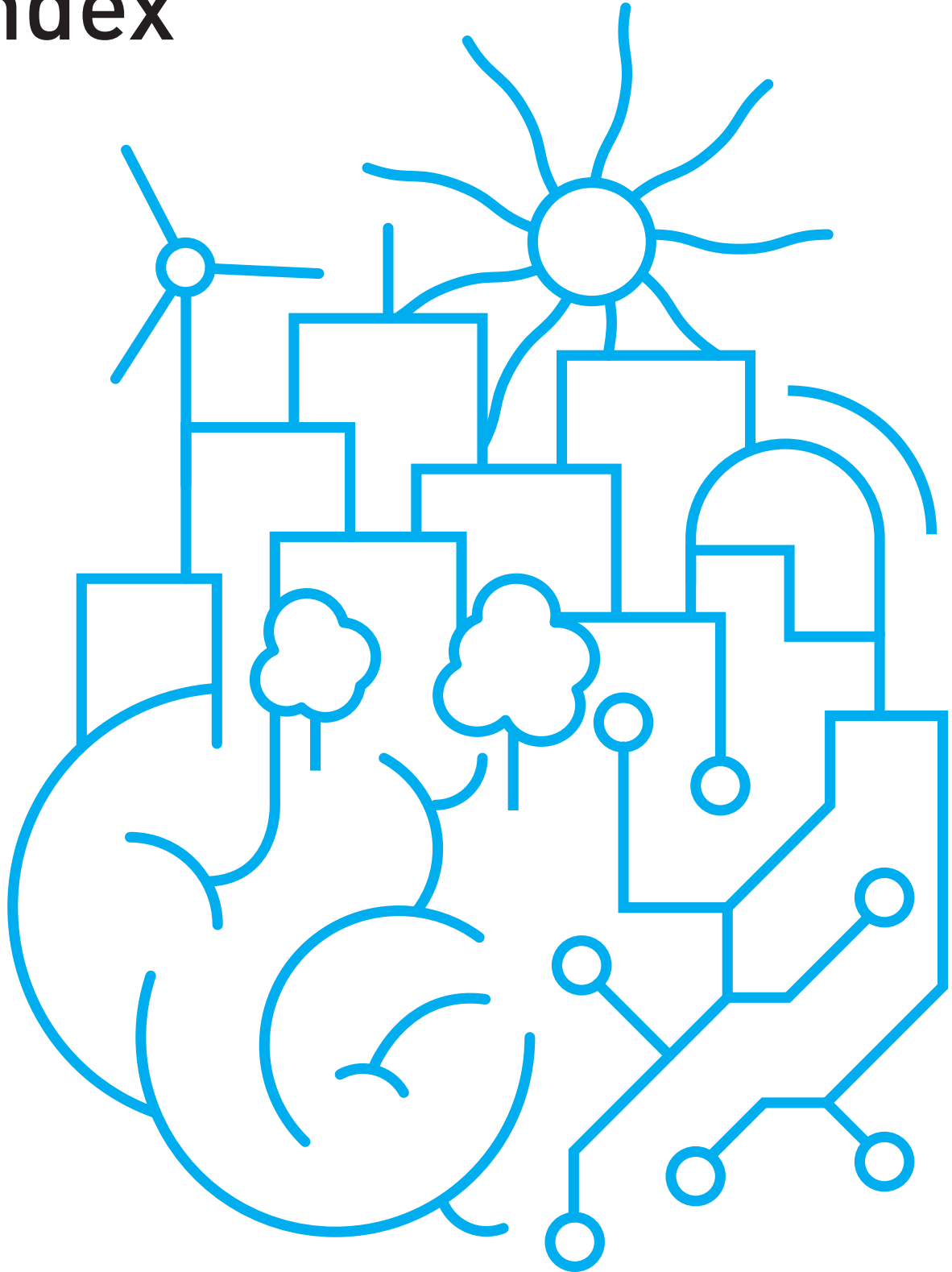


Smart City Index



« It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair... »

A Tale of Two Cities - Charles Dickens, 1859



Preface

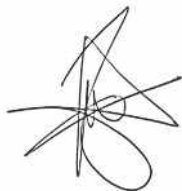
Smart Cities today fit amazingly well the opening lines of Charles Dickens' novel. They embed some of the highest hopes of mankind through the promise of harnessing technology for better lives and social harmony; for some, however, they could incarnate the fears of 'controlled lives' in some kind of panopticons governed by artificial intelligence and automated devices.

The choices we need to make today about what makes a city smart matter for at least two reasons. First, because the momentum of technological innovation will continue to increase in the near future, giving us new ways to address pending global challenges, in areas such as climate change, inequalities, health or education. Second because the majority of the individuals whose lives will depend on such choices will be city dwellers. Yet, for city leaders, investors, and citizens, such choices often remain difficult to make because they are complex, and often rely on imperfect or asymmetrical information. Real estate tactics have often prevailed over transport, energy or waste management concerns. Quality of life seldom received priority over urbanistic, architectural or technological ambitions. And efficiency sometimes eclipses social harmony.

In all avenues of life, it remains extremely difficult to improve what you can not measure. It is hence no surprise that so many 'smart city indices' have blossomed over the past few years. Why would we need another one? The main reason is simple: the quasi-totality of existing indices remains technology-centric. They give little or no room to assessing the 'why?' which underpins (or should underpin) any strategy to make a city smarter, or to build one from scratch. In line with previous and on-going efforts initiated and carried out by IMD's World Competitiveness Centre, the Smart City Index presented here is a holistic attempt to capture the various dimensions of how citizens could consider that their respective cities are becoming better cities by becoming smarter ones. Part of its uniqueness is to rely first and foremost on the perceptions of those who live and work in the cities covered by the index, while providing a realistic recognition that not all cities start from the same level of development, not with the same set of endowments and advantages. This new index also rests on a clear working definition of smart cities: in SCI's context, 'smart city' describes an urban setting that apply technology to enhance the benefits and diminish the shortcomings of urbanization.

This first edition of the SCI Report is the result of two years of intense work, carried out through a close cooperation between IMD and SUTD (Singapore University for Technology and Design), and benefitted from inputs by numerous experts and city specialists around the world. The initial methodology (described in detail in subsequent pages) has been refined through a series of field assessment and city specific studies, published earlier in the IMD-SUTD book 'Sixteen Shades of Smart'. In the future, we intend to pursue that path of systematic 'fact checking' on the ground, and to continue giving priority importance to the views of citizens and local players. This index will remain a 'work in progress' as new data, issues and views continue to gather around it and around the questions it raises. Its coverage will also increase with time, going significantly beyond the 102 cities included in this first edition.

It is hence our hope that feedback and reactions from all parts of the world will enable us to steer this index as close as possible to what it aims to be: a tool for action, and an instrument for better lives for all citizens.



*Professor Arturo Bris
Director - IMD World
Competitiveness Center*



*Professor Chan Heng Chee
President - Lee Kuan Yew
Centre for Innovative Cities*



*Bruno Lanvin
President - IMD Smart
City Observatory*



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City Profiles

| | | | |
|--------------------|----|------------------------|-----|
| Abu Dhabi | 14 | Copenhagen | 70 |
| Abuja | 16 | Denver | 72 |
| Amsterdam | 18 | Dubai | 74 |
| Ankara | 20 | Dublin | 76 |
| Athens | 22 | Dusseldorf | 78 |
| Auckland | 24 | Geneva | 80 |
| Bangkok | 26 | Göteborg | 82 |
| Barcelona | 28 | Guangzhou | 84 |
| Beijing | 30 | Hangzhou | 86 |
| Bengaluru | 32 | Hanoi | 88 |
| Berlin | 34 | Hanover | 90 |
| Bilbao | 36 | Helsinki | 92 |
| Birmingham | 38 | Ho Chi Minh City | 94 |
| Bogota | 40 | Hong Kong | 96 |
| Bologna | 42 | Hyderabad | 98 |
| Boston | 44 | Jakarta | 100 |
| Bratislava | 46 | Kiev | 102 |
| Brisbane | 48 | Krakow | 104 |
| Brussels | 50 | Kuala Lumpur | 106 |
| Bucharest | 52 | Lagos | 108 |
| Budapest | 54 | Lisbon | 110 |
| Buenos Aires | 56 | London | 112 |
| Busan | 58 | Los Angeles | 114 |
| Cairo | 60 | Lyon | 116 |
| Cape Town | 62 | Madrid | 118 |
| Chengdu | 64 | Makassar | 120 |
| Chicago | 66 | Manila | 122 |
| Chongqing | 68 | Medan | 124 |

City Profiles

| | | | |
|----------------------|-----|----------------------|-----|
| Medellin | 126 | Singapore | 182 |
| Melbourne..... | 128 | Sofia | 184 |
| Mexico City | 130 | St. Petersburg..... | 186 |
| Milan | 132 | Stockholm..... | 188 |
| Montreal..... | 134 | Sydney..... | 190 |
| Moscow | 136 | Taipei City..... | 192 |
| Mumbai..... | 138 | Tel Aviv | 194 |
| Nairobi | 140 | The Hague..... | 196 |
| Nanjing | 142 | Tianjin | 198 |
| New Delhi | 144 | Tokyo | 200 |
| New York | 146 | Toronto..... | 202 |
| Osaka | 148 | Vancouver..... | 204 |
| Oslo | 150 | Vienna | 206 |
| Paris | 152 | Warsaw..... | 208 |
| Philadelphia..... | 154 | Washington D.C. | 210 |
| Prague..... | 156 | Zaragoza | 212 |
| Rabat..... | 158 | Zhuhai..... | 214 |
| Rio de Janeiro | 160 | Zurich..... | 216 |
| Riyadh | 162 | | |
| Rome..... | 164 | | |
| Rotterdam..... | 166 | | |
| San Francisco..... | 168 | | |
| Santiago | 170 | | |
| São Paulo..... | 172 | | |
| Seattle | 174 | | |
| Seoul | 176 | | |
| Shanghai | 178 | | |
| Shenzhen | 180 | | |



The IMD World Competitiveness Center

For 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 |
| Bruno Lanvin | President, Smart City Observatory |
| José Caballero | Senior Economist |
| Maëlle Desard | Marketing Specialist |
| Madeleine Hediger | Data Research and Online Services Specialist |
| Catherine Jobin | Order and Sales Administrator |
| William Milner | Research Projects Associate Manager |
| Marco Pistis | Research Specialist |
| Maryam Zargari | Research Specialist |



City performance overview

Alphabetical

| City | Overall Rating | Overall ranking |
|--------------|----------------|-----------------|
| Abu Dhabi | B | 56 |
| Abuja | D | 97 |
| Amsterdam | A | 11 |
| Ankara | C C C | 74 |
| Athens | C | 95 |
| Auckland | A | 6 |
| Bangkok | C C C | 75 |
| Barcelona | B B | 48 |
| Beijing | B | 60 |
| Bengaluru | C C | 79 |
| Berlin | B B B | 39 |
| Bilbao | A | 9 |
| Birmingham | B B | 52 |
| Bogota | D | 98 |
| Bologna | B B B | 18 |
| Boston | B B B | 32 |
| Bratislava | C C | 84 |
| Brisbane | B B B | 27 |
| Brussels | B | 64 |
| Bucharest | C C | 85 |
| Budapest | C C | 83 |
| Buenos Aires | C C | 87 |
| Busan | B B | 50 |
| Cairo | D | 99 |
| Cape Town | C | 93 |
| Chengdu | B | 58 |

| City | Overall Rating | Overall ranking |
|------------------|----------------|-----------------|
| Chicago | B B | 53 |
| Chongqing | B B | 42 |
| Copenhagen | A A | 5 |
| Denver | B B B | 33 |
| Dubai | B B | 45 |
| Dublin | B B B | 30 |
| Dusseldorf | A | 10 |
| Geneva | A A | 4 |
| Gothenburg | B B B | 28 |
| Guangzhou | B | 57 |
| Hangzhou | B B | 44 |
| Hanoi | C C C | 66 |
| Hanover | B B B | 26 |
| Helsinki | A | 8 |
| Ho Chi Minh City | C C C | 65 |
| Hong Kong | B B B | 37 |
| Hyderabad | C C C | 67 |
| Jakarta | C C | 81 |
| Kiev | C | 92 |
| Krakow | C C C | 69 |
| Kuala Lumpur | C C C | 70 |
| Lagos | D | 102 |
| Lisbon | C C C | 76 |
| London | B B B | 20 |
| Los Angeles | B B B | 35 |
| Lyon | B B B | 23 |

| City | Overall Rating | Overall ranking |
|----------------|----------------|-----------------|
| Madrid | B B B | 21 |
| Makassar | C C | 80 |
| Manila | C | 94 |
| Medan | C C | 82 |
| Medellin | C | 91 |
| Melbourne | B B B | 24 |
| Mexico City | C C | 88 |
| Milan | B B B | 22 |
| Montreal | A | 16 |
| Moscow | C C C | 72 |
| Mumbai | C C | 78 |
| Nairobi | D | 100 |
| Nanjing | B | 55 |
| New Delhi | C C C | 68 |
| New York | B B B | 38 |
| Osaka | B | 63 |
| Oslo | A A | 3 |
| Paris | B B | 51 |
| Philadelphia | B B | 54 |
| Prague | B B B | 19 |
| Rabat | D | 101 |
| Rio de Janeiro | C | 96 |
| Riyadh | C C C | 71 |
| Rome | C C C | 77 |
| Rotterdam | B B B | 36 |
| San Francisco | A | 12 |

| City | Overall Rating | Overall ranking |
|-----------------|----------------|-----------------|
| Santiago | C C | 86 |
| São Paulo | C C | 90 |
| Seattle | B B B | 34 |
| Seoul | B B | 47 |
| Shanghai | B | 59 |
| Shenzhen | B B | 43 |
| Singapore | A A A | 1 |
| Sofia | C C | 89 |
| St. Petersburg | C C C | 73 |
| Stockholm | B B B | 25 |
| Sydney | A | 14 |
| Taipei City | A | 7 |
| Tel Aviv | B B | 46 |
| The Hague | B B B | 29 |
| Tianjin | B B | 41 |
| Tokyo | B | 62 |
| Toronto | A | 15 |
| Vancouver | A | 13 |
| Vienna | B B B | 17 |
| Warsaw | B | 61 |
| Washington D.C. | B B B | 31 |
| Zaragoza | B B | 49 |
| Zhuhai | B B | 40 |
| Zurich | A A A | 2 |

By ranking

| Overall ranking | City | Overall rating |
|-----------------|---------------|----------------|
| 1 | Singapore | A A A |
| 2 | Zurich | A A A |
| 3 | Oslo | A A |
| 4 | Geneva | A A |
| 5 | Copenhagen | A A |
| 6 | Auckland | A |
| 7 | Taipei City | A |
| 8 | Helsinki | A |
| 9 | Bilbao | A |
| 10 | Dusseldorf | A |
| 11 | Amsterdam | A |
| 12 | San Francisco | A |
| 13 | Vancouver | A |
| 14 | Sydney | A |
| 15 | Toronto | A |
| 16 | Montreal | A |
| 17 | Vienna | B B B |
| 18 | Bologna | B B B |
| 19 | Prague | B B B |
| 20 | London | B B B |
| 21 | Madrid | B B B |
| 22 | Milan | B B B |
| 23 | Lyon | B B B |
| 24 | Melbourne | B B B |
| 25 | Stockholm | B B B |
| 26 | Hanover | B B B |

| Overall ranking | City | Overall rating |
|-----------------|-----------------|----------------|
| 27 | Brisbane | B B B |
| 28 | Gothenburg | B B B |
| 29 | The Hague | B B B |
| 30 | Dublin | B B B |
| 31 | Washington D.C. | B B B |
| 32 | Boston | B B B |
| 33 | Denver | B B B |
| 34 | Seattle | B B B |
| 35 | Los Angeles | B B B |
| 36 | Rotterdam | B B B |
| 37 | Hong Kong | B B B |
| 38 | New York | B B B |
| 39 | Berlin | B B B |
| 40 | Zhuhai | B B |
| 41 | Tianjin | B B |
| 42 | Chongqing | B B |
| 43 | Shenzhen | B B |
| 44 | Hangzhou | B B |
| 45 | Dubai | B B |
| 46 | Tel Aviv | B B |
| 47 | Seoul | B B |
| 48 | Barcelona | B B |
| 49 | Zaragoza | B B |
| 50 | Busan | B B |
| 51 | Paris | B B |
| 52 | Birmingham | B B |

| Overall ranking | City | Overall rating |
|-----------------|------------------|----------------|
| 53 | Chicago | B B |
| 54 | Philadelphia | B B |
| 55 | Nanjing | B |
| 56 | Abu Dhabi | B |
| 57 | Guangzhou | B |
| 58 | Chengdu | B |
| 59 | Shanghai | B |
| 60 | Beijing | B |
| 61 | Warsaw | B |
| 62 | Tokyo | B |
| 63 | Osaka | B |
| 64 | Brussels | B |
| 65 | Ho Chi Minh City | C C C |
| 66 | Hanoi | C C C |
| 67 | Hyderabad | C C C |
| 68 | New Delhi | C C C |
| 69 | Krakow | C C C |
| 70 | Kuala Lumpur | C C C |
| 71 | Riyadh | C C C |
| 72 | Moscow | C C C |
| 73 | St. Petersburg | C C C |
| 74 | Ankara | C C C |
| 75 | Bangkok | C C C |
| 76 | Lisbon | C C C |
| 77 | Rome | C C C |
| 78 | Mumbai | C C |

| Overall ranking | City | Overall rating |
|-----------------|----------------|----------------|
| 79 | Bengaluru | C C |
| 80 | Makassar | C C |
| 81 | Jakarta | C C |
| 82 | Medan | C C |
| 83 | Budapest | C C |
| 84 | Bratislava | C C |
| 85 | Bucharest | C C |
| 86 | Santiago | C C |
| 87 | Buenos Aires | C C |
| 88 | Mexico City | C C |
| 89 | Sofia | C C |
| 90 | São Paulo | C C |
| 91 | Medellin | C |
| 92 | Kiev | C |
| 93 | Cape Town | C |
| 94 | Manila | C |
| 95 | Athens | C |
| 96 | Rio de Janeiro | C |
| 97 | Abuja | D |
| 98 | Bogota | D |
| 99 | Cairo | D |
| 100 | Nairobi | D |
| 101 | Rabat | D |
| 102 | Lagos | D |

User's Guide to the Smart City Index

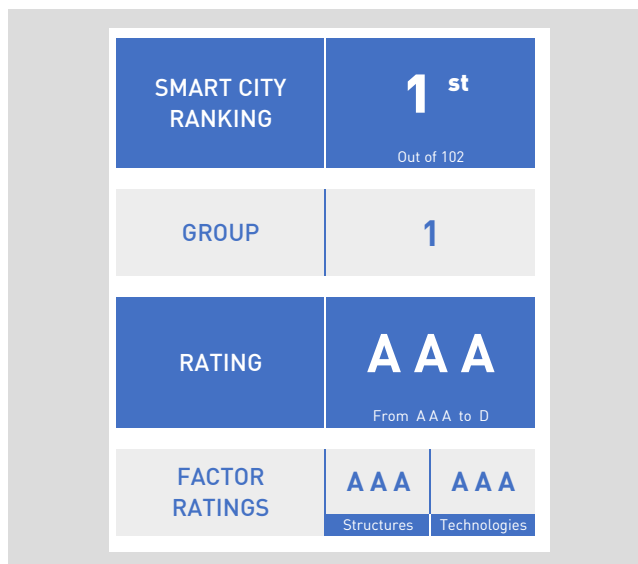
Smart City Ranking

Smart City Ranking: The ranking position of the city amongst the 102 cities measured, based upon the Rating and its components.

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

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.



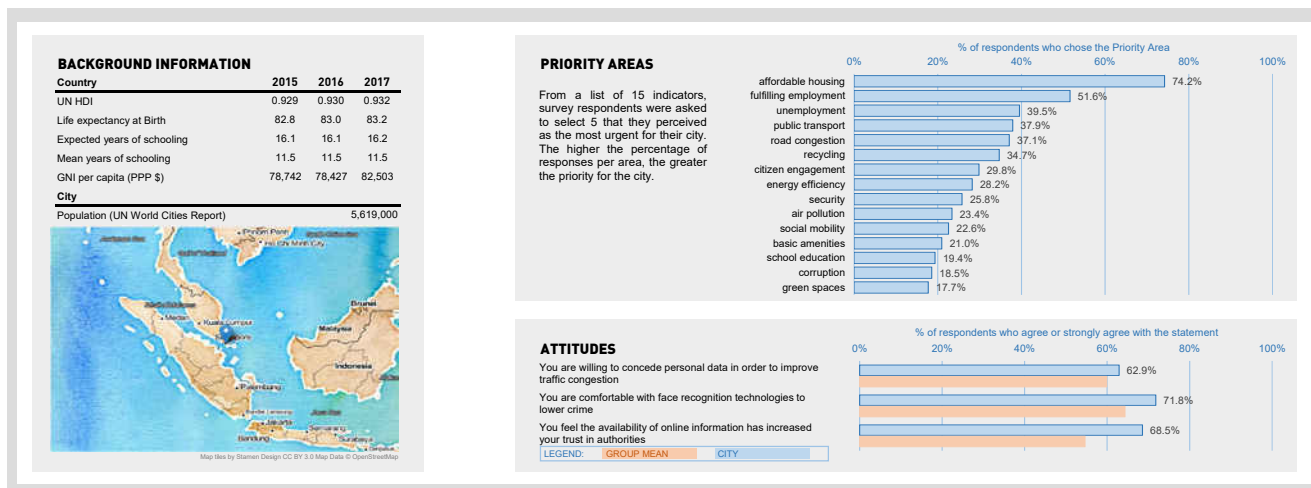
Background Information

Background Information: This presents the UN Human Development Index and its four components of the parent economy of the city, as well as the city's position on the map. For Taipei City, the data is calculated using the same methodology and comparable data. This section also presents the population of the city as defined through the UN World Cities Report for 94 of the cities, or Eurostat for 8 small European cities.

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 response rates indicate the preferences of the respondents; however, they were not asked to prioritize their choices.

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). The city is represented by the blue bar, while the group average is shown by the light red bar.



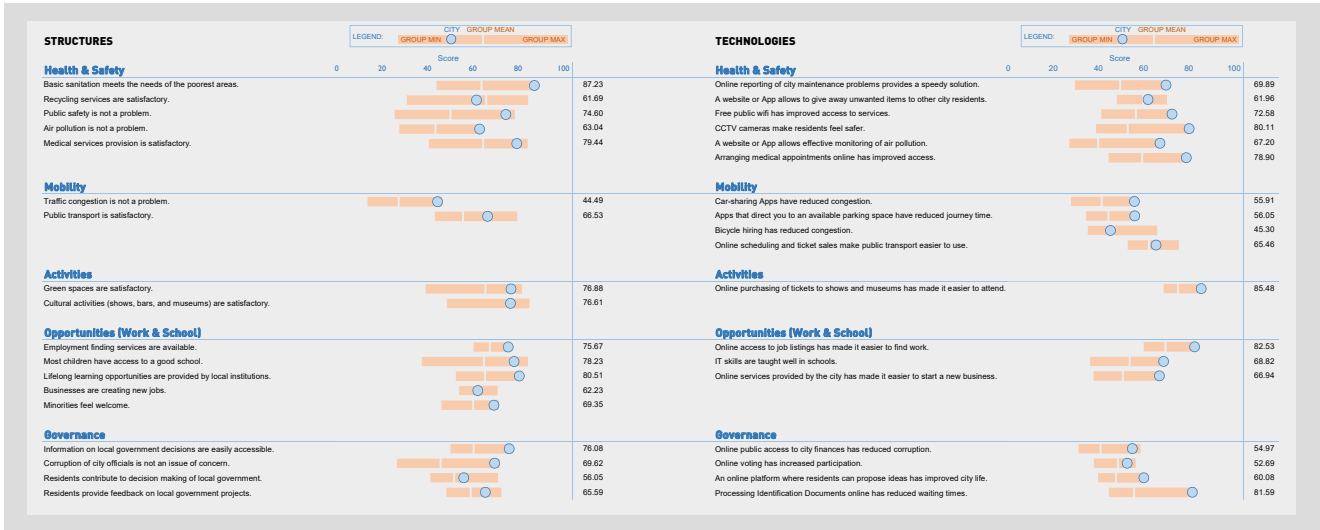
Structures and Technologies

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 plus its 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.





