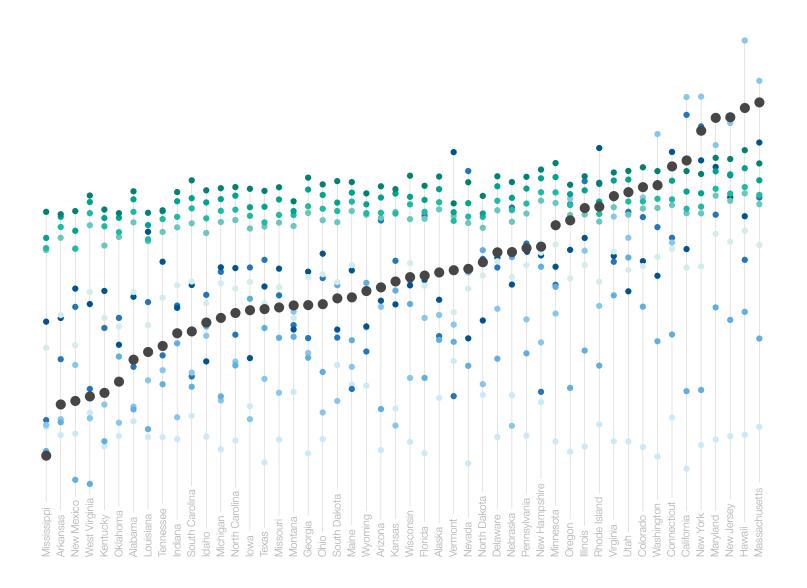
# Sharecare's Community Well-Being Index

2020 State Rankings Report







# Vision

The events of 2020 – including but not limited to the COVID-19 pandemic, our country's reckoning with racial injustice, and the 2020 presidential election – have reverberated well into 2021, continuing to shape both our individual well-being and the environmental factors that define access, economic circumstance, and how we operate in our daily lives.

We have lost the lives of more than half a million Americans – including our friends, family members, and colleagues – to the pandemic; yet in the face of disease, death, and division, we continue to find promise in the resilience of our populations.

Over the last 18 months, our nation and world have witnessed incredible acts of humanity and sacrifice – born from a commitment to care for one another and our communities – and realized unprecedented advances in research, healthcare, and technology. Global searches for "how to thank" reached an all-time high, and for the first time in history, we searched the web more for "how to be anti-racist" than we searched for "how to be a millionaire."

In the wake of these individual and global forces that span the best and worst of our circumstances, Sharecare's approach to community well-being measurement and intervention remains constant:

- Measure well-being comprehensively in a way that recognizes health risk and opportunity across both people and places
- Combine this holistic measure with research-backed protocols that enable people to thrive, verify places for health safety and security, and empower communities by making the healthy choice the easy choice; and

 Continue expanding upon opportunities to apply these data toward community wellbeing improvement, including new use cases ranging from contextualizing health equity and social determinant circumstances for employers, identifying individual and population-wide social determinant care gaps for providers, evaluating enterprises and communities across social impact and sustainability, and more.

Building upon 13 generations of measuring well-being across states, metro areas, and counties across the U.S., the 2020 rankings from Sharecare's Community Well-Being Index focus on domains that range from individual well-being to the social determinants of health (SDOH) that define where we live, work, and play. This report identifies key regional and national trends tied to financial and mental health, COVID-19 burden and resilience, and the evolving relationship between individual well-being and SDOH.

Based on over 450,000 surveys collected in 2020 alongside the study of more than 600 elements of SDOH, the latest Community Well-Being Index analysis continues to expand our scale, representation, and methods, enabling stakeholders across the healthcare continuum to maximize care advocacy and community-based interventions for the geographies and populations that need them the most.

We are honored to share these results as a collaboration between Sharecare and Boston University School of Public Health (BUSPH), anchored in its Biostatistics and Epidemiology Data Analytics Center (BEDAC), and it is our hope and mission that these findings will unite us in a movement to rebuild our nation's health and well-being.

Let's create a post-pandemic world where we are all together better.

#### Jeff Arnold

Founder and CEO, Sharecare

Sandro Galea, MD, DrPH Dean, Boston University School of Public Health



# Community Well-Being Index Overview

While many rankings and measures of health account for social determinants collected through publicly available sources, the Community Well-Being Index is uniquely positioned as it incorporates five SDOH sub-domains – which are statistically derived to carry the greatest explanatory power for key outcomes – and also captures five sub-domains of individual well-being at representative scale.

Through over 80 peer-reviewed publications, these measures have been proven to carry significant relationships with healthcare expenditure and utilization, workforce productivity and retention, and are further evidenced by macroeconomic indicators like the S&P 500, which demonstrates linkages between health, wealth, and economic prosperity.

Based on Sharecare's history of contextualizing the role of place in individual and community health efforts, the Community Well-Being Index delivers an overarching metric that provides insights for the next generation of community-driven care, affording the opportunity to evaluate health risk across multiple levels and viewpoints, and enabling new data-driven interventions across people, policy, and places.

Please visit our <u>methods page</u> for more information about Sharecare's Community Well-Being Index, and the sub-domains that comprise it.

### Sharecare Community Well-Being Index

Sharecare's Community Well-Being Index is a comprehensive measure that evaluates health risk across 10 domains.

