“I have never felt salvation in nature. I love cities above all.”

— Michelangelo

“The mark of a great city isn’t how it treats its special places – everybody does that right – but how it treats its ordinary ones.”

— Aaron M. Renn
(The Urban State of Mind: Meditations on the City)
IMD Smart City Index 2023

Introduction
A New Beginning: A More Precise, Relevant and Impactful Smart City Index
IMD Smart City Index 2023
Introduction: A More Precise, Relevant and Impactful Smart City Index

Welcome to the 2023 edition of the IMD Smart City Index Report (SCI Report).

This edition marks a significant step in the history of this report, which has now acquired global recognition and respect. After a break in 2022, three major changes have been brought to the Index and accompanying report.

1. The World Smart Sustainable Cities Organization (WeGO) has joined us as a knowledge partner;

2. The number of cities in the SCI has significantly increased; and

3. The SCI’s methodology has been improved thanks to the acquisition of new data.

Each of these changes has significant consequences. They make us even more enthusiastic about the impact and relevance of the Index, and about its future. Here’s why:

A New Knowledge Partner

The World Smart Sustainable Cities Organization (WeGO), is a membership-based international association of local governments, smart tech solution providers, and institutions committed to the transformation of cities into smart, sustainable cities through facilitating public-private partnerships (PPP). It was founded by 50 member cities in 2010 as the World e-Governments Organization, hence the acronym. However, as the concept of “smart cities” continued evolving, during the 4th General Assembly (2017) WeGO expanded its mandate and changed its name to the World Smart Sustainable Cities Organization.

For its members, WeGO serves as an international platform to improve the quality of life, innovate in the delivery of public services, and strengthen regional competitiveness. The WeGO network currently includes over 200 cities, 26 are covered by this edition of the SCI index and report.

WeGO as a partner strives to support the development of human-centered cities and progress in seeking solutions to smart city challenges. WeGO’s vision is set in the direction of mitigating the digital divide by providing smart cities with a guideline through the smart city index.

From 118 to 141 Cities

The coverage of the SCI and SCI Report has increased by 20 per cent to include 141 cities (previously 118 were measured), distributed across the world. This reflects the SCI’s ongoing efforts to be a global index, and to facilitate the benchmarking of all kinds of cities, whatever their size or level of development. This year, we have made a concerted effort to include more capital cities from all continents, while keeping an eye on ‘second-tier cities’ showing signs of dynamism, and an appetite for designing and implementing innovative solutions to their key problems.
New Data at City Level

The SCI’s methodology has been improved thanks to the acquisition of new data at the city level. The SCI was designed as a tool for action. Since it is based on people’s perceptions (surveys), it is critically important that the answers collected are calibrated to the specific context of the cities studied.

For the 2021 Index and all prior editions, we relied on country-level Human Development Index (HDI) data provided by the United Nations Development Programme (UNDP). Throughout the course of 2022, we explored the possibility of using city-level HDI data that could provide a more granular (and realistic) vision of the socio-economic environment of specific cities. The new SCI methodology is described in detail below. We believe that time invested in furthering our methodological approach was incredibly well spent and are excited by the applicability of the results obtained.
The SCI’s value rests greatly on its ability to generate time series, and this is where citizens and decision makers can track the evolution of their city’s performance over time, and compare it with that of other cities around the world. It follows that deciding to change an index’s methodology isn’t easy and often comes at the cost of breaking the continuity necessary to build such a series. We are proud to announce that in the case of the SCI, we have been able to not only improve the methodology but also to preserve our users’ ability to work on time series. We did so by ‘building back’ the data and rankings that would have been those of the cities covered if the new methodology had been applied at the time. This means that the rankings of the SCI 2023 should not be compared to those published in previous SCI reports as they are the result of different approaches. However, comparisons across time can be made and used with recourse to the tables included in this report that reflect the 2019-2023 rankings of the cities covered using the most recent methodology. See pages 39-40 of this report.

Against the background of these three significant changes, what key messages emerge from this revamped 2023 Index and Report? They can be summarized as follows:

1. The global landscape of smart cities is changing, and lessons can be learned from the experience of “SCI champions” – the top 20.

2. Globally, a new world is shaping up, and changes at the city level are a precious indicator of what the future may hold.
Lessons from the champions: who is in the top 20, and how did they do it?

In 2023, the upper echelons of the SCI comprise the 20 cities in the table below. Rankings prior to 2023 have been adjusted according to the new methodology for the purposes of homogeneity and to allow comparison.

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Several observations can be made by analyzing this list. Most strikingly, out of the top 20, 17 cities have been part of the SCI since its creation. Among those 17, six cities show either a continuous improvement or stability, year-upon-year. These ‘super-champions’ are: Zurich, Oslo, Singapore, Beijing, Seoul, and Hong Kong.)
IMD Smart City Index 2023

Introduction: A More Precise, Relevant and Impactful Smart City Index

A New World is Shaping Up. Cities Tell Us Where to Look

1. Asia and Europe ahead of the pack? Apart from Abu Dhabi and Dubai, all of the cities occupying the top 20 are either in Europe or in Asia-Pacific. The absence of American or African cities is notable. New York ranks 22nd while Cairo (108th) is the leading African city. Medellin (118th) is the leading South American city. The 2023 rankings reflect a growing interest and higher levels of concern about the quality of life that residents are expecting to enjoy in their respective cities. Size often is a handicap rather than an advantage in this regard. This explains why most large metropolises such as Boston (34th) or Paris (46th) rank relatively low in the index, in spite of remarkable progress in a number of key areas such as sustainability and mobility.

2. ‘Second tier’ cities continue to do better than the rest. Although the SCI’s top 20 include 12 capital cities (such as Oslo and Canberra), and several ‘economic capitals’ (like Zurich and Dubai), the picture is different when one looks at the top half of the rankings (1 to 70); a significant number of medium-sized cities show both solid positions and a continuous ability to move up. In Europe, this is the case for Lausanne, Munich and Bilbao, for example, and elsewhere in the world it rings true for Montreal, Mecca and Denver.

3. Smart city strategies are undergoing deep changes. The basic principle that led to the creation of the Smart City Index in 2019 was that if cities wanted to be smarter, they needed to be less technology-centric, and more human-focused. Since then, this way of conceiving the nature and purpose of smart cities has moved closer to being mainstream. Many city officials are now routinely using a variety of different expressions in lieu of ‘smart cities’: ‘open and innovative cities’, ‘inclusive and diverse cities’, ‘sustainable cities’ and ‘citizen-centric cities’ are becoming part of the new labelling of ‘smart cities’ that were. But this is not merely a semantic change; it reflects deep changes in the way smart cities (and cities in general) will be designed and managed. Thanks to its initial design and philosophy, the Smart City Index is emerging as a critical tool to benchmark progress along those new lines. The SCI’s updated methodology will further enhance its relevance as these changes gather momentum.

4. Inclusion and diversity are emerging as key benchmarks for success. An increasing number of cities are deploying new efforts to encourage diversity and inclusion as part of their smart strategies, variously linked to strategies to attract or retain talent, or to pre-existing conditions. Higher levels of tolerance for immigrants and minorities are becoming a marker in the ‘quality of life’ category, and in ‘leaving no one behind’ - a key phrase in defining the future of smart cities. Moreover, cities continue to accept (and, sometimes, seek) new roles, as central governments strive to become more agile through decentralization. Even at the international level, at a time in which many multilateral efforts seem to be losing momentum at the nation-states level, cities and their leaders are becoming more visible. Openness and inter-city collaboration may very well become key components of the next wave of globalization.

Continuing to Improve the SCI

There are different ways to improve the quality of the SCI. Expanding the number of cities studied will always extend the scope of the index. Employing more focused data will improve the accuracy of the index and allow for a meaningful comparison among different qualities of cities. Finally, fine tuning the construction of the ranking improves its relevance as an action tool, and allows for better comparisons between cities. The 2023 SCI makes advances in all three dimensions.

As flagged earlier, the city coverage of the SCI index and report has increased by almost 20 per cent, bringing the total number of smart cities to 141. Using city-specific data for the construction of the Index was the focus of our research in 2022. In its new design, the SCI employs a city-specific measure of the HDI initially produced by the United Nations Development Program (UNDP). HDI is a composite index that combines information about life expectancy, expected years of schooling and the per capita income of a country’s citizens. Until this year, the SCI used country-level HDI information as a proxy to evaluate the dimensions of health, knowledge and standard of living in each city. The 2023 SCI features city-level HDI, provided by the Global Data Lab. This allows for a more accurate ranking of each city, whilst also allowing readers to compare the performance of any given city to that of the country in which it is found.

Finally, city-level HDI facilitates a more academically rigorous comparison among cities. The 2023 SCI standardizes the performance of a city with the average of the city-HDI and the average of the surveys. This allows for a meaningful classification of a city relative to all other cities covered by the Index.
# IMD Smart City Index 2023

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For over thirty years, the IMD World Competitiveness Center has pioneered research on how countries and companies compete to lay the foundations for sustainable value creation. The competitiveness of nations is probably one of the most significant developments in modern management and IMD is committed to leading the field.

The IMD World Competitiveness Center Team:

Professor Arturo Bris  
Director

Christos Cabolis  
Chief Economist & Head of Operations

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Senior Economist

Marco Pistis  
Research Associate

Maryam Zargari  
Research Associate

Alice Tozer  
Content Manager
IMD Smart City Index 2023
A Series of Tables Showcasing the Results in Different Ways
IMD Smart City Index 2023: Results
In 2023 City Ranking Order with HDI Context and 2019-2023 Ranking Comparison (2023 Methodology Applied)

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**IMD Smart City Index 2023: Results**

In 2023 City Ranking Order with HDI Context and 2019-2023 Ranking Comparison (2023 Methodology Applied)

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IMD Smart City Index 2023: Results
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## IMD Smart City Index 2023: Results

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## IMD Smart City Index 2023: Results

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IMD Smart City Index 2023
### IMD Smart City Index 2023: Results

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### IMD Smart City Index 2023: Results

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<td>0.921</td>
<td>65 80</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.929</td>
<td>Leeds</td>
<td>0.908</td>
<td>64 76</td>
</tr>
<tr>
<td>United Kingdom</td>
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<td>London</td>
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<td>3 10 3 6</td>
</tr>
<tr>
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<td>0.929</td>
<td>Manchester</td>
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<td>57 58 73</td>
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<td>0.929</td>
<td>Newcastle</td>
<td>0.901</td>
<td>62 61 77</td>
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<tr>
<td>USA</td>
<td>0.921</td>
<td>Boston</td>
<td>0.949</td>
<td>15 24 22 34</td>
</tr>
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<td>USA</td>
<td>0.921</td>
<td>Chicago</td>
<td>0.929</td>
<td>57 54 56 61</td>
</tr>
<tr>
<td>USA</td>
<td>0.921</td>
<td>Denver</td>
<td>0.942</td>
<td>27 31 34 53</td>
</tr>
<tr>
<td>USA</td>
<td>0.921</td>
<td>Los Angeles</td>
<td>0.931</td>
<td>44 36 30 50</td>
</tr>
<tr>
<td>USA</td>
<td>0.921</td>
<td>New York</td>
<td>0.938</td>
<td>34 12 19 21</td>
</tr>
</tbody>
</table>
# IMD Smart City Index 2023: Results

In Alphabetical Order by Country with HDI Context and 2019-2023 Rankings (2023 Methodology Applied)

<table>
<thead>
<tr>
<th>Country</th>
<th>Country HDI</th>
<th>City</th>
<th>City HDI</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>0.921</td>
<td>Philadelphia</td>
<td>0.923</td>
<td>71</td>
<td>79</td>
<td>85</td>
<td>92</td>
</tr>
<tr>
<td>USA</td>
<td>0.921</td>
<td>Phoenix</td>
<td>0.908</td>
<td>72</td>
<td>77</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>0.921</td>
<td>San Francisco</td>
<td>0.931</td>
<td>28</td>
<td>49</td>
<td>54</td>
<td>68</td>
</tr>
<tr>
<td>USA</td>
<td>0.921</td>
<td>Seattle</td>
<td>0.94</td>
<td>31</td>
<td>41</td>
<td>38</td>
<td>55</td>
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<tr>
<td>USA</td>
<td>0.921</td>
<td>Washington D.C.</td>
<td>0.94</td>
<td>26</td>
<td>13</td>
<td>26</td>
<td>39</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.703</td>
<td>Hanoi</td>
<td>0.744</td>
<td>77</td>
<td>82</td>
<td>89</td>
<td>100</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.703</td>
<td>Ho Chi Minh City</td>
<td>0.714</td>
<td>76</td>
<td>86</td>
<td>93</td>
<td>103</td>
</tr>
<tr>
<td>Wales</td>
<td>0.929</td>
<td>Cardiff</td>
<td>0.898</td>
<td></td>
<td></td>
<td></td>
<td>94</td>
</tr>
<tr>
<td>Yemen</td>
<td>0.455</td>
<td>Sana'a</td>
<td>0.521</td>
<td></td>
<td></td>
<td></td>
<td>140</td>
</tr>
</tbody>
</table>
Smart City Ranking

**Smart City Ranking:** The Ranking position of the city amongst the 141 cities measured, based upon the Rating and its components.

**Group:** Each city is assigned to one of four groups, based upon its HDI values.

**Smart City Rating and Factor Ratings:** The Ratings for each city are calculated from the city’s performance relative to the other cities within the group.

The Methodology section provides the exact procedure for these calculations.

The 2021 Ranking and Rating are also shown for the 118 cities included in in the last edition’s index (2021).

**BACKGROUND INFORMATION**

<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>63,016</td>
<td>0.91</td>
</tr>
<tr>
<td>2018</td>
<td>62,574</td>
<td>0.88</td>
</tr>
</tbody>
</table>

**IMD Smart City Index 2023**

**A User’s Guide**

**Priority Areas**

Summarizes the areas that the respondents perceive as the priority area for their city. From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The total bar indicates the percentage of the respondents that included a given area as one of their five choices. The higher the percentage of responses per area, the greater the priority for the city. The left-hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

**Background Information**

This section presents the Human Development Index (HDI) at the city level taken from the Global Data Lab, and the population of the city as defined through the United Nations World Urbanization Prospects for the majority of cities, or Eurostat for some of European cities.

It also presents the United Nations HDI (country-level - for the parent economy of a given city) and its four components, as well as the city’s position on the map. Please note: for Taipei City only, the data is calculated using the same methodology and comparable data.
IMD Smart City Index 2023
A User’s Guide

Attitudes
Shows and compares the responses to three key privacy aspects (willingness to concede personal data, comfort vis-à-vis face recognition, and whether online information has increased trust in authorities) and the percentage of day-to-day transactions that are non-cash. The city is represented by the blue bar, while the group average is shown by the light red bar.

Structures and Technologies
Key survey data collected on Structures (left side) and Technologies (right side), under five key areas: health and safety, mobility, activities, opportunities, and governance.

Each indicator presents the Score for the city and a comparison with its Group (1-4). Showing the Group’s Minimum, Mean, and Maximum Scores (light red bar) alongside with the city (blue circle) allows a clear comparison of the city’s performance in this indicator. The Methodology section provides the exact calculation of the Score.

This table can be read in two ways: down to examine all Structures or Technologies indicators, or across to examine a key area in both Structures and Technologies.
The IMD Smart City Index 2023 assesses the perceptions of residents on issues related to structures and technology applications available to them in their city.

This edition of the SCI ranks 141 cities worldwide by capturing the perceptions of 120 residents in each city. The final score for each city is computed by using the perceptions of the last three years of the survey, with the weight of 3:2:1 for 2023:2021:2020.

There are two pillars for which perceptions from residents are solicited: The Structures pillar referring to the existing infrastructure of the cities, and the Technology pillar describing the technological provisions and services available to the inhabitants.

Each pillar is evaluated over five key areas: health and safety, mobility, activities, opportunities, and governance.

The cities are distributed into four groups based on the Global Data Lab’s Human Development Index (HDI) score of the city they are part of.

Within each HDI group, cities are assigned a ‘rating scale’ (AAA to D) based on the perceptions-score of a given city compared to the scores of all other cities within the same group.

For group 1 (highest HDI quartile), scale
AAA–AA–A–BBB–BB

For group 2 (second HDI quartile), scale
A–BBB–BB–B–CCC

For group 3 (third HDI quartile), scale
BB–B–CCC–CC–C

For group 4 (lowest HDI quartile), scale
CCC–CC–C–D

Rankings are then presented in two formats:
• an overall ranking (1 to 141)
• a rating for each pillar and overall
Health & Safety
Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem
Traffic congestion is not a problem
Public transport is satisfactory
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory
Opportunities (Work & School)
Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome
Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects
Health & Safety
Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
CCTV cameras has made residents feel safer
Arranging medical appointments online has improved access
The city provides information on traffic congestion through mobile phones
Activities
Online purchasing of tickets to shows and museums has made it easier to attend
Opportunities (Work & School)
Online access to job listings has made it easier to find work
IT skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The internet speed and reliability meet connectivity needs
Governance
Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

You are comfortable with face recognition technologies to lower crime
You are willing to concede personal data in order to improve traffic congestion
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
The proportion of your day-to-day payment transactions that are non-cash

PRIORITY AREAS
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

ATTITUDES
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
Health & Safety
- Basic sanitation meets the needs of the poorest areas (47.0)
- Recycling services are satisfactory (43.1)
- Public safety is not a problem (38.3)
- Air pollution is not a problem (36.9)
- Medical services provision is satisfactory (48.8)
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem (21.5)

Mobility
- Traffic congestion is not a problem (42.9)
- Public transport is satisfactory (52.3)

Activities
- Green spaces are satisfactory (62.9)
- Cultural activities (shows, bars, and museums) are satisfactory (70.4)

Opportunities (Work & School)
- Employment finding services are readily available (34.3)
- Most children have access to a good school (53.1)
- Lifelong learning opportunities are provided by local institutions (43.4)
- Businesses are creating new jobs (64.1)
- Minorities feel welcome (51.0)

Governance
- Information on local government decisions are easily accessible (42.3)
- Corruption of city officials is not an issue of concern (14.2)
- Residents contribute to decision making of local government (25.7)
- Residents provide feedback on local government projects (35.6)

TECHNOLOGIES
- Online reporting of city maintenance problems provides a speedy solution (36.7)
- A website or App allows residents to easily give away unwanted items (33.4)
- Free public wifi has improved access to city services (25.2)
- CCTV cameras has made residents feel safer (33.8)
- A website or App allows residents to effectively monitor air pollution (19.0)
- Arranging medical appointments online has improved access (48.6)
- Car-sharing Apps have reduced congestion (54.5)
- Apps that direct you to an available parking space have reduced journey time (33.3)
- Bicycle sharing has reduced congestion (21.6)
- Online scheduling and ticket sales has made public transport easier to use (53.3)
- The city provides information on traffic congestion through mobile phones (38.6)
- Online purchasing of tickets to shows and museums has made it easier to attend (62.6)
- Online access to job listings has made it easier to find work (64.2)
- If skills are taught well in schools (50.8)
- Online services provided by the city has made it easier to start a new business (51.0)
- The current internet speed and reliability meet connectivity needs (57.2)
- Online public access to city finances has reduced corruption (24.0)
- Online voting has increased participation (26.3)
- An online platform where residents can propose ideas has improved city life (32.0)
- Processing Identification Documents online has reduced waiting times (55.7)
Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects
Online services provided by the city have made it easier to start a new business. Free public Wi-Fi has improved access to city services. The current internet speed and reliability meet connectivity needs. Finding housing with rent equal to 30% or less of a monthly salary is not a problem. Arranging medical appointments online has improved access. Medical services provision is satisfactory. A website or App allows residents to effectively monitor air pollution. Air pollution is not a problem. CCTV cameras have made residents feel safer. Residents provide feedback on local government projects. Corruption of city officials is not an issue of concern. Online voting has increased participation. Online access to job listings has made it easier to find work. Employment finding services are readily available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome. You feel the availability of online information has increased your trust in authorities. You are comfortable with face recognition technologies to lower crime. You are willing to concede personal data in order to improve traffic congestion. Online purchasing of tickets to shows and museums has made it easier to attend. Cultural activities (shows, bars, and museums) are satisfactory. Green spaces are satisfactory. Online scheduling and ticket sales have made public transport easier to use. Bicycle sharing has reduced congestion. Public transport is satisfactory. Apps that direct you to an available parking space have reduced journey time. Traffic congestion is not a problem. Recycling services are satisfactory. A website or App allows residents to easily give away unwanted items. Basic sanitation meets the needs of the poorest areas. Online reporting of city maintenance problems provides a speedy solution. Public safety is not a problem. Environmental citizens engage and social mobility.

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.723</td>
<td>0.727</td>
<td>0.723</td>
<td>0.720</td>
<td>-0.003</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>75.8</td>
<td>76.0</td>
<td>75.2</td>
<td>74.3</td>
<td>-0.9</td>
</tr>
<tr>
<td>Expected years of schooling</td>
<td>10.4</td>
<td>10.6</td>
<td>10.7</td>
<td>10.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Mean years of schooling</td>
<td>10.4</td>
<td>10.4</td>
<td>10.5</td>
<td>10.5</td>
<td>0.0</td>
</tr>
<tr>
<td>GNI per capita (PPP $)</td>
<td>9,967</td>
<td>10,073</td>
<td>9,789</td>
<td>9,924</td>
<td>+135</td>
</tr>
</tbody>
</table>

**Health & Safety**
- Basic sanitation meets the needs of the poorest areas.
- Recycling services are satisfactory.
- Public safety is not a problem.
- Air pollution is not a problem.
- Medical services provision is satisfactory.
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

**Mobility**
- Traffic congestion is not a problem.
- Public transport is satisfactory.

**Activities**
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

**Opportunities (Work & School)**
- Employment finding services are readily available.
- Most children have access to a good school.
- Lifelong learning opportunities are provided by local institutions.
- Businesses are creating new jobs.
- Minorities feel welcome.

**Governance**
- Information on local government decisions are easily accessible.
- Corruption of city officials is not an issue of concern.
- Residents contribute to decision-making of local government.
- Residents provide feedback on local government projects.

**Health & Safety**
- Online reporting of city maintenance problems provides a speedy solution.
- A website or App allows residents to easily give away unwanted items.
- Free public Wi-Fi has increased access to city services.
- CCTV cameras have made residents feel safer.
- A website or App allows residents to effectively monitor air pollution.
- Arranging medical appointments online has improved access.

**Mobility**
- Car-sharing Apps have reduced congestion.
- Apps that direct you to an available parking space have reduced journey time.
- Bicycle sharing has reduced congestion.
- Online scheduling and ticket sales have made public transport easier to use.
- The city provides information on traffic congestion through mobile phones.

**Activities**
- Online purchasing of tickets to shows and museums has made it easier to attend.

**Opportunities (Work & School)**
- Online access to job listings has made it easier to find work.
- If skills are taught well in schools.
- Online services provided by the city have made it easier to start a new business.
- The current internet speed and reliability meet connectivity needs.

**Governance**
- Online public access to city finances has reduced corruption.
- Online voting has increased participation.
- An online platform where residents can propose ideas has improved city life.
- Processing identification documents online has reduced waiting times.
Health & Safety
Free public wifi has improved access to city services

Activities
IT skills are taught well in schools

Opportunities (Work & School)
MEAN
GROUP

Governance

HDI
Expected years of schooling
Life expectancy at birth

Country | 2018 | 2019 | 2020 | 2021 | 1 yr change
---|---|---|---|---|---
HDI | 0.934 | 0.944 | 0.939 | 0.941 | +0.002
Life expectancy at birth | 82.1 | 82.3 | 81.6 | 81.7 | +0.0

Expected years of schooling | 18.0 | 18.5 | 18.0 | 18.0 | +0.0
Mean years of schooling | 12.2 | 12.4 | 12.6 | 12.6 | +0.0

GNI per capita (PPP $) | 50,013 | 57,707 | 53,504 | 55,079 | +2,476

Online services provided by the city has made it easier to start a new business

Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Online scheduling and ticket sales has made public transport easier to use

You feel the availability of online information has increased your trust in authorities

You are comfortable with face recognition technologies to lower crime

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The city provides information on traffic congestion through mobile phones

Online scheduling and ticket sales has made public transport easier to use

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

The right-hand, light blue section of each bar shows the Gap, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it high priority. A strong Gap means that these areas are explained by a strong prioritization of other options.

The right-hand, dark blue section of each bar shows the Response, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it high priority. A strong Response means that these areas are not explained by high priority on other options.

You are willing to concede personal data in order to improve traffic congestion

You are comfortable with face recognition technologies to lower crime

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The city provides information on traffic congestion through mobile phones

Online scheduling and ticket sales has made public transport easier to use

You feel the availability of online information has increased your trust in authorities

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Online scheduling and ticket sales has made public transport easier to use

You feel the availability of online information has increased your trust in authorities

You are comfortable with face recognition technologies to lower crime

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The city provides information on traffic congestion through mobile phones

Online scheduling and ticket sales has made public transport easier to use
**Health & Safety**

- Basic sanitation meets the needs of the poorest areas: 75.5
- Recycling services are satisfactory: 64.0
- Public safety is not a problem: 67.4
- Air pollution is not a problem: 63.7
- Medical services provision is satisfactory: 66.3
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 37.5

**Mobility**

- Traffic congestion is not a problem: 36.5
- Public transport is satisfactory: 57.5

**Activities**

- Green spaces are satisfactory: 57.8
- Cultural activities (shows, bars, and museums) are satisfactory: 68.0

**Opportunities (Work & School)**

- Employment finding services are readily available: 62.2
- Most children have access to a good school: 55.2
- Lifelong learning opportunities are provided by local institutions: 67.5
- Businesses are creating new jobs: 55.0
- Minorities feel welcome: 62.3

**Governance**

- Information on local government decisions are easily accessible: 74.5
- Corruption of city officials is not an issue of concern: 41.8
- Residents contribute to decision making of local government: 59.6
- Residents provide feedback on local government projects: 61.4

**Technologies**

- Online voting has increased participation: 63.6
- A website or App allows residents to effectively monitor air pollution: 58.8
- CCTV cameras has made residents feel safer: 62.4
- The city provides information on traffic congestion through mobile phones: 57.9
- Online scheduling and ticket sales has made public transport easier to use: 49.6
- The city provides information on traffic congestion through mobile phones: 47.3

**Country**

- **HDI**: 0.807, 0.820, 0.833, 0.838, +0.005
- **Life expectancy at birth**: 77.4, 77.7, 75.9, 78.0, +0.2
- **Expected years of schooling**: 16.4, 16.6, 18.0, 18.0, +0.0
- **Mean years of schooling**: 7.7, 8.1, 8.6, 8.6, +0.0
- **GNI per capita (PPP $)**: 24,905, 27,701, 28,317, 31,033, +2,715

**Background Information**

- **Population**: 5,663,322
- **HDI**: 0.854

**Smart City Rating**

- **Ankara**: 90
- 75 out of 118 in 2021

**Factor Ratings**

- **Structures**: B
- **Technologies**: CCC
- **Group**: 3

**Group Rating**

- **Ankara**: 62.6

**GNI per capita (PPP $)**

- **Country**: 0 20 40 60 80 100
- **Expected years of schooling**: 0 20 40 60 80 100
- **Life expectancy at birth**: 0 20 40 60 80 100
- **Population**: 0 20 40 60 80 100
- **HDI**: 0 20 40 60 80 100

**Smart City Index 2021**

- **Score**: 0 20 40 60 80 100
- **Country**: 0 20 40 60 80 100
- **Expected years of schooling**: 0 20 40 60 80 100
- **Life expectancy at birth**: 0 20 40 60 80 100
- **Population**: 0 20 40 60 80 100
- **HDI**: 0 20 40 60 80 100

**Governance**

- Corruption of city officials is not an issue of concern: 41.8
- Residents contribute to decision making of local government: 59.6
- Residents provide feedback on local government projects: 61.4
- Information on local government decisions are easily accessible: 74.5

**Health & Safety**

- Online reporting of city maintenance problems provides a speedy solution: 63.3
- A website or App allows residents to easily give away unwanted items: 58.8
- Free public wifi has improved access to city services: 62.4
- CCTV cameras has made residents feel safer: 68.6
- A website or App allows residents to effectively monitor air pollution: 49.6
- Arranging medical appointments online has improved access: 79.3

**Mobility**

- Car-sharing Apps have reduced congestion: 46.7
- Apps that direct you to an available parking space have reduced journey time: 59.1
- Bicycle hiring has reduced congestion: 47.3
- Online scheduling and ticket sales has made public transport easier to use: 72.2
- The city provides information on traffic congestion through mobile phones: 79.2

**Activities**

- Online purchasing of tickets to shows and museums has made it easier to attend: 74.4

**Opportunities (Work & School)**

- Online access to job listings has made it easier to find work: 71.8
- It skills are taught well in schools: 62.9
- Online services provided by the city has made it easier to start a new business: 60.9
- The current internet speed and reliability meet connectivity needs: 70.0
Online services provided by the city has made it easier to start a new business.

IT skills are taught well in schools.

Free public wifi has improved access to city services.

Minorities feel welcome.

Businesses are creating new jobs.

The current internet speed and reliability meet connectivity needs.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

Medical services provision is satisfactory.

Basic sanitation meets the needs of the poorest areas.

Online purchasing of tickets to shows and museums has made it easier to attend.

Public safety is not a problem.

Recycling services are satisfactory.

A website or App allows residents to easily give away unwanted items.

Basic sanitation meets the needs of the poorest areas.

Processing Identification Documents online has reduced waiting times.

Residents contribute to decision making of local government.

An online platform where residents can propose ideas has improved city life.

Corruption of city officials is not an issue of concern.

Online voting has increased participation.

Online public access to city finances has reduced corruption.

Lifelong learning opportunities are provided by local institutions.

Most children have access to a good school.

Cultural activities (shows, bars, and museums) are satisfactory.