Methodology in a nutshell

1. The IMD-SUTD Smart City Index (SCI) assesses the perceptions of residents on issues related to structures and technology applications available to them in their city.
2. The first edition of the SCI ranks 102 cities worldwide by capturing the perceptions of 120 residents in each city.
3. 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.
4. Each pillar is evaluated over five key areas: health and safety, mobility, activities, opportunities, and governance.
5. The cities are distributed into four groups based on the UN Human Development Index (HDI) score of the economy they are part of.
6. 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.
7. Rankings are then presented in two formats:
 - an overall ranking (1 to 102)
 - a rating for each pillar and overall



CITY PROFILES



Abu Dhabi

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 56th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 3 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | B From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.860 | 0.862 | 0.863 |
| Life expectancy at Birth | 77.1 | 77.3 | 77.4 |
| Expected years of schooling | 13.8 | 13.6 | 13.6 |
| Mean years of schooling | 10.6 | 10.8 | 10.8 |
| GNI per capita (PPP \$) | 66,923 | 68,121 | 67,805 |

| City | Population (UN World Cities Report) |
|-----------|-------------------------------------|
| Abu Dhabi | 1,145,000 |



STRUCTURES

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

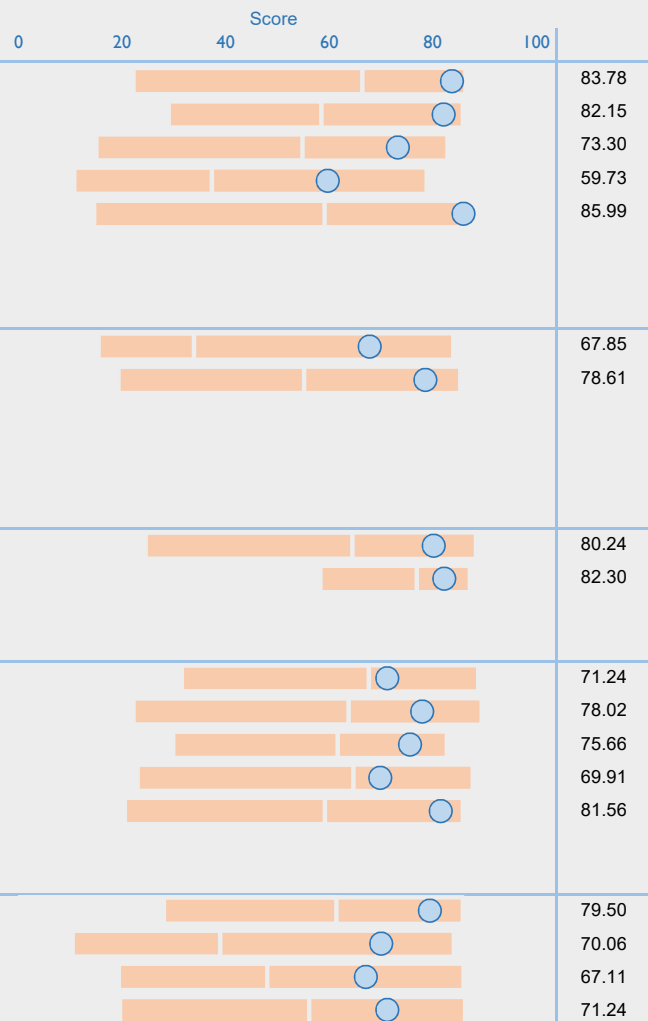
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

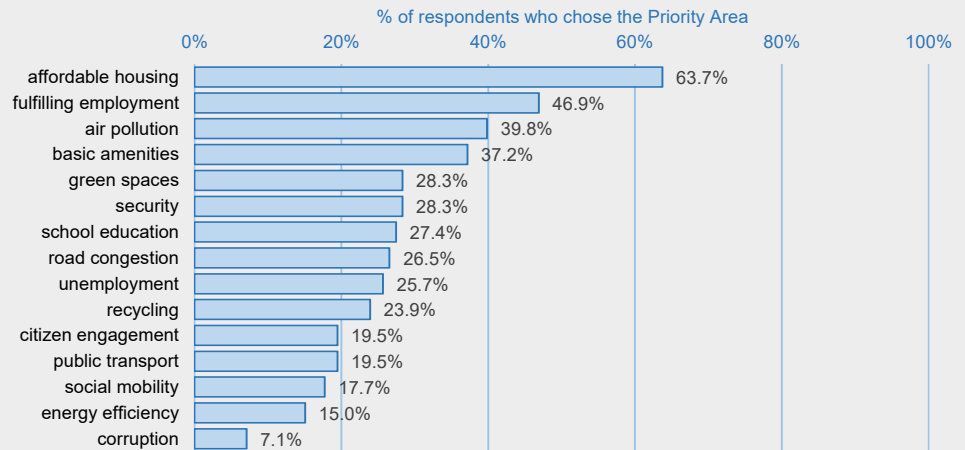
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



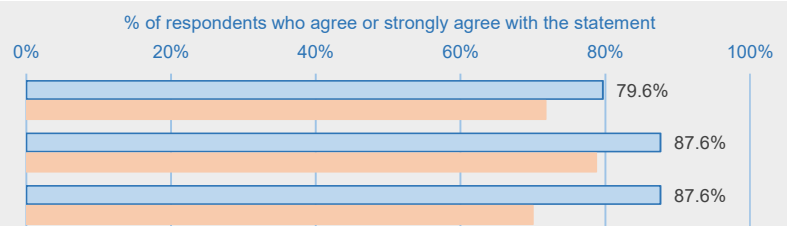
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 74.78 |
| A website or App allows to give away unwanted items to other city residents. | 71.09 |
| Free public wifi has improved access to services. | 75.22 |
| CCTV cameras make residents feel safer. | 84.51 |
| A website or App allows effective monitoring of air pollution. | 56.78 |
| Arranging medical appointments online has improved access. | 81.86 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 62.83 |
| Apps that direct you to an available parking space have reduced journey time. | 68.14 |
| Bicycle hiring has reduced congestion. | 66.37 |
| Online scheduling and ticket sales make public transport easier to use. | 78.91 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 84.22 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 77.73 |
| IT skills are taught well in schools. | 75.07 |
| Online services provided by the city has made it easier to start a new business. | 77.88 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 69.76 |
| Online voting has increased participation. | 69.91 |
| An online platform where residents can propose ideas has improved city life. | 70.21 |
| Processing Identification Documents online has reduced waiting times. | 81.56 |

Abuja

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 97th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 4 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | D From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | C | D |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.527 | 0.530 | 0.532 |
| Life expectancy at Birth | 53.0 | 53.4 | 53.9 |
| Expected years of schooling | 10.0 | 10.0 | 10.0 |
| Mean years of schooling | 6.0 | 6.2 | 6.2 |
| GNI per capita (PPP \$) | 5,527 | 5,326 | 5,231 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Abuja | 2,440,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

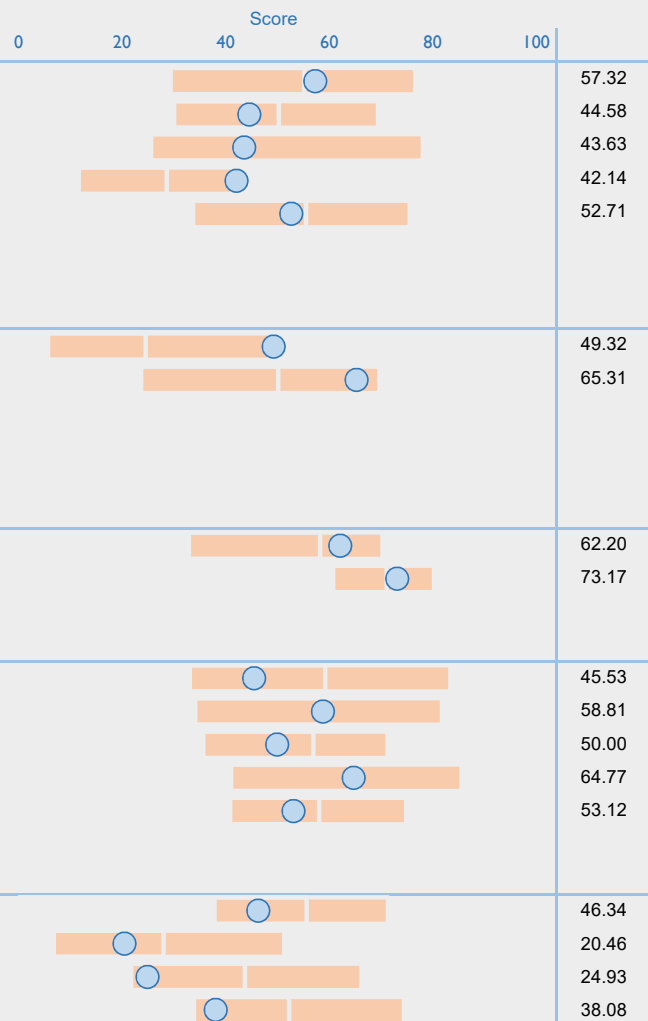
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

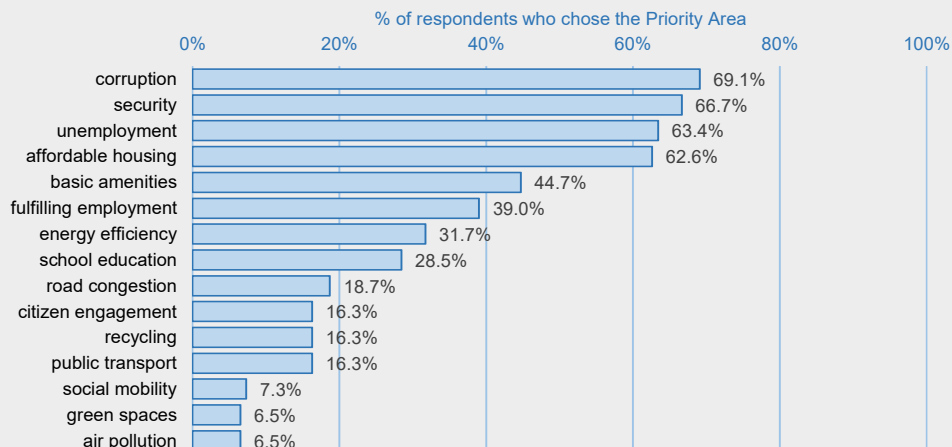
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



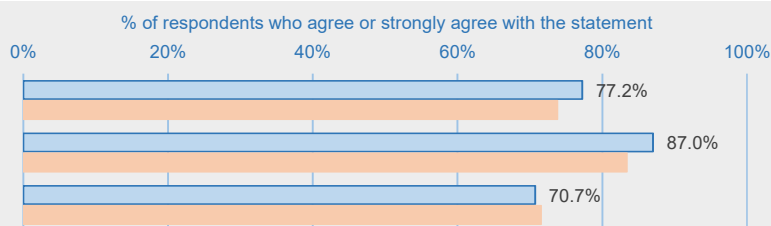
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 51.76 |
| A website or App allows to give away unwanted items to other city residents. | 39.02 |
| Free public wifi has improved access to services. | 40.51 |
| CCTV cameras make residents feel safer. | 43.09 |
| A website or App allows effective monitoring of air pollution. | 22.90 |
| Arranging medical appointments online has improved access. | 57.18 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 56.37 |
| Apps that direct you to an available parking space have reduced journey time. | 33.88 |
| Bicycle hiring has reduced congestion. | 23.04 |
| Online scheduling and ticket sales make public transport easier to use. | 64.23 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 72.63 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 71.82 |
| IT skills are taught well in schools. | 55.56 |
| Online services provided by the city has made it easier to start a new business. | 59.76 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 29.00 |
| Online voting has increased participation. | 22.09 |
| An online platform where residents can propose ideas has improved city life. | 31.17 |
| Processing Identification Documents online has reduced waiting times. | 50.41 |

Amsterdam

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 11th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | A From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | A | A |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.926 | 0.928 | 0.931 |
| Life expectancy at Birth | 81.7 | 81.9 | 82.0 |
| Expected years of schooling | 18.1 | 18.0 | 18.0 |
| Mean years of schooling | 12.1 | 12.1 | 12.2 |
| GNI per capita (PPP \$) | 46,239 | 46,711 | 47,900 |

| City | Population (UN World Cities Report) |
|-----------|-------------------------------------|
| Amsterdam | 1,091,000 |



STRUCTURES

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

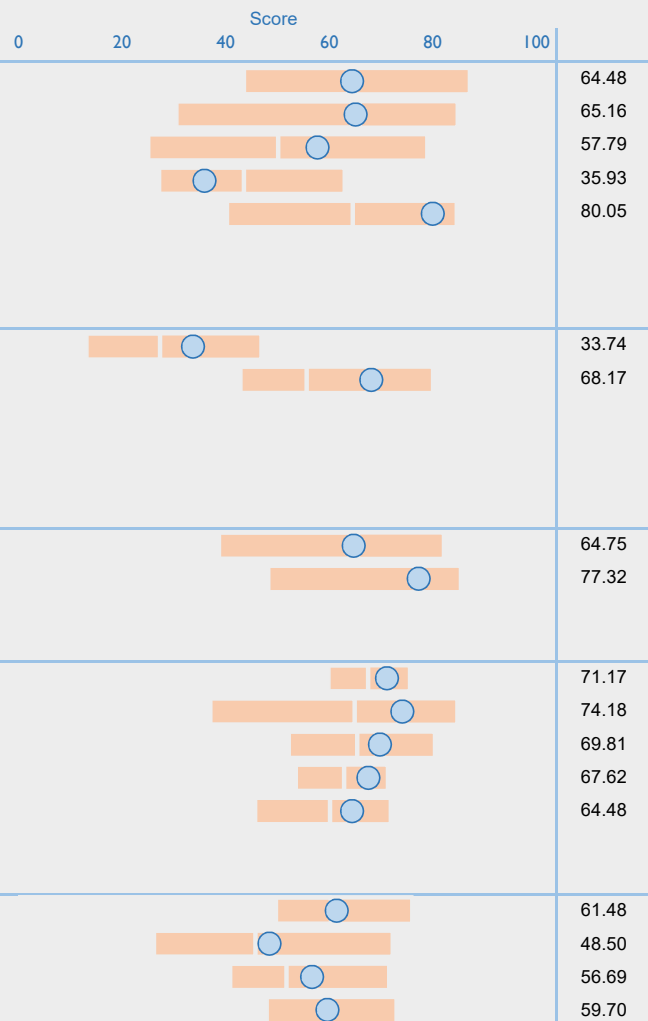
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

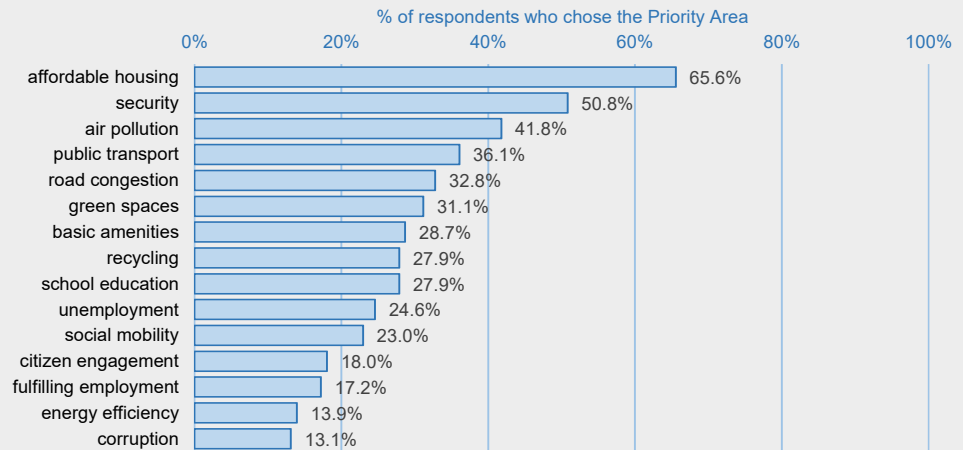
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



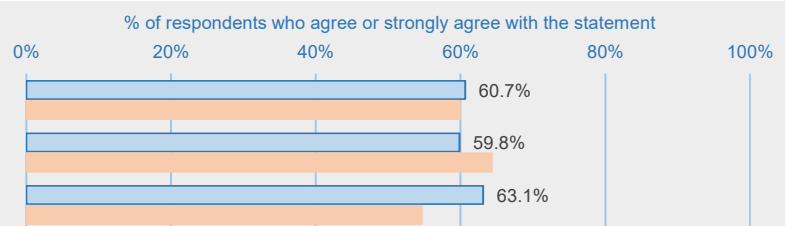
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 57.65 |
| A website or App allows to give away unwanted items to other city residents. | 59.70 |
| Free public wifi has improved access to services. | 51.09 |
| CCTV cameras make residents feel safer. | 61.75 |
| A website or App allows effective monitoring of air pollution. | 39.07 |
| Arranging medical appointments online has improved access. | 65.71 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 40.98 |
| Apps that direct you to an available parking space have reduced journey time. | 53.42 |
| Bicycle hiring has reduced congestion. | 54.92 |
| Online scheduling and ticket sales make public transport easier to use. | 58.74 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 70.08 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 65.44 |
| IT skills are taught well in schools. | 56.42 |
| Online services provided by the city has made it easier to start a new business. | 54.64 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 42.49 |
| Online voting has increased participation. | 47.27 |
| An online platform where residents can propose ideas has improved city life. | 47.81 |
| Processing Identification Documents online has reduced waiting times. | 56.69 |

Ankara

SMART CITY RANKING **74th**
Out of 102

GROUP **3**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.783 | 0.787 | 0.791 |
| Life expectancy at Birth | 75.5 | 75.8 | 76.0 |
| Expected years of schooling | 15.2 | 15.2 | 15.2 |
| Mean years of schooling | 7.8 | 8.0 | 8.0 |
| GNI per capita (PPP \$) | 23,125 | 23,500 | 24,804 |

City
Population (UN World Cities Report) 4,750,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

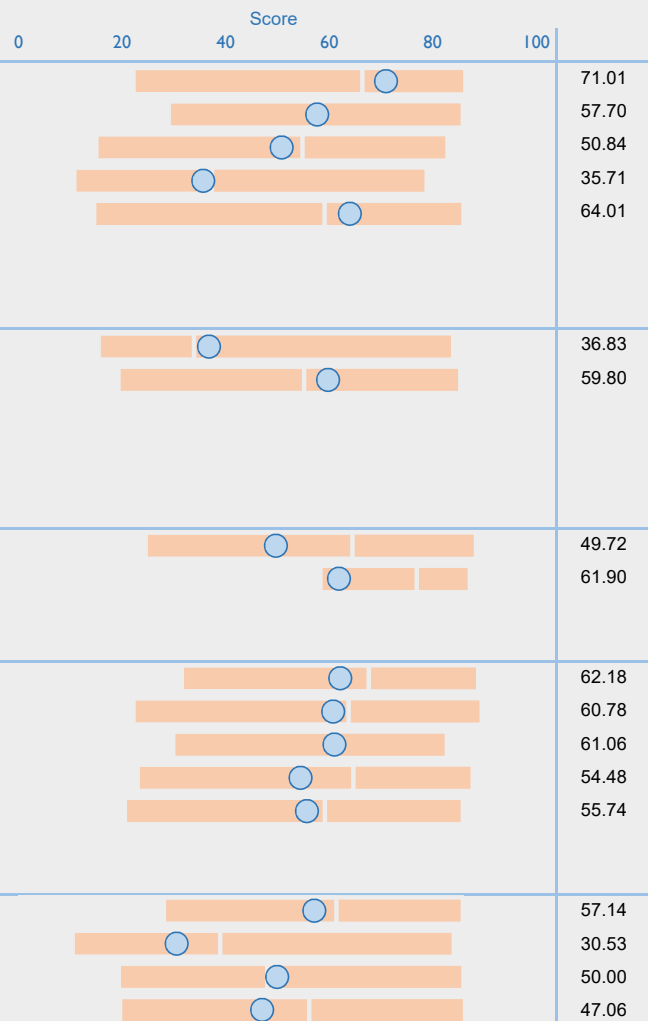
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

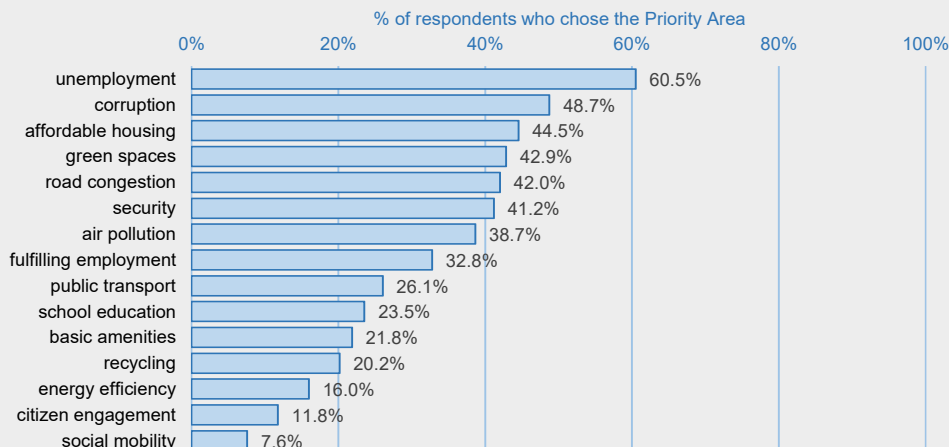
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



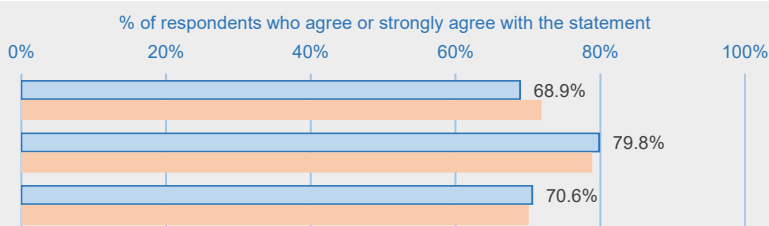
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 63.59 |
| A website or App allows to give away unwanted items to other city residents. | 65.55 |
| Free public wifi has improved access to services. | 57.98 |
| CCTV cameras make residents feel safer. | 68.49 |
| A website or App allows effective monitoring of air pollution. | 55.04 |
| Arranging medical appointments online has improved access. | 80.39 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 46.92 |
| Apps that direct you to an available parking space have reduced journey time. | 48.04 |
| Bicycle hiring has reduced congestion. | 42.44 |
| Online scheduling and ticket sales make public transport easier to use. | 63.87 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 67.79 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 73.11 |
| IT skills are taught well in schools. | 62.32 |
| Online services provided by the city has made it easier to start a new business. | 58.26 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 42.86 |
| Online voting has increased participation. | 43.28 |
| An online platform where residents can propose ideas has improved city life. | 53.50 |
| Processing Identification Documents online has reduced waiting times. | 67.65 |

Athens

SMART CITY RANKING **95th**
Out of 102

GROUP **3**

RATING **C**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| C | C |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.866 | 0.868 | 0.870 |
| Life expectancy at Birth | 81.0 | 81.2 | 81.4 |
| Expected years of schooling | 17.3 | 17.3 | 17.3 |
| Mean years of schooling | 10.6 | 10.8 | 10.8 |
| GNI per capita (PPP \$) | 24,251 | 24,284 | 24,648 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 3,052,000 |
|-------------------------------------|-----------|



STRUCTURES

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

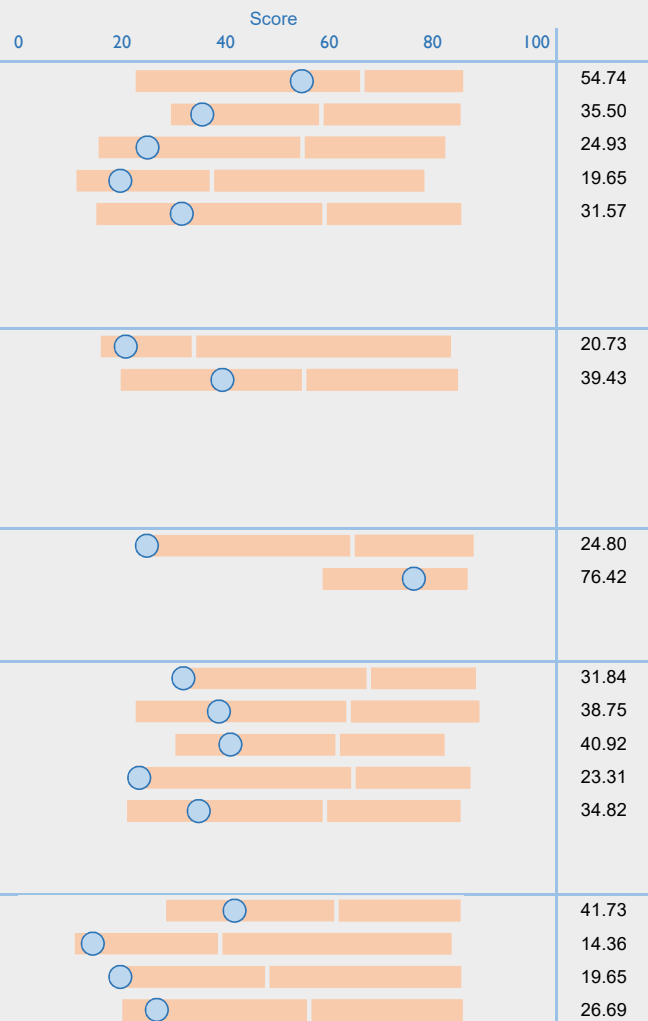
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

