

2019 SUMMARY REPORT

ACSM AMERICAN FITNESS INDEX®

Actively Moving America to Better Health



ACKNOWLEDGEMENTS

The ACSM American Fitness Index® is generously supported by a grant from the Anthem Foundation. Statements in this report are those of the authors and do not necessarily reflect the views of the Anthem Foundation unless explicitly noted.

REPORT AUTHORS

Gretchen S. Patch, M.P.H., Director, Strategic Health Programs, American College of Sports Medicine

Terrell W. Zollinger, Dr.P.H., Professor Emeritus, Indiana University Richard M. Fairbanks School of Public Health; Principal, T. Zollinger and Associates, LLC

Jessica M. Coffing, M.P.H., Research Associate, T. Zollinger and Associates, LLC

Derek A. Zollinger, M.S., Data Analyst, T. Zollinger and Associates, LLC

Barbara E. Ainsworth, Ph.D., M.P.H., FACSM, FNAK, Regents' Professor, Arizona State University

ADVISORY BOARD

ACSM greatly appreciates the contributions of Fitness Index Advisory Board members:

Chair: Barbara E. Ainsworth, Ph.D., M.P.H., FACSM, FNAK, Arizona State University

Steven N. Blair, P.E.D., FACSM, University of South Carolina

Jane C. Hurley, Ph.D., Arizona State University

John M. Jakicic, Ph.D., FACSM, University of Pittsburgh

Elizabeth A. Joy, M.D., M.P.H., FACSM, Intermountain Healthcare/University of Utah School of Medicine

NiCole R. Keith, Ph.D., FACSM, Indiana University/ Regenstrief Institute, Inc.

Angela D. Smith, M.D., FACSM, Nemours/ Alfred I. duPont Hospital for Children, Thomas Jefferson University

Walter R. Thompson, Ph.D., FACSM, Georgia State University

Carol E. Torgan, Ph.D., FACSM, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health

Stella L. Volpe, Ph.D., R.D.N., L.D.N., FACSM, Drexel University

Kathleen B. Watson, Ph.D., U.S. Centers for Disease Control and Prevention

Melicia C. Whitt-Glover, Ph.D., FACSM, Gramercy Research Group

Questions and comments on the ACSM American Fitness Index® or this report should be directed to the American College of Sports Medicine at afi@acsm.org.



May 14, 2019

Dear Partner in Promoting Fitness and Health:

The American College of Sports Medicine's American Fitness Index® has been solely funded by the Anthem Foundation since its inception 12 years ago. Over that time, the Fitness Index has become one of the most credible and reliable assessments of individual and community fitness in the country. Lenny Bernstein, columnist for the Washington Post, perhaps said it best when he credited the American College of Sports Medicine's Fitness Index as one that "actually tells us something about people's health habits and the opportunities their communities provide to stay fit." As an organization that is committed to improving lives and communities, the Anthem Foundation is proud to sponsor such a highly acclaimed report.

Of course, the impact of our Fitness Index goes well beyond just talking about the current state of fitness. We equip municipalities with the information and resources they need to address social determinants of health and affect positive change. As NBC News reported, "The American College of Sports Medicine launched the American Fitness Index in partnership with the Anthem Foundation. With the help of the Fitness Index, local officials, community groups, health organizations, and individual citizens can assess factors contributing to their city's fitness, health, and quality of life." So, our story is being told: the data-rich, research-backed Fitness Index is both assessing the fitness of communities and providing actionable information and resources they can use to encourage continued improvement.

The research methodology and indicators for the Fitness Index continue to evolve to ensure we provide the 100 largest US cities with the timely, relevant, and valuable data they need to address both unique and common factors. This year, we added four new indicators that reflect the importance of policy and the built environment on personal health outcomes. The new indicators include pedestrian fatalities, air quality, Bike Score®, and Complete Streets policies.

For the second year in a row, Arlington, Virginia's balance of healthy behaviors and community infrastructure earned it the title of #1 Fittest City. Arlington ranked in the top 10 for 22 of the 33 indicators in the Fitness Index, with six indicators ranked #1. We congratulate the city of Arlington for its impressive commitment to health, fitness, and overall wellness on behalf of its residents.

As always, thank you for your interest in the ACSM American Fitness Index®, sponsored by the Anthem Foundation. Please partner with us by using and sharing this year's report to help improve your community. To learn more, please visit AmericanFitnessIndex.org.

Sincerely,

Stephen Friedhoff, MD
Chief Clinical Officer
Anthem, Inc.

NEED FOR ACTION

Avoiding sedentary behaviors and engaging in regular physical activity is one of the most important ways people can improve and maintain their health.¹⁻⁴ Media messages encouraging exercise and advertisements for fitness-related gear have become commonplace as health organizations and businesses recognize the general population's growing interest in adopting healthy behaviors. While a significant proportion of Americans are physically active, less than 25 percent of adults meet national physical activity guidelines and 40 percent have obesity.^{2,5} **With direct and indirect costs of physical inactivity exceeding \$27 billion yearly and 47 percent of those costs covered by the public sector, increasing physical activity has never been more important to the nation's health and economic outcomes.⁶**

PHYSICAL HEALTH

For adults, regular exercise can reduce the risk of premature death, heart disease, stroke, high blood pressure, type 2 diabetes, breast cancer, colon cancer, and the risk of falls. For children and adolescents, regular physical activity can decrease body fat and improve bone health, cardiorespiratory fitness and muscular strength.¹⁻⁴

MENTAL AND SOCIAL HEALTH

Beyond physical health benefits, regular exercise and physical activity also provide mental and social health benefits including decreasing the risk of depression in adults and reducing depression symptoms and stress in young people.⁷⁻¹¹ Designing spaces with parks, green spaces, trails, and bike lanes can not only increase physical activity, but also increase a sense of community cohesion and improve public perception of a city.¹²⁻¹⁶

ECONOMIC HEALTH

Physical activity isn't only good for health, it's good for a city's bottom line. There is strong evidence of significant economic benefits of local policies and city planning that support physical activity, walkability, and bikeability. Well-designed cities experience increased home values, retail activity, as well as business and job growth.^{15, 17-18}

Emerging public health research suggests that to improve health and fitness, prevent disease and disability, and enhance quality of life for all Americans through physical activity, we must create a culture that integrates physical activity into our daily lives.²



NEED FOR ACTION



EXERCISE

A form of physical activity that is planned, structured, repetitive, and performed with the goal of improving health or fitness. All exercise is physical activity, but not all physical activity is exercise.



PHYSICAL FITNESS

The ability to carry out daily tasks with vigor and alertness, without undue fatigue, and with ample energy to enjoy leisure-time pursuits and respond to emergencies. Physical fitness includes several components: cardiorespiratory fitness (endurance or aerobic power), musculoskeletal fitness, flexibility, balance, and speed of movement.



