2019
U.S. EDITION

LeadingCities
Making Smart Cities Smarter

Bright Cities
UPGRADE YOUR CITY

Leading Cities Rating

powered by **Bright Cities**

Introduction

A Smart City is a designation given to a municipality that achieves everything from economic and environmental sustainability to incorporating information and communication technologies (ICT) to improve the quality and performance of urban services, such as energy, transportation and utilities, in order to reduce resource consumption, wastage and overall costs. These challenges are fundamental to defining the quality of life residents, workers and visitors will have in tomorrow's cities as well as their usability experience. Smart Cities solutions enhance public management and help solve many of these urban challenges in a more efficient way.

It was our goal to create a rating system that does not include the inherent flaws of a traditional ranking—that no matter how good or bad the analyzed subjects are, the "number one" slot is always filled or that unnecessary competition between cities develops when in order for one city to move up in a ranking another city must move down. The *Leading Cities Rating powered by Bright Cities* is a fundamental shift in how cities are measured and provides ample incentive for cities to achieve the advancements citizens deserve. In addition, this new system of measuring municipalities provides a framework for collaboration rather than competition where the underlying philosophy can be described as "sharing and caring", where knowledge and best practices can be shared and applied through trustworthy collaboration among cities and citizens.

Leading Cities Rating powered by Bright Cities analyzes a city's performance based on 32 indicators in 10 categories as listed below:
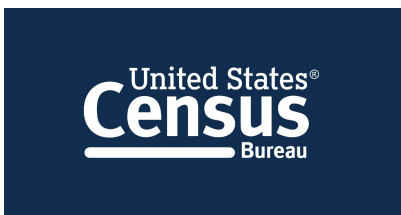
1. **Governance**
2. **Economy**
3. **Education**
4. **Entrepreneurship**
5. **Environment**
6. **Health**
7. **Mobility**
8. **Security**
9. **Technology**
10. **Urbanization**

Unlike a ranking, municipalities measured using the *Leading Cities Rating powered by Bright Cities* are not compared directly to one another, but rather measured against the best score achieved in each indicator thus creating a "model city" representing the compilation of those best scores. When analyzed together, this criterion provides a valuable diagnosis of a city's performance, pointing out which of these sectors deliver satisfactory results and which still need improvement. Ultimately, this rating system recognizes that the transformation to a smart city is an evolutionary process with no specific end goal but just the constant innovation needed to make our cities more livable, sustainable and resilient as outlined by the United Nation's Sustainable Development Goals.

In this inaugural edition of the *Leading Cities Rating powered by Bright Cities*, which soon will be international in scope, we analyzed the 500 largest municipalities in the United States. The results of this analysis highlight the tremendous amount of work left to be done in the U.S. to achieve smart city status. The most noticeable result of our study is that contrary to the general focus on smart city projects being implemented in larger cities such as New York or San Francisco, smaller cities are better positioned to perform better, are able to generate major levels of resilience and also provide better interaction among citizens and their urban ecosystem.

All data used from the indicators analyzed for the rating were consolidated from official sources as listed below:

Letter from Leading Cities

Leading Cities, an international non-profit organization, is a global leader in Smart City solutions, city diplomacy, and collaboration advancing sustainability and resilient city strategies and technologies to improve the quality of life in cities around the world. With its global network of world-class cities and partners, Leading Cities has built tools and bridges to share best practices, solutions, and lessons learned among city leaders while breaking down barriers within cities by engaging each of the five sectors of the Quintuple-helix (Q-helix): Public, Private, Non-profit, Academia and Citizenry.

When we launched the organization over a decade ago, the Smart Cities industry was just emerging. At that time, there were more questions than answers. For instance, we debated what was the very definition of a Smart City. We questioned which cities were smart or even the smartest. We considered how that level of "smartness" would or could be measured. And we wondered if a Smart City ranking would help provide needed context to these developing questions.

Since then, many Smart City Rankings have been published. What we have come to understand is that by virtue of being a ranking, these systems have created a zero-sum game where for one city to move up, another must be forced down. This creates a false sense of competition between cities, which is counter to the very purpose of Leading Cities—to enable and facilitate valuable collaboration between cities to achieve Smart City status faster and more effectively.

