Johns Hopkins Bloomberg School of Public Health

CCST Center for Climate Smart Transportation

Bloomberg American Health Initiative

WHO SPRAWLS THE MOST?

MAPPING URBAN SPRAWL AND ASSESSING ITS IMPACT ON EVERYDAY LIFE

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EXECUTIVE SUMMARY

Urban sprawl remains one of the most contested issues in urban planning and has a major impact on our daily lives. Recently, it has gained renewed attention as both sides of the debate argue its impacts on COVID-19 spread and mortality rates, housing crises, and energy affordability. Yet, to empirically study any of these outcomes, we first need a valid, reliable, and comprehensive measure of sprawl.

This report, led by researchers from the Johns Hopkins Bloomberg School of Public Health, is one of the most comprehensive efforts yet undertaken to define, measure, and evaluate urban sprawl. We developed measures of sprawl as a composite index combining up to 21 built environmental factors in four key dimensions: 1) residential and employment density; 2) neighborhood mix of homes, jobs, and services; 3) strength of urban subcenters and downtowns; and 4) connectivity of the street network. The overall compactness-sprawl index is a continuous score with a mean of 100, ranking places from the most compact (highest score) to the most sprawling (lowest score).

The indices are available for 233 metropolitan areas (MSAs), 995 urban counties, and 64,444 census tracts in the lower 48 states and the District of Columbia, covering 85% of the U.S. population. The new study is an update to a landmark study in 2014 which received extensive attention from public officials and academia. The 2014 study was covered by 110 media outlets and was used in more than 40 empirical studies on costs and benefits of sprawl.

The 2026 sprawl indices present a complete picture of which U.S. metro areas and counties sprawl the most and which are more compact and connected. It also examines how the sprawl scores relate to everyday life.

The report shows that San Francisco, CA (score: 242.91) and New York, NY (score: 227.3), the national leaders, are the most compact and connected metro areas while Riverside, CA (score: 54.3) and Atlanta, GA (score: 57.2) are the most sprawling. The report includes a complete list and rankings of 233 metropolitan areas and 995 urban counties in the country. Note that due to changes in census boundaries between 2010 and 2020, rankings and scores in 2014 and 2026 are not comparable and do not always reflect the changes in sprawl/compactness over time.

This report also examines how index scores relate to everyday life in 2025 through massive data collection and rigorous statistical models on several quality-of-life outcomes. We found that compact and connected neighborhoods, counties, and metro areas have lower energy costs, better health outcomes, lower exposure to vector-borne diseases such as Lyme disease, well-connected social lives and greater opportunities for children to thrive. Even housing, which has been the subject of many debates recently, is more affordable in compact areas after combining it with transportation and energy costs as two other major items in a household's budget. Compact and connected areas also provide residents with healthier, safer, and most cost-effective transportation options.

We recommend cities and local governments consider planning processes and policies that create more connections and facilitate more transportation choices with walkable and livable neighborhoods that offer both local and regional accessibility to residents. Our recommendations for public officials for encouraging compact, connected, and walkable development follow directly from our operational definition of sprawl and are explained in detail in this report.

INTRODUCTION

Urban sprawl has been the topic of widespread debate since 1990s.[1] The anti-sprawl side of the debate argues that more compact and connected metro areas are the solution to health, environmental, social, and economic challenges and improve many quality-of-life outcomes.[2] The pro-sprawl side of the debate links sprawl to housing affordability and argues that compact development makes housing harder to build, more expensive, and less affordable.[3]

The debate has been getting more attention recently. During the COVID-19 pandemic, many planners and policymakers blamed compact development for the increased spread and mortality of COVID-19, especially in large cities such as New York City, while several empirical studies found that the massive spread of the COVID-19 virus in large cities was due to overcrowding rather than compact development.[4]

Urban sprawl is again gaining momentum since Ezra Klein and Derek Thompson, in their bestselling new book, *Abundance*, cite housing unaffordability and its link to growth management regulations as one of the key drivers of the recent presidential election outcome.[5] They argue that it is hard to build housing in areas where Democrats govern, which also tend to be large compact and connected cities. This view is echoed by other advocates of sprawl such as journalists from the *New York Times* (April 2025), Reason Foundation (June 2025), and other pro-sprawl advocates.

These ongoing debates underscore a key point: Before we can advocate for or against sprawl, we should first understand its current extent and spatial patterns.[6] Accurate, comprehensive, and updated measurement of urban sprawl is essential for quantitively measuring its impacts on any of these outcomes.[7] In an era marked by worsening climate change impacts, affordability crises, and uneven urban growth, knowing where and how sprawl is occurring allows planners and policymakers to craft targeted, evidence-based zoning and land-use interventions.

A landmark study by the authors of this report in 2014, *Measuring Sprawl and Validating Sprawl Measures 2014*,[8] offered one of the most comprehensive measures of urban sprawl as a composite index combining four dimensions—density, land-use mix, activity centering, and street connectivity- for all metropolitan areas, urban counties, urbanized areas and census tracts in the U.S. The 2014 study received extensive media attention and was covered by more than 110 national and local media outlets. The 2014 sprawl indices were also posted on a NIH website and has been widely used by scholars who studied the impact of sprawl on a range of social,9 environmental, transportation,10 and health outcomes11 such as transit ridership and car dependency, innovation and economic productivity, disaster management, obesity and other chronic diseases, mental health, emergence of food deserts, air quality, housing foreclosure, real estate and housing innovation, economic mobility, traffic crashes and fatalities, and the spread and mortality of COVID-19 pandemic.

This 2026 report is based on a multiyear, comprehensive study that updates and refines the earlier sprawl measures for all metropolitan areas, urban counties, and census tracts in the U.S. using better and more updated data sources. The 2026 study is led by researchers from the Johns Hopkins Bloomberg School of Public Health and represents the most comprehensive effort yet undertaken to define, measure, and evaluate urban sprawl and its impacts. The 2020 compactness indices and individual dimension scores for metropolitan areas and counties are presented in Appendices B and D and are immediately available to study other costs and benefits of urban sprawl.

They will be posted on the Center for Smart Transportation website and available for download.

MEASURING SPRAWL IN 2026

For both counties and metropolitan areas, urban sprawl is measured as a combination of four factors, representing four distinct dimensions of sprawling development patterns:

Development density, the most widely studied dimension of sprawl. In this study the density factor is measured through six distinct but related indicators: 1) gross population density; 2) percentage of the county/MSA population living at low suburban densities; 3) percentage of the county/MSA population living at medium to high urban densities; 4) gross employment density; 5) net population density of urban places within the county/MSA; 6) estimated central density of metropolitan areas derived from a negative exponential population density function (only MSA level).

Land use Mix accounts for the degree of mixed and integrated land uses and is measured through three indicators: 1) degree of job-population balance; 2) degree of job mixing; 3) average Walk Score within counties and metropolitan areas.

Population and Employment Centering accounts for the role and significance of main centers and urban subcenters in shaping the overall structure of counties and MSAs. It is measured through five distinct indicators: 1) degree of variation in neighborhood (census tracts) population density within the county/MSA; 2) degree of variation in neighborhood (census tracts) employment density within the county/MSA; 3) percentage of the county/MSA population living in main or sub-centers; 4) percentage of the county/MSA employment opportunities reside in main or subcenters; 5) density gradient variable showing how quickly population density declines from the center of the MSA (only MSA level).

Street connectivity accounts for the degree of street network connectivity in the county/MSA and is measured through five distinct indicators. The first three indicators are related to block size since smaller blocks translate into shorter and more direct routes. They include: 1) average block size; 2) percentage of the county/MSA small urban blocks; 3) average block length (only MSA level). The last two variables account for the number and type of intersections: 4) intersection density; 5) percentage of 4-or-more-way intersections in the county/MSA.

Overall score

The four sprawl factors were weighted equally and combined to an overall index for 995 metropolitan counties as well as 233 metropolitan areas and divisions. More than 281 million Americans, nearly 85% of the U.S. population, lived in these 995 counties in 2020. The average value of the overall score is 100 which means the more compact counties have index values above 100, while the more sprawling counties have values below 100.

THE 2026 METROPOLITAN SPRAWL RANKINGS

The metropolitan index score ranges from the most sprawling (Riverside, CA, with the score of 54.3) to the most compact (San Francisco, CA, with the score of 242.9). Interestingly, both the most compact and the most sprawling MSAs in the U.S. reside in California. Other top compact metro areas/divisions are New York, NY, and Philadelphia, PA, metro divisions which have substantially higher overall scores than any metro area in the sample (**See Table 1**). These compact metro divisions consistently score high across all four dimensions: density, mixed-use, degree of centering, and street connectivity, reflecting highly accessible and connected development patterns.

In contrast, the two most sprawling metro areas are Atlanta-Sandy Springs-Alpharetta, GA, and Riverside-San Bernardino-Ontario, CA, which exhibit the lowest overall scores. These metro areas show relatively low density and centering values, indicating more dispersed and less centralized development patterns. While Riverside, CA, shows a moderate mixed-use score, both metro areas demonstrate weaker street connectivity and centering compared to other MSAs in our sample.

To provide a more comprehensive look at how communities compare, we also present here the most compact and most sprawling MSAs by size. Among large metro areas (defined as having a population over 1 million people), San Francisco, CA, and New York, NY, the national leaders, are the most compact and connected while Riverside, CA, and Atlanta, GA, are the most sprawling.

Of medium-sized metro areas (defined as having a population between 500,000 and 1 million), Madison, WI, is the most compact and connected with a score of 126.3, while Fayetteville, NC, and Baton Rouge, LA, are the most sprawling, with a score of 60 and 62.5, respectively. And of small metro areas (defined as having a population under 500,000), Trenton-Princeton, NJ, is the most compact and connected, with a score of 152.5 and Hickory, NC, is the most sprawling, with a score of 57.8.

Note that, according to 2014 index scores which are based on 2010 census data, New York, NY, ranks as the most compact, followed by San Francisco, CA. In 2026 index rankings which are based on 2020 census data, San Francisco, CA, ranks on top of New York, NY, simply due to changes in metro area boundaries between 2010 and 2020. Therefore, rankings and scores in 2014 and 2026 are not comparable and do not always reflect the changes in sprawl/compactness over time. The following tables (Tables 1-4) present the list of most compact and connected metropolitan areas and divisions (nationwide and by MSA size).

Table 1: Top 10 Most Compact and Connected Metropolitan Areas (nationwide) in 2020

Rank	Metropolitan Area	Index Score
1	San Francisco-San Mateo-Redwood City, CA	242.9
2	New York-Jersey City-White Plains, NY-NJ	227.4
3	Philadelphia, PA	220.8
4	Miami-Miami Beach-Kendall, FL	158.4
5	Trenton-Princeton, NJ	152.2
6	Boston, MA	145.9
7	Chicago-Naperville-Evanston, IL	145.1
8	Santa Maria-Santa Barbara, CA	143.3
9	San Rafael, CA	141.7
10	Boulder, CO	141.6

Table 2: Top 10 Compact and Connected Large Metropolitan Areas (population of over 1 million) in 2020

Rank	Metropolitan Area	Index Score
1	San Francisco-San Mateo-Redwood City, CA	242.9
2	New York-Jersey City-White Plains, NY-NJ	227.4
3	Philadelphia, PA	220.8
4	Miami-Miami Beach-Kendall, FL	158.4
5	Boston, MA	145.9
6	Chicago-Naperville-Evanston, IL	145.1
7	Los Angeles-Long Beach-Glendale, CA	137.7
8	Detroit-Dearborn-Livonia, MI	134.3
9	Anaheim-Santa Ana-Irvine, CA	132.7
10	Oakland-Berkeley-Livermore, CA	130.3

Table 3: Top 10 Most Compact and Connected Medium-sized Metropolitan Areas (population of between 500,000 and 1 million) in 2020

Rank	Metropolitan Area	Index Score
1	Madison, WI	126.3
2	Bridgeport-Stamford-Norwalk, CT	120.1
3	Spokane-Spokane Valley, WA	117.3
4	New Haven-Milford, CT	117.0
5	Modesto, CA	115.7
6	Lexington-Fayette, KY	115.5
7	Stockton, CA	109.6
8	Omaha-Council Bluffs, NE-IA	109.0
9	Oxnard-Thousand Oaks-Ventura, CA	108.5
10	Scranton-Wilkes-Barre, PA	107.8

Table 4: Top 10 Most Compact and Connected Small Metropolitan Areas (population of under 500,000) in 2020

Rank	Metropolitan Area	Index Score
1	Trenton-Princeton, NJ	152.2
2	Santa Maria-Santa Barbara, CA	143.3
3	San Rafael, CA	141.7
4	Boulder, CO	141.7
5	Champaign-Urbana, IL	136.5
6	San Luis Obispo-Paso Robles, CA	135.4
7	Springfield, IL	135.2
8	Erie, PA	132.2
9	Charleston, WV	130.9
10	Santa Cruz-Watsonville, CA	130.6

The following tables (Tables 5-8) present the list of most sprawling metropolitan areas and divisions (nationwide and by MSA size).

Table 5: Top 10 Most Sprawling Metropolitan Areas (nationwide) in 2020

Rank	Metropolitan Area	Index Score
224	Rockingham County-Strafford County, NH	65.1
225	Jacksonville, NC	63.7
226	Greenville-Anderson, SC	63.4
227	Baton Rouge, LA	62.5
228	Myrtle Beach-Conway-North Myrtle Beach, SC-NC	60.1
229	Fayetteville, NC	60.0
230	Hickory-Lenoir-Morganton, NC	57.9
231	Nashville-Davidson-Murfreesboro-Franklin, TN	57.4
232	Atlanta-Sandy Springs-Alpharetta, GA	57.2
233	Riverside-San Bernardino-Ontario, CA	54.3

Table 6: Top 10 Most Sprawling Large Metropolitan Areas (population of over 1 million) in 2020

Rank	Metropolitan Area	Index Score
208	Jacksonville, FL	73.0
211	Montgomery County-Bucks County-Chester County, PA	72.7
212	Charlotte-Concord-Gastonia, NC-SC	72.6
216	Raleigh-Cary, NC	71.0
217	San Antonio-New Braunfels, TX	70.7
219	Houston-The Woodlands-Sugar Land, TX	69.9
223	Warren-Troy-Farmington Hills, MI	65.2
231	Nashville-Davidson-Murfreesboro-Franklin, TN	57.4
232	Atlanta-Sandy Springs-Alpharetta, GA	57.2
233	Riverside-San Bernardino-Ontario, CA	54.3

Table 7: Top 10 Most Sprawling Medium-sized Metropolitan Areas (population of between 500,000 and 1 million) in 2020

Rank	Metropolitan Area	Index Score
205	Columbia, SC	73.8
210	Greensboro-High Point, NC	72.8
214	Chattanooga, TN-GA	71.3
218	Jackson, MS	70.2
220	Knoxville, TN	69.8
221	Augusta-Richmond County, GA-SC	69.4
222	Winston-Salem, NC	68.6
226	Greenville-Anderson, SC	63.4
227	Baton Rouge, LA	62.5
229	Fayetteville, NC	60.0

Table 8: Top 10 Most Sprawling Small Metropolitan Areas (population of under 500,000) in 2020

Rank	Metropolitan Area	Index Score
196	Killeen-Temple, TX	79.3
204	Clarksville, TN-KY	73.8
207	Salisbury, MD-DE	73.2
209	Longview, TX	72.9
213	Huntsville, AL	71.4
215	Kingsport-Bristol, TN-VA	71.2
224	Rockingham County-Strafford County, NH	65.1
225	Jacksonville, NC	63.7
228	Myrtle Beach-Conway-North Myrtle Beach, SC-NC	60.1
230	Hickory-Lenoir-Morganton, NC	57.9

The list of top 10 most compact and most sprawling counties is presented in Appendix C. Also please see Appendix B for the full 2025 list of metro area Compactness Index rankings and Appendix D for the full 2025 list of county index Compactness Index ranking.

WHAT SPRAWL MEANS FOR EVERYDAY LIFE

We conducted a series of rigorous, data-driven analyses and found that compact and connected counties and metropolitan areas offer better overall health, social, economic, environmental, environmental, safety, and transportation quality-of-life for every resident than their sprawling counterparts. This is after controlling for socioeconomic, demographic, and other key factors. As index score improves (higher compactness), so do the quality-of-life outcomes. Urban sprawl is linked to:

- Fewer **transportation options**
- Higher rates of **residential energy burden**
- Lower **housing, transportation, and energy affordability**
- Worse **health outcomes**, higher rates of hospitalizations due to COPD and heart attack
- Fewer **social connections** and networking opportunities
- Increased rates of **disconnected youth**
- Increased risks of **Lyme disease** infection
- Higher risks of fatal car crashes and of **pedestrian fatalities** from car crashes

A more detailed description of how sprawl impacts each of these outcomes is explained below:

Compact and connected counties are more affordable in terms of the combined costs of housing, transportation, and energy

People in compact and connected counties spend a higher portion of their income on housing, but less on transportation than their counterparts in sprawling areas. Shorter trips and the availability of alternative low-cost travel options such as walking, biking, and public transit, as well as fewer owned vehicles in compact and connected areas, make transportation substantially more affordable than in sprawling areas. A 10% increase in compactness index increases the housing costs relative to income by about 1.2%. Conversely, it decreases transportation costs relative to income by about 4%, respectively.

People in compact and connected metros also spend less of their budget on residential energy costs. Sprawling counties are dominated by single-family detached housing which require more energy than attached houses of the same size due to having more exposed surface area. Sprawling counties are home to larger houses which means more space to heat and cool. A 10% increase in scores decreases the energy costs relative to income by 2.7%.