### Individual Well-Being:

- **Physical:** Having good health and enough energy to get things done daily
- Financial: Managing your economic life to increase security and reduce stress
- **Social:** Having supportive relationships and love in your life
- **Community:** Liking where you live, feeling safe, and having pride in your community
- **Purpose:** Liking what you do each day and being motivated to achieve your goals

#### Social Determinants of Health:

- Healthcare Access: How easily community members can find healthcare facilities or resources
- Food Access: The proximity of healthy food retailers and grocery stores to community members' homes
- **Resource Access:** The proximity of key community resources such as libraries, churches, senior employment, and more
- Housing & Transportation: What home values are, how community members use public transportation, and more
- Economic Security: Whether community members are employed, insured, and more

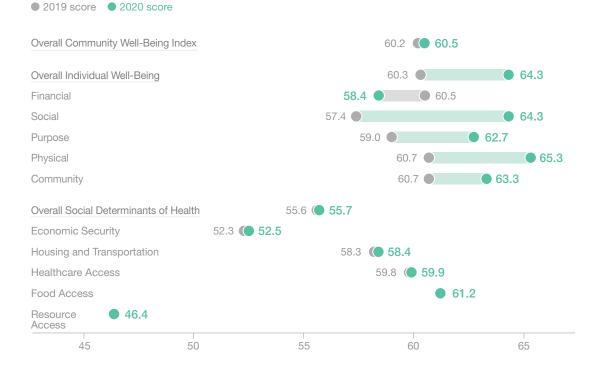


### 2020 Community Well-Being Trends

Measured on a scale of 0 to 100, with 100 representing the greatest possible wellbeing, the nation's Community Well-Being Index score from 2019 to 2020 remained statistically unchanged, increasing slightly from 60.2 to 60.5. Underlying the Index, social determinant sub-domains remained relatively fixed while national individual wellbeing trends were positive; specifically, a 4-point increase – from 60.3 in 2019 to 64.3 in 2020 – was measured across individual well-being. Other notable trends across states include:

A national decline in financial well-being, dropping from 60.5 in 2019 to 58.4 in 2020. This finding can be linked to previous results from Sharecare's July 2020 "Three States" analysis, which investigated differing COVID-19 trajectories for Washington, Massachusetts, and Florida and found these states had experienced significant financial well-being declines since the onset of the pandemic, regardless of the unique approaches taken to contain the virus in each state.

National resilience within the physical well-being domain, including a 4.6-point year-over-year upward trend tied to our collective ability to manage condition burden, daily productivity, lifestyle behaviors, and mental health. These findings align with Sharecare's "Flatten the Curve" survey - conducted between April and early June 2020 - in which the vast majority of respondents indicated they were maintaining or improving their lifestyle behaviors during the pandemic; however, improvements also may be due in part to widely reported reductions in doctor visits and hospitalizations not related to COVID-19, limiting opportunities for new condition identification and diagnoses in 2020.



#### Change in National Score, 2019 – 2020

### 2020 Community Well-Being Trends

# Trends tied to improvements across community, purpose, and,

in particular, social well-being. Earlier analyses also echo these trends. Sharecare's "Flatten the Curve" survey found that onethird of respondents felt grateful, and almost 95% said they were still connecting with friends and family via phone. While further analysis is required to understand the complex relationships between social health and the events of 2020, improvement in social support and cohesion during human and natural disasters is not unprecedented. Research from Fullerton and colleagues (2004) after the 2004 Hurricane Sandy disaster showed social support and cohesion within the affected communities were linked to a decreased likelihood of long-term depression symptoms.

While these national trends start to shed light on impacts across individual and community health, comprehensive coverage across metro areas and counties – highlighted in our upcoming 2020 community rankings report – will advance our understanding of these findings, including qualifying trends that lack significance at the state level.

# Relationship Between the Community Well-Being Index & 2020 U.S. Presidential Election

Prior Community Well-Being Index findings indicate a connection between counties that leaned more Republican in the 2016 U.S. presidential election than in 2012 and worsening well-being. Conversely, counties that voted more strongly for the Democratic candidate in the 2016 U.S. presidential election revealed improved levels of life satisfaction, future optimism, and experiencing positive daily emotions. For 2020, we note similar trends, including strong relationships between the percentage who voted for the Republican candidate at the state level and low Index scores. Specifically. nine out of the bottom 10 states for the overall Index ranking voted Republican in the 2020 U.S. presidential election, apart from New Mexico (#48). In the top quintile for the Index, nine out of the top 10 states voted for the Democratic candidate in the presidential election, except for Utah (#10). Among the top half of states for the Community Well-Being Index, just five voted Republican in the 2020 presidential election: Utah (#10), Nebraska (#18), North Dakota (#20), Alaska (#23), and Florida (#24). Among the bottom half, only five states cast all or most of their Electoral College votes for the Democratic

candidate: Arizona (#27), Maine (#29), Georgia (#32), Michigan (#38), and New Mexico (#48). It is worth noting that the Democratic Party carried Arizona and Georgia by narrow margins.

|               | Index Rank | Party Affiliation |
|---------------|------------|-------------------|
| Massachusetts | 1          | D                 |
| Hawaii        | 2          | D                 |
| New Jersey    | 3          | D                 |
| Maryland      | 4          | D                 |
| New York      | 5          | D                 |
| California    | 6          | D                 |
| Connecticut   | 7          | D                 |
| Washington    | 8          | D                 |
| Colorado      | 9          | D                 |
| Utah          | 10         | R                 |
| Indiana       | 41         | R                 |
| Tennessee     | 42         | R                 |
| Louisiana     | 43         | R                 |
| Alabama       | 44         | R                 |
| Oklahoma      | 45         | R                 |
| Kentucky      | 46         | R                 |
| West Virginia | 47         | R                 |
| New Mexico    | 48         | D                 |
| Arkansas      | 49         | R                 |
| Mississippi   | 50         | R                 |

|                      | Top 10 States   | Bottom 10 States |
|----------------------|-----------------|------------------|
| Community Well-Being | 1 Massachusetts | 41 Indiana       |
| Index Overall        | 2 Hawaii        | 42 Tennessee     |
|                      | 3 New Jersey    | 43 Louisiana     |
|                      | 4 Maryland      | 44 Alabama       |
|                      | 5 New York      | 45 Oklahoma      |
|                      | 6 California    | 46 Kentucky      |
|                      | 7 Connecticut   | 47 West Virginia |
|                      | 8 Washington    | 48 New Mexico    |
|                      | 9 Colorado      | 49 Arkansas      |
|                      | 10 Utah         | 50 Mississippi   |