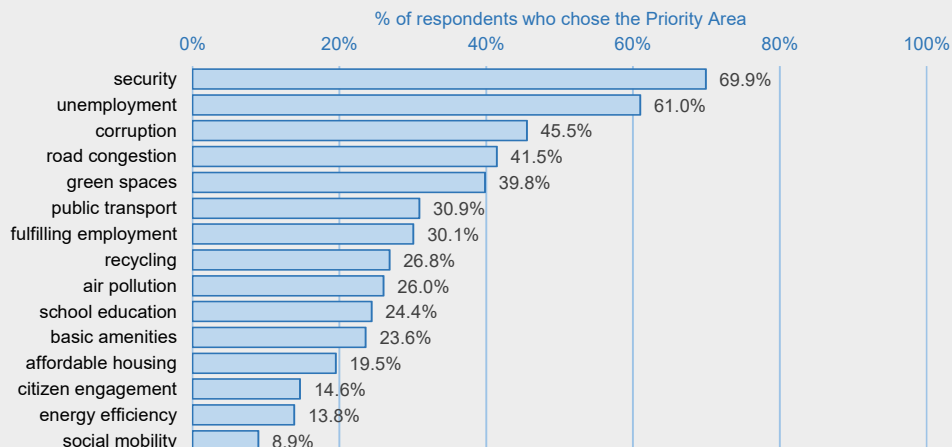
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

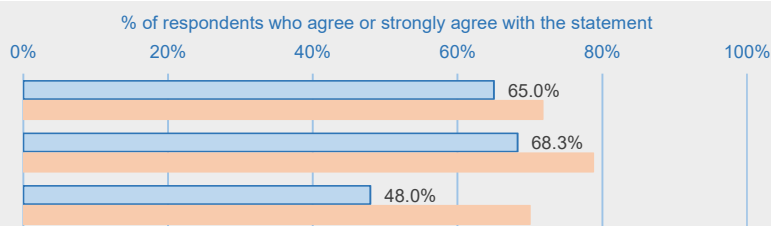


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 36.86 |
| A website or App allows to give away unwanted items to other city residents. | 55.15 |
| Free public wifi has improved access to services. | 32.38 |
| CCTV cameras make residents feel safer. | 30.49 |
| A website or App allows effective monitoring of air pollution. | 36.45 |
| Arranging medical appointments online has improved access. | 57.05 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 35.50 |
| Apps that direct you to an available parking space have reduced journey time. | 38.89 |
| Bicycle hiring has reduced congestion. | 32.11 |
| Online scheduling and ticket sales make public transport easier to use. | 53.93 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 84.01 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 68.70 |
| IT skills are taught well in schools. | 37.94 |
| Online services provided by the city has made it easier to start a new business. | 32.11 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 23.58 |
| Online voting has increased participation. | 31.03 |
| An online platform where residents can propose ideas has improved city life. | 32.52 |
| Processing Identification Documents online has reduced waiting times. | 56.37 |

Auckland

SMART CITY RANKING **6th**
Out of 102

GROUP **2**

RATING **A**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| A | A |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.914 | 0.915 | 0.917 |
| Life expectancy at Birth | 81.7 | 81.9 | 82.0 |
| Expected years of schooling | 18.9 | 18.9 | 18.9 |
| Mean years of schooling | 12.4 | 12.5 | 12.5 |
| GNI per capita (PPP \$) | 33,643 | 33,679 | 33,970 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 1,344,000 |
|-------------------------------------|-----------|



STRUCTURES

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

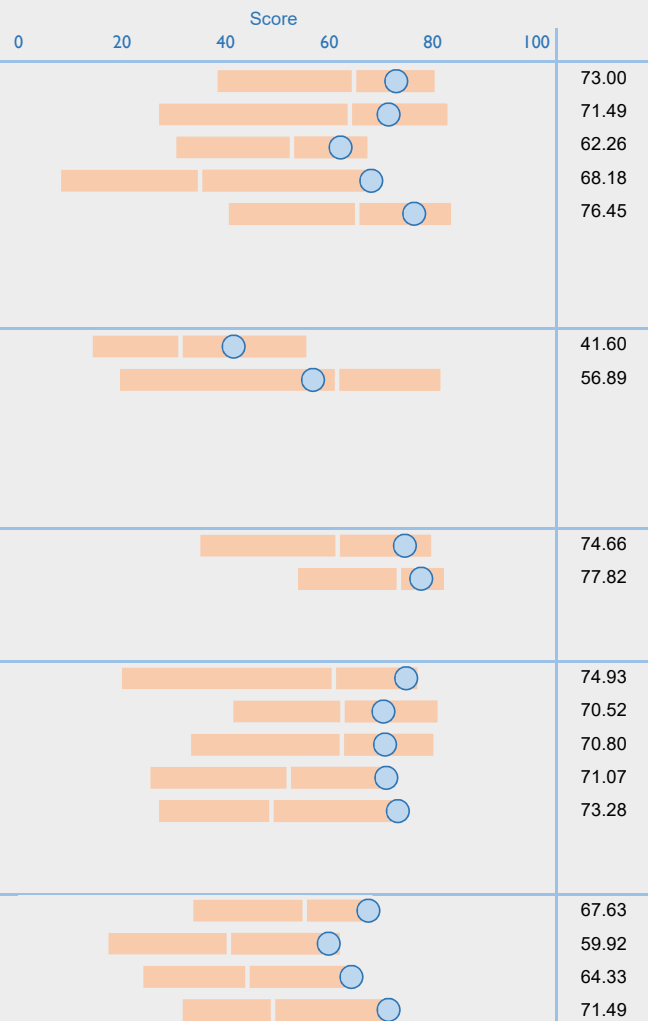
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

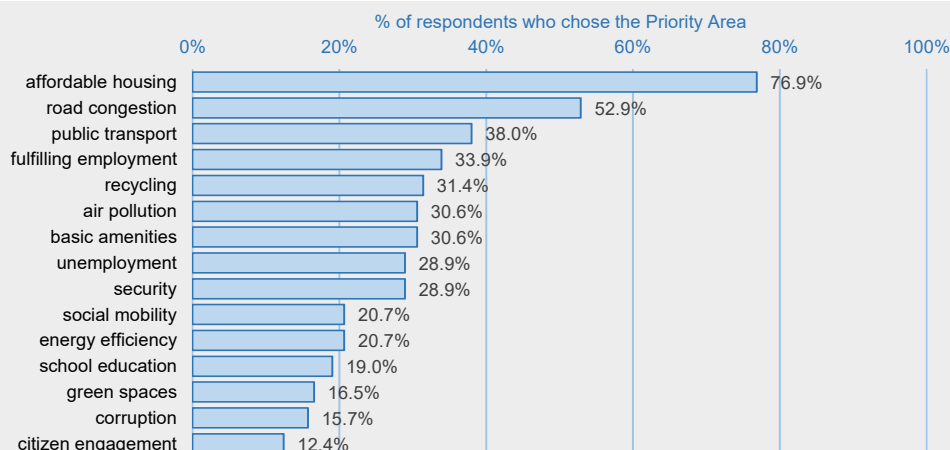
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

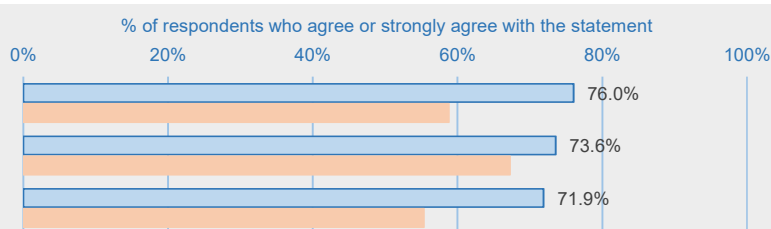


ATTITUDES

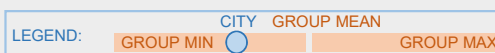
You are willing to concede personal data in order to improve traffic congestion

You are comfortable with face recognition technologies to lower crime

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 64.46 |
| A website or App allows to give away unwanted items to other city residents. | 75.48 |
| Free public wifi has improved access to services. | 75.76 |
| CCTV cameras make residents feel safer. | 68.18 |
| A website or App allows effective monitoring of air pollution. | 53.99 |
| Arranging medical appointments online has improved access. | 71.07 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 62.12 |
| Apps that direct you to an available parking space have reduced journey time. | 61.29 |
| Bicycle hiring has reduced congestion. | 61.02 |
| Online scheduling and ticket sales make public transport easier to use. | 76.58 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 81.82 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 82.78 |
| IT skills are taught well in schools. | 66.67 |
| Online services provided by the city has made it easier to start a new business. | 63.91 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 62.26 |
| Online voting has increased participation. | 70.25 |
| An online platform where residents can propose ideas has improved city life. | 64.33 |
| Processing Identification Documents online has reduced waiting times. | 74.79 |

Bangkok

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 75th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 3 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | CCC From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | CC | CCC |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.741 | 0.748 | 0.755 |
| Life expectancy at Birth | 75.1 | 75.3 | 75.5 |
| Expected years of schooling | 13.9 | 14.3 | 14.7 |
| Mean years of schooling | 7.6 | 7.6 | 7.6 |
| GNI per capita (PPP \$) | 14,455 | 14,971 | 15,516 |

| City | Population (UN World Cities Report) |
|---------|-------------------------------------|
| Bangkok | 9,270,000 |



STRUCTURES

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

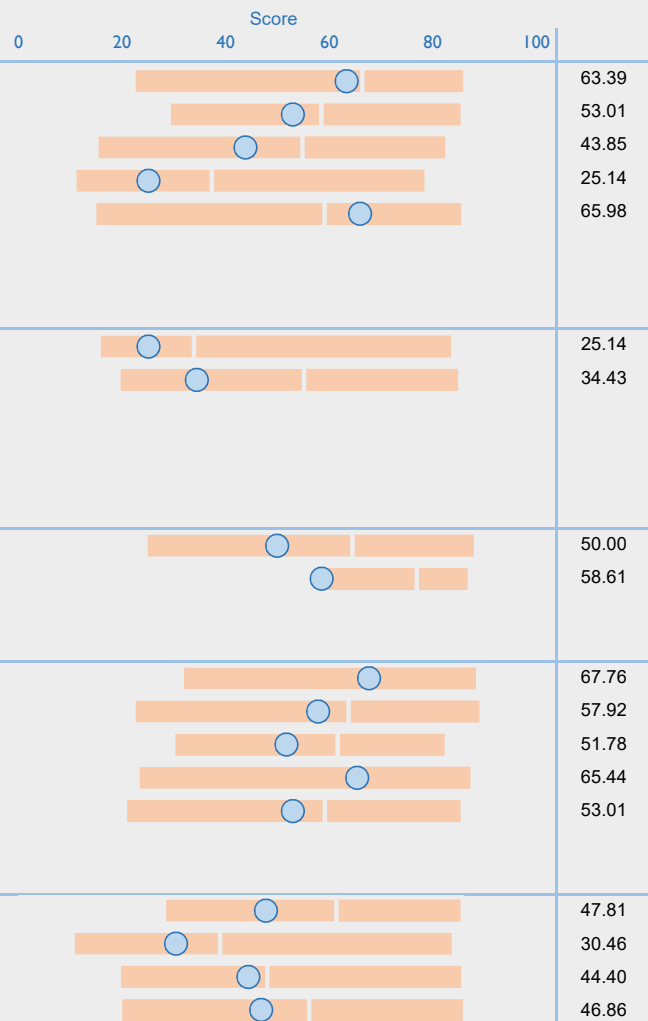
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

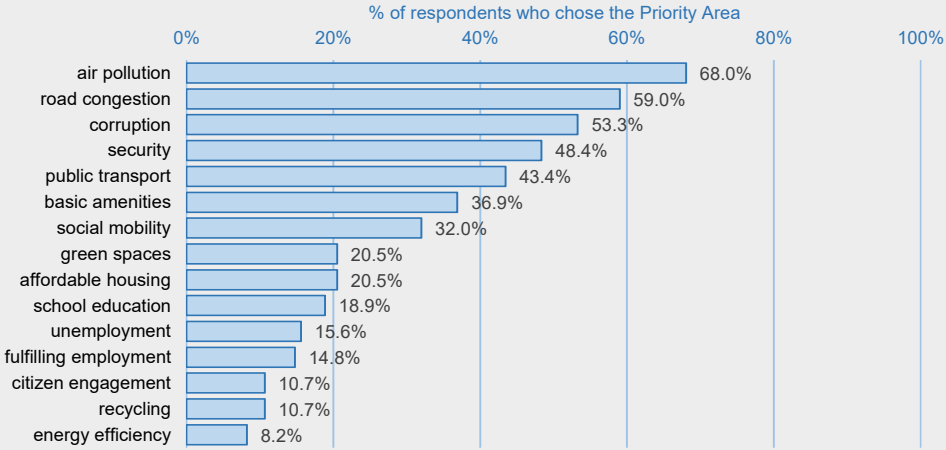
Governance

- 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.



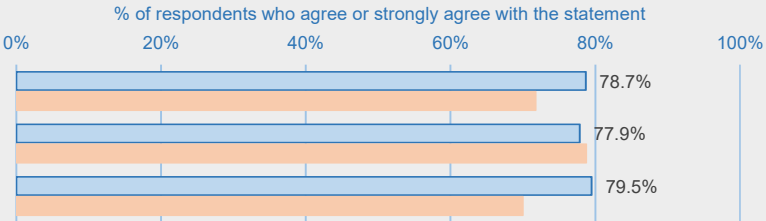
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 55.19 |
| A website or App allows to give away unwanted items to other city residents. | 58.88 |
| Free public wifi has improved access to services. | 54.92 |
| CCTV cameras make residents feel safer. | 61.20 |
| A website or App allows effective monitoring of air pollution. | 67.76 |
| Arranging medical appointments online has improved access. | 60.79 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 55.19 |
| Apps that direct you to an available parking space have reduced journey time. | 54.37 |
| Bicycle hiring has reduced congestion. | 53.55 |
| Online scheduling and ticket sales make public transport easier to use. | 72.27 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 76.23 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 78.83 |
| IT skills are taught well in schools. | 70.63 |
| Online services provided by the city has made it easier to start a new business. | 68.44 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 47.54 |
| Online voting has increased participation. | 63.11 |
| An online platform where residents can propose ideas has improved city life. | 62.57 |
| Processing Identification Documents online has reduced waiting times. | 65.71 |

Barcelona

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 48th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | B B From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.885 | 0.889 | 0.891 |
| Life expectancy at Birth | 83.0 | 83.1 | 83.3 |
| Expected years of schooling | 17.8 | 17.9 | 17.9 |
| Mean years of schooling | 9.7 | 9.8 | 9.8 |
| GNI per capita (PPP \$) | 32,217 | 33,307 | 34,258 |

| City | Population (UN World Cities Report) |
|-----------|-------------------------------------|
| Barcelona | 5,258,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

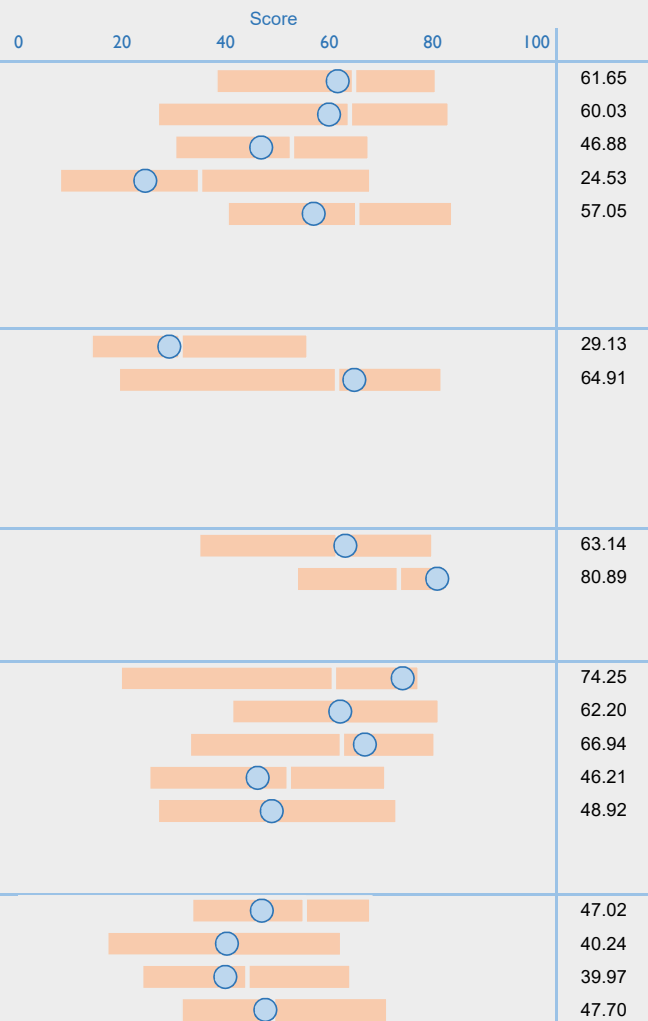
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

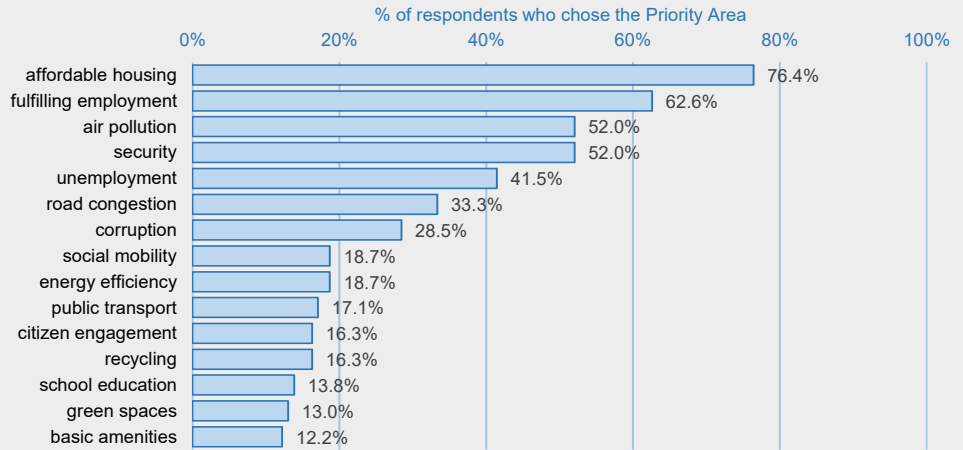
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

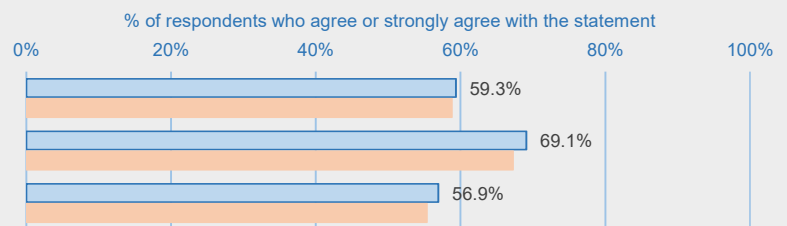


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 49.19 |
| A website or App allows to give away unwanted items to other city residents. | 57.05 |
| Free public wifi has improved access to services. | 54.34 |
| CCTV cameras make residents feel safer. | 49.32 |
| A website or App allows effective monitoring of air pollution. | 45.66 |
| Arranging medical appointments online has improved access. | 70.46 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 49.73 |
| Apps that direct you to an available parking space have reduced journey time. | 48.10 |
| Bicycle hiring has reduced congestion. | 57.45 |
| Online scheduling and ticket sales make public transport easier to use. | 63.28 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 77.37 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 66.26 |
| IT skills are taught well in schools. | 55.42 |
| Online services provided by the city has made it easier to start a new business. | 51.76 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 40.65 |
| Online voting has increased participation. | 43.09 |
| An online platform where residents can propose ideas has improved city life. | 52.44 |
| Processing Identification Documents online has reduced waiting times. | 63.28 |

Beijing

SMART CITY RANKING **60th**
Out of 102

GROUP **3**

RATING **B**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| B | B B |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

City

| | |
|-------------------------------------|------------|
| Population (UN World Cities Report) | 20,384,000 |
|-------------------------------------|------------|



STRUCTURES

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

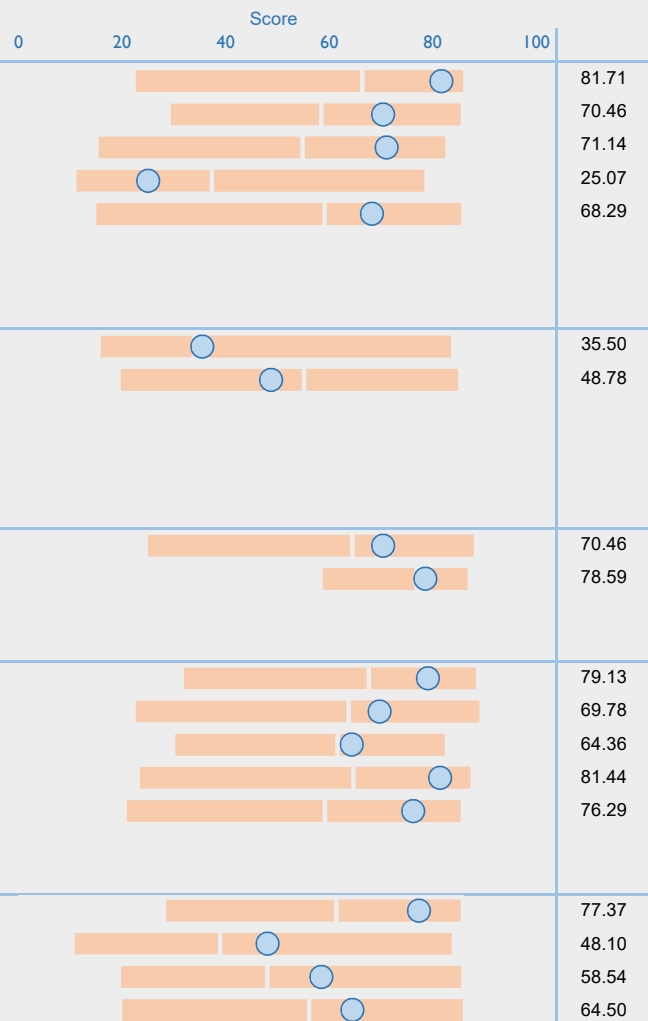
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

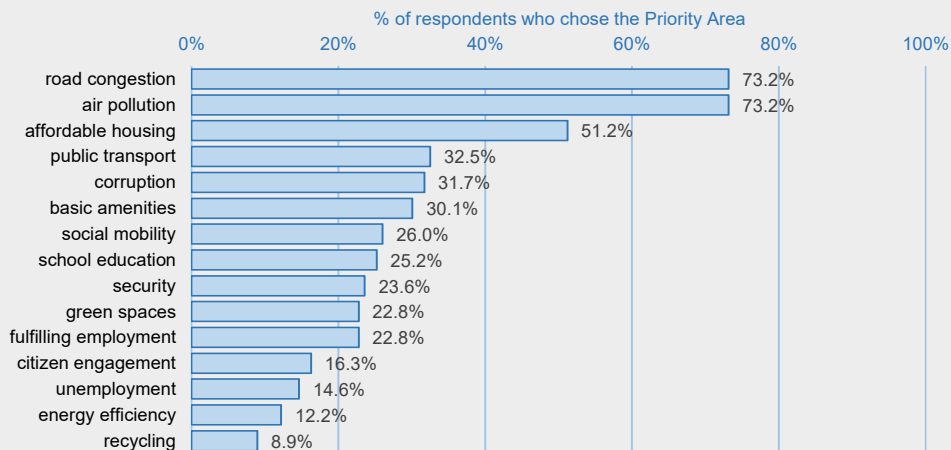
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