For example, a typical household in a typical compact neighborhood in San Francisco, CA, (index score: 252) spends an average 16% of their budget on transportation and 1% on energy, while a similar household in Riverside County, CA, (index score: 62) spends an average of 26.4% of their budget on transportation and 1.4% on energy. Similarly, an average household in a typical neighborhood in New York County (Manhattan Borough, index score: 460) spends 14% and 2.4% of their income on transportation and energy costs, respectively. In a sprawling county such as Hillsborough County, FL, which is home to Tampa, FL, (index score: 94) a typical household spends 23.6% and 3.5% on transportation and energy costs, respectively.

The most notable finding is that compact and connected counties are more affordable for residents for combined housing, transportation, and energy costs. In other words, lower transportation and energy costs offset the higher costs of housing in compact and connected counties. An average household in San Francisco County, CA, (index score: 252) spends 47.3% of their income on housing, transportation, and energy costs, while an average household in Riverside County, CA, spends 51% of their budget on the same items.

Looking at medium-sized counties, we found an even larger gap in housing, transportation, and energy share of income between compact and sprawling areas. For example, an average household in Alexandria, VA, (index score: 194) spends 26.8% of their income on housing, 15% on transportation, and 1.2% on energy costs. A similar household in Bedford, VA, (index score: 73) spends only 21.6% on housing, but a significantly larger share, 24.6%, on transportation and 1.7% on energy costs which offsets the lower housing costs by about 5% of the income.

Overall, as index score increases, transportation and energy costs decline faster than housing costs rise, creating a net decline in the combined costs of housing, transportation, and energy in compact counties.

Compact and connected metropolitan areas provide more transportation options such as walking and quality public transit and offer opportunities to own fewer vehicles.

Part of the reason transportation costs are substantially lower in compact and connected areas is the availability of low-cost transportation options such as walking and public transit. A 10% increase in metro index score is associated with a 10.4% increase in **walk and bike mode shares** (the portion of travelers who choose to walk or bike to work). For instance, an average person in San Francisco, CA, metro division (index score: 243) is 4.75 times more likely to choose walking or biking as his/her commute mode than the same person in Riverside, CA, metro area (index score: 54).

Similarly, a 10% increase in metro index score is associated with a 19.5% increase in **transit mode share** (the portion of travelers who choose to take public transit to work). This means, for example, an average person in New York, NY, Metro Division (index score: 227) is 6.2 times more likely to take public transit as his/her commute mode than the same person in New Brunswick, NJ, (index score: 89).

People in more compact and connected counties also own fewer vehicles. **Vehicle ownership** is by far the largest part of households' transportation costs, accounting for about 75% of their total transportation expenditure. For every 10% increase in the index score, vehicle ownership rates decline by 2%. A household living in Oakland, CA, metro division (index score: 129) is 17.7% more likely to own a car than is a similar household living in San Francisco, CA, metro division (index score: 243).

Compact and connected counties have lower rates of hospitalizations from heat-exacerbated health conditions such as COPD and heart attack.

The county index score is significantly associated with **lower COPD hospitalization rates**, likely due to better access to healthcare and preventive services in compact areas. A 10% increase in index score corresponds to a 0.65% reduction in COPD hospitalizations. Similarly, compact and connected counties experience 0.67% **lower rates of heart attack hospitalizations** due to improved walkability and greater opportunities for physical activity, better access to healthy food options and better access to preventive care—all factors supported by extensive literature.

For example, a typical resident of Montgomery County, PA, (index score: 88) is 5.4% more likely to be hospitalized than the same person in Philadelphia County, PA, (index score: 198) due to COPD complications. Likewise, a typical resident of San Bernardino County, CA, (index score: 66) is 4.5% more likely to be hospitalized than the same person in Napa County, CA, (index score: 128) due to heart attack. This study found no significant link between the index score and asthma hospitalizations.

Sprawling counties experience higher rates of death from car accidents and even higher rates of pedestrian fatalities from car accidents than more compact and connected counties.

The county index score is significantly associated with lower rates of fatal crashes and of pedestrian-involved fatal crashes due to the necessity of driving to most destinations and longer automobile trips which are a product of segregated land uses. Higher traffic speed in sprawling counties make car accidents more severe and likely deadly. A 10% increase in index score corresponds to a 7.6% reduction in total fatalities and 18.4% reduction in pedestrian fatalities.

For example, an average household in Harris County, TX, (index score: 83) is 2.2 times more likely to be in a fatal crash and 6.6 times more likely to be in a pedestrian-involved fatal car crash than the same household in Kings County, NY, (index score: 232).

Compact and connected counties experience significantly lower rates of "disconnected youth" and higher rates of social capital than sprawling counties.

In the U.S., nearly 11% of young people ages 16 to 24 are "disconnected"—neither working nor enrolled in school. This share is more than double the rate in many European countries and costs taxpayers an estimated $94 billion each year in lost productivity, forgone tax revenues, and increased public spending. Disconnected youth also face profound consequences that extend beyond their lives. Young people who are cut off from education and employment face diminished lifetime earnings and fewer opportunities to fully participate in the economy. For society, this translates into long-term revenue losses, greater dependence on social assistance, and elevated health care.

Sprawling counties experience higher rates of **disconnected youth** than more compact and connected counties. Urban sprawl is characterized by physical separation of land uses, poor accessibility, and car dependence, which exacerbates inequalities for low-income groups who face transportation and resource barriers. Sprawling counties tend to also reinforce residential segregation, concentrating disadvantage and reducing equal exposure to educational and labor market opportunities. A 10% increase in county index score reduces the rate of disconnected youth by 3.4%. For example, a person aged 16-24 in an average household in Baltimore County, MD, (index score: 87) is 28.3% more likely to experience disconnection than a child in the same household in Baltimore City (index score: 181).

People in sprawling counties have lower rates of **social connectivity** (social capital) than their counterparts in compact and connected counties. Compact environments, with their higher density, walkability, and public spaces, provide more opportunities for interaction, trust-building, and community participation. In contrast, in sprawling counties, long travel distances and automobile dependency discourage casual encounters and weaken local networks. Social capital, in turn, is a powerful protective factor for youth: supportive relationships, mentoring, and civic institutions help keep young people engaged in education and employment. A 10% increase in county index score increases the level of social connections/friendships between low-income and high-income individuals by 1.8%. Social connection is also a powerful protective factor for youth: Supportive relationships, mentoring, and civic institutions lead to higher chances of upward mobility and lower chances of youth disconnection.

Residents of suburban counties are 62.5% more at risk of Lyme disease than their counterparts in more compact counties.

Suburban areas, where low-density residential development meets forests or grasslands, have a unique mix of habitat fragmentation with higher risks of human-tick interactions which creates an ideal environment for the **spread of Lyme disease.** In these areas where

low-density residential development meets forests or grasslands—facilitates tick-human contact while fragmenting ecosystems, enhancing conditions for tick survival and pathogen transmission. A 10% increase in the county index score reduces the risk of Lyme disease by about 21%.

Our findings from massive data collection on a range of quality-of-life outcomes and a series of rigorous statistical analyses conclude that higher compactness scores are consistently associated with more travel options, shorter driving distance, substantially reduced traffic fatalities—particularly pedestrian-related deaths—and reduced car dependency and vehicle ownership. Compact urban form also promotes active modes of travel such as walking, cycling, and public transit and contributes significantly to better health outcomes. Beyond mobility and safety, compact development supports housing affordability by reducing transportation and energy costs. It also contributes to other improved public health indicators, with reductions in COPD and heart attack hospitalizations, while fostering stronger social opportunities by reducing youth disconnection and increasing social capital. Together, these results reinforce the critical role of compact urban form in creating healthier, safer, and more sustainable urban environments.

RECOMMENDATIONS FOR PUBLIC OFFICIALS

We recommend cities and local governments to consider planning processes and policies that create more connections, and facilitate more transportation choices with walkable and livable neighborhoods that offer both local and regional accessibility to residents. Our recommendations to public officials for encouraging compact, connected, and walkable development follow directly from our operational definition of sprawl and its four dimensions as explained below:

Recommendations for Promoting Higher-Density Developments

Density plays a foundational role in shaping urban structure and the availability of transportation options. Density improves land use efficiency by utilizing shared infrastructure and makes active modes of transportation such as walking, cycling, and transit more viable. The following are examples of policies and recommendations for planners to help achieve higher-density development:

Zoning Reform: Allow higher residential and mixed-use densities near transit corridors and employment centers (e.g., adopting form-based codes to encourage flexible, mixed-use growth would be an integrated zoning reform).[12]

Incentives for Infill Development: Provide tax breaks, density bonuses, and reduced parking minimum requirements to encourage infill and brownfield redevelopment rather than greenfield sprawl.

Transit-Oriented Upzoning: Require higher densities within walking distance (e.g., 800 meters) of major transit stations, supported by transit investment.

Affordable Housing Integration: Pair density increases with inclusionary zoning and affordable housing mandates to ensure equitable access to transit-rich, high-demand areas.

Parking Reform: Reduce or eliminate minimum parking requirements and promote shared parking, freeing up land for more productive uses.

Land Value Capture and TOD Financing: Use tools such as value capture, impact fees, or tax-increment financing to reinvest in transit and public amenities that support compact growth.

Design Guidelines for Livability: Ensure that higher-density areas include green spaces, community facilities, and active transportation infrastructure so density contributes to livability, not overcrowding.

Recommendations for Enhancing Mixed-Use and Vibrant Neighborhoods

Proximity of housing to jobs, retail, and public services reduces the need for long driving trips, supports active travel, and makes public transit more economically feasible. Mixed-use environments also enhance neighborhood vibrancy, foster social interaction, and contribute to economic resilience by diversifying local activity patterns. To achieve a higher land-use mix score, urban planners and policymakers can implement the following strategies:

Mixed-Use Zoning: Encourage developments that combine housing, retail, services, and jobs in close proximity, replacing rigid single-use zoning.

15-Minute Neighborhoods: Adopt planning policies that ensure daily needs (schools, groceries, healthcare, recreation) are accessible within a 15-minute walk or bike ride.

Incentivize Small Businesses: Reduce permitting costs, streamline approvals, or offer grants for local shops and services in residential areas to strengthen neighborhood self-sufficiency.

Public Facility Integration: Co-locate schools, libraries, community centers, and health clinics within mixed-use developments to serve multiple needs at once.

Adaptive Reuse Policies: Encourage the conversion of vacant or underutilized commercial and industrial properties into housing, cultural, or community spaces.

Inclusionary Development Requirements: Pair new mixed-use projects with requirements for affordable housing so residents across income levels can access these vibrant neighborhoods.

Transit-Supportive Land-Use Planning: Align new mixed-use developments with transit corridors to maximize ridership and reduce car dependency (e.g., TODs development).

Recommendations for Fostering Strong Urban Centers

Strong urban centers are regional hubs of economic prosperity and help direct growth into walkable focal points such as downtowns, town centers, and transit station areas—where jobs, housing, and services cluster together. Evidence from polycentric metropolitan regions shows that when centers are well connected by high-capacity transit and supported by land-use policy, they can improve innovation capacity and high-tech productivity, reduce car dependence, lower emissions, and improve access to jobs and services. At the same time, centering policies encourage economic vitality by concentrating employment and retail activity in vibrant, multimodal hubs. To achieve a higher centering score, urban planners and policymakers can consider the following strategies:

Regional Planning for Strong Centers: Designate a hierarchy of centers (CBDs and sub-centers) in regional plans, directing growth inward rather than to the periphery.

Identify the Effective Population and Employment Thresholds Required to Sustain Strong Centers and Adjust Land-Use Policies Accordingly: A recent national study by the authors of this study shows that the share of population in centers relative to the MSA becomes effective once it exceeds 0.3, and the share of employment in centers relative to the MSA becomes effective once it exceeds 0.35. Likewise, the population ratio of subcenters to the central business district (CBD) is most effective between 0.25 and 0.5, while the employment ratio of subcenters to the CBD is most effective between 0.2 and 0.5.

Transit-Land Use Alignment in Centers: Prioritize transit investments that connect major centers and require upzoning in station areas.

Employment Clustering: Offer incentives for universities, hospitals, and major employers to locate in or near designated centers.

Retail and Service Concentration: Discourage strip commercial development; support walkable main-street developments within centers.

Equitable TOD Tools: Pair center development with inclusionary zoning, community land trusts, and anti-displacement funds.

Parking Reform in Centers: Replace minimum parking requirements in centers with maximums, unbundle parking from housing, and reinvest curb pricing revenues locally.

Recommendations for Promoting Accessible and Connected Streets

Highly connected street networks with small block sizes shorten travel distances and make walking, cycling, and public transit more practical and attractive. A traditional urban neighborhood is composed of intersecting bounding streets that form a grid, with houses built on the four sides of the block, facing these streets. Therefore, the length of each side of that block, and therefore its block size, is relatively small. By contrast, a contemporary suburban neighborhood does not make connections between adjacent cul-de-sacs or loop roads. Large block sizes indicate a relative paucity of street connections and alternate routes. Small blocks paired with higher intersection density (especially 4-way intersections) provide the highest level of street connectivity. To achieve a higher street accessibility score, urban planners and policymakers can consider the following strategies:

Connected Street Grids: Require new developments to follow connected grid or semi-grid patterns, limiting cul-de-sacs and gated subdivisions.

Small Block Standards: Identify and update the maximum block length standards in subdivision regulations to ensure permeability and walkability.

Complete Streets Policies: Adopt and enforce Complete Streets design standards to ensure roads safely accommodate all users—pedestrians, cyclists, public transit, and vehicles.

Traffic Calming & Safety Design: Implement narrower lanes, raised intersections, curb extensions, and protected bike lanes to reduce vehicle speeds and improve walkability.

Retrofitting Existing Suburbs: Break up superblocks by adding pedestrian and cycling cut-throughs, secondary streets, or mid-block crossings.

Green Mobility Corridors: Integrate linear parks, greenways, and cycle highways that connect neighborhoods and centers through safe, continuous routes.

Transit-Supportive Street Design: Prioritize bus rapid transit (BRT) lanes, queue jumps, and signal priority along highly connected corridors.

CONCLUDING REMARKS

Our health and well-being, social life, economic prosperity, and growth opportunities for our children are largely determined by where we live and how well-connected, our neighborhood is to the rest of region. This study, through massive data collection and rigorous statistical analyses, reports that compact and connected neighborhoods, counties, and metro areas are significant determinants of healthier, safer, and more cost-effective transportation options, lower energy costs, better health outcomes, lower exposure to vector-borne disease such as Lyme disease, greater social life, and greater opportunities for our children to thrive. Even housing, which has been the subject of many debates recently, is more affordable in compact areas after combining it with transportation and energy costs as two other major items in a household's budget.

As residents, elected leaders, and public officials recognize life-changing benefits of better development strategies, many choose to encourage this type of growth through changes to public regulations and incentives. Local elected officials, state leaders, and federal lawmakers can all help communities grow in ways that support these improved outcomes. This study recommends local governments and elected and public officials to consider land-use planning strategies and policies that create more connections and facilitate healthier transportation choices in walkable, vibrant, and connected neighborhoods that offer both local and regional accessibility to residents.

Appendix A: Summary of Key Quality-of-Life Impacts of Sprawl

Table A1 summarizes the direction and magnitude of how sprawl impacts our everyday life. This summary is based on a massive national data collection on every quality-of-life outcome and rigorous statistical analyses. Table A1 offers data-driven insights on various social, transportation, traffic safety, affordability, health, and equity impacts of compact versus sprawling development patterns in the U.S. For more details on methodology, data, and measurements, please see the full technical document.

Table A1: Quality-of-Life Impacts of Compact Development in 2026

Quality-of-life outcome	Relationship to compact development	A 10% increase in the index score (higher compactness) results in:
Housing affordability	Positive & significant	1.2% ***increase*** in housing costs relative to income (county compactness impact: 0.46%; neighborhood compactness impact: 0.75%)
Transportation affordability	Negative & significant	-4% ***decrease*** in transportation costs relative to income (county compactness impact: -2.13%; neighborhood compactness impact: -1.84%)
Energy Affordability	Negative & significant	-2.7% ***decrease*** in energy costs relative to income (county compactness impact: -2.2%; neighborhood compactness impact: -0.54%)
Housing + transportation + Energy Affordability (H+T+E)	Negative & significant	-1.05% ***decrease*** in combined costs of housing, transportation and energy relative to income (county compactness impact: -0.57%; neighborhood compactness impact: -0.48%)
Vehicle miles traveled (VMT)	Negative & significant	2.4% ***reduction*** in VMT
Average vehicle ownership	Negative & significant	2% ***reduction*** in average vehicle ownership
% of commuters walking and cycling to work	Positive & significant	10.4% ***increase*** in active commuting
% of commuters using public transit	Positive & significant	19.5% ***increase*** in public transit use
Pedestrian fatalities from car crashes per 100,000 population	Negative & significant	18.4% ***reduction*** in pedestrian fatalities
Fatal crash rate per 100,000 population	Negative & significant	7.7% ***reduction*** in fatal crashes
Heart attack hospitalization	Negative & significant	0.65% ***reduction*** in heart attack hospitalization
COPD hospitalization	Negative & significant	0.67% ***reduction*** in COPD hospitalization.
Social capital	Positive & significant	2.9% ***increase*** in civic engagement and a 1.8% increase in social connectivity, respectively
Disconnected youth	Negative & significant	3.4% ***reduction*** in the rate of disconnected youth
Lyme disease prevalence	Nonlinear effect	20.8% reduction in Lyme disease prevalence

Appendix B: Full List of 2020 Metro Area Index Rankings

Below is the full list of compactness index scores for 202 medium-sized and large metropolitan areas and 13 metropolitan divisions in 11 largest metropolitan areas. The table also presents individual scores for each of the four dimensions of the index. All regions are census-defined Metropolitan Statistical Areas unless marked with an asterisk (*). These are Metropolitan Divisions.