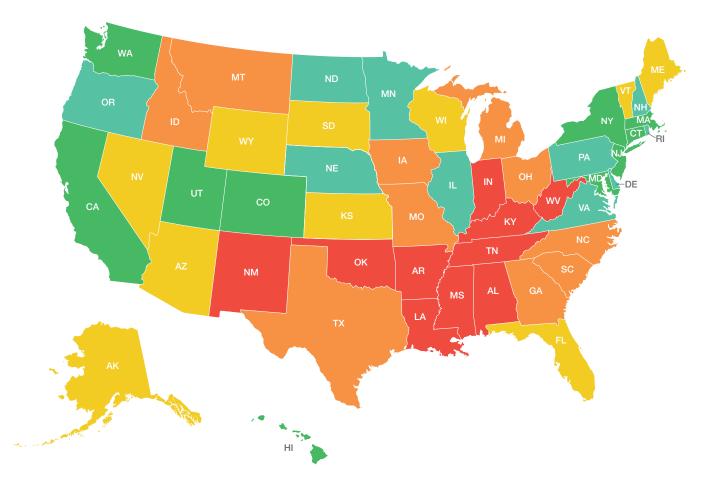
# Community Well-Being Index Rankings

In the state rankings and for the first time, Massachusetts ranked #1 in the Community Well-Being Index, followed by Hawaii, which claimed the top spot in 2019 and has been a veteran top contender across previous rankings. Other top-ranking states in 2020 include New Jersey, Maryland, and New York, respectively; these results place four of the top five states in the East Coast Atlantic region and three of the five in the Northeast. Mississippi took the last position in the Community Well-Being Index for the second year in a row and ranked among the bottom five states for individual well-being factors for the third year running. Other bottomranked states include Arkansas, New Mexico, West Virginia, and Kentucky – each of which ranked in the bottom quintile in 2019.

| Community<br>Well-Beind Index Bank |               | Individual Well-Being<br>Rank | Purpose | Social | Financial | Community | Physical | Social Determinants of<br>Health Rank | Food Access | Healthcare Access | Resource Access | Housing & Transportation | Economic Security |  |
|------------------------------------|---------------|-------------------------------|---------|--------|-----------|-----------|----------|---------------------------------------|-------------|-------------------|-----------------|--------------------------|-------------------|--|
| 1                                  | Massachusetts | 5                             | 6       | 7      | 5         | 6         | 5        | 1                                     | 7           | 1                 | 18              | 2                        | 21                |  |
| 2                                  | Hawaii        | 1                             | 1       | 1      | 1         | 1         | 1        | 4                                     | 18          | 8                 | 20              | 1                        | 14                |  |
| 49                                 | Arkansas      | 45                            | 46      | 45     | 44        | 46        | 50       | 48                                    | 43          | 41                | 21              | 46                       | 45                |  |
| 50                                 | Mississippi   | 50                            | 50      | 50     | 50        | 49        | 47       | 50                                    | 50          | 43                | 17              | 49                       | 48                |  |
|                                    |               |                               |         |        |           |           |          |                                       |             |                   |                 |                          |                   |  |

# Community Well-Being Index Rankings

| Top Quintile     | 2 <sup>nd</sup> Quintile | 3 <sup>rd</sup> Quintile | 4 <sup>th</sup> Quintile | 5 <sup>th</sup> Quintile |
|------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Massachusetts | 11. Virginia             | 21. Nevada               | 31. <b>Ohio</b>          | 41. Indiana              |
| 2. Hawaii        | 12. Rhode Island         | 22. Vermont              | 32. Georgia              | 42. Tennessee            |
| 3. New Jersey    | 13. Illinois             | 23. Alaska               | 33. Montana              | 43. Louisiana            |
| 4. Maryland      | 14. Oregon               | 24. Florida              | 34. Missouri             | 44. Alabama              |
| 5. New York      | 15. Minnesota            | 25. Wisconsin            | 35. Texas                | 45. Oklahoma             |
| 6. California    | 16. New Hampshire        | 26. Kansas               | 36. <b>Iowa</b>          | 46. Kentucky             |
| 7. Connecticut   | 17. Pennsylvania         | 27. Arizona              | 37. North Carolina       | 47. West Virginia        |
| 8. Washington    | 18. Nebraska             | 28. Wyoming              | 38. Michigan             | 48. New Mexico           |
| 9. Colorado      | 19. Delaware             | 29. Maine                | 39. Idaho                | 49. Arkansas             |
| 10. Utah         | 20. North Dakota         | 30. South Dakota         | 40. South Carolina       | 50. Mississippi          |



# Strengths and Weaknesses of the Highest and Lowest Ranking States

Massachusetts' top position in Sharecare's 2020 state rankings is a result of its strong scores across both SDOH and individual well-being, in which it ranked #1 and #5, respectively. Further, the state achieved top 10 rankings for eight out of 10 of the Index's domains: financial well-being (#5), social well-being (#7), purpose well-being (#6), physical well-being (#5), community well-being (#6), housing and transportation (#2), healthcare access (#1), and food access (#7).