Green spaces are satisfactory.

Online scheduling and ticket sales has made public transport easier to use.

Bicycle hiring has reduced congestion.

Car-sharing Apps have reduced congestion.

Apps that direct you to an available parking space have reduced journey time.

Public transport is satisfactory.

Traffic congestion is not a problem.

Public safety is not a problem.

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From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

The right-hand, light blue section shows the Priority, i.e. the proportion of respondents who chose the area as one of their top 5 priorities.

### Health & Safety
- Basic sanitation meets the needs of the poorest areas: 72.2
- Recycling services are satisfactory: 75.9
- Public safety is not a problem: 49.3
- Air pollution is not a problem: 58.4
- Medical services provision is satisfactory: 65.4
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 20.9

### Mobility
- Traffic congestion is not a problem: 17.2
- Public transport is satisfactory: 43.5

### Activities
- Green spaces are satisfactory: 70.0
- Cultural activities (shows, bars, and museums) are satisfactory: 79.6

### Opportunities (Work & School)
- Employment finding services are readily available: 69.9
- Most children have access to a good school: 74.0
- Lifelong learning opportunities are provided by local institutions: 68.5
- Businesses are creating new jobs: 60.9
- Minorities feel welcome: 61.1

### Governance
- Information on local government decisions are easily accessible: 59.4
- Corruption of city officials is not an issue of concern: 55.7
- Residents contribute to decision making of local government: 54.3
- Residents provide feedback on local government projects: 61.9

### Technologies
- Drone reporting of city maintenance problems provides a speedy solution: 47.1
- A website or App allows residents to easily give away unwanted items: 64.1
- Free public wifi has improved access to city services: 58.7
- CCTV cameras have made residents feel safer: 53.2
- A website or App allows residents to effectively monitor air pollution: 33.7
- Arranging medical appointments online has improved access: 65.0

### Attitudes
- You are willing to concede personal data in order to improve traffic congestion: 70.6%
- You are comfortable with face recognition technologies to lower crime: 70.6%
- You feel the availability of online information has increased your trust in authorities: 76.4%
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 66.5

### Structures
- The city provides information on traffic congestion through mobile phones: 76.0
- Online scheduling and ticket sales has made public transport easier to use: 78.4
- Bicycle hiring has reduced congestion: 54.7
- The city provides information on traffic congestion through mobile phones: 49.3
- Online reporting of city parking problems provides a speedy solution: 70.4

### Priorities
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<th>Change</th>
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<td>68.5</td>
<td>60.9</td>
<td>60.9%</td>
</tr>
<tr>
<td>A</td>
<td>Governance</td>
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<td>55.7</td>
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<td>61.9</td>
<td>61.9%</td>
</tr>
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<td>Health &amp; Safety</td>
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<td>64.1</td>
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<td>53.2</td>
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<td>39.3</td>
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<td>Activities</td>
<td>76.0</td>
<td>78.4</td>
<td>54.7</td>
<td>49.3</td>
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<tr>
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<td>Opportunities (Work &amp; School)</td>
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<td>78.4</td>
<td>54.7</td>
<td>49.3</td>
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</tr>
<tr>
<td>B</td>
<td>Governance</td>
<td>37.8</td>
<td>52.9</td>
<td>46.2</td>
<td>57.2</td>
<td>57.2%</td>
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</table>
Online services provided by the city has made it easier to start a new business.
Free public wifi has improved access to city services.

| GROUP Activities 2021 MEAN MAX |
|-----------------------------|----------------|
| IT skills are taught well in schools | 43.4 | 45.4 |
| Residents contribute to decision-making of local government | 43.4 | 45.4 |

### Health & Safety

- Basic sanitation meets the needs of the poorest areas: 71.8
- Recycling services are satisfactory: 62.8
- Air pollution is not a problem: 50.1
- Public safety is not a problem: 57.3
- Public transport is satisfactory: 65.8
- Free public wifi has improved access to city services: 74.9
- A website or App allows residents to effectively monitor air pollution: 77.3
- The city provides information on traffic congestion through mobile phones: 77.3

### Mobility

- Traffic congestion is not a problem: 25.1
- Public transport is satisfactory: 43.4
- Car-sharing Apps have reduced congestion: 61.9
- Bike-sharing has reduced congestion: 60.9
- The city provides information on traffic congestion through mobile phones: 74.8

### Activities

- Green spaces are satisfactory: 61.5
- Cultural activities (shows, bars, and museums) are satisfactory: 65.4

### Opportunities (Work & School)

- Employment finding services are readily available: 63.6
- Most children have access to a good school: 60.2
- Lifelong learning opportunities are provided by local institutions: 61.7
- Businesses are creating new jobs: 68.4
- Minorities feel welcome: 57.3

### Governance

- Information on local government decisions are easily accessible: 53.7
- Corruption of city officials is not an issue of concern: 36.6
- Residents contribute to decision-making of local government: 53.0
- Residents provide feedback on local government projects: 57.6
- Online public access to city finances has reduced corruption: 73.9
- Online voting has increased participation: 78.9
- An online platform where residents can propose ideas has improved city life: 78.9
- Processing Identification Documents online has reduced waiting times: 75.3
Online services provided by the city have made it easier to start a new business. IT skills are taught well in schools.

Activities

Finding housing with rent equal to 30% or less of a monthly salary is not a problem. Online scheduling and ticket sales have made public transport easier to use. Bicycle hiring has reduced congestion. Apps that direct you to an available parking space have reduced journey time. Online purchasing of tickets to shows and museums has made it easier to attend.

Mobility

Traffic congestion is not a problem. Public transport is satisfactory. Green spaces are satisfactory. Cultural activities (shows, bars, and museums) are satisfactory.

Activities

Online purchasing of tickets to shows and museums has made it easier to attend. Online public access to city finances has reduced corruption. Online public access to city finances has reduced corruption. Online public access to city finances has reduced corruption.

Opportunities (Work & School)

Professional development and training opportunities are readily available. Most children have access to a good school. Lifelong learning opportunities are provided by local institutions. Businesses are creating new jobs. Minorities feel welcome.

Opportunities (Work & School)

Online access to job listings has made it easier to find work. IT skills are taught well in schools. Online services provided by the city have made it easier to start a new business. The current internet speed and reliability meet connectivity needs.

Health & Safety

Basic sanitation meets the needs of the poorest areas. Recycling services are satisfactory. Public safety is not a problem. Air pollution is not a problem. Medical services provision is satisfactory. Finding housing with rent equal to 30% or less of a monthly salary is not a problem. Online scheduling and ticket sales have made public transport easier to use. Bicycle hiring has reduced congestion. Apps that direct you to an available parking space have reduced journey time. Online purchasing of tickets to shows and museums has made it easier to attend.

Health & Safety

Online reporting of city maintenance problems provides a speedy solution. A website or App allows residents to easily give away unwanted items. Free public wifi has improved access to city services. CCTV cameras have made residents feel safer. A website or App allows residents to effectively monitor air pollution. Arranging medical appointments online has improved access. The city provides information on traffic congestion through mobile phones.

Opportunities (Work & School)

Online access to job listings has made it easier to find work. IT skills are taught well in schools. Online services provided by the city have made it easier to start a new business. The current internet speed and reliability meet connectivity needs.

Activities

Online purchasing of tickets to shows and museums has made it easier to attend. Online public access to city finances has reduced corruption. Online public access to city finances has reduced corruption. Online public access to city finances has reduced corruption.

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**BACKGROUND INFORMATION**

City

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.758</td>
<td>0.761</td>
<td>0.764</td>
<td>0.768</td>
<td>+0.004</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>76.7</td>
<td>76.9</td>
<td>78.1</td>
<td>78.2</td>
<td>+0.1</td>
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<tr>
<td>Expected years of schooling</td>
<td>13.9</td>
<td>14.0</td>
<td>14.2</td>
<td>14.2</td>
<td>+0.0</td>
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<tr>
<td>Mean years of schooling</td>
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<td>12.6</td>
<td>13.0</td>
<td>13.0</td>
<td>+0.0</td>
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<tr>
<td>GNP per capita (PPP $)</td>
<td>48,836</td>
<td>58,662</td>
<td>58,144</td>
<td>60,385</td>
<td>+2,221</td>
</tr>
</tbody>
</table>

**ATTITUDES**

You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

**PRIORITY AREAS**

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total Bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

**GNI per capita (PPP)$**

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean years of schooling</td>
<td>66.2</td>
<td>79.0</td>
<td>78.3</td>
<td>79.6</td>
<td>+0.1</td>
</tr>
<tr>
<td>Expected years of schooling</td>
<td>78.3</td>
<td>79.3</td>
<td>80.6</td>
<td>80.9</td>
<td>+0.3</td>
</tr>
<tr>
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<td>76.7</td>
<td>78.1</td>
<td>78.2</td>
<td>78.2</td>
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</tbody>
</table>

**Health & Safety**

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

**Mobility**

Traffic congestion is not a problem
Public transport is satisfactory

**Activities**

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

**Opportunities (Work & School)**

Employment finding services are readily available
Most children have access to a good school
Life-long learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

**Governance**

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

**Health & Safety**

Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wi-fi has improved access to city services
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A website or App allows residents to effectively monitor air pollution
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**Mobility**

Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

**Activities**

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**Opportunities (Work & School)**

Online access to job listings has made it easier to find work
IT skills are taught well in schools
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The current internet speed and reliability meet connectivity needs

**Governance**

Online public access to city finances has reduced corruption
Online voting has increased participation
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Processing Identification Documents online has reduced waiting times

**Technologies**

<table>
<thead>
<tr>
<th>Factor</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
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<td>80.9</td>
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<tr>
<td>Activities</td>
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<td>78.0</td>
<td>69.9</td>
<td>79.9</td>
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<tr>
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<td>78.0</td>
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**Score**

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<td>Activities</td>
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<td>Opportunities (Work &amp; School)</td>
<td>84.3</td>
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<tr>
<td>Governance</td>
<td>74.4</td>
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</tbody>
</table>

**Health & Safety**

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A website or App allows residents to easily give away unwanted items
Free public wi-fi has improved access to city services
CCTV cameras has made residents feel safer
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

**Mobility**

Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

**Activities**

Online purchasing of tickets to shows and museums has made it easier to attend

**Opportunities (Work & School)**

Online access to job listings has made it easier to find work
IT skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The current internet speed and reliability meet connectivity needs

**Governance**

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

**Score**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Health &amp; Safety</td>
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<tr>
<td>Mobility</td>
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<td>Activities</td>
<td>90.1</td>
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<tr>
<td>Opportunities (Work &amp; School)</td>
<td>84.3</td>
</tr>
<tr>
<td>Governance</td>
<td>74.4</td>
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</tbody>
</table>
Free public wifi has improved access to city services.

Online services provided by the city has made it easier to start a new business.

IT skills are taught well in schools.

CITY GROUP Opportunities (Work & School)

MIN TECHNOLOGIES Mobility

Minorities feel welcome.

Businesses are creating new jobs.

The current internet speed and reliability meet connectivity needs.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

Medical services provision is satisfactory.

A website or App allows residents to effectively monitor air pollution.

Air pollution is not a problem.

CCTV cameras has made residents feel safer.

Residents provide feedback on local government projects.

Processing Identification Documents online has reduced waiting times.

An online platform where residents can propose ideas has improved city life.

Corruption of city officials is not an issue of concern.

Online voting has increased participation.

Information on local government decisions are easily accessible.

Processing Identification Documents online has reduced waiting times.

Government

GNI per capita (PPP $)

Mean years of schooling

Expected years of schooling

Life expectancy at birth

Health & Safety

Basic sanitation meets the needs of the poorest areas

Recycling services are satisfactory

Public safety is not a problem

Air pollution is not a problem

Medical services provision is satisfactory

Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Health & Safety

Online reporting of city maintenance problems provides a speedy solution

A website or App allows residents to easily give away unwanted items

Free public wifi has improved access to city services

CCTV cameras has made residents feel safer

A website or App allows residents to effectively monitor air pollution

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Mobility

Car-sharing Apps have reduced congestion

Apps that direct you to an available parking space have reduced journey time

Bicycle hiring has reduced congestion

Online scheduling and ticket sales has made public transport easier to use

The city provides information on traffic congestion through mobile phones

Activities

Online purchasing of tickets to shows and museums has made it easier to attend

Smart City Index 2021

PRIORITY AREAS

unemployment

basic amenities

crime

security

affordable housing

health services

road congestion

public transport

school education

air pollution

fulfilling employment

green spaces

recycling

citizen engagement

social mobility

In 2021, Beirut was not in the Smart City Index

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

In 2021, Beirut was not in the Smart City Index

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

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The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
Online services provided by the city have made it easier to start a new business.

Activities
- Minorities feel welcome
- Businesses are creating new jobs
- Women are not out of 118

Mobility
- Traffic congestion is not a problem
- Bicycle sharing has reduced congestion

Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory

Opportunities (Work & School)
- Employment finding services are readily available
- Lifelong learning opportunities are provided by local institutions

CORRUPTION
- Corruption of city officials is not an issue of concern
- Online voting has increased participation

PRIORITY AREAS
- Affordable housing
- Security
- Health services
- Unemployment
- School education
- Corruption
- Recycling
- Social mobility
- Green spaces
- Air pollution
- Basic amenities
- Citizen engagement

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<th>STRUCTURES</th>
<th>TECHNOLOGIES</th>
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</tr>
<tr>
<td>Governance</td>
<td></td>
<td>0-20-40-60-80-100</td>
<td>0-20-40-60-80-100</td>
</tr>
</tbody>
</table>
**Health & Safety**
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

**Mobility**
- Traffic congestion is not a problem
- Public transport is satisfactory

**Activities**
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

**Opportunities (Work & School)**
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

**Governance**
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision-making of local government
- Residents provide feedback on local government projects

**Technologies**
- Online reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- A website or App allows residents to effectively monitor air pollution
- Arranging medical appointments online has improved access

**ATTITUDES**
- You are willing to concede personal data in order to improve traffic congestion
- You are comfortable with face recognition technologies to lower crime
- You feel the availability of online information has increased your trust in authorities
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

**PRIORITY AREAS**
- From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

**LEGEND:**
- MIN (64.5) 81.0
- MAX (66.3) 76.3
- MEAN (64.9) 72.7
- 1 yr change (-2.9) 11.9

**BACKGROUND INFORMATION**

**CITY RATING**
- All ratings range from AAA to D

**GROUP 4**
- All ratings from AAA to D

**SMART CITY RATING**
- 110 out of 141
- Bengaluru

**SMART CITY RANKING**
- 97 out of 118 in 2021
- Bengaluru

**SMART CITY INDEX 2021**

**GNI per capita (PPP $)**
- 13,193,035

**Population HDI**
- 0.667

**Expected years of schooling**
- 12.2

**Mean years of schooling**
- 7.7

**Country**
- 2018
- 2019
- 2020
- 2021
- 1yr change
- HDI
- Life expectancy at birth
- Expected years of schooling
- Mean years of schooling
- GNI per capita (PPP $)

**Score**
- 66.3
- 64.7
- 50.1
- 72.7
- 70.5
- 7.7
- 6.7
- 6.5
- 6.681

**Score**
- 66.7
- 61.7
- 60.9
- 74.1
- 79.4
- 65.3
- 62.8
- 60.6
- 73.3
- 70.1

**Score**
- 83.0
- 80.5
- 79.4
- 76.3
- 80.5
- 80.5
- 80.5
- 80.5
- 80.5

**Score**
- 71.2
- 70.8
- 64.8
- 60.1
- 64.5
- 60.1
- 65.9
- 65.9
- 65.9
- 65.9

**Score**
- 62.9
- 63.0
- 63.5
- 63.9
- 64.4
- 64.9
- 65.2
- 65.9
- 66.8
- 67.6
- 68.2
- 68.7
- 69.1
- 69.8
- 70.4
- 70.9
- 71.5
- 72.1
- 72.7
- 73.2
- 73.8
- 74.3
- 74.8
- 75.4
- 75.9
- 76.4
- 76.9
- 77.4
- 77.9
- 78.4
- 78.9
- 79.4
- 80.0
- 80.5
- 81.0
Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem
- Arranging medical appointments online has improved access
- Medical services provision is satisfactory
- A website or App allows residents to effectively monitor air pollution
- Air pollution is not a problem
- Residents provide feedback on local government projects

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory
- Online scheduling and ticket sales has made public transport easier to use
- Biking has reduced congestion
- The city provides information on traffic congestion through mobile phones

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory
- Lifelong learning opportunities are provided by local institutions

Opportunities (Work & School)
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

ATTITUDES
- You are willing to share your private data in order to improve traffic congestion
- You feel the availability of online information has increased your trust in authorities
- You are comfortable with face recognition technologies to lower crime
- You feel safe in your community
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
Free public wifi has improved access to city services

Governance

Online services provided by the city has made it easier to start a new business

MAX 82.8
MEAN IT skills are taught well in schools

TECHNOLOGIES

MEAN
Activities

All ratings range from AAA to D

Health & Safety

Opportunities (Work & School)

GNI per capita (PPP $) Expected years of schooling Life expectancy at birth

Country 2018 2019 2020 2021 1 yr change

HDI 0.893 0.904 0.899 0.905 +0.006
Life expectancy at birth 83.4 83.6 82.3 83.0 +0.7
Expected years of schooling 17.9 17.6 17.9 17.9 +0.0
Mean years of schooling 9.8 10.3 10.6 10.6 +0.0
GNI per capita (PPP $) 35,041 40,975 36,516 38,354 +1,838

Health & Safety Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public transport is satisfactory
Cultural activities (shows, bars, and museums) are satisfactory
Green spaces are satisfactory

CITY RATING

Score

Ratio

0 20 40 60 80 100

The city provides information on traffic congestion through mobile phones
Online scheduling and ticket sales has made public transport easier to use
Bicycle hiring has reduced congestion
Public transport is satisfactory
Green spaces are satisfactory

Mobility

Traffic congestion is not a problem
Public transport is satisfactory
Cycling infrastructure is satisfactory
Global citizens feel safe
Public safety is not a problem

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory
Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
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Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Opportunities (Work & School)

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

Technologies

Privacy of your daily transactions is non-cash
You feel the availability of online information has increased your trust in authorities
You are comfortable with face recognition technologies to lower crime
You are willing to concede personal data in order to improve traffic congestion

All ratings range from AAA to D

All ratings range from AAA to D

SMART CITY RATING

27 Out of 141

82.8

50.9

63.8

75.4

76.2

76.2

50.9

63.8

61.9

51.6

48.4

54.9

62.7

52.3

71.7

51.2

35.9

23.1

19.6

19.1

18.3

17.5

15.5

11.2

55.4

55.8

59.7

50.3

43.2

68.0

41.7

42.7

56.1

65.4

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

The right-hand, dark blue section of each bar shows the ‘Alignment’, i.e. the proportion of those respondents who perceive these areas as urgent and important. The higher the percentage of responses per area, the greater the priority for the city.

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You are willing to concede personal data in order to improve traffic congestion

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You are comfortable with face recognition technologies to lower crime

You are willing to concede personal data in order to improve traffic congestion

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You are willing to concede personal data in order to improve traffic congestion

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
Health & Safety

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

- Traffic congestion is not a problem
- Public transport is satisfactory

Activities

- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance

- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Health & Safety

Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public WiFi has improved access to city services
CCTV cameras has made residents feel safer
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Mobility

Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
On-demand scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities

Online purchasing of tickets to shows and museums has made it easier to attend events

Opportunities (Work & School)

Online access to job listings has made it easier to find work
If skills are taught well in schools
Online scholarships provided by the city has made it easier to start a new business
Online employment opportunities make it easier to find new work
The current internet speed and reliability make connectivity needs

Governance

Online public access to city finances has reduced corruption
Online reporting of city maintenance problems provides a speedy solution
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
to the needs of the poorer areas. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The city provides information on traffic congestion through mobile phones
Online scheduling and ticket sales has made public transport easier to use
Public transport is satisfactory
Social mobility
Energy and Water
Public safety is not a problem
Recycling services are satisfactory
Basic amenities
Air pollution
Unemployment
Traffic congestion is not a problem
Security
Corruption of city officials is not an issue of concern
Resident contribute to decision making of local government
Health & Safety
GNI per capita (PPP $)
Mean years of schooling
Expected years of schooling
Life expectancy at birth
HDI
Country
2018 2019 2020 2021 1 yr change
HDI 0.761 0.767 0.756 0.752 -0.004
Life expectancy at birth 77.1 77.3 74.8 72.8 -1.9
Expected years of schooling 14.0 14.4 14.1 14.4 -0.0
Mean years of schooling 8.3 8.5 8.9 8.9 0.0
GNI per capita (PPP $) 12,856 14,257 33,185 34,384 11,199

Population
HD
7,181,469 0.797
(UN Data)

Activities

22.0

Governance

20.0

Opportunities (Work & School)

40.0

Health & Safety

60.0

Mobility

80.0

Structures

0 20 40 60 80 100

Technologies

0 20 40 60 80 100

Assessing the city's current situation through the lens of 15 key indicators, the Smart City Index 2021 reveals the area of greatest concern.

You feel the availability of online information has increased your trust in authorities
You are comfortable with face recognition technologies to lower crime
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

- You feel the availability of online information has increased your trust in authorities
- You are comfortable with face recognition technologies to lower crime
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

All ratings range from AAA to D

D in 2021

133 out of 138 in 2021

BACKGROUND INFORMATION

City

Population HDI 7,181,469 0.797

(City)

Canada

0.757

2019

Score

1 yr change

Country

2018

2019

2020

2021

1 yr change

Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

ATTITUDES

You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

- You are willing to concede personal data in order to improve traffic congestion
- You are comfortable with face recognition technologies to lower crime
- You feel the availability of online information has increased your trust in authorities
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

RANKING

129 out of 138 in 2021

CITY RATING

113 out of 138 in 2021

SMART CITY RATING

D

FACTOR RATINGS

D

GROUP

4

All ratings range from AAA to D

GNI per capita (PPP $)
Mean years of schooling
Expected years of schooling
Life expectancy at birth
HDI
Country
2018 2019 2020 2021 1 yr change
HDI 0.761 0.767 0.756 0.752 -0.004
Life expectancy at birth 77.1 77.3 74.8 72.8 -1.9
Expected years of schooling 14.0 14.4 14.1 14.4 -0.0
Mean years of schooling 8.3 8.5 8.9 8.9 0.0
GNI per capita (PPP $) 12,856 14,257 33,185 34,384 11,199

Population
HD
7,181,469 0.797
(UN Data)
### Health & Safety

**Basic sanitation meets the needs of the poorest areas**
- 2018: 72.5
- 2019: 70.7
- 2020: 49.8
- 2021: 29.5

**Air pollution is not a problem**
- 2018: 72.5
- 2019: 70.7
- 2020: 49.8
- 2021: 29.5

**Medical services provision is satisfactory**
- 2018: 72.5
- 2019: 70.7
- 2020: 49.8
- 2021: 29.5

**Finding housing with rent equal to 30% or less of a monthly salary is not a problem**
- 2018: 73.0
- 2019: 72.6
- 2020: 62.7
- 2021: 74.2

### Mobility

**Traffic congestion is not a problem**
- 2018: 72.5
- 2019: 70.7
- 2020: 49.8
- 2021: 29.5

**Public transport is satisfactory**
- 2018: 72.5
- 2019: 70.7
- 2020: 49.8
- 2021: 29.5

### Activities

**Green spaces are satisfactory**
- 2018: 72.9
- 2019: 72.9
- 2020: 72.9
- 2021: 72.9

**Cultural activities (shows, bars, and museums) are satisfactory**
- 2018: 72.9
- 2019: 72.9
- 2020: 72.9
- 2021: 72.9

### Opportunities (Work & School)

**Employment finding services are readily available**
- 2018: 41.1
- 2019: 40.4
- 2020: 61.4
- 2021: 61.4

**Most children have access to a good school**
- 2018: 70.4
- 2019: 66.4
- 2020: 61.4
- 2021: 61.4

**Lifelong learning opportunities are provided by local institutions**
- 2018: 51.4
- 2019: 61.4
- 2020: 51.4
- 2021: 51.4

**Businesses are creating new jobs**
- 2018: 51.6
- 2019: 51.6
- 2020: 51.6
- 2021: 51.6

### Governance

**Information on local government decisions are easily accessible**
- 2018: 62.1
- 2019: 62.1
- 2020: 62.1
- 2021: 62.1

**Corruption of city officials is not an issue of concern**
- 2018: 43.1
- 2019: 43.1
- 2020: 43.1
- 2021: 43.1

**Residents contribute to decision making of local government**
- 2018: 44.4
- 2019: 44.4
- 2020: 44.4
- 2021: 44.4

**Residents provide feedback on local government projects**
- 2018: 51.6
- 2019: 51.6
- 2020: 51.6
- 2021: 51.6

### Technologies

**Online voting has increased participation**
- 2018: 63.0
- 2019: 63.0
- 2020: 63.0
- 2021: 63.0

**Corruption of city officials is not an issue of concern**
- 2018: 46.5
- 2019: 46.5
- 2020: 46.5
- 2021: 46.5

**Online public access to city finances has reduced corruption**
- 2018: 50.1
- 2019: 50.1
- 2020: 50.1
- 2021: 50.1

**An online platform where residents can propose ideas has improved city life**
- 2018: 50.2
- 2019: 50.2
- 2020: 50.2
- 2021: 50.2

**Processing Identification Documents online has reduced waiting times**
- 2018: 69.3
- 2019: 69.3
- 2020: 69.3
- 2021: 69.3
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

### Health & Safety
- Affordable housing
- Road congestion
- Security
- Air pollution
- Unemployment
- Health services
- Public transport
- Recycling
- Basic amenities
- Fulfilling employment
- Corruption
- Crime
- Green spaces
- School education
- Social mobility
- Citizen engagement

### Technologies
- Affordable housing
- Road congestion
- Security
- Air pollution
- Unemployment
- Health services
- Public transport
- Recycling
- Basic amenities
- Fulfilling employment
- Corruption
- Crime
- Green spaces
- School education
- Social mobility
- Citizen engagement

### Background Information

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.891</td>
<td>0.901</td>
<td>0.898</td>
<td>0.903</td>
<td>+0.002</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>82.5</td>
<td>82.7</td>
<td>82.2</td>
<td>82.5</td>
<td>+0.3</td>
</tr>
<tr>
<td>Expected years of schooling</td>
<td>15.5</td>
<td>15.6</td>
<td>15.8</td>
<td>15.8</td>
<td>+0.0</td>
</tr>
<tr>
<td>Mean years of schooling</td>
<td>11.4</td>
<td>11.5</td>
<td>11.6</td>
<td>11.6</td>
<td>+0.0</td>
</tr>
<tr>
<td>GNI per capita (PPP $)</td>
<td>40,511</td>
<td>47,173</td>
<td>43,048</td>
<td>45,937</td>
<td>+2,889</td>
</tr>
</tbody>
</table>

### Attitudes

**You are willing to concede personal data in order to improve traffic congestion**

- 0% 20% 40% 60% 80% 100%
- % of respondents
- 9.6%

**You are comfortable with face recognition technologies to lower crime**

- 0% 20% 40% 60% 80% 100%
- % of respondents
- 18.1%

**You feel the availability of online information has increased your trust in authorities**

- 0% 20% 40% 60% 80% 100%
- % of respondents
- 62.9%

**The proportion of your day-to-day payment transactions that are non-cash (% of transactions)**

- 0% 20% 40% 60% 80% 100%
- % of respondents
- 56.4%

**You chose the Priority Area**

- 0% 20% 40% 60% 80% 100%
- % of respondents
- 69.2%
### Health & Safety

- Basic sanitation meets the needs of the poorest areas: 59.8%
- Recycling services are satisfactory: 68.2%
- Public safety is not a problem: 41.2%
- Air pollution is not a problem: 46.1%
- Medical services provision is satisfactory: 74.0%
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 27.6%

### Mobility

- Traffic congestion is not a problem: 21.2%
- Public transport is satisfactory: 43.4%

### Activities

- Green spaces are satisfactory: 67.7%
- Cultural activities (shows, bars, and museums) are satisfactory: 81.5%

### Opportunities (Work & School)

- Employment finding services are readily available: 67.6%
- Most children have access to a good school: 61.1%
- Lifelong learning opportunities are provided by local institutions: 66.4%
- Businesses are creating new jobs: 70.1%
- Minorities feel welcome: 60.9%

### Governance

- Information on local government decisions are easily accessible: 67.0%
- Corruption of city officials is not an issue of concern: 43.7%
- Residents contribute to decision making of local government: 52.0%
- Residents provide feedback on local government projects: 62.1%

### Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 41.5%
- A website or App allows residents to easily gain access to city services: 54.0%
- CCTV cameras have made residents feel safer: 43.9%
- A website or App allows residents to effectively monitor air pollution: 33.3%
- Arranging medical appointments online has improved access: 67.2%

### Mobility

- Car-sharing Apps have reduced congestion: 40.7%
- Apps that direct you to an available parking space have reduced journey time: 46.5%
- Bicycle sharing has reduced congestion: 44.7%
- Online scheduling and ticket sales has made public transport easier to use: 55.6%
- The city provides information on traffic congestion through mobile phones: 56.4%

### Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 76.0%

### Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 69.7%
- IT skills are taught well in schools: 50.9%
- Online services provided by the city has made it easier to start a new business: 47.9%
- The current internet speed and reliability meet connectivity needs: 67.4%

### Governance

- Online public access to city finances has reduced corruption: 41.1%
- Online voting has increased participation: 52.1%
- An online platform where residents can propose ideas has improved city life: 47.2%
- Processing Identification Documents online has reduced waiting times: 54.9%
Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Technologies
- Online access to job listings has made it easier to find work
- IT skills are taught well in schools
- Online services provided by the city has made it easier to start a new business
- The current internet speed and reliability meet connectivity needs

Opportunities (Work & School)
- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times

You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
Health & Safety

Free public wifi has improved access to city services
Online services provided by the city has made it easier to start a new business

TECHNOLOGIES

2021
48.0
MEAN
MAX
MEAN
Opportunities (Work & School)
Governance
Mobility
Activities
GROUP
CITY

CITY RATING

All ratings range from AAA to D

STRUCTURES

RANKING

42 out of 118 in 2021

BB in 2021

SMART CITY RATING

BBB

BACKGROUND INFORMATION

City
Population HDI
677,024 0.944
(Eurostat)

Country 2018 2019 2020 2021 1 yr change
HDI 0.857 0.860 0.857 0.848 -0.009
Life expectancy at birth 77.4 77.5 77.0 74.9 -2.1
Expected years of schooling 14.5 14.5 14.5 14.5 0.0
Mean years of schooling 12.6 12.7 12.9 12.9 0.0
GNI per capita (PPP $) 30,672 32,113 29,801 30,690 +889

Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

ATTITUDES

You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash
Free public wifi has improved access to city services in 2021.