Table B1: 2020 Metropolitan Compactness Score rankings

Rank	Metro area	Density score	Mixed land use score	Activity centering score	Street connectivity score	**Composite (overall) score**
1	San Francisco-San Mateo-Redwood City, CA*	229.03	160.91	238.93	170.86	**242.91**
2	New York-Jersey City-White Plains, NY-NJ*	323.19	170.43	190.70	173.01	**227.38**
3	Philadelphia, PA*	229.05	161.07	168.18	199.64	**220.82**
4	Miami-Miami Beach-Kendall, FL*	173.35	133.51	127.33	177.35	**158.37**
5	Trenton-Princeton, NJ	132.91	120.01	122.02	128.79	**152.23**
6	Boston, MA*	158.16	133.56	150.39	125.17	**145.92**
7	Chicago-Naperville-Evanston, IL*	175.31	138.61	152.95	158.52	**145.10**
8	Santa Maria-Santa Barbara, CA	115.74	148.11	99.71	124.76	**143.32**
9	San Rafael, CA*	108.92	150.72	94.14	105.02	**141.74**
10	Boulder, CO	106.30	121.68	122.81	118.72	**141.66**
11	Los Angeles-Long Beach-Glendale, CA*	183.51	160.02	123.76	154.76	**137.69**
12	Champaign-Urbana, IL*	99.03	126.07	124.96	87.74	**136.47**
13	San Luis Obispo-Paso Robles, CA	94.51	143.17	104.53	104.26	**135.40**
14	Springfield, IL	88.72	87.53	151.06	104.32	**135.23**
15	Detroit-Dearborn-Livonia, MI*	120.86	123.18	117.95	169.90	**134.37**
16	Anaheim-Santa Ana-Irvine, CA*	154.26	148.59	96.81	155.45	**132.72**
17	Erie, PA	95.40	135.04	109.47	96.66	**132.24**
18	Charleston, WV	85.08	88.28	159.81	97.86	**130.89**
19	Santa Cruz-Watsonville, CA	103.19	132.50	85.30	110.83	**130.35**
20	Oakland-Berkeley-Livermore, CA*	140.41	142.37	110.03	148.80	**130.31**
21	Fort Lauderdale-Pompano Beach-Sunrise, FL*	139.41	130.19	86.81	169.14	**129.47**
22	Atlantic City-Hammonton, NJ	96.20	89.24	130.02	114.49	**129.35**
23	Lincoln, NE	104.71	132.15	90.10	112.28	**128.98**
24	Eugene-Springfield, OR	98.72	137.75	117.51	89.68	**128.50**
25	Yakima, WA	89.78	118.95	132.11	81.53	**127.60**
26	Madison, WI	112.72	114.17	147.95	90.81	**126.34**
27	Yuma, AZ	91.68	71.44	137.99	106.77	**126.19**
28	San Jose-Sunnyvale-Santa Clara, CA	145.93	139.07	91.03	139.26	**125.68**
29	Columbia, MO	94.40	102.44	142.55	65.65	**124.42**
30	Reading, PA	104.81	118.36	107.68	104.40	**122.99**
31	Seattle-Bellevue-Kent, WA*	140.56	120.24	140.84	125.85	**122.24**

32	Tuscaloosa, AL	83.41	90.09	156.42	78.78	**121.29**
33	College Station-Bryan, TX	96.87	98.53	104.50	107.95	**120.97**
34	Rochester, MN	97.14	85.87	143.03	72.28	**120.40**
35	Bridgeport-Stamford-Norwalk, CT	111.17	131.55	122.04	101.33	**120.11**
36	Burlington-South Burlington, VT	90.49	100.06	159.76	46.74	**119.95**
37	Amarillo, TX	90.61	105.20	96.01	113.04	**119.75**
38	Duluth, MN-WI	84.89	118.25	132.21	69.91	**118.40**
39	Laredo, TX	106.80	94.76	66.34	133.25	**118.38**
40	Cedar Rapids, IA	90.70	109.40	116.95	83.51	**117.49**
41	Spokane-Spokane Valley, WA	94.06	108.25	108.64	124.80	**117.28**
42	New Haven-Milford, CT	109.77	123.38	114.97	105.51	**117.01**
43	Salinas, CA	105.55	133.86	84.57	96.07	**116.48**
44	Las Cruces, NM	88.14	101.02	98.71	99.28	**116.34**
45	Denver-Aurora-Lakewood, CO	124.60	119.98	129.77	135.47	**116.03**
46	Reno, NV	102.63	91.87	123.36	105.96	**115.88**
47	Modesto, CA	108.91	147.67	58.31	114.10	**115.67**
48	Lexington-Fayette, KY	99.46	100.85	132.18	92.98	**115.55**
49	Fargo, ND-MN	102.93	126.39	87.61	72.20	**114.85**
50	Corpus Christi, TX	100.92	111.09	78.51	122.70	**114.66**
51	Rockford, IL	91.91	106.83	81.84	119.23	**113.33**
52	Salem, OR	95.74	121.29	100.89	91.61	**112.53**
53	Medford, OR	89.34	118.44	102.03	68.10	**112.52**
54	South Bend-Mishawaka, IN-MI	90.25	97.25	91.16	116.88	**112.46**
55	Santa Rosa-Petaluma, CA	94.28	138.03	86.95	94.80	**112.06**
56	Lubbock, TX	95.31	116.51	77.36	104.60	**111.93**
57	New Orleans-Metairie, LA	104.48	117.06	95.93	141.71	**111.92**
58	Chico, CA	90.47	124.41	80.79	77.47	**111.64**
59	Salt Lake City, UT	119.85	120.13	92.03	124.04	**110.86**
60	Portland-Vancouver-Hillsboro, OR-WA	117.21	133.58	112.00	125.51	**110.58**
61	Frederick-Gaithersburg-Rockville, MD*	116.02	123.28	108.34	109.01	**109.99**
62	Milwaukee-Waukesha, WI	109.77	125.72	104.04	124.23	**109.67**
63	Stockton, CA	107.36	133.35	67.60	121.86	**109.63**
64	Binghamton, NY	90.31	116.16	103.30	64.62	**109.18**
65	Nassau County-Suffolk County, NY*	117.18	141.73	86.08	146.76	**109.10**
66	Omaha-Council Bluffs, NE-IA	100.51	116.31	110.64	111.44	**108.99**
67	Oxnard-Thousand Oaks-Ventura, CA	106.68	131.78	74.13	118.32	**108.46**
68	Utica-Rome, NY	89.58	110.37	119.17	61.34	**108.42**
69	Las Vegas-Henderson-Paradise, NV	128.68	97.37	109.71	141.78	**108.26**
70	Merced, CA	95.39	118.38	87.20	76.84	**108.09**
71	Appleton, WI	87.68	105.69	90.25	86.96	**107.97**
72	Manchester-Nashua, NH	96.95	102.52	107.81	89.55	**107.94**

73	Scranton--Wilkes-Barre, PA	91.08	117.46	88.49	113.57	**107.84**
74	Bellingham, WA	88.34	90.41	105.46	80.53	**107.00**
75	Olympia-Lacey-Tumwater, WA	90.71	78.69	120.20	87.13	**106.77**
76	Providence-Warwick, RI-MA	107.18	133.18	95.52	123.47	**106.74**
77	Allentown-Bethlehem-Easton, PA-NJ	100.42	118.03	82.98	125.30	**106.35**
78	Washington-Arlington-Alexandria, DC-VA-MD-WV*	128.86	109.77	161.15	111.06	**106.32**
79	El Paso, TX	106.76	96.28	87.42	136.34	**106.26**
80	Albuquerque, NM	101.26	111.35	101.67	114.45	**105.97**
81	Cambridge-Newton-Framingham, MA*	129.31	141.99	78.58	125.45	**105.97**
82	Tacoma-Lakewood, WA*	106.50	95.99	102.66	123.73	**105.94**
83	Fort Collins, CO	93.55	101.57	88.90	99.16	**105.60**
84	Huntington-Ashland, WV-KY-OH	83.28	83.53	123.71	91.91	**105.24**
85	Charlottesville, VA	92.74	100.27	123.70	42.50	**105.21**
86	Lancaster, PA	98.69	105.45	110.64	87.92	**105.18**
87	Harrisburg-Carlisle, PA	93.81	106.68	96.35	108.83	**105.07**
88	Norwich-New London, CT	85.66	80.91	135.82	65.34	**104.96**
89	Vallejo, CA	105.00	114.51	60.42	111.64	**104.51**
90	Evansville, IN-KY	89.70	101.73	91.34	90.47	**104.17**
91	West Palm Beach-Boca Raton-Boynton Beach, FL*	111.90	114.90	88.43	131.39	**103.85**
92	North Port-Sarasota-Bradenton, FL	97.66	98.07	91.34	131.01	**103.54**
93	Davenport-Moline-Rock Island, IA-IL	89.95	124.28	59.42	107.23	**103.39**
94	Tyler, TX	83.68	68.91	109.52	94.68	**103.25**
95	Visalia, CA	93.50	128.49	76.93	90.68	**102.92**
96	Canton-Massillon, OH	87.18	102.33	76.12	116.05	**102.88**
97	Newark, NJ-PA*	124.84	140.51	87.97	110.14	**102.52**
98	Peoria, IL	86.53	96.42	103.24	94.39	**102.40**
99	Bremerton-Silverdale-Port Orchard, WA	88.61	87.76	98.49	87.33	**102.38**
100	Sioux Falls, SD	95.99	102.21	92.47	71.23	**102.05**
101	Baltimore-Columbia-Towson, MD	114.32	117.85	122.35	117.71	**101.83**
102	Roanoke, VA	88.05	89.17	101.99	87.62	**101.55**
103	Ann Arbor, MI	103.64	94.45	98.37	77.56	**101.26**
104	Syracuse, NY	96.38	103.99	132.67	68.06	**101.13**
105	Kennewick-Richland, WA	92.65	96.81	75.44	98.40	**100.85**
106	San Diego-Chula Vista-Carlsbad, CA	125.68	126.78	102.38	121.82	**100.78**
107	Sacramento-Roseville-Folsom, CA	108.92	123.35	114.55	114.15	**100.58**
108	Wichita, KS	95.37	110.43	100.07	92.28	**100.37**
109	York-Hanover, PA	90.13	93.02	103.28	94.12	**100.00**
110	Waco, TX	86.56	81.18	78.82	109.18	**99.54**
111	Lake County-Kenosha County, IL-WI*	97.08	103.60	87.32	122.54	**99.42**
112	Colorado Springs, CO	100.90	105.21	72.50	123.86	**99.18**

113	Charleston-North Charleston, SC	93.45	85.70	122.82	102.94	**99.07**
114	Houma-Thibodaux, LA	82.66	86.79	90.29	80.28	**98.83**
115	Boise City, ID	96.85	110.96	106.65	87.00	**98.54**
116	Tallahassee, FL	94.63	74.30	117.39	82.25	**98.49**
117	Wilmington, NC	91.44	98.62	66.75	96.99	**98.25**
118	Dayton-Kettering, OH	92.87	107.07	92.60	109.69	**97.66**
119	Buffalo-Cheektowaga, NY	104.86	126.36	93.51	94.58	**97.63**
120	Toledo, OH	91.93	115.95	87.83	95.03	**97.57**
121	Des Moines-West Des Moines, IA	98.83	115.95	90.83	89.45	**97.41**
122	Topeka, KS	86.92	100.90	84.46	69.48	**97.27**
123	Lake Charles, LA	84.71	88.67	88.51	77.60	**97.27**
124	Springfield, MA	98.22	118.57	90.93	84.47	**96.53**
125	Macon-Bibb County, GA	82.38	81.83	99.39	75.33	**96.10**
126	Tucson, AZ	102.63	93.23	99.78	114.28	**96.01**
127	Port St. Lucie, FL	92.26	79.13	92.86	109.41	**95.99**
128	Greeley, CO	87.21	93.89	85.42	88.31	**95.95**
129	Wilmington, DE-MD-NJ*	101.03	106.13	75.75	109.93	**95.74**
130	Lafayette-West Lafayette, IN	93.12	97.47	74.39	70.85	**95.71**
131	Savannah, GA	88.87	72.01	100.71	102.28	**95.63**
132	Beaumont-Port Arthur, TX	83.66	78.02	92.10	106.49	**94.53**
133	Kalamazoo-Portage, MI	89.70	88.14	80.21	82.12	**94.45**
134	Camden, NJ*	102.25	122.08	71.43	120.25	**94.44**
135	Albany-Schenectady-Troy, NY	96.20	110.20	113.76	77.47	**93.94**
136	Provo-Orem, UT	102.06	117.59	60.65	103.05	**93.79**
137	Gainesville, FL	90.46	78.45	91.14	90.04	**93.45**
138	Crestview-Fort Walton Beach-Destin, FL	87.50	80.74	88.58	84.63	**93.21**
139	Austin-Round Rock-Georgetown, TX	103.26	94.51	138.22	104.09	**93.17**
140	Fort Wayne, IN	91.57	90.62	88.29	88.51	**92.99**
141	Elkhart-Goshen, IN	84.69	75.11	65.95	98.08	**92.38**
142	Fresno, CA	104.13	130.04	66.75	96.71	**91.75**
143	Pittsburgh, PA	100.30	110.32	114.36	113.14	**91.68**
144	Hagerstown-Martinsburg, MD-WV	84.76	82.70	95.87	75.03	**91.53**
145	Virginia Beach-Norfolk-Newport News, VA-NC	101.54	103.52	102.23	117.05	**91.44**
146	Columbus, GA-AL	88.95	85.00	93.34	76.20	**91.44**
147	Cape Coral-Fort Myers, FL	93.80	79.55	84.46	125.50	**91.42**
148	Akron, OH	91.48	100.32	80.44	105.81	**90.82**
149	Monroe, LA	80.34	57.03	101.03	80.82	**90.54**
150	Lansing-East Lansing, MI	95.63	94.87	104.90	69.26	**90.42**
151	Asheville, NC	81.60	75.80	114.29	84.73	**89.85**
152	Montgomery, AL	86.97	86.71	97.41	75.68	**89.70**
153	Ogden-Clearfield, UT	99.04	114.35	62.01	99.35	**89.70**

154	New Brunswick-Lakewood, NJ*	106.40	123.52	74.63	129.88	**89.28**
155	Tampa-St. Petersburg-Clearwater, FL	106.61	95.91	99.39	143.42	**89.13**
156	Minneapolis-St. Paul-Bloomington, MN-WI	111.03	110.86	122.20	105.81	**87.97**
157	Lafayette, LA	83.53	84.48	90.15	93.99	**87.91**
158	Durham-Chapel Hill, NC	89.91	75.44	135.93	65.59	**87.83**
159	Palm Bay-Melbourne-Titusville, FL	94.52	80.00	68.64	118.93	**87.23**
160	Gulfport-Biloxi, MS	82.41	71.42	97.94	91.50	**86.98**
161	Flint, MI	84.67	80.72	71.85	104.67	**86.80**
162	Bakersfield, CA	97.83	127.11	67.99	86.79	**86.58**
163	Gary, IN*	92.68	108.16	55.48	112.07	**86.52**
164	Cleveland-Elyria, OH	103.23	117.18	100.57	97.70	**86.34**
165	Fort Smith, AR-OK	82.99	90.46	62.82	79.64	**86.07**
166	Pensacola-Ferry Pass-Brent, FL	86.61	64.64	103.33	96.10	**85.98**
167	Shreveport-Bossier City, LA	84.00	77.22	78.48	98.37	**85.87**
168	Phoenix-Mesa-Chandler, AZ	112.46	101.49	117.71	124.96	**85.48**
169	Ocala, FL	81.04	50.74	95.35	107.39	**85.34**
170	Richmond, VA	97.50	83.99	117.74	94.92	**85.34**
171	Hartford-East Hartford-Middletown, CT	98.88	102.85	110.57	77.87	**85.27**
172	Spartanburg, SC	79.83	60.69	101.62	85.33	**85.10**
173	Columbus, OH	100.53	103.02	113.64	98.80	**84.80**
174	Dallas-Plano-Irving, TX*	112.04	92.22	122.16	130.33	**84.45**
175	Oklahoma City, OK	101.62	95.90	100.81	96.89	**84.22**
176	Worcester, MA-CT	98.21	107.29	97.41	73.92	**84.03**
177	Gainesville, GA	82.55	50.26	92.08	76.59	**83.82**
178	Birmingham-Hoover, AL	86.25	70.35	115.10	110.48	**83.68**
179	Indianapolis-Carmel-Anderson, IN	96.26	91.98	121.90	101.87	**83.47**
180	Elgin, IL*	94.39	95.90	64.96	106.11	**82.94**
181	Portland-South Portland, ME	86.30	82.03	119.78	58.02	**82.84**
182	Louisville/Jefferson County, KY-IN	95.87	91.41	103.75	94.84	**82.46**
183	Little Rock-North Little Rock-Conway, AR	85.40	74.28	109.01	91.29	**82.41**
184	Deltona-Daytona Beach-Ormond Beach, FL	89.40	79.38	65.06	120.57	**82.32**
185	Rochester, NY	94.62	102.28	119.18	58.56	**81.11**
186	Johnson City, TN	81.02	47.49	77.58	89.49	**81.09**
187	Lake Havasu City-Kingman, AZ	84.00	71.57	64.47	76.51	**80.94**
188	Cincinnati, OH-KY-IN	97.77	99.46	121.03	89.59	**80.54**
189	Youngstown-Warren-Boardman, OH-PA	84.46	101.99	67.01	86.41	**80.53**
190	Mobile, AL	86.67	82.12	72.34	87.80	**80.53**
191	St. Louis, MO-IL	96.32	102.11	106.29	113.24	**80.34**
192	Lynchburg, VA	80.71	79.43	97.36	45.86	**79.76**
193	Springfield, MO	87.70	93.00	74.08	76.79	**79.68**
194	Memphis, TN-MS-AR	96.02	79.85	111.92	92.81	**79.60**