Other noteworthy themes among thriving states include Hawaii - a veteran and leading state for overall well-being since 2008 ranking first in individual well-being and #4 in SDOH, as well as #1 for 6 out of the 10 Index sub-domains across financial wellbeing, social well-being, purpose well-being, physical well-being, community well-being, and housing and transportation. In addition, Maryland – for the first time in Community Well-Being Index history - ranked #2 for all five individual well-being sub-domains and among the top 10 states in two SDOH subdomains, housing and transportation (#7) and healthcare access (#6), contributing to the shift in its overall Index ranking from #11 in 2019 to #4 in 2020.

California – ranked #6 in the 2020 Community Well-Being Index – assumed the #1 position in the food access sub-domain for the second year in a row. Other top rankings were assumed by Vermont, ranked #1 in resource access, and North Dakota ranked #1 in economic security.

Conversely, Mississippi assumed the bottom position in the Community Well-Being Index 2020 state rankings, standing in the bottom quintile for each of the 10 sub-domains except resource access. While California ranked among the top 10 states in the Index, The Golden State assumed the #41 position in economic security and the bottom position in resource access, exposing a lack of essential community resources such as libraries, churches, senior employment, and more across the state.

Other states with room for improvement include Arkansas, which ranked last in physical well-being; Idaho, which ranked last in healthcare access; New Mexico, which ranked last in community well-being; and West Virginia, which ranked last in economic security.

Of the five lowest ranked states for the year, four – Kentucky, Arkansas, West Virginia, and Mississippi – landed in the bottom five for SDOH, and three scored in the bottom five for the individual well-being factors – Kentucky, New Mexico, and Mississippi. In addition, four of the five lowest ranked states in the Index overall are in the bottom of the purpose and economic security sub-domains.

# Ranking of Top and Bottom Five States by Community Well-Being Index Sub-Domain, 2020

|                           | Тор | o 5 States    | Bott | om 5 States |
|---------------------------|-----|---------------|------|-------------|
| Overall                   | 1.  | Hawaii        | 46.  | Louisiana   |
| Individual                | 2.  | Maryland      | 47.  | Oklahoma    |
| Well-Being                | 3.  | New Jersey    | 48.  | Kentucky    |
|                           | 4.  | Minnesota     | 49.  | New Mexico  |
|                           | 5.  | Massachusetts | 50.  | Mississippi |
| Physical                  | 1.  | Hawaii        | 46.  | New Mexico  |
|                           | 2.  | Maryland      | 47.  | Mississippi |
| $(-\infty)$               | 3.  | New Jersey    | 48.  | Louisiana   |
|                           | 4.  | Minnesota     | 49.  | Oklahoma    |
|                           | 5.  | Massachusetts | 50.  | Arkansas    |
| Financial                 | 1.  | Hawaii        | 46.  | Kentucky    |
|                           | 2.  | Maryland      | 47.  | Louisiana   |
|                           | 3.  | New Jersey    | 48.  | Oklahoma    |
|                           | 4.  | Minnesota     | 49.  | New Mexico  |
|                           | 5.  | Massachusetts | 50.  | Mississippi |
| Social                    | 1.  | Hawaii        | 46.  | Oklahoma    |
|                           | 2.  | Maryland      | 47.  | Kentucky    |
| ſŰĨĨ                      | 3.  | New Jersey    | 48.  | Louisiana   |
| - W -                     | 4.  | Minnesota     | 49.  | New Mexico  |
|                           | 5.  | New Hampshire | 50.  | Mississippi |
| Community                 | 1.  | Hawaii        | 46.  | Arkansas    |
|                           | 2.  | Maryland      | 47.  | Oklahoma    |
| 65                        | 3.  | Minnesota     | 48.  | Louisiana   |
|                           | 4.  | New Hampshire | 49.  | Mississippi |
|                           | 5.  | New Jersey    | 50.  | New Mexico  |
| Purpose                   | 1.  | Hawaii        | 46.  | Arkansas    |
|                           | 2.  | Maryland      | 47.  | Louisiana   |
| $\langle \zeta_2 \rangle$ | 3.  | New Hampshire | 48.  | Kentucky    |
|                           | 4.  | New Jersey    | 49.  | New Mexico  |
|                           | 5.  | Minnesota     | 50.  | Mississippi |

|                | То       | p 5 States    | Bott | om 5 States    |
|----------------|----------|---------------|------|----------------|
| Overall Social | 1.       | Massachusetts | 46.  | Alabama        |
| Determinants   | 2.       | New York      | 47.  | Kentucky       |
| of Health      | 3.       | New Jersey    | 48.  | Arkansas       |
|                | 4.       | Hawaii        | 49.  | West Virginia  |
|                | 5.       | Maryland      | 50.  | Mississippi    |
| Food Access    | 1.       | California    | 46.  | Maine          |
| Č              | 2.       | New York      | 47.  | West Virginia  |
|                | 3.       | Nevada        | 48.  | New Hampshire  |
| ×              | 4.       | New Jersey    | 49.  | Vermont        |
|                | 5.       | Illinois      | 50.  | Mississippi    |
| Healthcare     | 1.       | Massachusetts | 46.  | South Dakota   |
| Access         | 2.       | Rhode Island  | 47.  | Nevada         |
|                | 3.       | Connecticut   | 48.  | Oklahoma       |
|                | 4.       | Vermont       | 49.  | lowa           |
| -              | 5.       | New York      | 50.  | Idaho          |
| Resource       | 1.       | Vermont       | 46.  | Georgia        |
| Access         | 2.       | South Dakota  | 47.  | Washington     |
|                | 3.       | Maine         | 48.  | Texas          |
|                | 4.       | Wyoming       | 49.  | Nevada         |
|                | 5.       | Montana       | 50.  | California     |
| Housing and    | 1.       | Hawaii        | 46.  | Arkansas       |
| Transportation | 2.       | Massachusetts | 47.  | Oklahoma       |
|                | 3.       | New York      | 48.  | Kansas         |
|                | 4.       | California    | 49.  | Mississippi    |
|                | 5.       | New Jersey    | 50.  | Nebraska       |
| Economic       | 1.       | North Dakota  | 46.  | Louisiana      |
| Security       | 2.       | Nebraska      | 47.  | Kentucky       |
| 0              | 3.       | Utah          | 48.  | Mississippi    |
| 1 Ei           | 4.       | New Hampshire | 49.  | New Mexico     |
|                | ч.<br>5. | Wyoming       |      | West Virginia  |
|                | 0.       | yoning        | 00.  | riost virginia |