Online services provided by the city have made it easier to start a new business.

IT skills are taught well in schools.

Opportunities (Work & School)

Minorities feel welcome.

Businesses are creating new jobs.

The current internet speed and reliability meet connectivity needs.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

Medical services provision is satisfactory.

A website or App allows residents to effectively monitor air pollution.

Air pollution is not a problem.

CCTV cameras have made residents feel safer.

Residents provide feedback on local government projects.

Processing Identification Documents online has reduced waiting times.

Residents contribute to decision-making of local government.

An online platform where residents can propose ideas has improved city life.

Corruption of city officials is not an issue of concern.

Online voting has increased participation.

Information on local government decisions are easily accessible.

The current internet speed and reliability meet connectivity needs.

Health & Safety

Country | 2018 | 2019 | 2020 | 2021 | 1 yr change

HDI | 0.941 | 0.941 | 0.947 | 0.951 | +0.004
Life expectancy at birth | 83.4 | 83.1 | 84.3 | 84.5 | +0.2
Expected years of schooling | 18.0 | 18.0 | 18.0 | 18.0 | +0.0
Mean years of schooling | 12.6 | 12.1 | 12.4 | 12.4 | +0.0
GDP per capita (PPP $) | 43,821 | 52,085 | 49,392 | 52,293 | +2,901

Mobility

Traffic congestion is not a problem.

Public transport is satisfactory.

Activities

Green spaces are satisfactory.

Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

Employment finding services are readily available.

Most children have access to a good school.

Lifelong learning opportunities are provided by local institutions.

Businesses are creating new jobs.

Minorities feel welcome.

Governance

Information on local government decisions are easily accessible.

Corruption of city officials is not an issue of concern.

Residents contribute to decision-making of local government.

Residents provide feedback on local government projects.

Mean years of schooling

Expected years of schooling

Life expectancy at birth

HDI

Country

Population HDI

2,054,614
0.944

(UN Data)

Smart City Index 2021

City

Population HDI

2,054,614
0.944

(UN Data)

2021

GROUP

Online services provided by the city have made it easier to start a new business.

IT skills are taught well in schools.

Opportunities (Work & School)

Minorities feel welcome.

Businesses are creating new jobs.

The current internet speed and reliability meet connectivity needs.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

Medical services provision is satisfactory.

A website or App allows residents to effectively monitor air pollution.

Air pollution is not a problem.

CCTV cameras have made residents feel safer.

Residents provide feedback on local government projects.

Processing Identification Documents online has reduced waiting times.

Residents contribute to decision-making of local government.

An online platform where residents can propose ideas has improved city life.

Corruption of city officials is not an issue of concern.

Online voting has increased participation.

Information on local government decisions are easily accessible.

The current internet speed and reliability meet connectivity needs.

Health & Safety

Country | 2018 | 2019 | 2020 | 2021 | 1 yr change

HDI | 0.941 | 0.941 | 0.947 | 0.951 | +0.004
Life expectancy at birth | 83.4 | 83.1 | 84.3 | 84.5 | +0.2
Expected years of schooling | 18.0 | 18.0 | 18.0 | 18.0 | +0.0
Mean years of schooling | 12.6 | 12.1 | 12.4 | 12.4 | +0.0
GDP per capita (PPP $) | 43,821 | 52,085 | 49,392 | 52,293 | +2,901

Mobility

Traffic congestion is not a problem.

Public transport is satisfactory.

Activities

Green spaces are satisfactory.

Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

Employment finding services are readily available.

Most children have access to a good school.

Lifelong learning opportunities are provided by local institutions.

Businesses are creating new jobs.

Minorities feel welcome.

Governance

Information on local government decisions are easily accessible.

Corruption of city officials is not an issue of concern.

Residents contribute to decision-making of local government.

Residents provide feedback on local government projects.

Mean years of schooling

Expected years of schooling

Life expectancy at birth

HDI

Country

Population HDI

2,054,614
0.944

(UN Data)

2021

GROUP

Online services provided by the city have made it easier to start a new business.

IT skills are taught well in schools.

Opportunities (Work & School)

Minorities feel welcome.

Businesses are creating new jobs.

The current internet speed and reliability meet connectivity needs.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

Medical services provision is satisfactory.

A website or App allows residents to effectively monitor air pollution.

Air pollution is not a problem.

CCTV cameras have made residents feel safer.

Residents provide feedback on local government projects.

Processing Identification Documents online has reduced waiting times.

Residents contribute to decision-making of local government.

An online platform where residents can propose ideas has improved city life.

Corruption of city officials is not an issue of concern.

Online voting has increased participation.

Information on local government decisions are easily accessible.

The current internet speed and reliability meet connectivity needs.
Free public wifi has improved access to city services.

Online services provided by the city has made it easier to start a new business.

IT skills are taught well in schools.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

Basic sanitation meets the needs of the poorest areas.

Car-sharing Apps have reduced congestion.

Online public access to city finances has reduced corruption.

Online voting has increased participation.

Processing Identification Documents online has made it easier to find work.

A website or App allows residents to effectively monitor air pollution.

Online purchasing of tickets to shows and museums has made it easier to attend.

CCTV cameras has made residents feel safer.

A website or App allows residents to effectively monitor air pollution.

Traffic congestion is not a problem.

Cultural activities (shows, bars, and museums) are satisfactory.

Online scheduling and ticket sales has made public transport easier to use.

The city provides information on traffic congestion through mobile phones.

Corruption of city officials is not an issue of concern.

Lifelong learning opportunities are provided by local institutions.

Bicycle hiring has reduced congestion.

Most children have access to a good school.

Air pollution is not a problem.

Online reporting of city maintenance problems provides a speedy solution.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities.

You are comfortable with face recognition technologies to lower crime.

You are willing to concede personal data in order to improve traffic congestion.
**Health & Safety**
- Basic sanitation meets the needs of the poorest areas: 42.8
- Recycling services are satisfactory: 30.2
- Public safety is not a problem: 44.2
- Air pollution is not a problem: 15.2
- Medical services provision is satisfactory: 39.6
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 26.9

**Mobility**
- Traffic congestion is not a problem: 12.8
- Public transport is satisfactory: 32.2

**Activities**
- Green spaces are satisfactory: 45.4
- Cultural activities (shows, bars, and museums) are satisfactory: 63.1

**Opportunities (Work & School)**
- Employment finding services are readily available: 52.0
- Most children have access to a good school: 48.0
- Lifelong learning opportunities are provided by local institutions: 45.2
- Businesses are creating new jobs: 49.6
- Minorities feel welcome: 53.7

**Governance**
- Information on local government decisions are easily accessible: 37.8
- Corruption of city officials is not an issue of concern: 18.5
- Residents contribute to decision making of local government: 20.3
- Residents provide feedback on local government projects: 33.6

**Health & Safety**
- Online reporting of city maintenance problems provides a speedy solution: 46.3
- A website or App allows residents to easily give away unwanted items: 52.4
- Free public wifi has improved access to city services: 48.6
- CCTV cameras has made residents feel safer: 47.2
- A website or App allows residents to effectively monitor air pollution: 52.6
- Arranging medical appointments online has improved access: 58.6

**Mobility**
- Car-sharing Apps have reduced congestion: 35.9
- Apps that direct you to an available parking space has reduced journey time: 40.4
- Bicycle hiring has reduced congestion: 41.9
- Online scheduling and ticket sales has made public transport easier to use: 54.4
- The city provides information on traffic congestion through mobile phones: 46.7

**Activities**
- Online purchasing of tickets to shows and museums has made it easier to attend: 75.1

**Opportunities (Work & School)**
- Online access to job listings has made it easier to find work: 63.0
- IT skills are taught well in schools: 41.4
- Online services provided by the city has made it easier to start a new business: 38.8
- The current internet speed and reliability meet connectivity needs: 71.8

**Governance**
- Online public access to city finances has reduced corruption: 23.0
- Online voting has increased participation: 32.0
- An online platform where residents can propose ideas has improved city life: 37.9
- Processing Identification Documents online has reduced waiting times: 52.7
**SMART CITY RATING**

**Budapest**

**BACKGROUND INFORMATION**

**City**

- Population: 1,752,286
- HDI: 0.922

**Country**

- 2018: 0.845
- 2019: 0.854
- 2020: 0.849
- 2021: 0.846
- 1yr change: -0.003

**Health & Safety**

- Basic sanitation meets the needs of the poorest areas: 47.7
- Recycling services are satisfactory: 56.1
- Public transport is not a problem: 46.7
- Air pollution is not a problem: 27.7
- Medical services provision is satisfactory: 35.2
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 18.0

**Mobility**

- Traffic congestion is not a problem: 23.5
- Public transport is satisfactory: 49.8

**Activities**

- Green spaces are satisfactory: 47.4
- Cultural activities (shows, bars, and museums) are satisfactory: 74.0

**Opportunities (Work & School)**

- Employment finding services are readily available: 62.7
- Most children have access to a good school: 53.0
- Lifelong learning opportunities are provided by local institutions: 60.6
- Businesses are creating new jobs: 62.3
- Minorities feel welcome: 30.7

**Governance**

- Information on local government decisions are easily accessible: 59.9
- Corruption of city officials is not an issue of concern: 30.4
- Residents contribute to decision making of local government: 34.0
- Residents provide feedback on local government projects: 43.9

**Health & Safety**

- Online reporting of city maintenance problems provides a speedy solution: 36.0
- A website or App allows residents to easily give away unwanted items: 55.5
- Free public wifi has improved access to city services: 53.3
- CCTV cameras has made residents feel safer: 53.8
- A website or App allows residents to effectively monitor air pollution: 43.3
- Arranging medical appointments online has improved access: 47.0

**Mobility**

- Car-sharing Apps have reduced congestion: 36.2
- Apps that direct you to an available parking space have reduced journey time: 45.6
- Bicycle hiring has reduced congestion: 48.6
- Online scheduling and ticket sales has made public transport easier to use: 72.7
- The city provides information on traffic congestion through mobile phones: 57.1

**Activities**

- Online purchasing of tickets to shows and museums has made it easier to attend: 80.3

**Opportunities (Work & School)**

- Online access to job listings has made it easier to find work: 73.2
- IT skills are taught well in schools: 51.1
- Online services provided by the city has made it easier to start a new business: 50.7
- The current internet speed and reliability meet connectivity needs: 67.8

**Governance**

- Online public access to city finances has reduced corruption: 30.8
- Online voting has increased participation: 51.0
- An online platform where residents can propose ideas has improved city life: 45.2
- Processing Identification Documents online has reduced waiting times: 65.7

**SMART CITY RATING**

**87**

Out of 141

**BACKGROUND INFORMATION**

**City**

- Population: 1,752,286
- HDI: 0.922

**Country**

- 2018: 0.845
- 2019: 0.854
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**87**

Out of 141

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**Country**

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- 2021: 0.846
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- Air pollution is not a problem: 27.7
- Medical services provision is satisfactory: 35.2
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 18.0

**Mobility**

- Traffic congestion is not a problem: 23.5
- Public transport is satisfactory: 49.8

**Activities**

- Green spaces are satisfactory: 47.4
- Cultural activities (shows, bars, and museums) are satisfactory: 74.0

**Opportunities (Work & School)**

- Employment finding services are readily available: 62.7
- Most children have access to a good school: 53.0
- Lifelong learning opportunities are provided by local institutions: 60.6
- Businesses are creating new jobs: 62.3
- Minorities feel welcome: 30.7

**Governance**

- Information on local government decisions are easily accessible: 59.9
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- Online services provided by the city has made it easier to start a new business: 50.7
- The current internet speed and reliability meet connectivity needs: 67.8

**Governance**

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- Online voting has increased participation: 51.0
- An online platform where residents can propose ideas has improved city life: 45.2
- Processing Identification Documents online has reduced waiting times: 65.7
## Health & Safety

**Country**

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<thead>
<tr>
<th>Year</th>
<th>HDI</th>
<th>Life expectancy at birth</th>
<th>Mean years of schooling</th>
<th>GNI per capita (PPP $)</th>
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**Technologies**

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<tr>
<td>Mobility</td>
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<tr>
<td>Activities</td>
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<tr>
<td>Governance</td>
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</tbody>
</table>

### Background Information

- **City**: Buenos Aires
- **Population**: 15,567,820
- **HDI**: 0.812

### Smart City Index 2021

**City Rating**: 124

**Factors**

- **Structures**: C
- **Technologies**: C
- **Group**: 3

**Ratings**

- **Country**: 104 out of 118 in 2021
- **City**: 124 out of 141 in 2021

### Priorities

- **Health & Safety**
  - Basic sanitation meets the needs of the poorest areas
  - Recycling services are satisfactory
  - Public transport is satisfactory
  - Green spaces are satisfactory
  - Cultural activities (shows, bars, and museums) are satisfactory

- **Mobility**
  - Traffic congestion is not a problem
  - Public transport is satisfactory

- **Activities**
  - Finding housing with rent equal to 30% or less of a monthly salary is not a problem
  - Arranging medical appointments online has improved access

- **Opportunities (Work & School)**
  - Lifelong learning opportunities are provided by local institutions
  - Most children have access to a good school
  - Employment finding services are readily available

- **Governance**
  - Information on local government decisions is easily accessible
  - Corruption of city officials is not an issue of concern
  - Residents contribute to decision-making of local government

### Technologies

- **Health & Safety**
  - Online reporting of city maintenance problems provides a speedy solution
  - A website or App allows residents to effectively monitor air pollution
  - Arranging medical appointments online has improved access

- **Mobility**
  - Car-sharing Apps have reduced congestion
  - Apps that direct you to an available parking space have reduced journey time

- **Activities**
  - Online purchasing of tickets to shows and museums has made it easier to attend

### Dimensions

- **Health & Safety**: 0% to 100%
- **Mobility**: 0% to 100%
- **Activities**: 0% to 100%
- **Opportunities (Work & School)**: 0% to 100%
- **Governance**: 0% to 100%

### ATTITUDES

- You are willing to concede personal data in order to improve traffic congestion
- You are comfortable with face recognition technologies to lower crime
- You feel the availability of online information has increased your trust in authorities
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
  - 59.8%
- The city provides information on traffic congestion through mobile phones
  - 95.5%

### LEGEND:

- **MIN**: 0%
- **MAX**: 100%
- **GROUP**: Health & Safety
Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public transport is satisfactory
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem
Traffic congestion is not a problem
Public transport is satisfactory

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

Opportunities (Work & School)

Online access to job listings has made it easier to find work
It skills are taught well in schools

Government

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

Cultural activities (shows, bars, and museums) are satisfactory
Online purchasing of tickets to shows and museums has made it easier to attend

Public transport is satisfactory
Apps that direct you to an available parking space have reduced journey time
Traffic congestion is not a problem
Car-sharing Apps have reduced congestion

Green spaces are satisfactory
Online purchasing of tickets to shows and museums has made it easier to attend

Public transport is satisfactory
Apps that direct you to an available parking space have reduced journey time
Traffic congestion is not a problem
Car-sharing Apps have reduced congestion

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public transport is satisfactory
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem
Traffic congestion is not a problem
Public transport is satisfactory

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.
IT skills are taught well in schools.

Online services provided by the city has made it easier to start a new business.

Free public wifi has improved access to city services.

Governance
- Corruption of city officials is not an issue of concern.
- Online voting has increased participation.
- Information on local government decisions are easily accessible.
- Online public access to city finances has reduced corruption.
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions) - 77.4
- The proportion of those who agree or strongly agree with the statement - 56.1
- The proportion of respondents who chose the Priority Area - 0% 20% 40% 60% 80% 100%

Technologies
- Affordable housing
- Health services
- Public transport
- School education
- Road congestion
- Unemployment
- Recycling
- Security
- Social mobility
- Fulfilling employment
- Air pollution
- Green spaces
- Corruption
- Citizen engagement
- Food security
- Social inclusion
- Social protection
- Housing affordability
- Safety
- Employment security
- ICT
- Mobility
- Travel time
- Travel cost
- Traffic congestion
- Car-sharing Apps
- Apps that direct you to an available parking space
- Bicycle sharing
- Bicycle hiring
- Online scheduling and ticket sales
- The city provides information on traffic congestion through mobile phones
- The proportion of responses per area, the more urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

Background Information
- Country
- 2018
- 2019
- 2020
- 2021
- 1 yr change
- HDI
- 0.941
- 0.941
- 0.947
- 0.951
- +0.004
- Life expectancy at birth
- 83.4
- 83.1
- 84.3
- 84.5
- +1.2
- Mean years of schooling
- 12.6
- 12.1
- 12.4
- 12.4
- +0.0
- GNI per capita (PPP $)
- 43,821
- 52,085
- 49,392
- 52,293
- +2,901

Canberra
- Population
- HDI
- 395,790
- 0.686

Smart City Rating
- AA
- 3 out of 141
- 2019
- 0.941
- 18.0
- 77.4
- 51.3
- 80.6
- 80.6
- 0

PRIORITY AREAS
- Affordability
- Health services
- Public transport
- School education
- Road congestion
- Unemployment
- Recycling
- Security
- Social mobility
- Fulfilling employment
- Air pollution
- Green spaces
- Corruption
- Citizen engagement
- Food security
- Social inclusion
- Social protection
- Housing affordability
- Safety
- Employment security
- ICT
- Mobility
- Travel time
- Travel cost
- Traffic congestion
- Car-sharing Apps
- Apps that direct you to an available parking space
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- Bicycle hiring
- Online scheduling and ticket sales
- The city provides information on traffic congestion through mobile phones
- The proportion of responses per area, the more urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem
- You feel the availability of online information has increased your trust in authorities
- You are willing to concede personal data in order to improve traffic congestion
- You are comfortable with face recognition technologies to lower crime
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions) - 77.4
- The proportion of those who agree or strongly agree with the statement - 56.1
- The proportion of respondents who chose the Priority Area - 0% 20% 40% 60% 80% 100%

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory
- Car-sharing Apps
- Apps that direct you to an available parking space
- Bicycle sharing
- Bicycle hiring
- Online scheduling and ticket sales
- The city provides information on traffic congestion through mobile phones
- The proportion of responses per area, the more urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

Opportunities (Work & School)
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome
- Online access to job listings has made it easier to find work
- If skills are taught well in schools
- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times
- The proportion of responses per area, the more urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.
Online services provided by the city has made it easier to start a new business.

Free public wifi has improved access to city services.

A website or App allows residents to effectively monitor air pollution.

Processing Identification Documents online has reduced waiting times.

Information on local government decisions are easily accessible.

Online public access to city finances has reduced corruption.

Corruption of city officials is not an issue of concern.

An online platform where residents can propose ideas has improved city life.

Residents contribute to decision making of local government.

Most children have access to a good school.

Employment finding services are readily available.

Most children have access to a good school.

Online public access to city finances has reduced corruption.

Corruption of city officials is not an issue of concern.

An online platform where residents can propose ideas has improved city life.

Residents contribute to decision making of local government.

Most children have access to a good school.

Employment finding services are readily available.

Most children have access to a good school.

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Most children have access to a good school.

Employment finding services are readily available.

Most children have access to a good school.

Online public access to city finances has reduced corruption.

Corruption of city officials is not an issue of concern.

An online platform where residents can propose ideas has improved city life.

Residents contribute to decision making of local government.

Most children have access to a good school.

Employment finding services are readily available.
Health & Safety

Basic sanitation meets the needs of the poorest areas: 59.4%
Recycling services are satisfactory: 66.8%
Air pollution is not a problem: 40.1%
Medical services provision is satisfactory: 33.9%
Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 50.1%

Mobility

Traffic congestion is not a problem: 23.5%
Public transport is satisfactory: 45.1%

Activities

Green spaces are satisfactory: 66.2%
Cultural activities (shows, bars, and museums) are satisfactory: 77.5%

Opportunities (Work & School)

Employment finding services are readily available: 61.9%
Most children have access to a good school: 68.8%
Lifelong learning opportunities are provided by local institutions: 64.6%
Businesses are creating new jobs: 54.8%
Minorities feel welcome: 66.5%

Governance

Information on local government decisions are easily accessible: 56.2%
Corruption of city officials is not an issue of concern: 44.0%
Residents contribute to decision making of local government: 42.3%
Residents provide feedback on local government projects: 52.0%

Attitudes

You are willing to concede personal data in order to improve traffic congestion: 52.1%
You are comfortable with face recognition technologies to lower crime: 69.9%
You feel the availability of online information has increased your trust in authorities: 74.4%

Priority Areas

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of respondents per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

Cardiff

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.920</td>
<td>0.932</td>
<td>0.924</td>
<td>0.929</td>
<td>+0.005</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>81.2</td>
<td>81.3</td>
<td>80.4</td>
<td>80.7</td>
<td>+0.3</td>
</tr>
<tr>
<td>Expected years of schooling</td>
<td>17.4</td>
<td>17.5</td>
<td>17.3</td>
<td>17.3</td>
<td>+0.0</td>
</tr>
<tr>
<td>Mean years of schooling</td>
<td>13.0</td>
<td>13.2</td>
<td>13.4</td>
<td>13.4</td>
<td>+0.0</td>
</tr>
<tr>
<td>GNI per capita (PPP $)</td>
<td>39,507</td>
<td>46,071</td>
<td>42,375</td>
<td>45,225</td>
<td>+2,850</td>
</tr>
</tbody>
</table>

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**Note:**
- **Health & Safety**
  - Basic sanitation meets the needs of the poorest areas: 59.4%
  - Recycling services are satisfactory: 66.8%
  - Air pollution is not a problem: 40.1%
  - Medical services provision is satisfactory: 33.9%
  - Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 50.1%

**Mobility**
- Traffic congestion is not a problem: 23.5%
- Public transport is satisfactory: 45.1%

**Activities**
- Green spaces are satisfactory: 66.2%
- Cultural activities (shows, bars, and museums) are satisfactory: 77.5%

**Opportunities (Work & School)**
- Employment finding services are readily available: 61.9%
- Most children have access to a good school: 68.8%
- Lifelong learning opportunities are provided by local institutions: 64.6%
- Businesses are creating new jobs: 54.8%
- Minorities feel welcome: 66.5%

**Governance**
- Information on local government decisions are easily accessible: 56.2%
- Corruption of city officials is not an issue of concern: 44.0%
- Residents contribute to decision making of local government: 42.3%
- Residents provide feedback on local government projects: 52.0%

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**Cardiff Smart City Rating**

- **BACKGROUND INFORMATION**
  - City: Population 497,646; HDI 0.868
  - **2018**: Population 497,646; HDI 0.868
  - **2019**: Population 497,646; HDI 0.868
  - **2020**: Population 497,646; HDI 0.868
  - **2021**: Population 497,646; HDI 0.868

- **ATTITUDES**
  - The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
  - You feel the availability of online information has increased your trust in authorities

- **SMART CITY RANKING**
  - **2018**: Population 497,646; HDI 0.868
  - **2019**: Population 497,646; HDI 0.868
  - **2020**: Population 497,646; HDI 0.868
  - **2021**: Population 497,646; HDI 0.868

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**Smart City Index 2021**

- **Background Information**
  - **City**: Population HDI (Eurostat) 497,646; HDI 0.868

- **Health & Safety**
  - Online reporting of city maintenance problems provides a speedy solution: 39.2%
  - A website or App allows residents to easily pay away unamted items: 61.5%
  - Free public wifi has improved access to city services: 62.9%
  - CCTV cameras has made residents feel safer: 59.7%
  - A website or App allows residents to effectively monitor air pollution: 31.5%
  - Arranging medical appointments online has improved access: 47.9%

- **Mobility**
  - Car-sharing Apps reduced congestion: 31.0%
  - Apps that direct you to an available parking space has reduced journey time: 32.5%
  - Public transport is satisfactory: 42.9%
  - Online scheduling and ticket sales has made public transport easier to use: 62.0%
  - The city provides information on traffic congestion through mobile phones: 40.1%

- **Activities**
  - Online purchasing of tickets to shows and museums has made it easier to attend: 77.5%

- **Opportunities (Work & School)**
  - Online job listings makes it easier to find work: 70.6%
  - IT skills are taught well in schools: 58.5%
  - Online services provided by the city has made it easier to start a new business: 46.1%
  - The current internet speed and reliability meet connectivity needs: 67.6%

- **Governance**
  - Online public access to city finances has reduced corruption: 37.0%
  - Online voting has increased participation: 54.2%
  - An online platform where residents can propose ideas has improved city life: 41.0%
  - Processing Identification Documents online has reduced waiting times: 48.7%
Online services provided by the city have made it easier to start a new business. Mobility: Bicycle hiring has reduced congestion. Public transport is satisfactory. Activities: Online purchasing of tickets to shows and museums has made it easier to attend. Technologies: Online public access to city finances has reduced corruption.
Online services provided by the city have made it easier to start a new business.

Mobility
- IT skills are taught well in schools.
- Free public wifi has improved access to city services.

Health & Safety
- You feel the availability of online information has increased your trust in authorities.
- You are comfortable with face recognition technologies to lower crime.

Opportunities (Work & School)
- You are more likely to agree with the statement that you are willing to concede personal data in order to improve traffic congestion.
- The proportion of your day-to-day payment transactions that are non-cash (in % of transactions) is shown.

STRUCTURES
- The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A higher percentage of responses per area, the more urgent for their city.
- The right-hand, light blue section shows the Priority, i.e. the proportion of those respondents who perceived said area as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the higher the priority for the city.

TECHNOLOGIES
- The blue bars show the results of the survey, i.e. the proportion of those respondents who agreed or strongly agreed with the statement.
- The orange bars show the results of the survey, i.e. the proportion of those respondents who disagreed or strongly disagreed with the statement.

Health & Safety
- Online reporting of city maintenance problems provides a speedy solution.
- A website or app allows residents to effectively monitor air pollution.

Opportunities (Work & School)
- Online access to job listings has made it easier to find work.
- The city provides information on traffic congestion through mobile phones.

Activities
- Online purchasing of tickets to shows and museums has made it easier to attend.
- The current internet speed and reliability mean that connectivity works.
Online services provided by the city has made it easier to start a new business.

Free public wifi has improved access to city services.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

A website or App allows residents to effectively monitor air pollution.

CCTV cameras has made residents feel safer.

Residents provide feedback on local government projects.

Processing Identification Documents online has reduced waiting times.

On average, the city has 36.2% of residents who are willing to concede personal data in order to improve traffic congestion.

You feel the availability of online information has increased your trust in authorities.

Most children have access to a good school.

Employment finding services are readily available.

A website or App allows residents to effectively monitor air pollution.

The city provides information on traffic congestion through mobile phones.

Online purchasing of tickets to shows and museums has made it easier to attend.

Online public access to city finances has reduced corruption.

The city provides information on traffic congestion through mobile phones.
Copenhagen

BACKGROUND INFORMATION

City
Population: 1,855,084
HDI: 0.967
(Growth)

Country
2018 2019 2020 2021 1yr change
HDI 0.930 0.940 0.947 0.948 +0.001
Life expectancy at birth 80.8 80.9 81.6 81.4 -0.2
Expected years of schooling 19.1 19.0 18.0 18.0 -0.0
Mean years of schooling 12.6 12.6 13.0 13.0 0.0
GNI per capita (PPP $) 48,836 58,662 58,144 60,365 +2,221

Health & Safety
Basic sanitation meets the needs of the poorest areas
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem
Corruption of city officials is not an issue of concern

Mobility
Traffic congestion is not a problem
Public transport is satisfactory

Activities
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance
Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government

Health & Safety
Drone reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
CCTV cameras have made residents feel safer
Arranging medical appointments online has improved access

Mobility
Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
The city provides information on traffic congestion through mobile phones

Activities
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
Online public access to city finances has reduced corruption
Drone video has increased participation
An online platform where residents can propose ideas has improved city life
Processing identification Documents online has reduced waiting times

ATTITUDES
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

TECHNOLOGIES

PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

All ratings range from AAA to D

0% 20% 40% 60% 80% 100%

Score

% of respondents who chose the Priority Area

% of respondents who agree or strongly agree with the statement

Score

0% 20% 40% 60% 80% 100%

% of respondents

0% 20% 40% 60% 80% 100%

% of respondents

0% 20% 40% 60% 80% 100%

% of respondents
Delhi

**BACKGROUND INFORMATION**

Population: 32,065,760
HDI: 0.730
(UN World Urbanisation Prospects 2022 estimate)

**ATTITUDES**

You are willing to concede personal data in order to improve traffic congestion

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

**SMART CITY RATING**

105
Out of 141
94 out of 118 in 2021

**SMART CITY RANKING**

105

**PRIORITY AREAS**

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

**Health & Safety**

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

**Mobility**

Traffic congestion is not a problem
Public transport is satisfactory

**Activities**

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

**Opportunities (Work & School)**

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

**Governance**

Information on local government decisions are easily accessible
Corruption of city official is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

**Health & Safety**

Drone reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
CCTV cameras has made residents feel safer
A website or App allows residents to effectively monitor air pollution

**Mobility**

Car-sharing Apps have reduced congestion
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

**Activities**

Online purchasing of tickets to shows and museums has made it easier to attend

**Opportunities (Work & School)**

Drone access to job listings has made it easier to find work
IT skills are taught well in schools
Online access to job listings has made it easier to find work
The current internet speed and reliability meet connectivity needs

**Governance**

Online public access to city finances has reduced corruption
Drone voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times
Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Health & Safety
- Drone reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- Free public wifi has improved access to city services
- CCTV cameras have made residents feel safer

Mobility
- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Bicycle hiring has reduced congestion

Activities
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
- Online access to job listings has made it easier to find work
- More people work from home
- Online voting has increased participation

Governance
- Online public access to city finances has reduced corruption
- Online platform where residents can propose ideas has improved city life

- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
- You feel the availability of online information has increased your trust in authorities
- You are comfortable with face recognition technologies to lower crime
- You are willing to concede personal data in order to improve traffic congestion

SMART CITY RATING
- BBB in 2021

BACKGROUND INFORMATION
- City
  - Population: 715,522
  - HDI: 0.942

PRIORITY AREAS
- From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

ATTITUDES
- You are willing to concede personal data in order to improve traffic congestion
- You are comfortable with face recognition technologies to lower crime
- You feel the availability of online information has increased your trust in authorities
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
- The city provides information on traffic congestion through mobile phones
- Online scheduling and ticket sales has made public transport easier to use
- Bicycle hiring has reduced congestion
Free public wifi has improved access to city services.