195	McAllen-Edinburg-Mission, TX	95.43	69.97	79.54	115.07	**79.54**
196	Killeen-Temple, TX	86.69	70.89	72.59	100.50	**79.33**
197	Tulsa, OK	90.09	89.09	88.02	98.27	**78.80**
198	Fort Worth-Arlington-Grapevine, TX*	102.19	96.34	84.65	123.65	**78.13**
199	Kansas City, MO-KS	98.14	103.70	95.21	102.25	**77.67**
200	Lakeland-Winter Haven, FL	89.21	51.21	82.15	120.37	**76.44**
201	Fayetteville-Springdale-Rogers, AR	86.16	73.45	90.70	78.33	**75.87**
202	Orlando-Kissimmee-Sanford, FL	105.15	77.91	95.60	125.02	**75.59**
203	Poughkeepsie-Newburgh-Middletown, NY	90.83	98.60	79.71	70.17	**75.50**
204	Clarksville, TN-KY	84.87	52.83	102.18	58.25	**73.83**
205	Columbia, SC	88.30	73.59	103.18	78.22	**73.79**
206	Grand Rapids-Kentwood, MI	92.49	90.39	98.83	73.74	**73.50**
207	Salisbury, MD-DE	77.74	61.27	88.29	81.69	**73.20**
208	Jacksonville, FL	95.88	75.49	91.95	109.50	**73.03**
209	Longview, TX	78.09	78.78	65.67	67.92	**72.92**
210	Greensboro-High Point, NC	86.32	80.44	91.92	79.10	**72.85**
211	Montgomery County-Bucks County-Chester County, PA*	97.05	116.91	68.51	100.74	**72.65**
212	Charlotte-Concord-Gastonia, NC-SC	93.65	79.06	138.10	85.06	**72.63**
213	Huntsville, AL	84.12	55.06	92.21	80.98	**71.39**
214	Chattanooga, TN-GA	85.60	61.23	89.40	82.41	**71.33**
215	Kingsport-Bristol, TN-VA	76.55	50.41	92.11	70.39	**71.15**
216	Raleigh-Cary, NC	95.21	82.78	91.62	92.06	**71.00**
217	San Antonio-New Braunfels, TX	98.96	85.33	95.42	109.39	**70.68**
218	Jackson, MS	82.84	64.88	100.59	69.93	**70.20**
219	Houston-The Woodlands-Sugar Land, TX	109.07	95.46	110.27	121.12	**69.92**
220	Knoxville, TN	84.92	55.89	120.41	74.97	**69.84**
221	Augusta-Richmond County, GA-SC	84.78	66.11	91.29	75.60	**69.42**
222	Winston-Salem, NC	83.20	63.05	105.08	69.08	**68.56**
223	Warren-Troy-Farmington Hills, MI*	96.01	103.42	81.25	95.47	**65.23**
224	Rockingham County-Strafford County, NH*	82.57	75.30	71.73	62.25	**65.11**
225	Jacksonville, NC	79.57	44.42	61.75	65.48	**63.65**
226	Greenville-Anderson, SC	84.31	66.52	94.73	76.89	**63.38**
227	Baton Rouge, LA	88.39	68.86	72.09	87.97	**62.51**
228	Myrtle Beach-Conway-North Myrtle Beach, SC-NC	79.83	48.62	63.65	91.41	**60.04**
229	Fayetteville, NC	83.15	54.83	70.33	78.28	**60.03**
230	Hickory-Lenoir-Morganton, NC	76.29	43.12	77.75	67.17	**57.87**
231	Nashville-Davidson--Murfreesboro--Franklin, TN	91.42	62.66	117.16	72.58	**57.39**
232	Atlanta-Sandy Springs-Alpharetta, GA	100.91	82.86	133.43	79.42	**57.22**
233	Riverside-San Bernardino-Ontario, CA	102.83	108.71	66.07	98.41	**54.32**

Appendix C: 2020 County Score Rankings

The 10 most compact and 10 most sprawling counties are shown in Tables C1 and C2. The most compact counties are central counties of large, older metropolitan areas. The most sprawling counties are outlying counties of large metropolitan areas or component counties of smaller metropolitan areas. Values range from 460.3 for New York County, as the most compact county to 55.3 for Harris County in Columbus MSA GA, as the most sprawling county in 2020.

Table C1. Top 10 Most Compact Counties in 2020

Rank	County	Metropolitan Area	Index
1	New York County	New York-Jersey City-White Plains, NY-NJ	460.3
2	San Francisco County	San Francisco-San Mateo-Redwood City, CA	252.6
3	Kings County	New York-Jersey City-White Plains, NY-NJ	232.0
4	Bronx County	New York-Jersey City-White Plains, NY-NJ	214.6
5	Suffolk County	Boston, MA	207.2
6	District of Columbia	Washington-Arlington-Alexandria, DC-VA-MD-WV	203.9
7	Philadelphia County	Philadelphia, PA	197.9
8	Charlottesville city	Charlottesville, VA	197.4
9	Alexandria city	Washington-Arlington-Alexandria, DC-VA-MD-WV	193.6
10	Queens County	New York-Jersey City-White Plains, NY-NJ	190.0

Table C2. Top 10 Most Sprawling Counties in 2020

Rank	County	Metropolitan Area	Index
986	Paulding County	Atlanta-Sandy Springs-Alpharetta, GA	63.1
987	Fayette County	Memphis, TN-MS-AR	62.6
988	Chambers County	Houston-The Woodlands-Sugar Land, TX	62.1
989	Blount County	Birmingham-Hoover, AL	62.0
990	Currituck County	Virginia Beach-Norfolk-Newport News, VA-NC	61.8
991	Riverside County	Riverside-San Bernardino-Ontario, CA	61.7
992	Powhatan County	Richmond, VA	60.8
993	Grant Parish	Alexandria, LA	60.5
994	Pike County	Atlanta-Sandy Springs-Alpharetta, GA	56.7
995	Harris County	Columbus, GA-AL	55.3

Appendix D: Full List of 2020 County Index Rankings

Below is the full list of compactness index scores for 995 metropolitan counties in the U.S. Table D1 also presents individual scores for each of the four dimensions of the index. Nonmetropolitan and rural metropolitan counties were excluded from the sample. More than 281 million Americans, nearly 85% of the U.S. population, lived in these 995 counties in 2020.

Table D1: 2020 Metropolitan Compactness Score rankings

Rank	County	Density score	Mixed land-use score	Activity-centering score	Street connectivity score	**Composite (total) score**
1	New York County, NY	641.44	150.53	403.64	211.16	**460.29**
2	San Francisco County, CA	255.35	155.41	242.25	210.45	**252.58**
3	Kings County, NY	355.52	164.49	110.82	230.02	**232.00**
4	Bronx County, NY	337.53	155.56	83.20	221.32	**214.63**
5	Suffolk County, MA	224.43	146.87	175.50	198.63	**207.18**
6	District of Columbia, DC	199.26	136.97	207.47	187.66	**203.87**
7	Philadelphia County, PA	206.33	150.24	184.12	207.43	**197.87**
8	Charlottesville city, VA	129.45	148.21	175.69	153.78	**197.37**
9	Alexandria city, VA	176.83	156.97	127.93	175.66	**193.75**
10	Queens County, NY	267.08	161.52	99.67	216.98	**190.00**
11	Arlington County, VA	180.21	151.60	134.08	181.81	**187.38**
12	Falls Church city, VA	134.62	175.20	64.19	154.89	**185.68**
13	Hudson County, NJ	216.14	158.78	88.09	129.62	**183.60**
14	Baltimore City, MD	154.25	146.50	176.30	190.24	**181.42**
15	City of St. Louis, MO	125.18	137.09	176.07	183.45	**174.84**
16	Richmond city, VA	124.37	132.02	174.28	174.18	**171.99**
17	Denver County, CO	135.58	142.34	182.18	186.38	**169.91**
18	Winchester city, VA	114.62	140.99	110.93	146.86	**169.15**
19	Orleans Parish, LA	122.84	138.39	140.71	211.69	**167.98**
20	Hopewell city, VA	109.39	120.23	78.59	185.28	**166.89**
21	Fredericksburg city, VA	112.95	129.14	96.98	155.63	**164.65**
22	Salem city, VA	105.17	125.18	109.44	139.15	**162.64**
23	Norfolk city, VA	119.58	129.87	151.74	178.48	**161.54**
24	Manassas Park city, VA	126.90	128.64	78.22	124.23	**160.40**
25	Harrisonburg city, VA	112.79	137.48	134.91	127.46	**159.68**
26	Waynesboro city, VA	103.43	131.71	80.48	147.48	**154.76**
27	Fairfax city, VA	118.81	139.16	64.10	138.77	**152.58**
28	Bristol city, VA	97.68	123.46	81.14	148.28	**152.49**
29	Asotin County, WA	105.69	143.81	76.07	134.54	**152.34**
30	Roanoke city, VA	107.75	123.76	122.92	160.88	**150.11**
31	Radford city, VA	102.92	114.30	69.48	154.74	**149.95**

32	Williamsburg city, VA	104.93	131.28	72.29	126.01	**149.44**
33	Franklin city, VA	98.25	117.51	63.89	132.53	**149.26**
34	Richmond County, NY	177.04	143.20	79.62	175.56	**148.00**
35	Staunton city, VA	100.84	129.51	91.73	127.52	**147.22**
36	Colonial Heights city, VA	107.24	117.90	67.33	142.35	**146.55**
37	Boone County, IA	94.78	152.89	64.14	135.69	**144.20**
38	Cabell County, WV	97.13	114.25	166.90	116.55	**142.85**
39	Manassas city, VA	119.61	128.84	70.78	134.12	**142.67**
40	Multnomah County, OR	124.18	142.22	147.85	166.59	**142.15**
41	Portsmouth city, VA	110.95	123.12	94.55	164.42	**141.27**
42	Essex County, NJ	163.83	149.22	117.74	150.30	**140.91**
43	Cascade County, MT	97.34	129.79	129.72	127.50	**140.38**
44	Lynchburg city, VA	103.61	118.98	126.55	129.89	**139.95**
45	Warren County, NY	95.72	119.65	165.15	88.82	**138.17**
46	Bristol County, RI	107.54	139.65	82.34	126.19	**137.45**
47	Monroe County, IN	104.02	120.57	168.48	102.73	**136.85**
48	Ohio County, WV	95.44	104.64	125.24	123.97	**136.28**
49	Brooke County, WV	91.59	78.49	143.65	117.41	**135.64**
50	Petersburg city, VA	101.08	106.77	78.80	143.26	**135.29**
51	Chattahoochee County, GA	89.73	125.30	69.09	100.87	**134.84**
52	Cook County, IL	149.58	141.12	179.55	166.67	**134.58**
53	Potter County, TX	99.67	109.67	131.35	140.68	**133.82**
54	Milwaukee County, WI	125.15	139.64	136.12	163.74	**133.80**
55	Laramie County, WY	100.71	121.25	125.69	126.77	**133.69**
56	Wabasha County, MN	88.94	126.78	84.34	109.92	**133.02**
57	Unicoi County, TN	94.43	114.90	85.09	106.84	**132.69**
58	Montour County, PA	96.70	121.30	76.19	106.26	**132.64**
59	Falls County, TX	89.45	114.87	77.90	117.29	**132.55**
60	Johnson County, IA	105.13	116.09	171.13	95.72	**132.38**
61	Dakota County, NE	98.38	112.01	72.90	115.32	**132.27**
62	Union County, NJ	141.81	153.79	92.75	151.32	**131.81**
63	Lincoln County, WI	92.39	139.32	78.89	104.56	**130.51**
64	Chelan County, WA	98.99	129.66	129.14	98.85	**130.47**
65	Carson City, NV	104.61	136.00	78.33	125.24	**130.22**
66	Macoupin County, IL	91.91	142.19	76.53	122.14	**130.12**
67	Cape May County, NJ	95.18	120.86	101.54	144.05	**129.98**
68	Bourbon County, KY	97.26	141.67	72.76	86.94	**129.38**
69	Bannock County, ID	101.50	122.95	116.14	117.01	**129.36**
70	Natrona County, WY	98.69	116.97	122.09	116.27	**129.31**
71	Douglas County, WI	94.73	126.21	94.69	113.93	**129.15**
72	Monongalia County, WV	100.16	110.90	148.11	105.43	**129.08**

73	Clay County, IN	90.51	145.77	66.88	104.31	**128.45**
74	Victoria County, TX	100.02	124.21	114.71	117.85	**128.27**
75	Benton County, OR	102.53	121.85	133.69	100.24	**128.26**
76	Sullivan County, IN	89.16	147.43	66.99	92.84	**128.10**
77	St. Bernard Parish, LA	100.96	115.00	82.30	123.33	**128.01**
78	Napa County, CA	102.38	131.94	124.22	113.47	**127.65**
79	Woodbury County, IA	100.11	124.13	107.12	131.31	**127.50**
80	Houston County, MN	89.16	131.26	72.23	97.60	**127.24**
81	Vigo County, IN	96.31	112.79	118.24	132.13	**126.98**
82	Nez Perce County, ID	99.38	119.97	82.58	120.30	**126.91**
83	Boyd County, KY	95.74	98.35	121.28	112.25	**126.87**
84	Providence County, RI	121.49	144.80	133.79	133.09	**126.83**
85	Buchanan County, MO	100.13	117.39	96.26	135.93	**126.75**
86	Passaic County, NJ	144.22	146.11	98.32	135.61	**126.37**
87	Chemung County, NY	96.87	122.58	124.32	104.41	**126.30**
88	Alameda County, CA	142.54	143.27	133.56	149.82	**126.09**
89	Marshall County, WV	93.04	125.08	77.67	111.91	**125.65**
90	Fayette County, KY	112.16	119.06	145.71	124.31	**125.61**
91	Champaign County, IL	106.63	125.96	144.26	105.76	**125.50**
92	Blair County, PA	97.40	125.99	108.42	129.48	**125.27**
93	Geary County, KS	95.78	104.56	88.21	121.51	**124.82**
94	Fulton County, IL	92.76	127.17	87.75	99.61	**124.78**
95	Broomfield County, CO	107.65	111.85	81.69	127.03	**124.31**
96	Jasper County, IA	100.19	143.50	76.23	90.92	**124.23**
97	Hall County, NE	97.11	118.14	81.74	134.25	**124.17**
98	Wichita County, TX	96.88	112.08	128.79	121.86	**123.85**
99	Grand Forks County, ND	104.58	142.19	92.20	96.82	**123.84**
100	Nicollet County, MN	97.41	135.83	68.94	104.22	**123.72**
101	Mercer County, NJ	114.68	122.64	142.78	120.50	**123.20**
102	Hampton city, VA	110.15	112.17	97.71	143.25	**123.08**
103	Dubuque County, IA	96.85	125.79	116.27	107.19	**122.89**
104	Kanawha County, WV	96.88	104.08	150.77	118.35	**122.66**
105	Green County, WI	89.68	136.72	76.32	102.59	**122.54**
106	Peoria County, IL	100.53	115.13	134.55	119.61	**122.44**
107	Albany County, NY	108.12	124.80	156.03	100.94	**121.86**
108	Lackawanna County, PA	99.60	126.52	125.88	121.91	**121.85**
109	Story County, IA	101.70	109.33	132.48	99.15	**121.52**
110	Jefferson County, AR	92.91	102.19	113.18	118.61	**121.42**
111	Jones County, IA	89.26	130.54	73.65	85.58	**121.40**
112	Schenectady County, NY	106.07	131.17	109.08	114.78	**121.32**
113	Ramsey County, MN	117.26	136.38	105.79	152.67	**121.32**