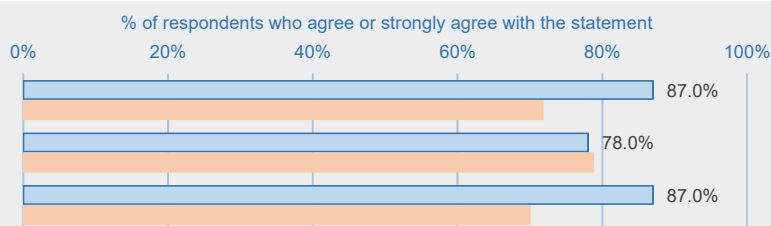
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 84.42 |
| A website or App allows to give away unwanted items to other city residents. | 65.85 |
| Free public wifi has improved access to services. | 80.62 |
| CCTV cameras make residents feel safer. | 81.03 |
| A website or App allows effective monitoring of air pollution. | 76.69 |
| Arranging medical appointments online has improved access. | 88.62 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 64.09 |
| Apps that direct you to an available parking space have reduced journey time. | 74.12 |
| Bicycle hiring has reduced congestion. | 72.90 |
| Online scheduling and ticket sales make public transport easier to use. | 88.21 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 92.28 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 89.02 |
| IT skills are taught well in schools. | 80.35 |
| Online services provided by the city has made it easier to start a new business. | 80.89 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 74.93 |
| Online voting has increased participation. | 67.75 |
| An online platform where residents can propose ideas has improved city life. | 80.22 |
| Processing Identification Documents online has reduced waiting times. | 79.27 |

Bengaluru

SMART CITY RANKING **79th**
Out of 102

GROUP **4**

RATING **CC**
From AAA to D

FACTOR RATINGS **CC** **CC**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.627 | 0.636 | 0.640 |
| Life expectancy at Birth | 68.3 | 68.6 | 68.8 |
| Expected years of schooling | 12.0 | 12.3 | 12.3 |
| Mean years of schooling | 6.3 | 6.4 | 6.4 |
| GNI per capita (PPP \$) | 5,691 | 6,026 | 6,353 |

City

Population (UN World Cities Report) 10,087,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

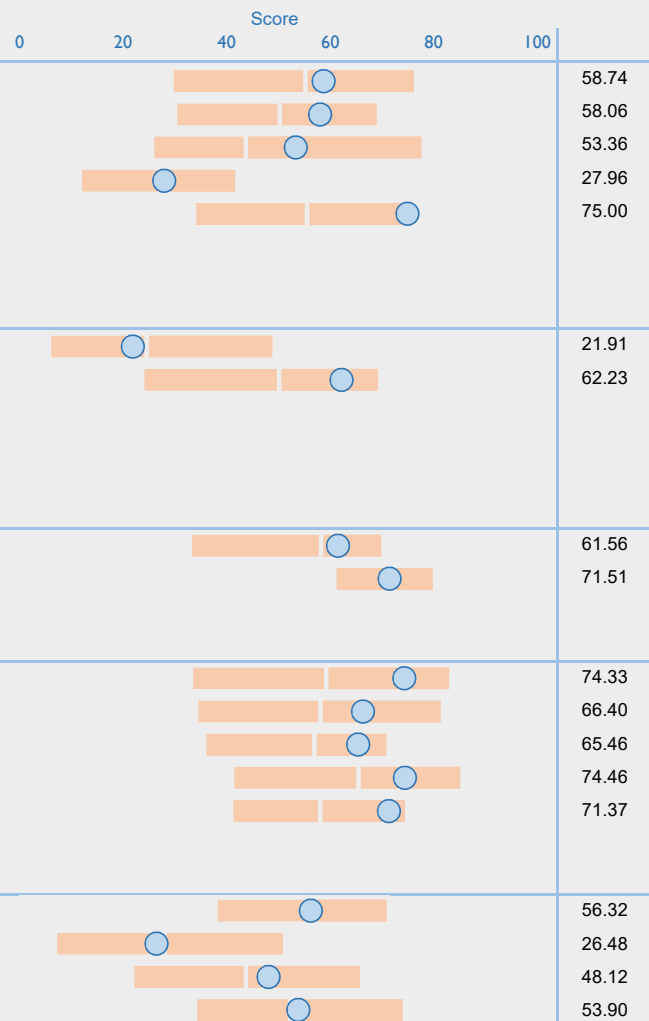
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

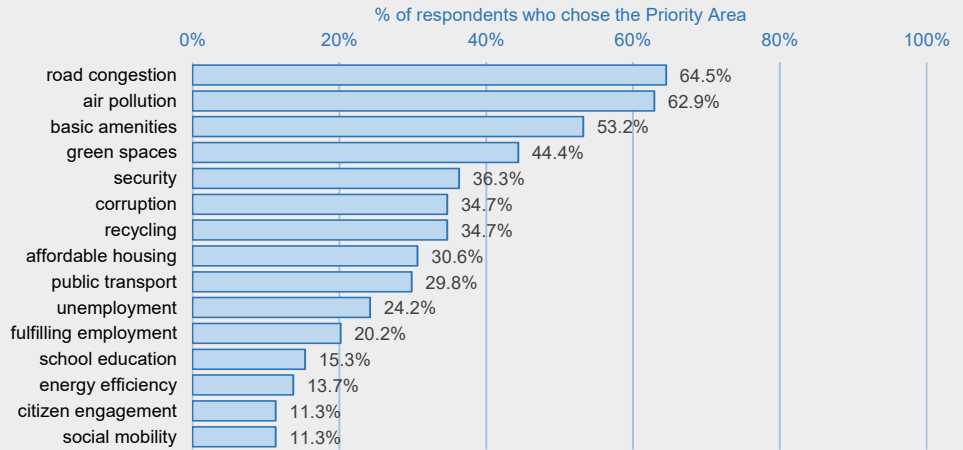
Governance

- 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.



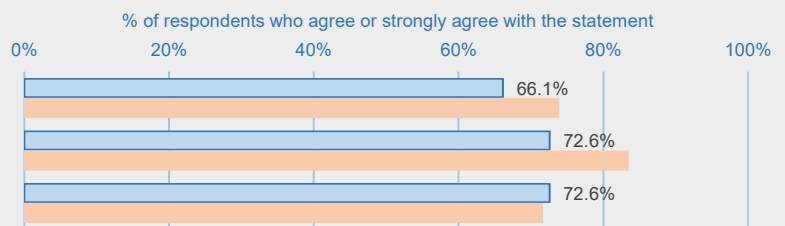
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score | City Score |
|--|-------|------------|
| Online reporting of city maintenance problems provides a speedy solution. | 59.95 | ~55 |
| A website or App allows to give away unwanted items to other city residents. | 54.17 | ~50 |
| Free public wifi has improved access to services. | 53.09 | ~50 |
| CCTV cameras make residents feel safer. | 73.92 | ~75 |
| A website or App allows effective monitoring of air pollution. | 47.18 | ~45 |
| Arranging medical appointments online has improved access. | 80.65 | ~80 |

Mobility

| Statement | Score | City Score |
|---|-------|------------|
| Car-sharing Apps have reduced congestion. | 64.78 | ~60 |
| Apps that direct you to an available parking space have reduced journey time. | 55.91 | ~55 |
| Bicycle hiring has reduced congestion. | 59.01 | ~55 |
| Online scheduling and ticket sales make public transport easier to use. | 76.34 | ~75 |

Activities

| Statement | Score | City Score |
|---|-------|------------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 79.57 | ~80 |

Opportunities (Work & School)

| Statement | Score | City Score |
|--|-------|------------|
| Online access to job listings has made it easier to find work. | 79.70 | ~80 |
| IT skills are taught well in schools. | 62.23 | ~60 |
| Online services provided by the city has made it easier to start a new business. | 74.73 | ~75 |

Governance

| Statement | Score | City Score |
|--|-------|------------|
| Online public access to city finances has reduced corruption. | 53.49 | ~50 |
| Online voting has increased participation. | 52.42 | ~50 |
| An online platform where residents can propose ideas has improved city life. | 60.08 | ~60 |
| Processing Identification Documents online has reduced waiting times. | 73.39 | ~75 |

Berlin

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 39th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | A | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.933 | 0.934 | 0.936 |
| Life expectancy at Birth | 80.8 | 81.0 | 81.2 |
| Expected years of schooling | 17.0 | 17.0 | 17.0 |
| Mean years of schooling | 14.1 | 14.1 | 14.1 |
| GNI per capita (PPP \$) | 44,766 | 45,203 | 46,136 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Berlin | 3,563,000 |



STRUCTURES

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

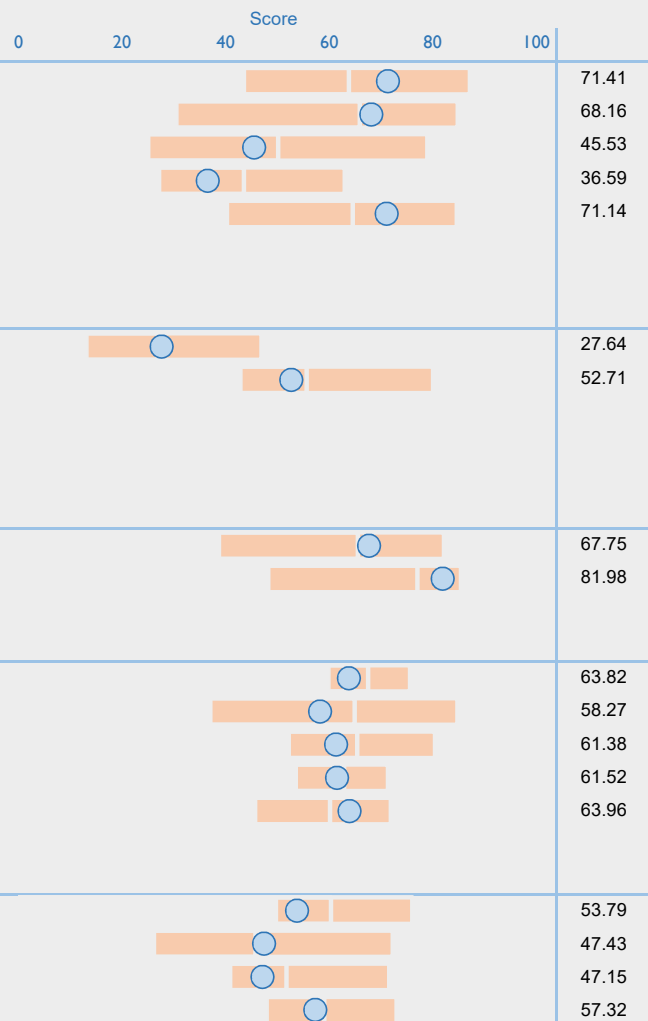
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

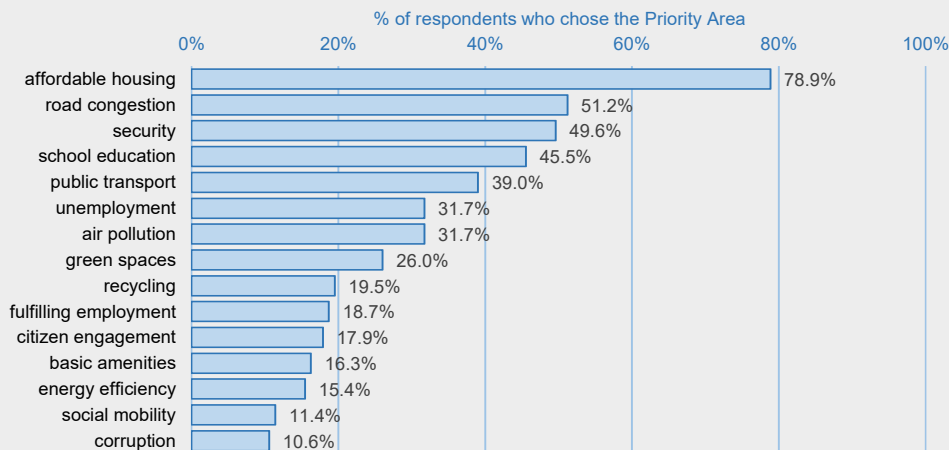
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

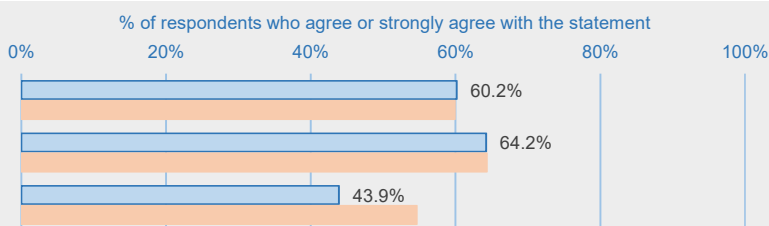


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 39.30 |
| A website or App allows to give away unwanted items to other city residents. | 55.69 |
| Free public wifi has improved access to services. | 41.19 |
| CCTV cameras make residents feel safer. | 50.95 |
| A website or App allows effective monitoring of air pollution. | 28.32 |
| Arranging medical appointments online has improved access. | 44.44 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 37.26 |
| Apps that direct you to an available parking space have reduced journey time. | 40.24 |
| Bicycle hiring has reduced congestion. | 45.53 |
| Online scheduling and ticket sales make public transport easier to use. | 67.89 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 74.80 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 67.75 |
| IT skills are taught well in schools. | 47.02 |
| Online services provided by the city has made it easier to start a new business. | 40.92 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 36.04 |
| Online voting has increased participation. | 44.72 |
| An online platform where residents can propose ideas has improved city life. | 43.77 |
| Processing Identification Documents online has reduced waiting times. | 44.58 |

Bilbao

| | |
|---------------------------|-------------------------------------|
| SMART CITY RANKING | 9th Out of 102 |
|---------------------------|-------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | A From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | A | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.885 | 0.889 | 0.891 |
| Life expectancy at Birth | 83.0 | 83.1 | 83.3 |
| Expected years of schooling | 17.8 | 17.9 | 17.9 |
| Mean years of schooling | 9.7 | 9.8 | 9.8 |
| GNI per capita (PPP \$) | 32,217 | 33,307 | 34,258 |

| City | Population (Eurostat) |
|--------|-----------------------|
| Bilbao | 414,000 |



STRUCTURES

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

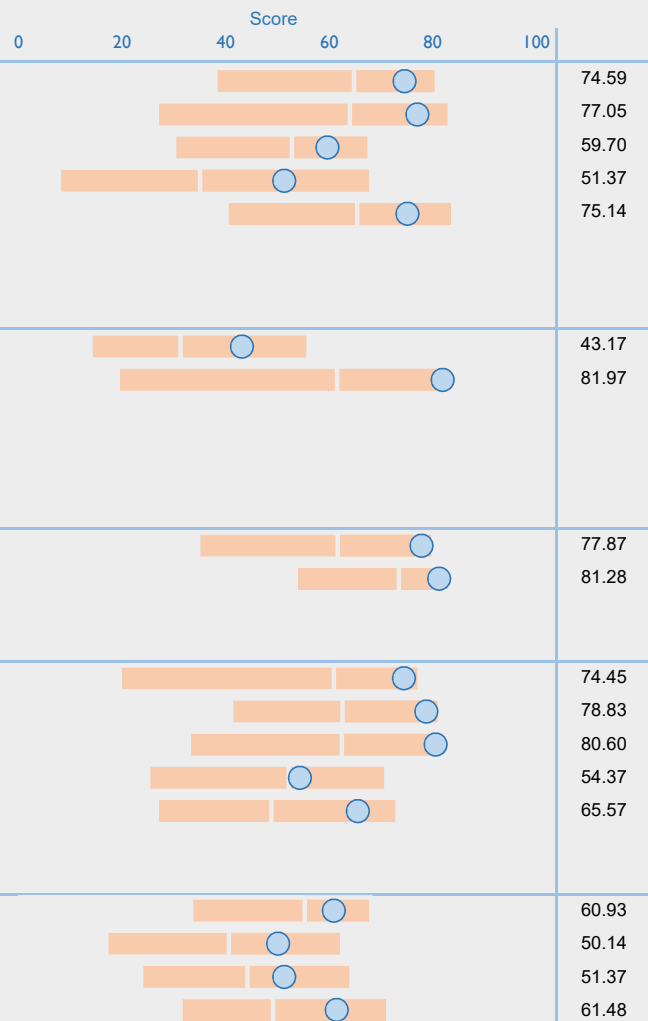
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

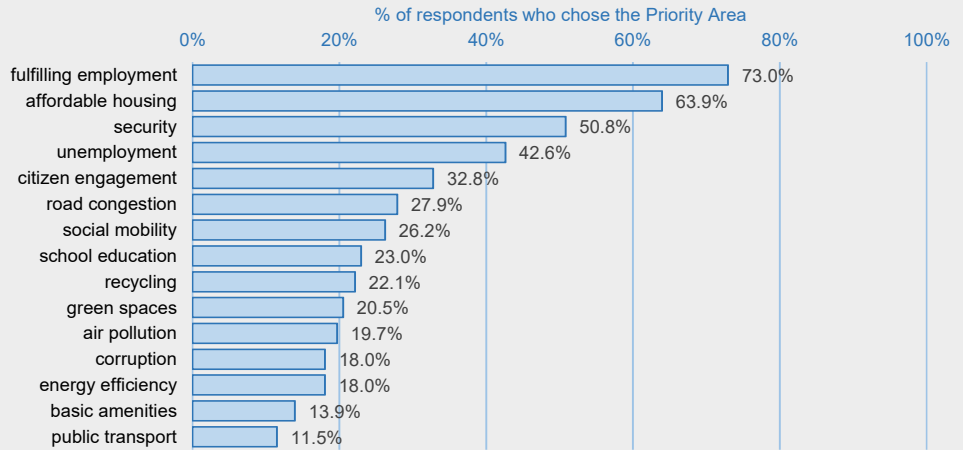
Governance

- 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.



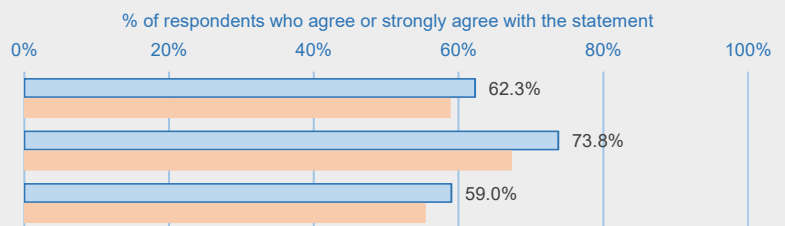
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score | Value |
|--|-------|-------|
| Online reporting of city maintenance problems provides a speedy solution. | ~55 | 59.97 |
| A website or App allows to give away unwanted items to other city residents. | ~50 | 53.83 |
| Free public wifi has improved access to services. | ~60 | 62.16 |
| CCTV cameras make residents feel safer. | ~50 | 51.09 |
| A website or App allows effective monitoring of air pollution. | ~50 | 50.00 |
| Arranging medical appointments online has improved access. | ~75 | 76.50 |

Mobility

| Statement | Score | Value |
|---|-------|-------|
| Car-sharing Apps have reduced congestion. | ~45 | 45.22 |
| Apps that direct you to an available parking space have reduced journey time. | ~50 | 52.05 |
| Bicycle hiring has reduced congestion. | ~55 | 58.47 |
| Online scheduling and ticket sales make public transport easier to use. | ~75 | 74.73 |

Activities

| Statement | Score | Value |
|---|-------|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | ~80 | 83.33 |

Opportunities (Work & School)

| Statement | Score | Value |
|--|-------|-------|
| Online access to job listings has made it easier to find work. | ~65 | 69.67 |
| IT skills are taught well in schools. | ~60 | 65.16 |
| Online services provided by the city has made it easier to start a new business. | ~55 | 59.02 |

Governance

| Statement | Score | Value |
|--|-------|-------|
| Online public access to city finances has reduced corruption. | ~45 | 46.17 |
| Online voting has increased participation. | ~45 | 43.85 |
| An online platform where residents can propose ideas has improved city life. | ~55 | 58.33 |
| Processing Identification Documents online has reduced waiting times. | ~65 | 63.66 |

Birmingham

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 52nd Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | B B From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.918 | 0.920 | 0.922 |
| Life expectancy at Birth | 81.4 | 81.6 | 81.7 |
| Expected years of schooling | 17.4 | 17.4 | 17.4 |
| Mean years of schooling | 12.8 | 12.9 | 12.9 |
| GNI per capita (PPP \$) | 38,146 | 38,680 | 39,116 |

| City | Population (UN World Cities Report) |
|------------|-------------------------------------|
| Birmingham | 2,515,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

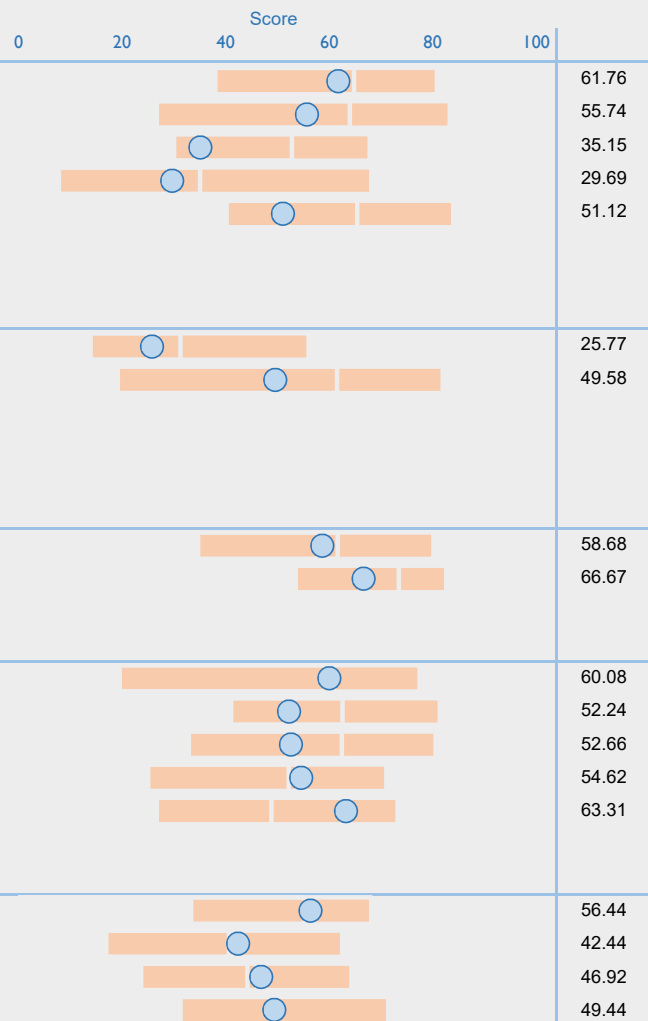
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

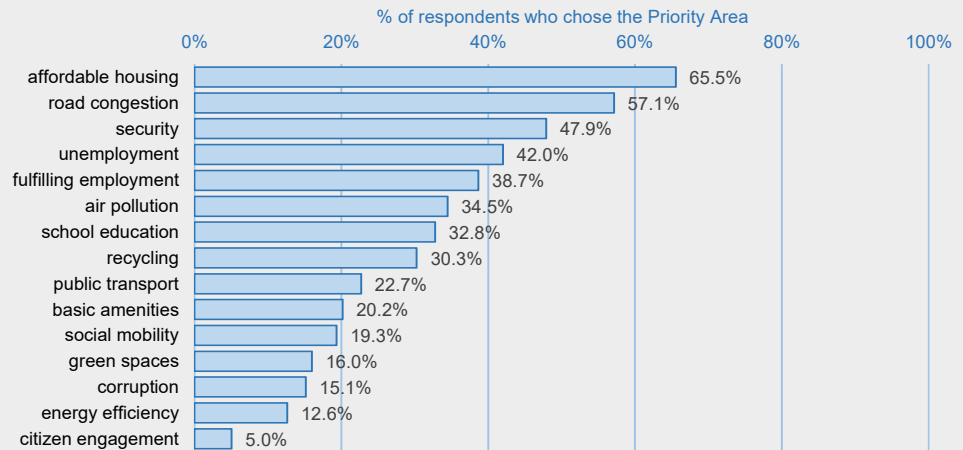
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



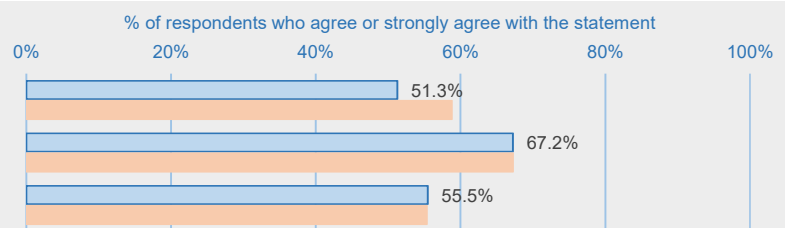
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 47.48 |
| A website or App allows to give away unwanted items to other city residents. | 61.90 |
| Free public wifi has improved access to services. | 59.80 |
| CCTV cameras make residents feel safer. | 56.02 |
| A website or App allows effective monitoring of air pollution. | 35.99 |
| Arranging medical appointments online has improved access. | 57.42 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 38.80 |
| Apps that direct you to an available parking space have reduced journey time. | 40.62 |
| Bicycle hiring has reduced congestion. | 38.66 |
| Online scheduling and ticket sales make public transport easier to use. | 59.66 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 64.43 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 62.18 |
| IT skills are taught well in schools. | 58.68 |
| Online services provided by the city has made it easier to start a new business. | 47.76 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 41.04 |
| Online voting has increased participation. | 56.44 |
| An online platform where residents can propose ideas has improved city life. | 44.40 |
| Processing Identification Documents online has reduced waiting times. | 51.54 |