SEDENTARY BEHAVIOR

Any waking behavior characterized by a low level of energy expenditure (less than or equal to 1.5 METs) while sitting, reclining, or lying.



PHYSICAL ACTIVITY

Any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basal level.

Physical Activity Guidelines for Americans, 2nd edition⁷

ACSM AMERICAN FITNESS INDEX® APPROACH

“The ACSM American Fitness Index® highlights recreation and transportation features in U.S. cities to inform city leaders and advocates of ways to promote health through physical activity and urban planning.”

—BARBARA E. AINSWORTH, PhD, MPH, FACSM, the 55th President of the American College of Sports Medicine (2011-2012), current chair of the ACSM American Fitness Index® Advisory Board, and Regents' professor at Arizona State University

The ACSM American Fitness Index® (Fitness Index) celebrates healthy, active lifestyles and encourages city leaders to enact policies and make system changes to promote these behaviors. The Fitness Index focuses on three strategies to support this effort:

1. **INFORM:** Demonstrate the health, social, and economic benefits of physical activity as well as the policies and infrastructure that promote healthy behaviors.

The Fitness Index, in partnership with the [Anthem Foundation](#), ranks the 100 largest cities in the United States on a composite of health behaviors, chronic diseases, and community infrastructure. These rankings give city leaders the necessary information to improve their residents' health through local policies and system changes.

2. **ENGAGE:** Inspire city leaders and residents to recognize and celebrate the factors that contribute to their city's culture of health and fitness.

The Fitness Index has a strong history of sharing the annual rankings, as well as success stories from cities making healthy changes through strategic dissemination and communication. Using traditional and social media, it is estimated that the Fitness Index reaches 355 million people annually to recognize achievements as well as stimulate community action and advocacy based on the most recent scientific data available.

3. **BUILD:** Expand local capacity and partnerships to implement policy and infrastructure changes to enable physically active lifestyles for all residents.

The Fitness Index is more than an annual ranking of cities. Since 2011, the Fitness Index has provided direct assistance and support to cities needing help to improve their residents' health. This tailored support helps city leaders identify opportunities for improvement and to create plans for implementing changes.

City leaders can access Fitness Index resources like the [Community Action Guide](#) and the [My Community Application Toolkit](#). These tools allow any city, regardless of whether it is in the Fitness Index rankings, to assess its local health and fitness to develop and implement plans for improvement.

The Fitness Index approach aligns with the [American College of Sports Medicine's](#) work to address health and fitness through research and education. After all, the journey to a healthier future begins where we live, learn, work and play. The Fitness Index indicators address social and physical environments that promote good health for all.¹⁹

2019 RANKINGS

“Improving the health and fitness of Americans is not an issue any one organization can tackle alone. We must work in a coordinated effort as a community and country to create a healthier, fitter generation.”

—STEPHEN FRIEDHOFF, MD, CHIEF CLINICAL OFFICER, ANTHEM, INC

The 2019 ACSM American Fitness Index® once again ranked Arlington, VA as the fittest city in America. Cities with the highest scores are considered to have strong community fitness, a concept analogous to individuals having strong personal fitness. Cities that rank near the top of the Fitness Index have more strengths and resources that support healthy living and fewer challenges that hinder it. The opposite is true for cities near the bottom of the rankings.

Additional information, including city scores and indicator data, is available in an interactive table on the website: www.americanfitnessindex.org/rankings.

[Read how cities are using the Fitness Index findings to track and focus their efforts to achieve a healthier and more active population.](#)



2019 RANKINGS

OVERALL RANK		PERSONAL HEALTH RANK	COMMUNITY + ENVIRONMENT RANK
1	Arlington, VA	1	1
2	Seattle, WA	3	9
3	Minneapolis, MN	7	4
4	San Francisco, CA	5	13
5	Madison, WI	2	21
6	Washington, D.C.	13	5
7	St. Paul, MN	27	2
8	Irvine, CA	8	28
9	Denver, CO	15	26
10	Portland, OR	25	16
11	Oakland, CA	10	34
12	San Jose, CA	4	47
13	Boise, ID	16	33
14	San Diego, CA	6	37
15	Chicago, IL	32	3
16	Pittsburgh, PA	31	10
17	Lincoln, NE	30	23
18	Long Beach, CA	18	41
19	Boston, MA	44	7
20	Sacramento, CA	36	19
21	St. Petersburg, FL	37	20
22	Atlanta, GA	29	27
23	Virginia Beach, VA	21	43
24	Santa Ana, CA	9	72
25	Milwaukee, WI	59.5	6
26	Honolulu, HI	26	40
27	Los Angeles, CA	17	58
28	Durham, NC	11	84
29	Chula Vista, CA	14	77
30	Raleigh, NC	23	53

OVERALL RANK		PERSONAL HEALTH RANK	COMMUNITY + ENVIRONMENT RANK
31	Albuquerque, NM	40	32
32	New York, NY	33	35
33	Stockton, CA	20	62
34	Fremont, CA	19	69
35	Miami, FL	43	30
36	Newark, NJ	39	36
37	Anaheim, CA	12	93
38	Richmond, VA	63	17
39	Colorado Springs, CO	24	67
40	Aurora, CO	22	74
41.5	Buffalo, NY	69	12
41.5	Orlando, FL	51	31
43	Austin, TX	38	45
44	Plano, TX	41	44
45	Omaha, NE	62	25
46	Tampa, FL	61	29
47	Norfolk, VA	72	11
48	Nashville, TN	28	78
49	Reno, NV	34.5	60
50	Jersey City, NJ	47	49
51	St. Louis, MO	76	15
52	Baltimore, MD	78	14
53	Tucson, AZ	53	48
54	New Orleans, LA	73	22
55	Hialeah, FL	58	46
56	Greensboro, NC	46	65
57	Cincinnati, OH	74	24
58	Riverside, CA	48	63
59	Glendale, AZ	54	54
60	Lubbock, TX	49	59

2019 RANKINGS

OVERALL RANK		PERSONAL HEALTH RANK	COMMUNITY + ENVIRONMENT RANK
61	Dallas, TX	57	55
62	Anchorage, AK	34.5	92
63	Philadelphia, PA	93	8
64	Fresno, CA	45	83
65	Cleveland, OH	90	18
66	Mesa, AZ	50	86
67	Kansas City, MO	75	39
68	Chandler, AZ	56	87
69	Scottsdale, AZ	55	90
70	Columbus, OH	68	56
71	Phoenix, AZ	52	94
72	El Paso, TX	67	66
73	Houston, TX	64	81
74	Lexington, KY	66	75
75	Charlotte, NC	42	98
76	Garland, TX	65	89
77	Jacksonville, FL	80	51
78	Irving, TX	70	70.5
79	Baton Rouge, LA	92	38
80	Laredo, TX	83.5	50