114	Newport News city, VA	111.32	118.48	105.68	130.46	**121.13**
115	Washington County, IA	88.71	124.86	74.74	93.47	**121.06**
116	Missoula County, MT	97.09	125.53	109.32	115.90	**120.64**
117	Newport County, RI	97.51	129.84	98.73	107.97	**120.38**
118	Miami-Dade County, FL	138.30	130.72	145.28	159.39	**120.29**
119	St. Louis County, MN	95.34	122.76	145.12	105.00	**120.28**
120	Eau Claire County, WI	98.53	122.22	115.10	106.27	**120.24**
121	Wood County, WV	95.93	118.98	104.23	114.17	**120.15**
122	Clinton County, MO	89.06	102.96	83.05	101.20	**119.92**
123	Lafayette County, MO	89.20	127.82	78.66	98.20	**119.92**
124	Vanderburgh County, IN	101.14	114.49	121.95	124.59	**119.92**
125	Olmsted County, MN	99.19	101.45	157.65	100.62	**119.90**
126	Sumner County, KS	87.94	131.17	71.15	87.94	**119.81**
127	Morehouse Parish, LA	94.09	120.66	65.51	102.47	**119.62**
128	Sangamon County, IL	96.86	105.36	150.49	112.88	**119.56**
129	Santa Barbara County, CA	118.91	139.02	115.73	124.43	**119.56**
130	Yellowstone County, MT	100.76	120.98	116.63	120.04	**119.51**
131	Hennepin County, MN	116.64	124.45	163.62	136.83	**119.44**
132	Nassau County, NY	130.29	148.61	106.77	159.07	**119.33**
133	Teller County, CO	90.69	118.34	71.82	99.99	**119.24**
134	Carroll County, IN	88.67	119.65	85.59	77.39	**119.20**
135	Yazoo County, MS	90.34	127.61	66.96	99.07	**119.20**
136	Douglas County, NE	108.88	124.30	132.88	143.21	**119.09**
137	Daviess County, KY	97.69	116.06	119.36	104.49	**118.89**
138	Allegany County, MD	92.63	104.07	112.25	110.69	**118.43**
139	Wicomico County, MD	94.69	109.17	134.65	98.11	**118.37**
140	Cowlitz County, WA	97.10	110.28	130.21	101.47	**118.18**
141	Dauphin County, PA	103.65	120.66	125.21	127.81	**118.00**
142	Dougherty County, GA	96.61	103.29	117.00	110.83	**117.86**
143	Jefferson Parish, LA	112.66	130.31	99.53	152.28	**117.64**
144	Hancock County, WV	93.86	98.83	79.14	115.28	**117.56**
145	Boulder County, CO	108.39	123.09	132.33	117.53	**117.56**
146	Colbert County, AL	94.79	117.24	77.47	120.72	**117.48**
147	Howard County, IN	97.63	115.69	96.43	115.01	**117.14**
148	Pawnee County, OK	88.33	113.00	61.47	93.24	**116.90**
149	Lehigh County, PA	110.24	125.91	113.99	132.94	**116.86**
150	West Baton Rouge Parish, LA	91.75	87.01	86.55	111.36	**116.74**
151	Washington County, NE	89.14	115.78	68.55	93.43	**116.49**
152	Walla Walla County, WA	97.95	125.75	78.64	108.99	**116.44**
153	Tom Green County, TX	98.47	112.41	104.92	121.87	**116.41**
154	Okmulgee County, OK	89.15	110.26	70.43	119.56	**116.30**

155	Shelby County, IN	97.13	111.94	99.31	88.74	**116.07**
156	La Crosse County, WI	98.89	127.36	86.32	123.76	**115.85**
157	Cooper County, MO	88.96	124.01	69.95	73.41	**115.82**
158	Garfield County, OK	97.56	129.53	80.84	101.95	**115.80**
159	Clay County, MN	101.48	132.60	79.61	96.42	**115.80**
160	Lancaster County, NE	105.63	130.97	114.70	124.46	**115.65**
161	Greenup County, KY	94.47	108.71	74.60	112.33	**115.62**
162	Saunders County, NE	88.35	125.03	64.73	89.84	**115.61**
163	Ray County, MO	89.21	128.51	70.71	79.87	**115.34**
164	Sutter County, CA	99.67	126.95	107.80	93.24	**115.33**
165	Black Hawk County, IA	98.39	127.87	89.45	122.41	**115.08**
166	Douglas County, WA	97.10	98.91	116.64	80.94	**114.91**
167	Franklin County, WA	103.40	114.88	88.00	118.10	**114.90**
168	Brazos County, TX	104.64	111.03	126.16	118.78	**114.86**
169	Mills County, IA	89.45	105.32	68.46	84.77	**114.86**
170	Taylor County, TX	99.03	120.58	102.00	119.22	**114.84**
171	Poquoson city, VA	96.79	91.55	82.28	69.44	**114.74**
172	Pottawattamie County, IA	97.15	118.91	101.07	101.57	**114.61**
173	Lycoming County, PA	94.97	123.15	103.56	109.77	**114.60**
174	Posey County, IN	91.50	109.81	78.88	88.62	**114.56**
175	Pueblo County, CO	100.15	114.62	102.24	129.38	**114.48**
176	Rock Island County, IL	100.71	129.31	86.91	122.83	**114.37**
177	Atlantic County, NJ	101.99	106.22	140.52	117.11	**114.36**
178	Camden County, NJ	113.29	135.21	101.44	142.80	**114.33**
179	Chittenden County, VT	99.93	117.83	148.76	79.47	**114.33**
180	Erie County, PA	100.88	131.16	125.69	107.51	**114.32**
181	Bibb County, GA	96.60	109.44	125.67	111.55	**114.30**
182	Miller County, AR	94.80	108.29	80.13	107.10	**114.30**
183	Ector County, TX	99.62	117.60	103.65	124.31	**114.28**
184	Marin County, CA	108.49	139.43	105.79	110.11	**114.27**
185	Androscoggin County, ME	97.10	102.10	143.45	86.12	**114.16**
186	Hamilton County, OH	109.37	125.47	158.65	116.42	**114.11**
187	Fulton County, GA	112.59	116.43	176.19	115.31	**114.05**
188	De Soto Parish, LA	87.97	65.00	140.98	76.90	**113.95**
189	Scott County, IA	100.70	124.47	93.42	127.86	**113.85**
190	Jefferson County, TX	101.06	110.21	114.95	135.44	**113.73**
191	San Luis Obispo County, CA	100.48	136.28	116.94	111.73	**113.72**
192	Sequoyah County, OK	91.38	108.75	95.66	89.75	**113.69**
193	Acadia Parish, LA	92.06	111.83	78.45	117.90	**113.65**
194	Madison County, IN	95.45	103.94	116.26	117.68	**113.43**
195	Kankakee County, IL	95.37	123.24	100.93	105.95	**113.38**

196	Douglas County, KS	104.02	129.66	95.33	100.37	**113.33**
197	Jackson County, IL	93.19	108.21	96.38	98.87	**113.31**
198	Charleston County, SC	101.42	110.49	151.07	117.35	**113.22**
199	Tompkins County, NY	100.03	100.97	147.07	76.30	**113.19**
200	Bay County, MI	95.88	116.64	100.48	110.37	**113.10**
201	Macon County, IL	95.25	111.39	107.45	109.33	**113.10**
202	Dane County, WI	107.68	120.31	150.07	113.63	**113.06**
203	Chesapeake city, VA	104.11	100.44	140.54	113.44	**112.89**
204	Fond du Lac County, WI	95.44	111.83	123.26	92.39	**112.86**
205	Mille Lacs County, MN	88.90	104.40	80.77	92.86	**112.71**
206	Riley County, KS	102.14	113.48	85.74	105.40	**112.68**
207	Mesa County, CO	100.34	106.27	115.68	116.14	**112.57**
208	Liberty County, GA	97.49	107.61	115.47	83.39	**112.56**
209	Virginia Beach city, VA	112.70	121.70	110.92	137.08	**112.55**
210	Benton County, MN	98.68	112.71	77.23	94.74	**112.41**
211	Allen County, OH	95.46	107.44	110.64	108.73	**112.35**
212	Richmond County, GA	101.57	105.12	132.81	109.88	**112.33**
213	Cambria County, PA	94.11	104.96	111.54	120.90	**112.31**
214	Kenosha County, WI	99.59	114.28	104.61	122.42	**112.21**
215	Butler County, KS	94.39	116.13	109.84	83.21	**112.20**
216	Midland County, TX	98.64	111.26	107.56	123.50	**112.17**
217	Kendall County, TX	91.96	96.61	121.26	76.53	**112.16**
218	St. Joseph County, IN	101.00	115.20	113.86	129.95	**112.12**
219	Cape Girardeau County, MO	95.53	97.70	123.59	94.27	**112.12**
220	Vermilion County, IL	91.09	91.81	110.51	113.75	**112.08**
221	Ingham County, MI	106.65	116.11	131.13	107.57	**112.02**
222	Box Elder County, UT	96.46	140.32	81.84	77.96	**111.89**
223	Bartholomew County, IN	95.19	100.53	113.27	101.51	**111.78**
224	Yamhill County, OR	98.81	130.54	85.39	106.56	**111.71**
225	Terrebonne Parish, LA	96.79	108.21	109.83	108.26	**111.63**
226	Centre County, PA	105.98	115.60	115.81	99.93	**111.60**
227	Benton County, IA	88.63	99.86	76.77	97.41	**111.53**
228	Durham County, NC	103.39	104.30	153.44	103.88	**111.34**
229	Tuscaloosa County, AL	95.10	104.94	142.58	107.68	**111.23**
230	Linn County, IA	100.26	115.86	127.73	106.91	**111.19**
231	McLean County, IL	101.77	113.42	118.17	104.52	**110.88**
232	Henry County, IL	90.36	108.36	98.23	90.75	**110.88**
233	Pinellas County, FL	114.34	125.50	106.49	160.73	**110.85**
234	Boone County, MO	99.32	111.22	130.64	99.44	**110.80**
235	Jackson County, MO	105.23	118.34	142.15	129.73	**110.68**
236	Campbell County, KY	99.49	114.33	87.76	109.99	**110.66**

237	Wayne County, MI	113.62	123.75	141.34	153.62	**110.62**
238	Orleans County, NY	94.58	134.97	84.62	64.26	**110.59**
239	Henderson County, KY	97.21	120.07	75.89	89.82	**110.59**
240	Imperial County, CA	102.09	138.63	101.43	96.59	**110.48**
241	Delaware County, IN	97.10	115.07	95.20	112.23	**110.42**
242	Gem County, ID	90.39	100.93	71.36	84.90	**110.26**
243	Delaware County, PA	119.00	141.54	84.96	139.90	**110.18**
244	Yuma County, AZ	99.88	95.17	134.10	114.11	**110.11**
245	Grant County, AR	88.75	109.62	74.69	71.89	**110.10**
246	Marion County, IN	109.46	113.30	151.70	131.95	**110.05**
247	Stevens County, WA	88.81	114.40	81.14	96.94	**110.05**
248	Simpson County, MS	88.85	103.38	79.63	87.18	**110.02**
249	Bergen County, NJ	134.60	148.60	86.48	155.44	**109.96**
250	Cass County, ND	103.13	125.55	109.84	100.53	**109.93**
251	Muskegon County, MI	96.40	103.80	126.33	110.07	**109.92**
252	Lane County, OR	101.71	132.06	130.58	103.49	**109.81**
253	Jerome County, ID	95.63	99.93	86.07	75.92	**109.77**
254	Bernalillo County, NM	108.65	122.56	122.60	136.91	**109.71**
255	Santa Cruz County, CA	106.26	130.82	106.71	108.98	**109.64**
256	Jasper County, MO	94.77	116.49	86.49	123.55	**109.62**
257	Hamblen County, TN	94.14	74.97	132.53	93.88	**109.60**
258	Lincoln County, SD	97.94	107.96	106.73	82.96	**109.60**
259	Sheboygan County, WI	97.18	121.56	98.37	102.24	**109.53**
260	Yakima County, WA	98.45	122.76	130.32	99.38	**109.51**
261	San Mateo County, CA	132.58	137.68	90.45	133.67	**109.47**
262	Ada County, ID	105.79	118.30	133.91	119.16	**109.39**
263	Onondaga County, NY	103.59	118.13	152.91	100.72	**109.35**
264	Harvey County, KS	89.99	119.86	69.33	89.46	**109.35**
265	Cole County, MO	93.78	99.31	119.88	88.80	**109.34**
266	Washington County, IN	93.29	102.20	89.03	75.45	**109.04**
267	Miami County, KS	88.87	102.16	87.44	89.52	**109.01**
268	Lucas County, OH	104.35	125.06	119.15	121.68	**108.98**
269	Allegheny County, PA	108.52	125.57	146.92	131.82	**108.90**
270	Chester County, SC	93.20	106.68	74.75	91.11	**108.76**
271	Carter County, TN	92.49	68.76	131.93	93.98	**108.67**
272	Minnehaha County, SD	102.25	113.61	107.09	114.97	**108.60**
273	Comanche County, OK	97.57	110.26	94.75	115.60	**108.60**
274	Crittenden County, AR	98.51	115.73	76.03	90.48	**108.58**
275	Forrest County, MS	94.09	98.21	109.69	98.29	**108.55**
276	Chatham County, GA	99.62	105.76	124.86	123.55	**108.47**
277	Montgomery County, AL	100.72	113.68	121.95	107.25	**108.45**

278	St. John the Baptist Parish, LA	96.83	101.72	77.34	99.44	**108.42**
279	Worcester County, MD	93.59	103.52	83.95	101.15	**108.33**
280	Kootenai County, ID	97.70	110.61	117.92	105.23	**108.31**
281	Outagamie County, WI	97.93	117.92	112.84	106.79	**108.15**
282	Spokane County, WA	100.47	116.13	129.25	131.75	**108.13**
283	Columbia County, PA	94.98	118.05	87.10	93.08	**108.11**
284	Wyandotte County, KS	101.92	104.06	98.08	125.20	**108.03**
285	Lebanon County, PA	95.91	118.22	91.72	117.53	**107.92**
286	King County, WA	120.43	126.56	159.04	128.99	**107.87**
287	Morton County, ND	90.78	92.50	97.72	83.84	**107.80**
288	St. James Parish, LA	88.91	78.33	98.05	78.04	**107.79**
289	Shawnee County, KS	98.54	111.11	110.21	111.92	**107.74**
290	Middlesex County, NJ	118.83	131.06	114.35	131.94	**107.74**
291	Burleigh County, ND	95.11	103.97	118.33	89.67	**107.67**
292	Lafourche Parish, LA	93.44	96.27	119.97	95.58	**107.55**
293	Twin Falls County, ID	97.37	124.97	82.89	97.68	**107.53**
294	Floyd County, IN	97.49	108.55	95.88	99.50	**107.48**
295	Kent County, RI	103.05	116.82	92.82	116.93	**107.41**
296	Pointe Coupee Parish, LA	88.78	88.90	86.93	81.20	**107.39**
297	Pennington County, SD	94.67	101.07	113.23	101.65	**107.28**
298	Winnebago County, IL	100.17	117.25	109.07	122.57	**107.10**
299	Muscogee County, GA	103.69	109.55	111.71	110.12	**107.07**
300	Kings County, CA	100.51	119.52	99.54	103.84	**107.01**
301	Westchester County, NY	128.23	145.86	100.16	124.22	**106.97**
302	Sacramento County, CA	116.58	129.03	140.93	131.17	**106.93**
303	Lubbock County, TX	104.24	120.41	104.74	122.53	**106.88**
304	Mineral County, WV	90.25	94.69	71.56	97.44	**106.84**
305	Warren County, IA	93.30	111.66	83.57	91.00	**106.75**
306	Morgan County, WV	89.14	94.40	78.76	67.32	**106.70**
307	Pulaski County, AR	100.37	106.27	130.95	123.96	**106.65**
308	Martin County, FL	98.70	101.64	123.02	101.32	**106.60**
309	Webb County, TX	105.04	108.27	94.37	137.38	**106.58**
310	Plaquemines Parish, LA	90.15	99.44	85.02	87.46	**106.55**
311	Bremer County, IA	88.92	91.29	78.77	90.01	**106.54**
312	Clinton County, IL	88.84	108.45	61.76	105.20	**106.32**
313	Broome County, NY	99.65	121.44	119.15	92.04	**106.23**
314	Santa Fe County, NM	97.62	117.11	113.40	93.96	**106.15**
315	Monroe County, IL	91.63	97.53	80.68	90.84	**106.04**
316	Lawrence County, OH	93.68	94.45	90.17	101.68	**105.94**
317	San Patricio County, TX	93.09	103.43	74.63	116.79	**105.90**
318	Williamson County, IL	92.36	96.00	85.52	113.51	**105.90**

319	Montgomery County, MD	116.83	128.16	133.17	120.76	**105.86**
320	San Benito County, CA	99.73	108.12	81.92	95.06	**105.84**
321	Hampden County, MA	105.07	127.19	124.58	108.90	**105.77**
322	Washington County, MD	96.71	113.03	118.69	92.63	**105.72**
323	Carbon County, PA	93.20	94.79	98.89	98.28	**105.66**
324	Northampton County, PA	102.76	122.10	102.05	124.69	**105.63**
325	Glynn County, GA	92.75	103.65	88.60	110.96	**105.61**
326	Pulaski County, VA	91.35	93.63	80.65	93.72	**105.60**
327	Manatee County, FL	102.06	108.97	123.70	124.05	**105.58**
328	Jefferson County, OH	94.52	106.45	84.11	92.60	**105.49**
329	Lafayette Parish, LA	99.30	106.51	116.83	115.31	**105.47**
330	Marion County, OR	101.43	124.69	122.65	104.08	**105.45**
331	Berkshire County, MA	93.39	115.33	121.47	82.46	**105.41**
332	Racine County, WI	99.26	122.40	95.25	112.61	**105.30**
333	Oneida County, NY	99.20	115.66	131.85	88.80	**105.26**
334	Blue Earth County, MN	96.82	114.84	87.37	87.50	**105.24**
335	Bonneville County, ID	98.92	114.88	94.25	102.32	**105.18**
336	Poinsett County, AR	89.18	110.15	70.48	71.96	**105.08**
337	Nueces County, TX	105.07	119.67	103.96	123.88	**105.06**
338	Lampasas County, TX	88.60	69.94	78.20	102.64	**104.93**
339	Sebastian County, AR	97.28	111.37	88.44	113.21	**104.75**
340	Indian River County, FL	98.01	95.13	102.95	123.27	**104.73**
341	Vermilion Parish, LA	91.57	92.46	96.84	97.97	**104.71**
342	Broward County, FL	124.31	127.15	115.66	153.28	**104.69**
343	Cumberland County, NJ	100.81	107.78	111.50	97.75	**104.64**
344	Edgecombe County, NC	90.15	95.77	82.33	102.17	**104.64**
345	Iberia Parish, LA	95.22	101.29	88.60	100.49	**104.62**
346	Los Angeles County, CA	150.98	146.37	147.98	141.17	**104.48**
347	Woodford County, KY	93.06	95.05	73.58	85.73	**104.42**
348	Jackson County, MS	94.54	90.54	129.08	102.16	**104.37**
349	Hinds County, MS	98.15	99.36	133.77	101.51	**104.29**
350	Cache County, UT	98.78	112.16	112.40	87.59	**104.26**
351	Garland County, AR	91.05	101.01	110.94	96.59	**104.26**
352	Berks County, PA	107.25	121.54	121.44	108.03	**104.25**
353	LaPorte County, IN	94.29	108.95	97.28	103.46	**104.22**
354	Boone County, IL	97.13	98.12	88.09	90.38	**104.15**
355	Floyd County, GA	93.60	89.49	121.72	93.23	**104.09**
356	Schoharie County, NY	90.65	119.37	87.61	51.58	**104.09**
357	Livingston County, NY	92.25	130.38	97.51	58.88	**104.07**
358	Ottawa County, OH	91.50	89.84	91.51	88.94	**104.00**
359	Columbia County, OR	93.49	102.35	90.57	86.28	**103.99**