At the Smart City Expo World Congress in 2018, Leading Cities joined forces with Bright Cities to develop the world's first Smart City Rating system that would continue to provide valuable context and comparison between cities, while fostering the natural instinct of cities to collaborate and share best practices. The *Leading Cities Rating powered by Bright Cities* achieves just that—a tool modeled on the municipal bond rating system that allows cities to be compared without being competitive.

This inaugural publication represents the culmination of months of collaboration, design, data gathering, analysis, and programming. We are proud of the results and the immediate impact it has already created. But we see this as a living organism needing constant improvement and adaptation. As such, we welcome any insights and feedback to increase the effectiveness of this tool. We also have a global vision for this rating system. This inaugural edition is limited to the analysis of 500 cities in the United States, however, we have already begun the process of analyzing cities in South America and Europe. We look forward to our international edition being published still in 2020.

Ultimately, as a non-profit organization, Leading Cities exists to support the hard work of leaders in the public, private, non-profit, community and academic sectors that seek to achieve more sustainable, more equitable, and more resilient cities around the world. We hope *Leading Cities Rating powered by Bright Cities* will illuminate a path forward for cities to seek greater collaboration and results. We offer our services to anyone interested in achieving the impact that Smart Cities offer, and we hope you will reach out to let us know if we can help you.

Respectfully,

Michael Lake
President & CEO
Leading Cities

Letter from Bright Cities

Bright Cities is a disruptive platform for diagnosing city's roadmap to become a smarter city every day. Using a pioneering methodology, it gathers, analyzes and connects data from various sources to trace diagnoses about cities performances of any size and nationality in ten areas of expertise. From there, the platform establishes a roadmap, listing priority actions, schedules and budgets to improve the life quality of residents, public services and government. Through a gradual evolution, each city analyzed can become more efficient and intelligent until it is fully converted into a smart city.

Using a pioneering methodology, Bright Cities contributes to make cities around the world more efficient and smarter. Bright Cities believe that is important to demystify the smart city concept. Any city can become smarter using technological solutions that can even be free in terms of cost and have a big impact on the daily lives of citizens. Using international city indicators, the platform analyzes and proposes solutions for ten areas of activity, such as safety, education, health, mobility, energy, technology and innovation, sustainability, entrepreneurship, governance and urbanism. Through data analysis, the platform runs a complex algorithm of indicators capable of creating a tailor-made guidance with time, cost and impact evaluations.

Released during Smart City Expo World Congress, the initiative *Leading Cities Rating powered by Bright Cities* was a great achievement for both organizations and for the Smart City World. The U.S. version of this pioneer initiative evaluated the 500 largest American cities, indicating how close they are in reaching sustainability, resiliency and equity, thus becoming a Smart City.

Unlike other traditional smart city rankings, the *Leading Cities Rating powered by Bright Cities* does not automatically assign a top score, giving the public a much more accurate understanding of where a city falls on the spectrum of city global indicators. Cities are categorized on a scale ranging from A+ to F, using data science applied to publicly available data to analyze a city's performance against more than 30 indicators from ten dimensions of: Governance, Economy, Education, Entrepreneurship, Environment, Health, Mobility, Security, Technology and Energy.

This initiative added to Bright Cities platform and Leading Cities organization will contribute to the development of cities towards more efficient management delivering higher quality of life for citizens.

Bright Cities

Raquel Cardamone
CEO & CO-Founder
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#upgradeyourcity

Executive Summary

Smaller Cities far better positioned for future of smart, sustainable cities according to "Leading Cities Rating powered by Bright Cities"

Following the preview of the **Leading Cities Rating powered by Bright Cities** shared at the Smart City Expo Atlanta 2019, the partnership between Leading Cities and Bright Cities has refined their research and rated 500 U.S. cities. In addition to the surprise that no U.S. city scored an A+ rating, smart city leaders globally recognized that smaller U.S. cities are better positioned to be the future of initiatives to advance resiliency and sustainability to achieve Smart Cities.

The highest rated cities, achieving an A- rating, were Newton, Massachusetts; Pleasanton, California; Plymouth in Minnesota and San Ramon, California. These cities demonstrate that bigger is not always better. Though much attention globally on Smart City projects have focused on marquis cities, like New York, London, Toronto and Barcelona, these cities may not be the leaders in Smart City efforts they were once believed to be.