OVERALL RANK		PERSONAL HEALTH RANK	COMMUNITY + ENVIRONMENT RANK
81	Winston-Salem, NC	71	80
82	San Antonio, TX	77	79
83	Gilbert, AZ	59.5	100
84	Chesapeake, VA	81	64
85	Las Vegas, NV	85	73
86	Fort Wayne, IN	83.5	76
87	Memphis, TN	88	68
88	Fort Worth, TX	79	96
89	Henderson, NV	87	82
90	Wichita, KS	86	88
91	Corpus Christi, TX	100	42
92	Arlington, TX	82	95
93	Detroit, MI	97	52
94	Bakersfield, CA	91	91
95	Louisville, KY	95	70.5
96	Indianapolis, IN	94	85
97	Toledo, OH	99	57
98	Tulsa, OK	98	61
99	North Las Vegas, NV	89	97
100	Oklahoma City, OK	96	99

KEY

		1ST QUARTILE			3RD QUARTILE
		2ND QUARTILE			4TH QUARTILE

SUMMARY OF FINDINGS



Good health starts in our homes, schools, and communities. That's why the Fitness Index looks at both personal health behaviors, meaning what we're doing individually to get and stay healthy, as well as the built environment, like parks, playgrounds, and recreation centers that help us do so.

Arlington, VA's balance of both healthy behaviors and community infrastructure earned them the #1 overall rank in the 2019 ACSM American Fitness Index® with a score of 87.3. Arlington, population 234,965, also ranked #1 in the personal health and community/environment sub-scores. At the individual indicator level, Arlington ranked in the top 10 for 22 of the 33 indicators in the Fitness Index, with six indicators ranked #1, including:

- Residents performing any exercise in the last month
- Residents meeting aerobic and strength activity guidelines
- High reports of good or excellent health
- Low rates of smoking, reports of poor physical health, and pedestrian fatalities

Cities of all sizes made it into the top 25 fittest cities, including relatively small cities like Arlington, VA (#1), Boise, ID (#13), and Madison, WI (#5) as well as some of the largest cities in the country like Chicago, IL (#15), San Diego, CA (#14), and Seattle, WA (#2). Regardless of population size, balancing healthy behaviors and community infrastructure was a common characteristic of cities that ranked in the top 25 overall.

NEW IN 2019

The [Fitness Index Advisory Board](#) added four new indicators that reflect the importance of policy and built environment on personal health outcomes. These include pedestrian fatalities, air quality, Bike Score®, and Complete Streets policies.

Pedestrian safety, both real and perceived, can impact how often residents walk, bike, or roll in a city. Across the country pedestrian fatalities have increased by 35 percent in the past decade and are projected to exceed 6,200 fatalities in 2018, averaging more than 17 pedestrian deaths per day, with people of color and people in low-income communities experiencing the highest rates of pedestrian fatalities.²⁰⁻²² Despite similar pedestrian commuting activity (3.7 percent versus 3.1 percent walking or biking to work), the 10 deadliest cities for pedestrians averaged 4.1 pedestrian deaths per 100,000 residents while the 10 safest cities averaged 0.6 pedestrian fatalities per 100,000 residents.

SUMMARY OF FINDINGS

DEADLIEST CITIES

OVERALL RANK	PEDESTRIAN FATALITIES/ 100K			
	0	2	4	6
1. St. Louis, MO				5.8
2. Albuquerque, NM				4.7
3. St. Petersburg, FL			4.2	
4. Corpus Christi, TX			4.1	
5. Atlanta, GA			4.1	
6. Jacksonville, FL			4.0	
7. Orlando, FL			3.7	
8. Tampa, FL			3.6	
9. New Orleans, LA			3.6	
10. Bakersfield, CA & San Antonio, TX (tie)			3.5	

Complete Streets may help mitigate pedestrian fatalities when streets are designed to consider all modes of transportation and people of all ages and abilities. This approach considers the needs of pedestrians and cyclists, and not just motorists as has been the policy historically.



25 CITIES HAVE AN ORDINANCE, LAW, OR TAX LEVY TO ENFORCE COMPLETE STREETS DESIGNS THAT BENEFIT PEOPLE OF ALL AGES AND ABILITIES

[Download the National Complete Streets Coalition's toolkit to learn the five activities to move from policy to action.](#)

SUMMARY OF FINDINGS

Bike Score, similar to Walk Score®, measures bikeability using bike lanes, hills, connectivity, and bicycle mode share. Studies have shown a direct relationship between neighborhood bikeability and the proportion of residents cycling to work and for recreation.²³⁻²⁴

Biking and walking more often as a means of transportation can lead to better health and to better air quality.²⁵ Unfortunately, poor air quality has been shown to discourage physical activity, especially among people with respiratory limitations. Geography, weather, automobile use, and industrial emissions all play a role in a city's air quality. Local policies and practices like car-free days/events, maintaining or upgrading city vehicles, quality checks on automobile exhaust, and better control of industrial emissions can help mitigate harmful air pollution that impacts all residents.

TOP 10 BIKE SCORE

OVERALL RANK

1.	Minneapolis, MN	81.9
2.	Portland, OR	81.2
3.	Chicago, IL	71.5
4.	Denver, CO	71.3
5.	San Francisco, CA	70.7
6.	Seattle, WA	70.0
7.	Arlington, VA	69.1
8.	Boston, MA	69.0
9.	New York, NY	67.7
10.	Washington, D.C.	66.9



62.3 AVERAGE BIKE SCORE OF THE TOP 25 CITIES INDICATING THEY HAVE BIKEABLE INFRASTRUCTURES

BEST AIR QUALITY INDEX

OVERALL RANK

1.	Norfolk, VA	98.3
2.	Lubbock, TX	96.2
3.	Virginia Beach, VA	95.3
4.	Honolulu, HI	93.7
5.	Lincoln, NE	92.2
6.	Richmond, VA	90.4
7.	Lexington, KY	86.3
8.	Anchorage, AK	85.8
9.	Arlington, VA	85.7
10.	St. Paul, MN	85.2



[Check today's air quality where you live!](#)

61.7% AVERAGE DAYS WITH GOOD AIR QUALITY ACROSS 100 CITIES

SUMMARY OF FINDINGS

Deeper Dive

Beyond the overall rankings, the sub-scores and individual indicator data tell a more complete story for each city. Three cities, Arlington, VA, Seattle, WA, and Minneapolis, MN, rank among the top 10 cities overall, as well as in both personal health and community/environment sub-scores.