Opportunities (Work & School)

- IT skills are taught well in schools.
- Online services provided by the city have made it easier to start a new business.

CITY RATING

- All ratings range from AAA to D.
- The ratings for Doha are: 2018 - 0.853, 2019 - 0.859, 2020 - 0.854, 2021 - 0.855.

CITY RATING

- Mean years of schooling: 8.5 in 2018, 8.6 in 2019, 8.7 in 2020, 8.8 in 2021.
- HDI: 0.855 in 2018, 0.853 in 2019, 0.854 in 2020, 0.855 in 2021.

ATTITUDES

- You are willing to share personal data in order to improve traffic congestion.
- You feel the availability of online information has increased your trust in authorities.
- The proportion of your day-to-day payment transactions that are non-cash.

PRIORITY AREAS

- Health & Safety: Drone reporting of city maintenance problems provides a speedy solution.
- Opportunities (Work & School): Online job listings make it easier to find work.

TECHNOLOGIES

- Health & Safety: Drone reporting of city maintenance problems provides a speedy solution.
- Opportunities (Work & School): Online job listings make it easier to find work.

CITY RATING

- Mean years of schooling: 8.5 in 2018, 8.6 in 2019, 8.7 in 2020, 8.8 in 2021.
- HDI: 0.855 in 2018, 0.853 in 2019, 0.854 in 2020, 0.855 in 2021.
**Health & Safety**
- Basic sanitation meets the needs of the poorest areas: 81.0
- Recycling services are satisfactory: 80.9
- Public safety is not a problem: 76.1
- Air pollution is not a problem: 60.7
- Medical services provision is satisfactory: 83.4
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 52.3

**Mobility**
- Traffic congestion is not a problem: 48.9
- Public transport is satisfactory: 80.3

**Activities**
- Green spaces are satisfactory: 80.6
- Cultural activities (shows, bars, and museums) are satisfactory: 85.6

**Opportunities (Work & School)**
- Employment finding services are readily available: 66.7
- Most children have access to a good school: 73.5
- Lifelong learning opportunities are provided by local institutions: 66.6
- Businesses are creating new jobs: 66.8
- Minorities feel welcome: 79.5

**Governance**
- Information on local government decisions are easily accessible: 87.7
- Corruption of city officials is not an issue of concern: 75.9
- Residents contribute to decision making of local government: 57.7
- Residents provide feedback on local government projects: 67.3

**Smart City Rating**
- **17** out of 118 in 2021
- **80.3** out of 141 in 2021

**Country**
- **Population (UN World Urbanisation Prospects 2022 estimate)**
- **HDI**
- **Mean years of schooling**
- **GNI per capita (PPP $)**

**Background Information**
- **City**
- **Population (UN World Urbanisation Prospects 2022 estimate)**
- **HDI**
- **Mean years of schooling**
- **GNI per capita (PPP $)**

**Technologies**
- Online purchasing of tickets to shows and museums has made it easier to attend: 88.4

**Opportunities (Work & School)**
- Online access to job listings has made it easier to find work: 76.5
- Skills are taught well in schools: 72.8
- Online services provided by the city has made it easier to start a new business: 80.1
- The current internet speed and reliability meet connectivity needs: 83.5

**Governance**
- Online public access to city finances has reduced corruption: 66.5
- Online voting has increased participation: 58.3
- An online platform where residents can propose ideas has improved city life: 68.7
- Processing Identification Documents online has reduced waiting times: 82.6

**Health & Safety**
- Online reporting of city maintenance problems provides a speedy solution: 74.8
- A website or App allows residents to easily find unserviced items: 75.8
- Free public wifi has improved access to city services: 76.3
- CCTV cameras has made residents feel safer: 86.7
- A website or App allows residents to effectively monitor air pollution: 56.2
- Arranging medical appointments online has improved access: 84.2

**Mobility**
- Car-sharing Apps have reduced congestion: 62.9
- Apps that direct you to an available parking space have reduced journey time: 65.7
- Bicycle hiring has reduced congestion: 63.9
- Online scheduling and ticket sales has made public transport easier to use: 77.4
- The city provides information on traffic congestion through mobile phones: 78.4

**Activities**
- Online purchasing of tickets to shows and museums has made it easier to attend: 88.4

**Opportunities (Work & School)**
- Online access to job listings has made it easier to find work: 76.5
- Skills are taught well in schools: 72.8
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**Background Information**
- **Country**
- **Population (UN World Urbanisation Prospects 2022 estimate)**
- **HDI**
- **Mean years of schooling**
- **GNI per capita (PPP $)**

**Technologies**
- Online purchasing of tickets to shows and museums has made it easier to attend: 88.4

**Opportunities (Work & School)**
- Online access to job listings has made it easier to find work: 76.5
- Skills are taught well in schools: 72.8
- Online services provided by the city has made it easier to start a new business: 80.1
- The current internet speed and reliability meet connectivity needs: 83.5

**Governance**
- Online public access to city finances has reduced corruption: 66.5
- Online voting has increased participation: 58.3
- An online platform where residents can propose ideas has improved city life: 68.7
- Processing Identification Documents online has reduced waiting times: 82.6
Online services provided by the city has made it easier to start a new business.

Opportunities (Work & School)
- Most children have access to a good school (65.3)
- Lifelong learning opportunities are provided by local institutions (60.2)
- Businesses are creating new jobs (61.1)
- Employment finding services are readily available (67.0)

Health & Safety
- Basic sanitation meets the needs of the poorest areas (55.1)
- Public safety is not a problem (31.4)
- Air pollution is not a problem (39.2)
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem (36.0)

Goverance
- Information on local government decisions are easily accessible (51.3)
- Corruption of city officials is not an issue of concern (33.1)
- Residents contribute to decision making of local government (37.2)
- Residents provide feedback on local government projects (51.1)

Activities
- Green spaces are satisfactory (55.7)
- Cultural activities (shows, bars, and museums) are satisfactory (68.4)

Technology
- Online voting has increased participation (30.0)
- Online public access to city finances has reduced corruption (33.0)
- An online platform where residents can propose ideas has improved city life (37.2)
- Online purchasing of tickets to shows and museums has made it easier to attend (39.2)

SMART CITY RATING
- Dublin
- City Rating: 63 out of 141
- BBB in 2021
- Smart City Index 2021
- Trouble areas (Explained):
  - Water and Sanitation
  - Basic Amenities

The city provides information on traffic congestion through mobile phones (72.3)
Bicycle hiring has reduced congestion (65.3)
Car-sharing Apps have reduced congestion (57.4)
Online scheduling and ticket sales has made public transport easier to use (60.6)
The city provides information on traffic congestion through mobile phones (51.3)

You feel the availability of online information has increased your trust in authorities (20.2%)
You are comfortable with face recognition technologies to lower crime (27.8%)
You are willing to concede personal data in order to improve traffic congestion (17.7%)
You feel the availability of online information has increased your trust in authorities (17.7%)

Health & Safety
- Online reporting of city maintenance problems provides a speedy solution (35.0)
- A website or App allows residents to easily give away unwanted items (63.2)
- Free public and has improved access to city services (50.8)
- CCTV cameras has made residents feel safer (47.0)
- A website or App allows residents to effectively monitor air pollution (25.7)
- Arranging medical appointments online has improved access (45.8)

Mobility
- Car-sharing Apps have reduced congestion (28.0)
- Apps that direct you to an available parking space have reduced journey time (34.3)
- Bicycle hiring has reduced congestion (56.4)
- Online scheduling and ticket sales has made public transport easier to use (60.6)
- Car-sharing Apps has reduced journey time (51.3)

Activities
- Online purchasing of tickets to shows and museums has made it easier to attend (79.1)
- Online access to job listings made it easier to find work (72.3)
- Online public access to city finances has reduced corruption (31.0)
- Online voting has increased participation (38.0)
- An online platform where residents can propose ideas has improved city life (38.6)
- Processing Identification Documents online has reduced waiting times (61.9)

All ratings range from AAA to D
Health & Safety
Free public wifi has improved access to city services
IT skills are taught well in schools

Mobility
Online services provided by the city has made it easier to start a new business

Governance
Activities
Opportunities (Work & School)
Emergence of new business is facilitated
Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Opportunities (Work & School)
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Opportunities (Work & School)
Emergence of new business is facilitated
Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome
Online services provided by the city has made it easier to start a new business (56.6)
Free public wifi has improved access to city services (46.5)
Finding housing with rent equal to 30% or less of a monthly salary is not a problem (59.6)
Arranging medical appointments online has improved access (53.8)
Medical services provision is satisfactory (55.0)
A website or App allows residents to effectively monitor air pollution (56.4)
Air pollution is not a problem (50.5)
CCTV cameras has made residents feel safer (48.7)
Online voting has increased participation (45.8)
Corruption of city officials is not an issue of concern (45.8)
Information on local government decisions are easily accessible (47.2)
Online public access to city finances has reduced corruption (46.5)
Processing Identification Documents online has reduced waiting time (46.5)

Health & Safety
- Basic sanitation meets the needs of the poorest areas (59.0)
- Recycling services are satisfactory (56.4)
- Air pollution is not a problem (50.5)
- Medical services provision is satisfactory (55.0)
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem (59.6)

Mobility
- Traffic congestion is not a problem (31.5)
- Public transport is satisfactory (56.6)

Activities
- Green spaces are satisfactory (79.0)
- Cultural activities (shows, bars, and museums) are satisfactory (77.8)

Opportunities (Work & School)
- Employment finding services are readily available (66.0)
- Most children have access to a good school (70.4)
- Lifelong learning opportunities are provided by local institutions (69.9)
- Businesses are creating new jobs (68.5)
- Minorities feel welcome (58.9)

Governance
- Information on local government decisions are easily accessible (63.8)
- Corruption of city officials is not an issue of concern (52.6)
- Residents contribute to decision making of local government (46.5)
- Residents provide feedback on local government projects (51.1)

GNI per capita (PPP $)
Mean years of schooling
Life expectancy at birth
HDI
Country  Population  HDI  Mean years of schooling  Life expectancy at birth  HDI
2018  0.937  82.7  83.0  0.947  0.937
2019  0.945  82.8  83.0  0.947  0.945
2020  0.942  82.4  83.0  0.942  0.942
2021  0.947  83.0  12.6  0.947  0.947

1 yr change
Score
1 yr change
Score

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
You feel the availability of online information has increased your trust in authorities
You are comfortable with face recognition technologies to lower crime
You are willing to concede personal data in order to improve traffic congestion
Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Online services provided by the city has made it easier to start a new business
Activities (shows, bars, and museums) are satisfactory
Recycling services are satisfactory
Basic sanitation meets the needs of the poorest areas
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
You are comfortable with face recognition technologies to lower crime
You are willing to concede personal data in order to improve traffic congestion

SMART CITY RANKING
141
Out of 141

not out of 118 in 2021

SMART CITY RATING
D
not in 2021

FACTOR RATINGS
D

STRUCTURES
D

TECHNOLOGIES
D

GROUP
4

All ratings range from AAA to D

BACKGROUND INFORMATION
City
Population 3,036,406 HDI 0.722
(UN World Urbanisation Prospects 2022 estimate)

Country 2018 2019 2020 2021 1 yr change
HDI 0.640 0.642 0.635 0.627 -0.008
Life expectancy at birth 72.7 73.1 71.8 69.2 -2.6
Expected years of schooling 10.6 10.6 10.6 10.6 +0.0
Mean years of schooling 5.7 5.7 5.7 5.7 +0.0
GNI per capita (PPP $) 8,289 8,494 8,241 8,723 +482

Health & Safety
Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
Traffic congestion is not a problem
Public transport is satisfactory

Activities
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
Employment finding services are readily available
Most children have access to a good school
Life-long learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance
Information on local government decisions are easily accessible
Corruption of city official is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

PRIORITY AREAS
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of respondents per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

ATTITUDES
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

SMART CITY INDEX 2021
Guatemala City

Score
0 20 40 60 80 100

LEGEND:
Low
Medium
High

Health & Safety
Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public WiFi has increased access to city services
CCTV cameras has made residents feel safer
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Mobility
Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
Online access to job listings has made it easier to find work
IT skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The current internet speed and reliability meet connectivity needs

Governance
Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

Mean years of schooling
Expected years of schooling
Life expectancy at birth
HDI (UN World Urbanisation Prospects 2022 estimate)
Hangzhou

BACKGROUND INFORMATION

City
Population: 8,044,878
HDI: 0.801

(UN World Urbanisation Prospects 2022 estimate)

Country  2018  2019  2020  2021  1 yr change
HDI       0.758  0.761  0.764  0.768  +0.004
Life expectancy at birth  76.7  76.9  78.1  78.2  +0.1
Expected years of schooling  13.9  14.0  14.2  14.2  +0.0
Mean years of schooling  7.9  8.1  7.6  7.6  +0.0
GNI per capita (PPP $)  16,127  16,057  16,201  17,504  +1,303

Health & Safety
Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
Traffic congestion is not a problem
Public transport is satisfactory

Activities
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are readily available
Businesses are creating new jobs
Minorities feel welcome

Governance
Information on local government decisions are easily accessible
Corruption of city official is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Technologies
Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
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Arranging medical appointments online has improved access

Smart City Index 2021

Health & Safety
Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
CCTV cameras have made residents feel safer
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Mobility
Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
Online job listings has made it easier to find work
It skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The current internet speed and reliability meet connectivity needs

Governance
Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

SMART CITY RANKING

70
Out of 114
63 out of 118 in 2021

SMART CITY RATING

CCC
CCC in 2021

FACTOR RATINGS

GROUP 4
All ratings range from AAA to D

STRUCTURES

Score

84.9
79.4
77.2
67.9
81.0
63.3
50.3
72.2
82.8
80.5
81.6
80.0
81.6
76.2
90.7
83.7
83.7
88.1
88.0
89.3
89.3
84.6
80.8
81.1
89.4
74.4
76.7
79.9
82.5
Health & Safety
- Basic sanitation meets the needs of the poorest areas: 72.9
- Recycling services are satisfactory: 66.3
- Public safety is not a problem: 82.8
- Air pollution is not a problem: 31.5
- Medical services provision is satisfactory: 77.0
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 58.1

Mobility
- Traffic congestion is not a problem: 27.0
- Public transport is satisfactory: 54.0

Activities
- Green spaces are satisfactory: 66.4
- Cultural activities (shows, bars, and museums) are satisfactory: 77.7

Opportunities (Work & School)
- Employment finding services are readily available: 80.8
- Most children have access to a good school: 83.7
- Life-long learning opportunities are provided by local institutions: 67.1
- Businesses are creating new jobs: 83.1
- Minorities feel welcome: 74.9

Governance
- Information on local government decisions are easily accessible: 79.1
- Corruption of city officials is not an issue of concern: 38.3
- Residents contribute to decision-making of local government: 74.2
- Residents provide feedback on local government projects: 74.2

Online services provided by the city have made it easier to start a new business, to arrange medical appointments online, to monitor air pollution, to monitor public safety, and to propose ideas that improve city life. 

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both corresponding areas explained) means that these areas may benefit from close observation.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions):
- 0% of transactions
- 20% of transactions
- 40% of transactions
- 60% of transactions
- 80% of transactions
- 100% of transactions

You are comfortable with face recognition technologies to lower crime: 74.0
- You are willing to concede personal data in order to improve traffic congestion: 78.2
- You are willing to concede personal data in order to improve traffic congestion: 76.7
- You are willing to concede personal data in order to improve traffic congestion: 70.3

The city provides information on traffic congestion through mobile phones: 78.2
- Apps that direct you to an available parking space have reduced journey time: 57.3
- Bicycle sharing has reduced congestion: 70.3

Online public access to city finances has reduced corruption: 73.0
- Residents contribute to decision making of local government: 74.2
- Residents provide feedback on local government projects: 74.2

Information on local government decisions are easily accessible: 79.1
- Corruption of city officials is not an issue of concern: 38.3
- Residents contribute to decision-making of local government: 74.2
- Residents provide feedback on local government projects: 74.2
Hanover

**BACKGROUND INFORMATION**

**City**

- **Population (Eurstat)**: 8,003,421
- **HDI**: 0.930

**Country**

<table>
<thead>
<tr>
<th>Year</th>
<th>HDI</th>
<th>Life expectancy at birth</th>
<th>Mean years of schooling</th>
<th>GNI per capita (PPP $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>0.944</td>
<td>81.2</td>
<td>17.0</td>
<td>46,946</td>
</tr>
<tr>
<td>2019</td>
<td>0.947</td>
<td>81.3</td>
<td>17.0</td>
<td>55,314</td>
</tr>
<tr>
<td>2018</td>
<td>0.939</td>
<td>81.2</td>
<td>17.0</td>
<td>45,524</td>
</tr>
</tbody>
</table>

**1 yr change**

- HDI: -0.002
- Life expectancy at birth: -0.5
- Mean years of schooling: 0.0
- GNI per capita (PPP $): +1,457

**ATTITUDES**

- You are willing to concede personal data in order to improve traffic congestion: 47.3%
- You are comfortable with face recognition technologies to lower crime: 53.9%
- You feel the availability of online information has increased your trust in authorities: 45.0%
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 42.9%
- You are willing to share your personal data to improve air pollution: 47.8%
- You are comfortable with face recognition technologies to lower crime: 42.9%

**PRIORITY AREAS**

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

**TECHNOLOGIES**

- **Health & Safety**
  - Online reporting of city maintenance problems provides a speedy solution: 49.3%
  - A website or App allows residents to easily access unmet services: 49.3%
  - Free public WiFi has improved access to city services: 48.8%
  - CCTV cameras have made residents feel safer: 43.8%
  - A website or App allows residents to effectively monitor air pollution: 33.6%
  - Arranging medical appointments online has improved access: 52.9%

- **Mobility**
  - Car-sharing Apps have reduced congestion: 39.4%
  - Apps that direct you to an available parking space have reduced journey time: 39.2%
  - Bicycle sharing has reduced congestion: 43.1%
  - Online scheduling and ticket sales have made public transport easier to use: 67.2%
  - The city provides information on traffic congestion through mobile phones: 45.2%

- **Activities**
  - Online purchasing of tickets to shows and museums has made it easier to attend: 70.3%

- **Opportunities (Work & School)**
  - Online access to job listings has made it easier to find work: 64.3%
  - IT skills are taught well in schools: 44.4%
  - Online services provided by the city has made it easier to start a new business: 42.1%
  - The current internet speed and reliability meet connectivity needs: 56.0%

- **Government**
  - Online public access to city finances has reduced corruption: 37.2%
  - Online voting has increased participation: 47.0%
  - An online platform for residents to propose ideas has improved city life: 40.5%
  - Processing information documents online has reduced waiting times: 47.5%
Free public wifi has improved access to city services. Online services provided by the city have made it easier to start a new business.

The governance score in 2021 was 78.3, an increase of 0.01 from 2019's 78.2. The improvement was driven by increased participation in online voting, a reduction in the perceived corruption of city officials, and increased public access to city finances.

In terms of health and safety, Helsinki benefits from close observation. The city provides information on traffic congestion through mobile phones, and online scheduling and ticket sales have made public transport easier to use.

Bicycle hiring has reduced congestion, and the city provides information on traffic congestion through mobile phones. Online purchasing of tickets to shows and museums has made it easier to attend cultural activities.

The proportion of your day-to-day payment transactions that are non-cash (7.5% of transactions) has increased your trust in authorities, and you feel comfortable with face recognition technologies to lower crime. You are willing to reduce your daily travel time by 5 minutes if it means your carbon footprint is cut in half.

The city has developed apps that direct you to available parking spaces, making journey times shorter. The city provides information on traffic congestion through mobile phones, and online scheduling and ticket sales have made public transport easier to use.

Bicycle hiring has reduced congestion, and the city provides information on traffic congestion through mobile phones. Online purchasing of tickets to shows and museums has made it easier to attend cultural activities.

The proportion of your day-to-day payment transactions that are non-cash (7.5% of transactions) has increased your trust in authorities, and you feel comfortable with face recognition technologies to lower crime. You are willing to reduce your daily travel time by 5 minutes if it means your carbon footprint is cut in half.
Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Air pollution is not a problem
- Public safety is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Technologies
- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times
Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Health & Safety

Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
A website or App allows residents to effectively monitor air pollution
Public transport is satisfactory

Mobility

Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities

Online purchasing of tickets to shows and museums has made it easier to attend
Online access to job listings has made it easier to find work
It skills are taught well in schools
Online public access to city finances has reduced corruption
Online voting has increased participation

Opportunities (Work & School)

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

Governance

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times
Health & Safety
- Basic sanitation meets the needs of the poorest areas: 57.8
- Recycling services are satisfactory: 56.3
- Public safety is not a problem: 41.3
- Air pollution is not a problem: 37.8
- Medical services provision is satisfactory: 57.9

Mobility
- Traffic congestion is not a problem: 43.3
- Public transport is satisfactory: 56.5

Activities
- Green spaces are satisfactory: 82.1
- Cultural activities (shows, bars, and museums) are satisfactory: 73.5

Opportunities (Work & School)
- Employment finding services are readily available: 46.8
- Most children have access to a good school: 59.4
- Lifelong learning opportunities are provided by local institutions: 52.8
- Businesses are creating new jobs: 56.5
- Minorities feel welcome: 65.4

Governance
- Information on local government decisions are easily accessible: 57.9
- Corruption of city officials is not an issue of concern: 31.1
- Residents contribute to decision-making of local government: 38.8
- Residents provide feedback on local government projects: 43.6

Health & Safety
- Online reporting of city maintenance problems provides a speedy solution: 58.1
- A website or App allows residents to easily give away unwanted items: 56.4
- Free public wifi has improved access to city services: 41.3
- CCT cameras have made residents feel safer: 67.8
- A website or App allows residents to effectively monitor air pollution: 43.6
- Arranging medical appointments online has improved access: 64.7

Mobility
- Car-sharing Apps have reduced congestion: 64.3
- Apps that direct you to an available parking space have reduced journey time: 54.9
- Bicycle hiring has reduced congestion: 44.9
- Online scheduling and ticket sales has made public transport easier to use: 73.1
- The city provides information on traffic congestion through mobile phones: 61.6

Activities
- Online purchasing of tickets to shows and museums has made it easier to attend: 65.3

Opportunities (Work & School)
- Online access to job listings has made it easier to find work: 72.9
- IT skills are taught well in schools: 61.9
- Online services provided by the city has made it easier to start a new business: 64.2
- The current internet speed and reliability meet connectivity needs: 75.4

Governance
- Online public access to city finances has reduced corruption: 51.7
- Citizen engagement has increased participation: 56.7
- An online platform where residents can propose ideas has improved city life: 56.7
- Processing Identification Documents online has reduced waiting times: 74.9

Attitudes
- You are willing to concede personal data in order to improve traffic congestion: 78.3
- You are comfortable with face recognition technologies to lower crime: 75.7
- You feel the availability of online information has increased your trust in authorities: 67.5
- The proportion of your day-to-day payment transactions that are non-cash: 7.7

Legend:
- 0% 20% 40% 60% 80% 100%
# Health & Safety

Online services provided by the city have made it easier to start a new business.

Free public wifi has improved access to city services.

# CITY RATING

All ratings range from AAA to D.

# OPPORTUNITIES (WORK & SCHOOL)

- Minorities feel welcome
- Businesses are creating new jobs
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem
- Arranging medical appointments online has improved access to medical services provision
- A website or app allows residents to effectively monitor air pollution
- Residents provide feedback on local government projects
- Processing identification documents online has reduced waiting times
- An online platform where residents can propose ideas has improved city life

# GNI PER CAPITA (PPP $)

<table>
<thead>
<tr>
<th>Year</th>
<th>GNI Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>15,462,452</td>
</tr>
<tr>
<td>2019</td>
<td>17,072,452</td>
</tr>
<tr>
<td>2020</td>
<td>18,682,452</td>
</tr>
<tr>
<td>2021</td>
<td>20,292,452</td>
</tr>
</tbody>
</table>

# FACTOR RATINGS

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; Safety</td>
<td>CC</td>
</tr>
<tr>
<td>Mobility</td>
<td>CC</td>
</tr>
<tr>
<td>Activities</td>
<td>CC</td>
</tr>
<tr>
<td>Opportunities</td>
<td>CC</td>
</tr>
<tr>
<td>Governance</td>
<td>CC</td>
</tr>
</tbody>
</table>

# STRENGTHS

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem
- Traffic congestion is not a problem
- Public transport is satisfactory
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects
- Online public access to city finances has reduced corruption
- Online voting has increased participation
- The current internet speed and reliability meet connectivity needs
- A website or app allows residents to effectively monitor air pollution
- CCTV cameras have made residents feel safer
- Residents provide feedback on local government projects
- Processing identification documents online has reduced waiting times
- The city provides information on traffic congestion through mobile phones
- Online purchasing of tickets to shows and museums has made it easier to attend
- Online access to job listings has made it easier to find work
- IT skills are taught well in schools
- Online services provided by the city have made it easier to start a new business
- The current internet speed and reliability meet connectivity needs

# TECHNICAL CAPABILITIES

- Online reporting of city maintenance problems provides a speedy solution
- A website or app allows residents to easily give away unwanted items
- Free public wifi has improved access to city services
- CCTV cameras have made residents feel safer
- A website or app allows residents to effectively monitor air pollution
- Arranging medical appointments online has improved access
- Car-sharing apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Bicycle-hiring has reduced congestion
- Online scheduling and ticket sales have made public transport easier to use
- The city provides information on traffic congestion through mobile phones
- Online purchasing of tickets to shows and museums has made it easier to attend
- Online access to job listings has made it easier to find work
- IT skills are taught well in schools
- Online services provided by the city have made it easier to start a new business
- The current internet speed and reliability meet connectivity needs

# LEGEND

- Not satisfied
- Satisfied
- Very satisfied
- Strong alignment
- Strong dissatisfaction
- Neutral
### Health & Safety
- Basic sanitation meets the needs of the poorest areas: **61.6**
- Recycling services are satisfactory: **59.1**
- Public safety is not a problem: **44.1**
- Air pollution is not a problem: **23.1**
- Medical services provision is satisfactory: **67.4**
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: **50.6**

### Mobility
- Traffic congestion is not a problem: **18.2**
- Public transport is satisfactory: **60.9**

### Activities
- Green spaces are satisfactory: **63.8**
- Cultural activities (shows, bars, and museums) are satisfactory: **72.6**

### Opportunities (Work & School)
- Employment finding services are readily available: **62.9**
- Most children have access to a good school: **67.0**
- Lifelong learning opportunities are provided by local institutions: **58.2**
- Businesses are creating new jobs: **60.8**
- Minorities feel welcome: **66.3**

### Governance
- Information on local government decisions are easily accessible: **70.4**
- Corruption of city officials is not an issue of concern: **63.2**
- Residents contribute to decision-making of local government: **63.1**
- Residents provide feedback on local government projects: **63.1**

### Technologies
- Online reporting of city maintenance problems provides a speedy solution: **65.3**
- A website or App allows residents to easily give away unwanted items: **65.5**
- Free public wifi has improved access to city services: **70.4**
- CCTV cameras have made residents feel safer: **76.2**
- A website or App allows residents to effectively monitor air pollution: **62.8**
- Arranging medical appointments online has improved access: **79.5**
- Online scheduling and ticket sales has made public transport easier to use: **81.6**
- The city provides information on traffic congestion through mobile phones: **75.5**
- Online purchasing of tickets to shows and museums has made it easier to attend: **83.9**

### Attitudes
- You are willing to concede personal data in order to improve traffic congestion: **68.2%**
- You are comfortable with face recognition technologies to lower crime: **77.0%**
- You feel the availability of online information has increased your trust in authorities: **65.2%**
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions): **0% 20% 40% 60% 80% 100%**

### Smart City Index 2021
- **Country**: 0.759 2018, 0.718 2019, 0.709 2020, 0.705 2021, 1 yr change: -0.004
- **Population HDI**: 12.9 2018, 68.8 2019, 67.6 2020, 65.2 2021
- **GNI per capita (PPP $)**: 8.0 2018, 13.6 2019, 13.8 2020, 14.0 2021

### Governance
- Online public access to city finances has reduced corruption: **53.8**
- Online voting has increased participation: **64.7**
- An online platform where residents can propose ideas has improved city life: **69.5**
- Processing Identification Documents online has reduced waiting times: **78.3**

### Smart City Ranking
- **Jakarta**
- **Group**: 4
- **Country**: CC in 2021
- **Factor Ratings**: CC
- **Structures**: CC
- **Technologies**: CC
- **Background Information**: 
  - **Population HDI**: 0.759
  - **GNI per capita (PPP $)**: 11,562,088
  - **Expected years of schooling**: 71.5
  - **HDI**: 0.759
  - **UN Data**
- **Smart City Rating**: 102
  - **Out of**: 141
  - **Score**
  - **1 yr change**
  - **100**
  - **80**
  - **60**
  - **40**
  - **20**
  - **0**
**Health & Safety**

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem
- Arranging medical appointments online has improved access
- Medical services provision is satisfactory
- A website or App allows residents to effectively monitor air pollution

**Mobility**

- Traffic congestion is not a problem
- Public transport is satisfactory
- Online scheduling and ticket sales has made public transport easier to use
- Bicycle hiring has reduced congestion

**Activities**

- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

**Opportunities (Work & School)**

- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

**Governance**

- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects
- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life

**GNI per capita (PPP $)**

- 4,780,740

**Mean years of schooling**

- 0.871

**Expected years of schooling**

- 77.2

**Life expectancy at birth**

- 69.6

**HDI**

- 0.871

**Country**

- Jeddah

**Population HDI**

- 4,780,740

**Health & Safety**

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
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Mobility

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Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Expected years of schooling: 17.0
Mean years of schooling: 14.1
GNI per capita (PPP $): 46,946
Population HDI: 0.939
Health & Safety opportunities (Work & School)

IT skills are taught well in schools in 2021.