### Regional Trends Among the Top and Bottom 10 States

Consistent with previous rankings, Southern states had the lowest levels of Community Well-Being nationally, representing eight of the bottom 10 spots. Southern states that suffered declines in the 2020 Index include Florida, which moved from #18 in 2019 to #24 in 2020, and Texas, which shifted from #25 in 2019 to #35 in 2020. On the other hand, some of the South Atlantic states improved in the 2020 Index rankings: Georgia, which went from #41 in 2019 to #32 in 2020; Delaware, which moved from a #38 spot in 2019 to #19 in 2020; and Maryland, which went from #11 in 2019 to #4 in 2020. In addition, for the community sub-domain (shown in the first figure), Southern states represented seven of the 10 bottom rankings, demonstrating lower levels of connections to neighborhoods.

States in the Northeastern region enjoyed the highest Community Well-Being Index scores nationally, with four states securing top 10 spots: Massachusetts (#1), New Jersey (#3), New York (#5), and Connecticut (#7). Within the nine states comprising the Northeast, six ranked in the top 10 for healthcare access, including Massachusetts (#1), Rhode Island (#2), Connecticut (#3), Vermont (#4), New York (#5), and New Jersey (#7).

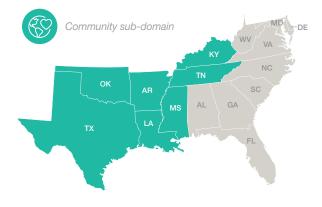
Rankings throughout the Midwest and Western regions were varied across the elements; however, eight states in the Midwest region – North Dakota (#1), Nebraska (#2), Utah (#3), Wyoming (#5), South Dakota (#6), Minnesota (#7), Kansas (#8), and Iowa (#10) – ranked among the top 10 for the economic security sub-domain, highlighting the importance of whether individuals are employed or insured within a community.

Northeast: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey

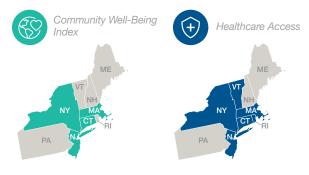
Midwest: Wisconsin, Michigan, Illinois, Indiana, Ohio, North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Utah, Colorado, Wyoming

South: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Mississippi, Alabama, Oklahoma, Texas, Arkansas, Louisiana

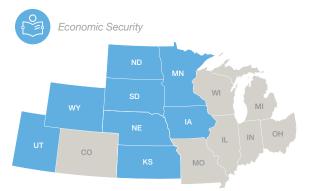
West: Idaho, Montana, Nevada, Arizona, New Mexico, Alaska, Washington, Oregon, California, Hawaii Southern states represented seven of the bottom 10 spots for the community sub-domain.



Northeastern states represented the highest levels of community well-being and healthcare access nationally.



Eight states in the Midwest ranked in the top 10 nationally for economic security.



# Community Well-Being Index and COVID-19: Overview

Although 2020 was both multi-faceted and unprecedented across multiple fronts, the impact of the COVID-19 pandemic cannot be overstated. Around the world, nearly 3 million lives were lost and over 150 million people have been infected. At the time of this report's publication, the U.S. stood as the hardest-hit country by the pandemic, with more than 30 million confirmed cases and more than 577,000 deaths. Beyond the immense toll of lives lost, 2020 also was a year of financial insecurity, giving rise to fears of homelessness and not having enough to eat; challenges with schooling and childcare; a fundamental shift in the workforce; and general uncertainty that hung over many aspects of our collective lives.

While profound impacts were seen across the nation, public health mandates, measures, and compliance were by no means uniform across or within regions, leading to significant variation in COVID-19 incidence and mortality rates by state.

By aligning Sharecare's Community Well-Being Index 2020 rankings with COVID-19 measures, two key trends emerged:

 States in the top quintile for the Index broadly achieved better COVID-19 measures compared to states in the bottom quintile, seeing more than 20% lower incidence rates on average and in some cases seeing up to 50% lower death rates in comparison to states assuming a bottom 10 spot.

|               | Overall Index<br>Rank | 2019-2020<br>Change | COVID-19 Case<br>Rate <sup>1</sup> (Rank) | COVID-19 Mortality<br>Rate <sup>1</sup> (Rank) |
|---------------|-----------------------|---------------------|---|--|
| Massachusetts | 1                     | +1                  | 9,842 (30)                                | 254 (3)  |
| Hawaii        | 2                     | -1                  | 2,258 (50)                                | 33 (50)  |
| New Jersey    | 3                     | 0                   | 11,152 (11)                               | 285 (1)  |
| Maryland      | 4                     | +7                  | 7,281 (44)                                | 143 (34)                                       |
| New York      | 5                     | -1                  | 10,364 (21)                               | 264 (2)  |
| California    | 6                     | -1                  | 9,434 (33)                                | 155 (30)                                       |
| Connecticut   | 7                     | -1                  | 9,361 (34)                                | 225 (7)  |
| Washington    | 8                     | +5                  | 5,168 (46)                                | 72 (44)  |
| Colorado      | 9                     | -1                  | 8,674 (41)                                | 110 (42)                                       |
| Utah          | 10                    | -3                  | 12,302 (4)                                | 68 (45)  |
| Indiana       | 41                    | +2                  | 10,622 (15)                               | 197 (13)                                       |
| Tennessee     | 42                    | -2                  | 12,085 (5)                                | 176 (21)                                       |
| Louisiana     | 43                    | +1                  | 9,787 (31)                                | 222 (8)  |
| Alabama       | 44                    | +2                  | 10,708 (14)                               | 221 (9)  |
| Oklahoma      | 45                    | 0                   | 11,277 (8)                                | 170 (25)                                       |
| Kentucky      | 46                    | +1                  | 9,914 (28)                                | 145 (33)                                       |
| West Virginia | 47                    | +2                  | 8,386 (42)                                | 157 (29)                                       |
| New Mexico    | 48                    | -6                  | 9,347 (35)                                | 192 (14)                                       |
| Arkansas      | 49                    | -1                  | 11,075 (13)                               | 189 (16)                                       |
| Mississippi   | 50                    | 0                   | 10,421 (18)                               | 241 (5)  |