PERSONAL HEALTH RANK & SCORE

OVERALL RANK		
1.	Arlington, VA	93.5
2.	Madison, WI	81.5
3.	Seattle, WA	81.2
4.	San Jose, CA	80.5
5.	San Francisco, CA	78.7
6.	San Diego, CA	76.1
7.	Minneapolis, MN	75.8
8.	Irvine, CA	75.4
9.	Santa Ana, CA	75.2
10.	Oakland, CA	74.6

COMMUNITY/ENVIRONMENT RANK & SCORE

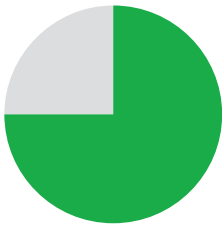
OVERALL RANK		
1.	Arlington, VA	79.0
2.	St. Paul, MN	78.7
3.	Chicago, IL	77.6
4.	Minneapolis, MN	77.3
5.	Washington, D.C.	76.7
6.	Milwaukee, WI	76.0
7.	Boston, MA	74.3
8.	Philadelphia, PA	74.1
9.	Seattle, WA	73.5
10.	Pittsburgh, PA	73.4



SUMMARY OF FINDINGS

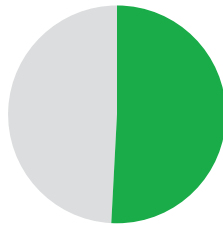
PHYSICAL ACTIVITY AND LOCAL PARKS

On average, 75.2 percent of adults in the 100 largest cities in the U.S. reported engaging in any physical activity in the previous month, but only 51.2 percent met the aerobic activity guidelines and 22.0 percent met the guidelines for both aerobic and strength activities.



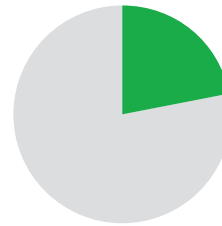
75.2%

OF ADULTS REPORTED
ANY PHYSICAL ACTIVITY
LAST MONTH



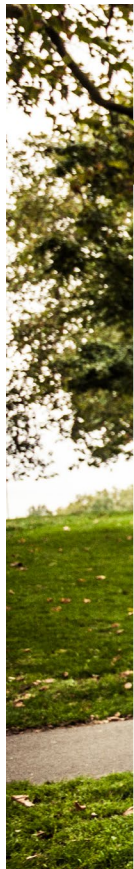
51.2%

OF ADULTS MET AEROBIC
ACTIVITY GUIDELINES



22.0%

OF ADULTS MET AEROBIC
AND STRENGTH ACTIVITY
GUIDELINES



ACSM and CDC recommend at least 150 minutes per week of moderate-intensity aerobic activity, 75 minutes of vigorous aerobic activity, or a combination of both for adults. They also recommend muscle strengthening activity twice a week.²⁶



SUMMARY OF FINDINGS

Arlington, VA residents reported the most physical activity with 92.6 percent exercising in the previous month and 32.9 percent reporting meeting the aerobic and strength activity guidelines. Madison, WI topped the charts for aerobic activity with 65.0 percent of residents reporting that they met the guidelines. Across all U.S. cities there is room to move more and sit less.



ANY EXERCISE

OVERALL RANK

1. **Arlington, VA**
2. San Jose, CA
3. **San Francisco, CA**
4. Anchorage, AK
5. Seattle, WA
6. **Madison, WI**
7. Oakland, CA
8. Fremont, CA
9. Irvine, CA
10. Santa Ana & Anaheim, CA (tie)

AEROBIC ACTIVITIES

OVERALL RANK

1. **Madison, WI**
2. **Arlington, VA**
3. Seattle, WA
4. San Jose, CA
5. **San Francisco, CA**
6. Irvine, CA
7. Santa Ana, CA
8. Anaheim, CA
9. Anchorage, AK
10. Fresno, CA

AEROBIC & STRENGTHENING ACTIVITIES

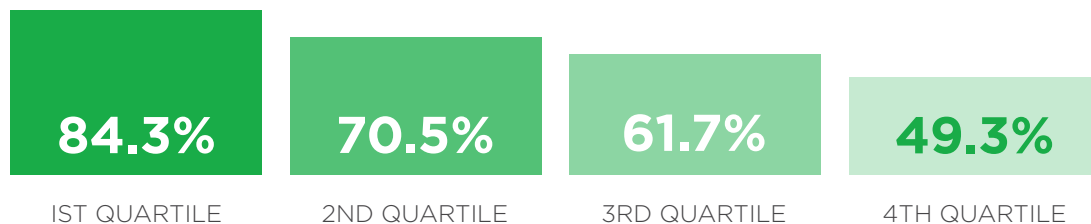
OVERALL RANK

1. **Arlington, VA**
2. Fresno, CA
3. **Madison, WI**
4. Virginia Beach, VA
5. Norfolk, VA
6. Stockton, CA
7. **San Francisco, CA**
8. Reno, NV
9. Denver, CO
10. Boise, ID

Access to parks and recreation facilities play a key role in supporting physical activity and proximity of a local park is particularly important. Among the top 10 cities for park proximity, on average, 97 percent of residents live within a 10-minute walk to a park. The average across all 100 cities is 66.4 percent of residents living within a 10-minute walk to a park.

SUMMARY OF FINDINGS

TOP 25 CITIES AVERAGE 35 PERCENT MORE RESIDENTS LIVING WITHIN A **10-MINUTE WALK TO A PARK** COMPARED TO CITIES IN THE BOTTOM QUARTILE.



Well designed, safe, and maintained parks are community assets that not only support physical activity, but also create a strong economy and neighborhood connection.

PARKS/ 10,000 RESIDENTS

OVERALL RANK

1. Madison, WI
2. Atlanta, GA
3. Cincinnati, OH
4. St. Petersburg, FL
- 5. Arlington, VA**
6. Buffalo, NY
7. Las Vegas, NV
8. Richmond, VA
9. Anchorage, AK
- 10. St. Paul, MN**

PARKS WITHIN 10-MINUTE WALK

OVERALL RANK

1. San Francisco, CA
2. Boston, MA
- 3. Arlington, VA**
4. Washington, D.C.
5. Chicago, IL
6. Minneapolis, MN
7. New York, NY
- 8. St. Paul, MN**
9. Seattle, WA
10. Philadelphia, PA

[Follow the Exercise Is Medicine® approach to getting more active.](#)
[Start where you are. Use what you have. Do what you can.](#)

SUMMARY OF FINDINGS

ACTIVE TRANSPORTATION

One way to sit less and move more is to walk or bike for transportation, also known as active transportation. Cities with high walkability and bikeability scores see higher rates of residents walking, biking, and rolling (skateboarding, skating, self-propelled scooters, etc.) for transportation, not just for exercise. Similar to local parks, the built environment, including sidewalks, protected bike lanes, lighting, and benches, supports safe walking, biking, and rolling. Across all 100 cities, only 4.5 percent of residents walk or bike to work and 7.1 percent use public transportation. Washington, D.C., New York, NY, Boston, MA, San Francisco, CA, and Seattle, WA reported the largest percentages of residents walking or biking to work and using public transportation.