Bogota

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 98th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 4 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | D From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | D | C |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.742 | 0.747 | 0.747 |
| Life expectancy at Birth | 74.2 | 74.4 | 74.6 |
| Expected years of schooling | 14.4 | 14.4 | 14.4 |
| Mean years of schooling | 8.1 | 8.3 | 8.3 |
| GNI per capita (PPP \$) | 12,772 | 13,050 | 12,938 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Bogota | 9,765,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

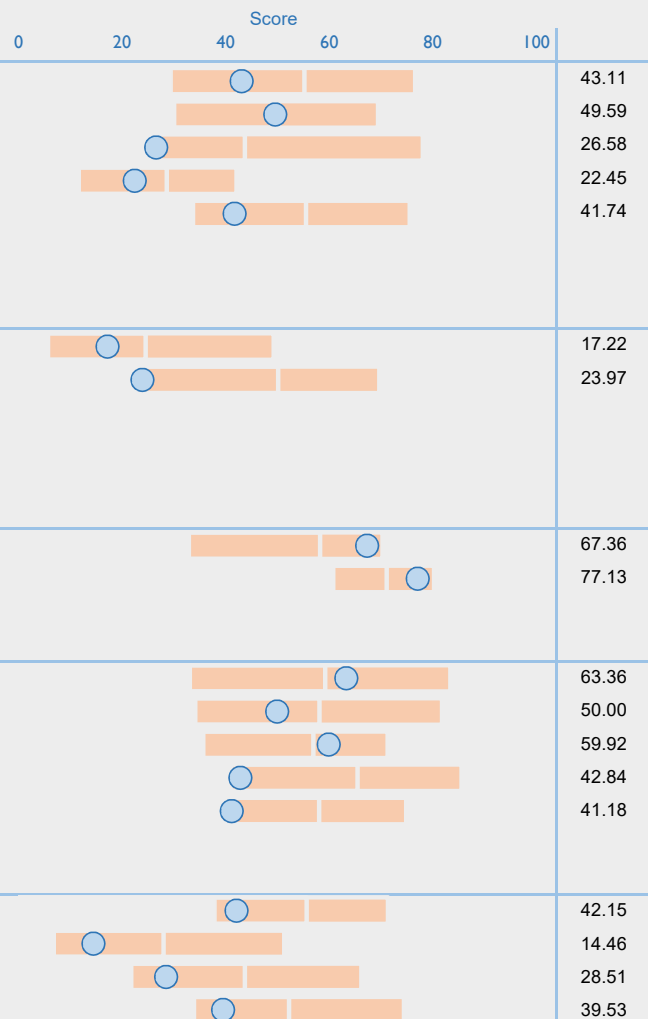
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

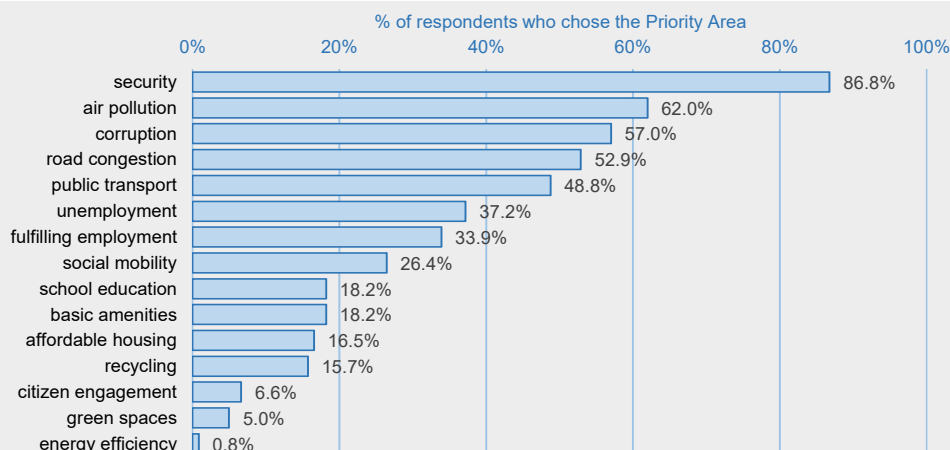
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



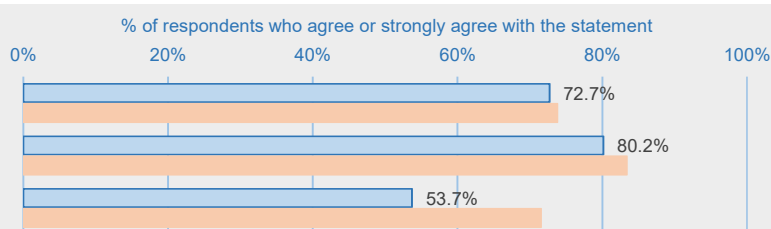
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 51.52 |
| A website or App allows to give away unwanted items to other city residents. | 41.60 |
| Free public wifi has improved access to services. | 65.98 |
| CCTV cameras make residents feel safer. | 55.23 |
| A website or App allows effective monitoring of air pollution. | 46.28 |
| Arranging medical appointments online has improved access. | 62.67 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 42.56 |
| Apps that direct you to an available parking space have reduced journey time. | 53.58 |
| Bicycle hiring has reduced congestion. | 59.09 |
| Online scheduling and ticket sales make public transport easier to use. | 52.07 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 79.20 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 63.09 |
| IT skills are taught well in schools. | 58.54 |
| Online services provided by the city has made it easier to start a new business. | 58.26 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 23.42 |
| Online voting has increased participation. | 31.27 |
| An online platform where residents can propose ideas has improved city life. | 39.53 |
| Processing Identification Documents online has reduced waiting times. | 60.74 |

Bologna

SMART CITY RANKING **18th**
Out of 102

GROUP **2**

RATING **B B B**
From AAA to D

FACTOR RATINGS

| | |
|--------------|--------------|
| B B B | B B |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.876 | 0.878 | 0.880 |
| Life expectancy at Birth | 82.8 | 83.0 | 83.2 |
| Expected years of schooling | 16.3 | 16.3 | 16.3 |
| Mean years of schooling | 10.2 | 10.2 | 10.2 |
| GNI per capita (PPP \$) | 34,115 | 34,733 | 35,299 |

City

| | |
|-------------------------------------|---------|
| Population (UN World Cities Report) | 784,000 |
|-------------------------------------|---------|



STRUCTURES

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

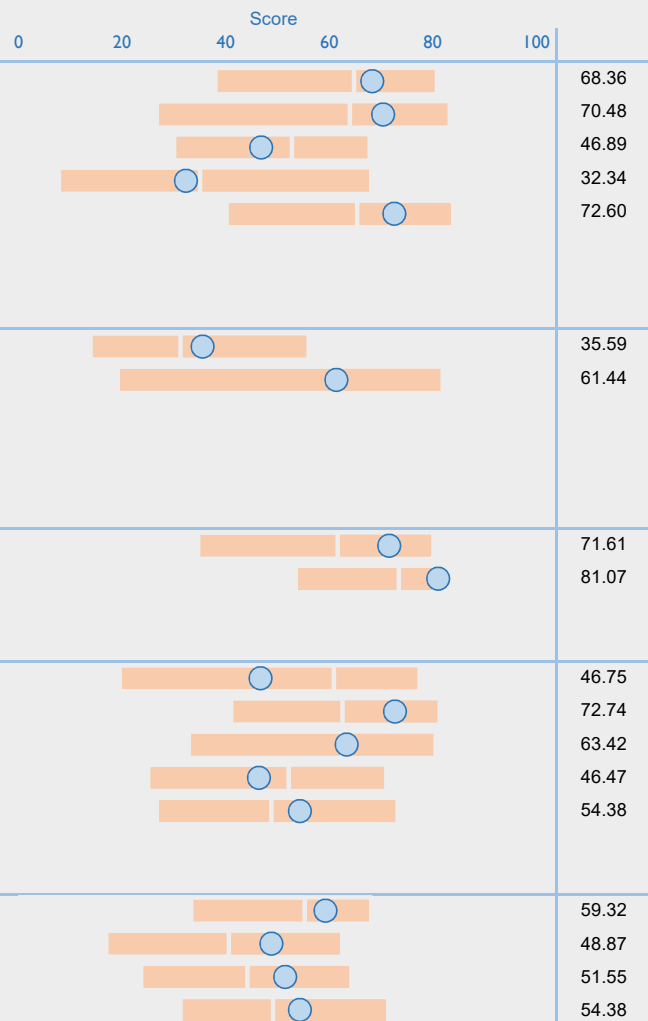
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

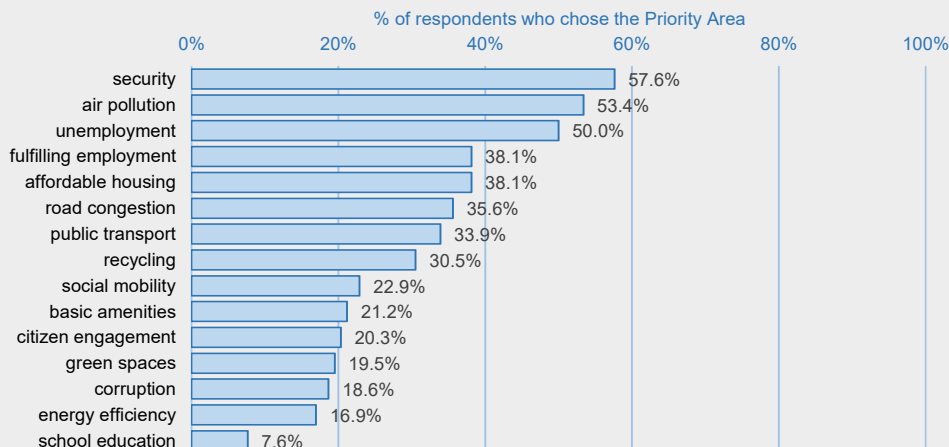
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



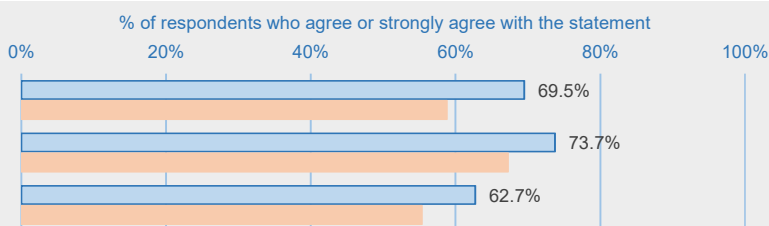
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 63.56 |
| A website or App allows to give away unwanted items to other city residents. | 64.69 |
| Free public wifi has improved access to services. | 65.40 |
| CCTV cameras make residents feel safer. | 58.62 |
| A website or App allows effective monitoring of air pollution. | 54.52 |
| Arranging medical appointments online has improved access. | 71.33 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 50.71 |
| Apps that direct you to an available parking space have reduced journey time. | 50.00 |
| Bicycle hiring has reduced congestion. | 55.65 |
| Online scheduling and ticket sales make public transport easier to use. | 65.82 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 81.50 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 66.10 |
| IT skills are taught well in schools. | 58.05 |
| Online services provided by the city has made it easier to start a new business. | 49.44 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 50.56 |
| Online voting has increased participation. | 44.63 |
| An online platform where residents can propose ideas has improved city life. | 52.82 |
| Processing Identification Documents online has reduced waiting times. | 59.46 |

Boston

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 32nd Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | A | B B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Boston | 4,249,000 |



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STRUCTURES

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

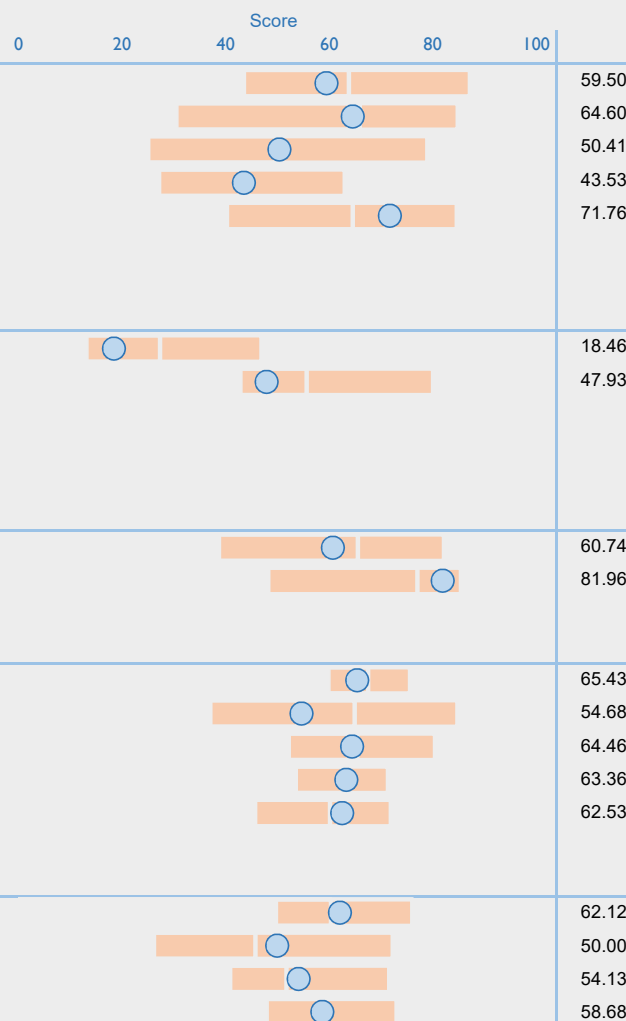
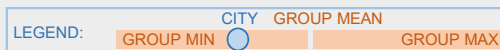
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

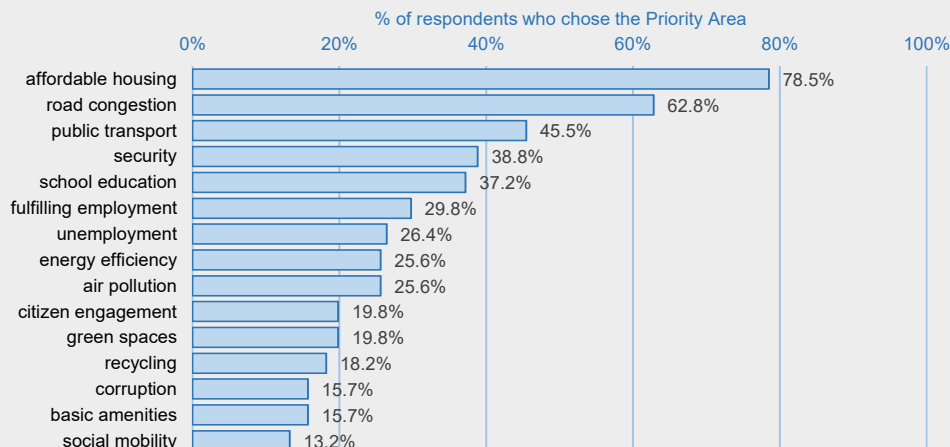
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

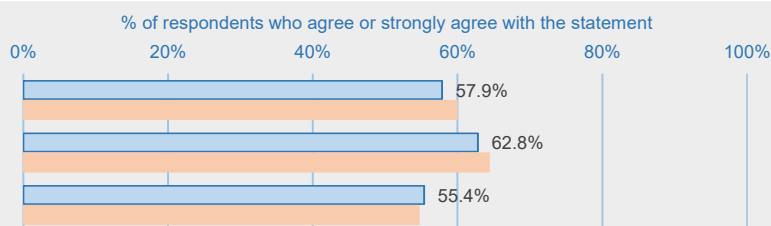


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 45.59 |
| A website or App allows to give away unwanted items to other city residents. | 58.95 |
| Free public wifi has improved access to services. | 53.31 |
| CCTV cameras make residents feel safer. | 43.53 |
| A website or App allows effective monitoring of air pollution. | 27.82 |
| Arranging medical appointments online has improved access. | 58.26 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 37.88 |
| Apps that direct you to an available parking space have reduced journey time. | 46.14 |
| Bicycle hiring has reduced congestion. | 42.42 |
| Online scheduling and ticket sales make public transport easier to use. | 58.13 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 74.93 |
|---|-------|

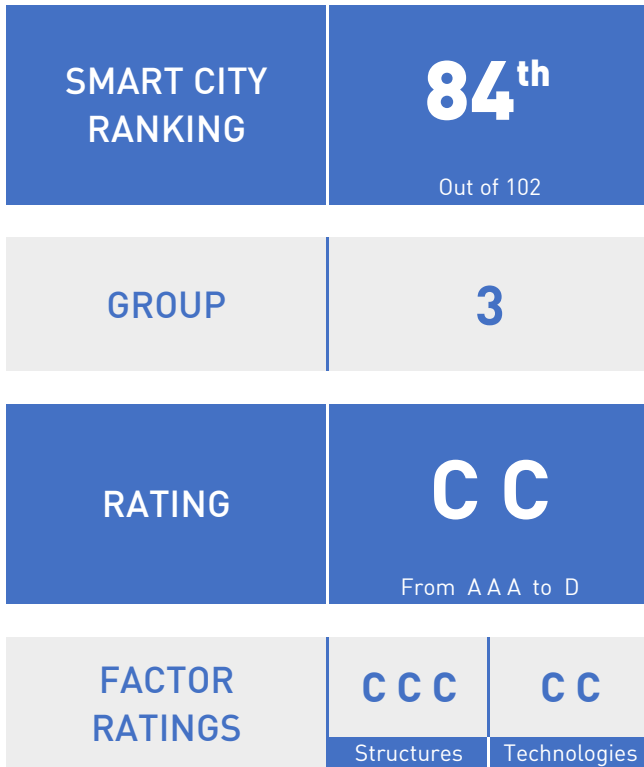
Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 70.66 |
| IT skills are taught well in schools. | 51.93 |
| Online services provided by the city has made it easier to start a new business. | 45.73 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 44.35 |
| Online voting has increased participation. | 42.84 |
| An online platform where residents can propose ideas has improved city life. | 44.35 |
| Processing Identification Documents online has reduced waiting times. | 50.55 |

Bratislava



BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.851 | 0.853 | 0.855 |
| Life expectancy at Birth | 76.7 | 76.9 | 77.0 |
| Expected years of schooling | 15.0 | 15.0 | 15.0 |
| Mean years of schooling | 12.5 | 12.5 | 12.5 |
| GNI per capita (PPP \$) | 27,851 | 28,546 | 29,467 |

City

| | |
|-----------------------|---------|
| Population (Eurostat) | 433,000 |
|-----------------------|---------|



STRUCTURES

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

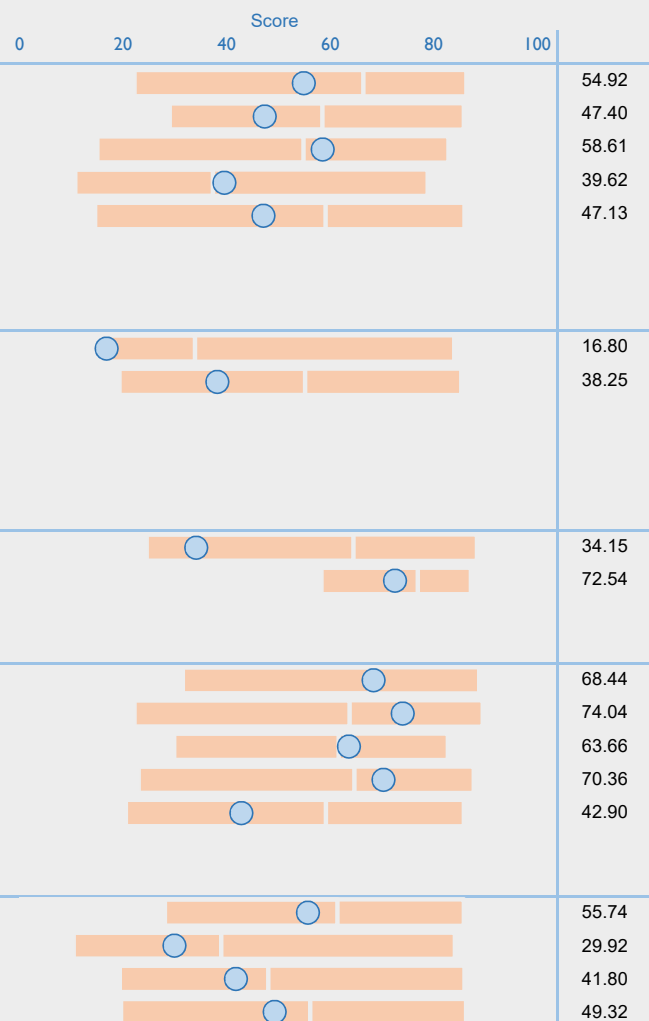
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

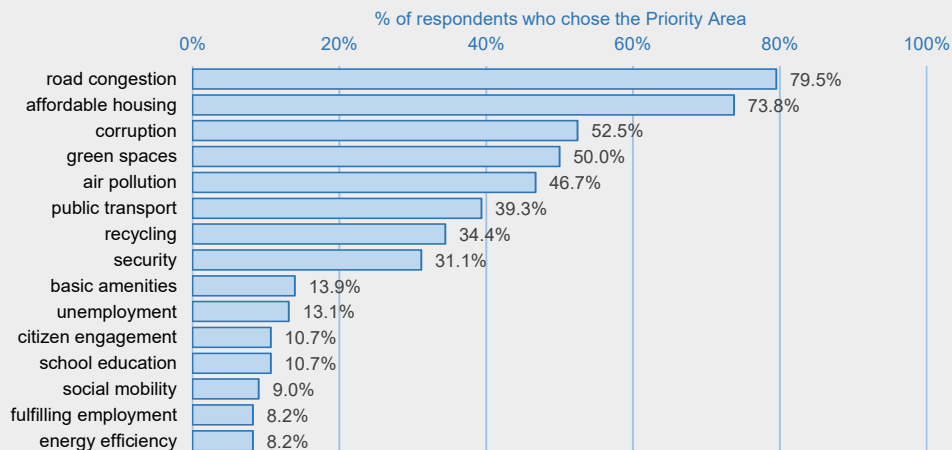
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

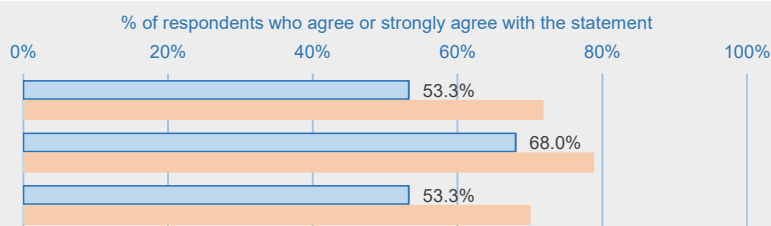


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 42.62 |
| A website or App allows to give away unwanted items to other city residents. | 48.77 |
| Free public wifi has improved access to services. | 60.79 |
| CCTV cameras make residents feel safer. | 56.56 |
| A website or App allows effective monitoring of air pollution. | 33.20 |
| Arranging medical appointments online has improved access. | 49.86 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 38.11 |
| Apps that direct you to an available parking space have reduced journey time. | 35.79 |
| Bicycle hiring has reduced congestion. | 44.40 |
| Online scheduling and ticket sales make public transport easier to use. | 67.08 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 74.45 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 73.77 |
| IT skills are taught well in schools. | 51.78 |
| Online services provided by the city has made it easier to start a new business. | 42.49 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 34.43 |
| Online voting has increased participation. | 37.43 |
| An online platform where residents can propose ideas has improved city life. | 45.63 |
| Processing Identification Documents online has reduced waiting times. | 57.10 |

Brisbane

SMART CITY RANKING **27th**
Out of 102

GROUP **1**

RATING **B B B**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| A | B B B |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.936 | 0.938 | 0.939 |
| Life expectancy at Birth | 82.7 | 82.9 | 83.1 |
| Expected years of schooling | 23.3 | 22.9 | 22.9 |
| Mean years of schooling | 12.8 | 12.9 | 12.9 |
| GNI per capita (PPP \$) | 43,138 | 43,637 | 43,560 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 2,202,000 |
|-------------------------------------|-----------|



