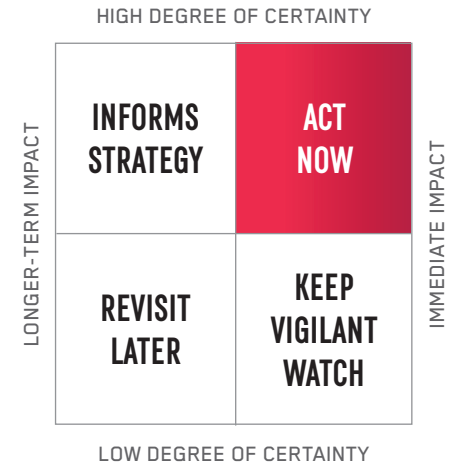


# Ranking the World's Smartest Cities

This is the second year we've researched and generated a smart cities list, and our goal is to showcase examples of exemplary, innovative leadership around the world.



## What makes a city “smart?”

In 2016, 78 cities applied for the US Department of Transportation's "Smart City" challenge, which would award the winner \$40 million in federal grant money to upgrade their urban transit systems. DoT selected Columbus, Ohio, as the winner for its proposal to deploy self-driving electric shuttles, launch smart cards to provide free car-sharing services, and develop a connected traffic light system to reduce traffic jams throughout the city. The City of Melbourne (Australia) has launched a Smart City Office, which includes open data projects, a 24-hour pedestrian counting system and city-wide free public WiFi.

Public-private partnerships, affordable technology, long-term urban and budget planning, and equal access to all citizens are just a few things that make cities smart. Here's a more complete list of the criteria we used to rate the world's smartest cities:

- Abundant 4G (and soon 5G) connectivity
- The availability of public wifi hotspots
- The use of smart grids for traffic and electricity
- City-sponsored incentives for smart buildings
- Accessible, digitized government data that is open to all
- The availability of anonymized citizen data that is digitized, structured and accessible
- Dedicated high-ranking positions in government dedicated to technology and science
- The number and influence of community leaders who are experts in tech
- The number of cybersecurity offices, departments and staff dedicated to proactive monitoring and continuous learning
- Tech-forward public transit systems that are optimized for all citizens
- The availability of ride sharing services (including various forms of transportation)
- The number of public-private tech and science partnerships that benefit all income levels
- Dedicated environmental protections for the present and future of the city
- City initiatives to reduce waste
- The availability of affordable clean energy options
- Dedication to long-term urban planning



# Smart Cities 2019 Ranking



- |                         |                            |                            |                        |                            |                        |
|-------------------------|----------------------------|----------------------------|------------------------|----------------------------|------------------------|
| 01. Copenhagen, Denmark | 10. Strasbourg, France     | 19. Seoul, South Korea     | 28. Yinchuan, China    | 37. Nice, France           | 46. Chicago, USA       |
| 02. Gothenburg, Sweden  | 11. Melbourne, Australia   | 20. San Francisco, USA     | 29. Hangzhou, China    | 38. Reykjavik, Iceland     | 47. Munich, Germany    |
| 03. Oslo, Norway        | 12. Singapore              | 21. Wuxi, China            | 30. Perugia, Italy     | 39. Barcelona, Spain       | 48. Toronto, Canada    |
| 04. Bergen, Norway      | 13. Vantaa, Finland        | 22. Boston, USA            | 31. New York City, USA | 40. Osaka, Japan           | 49. Bordeaux, France   |
| 05. Odense, Denmark     | 14. Amsterdam, Netherlands | 23. London, United Kingdom | 32. Vancouver, Canada  | 41. Abu Dhabi, UAE         | 50. Bhubaneswar, India |
| 06. Stockholm, Sweden   | 15. Zurich, Switzerland    | 24. Tokyo, Japan           | 33. Helsinki, Finland  | 42. Doha, Qatar            |                        |
| 07. Turku, Finland      | 16. Utrecht, Netherlands   | 25. Montreal, Canada       | 34. Hamburg, Germany   | 43. Hong Kong, China       |                        |
| 08. Aalborg, Denmark    | 17. Berlin, Germany        | 26. Tallinn, Estonia       | 35. Luxembourg         | 44. Rio de Janeiro, Brazil |                        |
| 09. Jyväskylä, Finland  | 18. Dubai, UAE             | 27. Tel Aviv, Israel       | 36. Portland, USA      | 45. Shanghai, China        |                        |

# Methodology

## Sources for this study include data collected from:

Municipal authority publications, including city, regional and national data; city and national census data; the World Health Organization; municipal energy departments; Numbeo; municipal strategic vision documents and press releases; United Nations reports; European Commission reports; Pew Research Center data; TomTom Traffic index; International Energy Statistics reports; the European Digital City Index; the Online Speed Test Global Index; municipal websites.

## Smart Cities ranking methodology:

We researched and analyzed 100 cities for the 2019 study. Cities without easily accessible data were not considered. We developed a model using 16 key performance indicators (on the previous page).

## Assumptions in our model:

- Data were not adjusted according to regional or local cultural differences.
- Where city specific data for certain indicators were not available, regional or national data were used instead.

## Using our model to calculate the ranking:

We weighted each of the 16 indicators equally to calculate raw scores. Those scores were ranked from top-performing to lowest-performing, based on available data.