WALK OR BIKE TO WORK

OVERALL RANK

1. **Washington, D.C.**
2. **Boston, MA**
3. **San Francisco, CA**
4. Madison, WI
5. **Seattle, WA**
6. Pittsburgh, PA
7. Portland, OR
8. Honolulu, HI
9. Norfolk, VA
10. **New York, NY**

USE PUBLIC TRANSPORTATION

OVERALL RANK

1. **New York, NY**
2. Jersey City, NJ
3. **Boston, MA**
4. **San Francisco, CA**
5. **Washington, D.C.**
6. Chicago, IL
7. Arlington, VA
8. Newark, NJ
9. Philadelphia, PA
10. **Seattle, WA**

WALK SCORE

OVERALL RANK

1. **New York, NY**
2. Jersey City, NJ
3. **San Francisco, CA**
4. **Boston, MA**
5. Newark, NJ
6. Miami, FL
7. Philadelphia, PA
8. Chicago, IL
9. **Washington, D.C.**
10. **Seattle, WA**

“Active transportation is an excellent way to meet physical activity recommendations and to help reduce transportation-related particulate pollution and ground-level ozone. Many of the top cities in the Fitness Index score high for walkability, proximity to a park, and good public transit which help make active transportation accessible to more people.”

—JANET R. WOJCIK, PhD, FACSM, Winthrop University, chair of the ActivEarth Task Force

SUMMARY OF FINDINGS

HEALTHY EATING

The Fitness Index scores show that adults tend to eat fruit more regularly than vegetables. Across all 100 cities, an average of 33.4 percent of adults reported eating at least two servings of fruit per day and 16.4 percent reported eating at least three or more servings of vegetables per day.

Proximity to fresh produce affects healthy eating, too. Local farmers markets have been shown to increase fruit and vegetable consumption, especially when paired with nutrition assistance programs like SNAP and WIC.²⁷⁻²⁸ Washington, D.C., led the way with 82.1 farmers markets per one million residents, while five cities reported no farmers markets.



2+ FRUITS/ DAY

OVERALL RANK

1. Madison, WI
2. Newark, NJ
3. Fresno, CA
- 4. Nashville, TN**
5. Boise, ID
6. San Diego, CA
7. Chula Vista, CA
- 8. Arlington, VA**
- 9. San Jose, CA**
10. Arlington, TX

3+ VEGETABLES/ DAY

OVERALL RANK

1. Washington, D.C.
- 2. Nashville, TN**
- 3. Arlington, VA**
4. Irving, TX
5. Santa Ana, CA
6. Anaheim, CA
7. Irvine, CA
8. Anchorage, AK
- 9. San Jose, CA**
10. Garland, TX

FARMERS MARKETS

OVERALL RANK

1. Washington, D.C.
2. Minneapolis, MN
3. Madison, WI
4. Honolulu, HI
5. Arlington, VA
6. Richmond, VA
7. Boston, MA
8. Cleveland, OH
9. Pittsburgh, PA
10. Anchorage, AK

[Explore policies and strategies that local governments and businesses can use to increase fruit and vegetable consumption.](#)

SUMMARY OF FINDINGS

HEALTH OUTCOMES

Both health behaviors and built environment impact health outcomes. Cities in the top 25 overall generally scored well in health outcomes. However, cities outside of the top 25 took top honors for low rates of heart disease and stroke with Lubbock, TX, ranked #60 overall, leading the way.

In all 100 cities, an average of 30.3 percent of residents were diagnosed with high blood pressure, 3.3 percent with heart disease, and 2.9 percent were diagnosed with a stroke.



LOWEST RATES OF HIGH BLOOD PRESSURE

OVERALL RANK

1. Boston, MA
2. San Jose, CA
3. Minneapolis, MN
- 4. Arlington, VA**
5. Oakland, CA
6. Fremont, CA
7. Aurora, CO
8. Seattle, WA
9. St. Paul, MN
10. Denver, CO

LOWEST RATES OF HEART DISEASE

OVERALL RANK

1. Lubbock, TX
2. Stockton, CA
3. Irving, TX
4. Dallas, TX
5. Denver, CO
6. Garland, TX
7. Durham, NC
- 8. Arlington, VA**
9. Plano, TX
10. Raleigh, NC

LOWEST RATES OF STROKE

OVERALL RANK

1. Lubbock, TX
2. El Paso, TX
3. Lexington, KY
4. Anchorage, AK
5. San Jose, CA
6. Raleigh, NC
7. Los Angeles, CA
8. Long Beach, CA
- 9. Arlington, VA**
10. Durham, NC

INTERPRETING THE RANKINGS

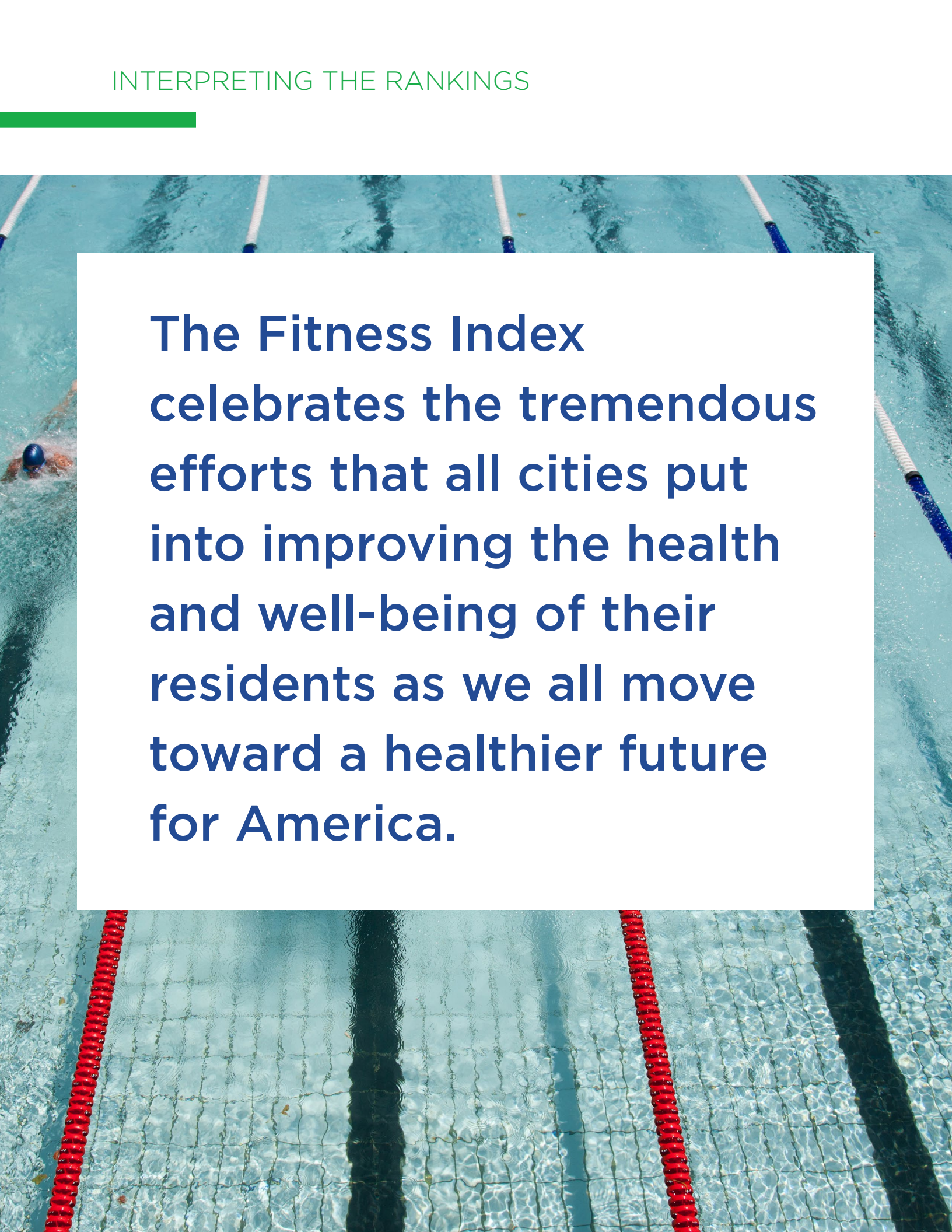
It is important to consider both the score as well as the rank for each city when using the Fitness Index. While the rankings list the cities from the highest score to the lowest score, the scores for many cities are very similar, indicating there may be relatively little real difference among their fitness levels.