STRUCTURES

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

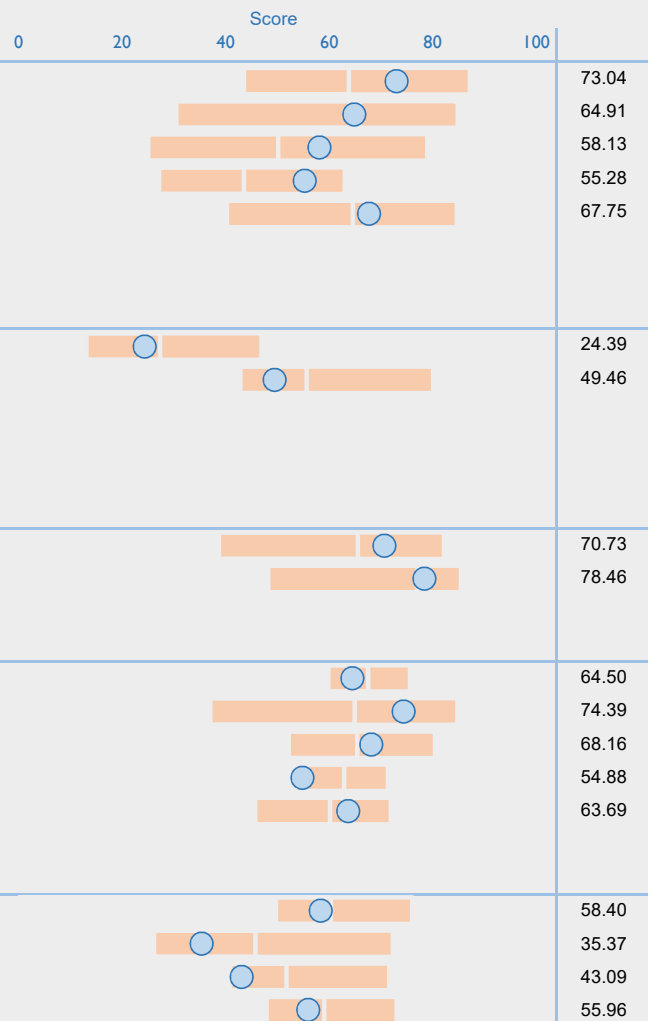
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

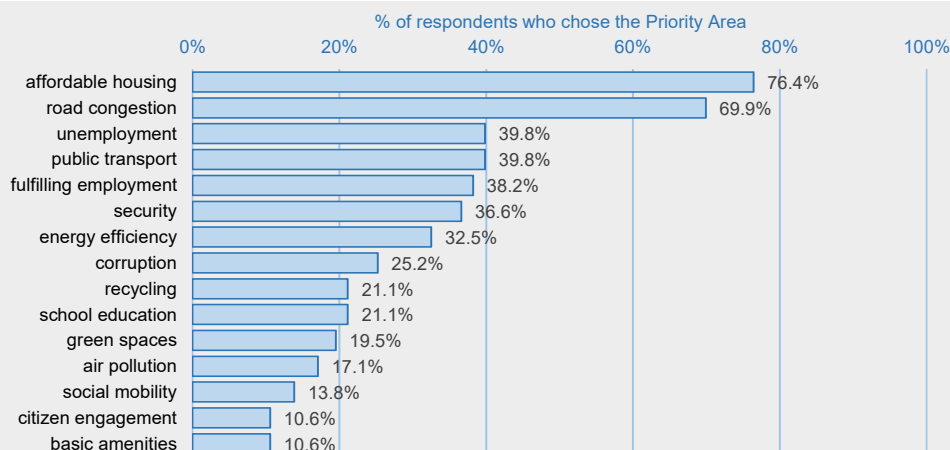
Governance

- 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

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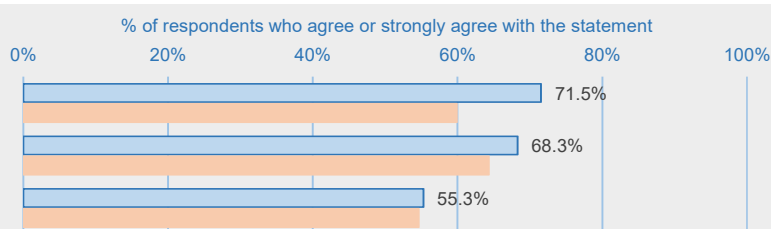


ATTITUDES

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You are comfortable with face recognition technologies to lower crime

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 49.46 |
| A website or App allows to give away unwanted items to other city residents. | 55.42 |
| Free public wifi has improved access to services. | 56.10 |
| CCTV cameras make residents feel safer. | 65.58 |
| A website or App allows effective monitoring of air pollution. | 28.86 |
| Arranging medical appointments online has improved access. | 62.47 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 37.26 |
| Apps that direct you to an available parking space have reduced journey time. | 34.55 |
| Bicycle hiring has reduced congestion. | 39.57 |
| Online scheduling and ticket sales make public transport easier to use. | 55.83 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 76.83 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 66.26 |
| IT skills are taught well in schools. | 57.32 |
| Online services provided by the city has made it easier to start a new business. | 43.22 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 34.82 |
| Online voting has increased participation. | 41.73 |
| An online platform where residents can propose ideas has improved city life. | 44.17 |
| Processing Identification Documents online has reduced waiting times. | 50.27 |

Brussels

| | | | | | |
|---------------------------|--|-----------|------------|------------|--------------|
| SMART CITY RANKING | 64th Out of 102 | | | | |
| GROUP | 2 | | | | |
| RATING | B From AAA to D | | | | |
| FACTOR RATINGS | <table border="1"> <tr> <td>BB</td> <td>CCC</td> </tr> <tr> <td>Structures</td> <td>Technologies</td> </tr> </table> | BB | CCC | Structures | Technologies |
| BB | CCC | | | | |
| Structures | Technologies | | | | |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.913 | 0.915 | 0.916 |
| Life expectancy at Birth | 81.0 | 81.1 | 81.3 |
| Expected years of schooling | 19.8 | 19.8 | 19.8 |
| Mean years of schooling | 11.7 | 11.8 | 11.8 |
| GNI per capita (PPP \$) | 41,727 | 41,588 | 42,156 |

| City | Population (Eurostat) |
|----------|-----------------------|
| Brussels | 1,205,000 |



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STRUCTURES

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

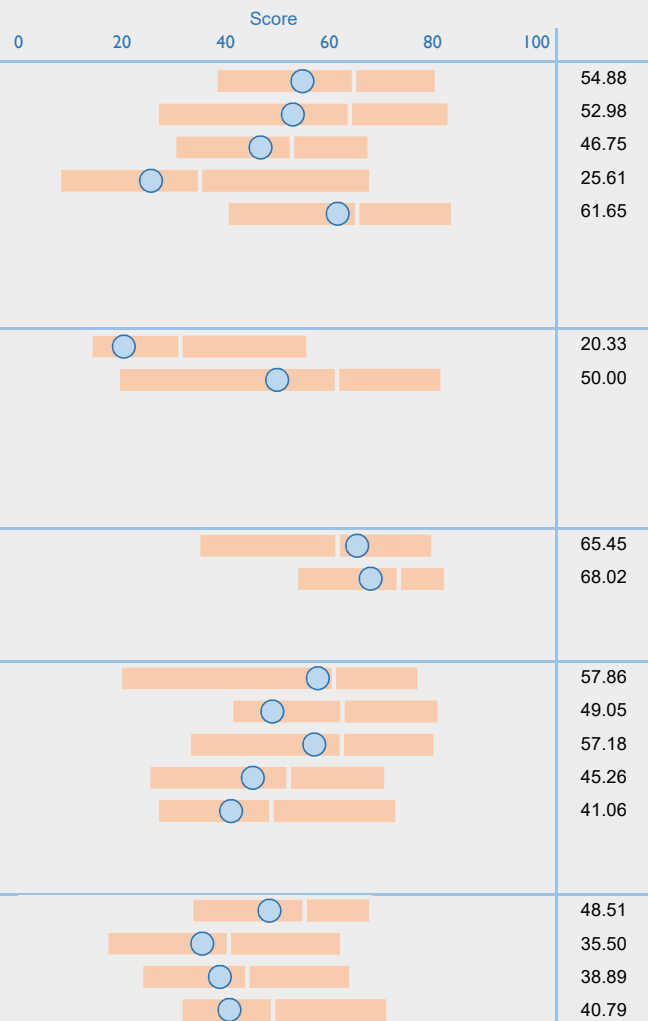
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

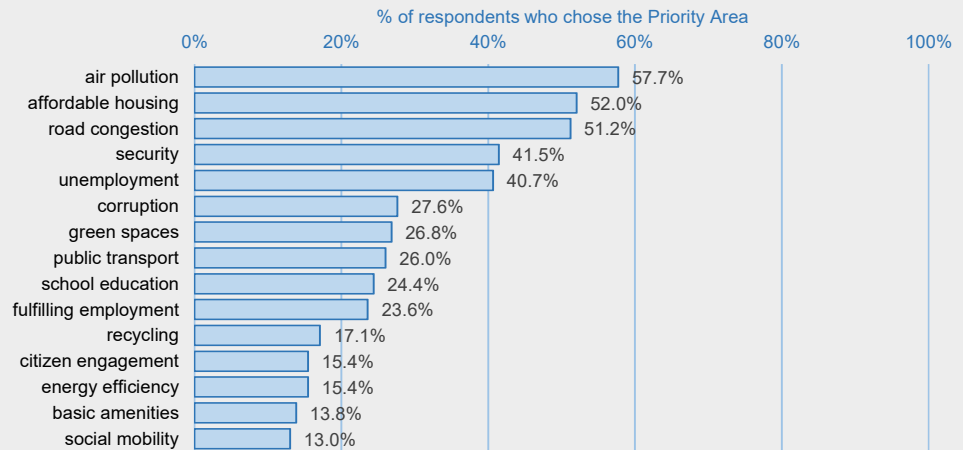
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



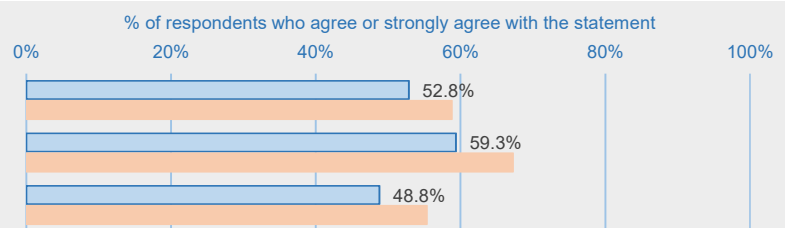
ATTITUDES

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

LEGEND: ■ GROUP MEAN ■ CITY



TECHNOLOGIES

LEGEND: ■ GROUP MIN ● CITY ■ GROUP MEAN ■ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 41.87 |
| A website or App allows to give away unwanted items to other city residents. | 55.69 |
| Free public wifi has improved access to services. | 52.17 |
| CCTV cameras make residents feel safer. | 47.70 |
| A website or App allows effective monitoring of air pollution. | 40.51 |
| Arranging medical appointments online has improved access. | 52.17 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 29.81 |
| Apps that direct you to an available parking space have reduced journey time. | 34.01 |
| Bicycle hiring has reduced congestion. | 48.92 |
| Online scheduling and ticket sales make public transport easier to use. | 60.30 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 73.04 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 51.36 |
| IT skills are taught well in schools. | 47.97 |
| Online services provided by the city has made it easier to start a new business. | 39.70 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 37.53 |
| Online voting has increased participation. | 34.82 |
| An online platform where residents can propose ideas has improved city life. | 34.69 |
| Processing Identification Documents online has reduced waiting times. | 56.50 |

Bucharest

SMART CITY RANKING **85th**
Out of 102

GROUP **3**

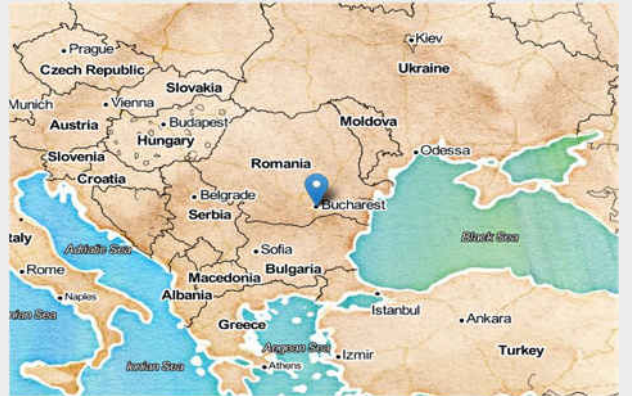
RATING **CC**
From AAA to D

FACTOR RATINGS **CC** **CC**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.805 | 0.807 | 0.811 |
| Life expectancy at Birth | 75.3 | 75.4 | 75.6 |
| Expected years of schooling | 14.5 | 14.3 | 14.3 |
| Mean years of schooling | 10.9 | 11.0 | 11.0 |
| GNI per capita (PPP \$) | 20,049 | 21,060 | 22,646 |

| City | Population (UN World Cities Report) |
|-----------|-------------------------------------|
| Bucharest | 1,868,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

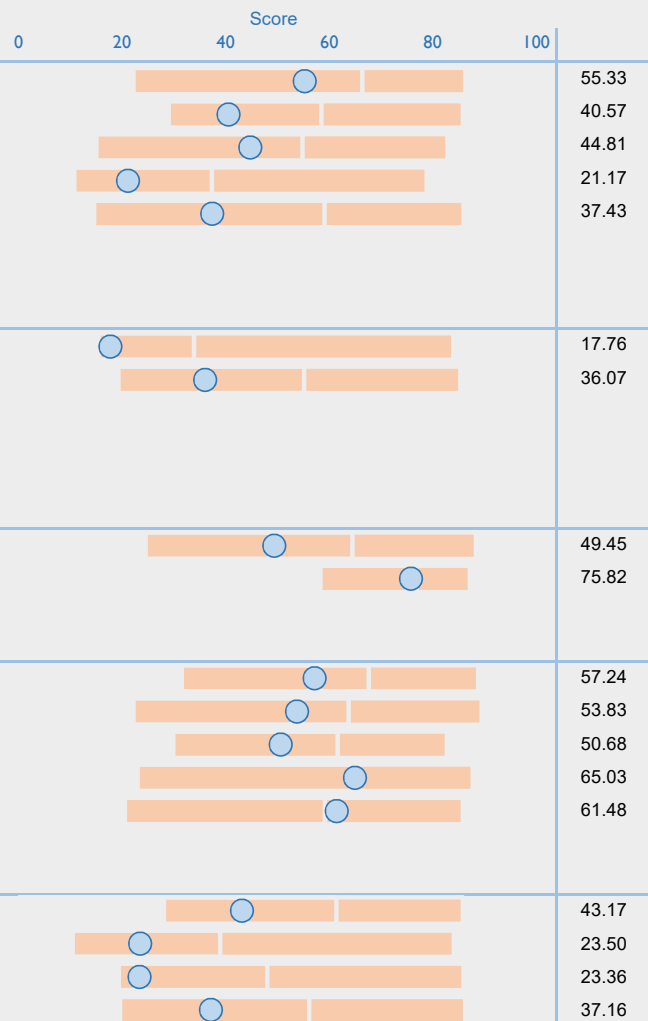
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

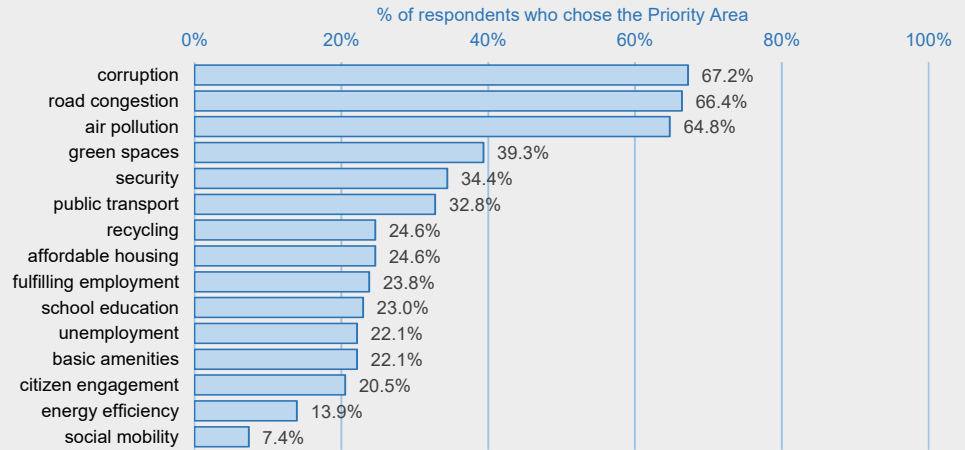
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

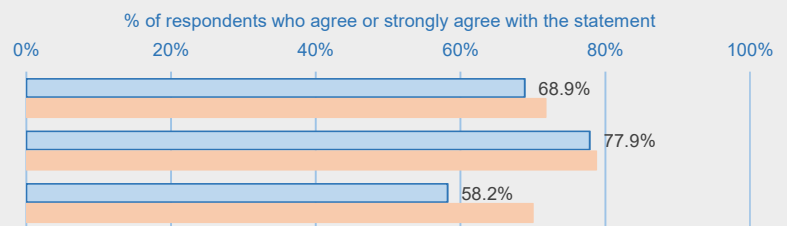


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 52.19 |
| A website or App allows to give away unwanted items to other city residents. | 55.74 |
| Free public wifi has improved access to services. | 62.02 |
| CCTV cameras make residents feel safer. | 52.32 |
| A website or App allows effective monitoring of air pollution. | 48.77 |
| Arranging medical appointments online has improved access. | 56.97 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 51.37 |
| Apps that direct you to an available parking space have reduced journey time. | 42.62 |
| Bicycle hiring has reduced congestion. | 46.72 |
| Online scheduling and ticket sales make public transport easier to use. | 59.43 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 82.38 |
|---|-------|

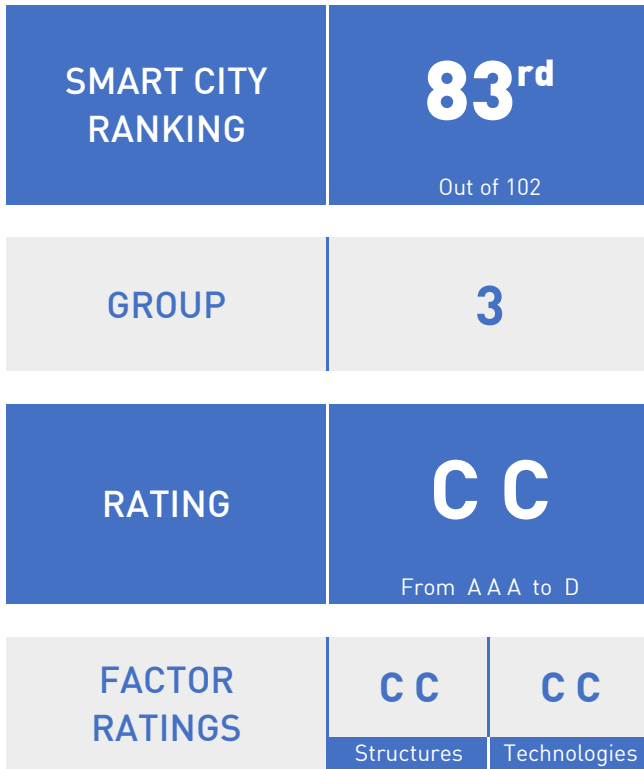
Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 72.68 |
| IT skills are taught well in schools. | 61.75 |
| Online services provided by the city has made it easier to start a new business. | 53.69 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 31.83 |
| Online voting has increased participation. | 33.33 |
| An online platform where residents can propose ideas has improved city life. | 45.77 |
| Processing Identification Documents online has reduced waiting times. | 51.09 |

Budapest



BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.834 | 0.835 | 0.838 |
| Life expectancy at Birth | 75.8 | 75.9 | 76.1 |
| Expected years of schooling | 15.2 | 15.1 | 15.1 |
| Mean years of schooling | 11.8 | 11.9 | 11.9 |
| GNI per capita (PPP \$) | 23,740 | 24,337 | 25,393 |

City

Population (UN World Cities Report) 1,714,000



STRUCTURES

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

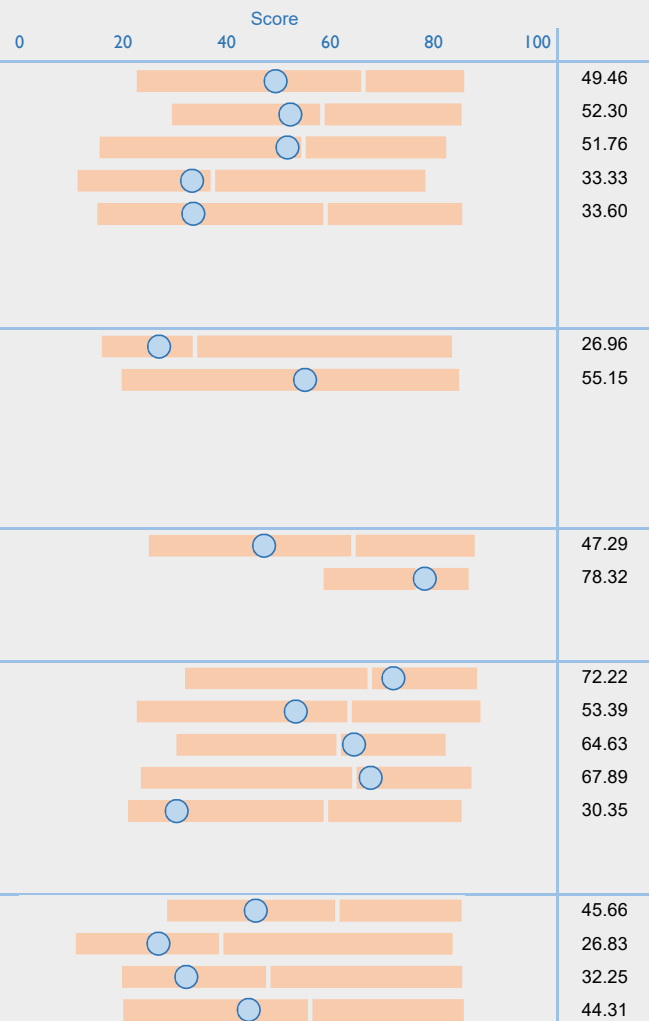
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

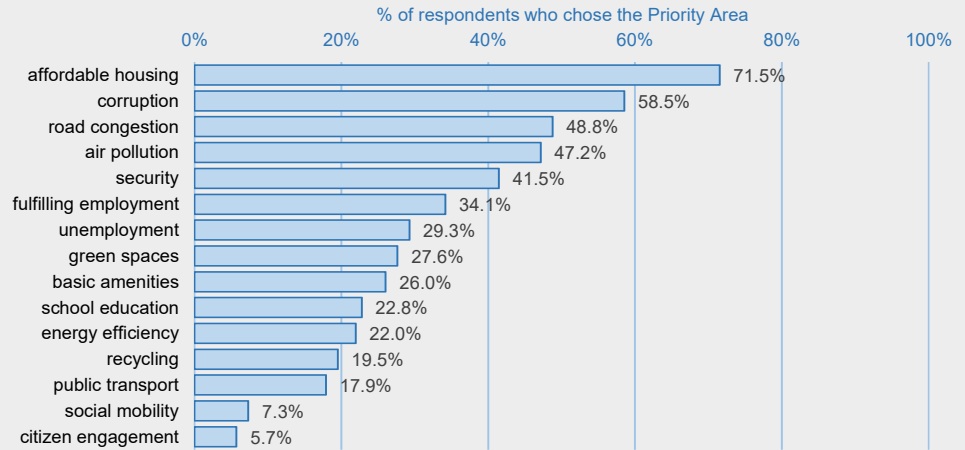
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

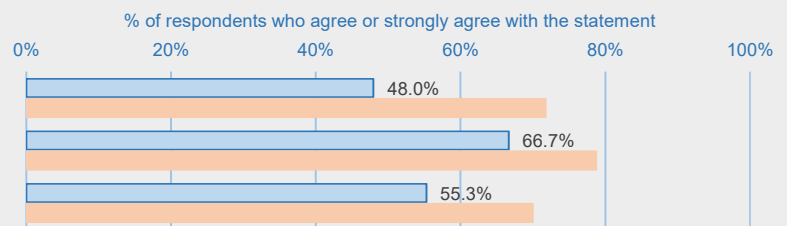


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 35.64 |
| A website or App allows to give away unwanted items to other city residents. | 58.94 |
| Free public wifi has improved access to services. | 54.61 |
| CCTV cameras make residents feel safer. | 66.12 |
| A website or App allows effective monitoring of air pollution. | 54.74 |
| Arranging medical appointments online has improved access. | 51.76 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 38.62 |
| Apps that direct you to an available parking space have reduced journey time. | 40.24 |
| Bicycle hiring has reduced congestion. | 50.41 |
| Online scheduling and ticket sales make public transport easier to use. | 72.09 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 63.82 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 76.69 |
| IT skills are taught well in schools. | 56.23 |
| Online services provided by the city has made it easier to start a new business. | 52.17 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 30.49 |
| Online voting has increased participation. | 41.73 |
| An online platform where residents can propose ideas has improved city life. | 39.97 |
| Processing Identification Documents online has reduced waiting times. | 56.64 |