# **Table 1.** Top and Bottom 10 Community Well-Being Index Ranked States and COVID-19 Incidence and Mortality Rate Statistics

<sup>1</sup> Rates are expressed per 100,000 people.

<sup>2</sup>COVID-19 data from The New York Times, April 26, 2021

# Community Well-Being Index and COVID-19: Overview

 States in the top quintile also achieved higher levels of financial, physical, and social well-being, as well as broadly higher levels of SDOH across economic security and healthcare access, creating a possible buffer against COVID-19 incidence and case fatality levels experienced in states among the bottom 10.

### Trend #1: COVID-19 Incidence Rates and Community Well-Being Index Scores

Per Table 1, states in the top 10 for the Community Well-Being Index reported lower COVID-19 incidence rates on average in comparison to states falling in the bottom 10 for the Index. In addition, seven out of the top 10 Index-ranked states fell in the bottom half overall for COVID-19 incidence rates nationally.

Conversely, and when looking at the 10 states with the lowest Community Well-Being Index scores, we see that two rank among the top 10 for the highest COVID-19 incidence rates (Tennessee and Oklahoma), and six of the 10 are in the top half – nearly the complete opposite compared to the topranked states.

In reviewing COVID-19 mortality rates per capita, similar but less clear-cut trends emerge, including on-average higher COVID-19 mortality rates represented in the bottom 10 states for the Index in comparison to the top 10 states.

Three of the 10 top-ranked states – New York, New Jersey, and Massachusetts – reported the highest COVID-19 mortality rates. Connecticut's mortality rate also places it in the top 10, demonstrating a mixed relationship between Index scores and COVID-19 mortality trends. Two key considerations for states that ranked high in both the 2020 Community Well-Being Index rankings and COVID-19 mortality:

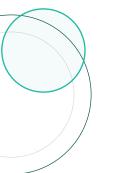
- 1. Boston and New York were the original epicenters of the COVID-19 outbreak in the U.S. during spring 2020.
- 2. New York falls in the top 10 states for the percentage of Black and African American residents. Similarly, all four of the confounding states are among the top half of states for Black and African American population share, reflecting well-established research demonstrating significantly higher COVID-19 case fatality in this demographic.

Finally, on average, the 10 bottom-ranked states in Sharecare's Community Well-Being Index measured COVID-19 mortality rates that were worse than their top 10 counterparts. Eight of the bottom 10 states were among the top half of those measuring the highest COVID-19 mortality rates. The two states within the bottom 10 that avoided placing among those with the highest COVID-19 mortality rates are West Virginia and Kentucky – both of which staved off COVID-19 surges until later in the year, and whose Black and African American communities make up a relatively small share of the state population.

# Trend #2: Relationship to Sub-Domain Rankings

In addition to the links between Community Well-Being Index rankings and COVID-19 measures, comparisons across Index subdomains offer additional context on why certain states may have been more resilient when it came to contracting – or even dying from – COVID-19.

Focusing on financial, physical, and social well-being, as well as economic security and healthcare access (shown in Table 2 below), the top 10 states averaged 20 ranks higher than the bottom 10 states across economic security and healthcare access, and over 30 ranks higher across physical, financial, and social well-being. It is worth noting, however,



# Community Well-Being Index and COVID-19: Overview

that two states, New York and California, fall in the bottom quintile for economic security but the top quintile for the overall Index, indicating a lack of uniformity when it comes to the relationship between economic security tied to places and overarching health and well-being.

With that, the top 10 states may have been more protected from certain COVID-19 risks including likelihood to transmit or die from the virus. This may have been impacted further by broadly enhanced levels of physical health, lower levels of financial stress and improved social connections, as well as improved access to healthcare, and in some cases, better economic circumstance.

In examining the bottom 10 in the 2020 Index, the opposite trend emerges. States in this

category broadly represent lower levels of individual well-being and SDOH tied to subdomains analyzed, including upwards of 70% of states in the bottom 10 for the Index also falling in the bottom 10 for the sub-domains analyzed, and only two states seeing a ranking in the top half across these measures.

While nothing causal can be drawn from correlations between Community Well-Being Index scores and COVID-19 risk, these findings suggest that physical and financial resilience, strength in social networks, access to critical healthcare resources, and residing in a state with strong economic security may enhance COVID-19 resilience – and conversely for states at the bottom of the Index, poor measures in these domains may enhance risk.