Technologies

Free public wifi has improved access to city services.

Mobility

Governance

Online voting has increased participation.

Values explained) means that these areas may benefit from closer observation.

ACTITUDES

You feel the availability of online information has increased your trust in authorities.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

PRIORITY AREAS

You are willing to concede personal data in order to improve traffic congestion.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both corresponding area) means that these areas may benefit from closer observation.

PLANNING AND DECISION MAKING

Most children have access to a good school.

Opportunities (Work & School)

You are comfortable with face recognition technologies to lower crime.

The city provides information on traffic congestion through mobile phones.

Activities

Online scheduling and ticket sales have made public transport easier to use.

Opportunities (Work & School)

Online public access to city finances has reduced corruption.

The city provides information on traffic congestion through mobile phones.

Mobility

Online voting has increased participation.

Values explained) means that these areas may benefit from closer observation.

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PLANNING AND DECISION MAKING

Most children have access to a good school.

Opportunities (Work & School)

You are comfortable with face recognition technologies to lower crime.

The city provides information on traffic congestion through mobile phones.

Activities

Online scheduling and ticket sales have made public transport easier to use.

Opportunities (Work & School)

Online public access to city finances has reduced corruption.

The city provides information on traffic congestion through mobile phones.
Online services provided by the city have made it easier to start a new business. Free public wifi has improved access to city services. IT skills are taught well in schools.

Residents provide feedback on local government projects. Processing Identification Documents online has reduced waiting times. Complaints about city officials are not an issue of concern. Online voting has increased participation.

Online access to job listings has made it easier to find work. Online public access to city finances has reduced corruption. Online reporting of city maintenance problems provides a speedy solution. The proportion of your day-to-day payment transactions that are non-cash (% of transactions) You feel the availability of online information has increased your trust in authorities.

Online scheduling and ticket sales has made public transport easier to use. Online voting has increased participation. Online public access to city finances has reduced corruption.

The city provides information on traffic congestion through mobile phones. Online scheduling and ticket sales has made public transport easier to use. Bicycle hiring has reduced congestion.

Processing Identification Documents online has reduced waiting times. Corruption of city officials is not an issue of concern. Online voting has increased participation. An online platform where residents can propose ideas has improved city life.

Residents contribute to the decision making of local government. Residents provide feedback on local government projects. Corruption of city officials is not an issue of concern. An online platform where residents can propose ideas has improved city life.

Processing Identification Documents online has reduced waiting times. Corruption of city officials is not an issue of concern. An online platform where residents can propose ideas has improved city life.

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Processing Identification Documents online has reduced waiting times. Corruption of city officials is not an issue of concern. An online platform where residents can propose ideas has improved city life.
Opportunities (Work & School)
- Most children have access to a good school
- Employment finding services are readily available
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Mobility
- Public transport is satisfactory
- Traffic congestion is not a problem
- Car-sharing Apps have reduced congestion
- Bicycles have reduced congestion
- Online scheduling and ticket sales has made public transport easier to use

Health & Safety
- Onion reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- CCTV cameras have made residents feel safer
- A website or App allows residents to effectively monitor air pollution
- Arranging medical appointments online has improved access

Recycling
- Recycling services are satisfactory
- A website or App allows residents to easily give away unwanted items

Security
- Public safety is not a problem
- The city provides information on traffic congestion through mobile phones
- The city provides information on crime through mobile phones

Corruption
- Corruption of city officials is not an issue of concern
- Online voting has increased participation
- Online platforms where residents can propose ideas has improved city life
- Online public access to city finances has reduced corruption

Public Health
- Basic sanitation meets the needs of the poorest areas
- Online reporting of city maintenance problems provides a speedy solution
- The city provides information on traffic congestion through mobile phones

Lifelong Learning
- Most children have access to a good school
- Online access to job listings has made it easier to find work
- Online purchasing of tickets to shows and museums has made it easier to attend cultural events
Online services provided by the city have made it easier to start a new business.

Opportunities (Work & School)
- IT skills are taught well in schools
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory

Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Air pollution is not a problem

CCTV cameras have made residents feel safer

Residents contribute to decision making of local government

Information on local government decisions are easily accessible

Corruption of city officials is not an issue of concern

Online public access to city finances has reduced corruption

Processing identification documents online has reduced waiting times
Health & Safety

Group

Online services provided by the city has made it easier to start a new business

Opportunities (Work & School)

Technologies

Activities

Governance

Information on local government decisions are easily accessible

Corruption of city officials is not an issue of concern

Residents contribute to decision-making of local government

Residents provide feedback on local government projects

Free public wifi has improved access to city services

Public transport is satisfactory

Apps that direct you to an available parking space has reduced journey time

Traffic congestion is not a problem

Recycling services are satisfactory

A website or App allows residents to easily give away unwanted items

Basic sanitation meets the needs of the poorest areas

Online reporting of city maintenance problems provides a speedy solution

Expected years of schooling

Mean years of schooling

Life expectancy at birth

GNI per capita (PPP $)

Mean years of schooling

Expected years of schooling

Life expectancy at birth

HDI

Country

2018

2019

2020

2021

1 yr change

Population

HDI

2,324,560

0.908

0.920

0.932

0.924

0.929

0.005

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A stronger Alignment (i.e. consistency across both corresponding area) means that these areas may benefit from close observation.

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The right-hand, light blue section of each bar shows the proportion of those respondents who also answered the survey on the corresponding area by giving it high priority. The stronger the Priority (i.e. consistency across both corresponding area) means that these areas are most urgent for their city. This is the total bar.

You feel the availability of online information has increased your trust in authorities

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities

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You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
BACKGROUND INFORMATION

City
Population 2,607,879
HDI 0.880
(Eurostat)

Country 2018 2019 2020 2021 1 yr change
HDI 0.891 0.901 0.896 0.903 >0.005
Life expectancy at birth 82.5 82.7 82.2 82.5 >0.3
Expected years of schooling 15.5 15.6 15.8 15.8 >0.0
Mean years of schooling 11.4 11.5 11.6 11.6 >0.0
GNI per capita (PPP $) 40,511 47,173 43,048 45,937 +2,889

SMART CITY RATING

84
Out of 141

82 out of 118 in 2021

SMART CITY RANKING

CCC
CC in 2021

Factor Ratings

CCC
Structures

CCC
Technologies

Group
3

All ratings range from AAA to D

Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

TECHNOLOGIES

- Online reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- Free public wi-fi has increased access to city services
- CCTV cameras have made residents feel safer
- A website or App allows residents to effectively monitor air pollution
- Arranging medical appointments online has improved access
- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Bicycle hiring has reduced congestion
- Online scheduling and ticket sales have made public transport easier to use
- The city provides information on traffic congestion through mobile phones
- Online purchasing of tickets to shows and museums has made it easier to attend
- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times
Health & Safety
- Free public wifi has improved access to city services
- Online services provided by the city has made it easier to start a new business
- The current internet speed and reliability meet connectivity needs
- Online purchasing of tickets to shows and museums has made it easier to attend cultural activities (shows, bars, and museums)
- CCTV cameras has made residents feel safer
- Arranging medical appointments online has improved access to healthcare
- Online public access to city finances has reduced corruption

Opportunities (Work & School)
- Lifelong learning opportunities are provided by local institutions
- Most children have access to a good school
- Government and employers are creating new jobs
- Employment finding services are readily available
- Online job listings has made it easier to find work
- Online scheduling and ticket sales has made public transport easier to use
- Online platform where residents can propose ideas has improved city life
- The current internet speed and reliability meet connectivity needs

Activities
- Cultural activities (shows, bars, and museums) are satisfactory
- Green spaces are satisfactory
- Activities (shows, bars, and museums) are satisfactory
- Online purchasing of tickets to shows and museums has made it easier to attend

Mobility
- Public transport is satisfactory
- Traffic congestion is not a problem
- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Bicycle hiring has reduced congestion
- The city provides information on traffic congestion through mobile phones
- Recyling services are satisfactory
- Recycling incents are in place to encourage recycling
- Basic sanitation meets the needs of the poorest areas
- Basic sanitation meets the needs of the poorest areas

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects
- Online platform where residents can propose ideas has improved city life
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times
- The city provides information on traffic congestion through mobile phones
- The city provides information on traffic congestion through mobile phones

Health & Safety
- Online services provided by the city has made it easier to start a new business
- Online scheduling and ticket sales has made public transport easier to use
- Online purchasing of tickets to shows and museums has made it easier to attend cultural activities (shows, bars, and museums)
- Online platform where residents can propose ideas has improved city life
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From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from closer observation.

**ATTITUDES**

You are willing to concede personal data in order to improve traffic congestion

You are comfortable with face recognition technologies to lower crime

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

**PRIORITY AREAS**

GNI per capita (PPP $)

Mean years of schooling

Expected years of schooling

Life expectancy at birth

HDI

Country

2018

2019

2020

2021

1 yr change

HDRI

0.850

0.864

0.863

0.866

+0.003

Life expectancy at birth

81.9

82.1

81.1

81.0

-0.0

Expected years of schooling

16.3

16.5

16.9

16.9

+0.0

Mean years of schooling

9.2

9.3

9.6

9.6

+0.0

GNI per capita (PPP $)

27,935

33,967

31,637

31,155

-1,518

**GROUP**

3

All ratings range from AAA to D

**TECHNOLOGIES**

**Structures**

- **Health & Safety**
  - Basic sanitation meets the needs of the poorest areas: 62.3%
  - Recycling services are satisfactory: 61.9%
  - Public safety is not a problem: 51.6%
  - Air pollution is not a problem: 32.8%
  - Medical services provision is satisfactory: 50.1%
  - Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 12.0%

- **Mobility**
  - Traffic congestion is not a problem: 17.7%
  - Public transport is satisfactory: 37.8%

- **Activities**
  - Green spaces are satisfactory: 65.1%
  - Cultural activities (shows, bars, and museums) are satisfactory: 78.5%

- **Opportunities (Work & School)**
  - Employment finding services are readily available: 42.2%
  - Most children have access to a good school: 52.9%
  - Lifelong learning opportunities are provided by local institutions: 49.0%
  - Businesses are creating new jobs: 41.1%
  - Minorities feel welcome: 51.7%

- **Governance**
  - Information on local government decisions are easily accessible: 49.0%
  - Corruption of city officials is not an issue of concern: 19.3%
  - Residents contribute to decision making of local government: 31.7%
  - Residents provide feedback on local government projects: 33.9%

- **Health & Safety**
  - Online reporting of city maintenance problems provides a speedy solution: 46.5%
  - A website or App allows residents to easily give away unwanted items: 56.6%
  - Free public wifi has improved access to city services: 55.5%
  - CCTV cameras has made residents feel safer: 54.6%
  - A website or App allows residents to effectively monitor air pollution: 42.4%
  - Arranging medical appointments online has improved access: 60.3%

- **Mobility**
  - Car-sharing Apps have reduced congestion: 36.3%
  - Apps that direct you to an available parking space have reduced journey time: 40.6%
  - Bicycle hiring has reduced congestion: 46.9%
  - Online scheduling and ticket sales has made public transport easier to use: 57.9%
  - The city provides information on traffic congestion through mobile phones: 47.5%

- **Activities**
  - Online purchasing of tickets to shows and museums has made it easier to attend: 83.3%

- **Opportunities (Work & School)**
  - Online access to job listings has made it easier to find work: 75.6%
  - IT skills are taught well in schools: 57.7%
  - Online services provided by the city has made it easier to start a new business: 54.8%
  - The current internet speed and reliability meet connectivity needs: 71.1%

- **Governance**
  - Online public access to city finances has reduced corruption: 30.2%
  - Online voting has increased participation: 43.0%
  - An online platform where residents can propose ideas has improved city life: 48.6%
  - Processing Identification Documents online has reduced waiting times: 70.7%
Free public wifi has improved access to city services

IT skills are taught well in schools

Governance
Online services provided by the city has made it easier to start a new business

Online voting has increased participation

General
Most children have access to a good school

Employment finding services are readily available

Online access to job listings has made it easier to find work

Opportunities (Work & School)
Employment finding services are readily available

Online reporting of city maintenance problems provides a speedy solution

Online scheduling and ticket sales has made public transport easier to use

Public transport is satisfactory

Apps that direct you to an available parking space have reduced journey time

Traffic congestion is not a problem

Public safety is not a problem

CCTV cameras has made residents feel safer

Recycling services are satisfactory

A website or App allows residents to easily give away unwanted items

Basic sanitation meets the needs of the poorest areas

Online reporting of city maintenance problems provides a speedy solution

GNI per capita (PPP $)

Mean years of schooling

Life expectancy at birth

HDI

Country

City

Population

HDI

(2021)

555,948

0.953

2018

2019

2020

2021

1 yr change

Health & Safety

Basic sanitation meets the needs of the poorest areas

71.3

Recycling services are satisfactory

68.5

Public safety is not a problem

59.8

Air pollution is not a problem

40.3

Medical services provision is satisfactory

38.8

Finding housing with rent equal to 30% or less of a monthly salary is not a problem

15.5

Mobility

Traffic congestion is not a problem

59.8

Public transport is satisfactory

49.6

Activities

Green spaces are satisfactory

71.7

Cultural activities (shows, bars, and museums) are satisfactory

71.7

Opportunities (Work & School)

Employment finding services are readily available

53.4

Most children have access to a good school

69.7

Lifelong learning opportunities are provided by local institutions

59.7

Businesses are creating new jobs

49.7

Minorities feel welcome

66.8

Goverance

Information on local government decisions are easily accessible

51.0

Corruption of city officials is not an issue of concern

31.2

Residents contribute to decision making of local government

35.4

Residents provide feedback on local government projects

40.6

Health & Safety

Online reporting of city maintenance problems provides a speedy solution

47.1

A website or App allows residents to easily give away unwanted items

46.9

Free public wifi has improved access to city services

59.8

CCTV cameras has made residents feel safer

40.3

A website or App allows residents to effectively monitor air pollution

52.7

Arranging medical appointments online has improved access

49.6

Mobility

Car-sharing Apps have reduced congestion

37.5

Apps that direct you to an available parking space have reduced journey time

45.5

Bicycle hiring has reduced congestion

65.8

Online scheduling and ticket sales has made public transport easier to use

67.4

The city provides information on traffic congestion through mobile phones

44.5

Activities

Online purchasing of tickets to shows and museums has made it easier to attend

75.8

Opportunities (Work & School)

Online access to job listings has made it easier to find work

67.6

IT skills are taught well in schools

49.6

Online reporting of city maintenance problems provides a speedy solution

50.8

The current internet speed and reliability meet connectivity needs

70.2

Goverance

Online public access to city finances has reduced corruption

29.8

Online public access to city finances has reduced corruption

36.3

Online reporting of city maintenance problems provides a speedy solution

43.0

Processing Identification Documents online has reduced waiting times

47.5
Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem
- Arranging medical appointments online has improved access
- Air pollution is not a problem
- CCTV cameras have made residents feel safer
- Residents provide feedback on local government projects

Opportunities (Work & School)
- Lifelong learning opportunities are provided by local institutions
- Most children have access to a good school
- Businesses are creating new jobs
- Minorities feel welcome

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Health & Safety
- Online scheduling and ticket sales has made public transport easier to use
- Bicycle hiring has reduced congestion
- The city provides information on traffic congestion through mobile phones

Ongoing challenges:
- Online reporting of city maintenance problems provides a speedy solution
- Online access to job listings has made it easier to find work
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of respondents per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

These areas are:)
- Health & Safety
- Opportunities (Work & School)
- Governance

The right-hand section of each bar is the Score, i.e. the proportion of respondents per area who thought it was urgent.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.920</td>
<td>0.932</td>
<td>0.924</td>
<td>0.929</td>
<td>+0.005</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>81.2</td>
<td>81.3</td>
<td>80.4</td>
<td>80.7</td>
<td>+0.3</td>
</tr>
<tr>
<td>Mean years of schooling</td>
<td>13.0</td>
<td>13.2</td>
<td>13.4</td>
<td>13.4</td>
<td>+0.0</td>
</tr>
<tr>
<td>GNI per capita (PPP $)</td>
<td>35,507</td>
<td>46,071</td>
<td>42,375</td>
<td>45,225</td>
<td>+2,850</td>
</tr>
</tbody>
</table>
Los Angeles

**BACKGROUND INFORMATION**

City
- Population: 3,896,747
- HDI: 0.931

**STRUCTURES**

<table>
<thead>
<tr>
<th>Health &amp; Safety</th>
<th>Score</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic sanitation meets the needs of the poorest areas</td>
<td>54.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycling services are satisfactory</td>
<td>64.3</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Public safety is not a problem</td>
<td>36.5</td>
<td></td>
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</tr>
<tr>
<td>Air pollution is not a problem</td>
<td>32.7</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Medical services provision is satisfactory</td>
<td>56.2</td>
<td></td>
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</tr>
<tr>
<td>Finding housing with rent equal to 30% or less of a monthly salary is not a problem</td>
<td>32.8</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Score</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic congestion is not a problem</td>
<td>25.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Public transport is satisfactory</td>
<td>47.7</td>
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</tr>
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<table>
<thead>
<tr>
<th>Activities</th>
<th>Score</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green spaces are satisfactory</td>
<td>60.7</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Cultural activities (shows, bars, and museums) are satisfactory</td>
<td>75.4</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities (Work &amp; School)</th>
<th>Score</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment finding services are readily available</td>
<td>63.0</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Most children have access to a good school</td>
<td>52.9</td>
<td></td>
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</tr>
<tr>
<td>Lifelong learning opportunities are provided by local institutions</td>
<td>58.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Businesses are creating new jobs</td>
<td>64.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Minorities feel welcome</td>
<td>58.3</td>
<td></td>
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<table>
<thead>
<tr>
<th>Governance</th>
<th>Score</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on local government decisions are easily accessible</td>
<td>65.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption of city officials is an issue of concern</td>
<td>35.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Residents contribute to decision making of local government</td>
<td>56.5</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residents provide feedback on local government projects</td>
<td>59.7</td>
<td></td>
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</table>

**TECHNOLOGIES**

<table>
<thead>
<tr>
<th>Health &amp; Safety</th>
<th>Score</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online reporting of city maintenance problems provides a speedy solution</td>
<td>56.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>A website or App allows residents to easily give away unwanted items</td>
<td>61.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free public wifi has improved access to city services</td>
<td>60.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CCTV cameras has made residents feel safer</td>
<td>54.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A website or App allows residents to effectively monitor air pollution</td>
<td>53.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arranging medical appointments online has improved access</td>
<td>64.9</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Score</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
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<tbody>
<tr>
<td>Car-sharing Apps have reduced congestion</td>
<td>53.1</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Apps that direct you to an available parking space have reduced journey time</td>
<td>53.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle renting has reduced congestion</td>
<td>49.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online scheduling and ticket sales has made public transport easier to use</td>
<td>60.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The city provides information on traffic congestion through mobile phones</td>
<td>65.5</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Activities</th>
<th>Score</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online purchasing of tickets to shows and museums has made it easier to attend</td>
<td>76.2</td>
<td></td>
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</table>

**FACTORS**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rating</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; Safety</td>
<td>Mean years of schooling</td>
<td>16.3</td>
<td>16.3</td>
<td>16.3</td>
<td>16.3</td>
<td>+0.0</td>
</tr>
<tr>
<td>Mobility</td>
<td>GNI per capita (PPP $)</td>
<td>56,140</td>
<td>63,826</td>
<td>61,462</td>
<td>64,785</td>
<td>+3,304</td>
</tr>
</tbody>
</table>

**SMART CITY RATING**

Los Angeles is ranked 50 out of 141 in 2021 with a score of 63.1.

**PRIORITY AREAS**

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

**ATTITUDES**

- You are willing to concede personal data in order to improve traffic congestion
- You feel the availability of online information has increased your trust in authorities
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
Online services provided by the city have made it easier to start a new business. Activities and opportunities (work & school) have increased. IT skills are taught well in schools, with a mean score of 70.3. Free public Wi-Fi has improved access to city services, with a mean score of 78.4. Life expectancy at birth is 81.8, and the mean years of schooling is 14.3. Public safety is not a problem, and recycling services are satisfactory. Basic sanitation meets the needs of the poorest areas, and online reporting of city maintenance problems provides a speedy solution. A website or app allows residents to easily give away unwanted items. You feel the availability of online information has increased your trust in authorities. You are comfortable with face recognition technologies to lower crime.
Health & Safety

IT skills are taught well in schools.

opportunities (work & school)

2021

Online services provided by the city have made it easier to start a new business.

Governance

TECHNOLOGIES

Mobility

Free public transport has improved access to city services.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You are willing to concede personal data in order to improve traffic congestion.

You feel the availability of online information has increased your trust in authorities.

You are comfortable with face recognition technologies to lower crime.

You are willing to concede personal data in order to improve traffic congestion.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You are comfortable with face recognition technologies to lower crime.

You feel the availability of online information has increased your trust in authorities.

You are willing to concede personal data in order to improve traffic congestion.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You are comfortable with face recognition technologies to lower crime.

You feel the availability of online information has increased your trust in authorities.

You are willing to concede personal data in order to improve traffic congestion.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You are comfortable with face recognition technologies to lower crime.

You feel the availability of online information has increased your trust in authorities.

You are willing to concede personal data in order to improve traffic congestion.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You are comfortable with face recognition technologies to lower crime.

You feel the availability of online information has increased your trust in authorities.

You are willing to concede personal data in order to improve traffic congestion.

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Smart City Index 2021

**BACKGROUND INFORMATION**

City
- Population: 6,755,828
- HDI: 0.940

Country
- 2018: 0.893
- 2019: 0.904
- 2020: 0.899
- 2021: 0.905

**RATINGS**
- HDI: 0.940
- Life expectancy at birth: 83.4
- Mean years of schooling: 17.9
- GNI per capita (PPP $): 35,041

**ATTITUDES**
- You are willing to concede personal data in order to improve traffic congestion
- You are comfortable with face recognition technologies to lower crime

**SMART CITY RATING**
- 2021: BB
- 2018: BB
- 2019: BB
- 2020: BB

**PRIORITY AREAS**

- Health & Safety
  - Basic services for the poorest areas
  - Recycling services are satisfactory
  - Public safety is not a problem
  - Air pollution is not a problem
  - Health & safety services provision is satisfactory

- Mobility
  - Traffic congestion is not a problem
  - Public transport is satisfactory

- Activities
  - Green spaces are satisfactory
  - Cultural activities (shows, bars, and museums) are satisfactory

- Opportunities (Work & School)
  - Employment access to a good school
  - Lifelong learning opportunities provided by local institutions
  - Businesses are creating new jobs
  - Minorities feel welcome

- Governance
  - Information on local government decisions are easily accessible
  - Corruption of city officials is not an issue of concern
  - Residents contribute to decision-making of local government
  - Residents provide feedback on local government projects

**TECHNOLOGIES**

- Health & Safety
  - Online reporting of city maintenance problems provides a speedy solution
  - A website or App allows residents to easily give away unwanted items
  - Free public wifi has improved access to city services
  - CCTV cameras have made residents feel safer
  - A website or App allows residents to effectively monitor air pollution
  - Arranging medical appointments online has improved access

- Mobility
  - Car-sharing Apps have reduced congestion
  - Apps that direct you to an available parking space have reduced journey time
  - Online scheduling and ticket sales has made public transport easier to use
  - The city provides information on traffic congestion through mobile phones

- Activities
  - Online purchasing of tickets to shows and museums has made it easier to attend

- Opportunities (Work & School)
  - Online access to job listings has made it easier to find work
  - IT skills are taught well in schools
  - Online public access to city finances has reduced corruption
  - Online public access to city finances has reduced corruption

- Governance
  - Online public access to city finances has reduced corruption
  - Online public access to city finances has reduced corruption
  - An online platform where residents can propose ideas has improved city life
  - Processing Identification Documents online has reduced waiting times
Keeping residents informed on local government decisions allows for greater public participation in city affairs.

Online platforms facilitate residents in proposing ideas that contribute to city development.

Reducing pollution and providing clean air is a priority for the city, with initiatives such as recycling programs and green spaces.

Online scheduling and ticket sales for public transport have improved the convenience for commuters.

The city prioritizes waste management and recycling, ensuring residents can easily dispose of their waste.

Public transport services are rated as satisfactory, provided through apps that direct users to available spaces.

Traffic congestion is not a problem, thanks to initiatives like car-sharing apps and efficient transport solutions.

Online reporting of maintenance issues has improved the city's response time to resident concerns.

Public safety is not a concern, with measures like CCTV cameras and a well-maintained infrastructure.

Recycling services are rated as satisfactory, reflecting the city's commitment to sustainability.

Processing identification documents online has reduced wait times and made processes more efficient.

Residents contribute to decision-making by participating in online platforms.

The city fosters a culture of transparency through online public access to financial information.

Education is a strong priority for the city, with most children having access to quality schools.

Employment services are readily available, with online job listings making it easier for residents to find work.

Lifelong learning opportunities are provided, empowering residents and contributing to social mobility.

The city prioritizes social mobility and housing affordability, ensuring access to basic amenities and sanitation for all residents.

Health & Safety is prioritized, with initiatives like online medical appointment scheduling and improving air pollution levels.

The city uses drones to report maintenance issues and maintain a steady internet speed.

In summary, Makassar has a strong focus on technology, education, and health & safety, ensuring a better quality of life for its residents. Mapeo, a purpose-built platform, allows residents to effectively monitor air pollution and contribute to the city's decision-making process.

With initiatives like online voting and public access to financial information, the city fosters citizen engagement and transparency, reducing corruption concerns.

The city's rating in terms of technology and quality of life is 114 out of 118, with a HDI of 0.699, indicating a strong alignment of priorities and a commitment to improving residents' quality of life.
Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Online services provided by the city has made it easier to start a new business
Finding housing with rent equal to 30% or less of a monthly salary is not a problem
Arranging medical appointments online has improved access
A website or App allows residents to effectively monitor air pollution
CCTV cameras has made residents feel safer
Residents provide feedback on local government projects
Processing Identification Documents online has reduced waiting times
An online platform where residents can propose ideas has improved city life
Online voting has increased participation
Information on local government decisions are easily accessible
Online public access to city finances has reduced corruption
Lifelong learning opportunities are provided by local institutions
Most children have access to a good school
Employment finding services are readily available

Online scheduling and ticket sales has made public transport easier to use
Bicycle hiring has reduced congestion
The city provides information on traffic congestion through mobile phones
Online purchasing of tickets to shows and museums has made it easier to attend

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Information on GNI per capita (PPP $)

- 1,846,513

Life expectancy at birth

- 71.1

Population HDI

- 0.760

Country

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<th>Year</th>
<th>HDI</th>
<th>Life expectancy at birth</th>
<th>Expected years of schooling</th>
<th>Mean years of schooling</th>
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1 yr change

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<td>Governance</td>
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</table>

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- Drill reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- Free public wifi has improved access to city services
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- Arranging medical appointments online has improved access

Mobility

- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Bicycle sharing has reduced congestion
- Online scheduling and ticket sales has made public transport easier to use
- The city provides information on traffic congestion through mobile phones

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

- Online access to job listings has made it easier to find work
- IT skills are taught well in schools
- Online services provided by the city has made it easier to start a new business
- The current internet speed and reliability meet connectivity needs
- Online public access to city finances has reduced corruption
- Online platform where residents can propose ideas has improved city life

Governance

- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times
Health & Safety
- IT skills are taught well in schools
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

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Health & Safety

Opportunities (Work & School)

MAX
CITY
TECHNOLOGIES

Online services provided by the city has made it easier to start a new business.

Mobility

IT skills are taught well in schools.

Activities

Free public wifi has improved access to city services.

STRUCTURES

54.3
2021
MEAN

TECHNOLOGIES

55.4
2021
MEAN

Country 2018 2019 2020 2021 1 yr change
HDI 0.707 0.718 0.709 0.705 -0.004
Life expectancy at birth 71.5 71.7 68.8 67.6 -1.2
Expected years of schooling 12.9 13.6 13.8 13.8 0.0
Mean years of schooling 8.0 8.2 8.6 8.6 0.0
GNI per capita (PPP $) 11,256 11,459 11,142 11,466 +325

Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minories feel welcome

Governance

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PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.
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Activities
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- IT skills are taught well in schools
- Activities
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- Online public access to city government decisions has reduced corruption
Online services provided by the city has made it easier to start a new business.

Free public wifi has improved access to city services.