360	Mecklenburg County, NC	108.77	109.83	166.38	111.33	**103.95**
361	Somerset County, MD	89.46	103.44	67.75	81.27	**103.91**
362	Carlton County, MN	89.27	103.73	77.84	86.29	**103.82**
363	Warren County, KY	96.48	105.42	116.69	91.62	**103.76**
364	Herkimer County, NY	94.60	132.82	72.09	78.48	**103.63**
365	Arapahoe County, CO	113.62	116.84	112.85	130.48	**103.63**
366	New Hanover County, NC	102.12	114.15	95.72	115.08	**103.63**
367	Belmont County, OH	91.43	99.35	88.66	98.49	**103.62**
368	Randall County, TX	100.98	117.93	76.34	116.35	**103.60**
369	Meade County, SD	88.35	75.64	86.27	98.43	**103.59**
370	Winnebago County, WI	99.61	124.46	83.29	112.10	**103.55**
371	Monterey County, CA	112.79	130.71	105.53	107.97	**103.50**
372	Charlotte County, FL	95.67	92.42	119.31	114.54	**103.28**
373	Seward County, NE	88.76	80.57	71.26	85.71	**103.19**
374	Harrison County, MS	96.80	98.84	124.17	104.91	**103.17**
375	Butte County, CA	98.30	125.19	107.72	95.53	**103.09**
376	Hardin County, KY	93.90	86.31	124.80	95.49	**103.05**
377	Polk County, IA	103.41	120.79	119.95	117.28	**103.00**
378	Polk County, OR	98.78	111.41	83.23	96.20	**102.96**
379	Orange County, NC	98.41	97.51	134.86	81.61	**102.95**
380	Calhoun County, AL	90.22	82.55	125.04	104.33	**102.94**
381	Lamar County, GA	89.38	92.51	73.83	72.54	**102.90**
382	Wayne County, WV	93.90	85.55	80.43	101.21	**102.88**
383	Polk County, MN	89.23	120.19	68.36	72.38	**102.83**
384	Christian County, KY	96.52	105.25	82.02	98.98	**102.80**
385	Jones County, TX	95.38	37.67	72.49	124.18	**102.78**
386	Davidson County, TN	105.24	107.69	147.51	114.76	**102.76**
387	Dallas County, IA	100.52	106.85	81.57	102.79	**102.75**
388	Weber County, UT	105.36	115.90	102.97	111.11	**102.72**
389	Stearns County, MN	96.57	107.66	115.86	94.30	**102.70**
390	Santa Clara County, CA	134.88	134.06	112.81	133.47	**102.58**
391	Buncombe County, NC	95.32	101.07	146.98	92.20	**102.52**
392	Oklahoma County, OK	103.92	112.81	138.97	122.92	**102.40**
393	Do+¦a Ana County, NM	98.30	110.62	110.12	107.37	**102.36**
394	Jackson County, MI	94.00	98.86	136.53	84.26	**102.36**
395	Florence County, SC	93.78	90.18	131.52	91.93	**102.30**
396	Galveston County, TX	102.03	104.78	106.80	131.03	**102.18**
397	Yolo County, CA	104.74	130.54	83.93	107.29	**102.17**
398	Rock County, WI	96.38	108.68	106.24	102.67	**102.15**
399	Sedgwick County, KS	103.41	116.59	121.59	119.41	**102.13**
400	Clarke County, GA	101.50	109.84	94.71	97.83	**102.06**

401	Travis County, TX	108.20	116.41	160.24	112.17	**101.92**
402	Copiah County, MS	89.76	113.72	64.80	73.59	**101.90**
403	Grayson County, TX	92.52	100.93	106.01	106.15	**101.88**
404	Bay County, FL	98.35	109.45	84.41	123.82	**101.88**
405	New Castle County, DE	107.81	119.46	108.85	127.37	**101.87**
406	Franklin County, OH	112.66	120.77	136.11	128.57	**101.86**
407	Tippecanoe County, IN	103.64	109.31	101.62	103.45	**101.69**
408	Dallas County, TX	117.84	113.09	150.67	143.24	**101.63**
409	Fulton County, OH	89.84	121.01	75.61	71.70	**101.63**
410	Warren County, VA	93.00	82.35	97.35	83.73	**101.63**
411	Lauderdale County, AL	93.15	87.39	124.78	84.62	**101.57**
412	Escambia County, FL	99.45	95.99	124.88	119.09	**101.55**
413	DeKalb County, IL	98.06	107.60	89.98	96.65	**101.42**
414	Jefferson County, KY	108.31	113.25	129.30	124.26	**101.38**
415	Leon County, FL	102.63	101.86	125.24	105.64	**101.29**
416	Leavenworth County, KS	94.86	101.06	93.79	94.03	**101.28**
417	Kenton County, KY	102.75	106.97	89.62	114.12	**101.05**
418	Skagit County, WA	95.86	109.31	99.19	96.79	**101.01**
419	Rockland County, NY	121.06	129.53	84.67	104.53	**100.78**
420	Washington County, OR	112.21	130.81	98.63	121.09	**100.73**
421	Marathon County, WI	94.17	117.95	95.97	95.12	**100.66**
422	Gregg County, TX	95.65	104.46	98.19	100.65	**100.54**
423	Etowah County, AL	91.53	88.05	112.19	98.98	**100.52**
424	Anson County, NC	91.51	99.75	78.25	59.02	**100.50**
425	Scott County, KY	96.34	93.28	84.40	92.74	**100.49**
426	Madison County, OH	90.79	83.37	95.67	86.12	**100.48**
427	Raleigh County, WV	92.53	100.79	86.63	97.76	**100.46**
428	Montgomery County, OH	102.74	118.72	115.26	121.09	**100.45**
429	Richland County, SC	101.03	102.80	133.25	110.27	**100.34**
430	Grady County, OK	91.77	89.50	83.07	100.78	**100.33**
431	Jefferson County, AL	98.61	104.81	133.20	130.30	**100.33**
432	Sarasota County, FL	102.40	108.24	111.59	126.10	**100.22**
433	Montgomery County, VA	97.01	106.54	91.48	93.84	**100.21**
434	Mercer County, PA	94.87	118.33	90.10	89.55	**100.14**
435	Jefferson County, WV	91.98	77.11	96.84	100.63	**100.11**
436	Jackson County, OR	97.89	120.94	111.02	91.47	**100.10**
437	Luzerne County, PA	100.38	119.52	101.80	115.28	**100.06**
438	Cumberland County, ME	97.68	108.61	141.55	85.24	**100.02**
439	Okaloosa County, FL	99.83	107.75	104.14	106.77	**99.89**
440	Franklin County, MA	93.71	111.68	96.28	73.74	**99.86**
441	Benton County, WA	99.23	106.96	109.21	102.44	**99.82**

442	Fayette County, WV	90.77	72.70	92.83	94.97	**99.67**
443	Greene County, OH	97.24	105.81	110.71	94.72	**99.64**
444	Houston County, AL	93.43	98.30	107.29	90.96	**99.62**
445	Jackson County, WV	89.00	102.08	65.74	79.73	**99.56**
446	Warren County, NJ	94.71	109.52	91.92	93.25	**99.54**
447	Caddo Parish, LA	97.50	105.54	101.50	117.22	**99.46**
448	Merced County, CA	102.06	120.99	108.60	97.33	**99.44**
449	Whatcom County, WA	96.29	105.51	123.75	94.34	**99.41**
450	New Haven County, CT	107.47	124.31	138.64	103.38	**99.36**
451	Henrico County, VA	105.89	105.71	101.07	121.82	**99.29**
452	Cuyahoga County, OH	111.74	128.79	129.89	118.55	**99.28**
453	Coconino County, AZ	95.62	118.81	123.19	63.93	**99.20**
454	Osage County, OK	92.80	81.91	79.87	99.68	**99.08**
455	Orange County, CA	134.19	138.51	113.38	140.17	**99.07**
456	Washoe County, NV	104.04	106.55	129.67	109.68	**98.95**
457	Rensselaer County, NY	98.62	114.16	101.40	92.79	**98.81**
458	Ouachita Parish, LA	94.53	82.43	120.83	106.93	**98.80**
459	Sagadahoc County, ME	90.59	86.79	89.13	78.14	**98.68**
460	Yuba County, CA	98.35	99.59	80.16	98.37	**98.65**
461	Stanislaus County, CA	109.64	138.16	90.65	115.76	**98.58**
462	Isanti County, MN	92.12	95.41	85.60	75.74	**98.55**
463	Morgan County, AL	95.31	93.27	104.42	100.32	**98.54**
464	Stark County, OH	98.21	112.30	105.01	122.08	**98.49**
465	Delaware County, OH	98.96	100.15	122.84	93.34	**98.39**
466	Suffolk city, VA	96.84	99.94	92.42	91.54	**98.31**
467	Salem County, NJ	94.15	94.72	91.65	86.75	**98.27**
468	Autauga County, AL	96.51	103.79	79.98	82.21	**98.25**
469	Thurston County, WA	98.53	98.25	135.30	95.35	**98.25**
470	Haywood County, NC	91.07	88.54	88.33	96.55	**98.18**
471	Cass County, NE	88.56	84.49	63.73	92.22	**98.03**
472	Alachua County, FL	101.48	100.34	114.03	109.05	**98.00**
473	Fairfield County, CT	110.92	128.76	134.08	100.93	**97.94**
474	Shasta County, CA	95.25	110.10	115.77	86.42	**97.92**
475	Whitley County, IN	91.34	86.75	94.37	65.71	**97.88**
476	Perry County, OH	89.40	95.09	76.48	79.96	**97.86**
477	Adams County, CO	111.53	116.80	89.60	132.11	**97.72**
478	McLennan County, TX	98.20	100.67	106.48	116.16	**97.72**
479	Clark County, OH	96.55	107.40	85.48	105.66	**97.67**
480	Monroe County, NY	104.28	116.26	145.34	98.57	**97.61**
481	Mahoning County, OH	98.09	111.73	104.58	102.09	**97.61**
482	Ozaukee County, WI	93.80	110.89	82.75	91.29	**97.58**

483	Le Sueur County, MN	89.24	84.72	76.93	80.51	**97.43**
484	Russell County, AL	93.31	86.85	82.80	95.88	**97.43**
485	Jessamine County, KY	95.01	95.95	78.09	86.90	**97.41**
486	Calumet County, WI	94.40	92.89	86.23	82.14	**97.36**
487	Cochise County, AZ	95.91	109.72	82.37	102.81	**97.29**
488	San Juan County, NM	92.95	95.12	124.58	76.88	**97.27**
489	Peach County, GA	89.95	81.26	80.00	87.19	**97.26**
490	Howard County, MD	104.25	119.78	116.57	89.55	**97.24**
491	Shiawassee County, MI	92.84	93.99	94.71	84.28	**97.14**
492	Calhoun County, MI	95.14	106.02	95.14	96.85	**97.11**
493	Fairfax County, VA	117.02	118.50	127.64	117.35	**97.06**
494	Fayette County, PA	92.35	94.90	97.70	104.94	**97.04**
495	Upshur County, TX	89.89	92.22	82.21	80.30	**97.03**
496	Hancock County, MS	91.19	79.11	79.70	99.52	**96.99**
497	Rapides Parish, LA	92.32	90.73	103.03	105.04	**96.87**
498	DeKalb County, GA	112.02	113.55	129.64	108.09	**96.85**
499	Sullivan County, TN	92.66	82.41	125.97	97.85	**96.81**
500	Washtenaw County, MI	104.02	108.50	132.05	89.02	**96.76**
501	Pitt County, NC	98.02	98.64	108.60	96.31	**96.66**
502	Contra Costa County, CA	113.55	123.31	119.86	122.54	**96.63**
503	Bowie County, TX	93.34	103.38	81.27	98.82	**96.57**
504	Sarpy County, NE	102.37	106.81	78.27	118.36	**96.51**
505	Sumter County, SC	91.67	87.21	112.81	89.56	**96.36**
506	Deschutes County, OR	96.80	105.06	112.60	92.51	**96.36**
507	Summit County, OH	101.18	117.12	110.88	118.79	**96.36**
508	Putnam County, WV	94.22	99.34	79.55	84.13	**96.34**
509	Saginaw County, MI	96.13	97.44	104.18	107.18	**96.23**
510	Grundy County, IL	92.51	85.08	82.31	92.82	**96.19**
511	Beaver County, PA	95.41	104.41	85.19	115.55	**96.11**
512	Hillsborough County, NH	102.20	112.51	125.34	96.55	**96.11**
513	Middlesex County, MA	122.50	136.33	114.33	119.30	**96.06**
514	Sonoma County, CA	100.86	132.55	108.37	100.92	**96.04**
515	Shelby County, KY	93.02	90.11	92.50	72.45	**96.03**
516	Iberville Parish, LA	92.30	59.16	81.71	96.57	**95.91**
517	Putnam County, IN	89.81	92.54	78.44	76.58	**95.87**
518	Clark County, KY	93.08	62.39	82.79	99.33	**95.83**
519	Clark County, IN	95.66	95.96	90.46	101.09	**95.78**
520	Atascosa County, TX	88.93	73.26	89.94	96.53	**95.70**
521	Pickaway County, OH	93.68	89.78	86.70	85.26	**95.62**
522	Norfolk County, MA	110.79	128.96	102.43	112.18	**95.53**
523	Larimer County, CO	99.93	111.50	111.48	105.92	**95.50**

524	Tioga County, NY	92.12	112.52	79.27	64.18	**95.49**
525	Roanoke County, VA	96.58	96.64	98.79	86.43	**95.27**
526	Calcasieu Parish, LA	95.83	104.26	108.78	99.06	**95.26**
527	Morgan County, IN	92.26	85.30	94.50	90.87	**95.21**
528	San Joaquin County, CA	107.33	129.85	100.81	121.48	**95.16**
529	Smith County, TX	94.97	93.21	120.53	101.72	**95.12**
530	New London County, CT	95.15	100.17	139.27	80.77	**95.09**
531	Pierce County, WA	105.01	108.18	132.96	119.79	**95.04**
532	Lamar County, MS	91.02	82.98	112.57	71.19	**94.98**
533	Craighead County, AR	95.27	93.15	112.09	79.53	**94.96**
534	Essex County, MA	117.15	132.89	94.83	115.36	**94.95**
535	Ulster County, NY	93.44	100.89	127.37	77.66	**94.91**
536	York County, VA	96.11	81.05	87.18	92.28	**94.86**
537	St. Lucie County, FL	102.09	95.16	110.14	116.34	**94.84**
538	Tazewell County, IL	95.23	100.08	81.83	109.20	**94.83**
539	Lowndes County, GA	94.48	92.13	101.05	94.52	**94.79**
540	Hillsborough County, FL	108.14	106.27	138.56	130.63	**94.69**
541	Boone County, IN	94.39	103.96	80.57	82.09	**94.68**
542	Hardin County, TX	90.60	86.87	90.96	83.14	**94.65**
543	Washington County, AR	99.01	104.33	115.16	92.57	**94.62**
544	Lancaster County, PA	101.31	114.22	132.48	96.11	**94.61**
545	Tulare County, CA	100.96	126.80	106.56	103.39	**94.59**
546	Frederick County, MD	97.21	103.85	121.63	92.63	**94.56**
547	Solano County, CA	107.00	119.34	94.69	115.41	**94.56**
548	Newton County, MO	91.21	98.64	79.61	83.57	**94.55**
549	Lake County, IN	101.57	119.76	88.14	130.22	**94.54**
550	Greene County, MO	100.32	110.77	101.47	106.39	**94.53**
551	Penobscot County, ME	92.03	95.72	134.10	69.76	**94.52**
552	El Paso County, TX	107.50	108.48	112.60	133.29	**94.51**
553	Porter County, IN	96.21	101.23	103.79	95.54	**94.50**
554	Creek County, OK	91.43	81.08	88.52	99.76	**94.38**
555	Rusk County, TX	89.25	110.93	74.12	72.94	**94.38**
556	Pierce County, WI	93.97	85.00	83.80	72.39	**94.36**
557	Josephine County, OR	95.04	103.22	83.56	87.15	**94.34**
558	Shelby County, TN	104.96	104.38	138.30	116.64	**94.28**
559	Wayne County, NC	91.78	73.11	123.89	90.98	**94.27**
560	Lake County, OH	100.88	112.38	104.05	90.30	**94.19**
561	Hocking County, OH	89.28	82.61	63.89	86.20	**94.17**
562	Armstrong County, PA	92.55	89.49	88.60	88.68	**94.16**
563	Knox County, TN	99.80	96.87	141.18	99.34	**94.15**
564	Hampshire County, MA	101.45	110.82	103.20	77.15	**94.15**