Buenos Aires

SMART CITY RANKING **87th**
Out of 102

GROUP **3**

RATING **CC**
From AAA to D

FACTOR RATINGS **CC** **CC**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.822 | 0.822 | 0.825 |
| Life expectancy at Birth | 76.4 | 76.6 | 76.7 |
| Expected years of schooling | 17.4 | 17.4 | 17.4 |
| Mean years of schooling | 9.8 | 9.9 | 9.9 |
| GNI per capita (PPP \$) | 18,437 | 17,857 | 18,461 |

City
Population (UN World Cities Report) 15,180,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

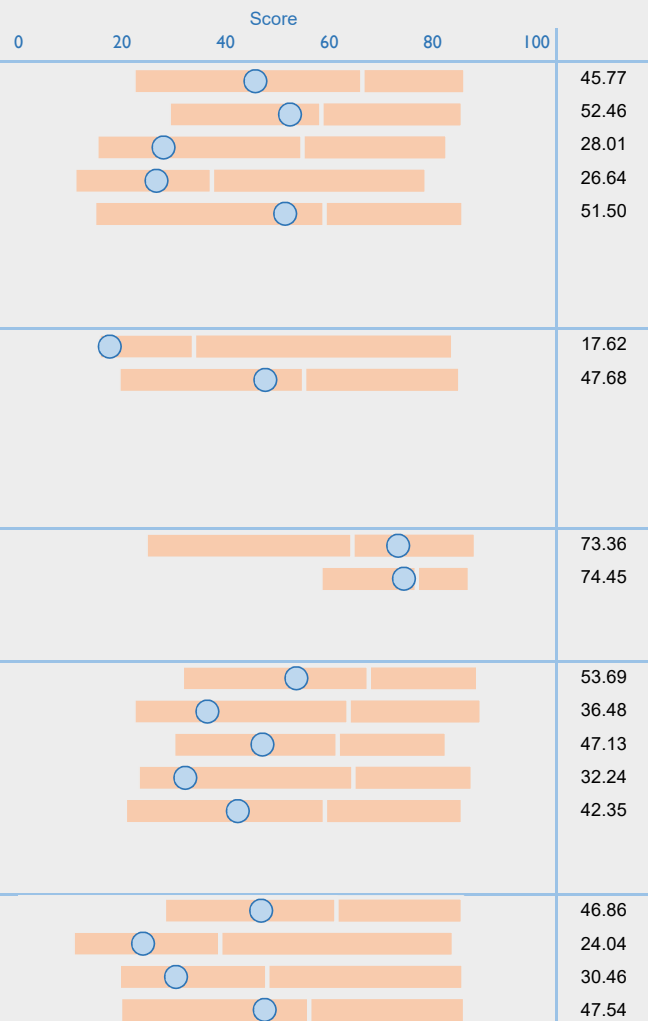
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

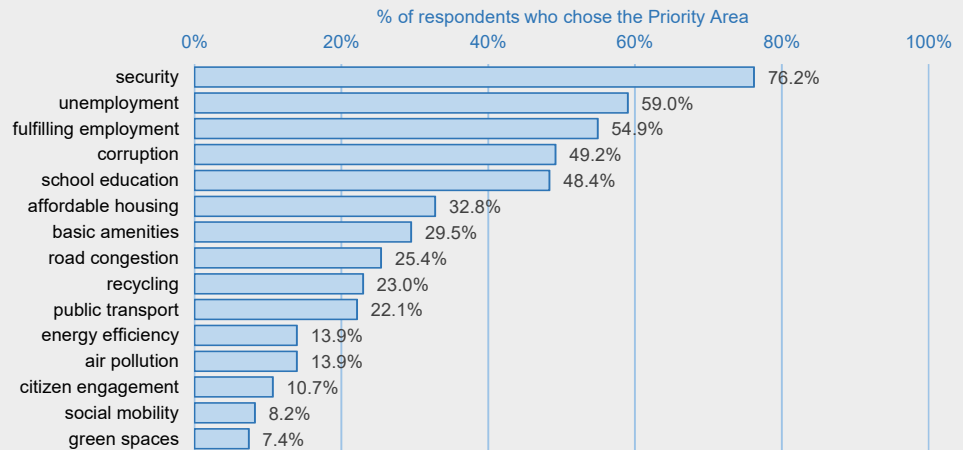
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



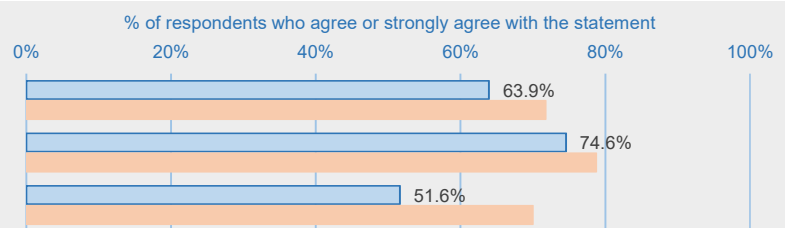
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 48.91 |
| A website or App allows to give away unwanted items to other city residents. | 51.91 |
| Free public wifi has improved access to services. | 61.20 |
| CCTV cameras make residents feel safer. | 48.09 |
| A website or App allows effective monitoring of air pollution. | 30.74 |
| Arranging medical appointments online has improved access. | 56.97 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 40.30 |
| Apps that direct you to an available parking space have reduced journey time. | 47.68 |
| Bicycle hiring has reduced congestion. | 52.60 |
| Online scheduling and ticket sales make public transport easier to use. | 53.14 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 78.55 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 51.64 |
| IT skills are taught well in schools. | 36.75 |
| Online services provided by the city has made it easier to start a new business. | 48.36 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 35.38 |
| Online voting has increased participation. | 36.20 |
| An online platform where residents can propose ideas has improved city life. | 45.36 |
| Processing Identification Documents online has reduced waiting times. | 69.81 |

Busan

| | | | | | |
|---------------------------|---|------------|------------|------------|--------------|
| SMART CITY RANKING | 50th Out of 102 | | | | |
| GROUP | 2 | | | | |
| RATING | B B From AAA to D | | | | |
| FACTOR RATINGS | <table border="1"> <tr> <td>B B</td> <td>B B</td> </tr> <tr> <td>Structures</td> <td>Technologies</td> </tr> </table> | B B | B B | Structures | Technologies |
| B B | B B | | | | |
| Structures | Technologies | | | | |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.898 | 0.900 | 0.903 |
| Life expectancy at Birth | 81.9 | 82.2 | 82.4 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 12.1 | 12.1 | 12.1 |
| GNI per capita (PPP \$) | 34,276 | 35,122 | 35,945 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Busan | 3,216,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

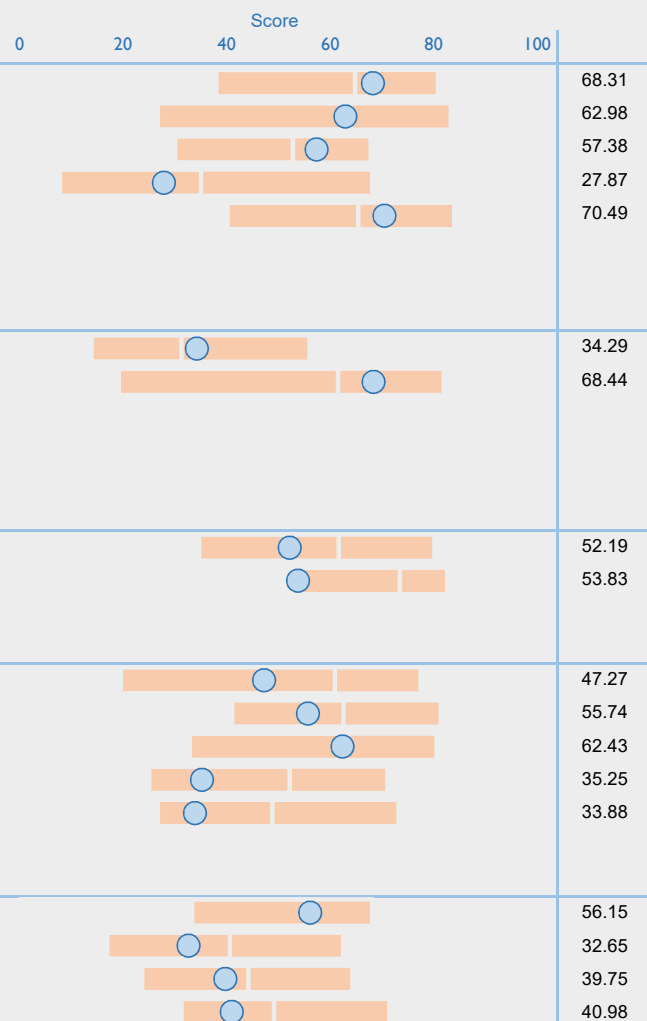
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

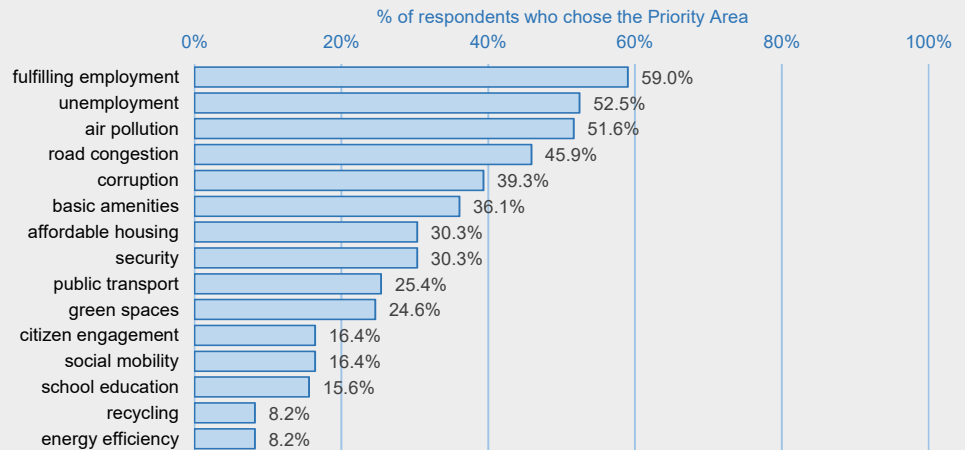
Governance

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- Residents contribute to decision making of local government.
- Residents provide feedback on local government projects.



PRIORITY AREAS

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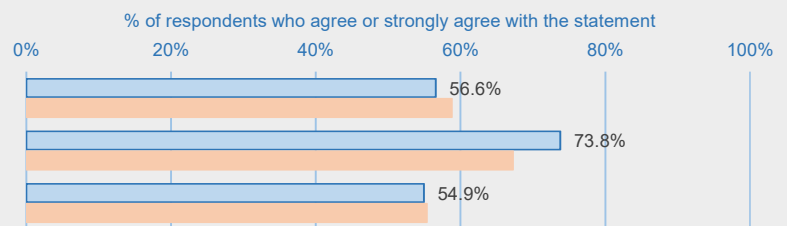
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score | Value |
|--|-------|-------|
| Online reporting of city maintenance problems provides a speedy solution. | ~50 | 58.06 |
| A website or App allows to give away unwanted items to other city residents. | ~55 | 55.46 |
| Free public wifi has improved access to services. | ~65 | 68.31 |
| CCTV cameras make residents feel safer. | ~75 | 77.19 |
| A website or App allows effective monitoring of air pollution. | ~60 | 61.07 |
| Arranging medical appointments online has improved access. | ~65 | 63.66 |

Mobility

| | | |
|---|-----|-------|
| Car-sharing Apps have reduced congestion. | ~40 | 39.89 |
| Apps that direct you to an available parking space have reduced journey time. | ~45 | 40.85 |
| Bicycle hiring has reduced congestion. | ~40 | 38.11 |
| Online scheduling and ticket sales make public transport easier to use. | ~70 | 66.80 |

Activities

| | | |
|---|-----|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | ~75 | 68.58 |
|---|-----|-------|

Opportunities (Work & School)

| | | |
|--|-----|-------|
| Online access to job listings has made it easier to find work. | ~65 | 63.25 |
| IT skills are taught well in schools. | ~60 | 60.38 |
| Online services provided by the city has made it easier to start a new business. | ~55 | 51.37 |

Governance

| | | |
|--|-----|-------|
| Online public access to city finances has reduced corruption. | ~45 | 43.72 |
| Online voting has increased participation. | ~55 | 52.46 |
| An online platform where residents can propose ideas has improved city life. | ~60 | 52.32 |
| Processing Identification Documents online has reduced waiting times. | ~75 | 67.08 |

Cairo

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 99th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 4 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | D From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | D | D |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|--------|--------|
| UN HDI | 0.691 | 0.694 | 0.696 |
| Life expectancy at Birth | 71.3 | 71.5 | 71.7 |
| Expected years of schooling | 13.1 | 13.1 | 13.1 |
| Mean years of schooling | 7.1 | 7.2 | 7.2 |
| GNI per capita (PPP \$) | 9,923 | 10,185 | 10,355 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Cairo | 18,772,000 |



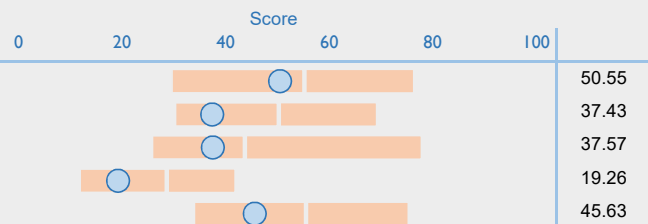
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STRUCTURES



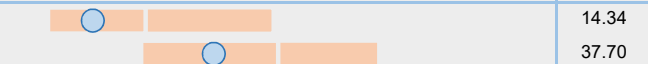
Health & Safety

- 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.



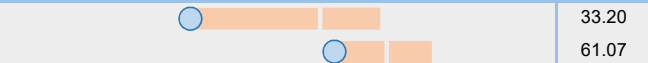
Mobility

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



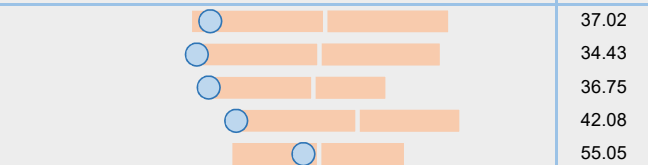
Activities

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



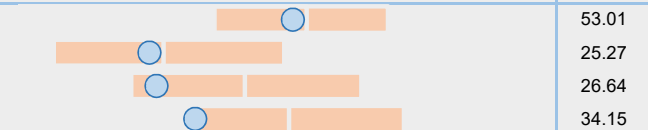
Opportunities (Work & School)

- Employment finding services are 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.



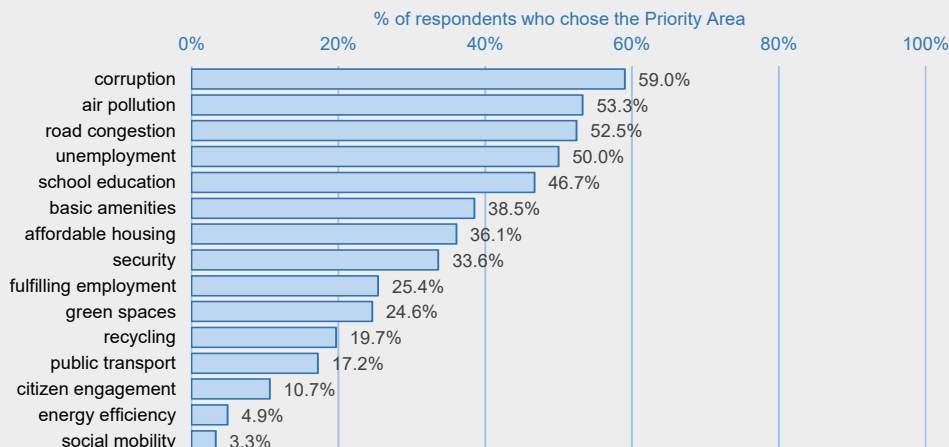
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



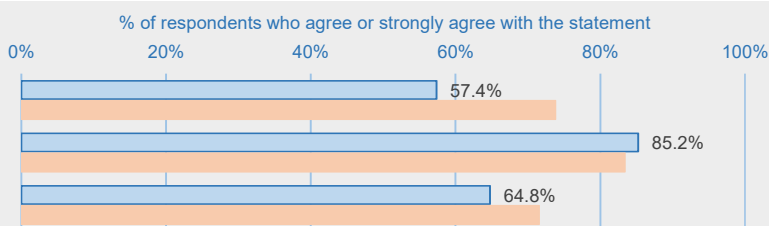
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 41.67 |
| A website or App allows to give away unwanted items to other city residents. | 41.94 |
| Free public wifi has improved access to services. | 43.99 |
| CCTV cameras make residents feel safer. | 58.06 |
| A website or App allows effective monitoring of air pollution. | 37.30 |
| Arranging medical appointments online has improved access. | 60.25 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 53.69 |
| Apps that direct you to an available parking space have reduced journey time. | 59.02 |
| Bicycle hiring has reduced congestion. | 45.90 |
| Online scheduling and ticket sales make public transport easier to use. | 57.51 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 65.98 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 65.44 |
| IT skills are taught well in schools. | 40.16 |
| Online services provided by the city has made it easier to start a new business. | 51.23 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 40.16 |
| Online voting has increased participation. | 41.26 |
| An online platform where residents can propose ideas has improved city life. | 42.08 |
| Processing Identification Documents online has reduced waiting times. | 51.23 |

Cape Town

SMART CITY RANKING **93rd**
Out of 102

GROUP **4**

RATING **C**
From AAA to D

FACTOR RATINGS

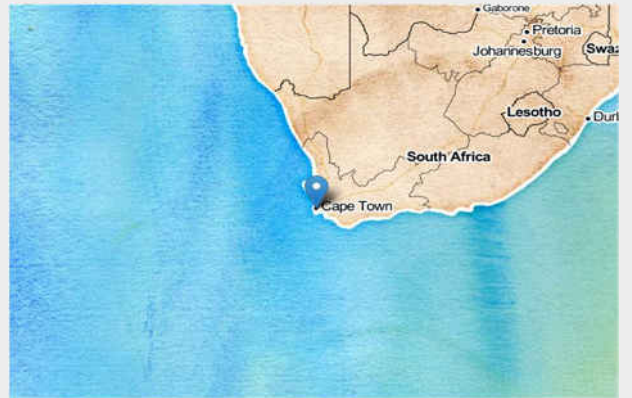
| | |
|------------|--------------|
| C | C |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.692 | 0.696 | 0.699 |
| Life expectancy at Birth | 62.0 | 62.8 | 63.4 |
| Expected years of schooling | 13.3 | 13.3 | 13.3 |
| Mean years of schooling | 10.1 | 10.1 | 10.1 |
| GNI per capita (PPP \$) | 12,073 | 11,948 | 11,923 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 3,660,000 |
|-------------------------------------|-----------|



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STRUCTURES

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

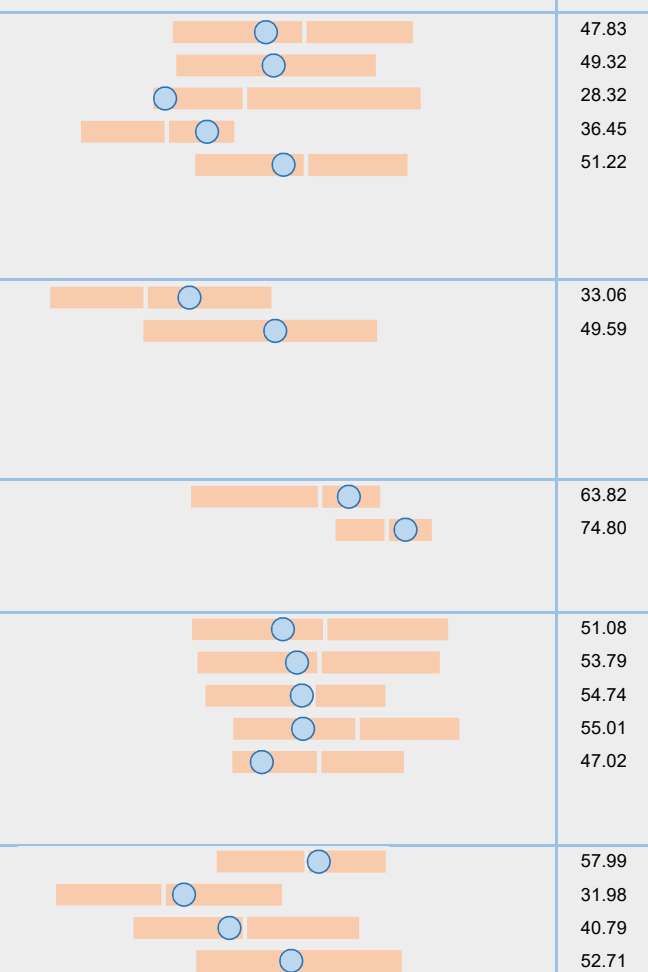
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

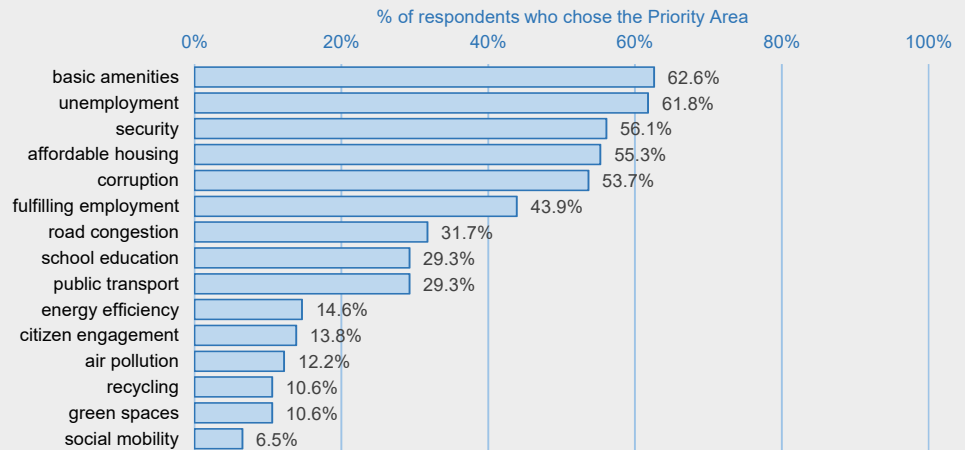
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



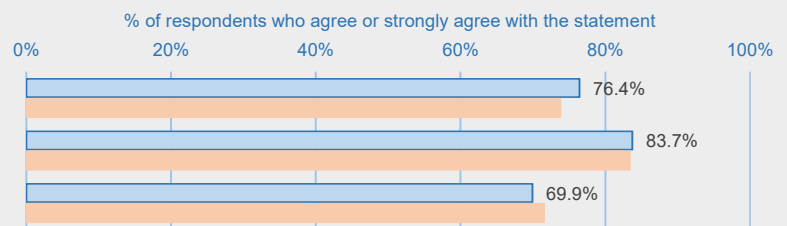
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 50.27 |
| A website or App allows to give away unwanted items to other city residents. | 53.93 |
| Free public wifi has improved access to services. | 52.03 |
| CCTV cameras make residents feel safer. | 53.79 |
| A website or App allows effective monitoring of air pollution. | 31.57 |
| Arranging medical appointments online has improved access. | 52.03 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 54.88 |
| Apps that direct you to an available parking space have reduced journey time. | 41.60 |
| Bicycle hiring has reduced congestion. | 39.84 |
| Online scheduling and ticket sales make public transport easier to use. | 58.94 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 80.76 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 71.82 |
| IT skills are taught well in schools. | 59.35 |
| Online services provided by the city has made it easier to start a new business. | 57.86 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 41.60 |
| Online voting has increased participation. | 46.75 |
| An online platform where residents can propose ideas has improved city life. | 45.26 |
| Processing Identification Documents online has reduced waiting times. | 59.62 |

Chengdu

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 58th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 3 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | B From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

| City | Population (UN World Cities Report) |
|---------|-------------------------------------|
| Chengdu | 7,556,000 |