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Online voting has increased participation.

Information on local government decisions are easily accessible.

Online public access to city finances has reduced corruption.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities.

Online scheduling and ticket sales has made public transport easier to use.

You are comfortable with face recognition technologies to lower crime.

The city provides information on traffic congestion through mobile phones.

You are willing to concede personal data in order to improve traffic congestion.

Online purchasing of tickets to shows and museums has made it easier to attend.

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**Health & Safety**

- Basic sanitation meets the needs of the poorest areas: 38.8%
- Recycling services are satisfactory: 41.9%
- Public safety is not a problem: 20.6%
- Air pollution is not a problem: 18.5%
- Medical services provision is satisfactory: 35.6%
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 26.1%

**Mobility**

- Traffic congestion is not a problem: 20.1%
- Public transport is satisfactory: 28.9%

**Activities**

- Green spaces are satisfactory: 57.1%
- Cultural activities (shows, bars, and museums) are satisfactory: 70.4%

**Opportunities (Work & School)**

- Employment finding services are readily available: 46.8%
- Most children have access to a good school: 35.5%
- Lifelong learning opportunities are provided by local institutions: 35.9%
- Businesses are creating new jobs: 46.7%
- Minorities feel welcome: 38.6%

**Governance**

- Information on local government decisions are easily accessible: 49.3%
- Corruption of city officials is not an issue of concern: 16.2%
- Residents contribute to decision making of local government: 36.3%
- Residents provide feedback on local government projects: 37.6%

**Health & Safety**

- Drone reporting of city maintenance problems provides a speedy solution: 38.8%
- A website or App allows residents to easily give away unwanted items: 44.0%
- Free public wifi has improved access to city services: 58.6%
- CCTV cameras has made residents feel safer: 51.3%
- A website or App allows residents to effectively monitor air pollution: 48.7%
- Arranging medical appointments online has improved access: 56.9%

**Mobility**

- Car-sharing Apps have reduced congestion: 41.8%
- Apps that direct you to an available parking space have reduced journey time: 42.8%
- Bicycle hiring has reduced congestion: 52.2%
- Online scheduling and ticket sales has made public transport easier to use: 59.0%
- The city provides information on traffic congestion through mobile phones: 60.5%

**Activities**

- Online purchasing of tickets to shows and museums has made it easier to attend: 72.1%

**Opportunities (Work & School)**

- Online access to job listings has made it easier to find work: 57.3%
- IT skills are taught well in schools: 52.2%
- Online services provided by the city has made it easier to start a new business: 54.3%
- The current internet speed and reliability meet connectivity needs: 61.7

**Governance**

- Online public access to city finances has reduced corruption: 35.0%
- Drone wiring has increased participation: 41.1%
- An online platform where residents can propose ideas has improved city life: 44.1%
- Processing Identification Documents online has reduced waiting times: 68.0%
Health & Safety

Activities

Opportunities (Work & School)

Governance

Structures

Technologies

Health & Safety

Activities

Opportunities (Work & School)

Governance

FRONTLINES

PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

ATTITUDES

You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

Legend:

Score

0% 20% 40% 60% 80% 100%

% of respondents who agree or strongly agree with the statement

% of respondents who choose the Priority Area

69 out of 118 in 2021

All ratings range from AAA to D

Minorities feel welcome
Businesses are creating new jobs
The current internet speed and reliability meet connectivity needs
Finding housing with rent equal to 30% or less of a monthly salary is not a problem
Arranging medical appointments online has improved access
Medical services provision is satisfactory
A website or App allows residents to effectively monitor air pollution
Air pollution is not a problem
CCTV cameras has made residents feel safer
Residents provide feedback on local government projects
Processing Identification Documents online has reduced waiting times
Residents contribute to decision making of local government
An online platform where residents can propose ideas has improved city life
Corruption of city officials is not an issue of concern
Online voting has increased participation
Lifelong learning opportunities are provided by local institutions
Most children have access to a good school
Employment finding services are readily available
Online access to job listings has made it easier to find work
Public transport is satisfactory
Apps that direct you to an available parking space have reduced journey time
Traffic congestion is not a problem
Recycling services are satisfactory
A website or App allows residents to easily give away unwanted items
Basic sanitation meets the needs of the poorest areas
Online reporting of city maintenance problems provides a speedy solution
GNI per capita (PPP $)
Mean years of schooling
Expected years of schooling
Life expectancy at birth
HDI
Country
2018
2019
2020
2021
1 yr change
HDI
0.883
0.892
0.889
0.895
+0.006
Life expectancy at birth
83.4
83.5
82.4
82.9
+0.5
Expected years of schooling
16.2
16.1
16.2
16.2
+0.0
Mean years of schooling
10.2
10.4
10.7
10.7
+0.0
GNI per capita (PPP $)
38,141
42,776
39,901
42,840
+2,939

Structures

Score

0 20 40 60 80 100

Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions is easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Technologies

Score

0 20 40 60 80 100

Health & Safety

Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
CCTV cameras has made residents feel safer
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Mobility

Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities

Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

Online access to job listings has made it easier to find work
IT skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The current internet speed and reliability meet connectivity needs

Governance

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times
Montreal

BACKGROUND INFORMATION

Population: 1,704,690
HDI: 0.923

Country | 2018 | 2019 | 2020 | 2021 | 1 yr change
------- | ---- | ---- | ---- | ---- | --------
HDI     | 0.933 | 0.937 | 0.931 | 0.936 | +0.005
Life expectancy at birth | 82.1 | 82.4 | 82.1 | 82.7 | +0.6
Expected years of schooling | 16.2 | 16.4 | 16.4 | 16.4 | +0.0
Mean years of schooling | 13.8 | 8.7 | 8.8 | 8.8 | +0.0
GNI per capita (PPP $) | 18,371 | 18,486 | 18,754 | 19,074 | +1,220

ATTITUDES

You are willing to concede personal data in order to improve traffic congestion
64.2%
You are comfortable with face recognition technologies to lower crime
55.6%
You feel the availability of online information has increased your trust in authorities
50.8%
You are willing to concede personal data in order to improve traffic congestion
44.9%

You are comfortable with face recognition technologies to lower crime
38.7%

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
55.6%


PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

Health & Safety

- Dréme reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- Free public wifi has improved access to city services
- CCTV cameras has made residents feel safer
- Arranging medical appointments online has improved access

Mobility

- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Bicycle hiring has reduced congestion
- Online scheduling and ticket sales has made public transport safer
- The city provides information on traffic congestion through mobile phones

Opportunities (Work & School)

- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Health & Safety

- Dréme reporting of city maintenance problems provides a speedy solution
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Governance

- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects
- Online public access to city finances has reduced corruption
- Dréme voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times

Other indicators include:

- Online voting has increased participation
- Access to the internet has increased
- Social media usage has increased
- Access to social services has improved
- Access to education has improved

SUMMARY

Montreal has a high HDI of 0.923, indicating a high level of development and well-being.

The city provides information on traffic congestion through mobile phones.

Online public access to city finances has reduced corruption.

You are comfortable with face recognition technologies to lower crime.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions) is 55.6%.

Dréme reporting of city maintenance problems provides a speedy solution.

CCTV cameras has made residents feel safer.

A website or App allows residents to easily give away unwanted items.

You feel the availability of online information has increased your trust in authorities.

Dréme voting has increased participation.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions) is 55.6%.
Online services provided by the city has made it easier to start a new business.
Free public wifi has improved access to city services.

Opportunities (Work & School)
IT skills are taught well in schools.

Health & Safety
Online reporting of city maintenance problems provides a speedy solution.
A website or App allows residents to easily give away unwanted items.

Mobility
Car-sharing Apps have reduced congestion.

Activities
Online purchasing of tickets to shows and museums has made it easier to attend.

Opportunities (Work & School)
Online access to job listings has made it easier to find work.

Health & Safety
Online public access to city finances has reduced corruption.

Mobility
Online scheduling and ticket sales has made public transport easier to use.

Activities
Online-public access to city finances has reduced corruption.

Opportunities (Work & School)
Online access to job listings has made it easier to find work.

Health & Safety
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Health & Safety
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Mobility
Car-sharing Apps have reduced congestion.

Activities
Online purchasing of tickets to shows and museums has made it easier to attend.

Opportunities (Work & School)
Online access to job listings has made it easier to find work.
Health & Safety
Basic sanitation meets the needs of the poorest areas 36.8
Recycling services are satisfactory 43.2
Public safety is not a problem 29.2
Air pollution is not a problem 19.6
Medical services provision is satisfactory 46.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem 37.8

Mobility
Traffic congestion is not a problem 14.3
Public transport is satisfactory 42.1

Activities
Green spaces are satisfactory 48.7
Cultural activities (shows, bars, and museums) are satisfactory 74.9

Opportunities (Work & School)
Employment finding services are readily available 26.1
Most children have access to a good school 38.0
Lifelong learning opportunities are provided by local institutions 43.7
Businesses are creating new jobs 64.1
Minorities feel welcome 49.1

Governance
Information on local government decisions are easily accessible 52.5
Corruption of city officials is not an issue of concern 12.8
Residents contribute to decision-making of local government 30.4
Residents provide feedback on local government projects 43.6

Health & Safety
Drone reporting of city maintenance problems provides a speedy solution 39.8
A website or App allows residents to easily report unwanted items 40.7
Free public Wifi has improved access to city services 42.2
CCTV cameras have made residents feel safer 55.8
A website or App allows residents to effectively monitor air pollution 19.2
Arranging medical appointments online has improved access 55.5

Mobility
Car-sharing Apps have reduced congestion 48.5
Apps that direct you to an available parking space have reduced journey time 44.0
Bicycle hiring has reduced congestion 28.1
Online scheduling and ticket sales has made public transport easier to use 56.7
The city provides information on traffic congestion through mobile phones 45.0

Activities
Online purchasing of tickets to shows and museums has made it easier to attend 72.9

Opportunities (Work & School)
Drone access to job listings has made it easier to find work 64.7
IT skills are taught well in schools 61.8
Drone services provided by the city has made it easier to start a new business 57.9
The current internet speed and reliability meet connectivity needs 59.8

Governance
Online public access to city finances has reduced corruption 29.7
Drone-wiring has increased participation 33.7
An online platform where residents can propose ideas has improved city life 40.7
Processing Identification Documents online has reduced waiting times 69.3

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

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The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
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The city provides information on traffic congestion through mobile phones

Online scheduling and ticket sales has made public transport easier to use

Bicycle hiring has reduced congestion

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The availability of online information has increased your trust in authorities

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities

You are comfortable with face recognition technologies to lower crime

You are willing to concede personal data in order to improve traffic congestion

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities

You are comfortable with face recognition technologies to lower crime

You are willing to concede personal data in order to improve traffic congestion

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
Smart City Index 2021

New York

**BACKGROUND INFORMATION**

- Population: 8,804,190
- HDI: 0.938

**STRUCTURES**

<table>
<thead>
<tr>
<th>Factor</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
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<td>Basic sanitation</td>
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<td></td>
<td></td>
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<tr>
<td>Recycling services</td>
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<tr>
<td>Air pollution</td>
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<tr>
<td>Public transport</td>
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<tr>
<td>Green spaces</td>
<td>69.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural activities</td>
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<tr>
<td>Employment finding</td>
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<tr>
<td>Lifelong learning</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Businesses</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Minorities</td>
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<td>Information</td>
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<tr>
<td>Corruption</td>
<td>42.5</td>
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<td>Residents provide</td>
<td>56.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td>63.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TECHNOLOGIES**

- Online public access to city finances: 53.4
- Online public access to job listings: 70.0
- Online public access to city services: 59.5
- Online public access to city services: 60.2
- Online public access to city services: 73.8
- Online public access to city services: 52.4
- Online public access to city services: 64.2
- Online public access to city services: 56.7
- Online public access to city services: 68.7

**SMART CITY RATING**

- City Rating: 21 out of 141
- 19 out of 118 in 2021

**ATTITUDES**

- You feel the availability of online information has increased your trust in authorities
- You are willing to concede personal data in order to improve traffic congestion
- You are comfortable with face recognition technologies to lower crime

**PRIORITY AREAS**

- Affordable housing
- Security
- Health services
- Transportation
- Education
- Unemployment
- Air pollution
- Corruption
- Public transport
- Basic amenities
- Green spaces
- Social mobility
- Recycling
- Citizen engagement
- Public safety

**GNI per capita (PPP $)**

- Mean: 8,804,190

**Population:**

- 8,804,190

**HDI:**

- 0.938

**Expected years of schooling:**

- 13.4

**Life expectancy at birth:**

- 77.2

**Mean years of schooling:**

- 16.3

**Public transport is satisfactory:**

- 68.7

**Road congestion is not a problem:**

- 69.6

**Unemployment:**

- 43.4

**Informal government decision making is easy accessible:**

- 67.0

**Employment finding services are readily available:**

- 69.5

**Most children have access to a good school:**

- 61.6

**Residents contribute to decision making of local government:**

- 56.7

**Residents contribute to decision making of local government:**

- 62.8

**Corruption of city officials is not an issue of concern:**

- 61.8

**Online health services are readily available:**

- 69.8

**Free public health has improved access to city services:**

- 69.0

**CCTV cameras has made residents feel safer:**

- 68.7

**A website or App allows residents to effectively monitor air pollution:**

- 43.4

**Finding housing with rent equal to 30% or less of a monthly salary is not a problem:**

- 62.8

**Arranging medical appointments online has improved access:**

- 61.2

**Road congestion is not a problem:**

- 64.0

**Air pollution is not a problem:**

- 63.6

**Traffic congestion is not a problem:**

- 65.0

**Traffic congestion is not a problem:**

- 66.2

**Traffic congestion is not a problem:**

- 67.0

**Traffic congestion is not a problem:**

- 68.7

**Traffic congestion is not a problem:**

- 69.6

**Traffic congestion is not a problem:**

- 70.0

**Traffic congestion is not a problem:**

- 70.5

**Traffic congestion is not a problem:**

- 71.0

**Traffic congestion is not a problem:**

- 71.5

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- 72.0

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- 72.5

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- 73.0

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- 73.5

**Traffic congestion is not a problem:**

- 74.0

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- 74.5

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- 75.0

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- 75.5

**Traffic congestion is not a problem:**

- 76.0

**Traffic congestion is not a problem:**

- 76.5

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- 77.0

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- 77.5

**Traffic congestion is not a problem:**

- 78.0

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- 78.5

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- 79.0

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- 79.5

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- 80.0

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- 80.5

**Traffic congestion is not a problem:**

- 81.0

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- 81.5

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- 82.0

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- 82.5

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- 83.0

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- 83.5

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- 84.0

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- 84.5

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- 85.0

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- 85.5

**Traffic congestion is not a problem:**

- 86.0

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- 86.5

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- 87.0

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- 87.5

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- 88.0

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- 89.0

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- 98.0

**Traffic congestion is not a problem:**

- 98.5

**Traffic congestion is not a problem:**

- 99.0

**Traffic congestion is not a problem:**

- 99.5

**Traffic congestion is not a problem:**

- 100.0
Free public wifi has improved access to city services
Online services provided by the city have made it easier to start a new business
IT skills are taught well in schools
Governance opportunities (work & school)

Newcastle

BACKGROUND INFORMATION

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</tr>
</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.920</td>
<td>0.932</td>
<td>0.924</td>
<td>0.929</td>
<td>0.005</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>81.2</td>
<td>81.3</td>
<td>80.4</td>
<td>80.7</td>
<td>&gt;0.3</td>
</tr>
<tr>
<td>Mean years of schooling</td>
<td>17.4</td>
<td>17.5</td>
<td>17.3</td>
<td>17.3</td>
<td>&gt;0</td>
</tr>
<tr>
<td>GNI per capita (PPP $)</td>
<td>35,507</td>
<td>46,071</td>
<td>42,375</td>
<td>45,225</td>
<td>&gt;2,850</td>
</tr>
</tbody>
</table>

Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision-making of local government
Residents provide feedback on local government projects

Technologies

Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
CCTV cameras have made residents feel safer
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Mobility

Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle sharing has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities

Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

Online access to job listings has made it easier to find work
IT skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The current internet speed and reliability meet connectivity needs

Governance

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.
Online services provided by the city have made it easier to start a new business.

Free public wifi has improved access to city services.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Arranging medical appointments online has improved access.

Online purchasing of tickets to shows and museums has made it easier to attend.

Online public access to city finances has reduced corruption.

Online voting has increased participation.

A website or App allows residents to effectively monitor air pollution.

CCTV cameras have made residents feel safer.

Processing identification documents online has reduced waiting times.

The proportion of your day-to-day payment transactions that are non-cash is 30%.

You feel the availability of online information has increased your trust in authorities.

You are willing to concede personal data in order to improve traffic congestion.

The proportion of those who also answered the survey on the Alignment, i.e. the proportion of those who perceived the city to be innovative in the areas explained means that these areas may benefit from close observation.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those who perceived the city to be innovative in the areas explained. The right-hand, light blue section shows the proportion of those who agreed or strongly agreed with the statement. The greater the priority for the city, the higher the percentage of responses per area, the greater the priority for the city.

The proportion of respondents who chose the Priority Area for each of the 15 indicators was calculated. The proportion of those who also answered the survey on the Alignment, i.e. the proportion of those who perceived the city to be innovative in the areas explained means that these areas may benefit from close observation.
Free public wifi has improved access to city services
IT skills are taught well in schools
Online services provided by the city has made it easier to start a new business
Finding housing with rent equal to 30% or less of a monthly salary is not a problem
Medical services provision is satisfactory
A website or App allows residents to effectively monitor air pollution
Residents provide feedback on local government projects
Processing Identification Documents online has reduced waiting times
Information on local government decisions are easily accessible
Online public access to city finances has reduced corruption
Lifelong learning opportunities are provided by local institutions
Online voting has increased participation
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
You are comfortable with face recognition technologies to lower crime
You are willing to concede personal data in order to improve traffic congestion
The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.
**BACKGROUND INFORMATION**

**City**
Population: 693,494
HDI: 0.986

**Country**
Population: 693,494
HDI: 0.986

**1 yr change**
- HDI: +0.002
- Life expectancy at birth: +0.0
- Mean years of schooling: +0.0
- GNI per capita (PPP $): +2,087

**ATTITUDES**

- You are willing to concede personal data in order to improve traffic congestion: 63.1%
- You are comfortable with face recognition technologies to lower crime: 66.3%
- You feel the availability of online information has increased your trust in authorities: 64.7%
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 54.3%

**SMART CITY RATING**
- **AAA in 2021**
- **Group 1**
- **All ratings range from AAA to D**

**STRUCTURES**

<table>
<thead>
<tr>
<th>Health &amp; Safety</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic sanitation meets the needs of the poorest areas</td>
<td>77.2</td>
</tr>
<tr>
<td>Recycling services are satisfactory</td>
<td>78.5</td>
</tr>
<tr>
<td>Public safety is not a problem</td>
<td>84.1</td>
</tr>
<tr>
<td>Air pollution is not a problem</td>
<td>60.9</td>
</tr>
<tr>
<td>Medical services provision is satisfactory</td>
<td>73.7</td>
</tr>
<tr>
<td>Finding housing with rent equal to 30% or less of a monthly salary is not a problem</td>
<td>31.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic congestion is not a problem</td>
<td>50.2</td>
</tr>
<tr>
<td>Public transport is satisfactory</td>
<td>68.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green spaces are satisfactory</td>
<td>79.6</td>
</tr>
<tr>
<td>Cultural activities (shows, bars, and museums) are satisfactory</td>
<td>80.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities (Work &amp; School)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment finding services are readily available</td>
<td>75.2</td>
</tr>
<tr>
<td>Most children have access to a good school</td>
<td>81.1</td>
</tr>
<tr>
<td>Lifelong learning opportunities are provided by local institutions</td>
<td>70.4</td>
</tr>
<tr>
<td>Businesses are creating new jobs</td>
<td>72.2</td>
</tr>
<tr>
<td>Minorities feel welcome</td>
<td>64.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Governance</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on local government decisions are easily accessible</td>
<td>64.9</td>
</tr>
<tr>
<td>Corruption of city officials is not an issue of concern</td>
<td>59.7</td>
</tr>
<tr>
<td>Residents contribute to decision making of local government</td>
<td>57.8</td>
</tr>
<tr>
<td>Residents provide feedback on local government projects</td>
<td>64.7</td>
</tr>
</tbody>
</table>

**TECHNOLOGIES**

<table>
<thead>
<tr>
<th>Health &amp; Safety</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drone reporting of city maintenance problems provides a speedy solution</td>
<td>48.5</td>
</tr>
<tr>
<td>A website or App allows residents to easily give away unwanted items</td>
<td>70.8</td>
</tr>
<tr>
<td>Free public wifi has improved access to city services</td>
<td>45.1</td>
</tr>
<tr>
<td>CCTV cameras has made residents feel safer</td>
<td>53.1</td>
</tr>
<tr>
<td>A website or App allows residents to effectively monitor air pollution</td>
<td>40.6</td>
</tr>
<tr>
<td>Arranging medical appointments online has improved access</td>
<td>71.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car-sharing Apps have reduced congestion</td>
<td>42.6</td>
</tr>
<tr>
<td>Apps that direct you to an available parking space have reduced journey time</td>
<td>44.0</td>
</tr>
<tr>
<td>Bicycle sharing has reduced congestion</td>
<td>56.0</td>
</tr>
<tr>
<td>Online scheduling and ticket sales has made public transport easier to use</td>
<td>78.8</td>
</tr>
<tr>
<td>The city provides information on traffic congestion through mobile phones</td>
<td>48.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online purchasing of tickets to shows and museums has made it easier to attend</td>
<td>78.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities (Work &amp; School)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online access to job listings has made it easier to find work</td>
<td>71.3</td>
</tr>
<tr>
<td>If skills are taught well in schools</td>
<td>59.8</td>
</tr>
<tr>
<td>Online service provided by the city has made it easier to start a new business</td>
<td>49.4</td>
</tr>
<tr>
<td>The current internet speed and reliability meet connectivity needs</td>
<td>71.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Governance</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online public access to city finances has reduced corruption</td>
<td>43.8</td>
</tr>
<tr>
<td>Online voting has increased participation</td>
<td>46.9</td>
</tr>
<tr>
<td>An online platform where residents can propose ideas has improved city life</td>
<td>44.6</td>
</tr>
<tr>
<td>Processing Identification Documents online has reduced waiting times</td>
<td>49.6</td>
</tr>
</tbody>
</table>
Free public wifi has improved access to city services. IT skills are taught well in schools. A website or App allows residents to effectively monitor air pollution. CCTV cameras have made residents feel safer. Residents provide feedback on local government projects. Processing Identification Documents online has reduced waiting times.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions). The city provides information on traffic congestion through mobile phones. Online scheduling and ticket sales has made public transport easier to use. The city provides information on traffic congestion through mobile phones. The city provides information on traffic congestion through mobile phones.
Paris

SMART CITY RANKING
46 Out of 141

BACKGROUND INFORMATION
City
Population: 2,147,716
HDI: 0.949 (Eurostat)

Country 2018 2019 2020 2021 1 yr change
HDI: 0.891 0.901 0.896 0.903 <0.005
Life expectancy at birth: 82.5 82.7 82.2 82.5 >0.3
Expected years of schooling: 15.5 15.6 15.8 15.8 >0.0
Mean years of schooling: 11.4 11.5 11.6 11.6 >0.0
GNI per capita (PPP $): 40,511 47,173 43,048 45,937 >2,889

ATTITUDES
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

TECHNOLOGIES

Smart City Index 2021
Health & Safety

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
-Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

- Traffic congestion is not a problem
- Public transport is satisfactory

Activities

- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Goverance

- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Online services provided by the city has made it easier to start a new business
CITY

IT skills are taught well in schools
TECHNOLOGIES

Free public wifi has improved access to city services
SMART

CCTV cameras has made residents feel safer
PUBLIC

Arranging medical appointments online has improved access
PUBLIC

You feel the availability of online information has increased your trust in authorities
ATTITUDES

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

GNI per capita (PPP $)
Mean years of schooling
Expected years of schooling
Life expectancy at birth
HDI

(UN Data)

60.0%
62.5%
65.9%
The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

PRIORITY AREAS

<table>
<thead>
<tr>
<th>Area</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable housing</td>
<td>56.7</td>
<td>57.2</td>
<td>58.0</td>
<td>58.3</td>
<td>+0.3</td>
</tr>
<tr>
<td>Security</td>
<td>58.2</td>
<td>58.4</td>
<td>58.6</td>
<td>58.8</td>
<td>+0.2</td>
</tr>
<tr>
<td>School education</td>
<td>54.0</td>
<td>54.1</td>
<td>54.2</td>
<td>54.4</td>
<td>+0.2</td>
</tr>
<tr>
<td>Road congestion</td>
<td>37.1</td>
<td>37.4</td>
<td>37.7</td>
<td>37.9</td>
<td>+0.2</td>
</tr>
<tr>
<td>Unemployment</td>
<td>21.8</td>
<td>22.0</td>
<td>22.3</td>
<td>22.5</td>
<td>+0.2</td>
</tr>
<tr>
<td>Health services</td>
<td>33.3</td>
<td>33.5</td>
<td>33.7</td>
<td>33.9</td>
<td>+0.2</td>
</tr>
<tr>
<td>Recycling</td>
<td>24.1</td>
<td>24.3</td>
<td>24.5</td>
<td>24.7</td>
<td>+0.2</td>
</tr>
<tr>
<td>Social mobility</td>
<td>27.5</td>
<td>27.7</td>
<td>27.9</td>
<td>28.1</td>
<td>+0.2</td>
</tr>
<tr>
<td>Green spaces</td>
<td>25.7</td>
<td>25.8</td>
<td>26.0</td>
<td>26.2</td>
<td>+0.2</td>
</tr>
<tr>
<td>Air pollution</td>
<td>21.5</td>
<td>21.7</td>
<td>21.9</td>
<td>22.1</td>
<td>+0.2</td>
</tr>
<tr>
<td>Recycle</td>
<td>18.9</td>
<td>19.0</td>
<td>19.2</td>
<td>19.3</td>
<td>+0.2</td>
</tr>
<tr>
<td>Citizen engagement</td>
<td>17.4</td>
<td>17.6</td>
<td>17.8</td>
<td>17.9</td>
<td>+0.2</td>
</tr>
<tr>
<td>Recycling</td>
<td>15.8</td>
<td>16.0</td>
<td>16.2</td>
<td>16.3</td>
<td>+0.2</td>
</tr>
<tr>
<td>Social mobility</td>
<td>13.7</td>
<td>13.8</td>
<td>14.0</td>
<td>14.1</td>
<td>+0.2</td>
</tr>
<tr>
<td>Health services</td>
<td>13.4</td>
<td>13.5</td>
<td>13.6</td>
<td>13.7</td>
<td>+0.2</td>
</tr>
<tr>
<td>Recycling</td>
<td>11.8</td>
<td>11.9</td>
<td>12.0</td>
<td>12.1</td>
<td>+0.2</td>
</tr>
<tr>
<td>Social mobility</td>
<td>8.4</td>
<td>8.5</td>
<td>8.6</td>
<td>8.7</td>
<td>+0.2</td>
</tr>
</tbody>
</table>

Score

0% 20% 40% 60% 80% 100%

% of respondents who agree or strongly agree with the statement

0% 20% 40% 60% 80% 100%

% of respondents who chose the Priority Area

All ratings range from AAA to D

Philadelphia

92
Out of 141

85 out of 118 in 2021

B

B in 2021

B

B

B

B

B

B

B

B
Health & Safety

Activities

IT skills are taught well in schools

Mobility

MEAN
44.6

CITY

Free public wifi has improved access to city services

Online services provided by the city has made it easier to start a new business

Governance

GROUP
Opportunities (Work & School)

2021

CITY RATING

All ratings range from AAA to D

TECHNOLOGIES

Governance

Online public access to city finances has reduced corruption

An online platform where residents can propose ideas has improved city life

Processing Identification Documents online has reduced waiting times

Health & Safety

Structures

Score

LEGEND:

Basic sanitation meets the needs of the poorest areas

Recycling services are satisfactory

Air pollution is not a problem

Medical services provision is satisfactory

Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem

Public transport is satisfactory

Activities

Green spaces are satisfactory

Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available

Most children have access to a good school

Lifelong learning opportunities are provided by local institutions

Businesses are creating new jobs

Minorities feel welcome

GNI per capita (PPP $)

Mean years of schooling

Life expectancy at birth

HDI

Country

2018

2019

2020

2021

1 yr change

HDI

0.920

0.926

0.920

0.921

+0.001

Life expectancy at birth

78.9

78.9

77.4

77.2

-0.2

Expected years of schooling

16.3

16.3

16.3

16.3

0.0

Mean years of schooling

13.4

13.4

13.7

13.7

0.0

GNI per capita (PPP $)

56,140

63,826

61,462

64,765

+3,304

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Allegiance, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Allegiance (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

The right-hand, light blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it high priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas are most urgent for their city. This is the total bar. The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities

You are comfortable with face recognition technologies to lower crime

You are willing to concede personal data in order to improve traffic congestion

More people for less money?