565	Bristol County, MA	108.59	122.71	99.40	114.28	**94.14**
566	Crawford County, AR	92.38	80.63	96.55	83.89	**94.08**
567	Caldwell County, NC	91.28	83.88	109.25	80.61	**94.01**
568	Whitfield County, GA	95.07	83.65	107.27	87.54	**93.94**
569	Washington County, PA	94.40	106.48	99.11	102.17	**93.90**
570	Ventura County, CA	111.66	128.84	102.86	115.80	**93.86**
571	Forsyth County, NC	99.06	98.59	131.50	98.54	**93.86**
572	Berrien County, MI	93.56	107.65	88.87	100.17	**93.84**
573	Weld County, CO	97.05	107.65	113.46	101.89	**93.73**
574	Anderson County, TN	91.94	76.10	103.46	89.54	**93.67**
575	Logan County, OK	90.38	73.34	95.46	84.61	**93.59**
576	Greene County, VA	90.46	81.03	77.12	59.34	**93.58**
577	Richland County, OH	94.12	99.69	98.32	88.92	**93.53**
578	Linn County, OR	96.26	112.12	86.86	86.88	**93.43**
579	Rockwall County, TX	99.16	86.26	88.13	101.31	**93.42**
580	Gaston County, NC	95.81	95.18	114.48	99.13	**93.30**
581	Highlands County, FL	91.76	82.55	87.52	109.92	**93.18**
582	Cumberland County, PA	98.15	111.39	96.12	102.60	**93.05**
583	Monmouth County, NJ	103.79	131.08	93.51	116.13	**92.94**
584	St. Clair County, IL	95.45	104.32	92.34	116.73	**92.90**
585	Madison County, IL	96.72	108.05	88.99	116.13	**92.83**
586	York County, PA	98.71	106.70	125.84	101.04	**92.81**
587	Bradley County, TN	93.72	75.66	118.33	85.98	**92.80**
588	Salt Lake County, UT	113.32	122.14	111.27	122.91	**92.51**
589	Strafford County, NH	96.35	107.29	94.72	82.12	**92.46**
590	St. Charles Parish, LA	92.79	73.16	83.82	93.78	**92.41**
591	Chippewa County, WI	91.68	89.55	80.54	90.73	**92.29**
592	Cass County, MO	94.66	106.04	76.86	95.16	**92.28**
593	Mathews County, VA	89.27	54.02	74.29	50.41	**92.26**
594	Darlington County, SC	90.33	91.78	87.90	78.92	**92.10**
595	Tulsa County, OK	103.12	111.15	113.01	118.10	**92.07**
596	Kitsap County, WA	97.69	103.40	116.25	92.14	**92.06**
597	Allen County, IN	99.64	105.66	113.01	104.61	**92.00**
598	Valencia County, NM	92.72	85.91	88.32	90.13	**91.97**
599	Nash County, NC	91.89	85.53	101.45	87.31	**91.92**
600	Davis County, UT	106.25	117.46	87.26	108.27	**91.89**
601	Seminole County, FL	106.11	107.53	95.57	121.65	**91.71**
602	Niagara County, NY	97.63	113.77	85.58	100.91	**91.64**
603	Warrick County, IN	95.71	92.26	79.51	83.66	**91.57**
604	Walton County, FL	89.98	69.72	108.77	86.69	**91.40**
605	Appomattox County, VA	88.60	77.11	74.25	53.10	**91.21**

606	Berkeley County, WV	93.56	85.23	103.68	91.66	**91.20**
607	Kent County, DE	94.89	85.88	114.14	95.25	**91.14**
608	St. Clair County, MI	94.07	102.30	96.94	91.81	**91.12**
609	Woodford County, IL	89.04	79.36	68.16	91.10	**91.10**
610	Kent County, MI	100.21	111.31	132.43	97.99	**91.00**
611	Adams County, PA	92.52	94.22	100.64	80.05	**90.99**
612	Gibson County, TN	89.10	87.45	85.12	76.10	**90.92**
613	Hartford County, CT	106.81	117.92	134.22	95.63	**90.89**
614	Placer County, CA	100.75	112.70	104.13	104.28	**90.83**
615	Waller County, TX	91.26	57.89	95.04	98.31	**90.81**
616	St. Charles County, MO	104.13	108.26	93.00	116.17	**90.76**
617	Cobb County, GA	107.84	107.05	122.13	110.73	**90.72**
618	Palm Beach County, FL	108.54	118.15	121.09	126.34	**90.68**
619	Somerset County, NJ	101.76	113.75	95.29	104.08	**90.57**
620	Washington County, RI	92.93	105.29	89.82	85.66	**90.54**
621	Middlesex County, CT	94.47	101.66	112.78	76.00	**90.53**
622	Morris County, NJ	101.84	118.52	109.78	99.89	**90.51**
623	Erie County, NY	108.78	127.94	119.24	99.72	**90.49**
624	Albemarle County, VA	96.12	101.33	99.03	71.71	**90.45**
625	Jefferson County, ID	88.80	80.11	84.34	63.33	**90.43**
626	Sumter County, FL	99.08	75.96	82.25	117.48	**90.43**
627	Lee County, AL	97.02	90.71	114.56	85.68	**90.38**
628	Gloucester County, NJ	99.99	116.85	85.18	105.10	**90.38**
629	Kalamazoo County, MI	97.27	104.71	107.52	93.43	**90.35**
630	Bossier Parish, LA	94.31	84.68	101.61	94.48	**90.35**
631	Ocean County, NJ	107.72	108.66	95.57	127.78	**90.30**
632	Caldwell County, TX	89.62	68.46	81.45	92.01	**90.26**
633	Madison County, TN	94.84	99.02	82.05	87.32	**90.26**
634	DuPage County, IL	111.44	124.80	88.64	129.24	**90.24**
635	Hamilton County, IN	100.95	96.74	111.22	104.73	**90.21**
636	East Baton Rouge Parish, LA	102.71	102.58	101.74	118.04	**90.21**
637	Alamance County, NC	95.54	102.51	93.19	93.64	**90.17**
638	Columbia County, WI	89.18	90.44	76.79	85.36	**90.12**
639	Cecil County, MD	92.38	87.53	101.46	84.15	**90.11**
640	Duval County, FL	105.70	103.18	121.00	126.55	**90.03**
641	Kane County, IL	102.83	114.24	95.79	116.59	**89.95**
642	Miami County, OH	92.14	98.98	77.34	97.79	**89.90**
643	Guadalupe County, TX	98.48	85.77	101.42	98.80	**89.89**
644	James City County, VA	95.53	86.85	79.82	92.77	**89.86**
645	Bell County, TX	99.36	97.84	105.96	112.50	**89.82**
646	Elkhart County, IN	95.80	96.59	94.71	104.95	**89.80**

647	Hamilton County, TN	97.79	93.90	117.44	105.94	**89.77**
648	Goochland County, VA	89.68	90.76	70.86	59.38	**89.74**
649	Monroe County, MI	92.71	92.19	114.32	80.65	**89.71**
650	Wood County, OH	94.77	103.71	90.89	85.05	**89.63**
651	Jefferson County, CO	106.64	121.15	88.34	118.05	**89.57**
652	Washington County, MN	99.78	105.62	91.42	104.95	**89.46**
653	Franklin County, MO	90.84	90.85	92.67	89.20	**89.46**
654	Platte County, MO	97.42	95.73	77.78	93.35	**89.45**
655	Carver County, MN	94.84	93.52	85.79	90.11	**89.37**
656	Coryell County, TX	96.77	83.35	84.56	89.25	**89.35**
657	St. Louis County, MO	107.20	113.91	111.36	122.91	**89.30**
658	Boone County, KY	99.11	90.76	94.41	89.95	**89.29**
659	Pima County, AZ	102.97	107.32	132.36	113.60	**89.29**
660	Clark County, NV	119.51	109.31	128.14	130.75	**89.25**
661	Madera County, CA	96.50	105.56	94.18	83.93	**89.23**
662	Dearborn County, IN	90.17	72.88	88.79	81.60	**89.20**
663	Campbell County, TN	89.16	70.31	79.38	84.09	**89.11**
664	McClain County, OK	89.52	79.19	68.30	88.50	**89.02**
665	El Paso County, CO	104.52	112.81	101.57	121.81	**88.86**
666	Montgomery County, TN	97.78	76.95	133.80	83.39	**88.79**
667	Lake County, IL	103.80	111.40	106.92	117.49	**88.78**
668	Carroll County, OH	88.75	82.49	68.29	66.95	**88.74**
669	Clark County, WA	104.53	112.36	94.64	113.64	**88.69**
670	Johnson County, IN	98.04	106.32	81.98	92.86	**88.67**
671	Brown County, WI	98.42	115.55	86.09	99.44	**88.63**
672	Eaton County, MI	93.55	104.40	84.83	80.37	**88.57**
673	Clay County, MO	100.06	101.89	90.70	104.10	**88.51**
674	Montgomery County, PA	106.89	127.80	97.95	116.33	**88.44**
675	Spalding County, GA	93.26	77.83	80.55	90.63	**88.43**
676	Scott County, MN	97.92	101.51	79.79	97.21	**88.40**
677	Washington County, UT	97.70	96.34	88.75	100.03	**88.38**
678	Butler County, OH	101.55	106.41	99.82	106.60	**88.37**
679	Washington County, TN	94.29	82.78	97.30	96.33	**88.36**
680	Madison County, MS	93.80	85.36	96.37	86.91	**88.35**
681	Dutchess County, NY	95.73	107.96	118.59	80.11	**88.34**
682	Loudoun County, VA	103.80	113.96	84.66	114.46	**88.27**
683	Clackamas County, OR	100.46	122.41	92.64	101.57	**88.25**
684	Rowan County, NC	92.22	88.46	101.57	91.62	**88.24**
685	Barnstable County, MA	91.90	108.85	85.90	105.40	**88.22**
686	Jefferson County, NY	93.62	90.93	97.86	82.35	**88.20**
687	Dakota County, MN	105.32	110.58	87.22	114.85	**88.16**

688	Jasper County, IN	88.76	94.11	70.66	59.66	**88.15**
689	Trumbull County, OH	95.06	106.08	86.80	98.88	**88.14**
690	Canyon County, ID	98.57	109.44	83.60	101.05	**88.12**
691	Hancock County, IN	92.89	82.93	87.27	87.66	**88.11**
692	Fairfield County, OH	96.16	93.37	92.26	94.70	**88.11**
693	Burlington County, NJ	100.70	112.27	104.44	102.81	**88.07**
694	Anne Arundel County, MD	105.12	108.98	101.63	114.45	**87.96**
695	Culpeper County, VA	90.59	78.04	90.66	71.87	**87.88**
696	Catoosa County, GA	93.00	81.32	81.64	86.46	**87.79**
697	Craven County, NC	92.25	83.02	90.67	90.90	**87.72**
698	Prince George's County, MD	113.90	119.36	95.60	120.13	**87.52**
699	Baltimore County, MD	109.26	123.40	102.24	108.38	**87.51**
700	Faulkner County, AR	94.05	87.31	104.54	79.43	**87.49**
701	Cleveland County, OK	101.18	103.81	96.46	98.96	**87.44**
702	Westmoreland County, PA	95.31	107.66	95.20	111.91	**87.40**
703	Ionia County, MI	93.20	78.46	92.02	76.31	**87.34**
704	Tooele County, UT	97.98	91.70	76.50	77.06	**87.27**
705	Rogers County, OK	91.54	77.63	92.98	91.88	**87.26**
706	Oswego County, NY	93.49	89.56	106.95	72.68	**87.17**
707	Dorchester County, SC	103.26	98.61	76.39	97.25	**87.12**
708	Henderson County, NC	91.68	90.53	86.50	91.65	**87.07**
709	Lincoln County, MO	91.10	60.60	107.15	76.49	**86.99**
710	Sequatchie County, TN	88.99	51.74	75.56	64.33	**86.81**
711	Guilford County, NC	99.94	107.13	115.90	100.32	**86.75**
712	Pottawatomie County, KS	88.97	68.04	59.78	85.76	**86.75**
713	Clayton County, GA	106.72	93.07	92.43	104.82	**86.49**
714	Utah County, UT	106.91	119.66	95.85	108.09	**86.44**
715	Houston County, GA	97.93	97.11	79.77	97.47	**86.40**
716	Greenville County, SC	99.34	100.24	125.49	96.17	**86.38**
717	Marion County, FL	93.86	81.96	125.60	106.07	**86.38**
718	Volusia County, FL	99.12	101.57	101.54	120.75	**86.33**
719	Madison County, NY	91.60	103.11	80.46	65.32	**86.27**
720	Marion County, TN	89.01	70.61	60.28	82.79	**86.13**
721	Harrison County, TX	89.00	75.49	84.33	89.04	**86.10**
722	Butler County, PA	93.88	98.82	105.88	81.35	**86.09**
723	Johnson County, KS	105.60	114.53	94.01	112.44	**86.07**
724	Orange County, FL	109.63	99.52	124.55	126.86	**86.03**
725	Lee County, FL	101.01	97.96	113.95	122.01	**85.91**
726	Windham County, CT	93.23	94.90	104.01	66.91	**85.77**
727	Catawba County, NC	92.81	79.93	108.25	90.24	**85.66**
728	St. Croix County, WI	91.93	91.88	90.07	75.33	**85.63**

729	Rockdale County, GA	96.37	85.23	83.74	84.68	**85.62**
730	Bryan County, GA	91.94	66.34	93.13	67.95	**85.58**
731	Putnam County, NY	93.49	92.56	80.24	84.53	**85.54**
732	Callaway County, MO	89.21	83.92	75.96	69.47	**85.54**
733	Washington County, WI	93.46	99.25	91.40	80.09	**85.44**
734	Hunt County, TX	91.12	68.61	100.10	91.56	**85.41**
735	St. Tammany Parish, LA	96.26	91.62	98.05	104.87	**85.40**
736	Hall County, GA	94.35	81.74	114.00	90.07	**85.39**
737	Brown County, OH	89.21	80.31	71.19	76.79	**85.28**
738	Genesee County, MI	96.15	99.36	103.25	109.04	**85.28**
739	Washington County, VA	89.58	78.67	86.18	71.42	**85.21**
740	Christian County, MO	91.66	87.40	83.18	83.49	**85.17**
741	Washington County, NY	92.14	87.55	88.68	62.01	**85.11**
742	Licking County, OH	94.63	91.69	96.03	91.14	**84.96**
743	Worcester County, MA	103.58	117.60	125.82	90.48	**84.89**
744	Williamson County, TN	95.94	78.16	124.61	88.59	**84.86**
745	Kendall County, IL	98.08	81.94	84.66	96.40	**84.80**
746	Carter County, KY	88.74	48.62	75.07	84.43	**84.78**
747	Pike County, PA	90.55	40.43	113.42	82.23	**84.74**
748	Oconee County, GA	90.59	79.27	74.37	70.03	**84.66**
749	Mohave County, AZ	96.14	94.41	96.69	91.43	**84.65**
750	Lancaster County, SC	92.43	86.03	82.87	85.28	**84.64**
751	Shelby County, AL	94.41	76.21	120.26	90.54	**84.57**
752	San Diego County, CA	120.30	125.70	126.41	118.32	**84.53**
753	Sandoval County, NM	100.38	92.10	80.23	91.97	**84.43**
754	Campbell County, VA	90.82	85.78	81.05	68.97	**84.37**
755	Botetourt County, VA	89.14	67.06	80.33	68.03	**84.37**
756	Person County, NC	89.20	78.13	84.54	58.83	**84.36**
757	Levy County, FL	88.21	65.11	71.37	90.07	**84.31**
758	Loudon County, TN	90.60	62.06	84.93	87.14	**84.30**
759	Tolland County, CT	94.45	82.32	123.41	62.95	**84.28**
760	Hawkins County, TN	89.48	73.49	86.68	75.91	**84.25**
761	Midland County, MI	95.99	86.00	84.68	74.14	**84.14**
762	Wyoming County, PA	88.81	76.61	69.71	59.84	**84.08**
763	Osceola County, FL	101.90	84.94	95.76	120.58	**84.08**
764	Clay County, FL	98.29	84.77	108.58	87.87	**84.02**
765	Pickens County, SC	91.91	82.82	101.36	82.28	**83.91**
766	St. Martin Parish, LA	89.75	68.27	80.16	83.42	**83.91**
767	Ontario County, NY	93.68	98.90	93.70	65.39	**83.89**
768	Collin County, TX	106.89	102.91	110.56	122.92	**83.87**
769	Webster County, MO	89.17	81.66	68.83	69.71	**83.82**