# **Table 2.** Top and Bottom 10 Community Well-Being Index Ranked States and Select 2020Sub-Domain Ranks

|               | Overall Index<br>Rank | Financial<br>Well-Being | Physical<br>Well-Being | Social<br>Well-Being | Healthcare<br>Access | Economic<br>Access |
|---------------|-----------------------|-------------------------|------------------------|----------------------|----------------------|--------------------|
| Massachusetts | 1                     | 5                       | 5                      | 7                    | 1                    | 21                 |
| Hawaii        | 2                     | 1                       | 1                      | 1                    | 8                    | 14                 |
| New Jersey    | 3                     | 3                       | 3                      | 3                    | 7                    | 15                 |
| Maryland      | 4                     | 2                       | 2                      | 2                    | 6                    | 13                 |
| New York      | 5                     | 15                      | 13                     | 19                   | 5                    | 40                 |
| California    | 6                     | 17                      | 10                     | 17                   | 11                   | 41                 |
| Connecticut   | 7                     | 6                       | 6                      | 9                    | 3                    | 18                 |
| Washington    | 8                     | 9                       | 11                     | 10                   | 26                   | 24                 |
| Colorado      | 9                     | 16                      | 7                      | 12                   | 18                   | 12                 |
| Utah          | 10                    | 18                      | 9                      | 6                    | 34                   | 3                  |
| Indiana       | 41                    | 31                      | 38                     | 32                   | 40                   | 26                 |
| Tennessee     | 42                    | 40                      | 45                     | 41                   | 19                   | 37                 |
| Louisiana     | 43                    | 47                      | 48                     | 48                   | 9                    | 46                 |
| Alabama       | 44                    | 38                      | 37                     | 29                   | 35                   | 43                 |
| Oklahoma      | 45                    | 48                      | 49                     | 46                   | 48                   | 29                 |
| Kentucky      | 46                    | 46                      | 44                     | 47                   | 33                   | 47                 |
| West Virginia | 47                    | 39                      | 40                     | 33                   | 39                   | 50                 |
| New Mexico    | 48                    | 49                      | 46                     | 49                   | 32                   | 49                 |
| Arkansas      | 49                    | 44                      | 50                     | 45                   | 41                   | 45                 |
| Mississippi   | 50                    | 50                      | 47                     | 50                   | 43                   | 48                 |

### Community Well-Being Index and COVID-19: Urban vs. Rural

The presence of rural and urban counties within a state is deeply influential as it concerns the relationship between a state's Community Well-Being Index score and its COVID-19 incidence rates.

When comparing the 10 top-ranked states with the 10 bottom-ranked states in the 2020 Index, the top 10 represent both improved COVID-19 measures and half the counties considered rural.

Drivers of the disproportionate spread and fatality of COVID-19 in rural communities include lower access to healthcare professionals and critical medical resources, financial and physical health vulnerability, and weaker social support systems which could lead to longer-term mental health consequences. This trend aligns with rural vs. urban trends noted in our 2019 state rankings report, including the finding that on average, counties considered rural measured well-being scores 2+ points lower than their urban counterparts. In addition, and in looking at Sharecare and BUSPH research from September 2020, counties considered rural generally measured lower scores across SDOH, including access to guality healthcare and education, safe and affordable housing, transportation, food security, and financial stability. Against the backdrop of COVID-19, this trend reinforces and further highlights the continued rural/urban divide and calls for creative, innovative solutions to mitigate risks and close the geographical divide across the nation.

| Index<br>Ranking | Average COVID-19<br>Incidence Rate (per 100K) | Average COVID-19 Case<br>Fatality Rate (per 100K) | % Counties<br>Rural |
|------------------|---|---|---------------------|
| Тор 10           | 8,584   | 161   | 36%                 |
| Bottom 10        | 10,362  | 191   | 61%                 |
|                  |   |   |                     |

# Next Steps in Community Well-Being Measurement

In 2020, we noted differences between wellbeing "elite" and well-being "challenged" states across people and places. Still, overall, we saw enhanced resilience and community well-being in the face of illness, fear, loss, isolation, uncertainty, and hardship. As our nation moves into the "next normal," Sharecare will continue the journey of contextualizing well-being across people and places, partnering with BUSPH to enhance our collective visibility into community health to build a healthier post-COVID-19 world. The near-term future of Sharecare's Community Well-Being Index will focus on the development of specific reports to showcase:

- 2020 rankings of metropolitan statistical areas and counties
- · Findings among minority populations
- Sub-domain rankings across individual well-being and SDOH factors

 Indices targeted toward critical population measures for key themes across happiness, sustainability, and the economy

In addition, Sharecare and BUSPH will continue to make enhancements to methods for real- and near-time data collection and conduct research tied to the evolving relationship between individual well-being and SDOH.

We look forward to the continued pursuit of knowledge and insight to support the next generation of community interventions that ensure our recovery and resilience from this unprecedented year.

If your research or academic institution is interested in partnering with Sharecare and BUSPH to study these data, please contact cwbi@sharecare.com.



# Best Practices for Community Well-Being Impact

As part of Sharecare's mission, we recognize the importance of measuring well-being through our Index and capitalizing on it to support data-driven digital and high-touch interventions that augment community wellbeing locally and nationally.

Below are best practices that can be utilized by employers, health plans, federal and state government agencies, life sciences companies, providers, community leaders, and all population health stakeholders as they implement well-being improvement and sustainability programs. Although each of these verticals play unique roles in healthcare experiences and outcomes, commonalities across best-in-class programs include multi-modal interventions for individuals and communities, verification across places (worksites, schools, hotels, restaurants, etc.) to ensure safety, infrastructure, and technology investments that encourage healthier choices, cultural changes and inclusivity in policies, and community wellbeing measurement to gauge progress.