"This first publication of our full rating is no doubt shocking" according to Michael Lake, President and CEO of Leading Cities, "but this highlights the real opportunity for Smart City solution providers to focus on the more agile, less bureaucratic partners in smaller cities. The results of this rating system are an indicator that larger cities may need to turn to their smaller counterparts to lead municipal governments into the Smart City future we need to achieve the United Nation's Sustainable Development Goals and the Paris Agreement's commitment to carbon reduction."

Though the United States remains the world's greatest launchpad for smart city startups, the rate of implementation among U.S. cities is far lower than adoption rates in places like Europe where the European Union has invested hundreds of billions to make its cities smarter. American cities are at a global disadvantage resulting from the lack of federal funding to support smart city solutions and infrastructure upgrades.

Earlier 2019, the Smart Cities and Communities Act was reintroduced by members of both houses of Congress. A similar bill failed to pass in 2017 after stalling in committee. If passed now, the Smart Cities and Communities Act would provide approximately $200 million a year for five years to advance the implementation of smart city solutions around the country.
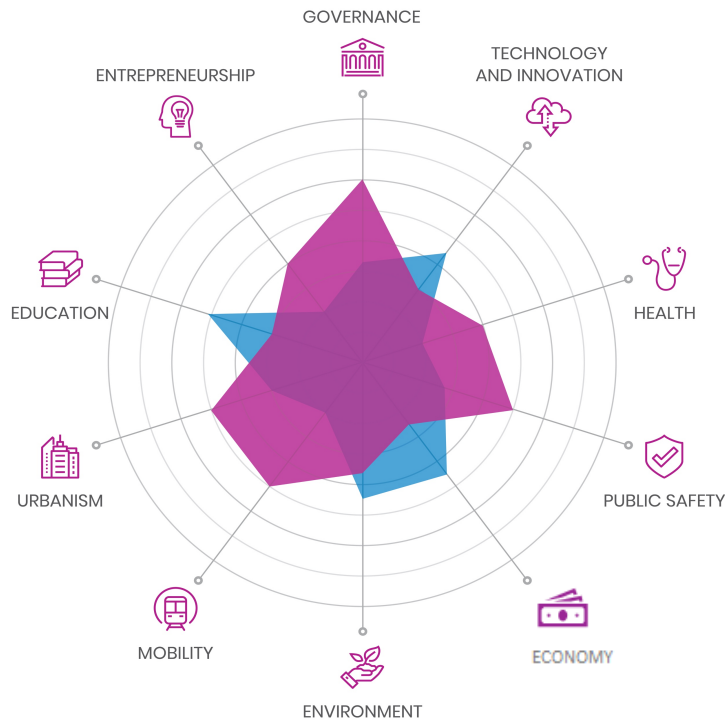
According to Raquel Cardamone, CEO of Bright Cities "Utilizing data science technology and fundamentally shifting from a ranking to a rating system provides a better understanding of the opportunities and challenges cities face as they prepare for continued urbanization.

Combining Leading Cities' pioneering tools and network of global smart city experts with Bright Cities' innovative diagnostic technology, *The Leading Cities Rating powered by Bright Cities* represents a dramatic shift in the way we measure a city's transformation to a "smart city." This tool uses data science applied to publicly available data to analyze a city's performance against 32 indicators from ten dimensions of a smart city: Governance, Economy, Education, Entrepreneurship, Environment, Health, Mobility, Security, Technology and Urbanization. Rated cities are categorized on a scale ranging from A+ to F.

Overview

The *Leading Cities Rating powered by Bright Cities* fosters the instinct cities have to collaborate and share best practices while achieving their goal of sustainability, resiliency, and equity becoming a Smart City.

Rating Scope

Leading Cities and Bright Cities initially focused on the 500 largest municipalities in the United Sates. The next edition will expand this scope to the international level providing greater opportunities to understand the context and to encourage greater cross-border collaboration among municipalities worldwide.