For example, Raleigh, NC scored 57.7 overall and ranked #30 while Anaheim, CA scored 56.1 overall and ranked #37. While Raleigh ranked seven positions higher than Anaheim in the 2019 Fitness Index, these two cities are actually very similar across most of the indicators as evidenced by the close scores (1.6 points difference in scores); thus, there is little difference in the community fitness levels of the two cities.

Also, while one city ranks #1 and another ranks #100, this does not necessarily mean that the highest ranked city has excellent values across all indicators and the lowest ranked city has the lowest values across all indicators. The ranking merely indicates that, relative to each other, some cities scored better than others. Visit www.americanfitnessindex.org/rankings to compare city indicators and sub-scores using the interactive city comparison tool.

It's important to remember that a majority of the indicators do not change rapidly, and it will take time for the impact of new initiatives to result in changes to health indicators. While improvements in community and built environment indicators are important investments, a notable change in the health of residents is expected to slowly but surely follow. Additionally, some indicator-level changes may be due to sample size or sampling variation.

Cities with the best scores, and even those with scores close to the best, are commended for their efforts to improve and maintain the health and fitness of their residents. These cities demonstrated the ability to support healthy lifestyles; thus, their approaches serve as examples to cities working to improve similar indicators.

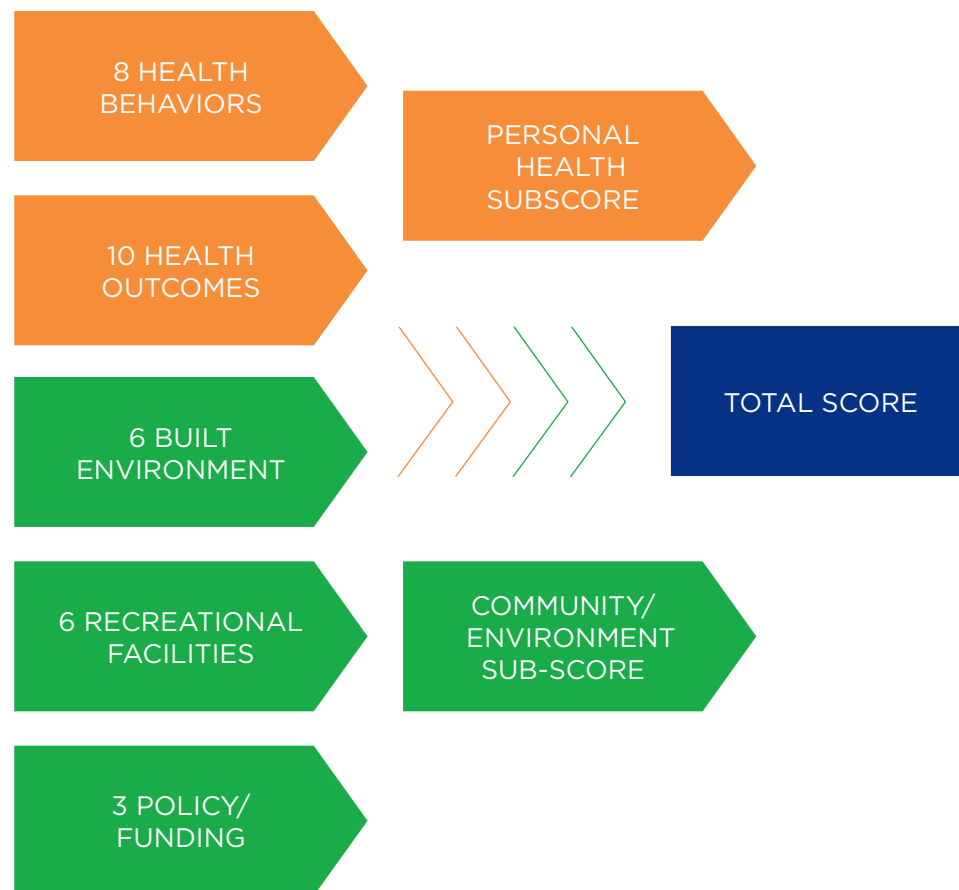
A photograph of a swimming pool with lane lines. The water is blue and rippled. In the foreground, two red lane lines are visible. In the background, a swimmer's head and blue swim cap are visible in the water. The text is overlaid on a white rectangular background in the center of the image.

**The Fitness Index
celebrates the tremendous
efforts that all cities put
into improving the health
and well-being of their
residents as we all move
toward a healthier future
for America.**

APPENDIX: METHODOLOGY

Last year the Fitness Index expanded from 50 metropolitan statistical areas to the 100 largest cities in the U.S. This change provided city and community leaders with much needed data at the local level and allowed the Fitness Index to provide targeted information to better assist city leaders and community-based organizations.²⁹⁻³¹

The Fitness Index was calculated using 33 indicators from reliable, publicly accessible, and up-to-date sources. Indicators were combined to create sub-scores for personal health and community and environment indicators. Individual indicators were weighted relative to their assessed impact on community fitness, converted to ranks, and combined in a straight-forward manner as described in the methodology section on the website. The two sub-scores were then combined to form the total score.