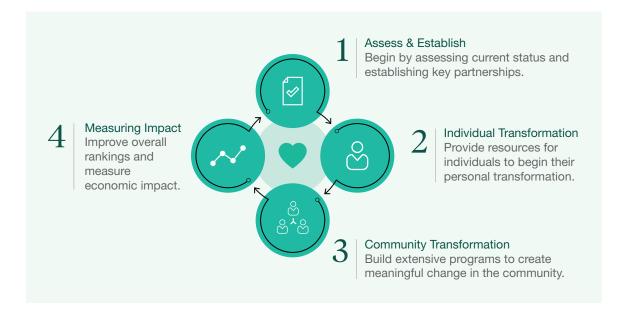
#### Assess & Establish

The blueprint for well-being transformation starts with unifying stakeholders across the

healthcare continuum around a common goal tied to community well-being improvement. By understanding the risk factors most pervasive across and within communities, as well as the relationships between risks across individual well-being and SDOH, key partners and population health stakeholders can democratize Community Well-Being Index datasets to support awareness and, further, form a series of hyperlocal interventions aimed at mitigating and improving identified risks.

As we transition to a post-pandemic phase, stakeholder alignment on risks across individuals and communities, as well as an understanding of the relationships between those risks will be critical. With this alignment and understanding, we can identify and enable targeted support for vulnerable populations while maximizing health resources.

As a starting point for intervention and to enhance and sustain individual resilience, it is critical to create care advocacy solutions that enable people to manage their health in a convenient, affordable, and expedient manner.



## Best Practices for Community Well-Being Impact

#### Individual Transformation

Interventions to improve well-being across populations start with the individual. A holistic, ultra-personalized approach that goes beyond physical health to encompass purpose, social, financial, and community factors helps identify and mitigate the underlying causes of poor health. By delivering a dynamic, artificial intelligencedriven user experience that includes baseline and real-time measurement for identifying risks, clinically validated content for educating users on both individual risk and risk tied to their surroundings, digital therapeutics to manage unique and costly health conditions, and evidence-based lifestyle and disease management programs through digital and high touch modalities, individuals become empowered in their health journey toward well-being improvement.

The year 2020 underscored the importance of individual resilience in the wake of the COVID-19 pandemic. Individuals and populations with lower levels of condition burden, higher financial resilience, and stronger connections to social networks and community were less likely to be affected negatively by the pandemic - collectively measuring lower levels of COVID-19 incidence and fatality as a result. In addition, Sharecare's Community Well-Being Index and other bodies of research have demonstrated that individuals who exhibit higher levels of well-being are less likely to experience negative mental and behavioral health issues as a result of the events of 2020, demonstrating the importance of individual interventions that maximize well-being.

#### Individual to Community Transformation

Recognizing the hyperlocal nature of health, it is critical to support individuals in better understanding:

• The places where they engage and how those places define their feelings of safety

• The communities where they live and how those surroundings impact their everyday health.

Lack of best-in-class facility protocols as well as broad social determinant issues - like limited access to healthy foods and healthcare and high levels of air pollution - have proven to be highly impactful as it concerns whether or not individuals can achieve higher levels of well-being. A successful blueprint entails educating people on these risks, and further, creating technology-enabled verification systems for places as well as geospatial member journeys that enable people to identify healthy, convenient, and affordable options for daily needs related to food, healthcare, fitness, community resources, and more. By improving awareness of the resources in their surroundings, individuals become better equipped to create healthy habits and engage with places verified as conducive to well-being. This enables them to evolve from being a product of their environment to capitalizing on the right places, environment, and surroundings to improve health.

As the year and the pandemic progressed in 2020, best practices tied to COVID-19 procedures and protocols consistently changed, and our surroundings and perceptions continuously evolved as a result. In light of these events, the need and opportunity to connect individuals to their communities via high-tech solutions that consistently enable access to tools and resources while minimizing physical contact has grown.

#### **Community Transformation**

Communities that invest in infrastructures to promote active living – such as bike paths, walkability, and public transit – have residents with better health and well-being outcomes. Research shows that residents in highly active communities have significantly lower rates of smoking, obesity, diabetes, high blood pressure, high cholesterol, and depression, as

# Best Practices for Community Well-Being Impact

well as significantly higher rates of exercise, healthy eating, fresh product consumption, and physical thriving. In addition, racial and socioeconomic well-being inequities require specific infrastructure and policies to mitigate against sustained differences in health outcomes, including critical digital infrastructures like broadband access that enable and powers education, social networks, telehealth, and more. Accordingly, a best-in-class approach to community transformation will deploy interventions across people, policy, and places to optimize "life radius" - or the environments in which people live, work, and play. Informed by community input and driven by a representative local steering committee, an optimal community blueprint executes neighborhood-level strategies to address risk across SDOH and achieve health equity and sustainability.

Additionally, as we embrace a "new normal" in 2021 and beyond, it is vital to consider "community" in the sense of our physical surroundings and digital connection points that unify places and communities to promote well-being further. Through a combined hightouch and high-tech approach to community transformation, individuals can engage in both their own health journey – as well as that of their community – daily, improving well-being through health encouragement, empathy, and combined goals.

### Measuring Impact

Measurement is critical to the success of any well-being program. Benchmarking individual and community well-being to understand risks and opportunities, prioritizing interventions according to those risks, and then measuring the impact of those interventions is critical to contextualizing improvement and optimizing future interventions to maximize results and value to society. In addition, successful individual and community interventions enable blueprints that can be replicated in others, driving results at further scale and bending the trend on our nation's health crisis.

As we look to the future, it is important to identify new opportunities and next generation interventions that enhance our urban and rural city centers to align with sustainable development goals and return on social value across populations. By understanding the deep connections between people and places, in addition to how the digital divide has accelerated inequality in access, best practices for community well-being will entail a transition from urban development to urban services, creating cities and neighborhoods that can initially make a healthy choice an easy choice to ultimately the healthy choice being the only choice.