Methodology

The *Leading Cities Rating powered by Bright Cities* is based on the input of experts from around the world and powered by Bright Cities' disruptive platform for Smart City transformation. The methodology uses data science to analyze and score publicly available data and compare a city's score with the "model city" (constantly evolving) . The "model city" is determined using the best results already achieved by a city in each of the 32 indicators analyzed. The analysis on the best result was based on data from the 500 largest U.S. municipalities. The indicators were divided into ten categories: Governance, Economy, Education, Entrepreneurship, Environment, Health, Mobility, Security, Technology and Urbanization. Because of the use of the "model city" approach, the rating system is in a constant state of evolution and improvement reflecting the natural drive municipalities must have for constant innovation and improvement.

Upgrading a City

Combining Leading Cities' pioneering tools and network of global smart city experts with Bright Cities' innovative diagnostic technology, *Leading Cities Rating powered by Bright Cities* represents a dramatic shift in the way we measure a city's transformation to a "smart city." This insight paves the way for municipalities to better understand the improvements necessary to deliver a more resilient, sustainable and equitable city.

Tools for Change

Leading Cities members benefit from access to a library of tools and expertise to facilitate and manage the multitude of challenges facing a Smart City transformation. From comprehensive strategy development and project management to ongoing assessments and community engagement, Leading Cities provides cities what they need most: the access to the talent and tools needed to make their vision for a smarter city a reality.

For more detailed information of the *Leading Cities Rating powered by Bright Cities* you can purchase a detailed report that provides the categorical breakdown of scores in each of the 10 dimensions measured. If you need the complete diagnosis of a city with scores on 160 indicators and comparative models, you can engage directly with Bright Cities. Bright Cities provides a comprehensive diagnostic and ready to use roadmap to upgrade cities worldwide. In addition to receiving the results of the 32 indicators of the Leading Cities Rating, the comprehensive diagnosis includes the 160 indicators Bright Cities uses for global analysis.

Bright Cities is a disruptive platform for diagnosing city's roadmap to become a smarter city every day. Using a pioneering methodology, it gathers, analyzes and connects data from various sources to trace diagnoses about cities performances of any size and nationality in ten areas of expertise. From there, the platform establishes a roadmap, listing priority actions, schedules and budgets to improve the life quality of residents, public services and government. Through a gradual evolution, each city analyzed can become more efficient and intelligent until it is fully converted into a smart city.

Results

Only four cities achieved score A

AGRADE

City Name	State	Rating	City Name	State	Rating
Newton	Massachusetts	A-	San Ramon	California	A-
Pleasanton	California	A-	Plymouth	Minnesota	A-

Among the highlights is **Newton**, a city with 88,000 inhabitants located in eastern Massachusetts, and one of the major cities within Greater Boston. Newton received one of the highest scores in the rating and stood out mainly in the areas of Governance and Security, where it is worth mentioning the low crime rates against property and homicide, according to FBI data. In both cases, Newton was far below state and national avarages. In 2018, there were no homicides within the municipality's jurisdiction, the city achieved half the state´s average on property crimes indicator per 100,000 inhabitants almost three times less than the national average in this indicator. The excellent safety results can, in part, be credited for impressive results in low unemployment and to the strong education system in the city.

Located in the San Francisco Metropolitan Area, **Pleasanton** is a city of about 80,000 inhabitants in the state of California. Its highlight are in the areas of Education, Health and Governance having achieved A scores in all three areas. Pleasanton is also recognized for the innovation approach to participatory management as realized with the initiatives like the "Development Project Status" tool on the city's official website where citizens can monitor the status, description and responsible for works in the municipality.

Very close to Pleasanton, the **San Ramon** municipality is the second municipality of the San Francisco Metropolitan Area that has received the overall A- rating, the highest rating achieved. In addition to being at the highest level in the areas of Education and Employment, it is worth noting that the average salary in this municipality is much higher than the national average, thus following a state trend, even in a medium-sized city. San Ramon also features connectivity and technology, exceeding expectations for a municipality of this size.

Finally, **Plymouth** is a city in the Minneapolis – Saint Paul Metropolitan Area in the south-central region of Minnesota, excelling in both Health and Safety indicators. Plymouth has a number of recreation and green spaces that are important for higher quality of life for constituents. Another indicator that draws attention is that the average wages of residents are above both state and national averages, and both are directly with the promising results indicators.

To access the **Leading Cities Rating powered by Bright Cities** for all 500 largest municipalities in the United States go to https://leadingcities.org/leading-cities-rating/

About Leading Cities

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