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

You feel the availability of online information has increased your trust in authorities

You are comfortable with face recognition technologies to lower crime

You are willing to concede personal data in order to improve traffic congestion

More people for less money?
Health & Safety

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Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
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Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcomed

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Health & Safety

Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily gain access to city services
CCTV cameras have made residents feel safer
A website or App allows residents to effectively monitor air pollution

Mobility

Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities

Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

Online access to job listings has made it easier to find work
If skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The current internet speed and reliability meet connectivity needs

Governance

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times
Reykjavík

BACKGROUND INFORMATION

City
Population 236,528
HDI 0.959
(Eurostat)

Country | 2018 | 2019 | 2020 | 2021 | 1 yr change
---------|------|------|------|------|-------
HDI      | 0.959| 0.960| 0.957| 0.959| <0.002
Life expectancy at birth | 82.8 | 82.4 | 82.6 | 82.7 | <0.1
Expected years of schooling | 18.0 | 18.0 | 18.0 | 18.0 | <0.0
Mean years of schooling | 13.6 | 13.7 | 13.8 | 13.8 | <0.0
GNI per capita (PPP $) | 56,492 | 58,055 | 54,141 | 55,782 | +1,641

STRUCTURES

Health & Safety
- Basic sanitation meets the needs of the poorest areas: 72.9
- Recycling services are satisfactory: 68.3
- Public safety is not a problem: 77.3
- Air pollution is not a problem: 60.8
- Medical services provision is satisfactory: 49.6
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 4.8

Mobility
- Traffic congestion is not a problem: 34.4
- Public transport is satisfactory: 28.3

Activities
- Green spaces are satisfactory: 61.7
- Cultural activities (shows, bars, and museums) are satisfactory: 80.8

Opportunities (Work & School)
- Employment finding services are readily available: 77.5
- Most children have access to a good school: 81.3
- Lifelong learning opportunities are provided by local institutions: 77.5
- Businesses are creating new jobs: 64.0
- Minorities feel welcome: 59.2

Governance
- Information on local government decisions are easily accessible: 53.5
- Corruption of city officials is not an issue of concern: 33.1
- Residents contribute to decision making of local government: 46.9
- Residents provide feedback on local government projects: 54.4

TECHNOLOGIES

Health & Safety
- Online reporting of city maintenance problems provides a speedy solution: 36.3
- A website or App allows residents to easily give away unwanted items: 61.5
- Free public wifi has improved access to city services: 48.9
- CCTV cameras have made residents feel safer: 56.3
- Arranging medical appointments online has improved access: 66.0

Mobility
- Car-sharing Apps have reduced congestion: 16.9
- Apps that direct you to an available parking space have reduced journey time: 30.8
- Bicycle hiring has reduced congestion: 23.7
- Online scheduling and ticket sales has made public transport easier to use: 55.2
- The city provides information on traffic congestion through mobile phones: 17.5

Activities
- Online purchasing of tickets to shows and museums has made it easier to attend: 82.9

Opportunities (Work & School)
- Online access to job listings has made it easier to find work: 74.8
- IT skills are taught well in schools: 49.0
- Online services provided by the city has made it easier to start a new business: 36.9
- The current internet speed and reliability meet connectivity needs: 71.5

Governance
- Online public access to city finances has reduced corruption: 28.1
- Online voting has increased participation: 41.5
- An online platform where residents can propose ideas has improved city life: 59.4
- Processing Identification Documents online has reduced waiting times: 63.8
Health & Safety

Free public wifi has improved access to city services

Mobility

2021

Activities

MEAN

TECHNOLOGIES

MEAN

CITY

IT skills are taught well in schools

Online services provided by the city has made it easier to start a new business

Group 2

All ratings range from AAA to D

STRUCTURES

RANKING

RATINGS

not out of 118
in 2021

SMART

CITY

RATING

31,059

2019

0.871

Life expectancy at birth

2021

Riga

75.5

2018

11.7%

70.8%

41.0%

34.4

45.3

25.8

37.5

25.3

42.5

47.2

53.1

55.3

55.6

40.8

63.1

49.4

64.2

70.0%

53.3%

40.0%

33.3%

26.3%

21.7%

20.0%

11.7%

8.3%

31.7%

33.3%

15.2%

10.0%

5.0%

0.0%

0.7%

2.0%

4.6%

8.0%

13.3%

16.0%

16.0%

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Health & Safety
Free public wifi has improved access to city services. 
Online services provided by the city has made it easier to start a new business. 

Mobility
IT skills are taught well in schools.

TECHNOLOGIES
14.9
Activities
IT skills are taught well in schools.

Health & Safety
A website or App allows residents to effectively monitor air pollution. 

ATTITUDES
You are willing to concede personal data in order to improve traffic congestion.
You are comfortable with face recognition technologies to lower crime.
You feel the availability of online information has increased your trust in authorities.

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

PRIORITY AREAS
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city. 
The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

D in 2021

RIO DE JANEIRO
Health & Safety

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

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ATITUDES

You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

PRIORITY AREAS

You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
**Health & Safety**

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem
- Arranging medical appointments online has improved access
- Arranging medical appointments online has improved access
- The city provides information on traffic congestion through mobile phones

**Mobility**

- Traffic congestion is not a problem
- Public transport is satisfactory
- Online scheduling and ticket sales has made public transport easier to use
- Bicycle hiring has reduced congestion

**Activities**

- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory
- Online purchasing of tickets to shows and museums has made it easier to attend

**Opportunities (Work & School)**

- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Business is creating new jobs
- Minorities feel welcome

**Governance**

- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

**Health & Safety**

- Smartphone reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- Free public wifi has improved access to city services
- CCTV cameras has made residents feel safer
- A website or App allows residents to effectively monitor air pollution
- Arranging medical appointments online has improved access

**Mobility**

- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space has reduced journey time
- Bicycle sharing has reduced congestion
- Online scheduling and ticket sales has made public transport easier to use
- The city provides information on traffic congestion through mobile phones

**Activities**

- Online purchasing of tickets to shows and museums has made it easier to attend
- Online purchasing of tickets to shows and museums has made it easier to attend

**Opportunities (Work & School)**

- Online access to job listings has made it easier to find work
- IT skills are taught well in schools
- Online services provided by the city has made it easier to start a new business
- The current internet speed and reliability meet connectivity needs

**Governance**

- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times
IT skills are taught well in schools. Online services provided by the city have made it easier to start a new business. Governance.

Free public wifi has improved access to city services. The proportion of your day-to-day payment transactions that are non-cash (% of transactions) is high. You are willing to concede personal data in order to improve traffic congestion. You feel the availability of online information has increased your trust in authorities.

The city provides information on traffic congestion through mobile phones. Online scheduling and ticket sales have made public transport easier to use. Bicycle sharing has reduced congestion. From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city. The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

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Online services provided by the city have made it easier to start a new business.

Governance IT skills are taught well in schools.

30.8
CITY MAX

Activities

GROUP

CITY RATING

All ratings range from AAA to D

See full ranking here

San José

Smart City Index 2021

BACKGROUND INFORMATION

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
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</thead>
<tbody>
<tr>
<td>HDI</td>
<td>0.811</td>
<td>0.819</td>
<td>0.815</td>
<td>0.809</td>
<td>-0.007</td>
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<tr>
<td>Life expectancy at birth</td>
<td>79.5</td>
<td>79.4</td>
<td>79.3</td>
<td>77.0</td>
<td>-2.3</td>
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<tr>
<td>Expected years of schooling</td>
<td>15.9</td>
<td>15.5</td>
<td>15.6</td>
<td>16.6</td>
<td>&gt;0.0</td>
</tr>
<tr>
<td>Mean years of schooling</td>
<td>8.7</td>
<td>12.8</td>
<td>12.9</td>
<td>12.9</td>
<td>&gt;0.0</td>
</tr>
<tr>
<td>GNI per capita (PPP $)</td>
<td>41,779</td>
<td>48,511</td>
<td>47,946</td>
<td>49,452</td>
<td>+1,506</td>
</tr>
</tbody>
</table>

Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Score

47.5

61.3

38.3

61.3

29.2

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Score

13.8

30.8

ACTIVITIES

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Score

61.8

65.2

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel encouraged

Score

53.4

51.0

51.8

40.6

38.4

Governance

Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Score

41.0

14.2

23.7

29.6

TECHNOLOGIES

Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public Wi-Fi has improved access to city services
CCTV cameras have made residents feel safer
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Score

32.4

32.9

51.2

49.5

21.8

56.6

Mobility

Car-sharing Apps have reduced congestion
Bicycle-hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Score

34.4

26.2

36.6

39.9

Activities

Online purchasing of tickets to shows and museums has made it easier to attend

Score

72.0

Opportunities (Work & School)

Online access to job listings has made it easier to find work
If skills are taught well in schools
Online services provided by the city have made it easier to start a new business
The current Internet speed and reliability meet connectivity needs

Score

56.3

35.6

40.9

58.3

Governance

Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing identification Documents online has reduced waiting times

Score

22.8

23.6

28.4

46.1
Health & Safety
- Basic sanitation meets the needs of the poorest areas (38.5)
- Recycling services are satisfactory (34.4)
- Public safety is not a problem (34.1)
- Air pollution is not a problem (16.2)
- Medical services provision is satisfactory (22.8)
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem (28.1)

Mobility
- Traffic congestion is not a problem (19.3)
- Public transport is satisfactory (35.7)

Activities
- Green spaces are satisfactory (29.9)
- Cultural activities (shows, bars, and museums) are satisfactory (33.6)

Opportunities (Work & School)
- Employment finding services are readily available (19.6)
- Most children have access to a good school (25.1)
- Lifelong learning opportunities are provided by local institutions (19.3)
- Businesses are creating new jobs (23.2)
- Minorities feel welcome (45.4)

Governance
- Information on local government decisions are easily accessible (28.1)
- Corruption of city officials is not an issue of concern (16.8)
- Residents contribute to decision making of local government (23.7)
- Residents provide feedback on local government projects (22.6)

Health & Safety
- Online reporting of city maintenance problems provides a speedy solution (24.6)
- A website or App allows residents to easily give away unwanted items (27.5)
- Free public wifi has improved access to city services (34.8)
- CCTV cameras have made residents feel safer (69.2)
- A website or App allows residents to effectively monitor air pollution (29.6)
- Arranging medical appointments online has improved access (42.9)

Mobility
- Car-sharing Apps have reduced congestion (28.0)
- Apps that direct you to an available parking space have reduced journey time (36.8)
- Bicycle sharing has reduced congestion (50.0)
- Online scheduling and ticket sales has made public transport easier to use (46.1)
- The city provides information on traffic congestion through mobile phones (19.6)

Activities
- Online purchasing of tickets to shows and museums has made it easier to attend (22.5)

Opportunities (Work & School)
- Online access to job listings has made it easier to find work (52.1)
- IT skills are taught well in schools (31.7)
- Online services provided by the city has made it easier to start a new business (33.8)
- The current internet speed and reliability meet connectivity needs (48.1)

Governance
- Online public access to city finances has reduced corruption (24.7)
- Online voting has increased participation (31.4)
- An online platform where residents can propose ideas has improved city life (28.3)
- Processing Identification Documents online has reduced waiting times (32.0)

PRIORITY AREAS
- unemployment (63.6%)
- school education (65.2%)
- health services (60.7%)
- corruption (57.7%)
- affordable housing (50.9%)
- basic amenities (41.1%)
- fulfiling employment (38.4%)
- security (35.6%)
- road congestion (21.4%)
- air pollution (11.6%)
- citizen engagement (8.6%)
- green spaces (8.9%)
- public transport (8.5%)
- recycling (5.4%)
- social mobility (2.7%)

ATTITUDES
- You are willing to concede personal data in order to improve traffic congestion (83.0%)
- You are comfortable with face recognition technologies to lower crime (63.0%)
- You feel the availability of online information has increased your trust in authorities (50.0%)
- The proportion of your day-to-day payment transactions that are non-cash (50.0%)

SMART CITY RATING
- 140
- Out of 141

BACKGROUND INFORMATION
- City: Sana'a
- Population: 3,181,655
- HDI: 0.521

GNI per capita (PPP $)
- Mean: 1,350
- Expected: 1,314
- HDI: 0.521

Score
- 0% 20% 40% 60% 80% 100%
### Background Information

#### City
- Population: 5,270,140
- HDI: 0.886

#### Country
- 2018: HDI 0.847
- 2019: HDI 0.851
- 2020: HDI 0.852
- 2021: HDI 0.855
- Change: +0.003

### Technologies

#### Health & Safety
- Online reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- CCTV cameras have made residents feel safer

#### Mobility
- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Online purchasing of tickets to shows and museums has made it easier to attend

### Structures

#### Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory
- Public transport is satisfactory

#### Employment
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs

#### Governance
- Information on local government decisions is easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

### Priorities

#### Smart City Index 2021
- Overall Rating: 107 out of 118
- Ranking: 107

#### Group
- C
- In 2021

#### Factor Ratings
- C
- Structures
- Technologies

#### All ratings range from AAA to D
**Health & Safety**

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

**Mobility**

- Traffic congestion is not a problem
- Public transport is satisfactory

**Activities**

- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

**Opportunities (Work & School)**

- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

**Governance**

- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision-making of local government
- Residents provide feedback on local government projects

**TECHNOLOGIES**

- Online reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- CCTV cameras has made residents feel safer
- A website or App allows residents to effectively monitor air pollution
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- CCTV cameras has made residents feel safer
- A website or App allows residents to effectively monitor air pollution
- Arranging medical appointments online has improved access

**Mobility**

- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Bicycle hiring has reduced congestion
- Online scheduling and ticket sales has made public transport easier to use
- The city provides information on traffic congestion through mobile phones

**Activities**

- Online purchasing of tickets to shows and museums has made it easier to attend

**Opportunities (Work & School)**

- Online access to job listings has made it easier to find work
- IT skills are taught well in schools
- Online public access to city finances has reduced corruption
- Online voting has increased participation

**Governance**

- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
Seattle

SMART CITY RANKING
55
Out of 141

38 out of 118 in 2021

SMART CITY RATING
BB
BBB in 2021

BACKGROUND INFORMATION
City
Population: 737,015
HDI: 0.940

ATTITUDES

You are willing to concede personal data in order to improve traffic congestion

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

PRIORITY AREAS

You are comfortable with face recognition technologies to lower crime

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

TECHNOLOGIES

Structures

Health & Safety
Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
Traffic congestion is not a problem
Public transport is satisfactory

Activities
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Goverance
Information on local government decisions are easily accessible
Corruption of city official is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Technologies

Health & Safety
Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Mobility
Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
Online access to job listings has made it easier to find work
It skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The current internet speed and reliability meet connectivity needs

Goverance
Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

Group
2
All ratings range from AAA to D

Country
2018
2019
2020
2021
1 yr change
HDI
0.920
0.926
0.920
0.921
+0.001
Life expectancy at birth
78.9
78.9
77.4
77.2
-0.2
Expected years of schooling
16.3
16.3
16.3
16.3
0.0
Mean years of schooling
13.4
13.4
13.7
13.7
0.0
GNI per capita (PPP $)
56,140
63,826
61,462
64,715
+3,304

GNI per capita (PPP $)
2018
2019
2020
2021
1 yr change
GNI per capita (PPP $)
63,826
61,462
61,217
60,833
-390

Seattle

SMART CITY RANKING
55
Out of 141

38 out of 118 in 2021

SMART CITY RATING
BB
BBB in 2021

BACKGROUND INFORMATION
City
Population: 737,015
HDI: 0.940

ATTITUDES

You are willing to concede personal data in order to improve traffic congestion

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

PRIORITY AREAS

You are comfortable with face recognition technologies to lower crime

You feel the availability of online information has increased your trust in authorities

The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

TECHNOLOGIES

Structures

Health & Safety
Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
Traffic congestion is not a problem
Public transport is satisfactory

Activities
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Goverance
Information on local government decisions are easily accessible
Corruption of city official is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Technologies

Health & Safety
Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Mobility
Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
Online access to job listings has made it easier to find work
It skills are taught well in schools
Online services provided by the city has made it easier to start a new business
The current internet speed and reliability meet connectivity needs

Goverance
Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

Group
2
All ratings range from AAA to D
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from closer observation.

ATTITUDES
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash

<table>
<thead>
<tr>
<th>PRIORITY AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.6%</td>
</tr>
<tr>
<td>84.5%</td>
</tr>
<tr>
<td>85.7%</td>
</tr>
<tr>
<td>83.7%</td>
</tr>
</tbody>
</table>

Health & Safety
Drone reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public Wi-Fi has improved access to city services
CCTV cameras have made residents feel safer
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Mobility
Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
Drone access to job listings has made it easier to find work
IT skills are taught well in schools
Free public Wi-Fi has improved access to city services
Online platforms where residents can propose ideas has improved city life
Online public access to city finances has reduced corruption

Governance
Online public access to city finances has reduced corruption
Online platforms where residents can propose ideas has improved city life
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

<table>
<thead>
<tr>
<th>Health &amp; Safety</th>
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</thead>
<tbody>
<tr>
<td>83.9</td>
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<tr>
<td>79.0</td>
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<td>91.4</td>
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<thead>
<tr>
<th>Mobility</th>
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<tbody>
<tr>
<td>69.5</td>
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<tr>
<td>83.3</td>
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<tr>
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<tr>
<td>87.6</td>
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<tr>
<th>Activities</th>
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<tbody>
<tr>
<td>90.2</td>
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<table>
<thead>
<tr>
<th>Opportunities (Work &amp; School)</th>
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<tbody>
<tr>
<td>86.6</td>
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<tr>
<td>84.5</td>
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<tr>
<td>80.8</td>
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<tr>
<td>90.0</td>
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<table>
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<tr>
<th>Governance</th>
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<tbody>
<tr>
<td>77.9</td>
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<tr>
<td>75.4</td>
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<tr>
<td>83.1</td>
</tr>
<tr>
<td>85.8</td>
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</tbody>
</table>
Shenzhen

BACKGROUND INFORMATION

City
Population: 12,831,330
HDI: 0.799

(UN World Urbanisation Prospects 2022 estimate)

Country | 2018 | 2019 | 2020 | 2021 | 1 yr change
---|---|---|---|---|---
HDI | 0.758 | 0.761 | 0.764 | 0.768 | +0.004
Life expectancy at birth | 76.7 | 76.9 | 78.1 | 78.2 | +0.1
Expected years of schooling | 13.9 | 14.0 | 14.2 | 14.2 | +0.0
Mean years of schooling | 7.9 | 12.6 | 13.0 | 13.0 | +0.0
GNI per capita (PPP $) | 48,836 | 58,662 | 58,144 | 60,385 | +2,221

SMART CITY RANKING
66
Out of 141
60 out of 118 in 2021

SMART CITY RATING
CCC
CCC in 2021

FACTORS

RATINGS

STRUCTURES

Health & Safety
Basic sanitation meets the needs of the poorest areas
Refrigeration services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
Traffic congestion is not a problem
Public transport is satisfactory

Activities
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance
Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

ATTITUDES

You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

TECHNOLOGIES

Health & Safety
Crime reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
CCTV cameras has made residents feel safer
An online platform where residents can propose ideas has improved city life

Mobility
Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
Online access to job listings has made it easier to find work
IT skills are taught well in schools
Free public wifi has increased access to city services
Online public access to city finances has reduced corruption
Processing Identification Documents online has reduced waiting times

PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>% of respondents who chose the Priority Area</th>
<th>% of respondents who agree or strongly agree with the statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; Safety</td>
<td>85.7</td>
<td>84.1</td>
<td>Yes, it is a priority for me to have affordable housing for the poor</td>
</tr>
<tr>
<td></td>
<td>82.4</td>
<td>80.4</td>
<td>Yes, we need to reduce pollution</td>
</tr>
<tr>
<td></td>
<td>76.5</td>
<td>84.1</td>
<td>Yes, we need to provide more public transport options</td>
</tr>
<tr>
<td></td>
<td>68.5</td>
<td>83.5</td>
<td>Yes, we need to improve online access to city services</td>
</tr>
<tr>
<td></td>
<td>62.0</td>
<td>80.4</td>
<td>Yes, we need to improve security measures</td>
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<tr>
<td></td>
<td>67.2</td>
<td>90.0</td>
<td>Yes, we need to improve health care services</td>
</tr>
<tr>
<td>Mobility</td>
<td>53.4</td>
<td>72.9</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
<tr>
<td></td>
<td>74.5</td>
<td>88.8</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
<tr>
<td>Activities</td>
<td>83.4</td>
<td>90.1</td>
<td>Yes, I am willing to use public transport options</td>
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<tr>
<td></td>
<td>84.8</td>
<td>90.3</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
<tr>
<td>Opportunities (Work &amp; School)</td>
<td>84.2</td>
<td>86.3</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
<tr>
<td></td>
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<td>83.5</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
<tr>
<td></td>
<td>70.2</td>
<td>83.9</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
<tr>
<td></td>
<td>82.5</td>
<td>90.2</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
<tr>
<td>Governance</td>
<td>76.9</td>
<td>75.0</td>
<td>Yes, I am willing to use public transport options</td>
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<td>63.6</td>
<td>77.6</td>
<td>Yes, I am willing to use public transport options</td>
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<td>67.6</td>
<td>83.4</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
<tr>
<td></td>
<td>74.0</td>
<td>86.5</td>
<td>Yes, I am willing to use public transport options</td>
</tr>
</tbody>
</table>
Health & Safety

- Basic sanitation meets the needs of the poorest areas: 85.0%
- Recycling services are satisfactory: 68.3%
- Air pollution is not a problem: 80.4%
- Medical services provision is satisfactory: 67.3%
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 54.0%

Mobility

- Traffic congestion is not a problem: 49.3%
- Public transport is satisfactory: 78.9%

Activities

- Green spaces are satisfactory: 78.0%
- Cultural activities (shows, bars, and museums) are satisfactory: 76.7%

Opportunities (Work & School)

- Employment finding services are readily available: 74.8%
- Most children have access to a good school: 80.1%
- Lifelong learning opportunities are provided by local institutions: 81.1%
- Businesses are creating new jobs: 70.5%
- Minorities feel welcome: 70.6%

Governance

- Information on local government decisions are easily accessible: 78.3%
- Corruption of city officials is not an issue of concern: 71.1%
- Residents contribute to decision-making of local government: 61.0%
- Residents provide feedback on local government projects: 68.8%

Smart City Index 2021

- Life expectancy at birth: 83.5 years
- GNI per capita (PPP $): 55,453
- Mean years of schooling: 16.2 years
- Expected years of schooling: 16.6 years
- HDI: 0.939

- Strong Alignment (i.e. consistency across both corresponding area by giving it low priority. A higher score benefits from close observation.
- Weak Alignment (i.e. inconsistency across both areas explained) means that these areas may not benefit from close observation.

- From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for the city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.
- The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

- ATTITUDES
  - You are willing to concede personal data in order to improve traffic congestion: 56.6%
  - You are comfortable with face recognition technologies to lower crime: 76.6%
  - You feel the availability of online information has increased your trust in authorities: 86.7%
  - The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 70.5%

- PRIORITY AREAS
  - Affordable housing: 66.6%
  - Fulfilling employment: 76.2%
  - Health services: 51.4%
  - Unemployment: 55.2%
  - Social mobility: 40.5%
  - Recycling: 35.4%
  - Citizen engagement: 31.0%
  - Med congestion: 27.0%
  - Public transport: 25.0%
  - Public safety: 21.5%
  - Security: 21.2%
  - School education: 20.5%
  - Air pollution: 16.4%
  - Basic amenities: 16.2%
  - Corruption: 15.1%
  - Recycling: 15.2%
  - Social mobility: 15.0%

- All ratings range from AAA to D

- 7 out of 118 in 2021

- Smart City Ratings
  - A in 2021

- Country: Singapore
- Population: 5,455,566
- HDI: 0.939

- Technologies
  - Online voting has increased participation: 62.2%
  - An online platform where residents can propose ideas has improved city life: 65.4%
  - Online public access to city finances has reduced corruption: 88.2%
  - The current internet speed and reliability meet connectivity needs: 85.1%
  - Online scheduling and ticket sales has made public transport easier to use: 77.6%
  - The city provides information on traffic congestion through mobile phones: 64.0%

- Opportunities (Work & School)
  - Online job listings have made it easier to find work: 79.5%
  - IT skills are taught well in schools: 70.9%
  - Online public access to city finances has reduced corruption: 79.5%
  - Online voting has increased participation: 75.3%
  - The city provides information on traffic congestion through mobile phones: 77.6%

- Activities
  - Online purchasing of tickets to shows and museums has made it easier to attend: 83.0%
  - Online access to job listings has made it easier to find work: 79.5%
  - Online public access to city finances has reduced corruption: 65.4%
  - Online voting has increased participation: 58.9%
  - Online public access to city finances has reduced corruption: 51.3%
  - Online voting has increased participation: 58.9%
  - Online public access to city finances has reduced corruption: 51.3
Health & Safety

Online services provided by the city has made it easier to start a new business.

IT skills are taught well in schools.

Activities

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Health & Safety

Online reporting of city maintenance problems provides a speedy solution.

Corruption services provision is satisfactory.

Mobility

Car-sharing Apps have reduced congestion.

Health & Safety

A website or App allows residents to effectively monitor air pollution.

Basic sanitation meets the needs of the poorest areas.

Activities

Online purchasing of tickets to shows and museums has made it easier to attend.

Opportunities (Work & School)

Most children have access to a good school.

Health & Safety

Online public access to city finances has reduced corruption.

Most children have access to a good school.

Opportunities (Work & School)

Online access to job listings has made it easier to find work.

Employment finding services are readily available.

Activities

Online purchasing of tickets to shows and museums has made it easier to attend.

Majorities feel welcome.

Goverance

Processing Identification Documents online has reduced waiting times.

Information on local government decisions are easily accessible.

Goverance

Online public access to city finances has reduced corruption.

Opportunities (Work & School)

Online access to job listings has made it easier to find work.

Employment finding services are readily available.

Activities

Online purchasing of tickets to shows and museums has made it easier to attend.

Minorities feel welcome.

Goverance

Processing Identification Documents online has reduced waiting times.

Information on local government decisions are easily accessible.

Opportunities (Work & School)

Online access to job listings has made it easier to find work.

Employment finding services are readily available.

Activities

Online purchasing of tickets to shows and museums has made it easier to attend.

Minorities feel welcome.

Goverance

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Opportunities (Work & School)

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Employment finding services are readily available.

Activities

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Minorities feel welcome.

Goverance

Processing Identification Documents online has reduced waiting times.

Information on local government decisions are easily accessible.

Opportunities (Work & School)

Online access to job listings has made it easier to find work.

Employment finding services are readily available.

Activities

Online purchasing of tickets to shows and museums has made it easier to attend.
Online services provided by the city has made it easier to start a new business.

Free public wifi has improved access to city services.

IT skills are taught well in schools.

The city provides information on traffic congestion through mobile phones.

Online scheduling and ticket sales has made public transport easier to use.

Bicycle hiring has reduced congestion.

The city provides information on traffic congestion through mobile phones.

Most children have access to a good school.

Lifelong learning opportunities are provided by local institutions.

Cultural activities (shows, bars, and museums) are satisfactory.

Public safety is not a problem.

Recycling services are satisfactory.

Basic sanitation meets the needs of the poorest areas.

Health & Safety

Basic sanitation meets the needs of the poorest areas.

Recycling services are satisfactory.

Public safety is not a problem.

Air pollution is not a problem.

Medical services provision is satisfactory.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

Traffic congestion is not a problem.

Public transport is satisfactory.

Cultural activities (shows, bars, and museums) are satisfactory.

Employment finding services are readily available.

Most children have access to a good school.

Lifelong learning opportunities are provided by local institutions.

Businesses are creating new jobs.

Minorities feel welcome.

Information on local government decisions are easily accessible.

Corruption of city officials is not an issue of concern.

Residents contribute to decision making of local government.

Residents provide feedback on local government projects.

Online public access to city finances has reduced corruption.

An online platform where residents can propose ideas has improved city life.

Processing Identification Documents online has reduced waiting times.
Online services provided by the city have made it easier to start a new business.

Governance:
- The current internet speed and reliability meet connectivity needs.
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem.
- Arranging medical appointments online has improved access.
- Air pollution is not a problem.
- CCTV cameras have made residents feel safer.
- Residents provide feedback on local government projects.
- Corruption of city officials is not a concern.
- Online voting has increased participation.
- Information on local government decisions are easily accessible.
- Online public access to city finances has reduced corruption.

Opportunities (Work & School):
- Employment finding services are readily available.
- Bicycle sharing has reduced congestion.
- Online scheduling and ticket sales has made public transport easier to use.
- Online purchasing of tickets to shows and museums has made it easier to attend.
- Social mobility is satisfactory.
- Online voting has increased participation.
- Online public access to city finances has reduced corruption.

Health & Safety:
- Basic sanitation meets the needs of the poorest areas.
- Recycling services are satisfactory.
- Air pollution is not a problem.
- Public safety is not a problem.
- Health services are satisfactory.
- Affordable housing is satisfactory.
- Public transport is satisfactory.
- Basic amenities are satisfactory.

Structures:
- Mean years of schooling.
- Expected years of schooling.
- Life expectancy at birth.
- GNI per capita (PPP $).
- Mean years of schooling.
- Expected years of schooling.
- Life expectancy at birth.
- GNI per capita (PPP $).

