35 | 29 | 15 | 39 | 14 | 17 | 43 | 10 | 24 |
| Michigan | 8 | 48 | 34 | 14 | 11 | 21 | 7 | 37 | 21 | 24 |
| West Virginia | 17 | 28 | 22 | 25 | 15 | 17 | 13 | 20 | 44 | 24 |
| Hawaii | 14 | 27 | 17 | 31 | 23 | 16 | 19 | 40 | 25 | 27 |
| New Mexico | 24 | 16 | 15 | 35 | 40 | 1 | 25 | 28 | 34 | 28 |
| Alabama | 22 | 11 | 10 | 22 | 49 | 12 | 33 | 33 | 27 | 29 |
| North Dakota | 16 | 14 | 8 | 36 | 34 | 2 | 23 | 29 | 45 | 30 |
| Ohio | 47 | 8 | 32 | 47 | 30 | 11 | 34 | 21 | 18 | 30 |
| Maryland | 20 | 24 | 19 | 46 | 18 | 42 | 45 | 30 | 14 | 32 |
| Kansas | 38 | 12 | 26 | 19 | 31 | 19 | 18 | 35 | 31 | 33 |
| Alaska | 26 | 25 | 28 | 1 | 5 | 38 | 6 | 32 | 48 | 34 |
| Massachusetts | 35 | 49 | 47 | 12 | 12 | 46 | 19 | 41 | 7 | 34 |
| Mississippi | 11 | 5 | 4 | 20 | 38 | 35 | 37 | 42 | 36 | 36 |
| Minnesota | 43 | 37 | 45 | 45 | 25 | 28 | 42 | 18 | 20 | 37 |
| Arkansas | 39 | 32 | 38 | 30 | 44 | 22 | 39 | 15 | 35 | 38 |
| South Carolina | 15 | 29 | 19 | 41 | 32 | 24 | 41 | 44 | 24 | 39 |
| Maine | 41 | 44 | 48 | 26 | 8 | 41 | 24 | 14 | 43 | 40 |
| Iowa | 48 | 34 | 46 | 33 | 19 | 39 | 36 | 13 | 37 | 41 |
| Pennsylvania | 44 | 50 | 50 | 17 | 21 | 33 | 21 | 46 | 15 | 41 |
| New Hampshire | 45 | 43 | 49 | 9 | 2 | 44 | 11 | 34 | 39 | 43 |
| Illinois | 36 | 42 | 42 | 16 | 35 | 45 | 39 | 48 | 5 | 44 |
| Louisiana | 40 | 4 | 19 | 27 | 50 | 30 | 46 | 38 | 32 | 45 |
| Connecticut | 31 | 19 | 26 | 37 | 27 | 49 | 48 | 47 | 26 | 46 |
| Kentucky | 27 | 47 | 40 | 29 | 14 | 36 | 28 | 49 | 30 | 46 |
| New Jersey | 42 | 36 | 42 | 48 | 46 | 50 | 50 | 50 | 12 | 48 |
| Vermont | 37 | 18 | 32 | 44 | 16 | 48 | 47 | 31 | 47 | 49 |
| Rhode Island | 30 | 23 | 29 | 39 | 22 | 43 | 43 | 45 | 41 | 50 |

*Sources: Pew Charitable Trusts, Tax Foundation, Real Capital Analytics, Ten-X Research*

The table below shows the full ratings, incorporating market-specific real estate dynamics, along with the long-term attributes of relative state attractiveness to individuals and businesses. Since the real estate analysis examines the top 50 metro markets in each segment, only states containing at least one of those markets appear. This approach narrows the lists of states down to 27. DC is excluded from the analysis due to lack of state tax or pension fund data.

State Rankings Incorporating Market-Specific Real Estate and Economic Factors

| | Business Tax Rank | Personal Tax Rank | Percent Pension Funded | Fiscal Subrank | Commercial Deal Volume Rank | Commercial Property Rank | CRE Subrank | Overall Rank |
|---|---|---|---|---|---|---|---|---|
| Florida | 5 | 4 | 11 | 1 | 4 | 7 | 3 | 1 |
| North Carolina | 1 | 16 | 4 | 3 | 13 | 3 | 4 | 2 |
| Arizona | 7 | 21 | 39 | 10 | 11 | 8 | 6 | 3 |
| Utah | 6 | 2 | 12 | 1 | 29 | 1 | 16 | 4 |
| Georgia | 25 | 37 | 17 | 16 | 6 | 2 | 1 | 4 |
| Indiana | 10 | 1 | 36 | 5 | 22 | 4 | 13 | 6 |
| New York | 13 | 49 | 3 | 9 | 2 | 22 | 10 | 7 |
| Tennessee | 18 | 32 | 5 | 7 | 17 | 11 | 14 | 8 |
| Texas | 41 | 29 | 22 | 20 | 3 | 6 | 2 | 9 |
| Oregon | 36 | 10 | 6 | 6 | 19 | 11 | 16 | 9 |
| Virginia | 24 | 30 | 24 | 14 | 9 | 14 | 8 | 9 |
| Washington | 35 | 30 | 10 | 12 | 8 | 16 | 10 | 9 |
| Colorado | 29 | 17 | 43 | 18 | 10 | 8 | 5 | 13 |
| California | 22 | 43 | 26 | 19 | 1 | 18 | 6 | 14 |
| Nevada | 42 | 8 | 23 | 11 | 16 | 13 | 15 | 15 |
| Missouri | 3 | 14 | 16 | 4 | 23 | 15 | 24 | 16 |
| Hawaii | 17 | 19 | 40 | 13 | 25 | 8 | 19 | 17 |
| Massachusetts | 47 | 19 | 41 | 24 | 7 | 16 | 8 | 17 |
| Minnesota | 45 | 42 | 18 | 23 | 20 | 4 | 10 | 19 |
| Wisconsin | 37 | 25 | 2 | 8 | 28 | 25 | 26 | 20 |
| Michigan | 34 | 7 | 37 | 14 | 21 | 27 | 25 | 21 |
| Maryland | 19 | 45 | 30 | 21 | 14 | 19 | 19 | 22 |
| Ohio | 32 | 34 | 21 | 17 | 18 | 19 | 23 | 22 |
| Illinois | 42 | 39 | 48 | 26 | 5 | 26 | 18 | 24 |
| Pennsylvania | 50 | 21 | 46 | 25 | 15 | 21 | 21 | 25 |
| New Jersey | 42 | 50 | 50 | 27 | 12 | 24 | 21 | 26 |
| Louisiana | 19 | 46 | 38 | 22 | 32 | 23 | 27 | 27 |

*Sources: Pew Charitable Trusts, Tax Foundation, Real Capital Analytics, Reis, US Census Bureau, BLS, BEA, EPA, NAR, STR, Sperling's BestPlaces, Forbes, Ten-X Research*

# Notes

## About Ten-X

Do more deals in more places with the power of Ten-X. Whether you're growing market share or expanding your reach, we provide brokers and investors access to new markets and higher quality investments. Ten-X amplifies the power of market experts by combining real estate expertise with powerful workflow technology. From marketing and diligence to financing and closing, we seamlessly support the entire transaction, so you can maximize your time and increase ROI.

Our team of data scientists, engineers and economists delivers real-time market intelligence so you can quickly make decisions on the deals that matter most. Our data-driven approach to marketing and pricing strategy connects the right sellers with the right buyers every time.