770	McDuffie County, GA	88.92	52.33	73.98	69.77	**83.77**
771	Canadian County, OK	98.33	96.80	80.24	89.58	**83.77**
772	Franklin County, VT	92.36	76.39	88.52	61.72	**83.71**
773	Saline County, AR	91.89	75.53	108.15	79.83	**83.71**
774	Meade County, KY	89.56	50.76	91.78	66.00	**83.69**
775	Fresno County, CA	104.74	127.80	100.70	107.21	**83.67**
776	Dawson County, GA	89.71	57.09	81.02	65.39	**83.54**
777	Franklin County, PA	93.12	94.81	93.25	83.28	**83.54**
778	Madison County, AL	96.79	88.58	118.67	97.30	**83.44**
779	Tarrant County, TX	109.92	113.17	112.49	134.18	**83.38**
780	Anoka County, MN	100.60	107.65	86.12	103.90	**83.31**
781	Saratoga County, NY	94.00	93.77	111.11	81.29	**83.28**
782	Isle of Wight County, VA	90.69	79.99	70.65	65.19	**83.20**
783	Murray County, GA	89.95	62.24	83.86	72.93	**83.18**
784	Fort Bend County, TX	106.12	89.57	117.35	117.97	**83.15**
785	Gadsden County, FL	89.21	59.16	73.55	90.32	**83.14**
786	Marshall County, MS	88.83	74.76	70.01	67.98	**83.11**
787	Cumberland County, NC	98.83	96.01	102.32	96.83	**83.10**
788	Warren County, OH	98.29	90.48	102.35	89.67	**82.97**
789	Nassau County, FL	91.65	73.74	85.40	89.99	**82.88**
790	Harris County, TX	115.57	115.92	135.04	134.62	**82.85**
791	Mobile County, AL	97.14	99.82	104.36	100.08	**82.50**
792	Bullitt County, KY	93.87	75.75	84.37	83.14	**82.44**
793	Rockingham County, VA	91.13	80.84	89.64	75.68	**82.39**
794	Amherst County, VA	89.43	71.92	78.00	57.81	**82.33**
795	Spartanburg County, SC	93.58	87.55	117.00	93.51	**82.24**
796	Blount County, TN	93.20	70.50	105.74	86.05	**82.22**
797	Cameron County, TX	100.34	100.34	93.99	106.87	**82.22**
798	Anderson County, SC	91.58	75.10	123.12	81.87	**82.21**
799	Hunterdon County, NJ	92.11	93.26	97.61	70.20	**81.93**
800	Harrison County, IN	89.20	67.47	82.48	65.70	**81.90**
801	St. Johns County, FL	96.82	81.30	98.73	105.08	**81.72**
802	Plymouth County, MA	100.04	102.48	110.86	95.85	**81.72**
803	Lorain County, OH	98.22	109.34	84.62	95.83	**81.62**
804	Comal County, TX	93.80	74.45	101.88	90.73	**81.55**
805	Clinton County, MI	91.21	86.85	84.32	69.58	**81.50**
806	Hays County, TX	97.05	79.04	106.89	94.27	**81.50**
807	Orange County, TX	89.97	63.29	85.84	95.43	**81.43**
808	Robertson County, TN	91.50	80.27	91.64	66.20	**81.41**
809	Lee County, GA	89.74	56.49	79.91	70.35	**81.41**
810	Andrew County, MO	88.51	42.90	71.97	69.08	**81.39**

811	Fayette County, GA	93.24	93.46	82.08	81.09	**81.35**
812	Douglas County, CO	101.58	95.72	90.49	104.87	**81.32**
813	Brevard County, FL	102.10	98.65	97.53	115.45	**81.18**
814	Suffolk County, NY	105.01	121.42	104.68	119.76	**81.13**
815	Johnson County, TX	93.30	79.73	95.35	95.89	**81.11**
816	Medina County, TX	88.92	54.90	77.63	91.50	**81.10**
817	Monroe County, PA	92.42	78.00	108.80	82.70	**81.08**
818	Kern County, CA	103.58	125.83	99.17	101.05	**81.01**
819	Oakland County, MI	104.35	112.80	116.31	109.82	**81.00**
820	Walker County, GA	91.73	70.90	84.05	77.99	**80.99**
821	Ascension Parish, LA	94.20	85.76	80.30	89.44	**80.97**
822	Orange County, NY	102.24	110.99	97.17	86.37	**80.95**
823	Dinwiddie County, VA	89.20	73.80	79.25	46.10	**80.95**
824	Harford County, MD	99.66	101.30	88.82	89.12	**80.94**
825	Union County, OH	92.36	68.06	80.37	78.40	**80.90**
826	Fauquier County, VA	90.43	78.09	95.30	63.30	**80.89**
827	Flagler County, FL	97.36	77.68	78.72	90.60	**80.48**
828	Hendricks County, IN	96.62	88.97	80.50	95.24	**80.41**
829	Macomb County, MI	107.77	122.12	86.72	110.03	**80.34**
830	El Dorado County, CA	94.20	87.80	98.92	83.91	**80.20**
831	Prince George County, VA	91.10	65.15	74.03	78.87	**80.15**
832	Wagoner County, OK	93.14	61.85	79.82	94.57	**80.15**
833	Pickens County, GA	89.55	48.96	85.61	69.81	**80.07**
834	Wake County, NC	103.75	106.06	117.99	107.92	**79.99**
835	Queen Anne's County, MD	89.64	77.48	74.73	65.50	**79.87**
836	Gloucester County, VA	90.69	51.20	86.64	70.02	**79.84**
837	Roane County, TN	89.10	54.53	83.87	83.42	**79.82**
838	Sussex County, NJ	93.93	86.76	92.66	78.16	**79.82**
839	Bartow County, GA	92.01	75.09	91.41	81.81	**79.59**
840	Wise County, TX	88.93	54.43	95.72	82.28	**79.58**
841	Citrus County, FL	90.62	66.43	95.42	101.34	**79.51**
842	Alexander County, NC	89.50	72.78	77.84	55.08	**79.40**
843	Collier County, FL	99.33	97.07	86.61	106.05	**79.28**
844	Waukesha County, WI	96.44	105.83	89.24	101.13	**79.27**
845	Haralson County, GA	89.21	53.72	71.22	73.62	**79.27**
846	Benton County, AR	95.59	87.17	103.37	92.03	**79.23**
847	Lake County, FL	96.56	82.09	100.81	110.53	**79.15**
848	Chester County, PA	97.64	105.23	109.23	91.85	**79.08**
849	Perry County, PA	89.21	69.98	73.87	68.67	**79.08**
850	Prince William County, VA	107.80	97.58	81.96	111.95	**79.03**
851	Yavapai County, AZ	95.30	94.46	92.80	87.12	**78.90**

852	Spotsylvania County, VA	97.51	81.17	83.39	86.57	**78.87**
853	Stafford County, VA	98.66	82.73	82.17	90.21	**78.75**
854	Jones County, GA	89.38	51.10	77.14	64.10	**78.73**
855	Portage County, OH	93.99	83.00	98.74	78.17	**78.73**
856	Bexar County, TX	107.78	107.07	118.01	123.09	**78.71**
857	Burke County, NC	90.01	71.84	88.64	78.21	**78.66**
858	Hoke County, NC	92.29	58.28	87.89	72.44	**78.56**
859	Davie County, NC	89.78	63.73	80.03	66.76	**78.53**
860	Calvert County, MD	94.03	63.55	82.80	89.72	**78.46**
861	Kaufman County, TX	93.09	67.57	89.51	98.61	**78.42**
862	Chesterfield County, VA	100.40	84.44	107.00	94.59	**78.34**
863	Chilton County, AL	88.73	67.73	82.69	61.92	**78.22**
864	Laurens County, SC	89.31	58.04	90.70	78.58	**78.11**
865	Newton County, GA	93.40	58.25	103.78	79.90	**77.97**
866	Lawrence County, AL	88.48	60.96	76.84	61.34	**77.96**
867	Chisago County, MN	89.91	71.66	73.83	73.88	**77.96**
868	Yates County, NY	88.69	62.44	68.80	55.63	**77.90**
869	Cabarrus County, NC	97.40	89.29	79.68	99.00	**77.87**
870	Frederick County, VA	93.92	70.63	88.08	75.75	**77.81**
871	Monroe County, GA	88.77	56.91	70.68	63.21	**77.68**
872	Ottawa County, MI	97.03	96.61	94.44	87.51	**77.63**
873	Bibb County, AL	88.42	43.77	66.39	71.72	**77.62**
874	Hanover County, VA	93.79	85.04	81.15	76.07	**77.57**
875	Sherburne County, MN	91.28	67.35	89.85	81.23	**77.55**
876	Douglas County, GA	95.67	81.63	88.40	80.47	**77.55**
877	Lonoke County, AR	90.92	56.65	91.52	80.08	**77.54**
878	Bastrop County, TX	89.77	67.88	82.45	89.94	**77.44**
879	Carroll County, GA	91.15	68.27	109.54	68.95	**77.39**
880	Montcalm County, MI	89.34	65.35	79.07	80.74	**77.38**
881	Rankin County, MS	93.36	71.87	97.58	86.09	**77.25**
882	Hernando County, FL	96.92	74.19	80.10	106.32	**77.24**
883	Chatham County, NC	89.69	80.20	76.98	72.82	**77.21**
884	Maricopa County, AZ	111.77	113.59	134.39	124.22	**77.20**
885	Horry County, SC	95.12	84.84	96.26	105.12	**77.19**
886	Aiken County, SC	91.81	78.37	84.63	96.51	**77.14**
887	Polk County, FL	98.32	82.61	111.46	118.09	**77.12**
888	McHenry County, IL	97.89	96.67	81.83	99.64	**77.06**
889	Santa Rosa County, FL	93.50	78.37	101.00	83.57	**77.05**
890	Rockingham County, NC	90.47	73.24	84.48	77.75	**76.89**
891	Bucks County, PA	101.93	118.01	86.29	98.83	**76.84**
892	Ellis County, TX	92.73	76.37	92.65	94.22	**76.78**

893	Tangipahoa Parish, LA	91.70	72.39	88.92	87.90	**76.72**
894	Lapeer County, MI	91.17	64.09	107.38	61.68	**76.69**
895	Beaufort County, SC	93.17	82.60	79.34	98.28	**76.68**
896	Hidalgo County, TX	101.69	94.11	105.38	114.69	**76.29**
897	Williamson County, TX	102.12	99.54	91.30	108.36	**76.28**
898	Snohomish County, WA	104.65	109.38	99.17	100.45	**76.22**
899	Madison County, NC	88.69	38.73	68.13	69.22	**76.18**
900	Charles County, MD	96.90	74.63	91.50	84.53	**76.07**
901	Clarendon County, SC	89.41	39.29	92.62	59.08	**75.97**
902	Iredell County, NC	93.82	85.11	86.61	86.50	**75.77**
903	Maury County, TN	93.13	69.07	86.42	78.62	**75.71**
904	Brazoria County, TX	97.39	89.44	92.87	99.49	**75.62**
905	Morgan County, GA	88.68	49.48	63.40	60.05	**75.51**
906	Denton County, TX	104.67	99.42	92.48	117.98	**75.13**
907	Preston County, WV	88.99	55.80	76.60	59.85	**74.89**
908	Onslow County, NC	94.17	78.89	96.61	83.54	**74.75**
909	DeSoto County, MS	94.99	77.69	90.61	85.93	**74.72**
910	Clermont County, OH	96.84	90.53	80.95	85.34	**74.54**
911	York County, SC	96.44	86.08	94.26	89.23	**74.52**
912	Cass County, MI	89.16	60.70	72.27	74.57	**74.43**
913	Gwinnett County, GA	107.93	103.11	104.43	98.73	**74.37**
914	Columbia County, GA	96.55	83.81	79.62	80.86	**74.11**
915	Coweta County, GA	93.30	79.28	89.25	76.71	**74.10**
916	Wilson County, TX	89.13	43.07	86.75	75.11	**74.02**
917	Warren County, MO	89.53	48.49	72.61	69.69	**73.93**
918	Wright County, MN	91.20	86.35	80.05	77.45	**73.89**
919	Barrow County, GA	92.18	69.52	77.61	75.75	**73.81**
920	Carroll County, MD	93.10	82.76	87.97	79.85	**73.81**
921	Wakulla County, FL	88.97	32.75	87.23	68.10	**73.76**
922	Medina County, OH	95.27	95.59	82.00	73.28	**73.76**
923	St. Mary's County, MD	92.46	61.14	93.12	80.17	**73.75**
924	Rockingham County, NH	93.37	92.44	104.60	77.51	**73.61**
925	Wayne County, NY	90.36	80.09	87.03	59.85	**73.46**
926	Jefferson County, MO	94.36	81.08	85.97	92.06	**73.43**
927	York County, ME	92.09	88.11	97.61	73.57	**73.25**
928	Wilson County, TN	93.01	73.61	96.99	72.57	**73.15**
929	Bedford County, VA	89.64	75.33	88.73	55.83	**73.13**
930	Kershaw County, SC	89.32	70.55	73.24	69.65	**73.01**
931	Will County, IL	100.92	106.71	85.37	105.76	**72.92**
932	Pasco County, FL	99.70	87.48	80.81	121.36	**72.84**
933	Parker County, TX	90.54	66.88	95.22	82.54	**72.76**

934	Stokes County, NC	89.26	51.38	87.01	58.65	**72.71**
935	Butts County, GA	89.88	33.69	72.79	66.40	**72.69**
936	Cherokee County, GA	98.08	93.36	81.26	85.70	**72.68**
937	Davidson County, NC	91.56	79.73	86.15	81.25	**72.48**
938	Dade County, GA	88.93	12.25	78.00	64.55	**72.27**
939	Brunswick County, NC	90.19	71.13	77.35	97.48	**72.20**
940	Scott County, VA	88.57	31.56	63.04	72.35	**72.17**
941	Limestone County, AL	90.58	62.51	87.15	78.81	**72.14**
942	Cheatham County, TN	89.85	52.79	85.26	52.64	**72.10**
943	Jefferson County, TN	89.56	52.59	80.80	72.01	**71.93**
944	New Kent County, VA	89.37	33.81	64.60	67.86	**71.91**
945	Livingston County, MI	91.93	78.59	96.64	76.59	**71.88**
946	Oldham County, KY	91.36	69.08	71.88	71.63	**71.82**
947	Granville County, NC	89.84	58.60	84.79	63.58	**71.75**
948	Tipton County, TN	91.73	35.33	99.62	69.74	**71.74**
949	Pender County, NC	89.75	64.50	74.47	66.17	**71.70**
950	Montgomery County, TX	96.72	85.13	117.15	90.94	**71.51**
951	Union County, NC	94.15	80.21	88.10	88.30	**71.47**
952	Madison County, GA	89.36	50.22	69.76	58.34	**71.33**
953	Effingham County, GA	89.87	46.10	81.55	80.36	**71.26**
954	Lexington County, SC	93.88	86.38	93.29	84.85	**71.23**
955	Elmore County, AL	90.00	51.48	92.65	75.87	**71.17**
956	Sussex County, DE	91.28	75.59	88.50	94.64	**71.09**
957	Baker County, FL	88.62	23.98	80.31	71.02	**71.09**
958	Lincoln County, NC	91.02	62.62	87.70	67.46	**70.82**
959	Berkeley County, SC	96.91	80.53	78.90	89.32	**70.81**
960	Grainger County, TN	88.93	32.66	71.84	60.53	**70.80**
961	Dickson County, TN	89.42	55.94	75.41	68.46	**70.62**
962	Augusta County, VA	89.33	69.67	84.64	61.69	**70.40**
963	Grant County, KY	89.37	31.13	69.89	66.43	**70.36**
964	Baldwin County, AL	90.95	82.48	80.53	92.65	**70.20**
965	Henry County, GA	95.12	77.17	94.34	81.74	**70.14**
966	Geauga County, OH	89.99	84.22	85.07	52.27	**70.10**
967	Randolph County, NC	90.62	75.09	89.80	70.31	**69.52**
968	Franklin County, VA	89.00	48.96	96.56	51.45	**69.46**
969	Fluvanna County, VA	90.07	44.55	69.23	54.00	**69.42**
970	Sumner County, TN	95.51	76.08	89.38	75.61	**69.04**
971	Oconto County, WI	88.40	45.25	73.85	64.10	**68.99**
972	Forsyth County, GA	99.41	85.01	79.85	81.66	**68.64**
973	Rutherford County, TN	98.34	75.44	95.52	88.58	**68.42**
974	Pinal County, AZ	99.71	71.61	93.82	100.34	**67.88**

975	St. Clair County, AL	89.79	47.82	87.25	76.79	**67.84**
976	Union County, TN	88.94	24.65	74.25	52.06	**66.99**
977	Spencer County, KY	89.57	19.87	66.12	61.46	**66.93**
978	Johnston County, NC	91.46	69.29	93.58	81.19	**66.84**
979	Harnett County, NC	90.50	57.96	81.05	85.56	**66.52**
980	Yadkin County, NC	89.13	49.29	73.18	51.77	**66.39**
981	Walton County, GA	90.77	65.30	81.20	63.39	**66.15**
982	San Bernardino County, CA	107.94	116.76	102.06	100.32	**65.91**
983	Liberty County, TX	88.98	34.02	89.76	85.46	**65.88**
984	Livingston Parish, LA	92.14	61.47	86.81	73.04	**64.80**
985	Franklin County, NC	89.96	47.71	77.81	70.02	**64.80**
986	Paulding County, GA	94.00	64.70	79.64	77.21	**63.18**
987	Fayette County, TN	89.02	45.44	69.57	54.20	**62.65**
988	Chambers County, TX	89.15	24.34	68.10	82.63	**62.19**
989	Blount County, AL	89.04	27.55	81.75	71.98	**62.02**
990	Currituck County, NC	89.34	14.78	71.02	64.81	**61.82**
991	Riverside County, CA	106.09	113.07	96.81	104.00	**61.77**
992	Powhatan County, VA	89.91	42.04	63.98	44.49	**60.82**
993	Grant Parish, LA	88.33	3.98	66.63	68.30	**60.55**
994	Pike County, GA	89.35	14.71	59.60	50.11	**56.76**
995	Harris County, GA	89.03	17.82	64.81	61.57	**55.30**

Endnotes

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