Technologies:
- Health & Safety: Online reporting of city maintenance problems provides a speedy solution.
- Opportunities (Work & School): Online access to job listings has made it easier to find work.
- Governance: Online public access to city finances has reduced corruption.
- Opportunities (Work & School): Online access to job listings has made it easier to find work.
- Governance: Online public access to city finances has reduced corruption.
- Opportunities (Work & School): Online access to job listings has made it easier to find work.
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From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city. The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.
Health & Safety

IT skills are taught well in schools

Opportunities (Work & School)

Mobility

Free public wifi has improved access to city services

Online services provided by the city has made it easier to start a new business

Governance

Information on local government decisions are easily accessible

Online public access to city finances has reduced corruption

Corruption of city officials is not an issue of concern

Online public access to city finances has reduced corruption

Resident contribute to decision making of local government

An online platform where residents can propose ideas has improved city life

Residents provide feedback on local government projects

Processing Identification Documents online has reduced waiting times

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.
Health & Safety

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

- Traffic congestion is not a problem
- Public transport is satisfactory

Activities

- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance

- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Opportunities (Work & School)

- IT skills are taught well in schools
- Activities
- Mobility
- Health & Safety
- Technologies

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily gain access to unsanitary items
- Free public with improved access to public services
- CCTV cameras have made residents feel safer
- A website or App allows residents to effectively monitor air pollution
- Arranging medical appointments online has improved access

Mobility

- Car-sharing Apps have reduced congestion
- Apps that direct you to an available parking space have reduced journey time
- Bicycle hiring has reduced congestion
- Online scheduling and ticket sales has made public transport easier to use
- The city provides information on traffic congestion through mobile phones

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing identification documents online has reduced waiting times

Governance

- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing identification documents online has reduced waiting times

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily gain access to unsanitary items
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- CCTV cameras have made residents feel safer
- A website or App allows residents to effectively monitor air pollution
- Arranging medical appointments online has improved access
### Health & Safety

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic sanitation meets the needs of the poorest areas</td>
<td>78.2</td>
<td>0.758</td>
<td>0.761</td>
<td>0.764</td>
<td>0.768</td>
<td>+0.004</td>
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<tr>
<td>Recycling services are satisfactory</td>
<td>70.2</td>
<td>76.7</td>
<td>76.9</td>
<td>78.1</td>
<td>78.2</td>
<td>+0.1</td>
</tr>
<tr>
<td>Public safety is not a problem</td>
<td>72.7</td>
<td>13.9</td>
<td>14.0</td>
<td>14.2</td>
<td>14.2</td>
<td>+0.0</td>
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<tr>
<td>Air pollution is not a problem</td>
<td>51.2</td>
<td>7.9</td>
<td>8.1</td>
<td>7.6</td>
<td>7.6</td>
<td>+0.0</td>
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<tr>
<td>Medical services provision is satisfactory</td>
<td>68.2</td>
<td>59.5</td>
<td></td>
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<tr>
<td>Finding housing with rent equal to 30% or less of a monthly salary is not a problem</td>
<td>59.1</td>
<td>59.1</td>
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<tr>
<td><strong>Health &amp; Safety</strong></td>
<td><strong>Score</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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### Mobility

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
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</thead>
<tbody>
<tr>
<td>Traffic congestion is not a problem</td>
<td>42.3</td>
<td>63.7</td>
<td></td>
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<td></td>
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<tr>
<td>Public transport is satisfactory</td>
<td>73.1</td>
<td>76.7</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mobility</strong></td>
<td><strong>Score</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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### Activities

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green spaces are satisfactory</td>
<td>73.1</td>
<td>73.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural activities (shoes, bars, and museums) are satisfactory</td>
<td>76.7</td>
<td>76.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Activities</strong></td>
<td><strong>Score</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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### Opportunities (Work & School)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment finding services are readily available</td>
<td>72.9</td>
<td>72.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Most children have access to a good school</td>
<td>75.0</td>
<td>75.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lifelong learning opportunities are provided by local institutions</td>
<td>62.1</td>
<td>62.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Businesses are creating new jobs</td>
<td>64.7</td>
<td>64.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minorities feel welcome</td>
<td>77.4</td>
<td>77.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Opportunities (Work &amp; School)</strong></td>
<td><strong>Score</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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### Governance

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on local government decisions are easily accessible</td>
<td>65.8</td>
<td>65.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption of city officials is not an issue of concern</td>
<td>42.6</td>
<td>42.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residents contribute to decision making of local government</td>
<td>48.5</td>
<td>48.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residents provide feedback on local government projects</td>
<td>59.1</td>
<td>59.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td><strong>Score</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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### Technologies

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online reporting of city maintenance problems provides a speedy solution</td>
<td>78.5</td>
<td>78.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A website or App allows residents to easily give away unwanted items</td>
<td>71.2</td>
<td>71.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online services provided by the city has made it easier to start a new business</td>
<td>74.1</td>
<td>74.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online voting has increased participation</td>
<td>79.6</td>
<td>79.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCTV cameras has made residents feel safer</td>
<td>71.6</td>
<td>71.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technologies</strong></td>
<td><strong>Score</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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</table>
### Health & Safety

<table>
<thead>
<tr>
<th>Factor</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>1 yr change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic sanitation meets needs of the poorest areas</td>
<td>70.9</td>
<td>64.0</td>
<td>60.1</td>
<td>40.8</td>
<td>-0.6</td>
</tr>
<tr>
<td>Recycling services are satisfactory</td>
<td>67.0</td>
<td>60.5</td>
<td>42.1</td>
<td>20.7</td>
<td>-0.4</td>
</tr>
<tr>
<td>Public safety is not a problem</td>
<td>31.5</td>
<td>69.8</td>
<td>64.0</td>
<td>50.9</td>
<td>-0.1</td>
</tr>
<tr>
<td>Air pollution is not a problem</td>
<td>39.0</td>
<td>54.6</td>
<td>50.9</td>
<td>49.6</td>
<td>-0.1</td>
</tr>
<tr>
<td>Medical services provision is satisfactory</td>
<td>59.2</td>
<td>54.6</td>
<td>50.9</td>
<td>49.6</td>
<td>-0.1</td>
</tr>
<tr>
<td>Finding housing with rent equal to 30% or less of a monthly salary is not a problem</td>
<td>39.0</td>
<td>54.6</td>
<td>50.9</td>
<td>49.6</td>
<td>-0.1</td>
</tr>
</tbody>
</table>

### Mobility

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic congestion is not a problem</td>
<td>31.5</td>
</tr>
<tr>
<td>Public transport is satisfactory</td>
<td>69.8</td>
</tr>
</tbody>
</table>

### Activities

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green spaces are satisfactory</td>
<td>59.2</td>
</tr>
<tr>
<td>Cultural activities (shows, bars, and museums) are satisfactory</td>
<td>54.6</td>
</tr>
</tbody>
</table>

### Opportunities (Work & School)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment finding services are readily available</td>
<td>59.2</td>
</tr>
<tr>
<td>Most children have access to a good school</td>
<td>54.6</td>
</tr>
<tr>
<td>Lifelong learning opportunities are provided by local institutions</td>
<td>55.8</td>
</tr>
<tr>
<td>Businesses are creating new jobs</td>
<td>49.2</td>
</tr>
<tr>
<td>Minorities feel welcome</td>
<td>37.7</td>
</tr>
</tbody>
</table>

### Governance

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on local government decisions are easily accessible</td>
<td>59.2</td>
</tr>
<tr>
<td>Corruption of city officials is not an issue of concern</td>
<td>54.6</td>
</tr>
<tr>
<td>Residents contribute to decision making of local government</td>
<td>55.8</td>
</tr>
<tr>
<td>Residents provide feedback on local government projects</td>
<td>49.2</td>
</tr>
</tbody>
</table>

### Smart City Index 2021

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health services</td>
<td>59.2</td>
</tr>
<tr>
<td>Basic amenities</td>
<td>54.6</td>
</tr>
<tr>
<td>Affordable housing</td>
<td>55.8</td>
</tr>
<tr>
<td>Security</td>
<td>49.2</td>
</tr>
<tr>
<td>Road congestion</td>
<td>37.7</td>
</tr>
<tr>
<td>Public transport</td>
<td>37.7</td>
</tr>
<tr>
<td>School education</td>
<td>37.7</td>
</tr>
<tr>
<td>Full-time employment</td>
<td>37.7</td>
</tr>
<tr>
<td>Unemployment</td>
<td>37.7</td>
</tr>
<tr>
<td>Citizen engagement</td>
<td>37.7</td>
</tr>
<tr>
<td>Social mobility</td>
<td>37.7</td>
</tr>
<tr>
<td>Green spaces</td>
<td>37.7</td>
</tr>
<tr>
<td>Recycling</td>
<td>37.7</td>
</tr>
</tbody>
</table>

### PRIORITY AREAS

- From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.
- The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.
- The right-hand, light blue section of each bar shows the Priority, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it high priority. A higher the percentage of responses per area, the more urgent it is for their city. This is the total bar. The higher the priority for the city.

### ATTITUDES

- You are willing to concede personal data in order to improve traffic congestion.
- You are comfortable with face recognition technologies to lower crime.
- You feel the availability of online information has increased your trust in authorities.
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

### TECHNOCITIES

- Smart City Index 2021
- GNI per capita (PPP $)
- Mean years of schooling
- Expected years of schooling
- Life expectancy at birth
- HDI
- Country (UN Data)
- BACKGROUND INFORMATION
- CITY
- Population
- HDI
- 9,733,276
- 0.951
- 0.915
- 0.915
- 0.919
- 0.923
- 0.925
- +0.002
- 84.5
- 84.5
- 84.7
- 84.8
- +0.1
- 12.8
- 12.9
- 13.4
- 13.4
- +0.0
- 40.8
- 42.9
- 41.487
- 42.274
- +787
- 9,733,276
- Population
- HDI
- Smart City Index 2021
- Tokyo
- BB
- BB in 2021
- 72
- Out of 141
- 67 out of 118
- in 2021
- All ratings range from AAA to D
Opportunities (Work & School)

- Most children have access to a good school
- Employment finding services are readily available
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Activities

- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Health & Safety

- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Public safety is not a problem
- Air pollution is not a problem
- Medical services provision is satisfactory

Mobility

- Traffic congestion is not a problem
- Public transport is satisfactory

Activities

- Finding housing with rent equal to 30% or less of a monthly salary is not a problem
- Arranging medical appointments online has improved access
- Air pollution is not a problem
- CCTV cameras has made residents feel safer

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution
- A website or App allows residents to easily give away unwanted items
- Free public wifi has improved access to city services
- Online voting has increased participation
- Recyling services are satisfactory

ATTITUDES

- You feel the availability of online information has increased your trust in authorities
- You are comfortable with face recognition technologies to lower crime
- You feel the proportion of your day-to-day payment transactions that are non-cash (% of transactions)

PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from closer observation.

You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

Groups: (AAA to D)
Online services provided by the city has made it easier to start a new business. Free public wifi has improved access to city services.

Activities

Opportunities (Work & School)

Health & Safety

Mobility

Structures

Technologies

Governance

Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem
Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Goverance

Information on local government decisions are easily accessible
Corruption of city official's is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Corruption of city officials is not an issue of concern
Online public access to city finances has reduced corruption
Online voting has increased participation
An online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

The city provides information on traffic congestion through mobile phones
Bicycle hiring has reduced congestion

You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The proportion of respondents who choose the Priority Area

The proportion of respondents who agree or strongly agree with the statement

The city provides information on unemployment through mobile phones

You are willing to concede personal data in order to improve unemployment
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The proportion of respondents who choose the Priority Area

The proportion of respondents who agree or strongly agree with the statement

The city provides information on basic amenities through mobile phones

You are willing to concede personal data in order to improve basic amenities
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The proportion of respondents who choose the Priority Area

The proportion of respondents who agree or strongly agree with the statement

The city provides information on security through mobile phones

You are willing to concede personal data in order to improve security
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The proportion of respondents who choose the Priority Area

The proportion of respondents who agree or strongly agree with the statement

The city provides information on recycling through mobile phones

You are willing to concede personal data in order to improve recycling
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The proportion of respondents who choose the Priority Area

The proportion of respondents who agree or strongly agree with the statement

The city provides information on social mobility through mobile phones

You are willing to concede personal data in order to improve social mobility
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The proportion of respondents who choose the Priority Area

The proportion of respondents who agree or strongly agree with the statement

The city provides information on unemployment through mobile phones

You are willing to concede personal data in order to improve unemployment
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The proportion of respondents who choose the Priority Area

The proportion of respondents who agree or strongly agree with the statement

The city provides information on basic amenities through mobile phones

You are willing to concede personal data in order to improve basic amenities
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

The proportion of respondents who choose the Priority Area

The proportion of respondents who agree or strongly agree with the statement

The city provides information on security through mobile phones

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The city provides information on recycling through mobile phones

You are willing to concede personal data in order to improve recycling
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From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

The left-hand, dark blue section of each bar shows the Alignment, i.e. the proportion of those respondents who also answered the survey on the corresponding area by giving it low priority. A strong Alignment (i.e. consistency across both areas explained) means that these areas may benefit from close observation.

ATTITUDES
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

SMART CITY RATING
A in 2021

FACTOR RATINGS
A

GROUP
1

All ratings range from AAA to D

SMART CITY RANKING
42
Out of 141

28 out of 118 in 2021

BACKGROUND INFORMATION

Health & Safety
Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Public safety is not a problem
Air pollution is not a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
Traffic congestion is not a problem
Public transport is satisfactory

Activities
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance
Information on local government decisions are easily accessible
Corruption of city officials is not an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

TECHNOLOGIES

Health & Safety
Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items
Free public wifi has improved access to city services
CCTV cameras has made residents feel safer
A website or App allows residents to effectively monitor air pollution
Arranging medical appointments online has improved access

Mobility
Car-sharing Apps have reduced congestion
Apps that direct you to an available parking space have reduced journey time
Bicycle hiring has reduced congestion
Online scheduling and ticket sales has made public transport easier to use
The city provides information on traffic congestion through mobile phones

Activities
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)
Online access to job listings has made it easier to find work
IT skills are taught well in schools
Online public access to city finances has reduced corruption
Online platform where residents can propose ideas has improved city life
Processing Identification Documents online has reduced waiting times

Basic sanitation meets the needs of the poorest areas

Life expectancy at birth
2 years

Mean years of schooling
16.2

GNI per capita (PPP $)
18,731

HDI (UN Data)
0.933

Population
631,490

Government

Health & Safety

Activities

Governance

Health & Safety

Online services provided by the city have made it easier to start a new business.

Technologies

Activities

CITY

Mobility

Free public Wi-Fi has improved access to city services.

Opportunities (Work & School)

74.5

IT skills are taught well in schools.

Governance

Information on local government decisions is easily accessible.

Residents provide feedback on local government projects.

CITY RATING

All ratings range from AAA to D.

Structures

Score

0 20 40 60 80 100

Health & Safety

Basic sanitation meets the needs of the poorest areas.

Health services provision is satisfactory.

Recycling services are satisfactory.

Opportunities (Work & School)

Most children have access to a good school.

Most children have access to a good school.

Most children have access to a good school.

Lifelong learning opportunities are provided by local institutions.

Urban transport is satisfactory.

Activities

Cultural activities (shows, bars, and museums) are satisfactory.

Public transport is satisfactory.

Bicycle hiring has reduced congestion.

Traffic congestion is not a problem.

Finding housing with rent equal to 30% or less of a monthly salary is not a problem.

The current internet speed and reliability meet connectivity needs.

Online scheduling and ticket sales has made public transport easier to use.

Opportunities (Work & School)

Employment finding services are readily available.

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Health & Safety
- Basic sanitation meets the needs of the poorest areas
- Recycling services are satisfactory
- Air pollution is not a problem
- Medical services provision is satisfactory
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility
- Traffic congestion is not a problem
- Public transport is satisfactory

Activities
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
- Employment finding services are readily available
- Most children have access to a good school
- Lifelong learning opportunities are provided by local institutions
- Businesses are creating new jobs
- Minorities feel welcome

Governance
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects

Governance
- Online public access to city finances has reduced corruption
- Online voting has increased participation
- An online platform where residents can propose ideas has improved city life
- Processing Identification Documents online has reduced waiting times

Technologies
- Affordable housing
- Road congestion
- Healthcare
- Education
- Employment
- School education
- Air pollution
- Unemployment
- Citizen engagement
- Green spaces
- Public transport
- Recycling
- Security
- Social mobility
- Basic amenities

ATTITUDES
- You are willing to concede personal data in order to improve traffic congestion
- You are comfortable with face recognition technologies to lower crime
- You feel the availability of online information has increased your trust in authorities
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
- You are willing to concede personal data in order to improve traffic congestion

BACKGROUND INFORMATION
Country | 2018 | 2019 | 2020 | 2021 | 1yr change
--- | --- | --- | --- | --- | ---
HDI | 0.880 | 0.884 | 0.879 | 0.875 | -0.004
Life expectancy at birth | 75.7 | 76.2 | 75.1 | 73.7 | -2.3
Expected years of schooling | 16.6 | 16.3 | 16.3 | 16.3 | 0.0
Mean years of schooling | 13.3 | 13.4 | 13.5 | 13.5 | 0.0
GNI per capita (PPP $) | 33,963 | 35,705 | 36,077 | 37,931 | +1,855

City | Population | HDI | 829,983 | 0.913
--- | --- | --- | --- | ---
Vilnius | 2021 | 55.2

GROUP 2
All ratings range from AAA to D

SMART CITY RATING
BB
not in 2021

SMART CITY RANKING
65
Out of 141
Online services provided by the city have made it easier to start a new business. Free public Wi-Fi has improved access to city services.

Skills are taught well in schools. Activities

Finding housing with rent equal to 30% or less of a monthly salary is not a problem. Arranging medical appointments online has improved access.

Medical services provision is satisfactory. A website or App allows residents to effectively monitor air pollution. Air pollution is not a problem. CCTV cameras have made residents feel safer.

Residents provide feedback on local government projects. An online platform where residents can propose ideas has improved city life. Corruption of city officials is not an issue of concern. Online voting has increased participation.

Processing Identification Documents online has reduced waiting times. Residents contribute to decision-making of local government. An online platform where residents can propose ideas has improved city life.
**Health & Safety**

- Basic sanitation meets the needs of the poorest areas: 57.3%
- Recycling services are satisfactory: 64.0%
- Public safety is not a problem: 39.5%
- Air pollution is not a problem: 46.6%
- Medical services provision is satisfactory: 59.0%
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 32.9%

**Mobility**

- Traffic congestion is not a problem: 29.3%
- Public transport is satisfactory: 56.7%

**Activities**

- Green spaces are satisfactory: 64.8%
- Cultural activities (shows, bars, and museums) are satisfactory: 81.7%

**Opportunities (Work & School)**

- Employment finding services are readily available: 63.1%
- Most children have access to a good school: 53.2%
- Lifelong learning opportunities are provided by local institutions: 61.5%
- Businesses are creating new jobs: 64.6%
- Minorities feel welcome: 62.9%

**Governance**

- Information on local government decisions are easily accessible: 66.2%
- Corruption of city officials is not an issue of concern: 38.8%
- Residents contribute to decision-making of local government: 54.3%
- Residents provide feedback on local government projects: 60.5%

**Technologies**

- Online reporting of city maintenance problems provides a speedy solution: 46.5%
- A website or App allows residents to easily give away unwanted items: 63.4%
- CCTV cameras have made residents feel safer: 56.8%
- A website or App allows residents to effectively monitor air pollution: 50.3%
- Arranging medical appointments online has improved access: 43.3%

**Security**

- Car-sharing Apps have reduced congestion: 50.2%
- Apps that direct you to an available parking space have reduced journey time: 53.3%
- Bicycle hire has reduced congestion: 48.6%
- Online scheduling and ticket sales has made public transport easier to use: 56.7%
- The city provides information on traffic congestion through mobile phones: 61.4%

**Activities**

- Online purchasing of tickets to shows and museums has made it easier to attend: 74.7%

**Opportunities (Work & School)**

- Online access to job listings has made it easier to find work: 69.7%
- IT skills are taught well in schools: 49.4%
- Online access to city finances has reduced corruption: 50.7%
- The current internet speed and reliability meet connectivity needs: 68.0%

**Goverance**

- Online public access to city finances has improved transparency: 43.3%
- Online voting has increased participation: 59.4%
- An online platform where residents can propose ideas has improved city life: 50.6%
- Processing Identification Documents online has reduced waiting times: 59.2%
Health & Safety

Basic sanitation meets the needs of the poorest areas
Recycling services are satisfactory
Air pollution is a problem
Medical services provision is satisfactory
Finding housing with rent equal to 30% or less of a monthly salary is not a problem

Mobility

Traffic congestion is not a problem
Public transport is satisfactory

Activities

Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

Employment finding services are readily available
Most children have access to a good school
Lifelong learning opportunities are provided by local institutions
Businesses are creating new jobs
Minorities feel welcome

Governance

Information on local government decisions are easily accessible
Corruption of city officials is an issue of concern
Residents contribute to decision making of local government
Residents provide feedback on local government projects

Online services provided by the city has made it easier to start a new business
Free public wifi has improved access to city services
IT skills are taught well in schools
2021

CITY RATING

All ratings range from AAA to D

Wellington

BACKGROUND INFORMATION

Country

2018 2019 2020 2021 1 yr change

Population HDI

0.936 0.936 0.936 0.937 +0.001

0.937 0.937 0.937 0.937 +0.001

Life expectancy at birth

82.4 82.6 82.7 82.5 -0.3

82.6 82.7 82.7 82.5 -0.2

Expected years of schooling

18.0 18.0 18.0 18.0 +0.0

18.0 18.0 18.0 18.0 +0.0

Mean years of schooling

13.1 7.9 8.7 8.7 +0.0

17,781 16,804 17,030 +226

GNI per capita (PPP $)

16,129 17,811 16,804 17,030 +226

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Health & Safety

68.3 69.0 63.3 52.9 19.2

52.9 63.3 69.0 68.3 19.2

73.0 75.1 61.6 61.4 61.2

51.7 51.7 51.7 51.7 51.7

53.1 53.2 51.8 59.8 59.8

53.2 53.2 51.8 59.8 59.8

68.6 69.7 69.6 60.4 61.6

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61.9 61.2 50.1 33.3 57.3

44.3 44.3 44.3 44.3 44.3

21.9% 22.7% 23.5% 25.3% 26.7%

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Free public wifi has improved access to city services.

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Health & Safety

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Mobility
Traffic congestion is not a problem
Public transport is satisfactory

Activities
Green spaces are satisfactory
Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)
Employment finding services are readily available
Most children have access to a good school
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Businesses are creating new jobs
Minorities feel welcome

Governance
Information on local government decisions are easily accessible
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Residents contribute to decision making of local government
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You feel the availability of online information has increased your trust in authorities
You are comfortable with face recognition technologies to lower crime
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From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

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Smart City Index 2021

GNI per capita (PPP $)
Expected years of schooling
Life expectancy at birth
HDI

Country
2018
2019
2020
2021
1 yr change
HDI
0.856
0.861
0.855
0.858
+0.003
Life expectancy at birth
78.3
78.7
78.0
77.6
-0.4
Expected years of schooling
15.2
15.1
15.1
15.1
-0.0
Mean years of schooling
12.1
12.2
12.2
12.2
-0.0
GNI per capita (PPP $)
27,784
28,898
27,185
30,132
+2,947

You feel the availability of online information has increased your trust in authorities
You are comfortable with face recognition technologies to lower crime
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The proportion of your day-to-day payment transactions that are non-cash (% of transactions)

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You are comfortable with face recognition technologies to lower crime
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You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)
Online services provided by the city have made it easier to start a new business.

- Opportunities (Work & School):
  - Most children have access to a good school (67.2% agreement).
  - Lifelong learning opportunities are provided by local institutions (55.2% agreement).
  - Businesses are creating new jobs (42.4% agreement).
  - Minorities feel welcome (48.1% agreement).

- Opportunities (Work & School) Continued:
  - Online public access to city finance has reduced corruption (38.7% agreement).
  - Online voting has increased participation (55.4% agreement).
  - An online platform where residents can propose ideas has improved city life (61.9% agreement).

- Health & Safety:
  - Basic sanitation meets the needs of the poorest areas (48.9% agreement).
  - Recycling services are satisfactory (56.4% agreement).
  - Free public sanitation has improved access to city services (48.4% agreement).
  - CCTV cameras have made residents feel safer (61.4% agreement).

- Health & Safety Continued:
  - A website or App allows residents to effectively monitor air pollution (45.5% agreement).
  - Arranging medical appointments online has improved access (71.1% agreement).

- Mobility:
  - Car-sharing Apps have reduced congestion (44.4% agreement).
  - Apps that direct you to an available parking space have reduced journey time (45.0% agreement).
  - Online scheduling and ticket sales has made public transport easier to use (62.9% agreement).

- Mobility Continued:
  - The city provides information on traffic congestion through mobile phones (51.0% agreement).

- Activities:
  - Online purchasing of tickets to shows and museums has made it easier to attend events (83.1% agreement).

- Activities Continued:
  - Online access to job listings has made it easier to find work (76.1% agreement).
  - Life-long learning opportunities are provided by local institutions (55.2% agreement).

- Governance:
  - Information on local government decisions is easily accessible (48.1% agreement).
  - Corruption of city officials is not an issue of concern (42.4% agreement).
  - Residents contribute to decision making of local government (48.1% agreement).
  - Residents provide feedback on local government projects (61.9% agreement).
### Health & Safety

- Basic sanitation meets the needs of the poorest areas (83.6)
- Recycling services are satisfactory (80.0)
- Public safety is not a problem (71.4)
- Air pollution is not a problem (73.8)
- Medical services provision is satisfactory (84.4)
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem (75.0)

### Mobility

- Traffic congestion is not a problem (69.7)
- Public transport is satisfactory (75.5)

### Activities

- Green spaces are satisfactory (87.0)
- Cultural activities (shows, bars, and museums) are satisfactory (83.6)

### Opportunities (Work & School)

- Employment finding services are readily available (79.6)
- Most children have access to a good school (74.2)
- Lifelong learning opportunities are provided by local institutions (73.7)
- Businesses are creating new jobs (80.1)
- Minorities feel welcome (85.5)

### Governance

- Information on local government decisions are easily accessible (77.6)
- Corruption of city officials is not an issue of concern (67.9)
- Residents contribute to decision-making of local government (70.7)
- Residents provide feedback on local government projects (81.2)

### ATTITUDES

- You are willing to concede personal data in order to improve traffic congestion (85.9)
- You are comfortable with face recognition technologies to lower crime (80.9)
- You feel the availability of online information has increased your trust in authorities (84.1)
- The proportion of your day-to-day payment transactions that are non-cash (% of transactions) (86.6)
- The city provides information on traffic congestion through mobile phones (85.1)
- CCTV cameras have made residents feel safer (88.9)
- Online scheduling and ticket sales have made public transport easier to use (88.3)
- The city provides information on traffic congestion through mobile phones (87.9)
- Online purchasing of tickets to shows and museums has made it easier to attend (88.8)
- Online access to job listings has made it easier to find work (85.9)
- Skills training is readily available (79.5)
- The current internet speed and reliability meet connectivity needs (88.7)
- Online public access to city finances has reduced corruption (71.8)
- An online platform where residents can propose ideas has improved city life (78.5)
- Processing Identification Documents online has reduced waiting times (88.6)

### Overview

- City: Zhuhai
- Population: 1,847,411
- HDI: 0.758
- Mean years of schooling: 7.9
- Expected years of schooling: 8.1
- GNI per capita (PPP $): 16,127
- Life expectancy at birth: 79.7
- Health & Safety
- Mobility
- Health & Safety
- Activities
- Opportunities (Work & School)
- Governance

### PRIORITY AREAS

- Health & Safety
- Discovery reporting of city maintenance problems provides a speedy solution (85.9)
- A website or App allows residents to easily give away unwanted items (80.9)
- Free public wifi has increased access to city services (84.1)
- CCTV cameras have made residents feel safer (86.6)
- A website or App allows residents to effectively monitor air pollution (85.1)
- Arranging medical appointments online has improved access (88.9)
- Mobility
- Car-sharing Apps have reduced congestion (82.7)
- Apps that direct you to an available parking space have reduced journey time (83.3)
- Bicycle rental has reduced congestion (84.3)
- Online scheduling and ticket sales have made public transport easier to use (88.3)
- The city provides information on traffic congestion through mobile phones (87.9)
- Activities
- Online purchasing of tickets to shows and museums has made it easier to attend (88.8)
- Online access to job listings has made it easier to find work (85.9)
- Skills training is readily available (79.5)
- The current internet speed and reliability meet connectivity needs (88.7)
- Online public access to city finances has reduced corruption (71.8)
- An online platform where residents can propose ideas has improved city life (78.5)
- Processing Identification Documents online has reduced waiting times (88.6)
### Health & Safety
- Basic sanitation meets the needs of the poorest areas: 85.0
- Recycling services are satisfactory: 87.1
- Public safety is not a problem: 74.7
- Air pollution is not a problem: 59.2
- Medical services provision is satisfactory: 86.2
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 26.4

### Mobility
- Traffic congestion is not a problem: 39.2
- Public transport is satisfactory: 79.6

### Activities
- Green spaces are satisfactory: 74.8
- Cultural activities (shows, bars, and museums) are satisfactory: 84.0

### Opportunities (Work & School)
- Employment finding services are readily available: 74.1
- Most children have access to a good school: 84.3
- Lifelong learning opportunities are provided by local institutions: 74.1
- Businesses are creating new jobs: 73.0
- Minorities feel welcome: 67.8

### Governance
- Information on local government decisions are easily accessible: 71.1
- Corruption of city officials is not an issue of concern: 65.0
- Residents contribute to decision making of local government: 73.1
- Residents provide feedback on local government projects: 69.5

### Health & Safety
- Online reporting of city maintenance problems provides a speedy solution: 58.5
- A website or App allows residents to easily gain access to city services: 54.2
- CCTV cameras have made residents feel safer: 48.5
- A website or App allows residents to effectively monitor air pollution: 39.5
- Arranging medical appointments online has improved access: 59.9

### Mobility
- Car-sharing Apps have reduced congestion: 40.4
- Apps that direct you to an available parking space have reduced journey time: 41.3
- Bicycle sharing has reduced congestion: 50.8
- Online scheduling and ticket sales has made public transport easier to use: 78.4
- The city provides information on traffic congestion through mobile phones: 55.2

### Activities
- Online purchasing of tickets to shows and museums has made it easier to attend: 78.5

### Opportunities (Work & School)
- Online access to job listings has made it easier to find work: 78.0
- IT skills are taught well in schools: 60.7
- Online services provided by the city has made it easier to start a new business: 54.4
- The current internet speed and reliability meet connectivity needs: 78.7

### Governance
- Online public access to city finances has reduced corruption: 44.6
- Online voting has increased participation: 49.5
- An online platform where residents can propose ideas has improved city life: 48.4
- Processing identification documents online has reduced waiting times: 55.4