APPENDIX: METHODOLOGY

The analysis included city-level data when available. All other indicator data were analyzed for the county(ies) where the city proper was located.* Groups of counties were used when the city limits extend across county lines. For example, the city of Denver, CO is located only in Denver County; however, New York, NY is located in the five counties of Bronx, Kings, New York, Queens, and Richmond.

The Fitness Index Advisory Board reviewed and updated the indicators and weights used to calculate the 2019 Fitness Index scores and rankings. The four new indicators reflect the importance of policy and built environment on personal health outcomes like pedestrian fatalities.

Complete Streets policies were graded by type of policy at the city or county level. Grades favored ordinances, laws, and tax levies as they have more enforcement mechanisms than other policy types.

POLICY TYPE	GRADE	# CITIES WITH POLICY
Ordinance/ Law, Tax Levy	2	26
Policy, Design Manual/ Guide, Plan, Internal Policy/ Executive Order, Resolution	1	49
No Policy Type	0	25

The Advisory Board used a variety of considerations when removing indicators. Sleep is a very important indicator to community health and fitness; however, the data source used in previous years (BRFSS) no longer collects information on sleep on a regular basis. The three park-related measures were removed to focus only the most important built environment characteristics and provide a better balance between the number of environment/community indicators and number of personal health indicators.

Additionally, two indicators, walking and biking to work and use of public transit, were moved from the community/environment sub-group to the personal health sub-group since both indicators were behaviors, not infrastructure.

+ ADDED

Pedestrian fatality rate/ 100,000 residents

Air quality index

Bike Score

Local Complete Streets policy

✗ REMOVED

% getting 7+ hours of sleep/day

Acres of parkland/ 1,000 residents

Parkland as % of city

Dog parks/ 100,000 residents

APPENDIX: METHODOLOGY

Although some indicators and weights changed, the statistical methodology to produce the Fitness Index scores and rankings remains unchanged from previous years.** For more information on the development of the Fitness Index, including indicator selection and counties included in the analysis, please visit: www.americanfitnessindex.org/methodology.

PERSONAL HEALTH INDICATORS

HEALTH BEHAVIORS

- % exercising in the last 30 days
- % meeting aerobic activity guidelines
- % meeting aerobic & strength activity guidelines
- % bicycling or walking to work
- % using public transportation to work
- % consuming 2+ fruits/day
- % consuming 3+ vegetables/day
- % smoking

HEALTH OUTCOMES

- % in excellent or very good health
- % physical health not good during the past 30 days
- % mental health not good during the past 30 days
- % with obesity
- % with asthma
- % with high blood pressure
- % with angina or coronary heart disease
- % with stroke
- % with diabetes
- Pedestrian fatality rate/ 100,000 residents

COMMUNITY/ ENVIRONMENT INDICATORS

BUILT ENVIRONMENT

- Air quality index
- Bike Score
- Farmers markets/ 1,000,000 residents
- Park units/ 10,000 residents
- % within a 10-minute walk to a park
- Walk Score

RECREATIONAL FACILITIES

- Ball diamonds/ 10,000 residents
- Basketball hoops/ 10,000 residents
- Park playgrounds/ 10,000 residents
- Recreational centers/ 20,000 residents
- Swimming pools/ 100,000 residents
- Tennis courts/ 10,000 residents

POLICY & FUNDING

- Local complete streets policy
- Park expenditure/ resident (adjusted)
- Physical education requirement

*There was an insufficient number of BRFSS survey respondents in both 2017 and 2018 from Webb County where Laredo, Texas, is located to report health measures for only Webb County. To obtain the minimum amount of responses required by CDC for data reporting for 2017, the geographical area was expanded to include the six adjacent counties: Dimmit, Duval, LaSalle, Jim Hogg, Maverick, and Zapata. For 2018, there was an insufficient number of BRFSS respondents even for the expanded area, so 2017 data were used for the 2019 Index. All of the other indicator data are for the city of Laredo only.

**Due to continuous updates to the Fitness Index, comparisons of overall rank, score, and sub-scores from previous years should be avoided. Individual indicators that have not changed can be compared to data from 2018 only. More information on the updates is available in the methodology.

APPENDIX: DATA SOURCES

The Fitness Index uses a variety of data sources to calculate the annual scores and rankings.

- 2017 American Community Survey — U.S. Census
- 2017 Behavioral Risk Factor Surveillance System (BRFSS), County Data — CDC
- 2017 Environmental Protection Agency
- 2016 National Highway Traffic Safety Administration
- 2018 Smart Growth America/ National Complete Streets Coalition
- 2016 Shape of the Nation
- 2017 Trust for the Public Land — City data
- 2018 Farmers Markets Directory and Geographic Data — USDA
- 2018 Walk Score



APPENDIX: REFERENCES

1. U.S. Department of Health and Human Services, Office of the Surgeon General National Prevention Council. 2011, June. National Prevention Strategy. [cited 2019 February 25]. Available from: <http://www.surgeongeneral.gov/priorities/prevention/strategy/report.pdf>
2. U.S. Centers for Disease Control and Prevention. 2018, November 13. Physical Activity. [cited 2019 February 25]. Available from: <https://www.cdc.gov/physicalactivity/>
3. American College of Sports Medicine. (n.d.). ACSM | Position Stands. [cited 2019 February 25]. Available from: <https://www.acsm.org/acsm-positions-policy/official-positions/ACSM-position-stands>
4. U.S. Department of Health and Human Services, Healthy People 2020. 2019, February 21. Physical Activity. [cited 2019 February 25]. Available from: <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=33>
5. Hales CM, Fryar CD, Carroll MD, Freedman DS, Ogden CL. Trends in obesity and severe obesity prevalence in U.S. youth and adults by sex and age, 2007-2008 to 2015-2016. *JAMA*. 2018;319(16):1723-25.
6. Ding D, Lawson KD, Kolbe-Alexander TL, et al. The economic burden of physical inactivity: a global analysis of major non-communicable diseases. *Lancet*. 2016;388(10051):1311-24
7. U.S. Department of Health and Human Services. *Physical Activity Guidelines for Americans*, 2nd ed. Washington, D.C.: U.S. Department of Health and Human Services; 2018. [cited 2019 February 25]. Available from: https://health.gov/paguidelines/second-edition/pdf/Physical_Activity_Guidelines_2nd_edition.pdf
8. Van den Berg AE, Maas J, Verheij RA, Groenewegen PP. Green space as a buffer between stressful life events and health. *Soc Sci Med*. 2010;70(8):1203-1210.
9. Alcock I, White MP, Wheeler BW, Fleming LE, Depledge MH. Longitudinal effects on mental health of moving to greener and less green urban areas. *Environ Sci Technol*. 2014;48(2):1247-1255.
10. Taylor AF, Kuo FE. Children with attention deficits concentrate better after walk in the park. *J Atten Disord*. 2009;12(5):402-409.
11. Wells NM, Evans GW. Nearby nature: a buffer of life stress among rural children. *Environ Behav*. 2003;35(3):311-330.
12. Leyden KM. Social capital and the built environment: the importance of walkable neighborhoods. *Am J Pub Health*. 2003;93(9):1546-1551.
13. Sallis JF, Floyd MF, Rodriguez DA, Saelens BE. Role of built environments in physical activity, obesity, and cardiovascular disease. *Circulation*. 2012;125(5):729-737.
14. Sallis JF, Cerin E, Conway TL, et al. Physical activity in relation to urban environments in 14 cities worldwide: a cross-sectional study. *Lancet*. 2016;387(10034):2207-2217.

APPENDIX: REFERENCES

15. Sallis JF, Spoon C, Cavill N, et al. Co-benefits of designing communities for active living: an exploration of literature. *Int J Behav Nutr Phys Act*. 2015;12(30).
16. Sugiyama T, Cerin E, Owen N, et al. Perceived neighbourhood environmental attributes associated with adults' recreational walking: IPEN Adult study in 12 countries. *Health Place*. 2014;28:22-30.
17. Guo JY, Gandavarapu S. An economic evaluation of health-promotive built environment changes. *Prev Med*. 2010;50:44-49.
18. U.S. Environmental Protection Agency. 2012, December. Smart Growth and Economic Success: Benefits for Real Estate Developers, Investors, Business, and Local Governments. [cited 2019 February 25]. Available from: <https://www.epa.gov/smartgrowth/smart-growth-and-economic-success-benefits-real-estate-developers-investors-business-and>
19. Hasson RE, Brown DR, Dorn J, et al. Achieving equity in physical activity participation: ACSM experience and next steps. *Med Sci Sports Exerc*. 2017;49(4):848-858.
20. Smart Growth America. *Dangerous by Design 2019*. Washington, D.C.: 2019. [cited 2019 February 25]. Available from: <https://smartgrowthamerica.org/dangerous-by-design/>
21. Governors Highway Safety Association. *Pedestrian Traffic Fatalities by State: 2018 Preliminary Data*. Washington, D.C.: 2019. [cited 2019 March 04]. Available from: https://www.ghsa.org/sites/default/files/2019-02/FINAL_Pedestrians19.pdf
22. Chakravarthy B, Anderson CL, Ludlow J, Lotfipour S, Vaca FE. The relationship of pedestrian injuries to socioeconomic characteristics in a large Southern California county. *Traffic Inj Prev*. 2010;11(5):508-513
23. Winters M, Teschke K, Brauer M, Fuller D. Bike Score®: Associations between urban bikeability and cycling behavior in 24 cities. *Int j Behav Nutr Phys Act*. 2016;13:18. doi:10.1186/s12966-016-0339-0
24. Le HTK, Buehler R, Hankey S. Correlates of the built environment and active travel: evidence from 20 U.S. metropolitan areas. *Environ Health Perspect*. 2018;126(7):077011. doi: 10.1289/EHP3389. eCollection 2018 Jul.
25. Maizlish N, Woodcock J, Co S, Ostro B, Fanai A, Fairley D. Health co-benefits and transportation-related reductions in greenhouse gas emissions in the San Francisco Bay area. *Am J Public Health*. 2013;103(4):703-709.
26. Garber CE, Blissmer B, Deschenes MR, et al. Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: guidance for prescribing exercise. *Med Sci Sports Exerc*. 2011;43(7):1334-1359.
27. Herman DR, Harrison GG, Afifi AA, Jenks E. Effect of a targeted subsidy on intake of fruits and vegetables among low-income women in the Special Supplemental Nutrition Program for Women, Infants, and Children. *Am J Public Health*. 2008;98(1):98-105.

APPENDIX: REFERENCES

28. Kropf ML, Holben DH, Holcomb JP Jr, Anderson H. Food security status and produce intake and behaviors of Special Supplemental Nutrition Program for Women, Infants, and Children and Farmers' Market Nutrition Program participants. *J Am Diet Assoc.* 2007;107(11):1903-1908.
29. Castrucci BC, Rhoades EK, Leider JP, Hearne S. What gets measured gets done: an assessment of local data uses and needs in large urban health departments. *J Pub Health Manag Pract.* 2015;21(Suppl 1):S38-S48.
30. National Committee on Vital and Health Statistics. 2017, March. Measuring Health at the Community Level: Data Gaps and Opportunities U.S. Department of Health and Human Services A Workshop Summary and Project Overview. [cited 2019 February 25]. Available from: <https://www.ncvhs.hhs.gov/wp-content/uploads/2017/04/Measuring-Health-at-the-Community-Level-Data-Gaps-and-Opportunities.pdf>
31. Remington PL. County Health Rankings and the cult of the imperfect. *Health Serv Res.* 2015;50(5):1407-1412.



ABOUT US



The American College of Sports Medicine is the largest sports medicine and exercise science organization in the world. More than 50,000 international, national and regional members are dedicated to advancing and integrating scientific research to provide educational and practical applications of exercise science and sports medicine. More details can be found at www.acsm.org.

ACSM is a global leader in promoting the benefits of physical activity and advocates for legislation that helps government and the health community make it a priority. ACSM encourages Congress to support continued funding of parks, trails, and safe routes to school, as well as the need for all Americans to meet the physical activity recommendations included in the National Physical Activity Guidelines, and the need for the guidelines to be regularly updated every 10 years.



The Anthem Foundation is the philanthropic arm of Anthem, Inc. and through charitable contributions and programs, the Foundation promotes the inherent commitment of Anthem, Inc. to enhance the health and well-being of individuals and families in communities that Anthem, Inc. and its affiliated health plans serve. The Foundation focuses its funding on strategic initiatives that make up its Healthy Generations Program, a multi-generational initiative that targets: maternal health, diabetes prevention, cancer prevention, heart health and healthy, active lifestyles, behavioral health efforts and programs that benefit people with disabilities. The Foundation also coordinates the company's year-round Dollars for Dollars program which provides a 100 percent match of associates' donations, as well as its Volunteer Time Off and Dollars for Doers community service programs. To learn more about the Anthem Foundation, please visit <http://www.anthem.foundation> and its blog at <https://medium.com/anthemfoundation>.

ACSM AMERICAN FITNESS INDEX® IS AVAILABLE IN ITS
ENTIRETY AT **WWW.AMERICANFITNESSINDEX.ORG**. VISIT
THE WEBSITE TO COMPARE CITY RANKINGS, DOWNLOAD
RESOURCES, AND REQUEST ASSISTANCE FOR YOUR CITY.

MAY 2019