STRUCTURES

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

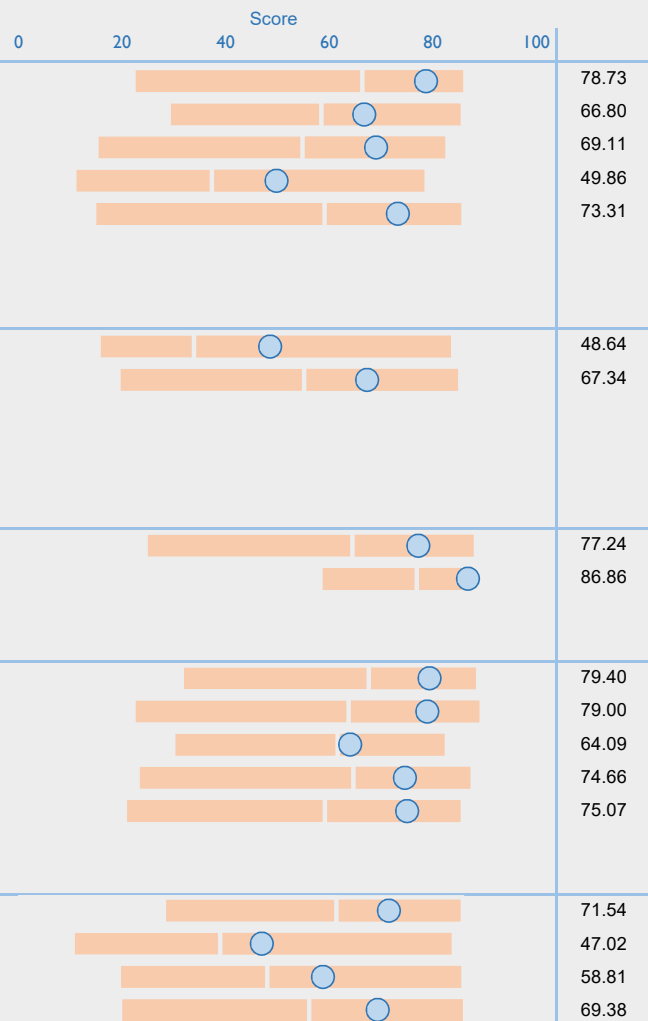
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Opportunities (Work & School)

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- Businesses are creating new jobs.
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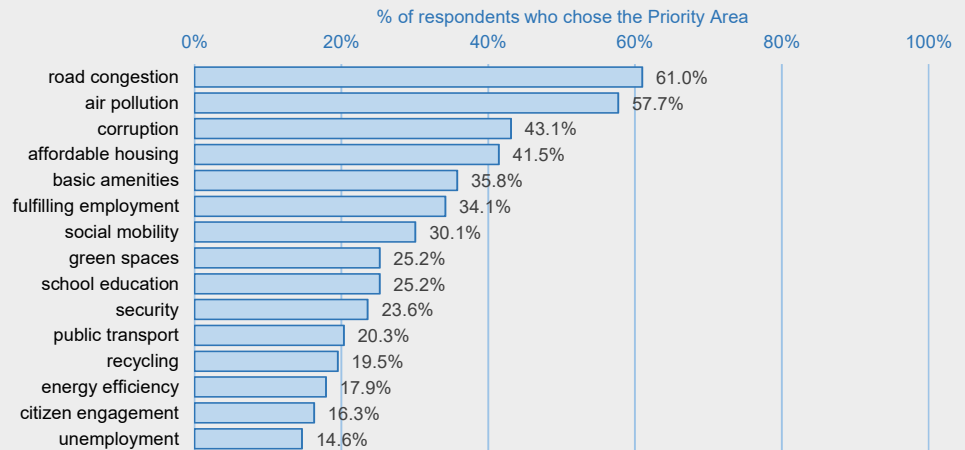
Governance

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PRIORITY AREAS

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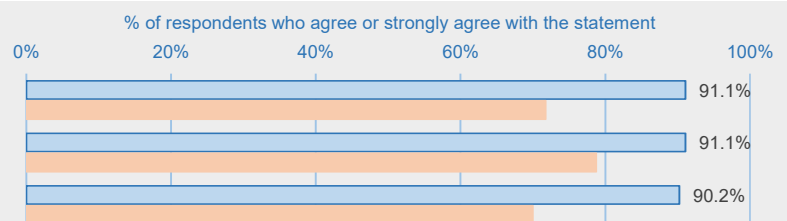


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 85.50 |
| A website or App allows to give away unwanted items to other city residents. | 70.05 |
| Free public wifi has improved access to services. | 79.81 |
| CCTV cameras make residents feel safer. | 79.13 |
| A website or App allows effective monitoring of air pollution. | 72.63 |
| Arranging medical appointments online has improved access. | 89.16 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 65.72 |
| Apps that direct you to an available parking space have reduced journey time. | 80.35 |
| Bicycle hiring has reduced congestion. | 78.32 |
| Online scheduling and ticket sales make public transport easier to use. | 90.51 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 90.79 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 87.67 |
| IT skills are taught well in schools. | 77.91 |
| Online services provided by the city has made it easier to start a new business. | 81.57 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 69.51 |
| Online voting has increased participation. | 72.09 |
| An online platform where residents can propose ideas has improved city life. | 82.25 |
| Processing Identification Documents online has reduced waiting times. | 72.36 |

Chicago

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 53rd Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | B B From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | B B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

| City | Population (UN World Cities Report) |
|---------|-------------------------------------|
| Chicago | 8,745,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

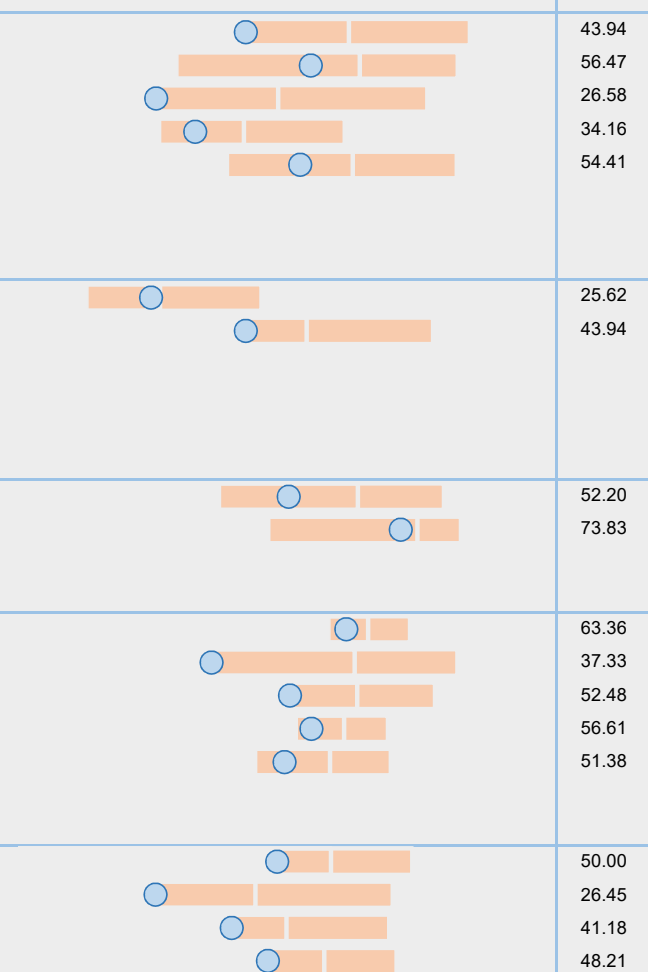
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

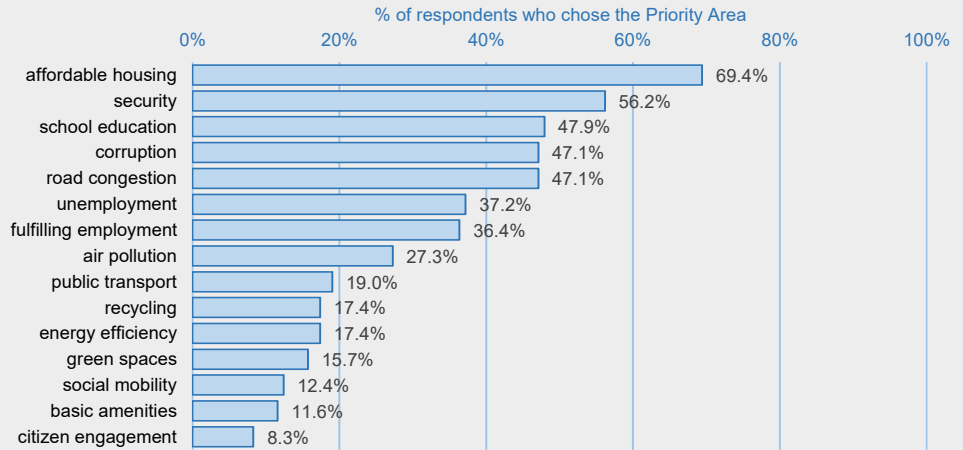
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

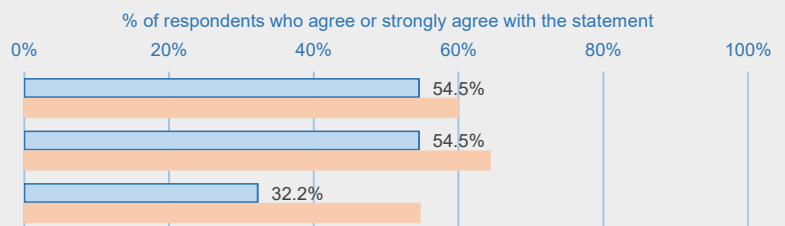


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 48.21 |
| A website or App allows to give away unwanted items to other city residents. | 54.96 |
| Free public wifi has improved access to services. | 59.09 |
| CCTV cameras make residents feel safer. | 47.38 |
| A website or App allows effective monitoring of air pollution. | 32.23 |
| Arranging medical appointments online has improved access. | 59.92 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 46.56 |
| Apps that direct you to an available parking space have reduced journey time. | 56.89 |
| Bicycle hiring has reduced congestion. | 49.86 |
| Online scheduling and ticket sales make public transport easier to use. | 66.25 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 72.18 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 69.83 |
| IT skills are taught well in schools. | 47.25 |
| Online services provided by the city has made it easier to start a new business. | 46.56 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 31.13 |
| Online voting has increased participation. | 48.48 |
| An online platform where residents can propose ideas has improved city life. | 47.52 |
| Processing Identification Documents online has reduced waiting times. | 49.72 |

Chongqing

| | |
|--------------------|--------------------------------------|
| SMART CITY RANKING | 42nd Out of 102 |
|--------------------|--------------------------------------|

| | |
|-------|----------|
| GROUP | 3 |
|-------|----------|

| | |
|--------|-----------------------------|
| RATING | B B From AAA to D |
|--------|-----------------------------|

| | | |
|----------------|------------|--------------|
| FACTOR RATINGS | B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

| City | Population (UN World Cities Report) |
|-----------|-------------------------------------|
| Chongqing | 13,332,000 |



STRUCTURES

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

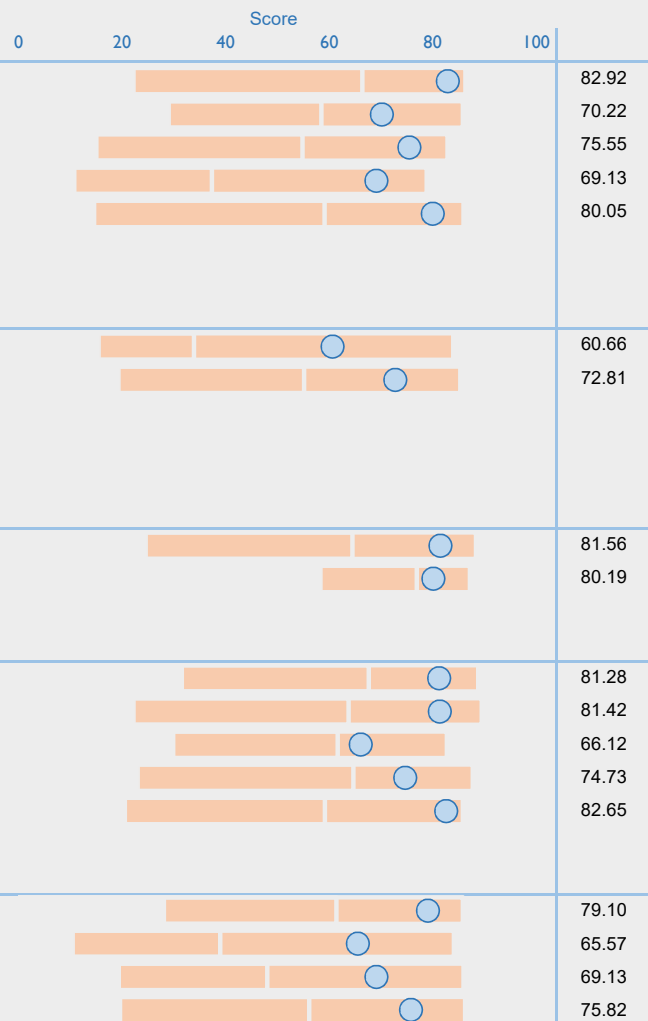
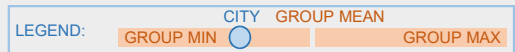
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

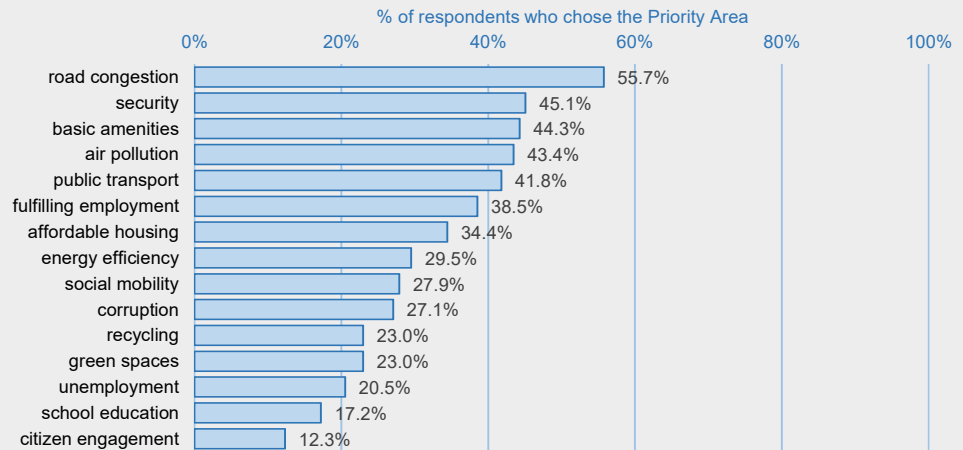
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

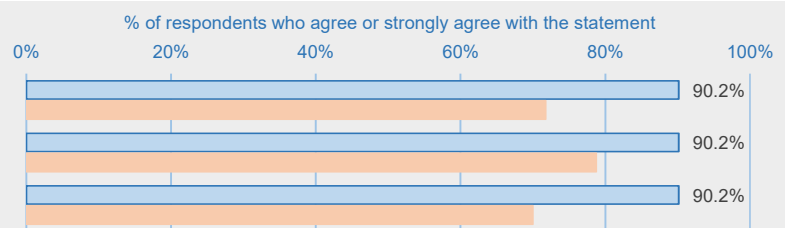


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 86.34 |
| A website or App allows to give away unwanted items to other city residents. | 75.82 |
| Free public wifi has improved access to services. | 71.04 |
| CCTV cameras make residents feel safer. | 82.79 |
| A website or App allows effective monitoring of air pollution. | 82.10 |
| Arranging medical appointments online has improved access. | 88.39 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 75.14 |
| Apps that direct you to an available parking space have reduced journey time. | 79.78 |
| Bicycle hiring has reduced congestion. | 66.53 |
| Online scheduling and ticket sales make public transport easier to use. | 86.89 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 92.76 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 90.71 |
| IT skills are taught well in schools. | 83.20 |
| Online services provided by the city has made it easier to start a new business. | 79.37 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 78.96 |
| Online voting has increased participation. | 79.10 |
| An online platform where residents can propose ideas has improved city life. | 76.37 |
| Processing Identification Documents online has reduced waiting times. | 77.05 |

Copenhagen

| | |
|---------------------------|-------------------------------------|
| SMART CITY RANKING | 5th Out of 102 |
|---------------------------|-------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|----------------------------|
| RATING | AA From AAA to D |
|---------------|----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | AA | A |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.926 | 0.928 | 0.929 |
| Life expectancy at Birth | 80.6 | 80.7 | 80.9 |
| Expected years of schooling | 19.2 | 19.1 | 19.1 |
| Mean years of schooling | 12.5 | 12.6 | 12.6 |
| GNI per capita (PPP \$) | 47,000 | 47,209 | 47,918 |

| City | Population (UN World Cities Report) |
|------------|-------------------------------------|
| Copenhagen | 1,268,000 |



STRUCTURES

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

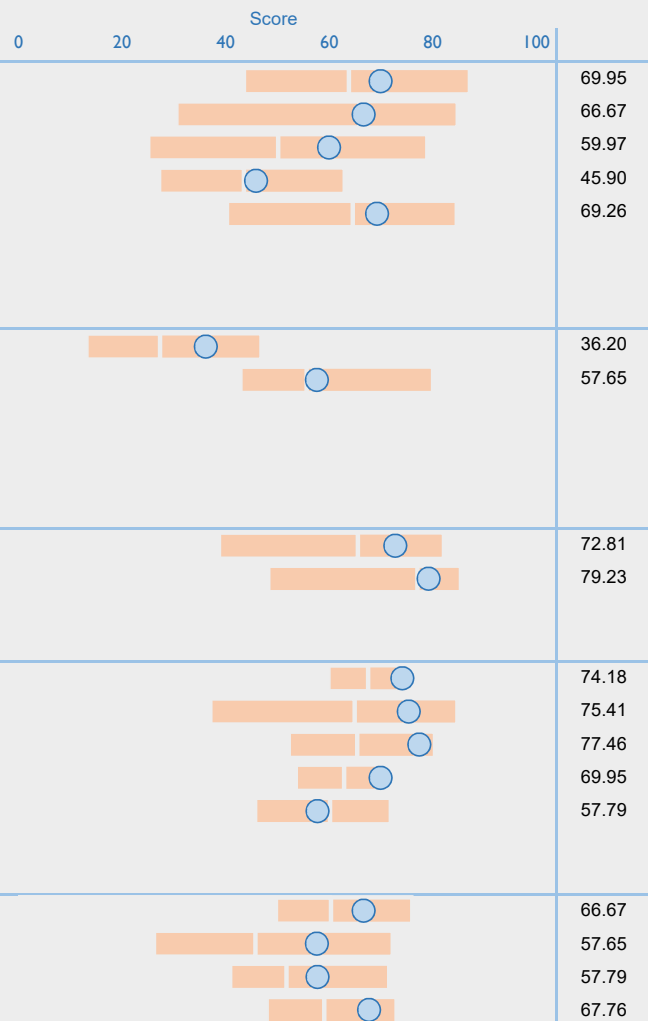
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

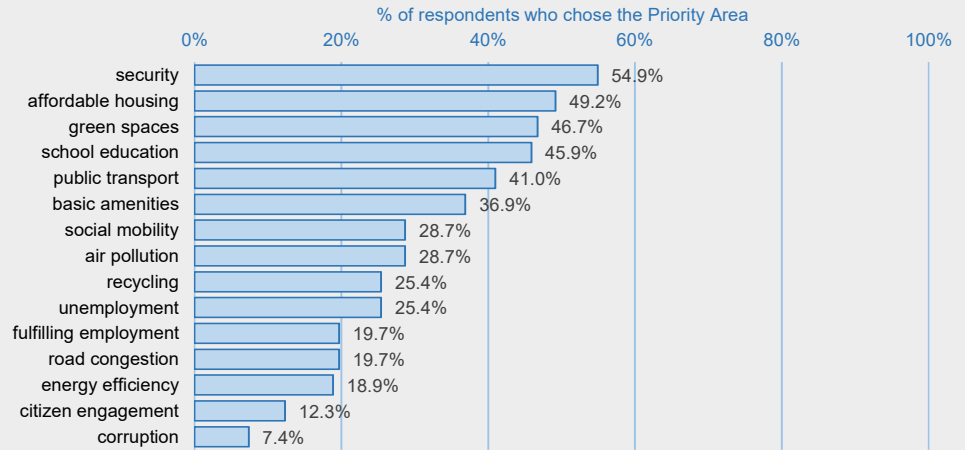
Governance

- 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.



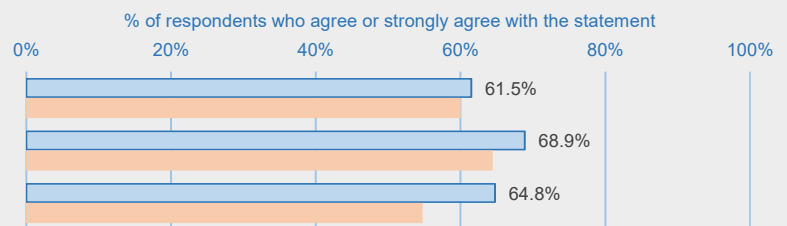
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 53.83 |
| A website or App allows to give away unwanted items to other city residents. | 67.35 |
| Free public wifi has improved access to services. | 61.48 |
| CCTV cameras make residents feel safer. | 49.04 |
| A website or App allows effective monitoring of air pollution. | 39.48 |
| Arranging medical appointments online has improved access. | 68.72 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 43.31 |
| Apps that direct you to an available parking space have reduced journey time. | 50.41 |
| Bicycle hiring has reduced congestion. | 57.24 |
| Online scheduling and ticket sales make public transport easier to use. | 71.99 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 78.55 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 67.08 |
| IT skills are taught well in schools. | 54.10 |
| Online services provided by the city has made it easier to start a new business. | 57.65 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 42.90 |
| Online voting has increased participation. | 53.96 |
| An online platform where residents can propose ideas has improved city life. | 54.92 |
| Processing Identification Documents online has reduced waiting times. | 59.70 |

Denver

SMART CITY RANKING **33rd**
Out of 102

GROUP **1**

RATING **B B B**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| A | B B B |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 2,599,000 |
|-------------------------------------|-----------|



STRUCTURES

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

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

Opportunities (Work & School)

- Employment finding services are 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.

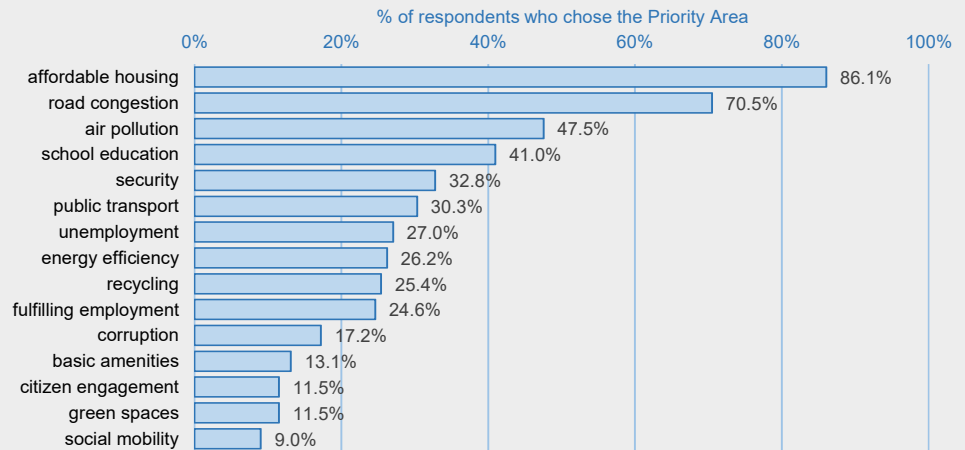
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

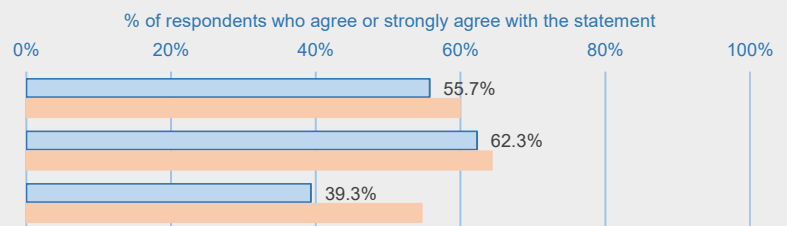


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 41.80 |
| A website or App allows to give away unwanted items to other city residents. | 60.66 |
| Free public wifi has improved access to services. | 43.72 |
| CCTV cameras make residents feel safer. | 43.58 |
| A website or App allows effective monitoring of air pollution. | 37.30 |
| Arranging medical appointments online has improved access. | 63.39 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 38.66 |
| Apps that direct you to an available parking space have reduced journey time. | 36.89 |
| Bicycle hiring has reduced congestion. | 43.31 |
| Online scheduling and ticket sales make public transport easier to use. | 56.69 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 78.96 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 69.95 |
| IT skills are taught well in schools. | 42.90 |
| Online services provided by the city has made it easier to start a new business. | 45.49 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 34.70 |
| Online voting has increased participation. | 53.14 |
| An online platform where residents can propose ideas has improved city life. | 42.76 |
| Processing Identification Documents online has reduced waiting times. | 55.60 |

Dubai

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 45th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 3 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | B B From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.860 | 0.862 | 0.863 |
| Life expectancy at Birth | 77.1 | 77.3 | 77.4 |
| Expected years of schooling | 13.8 | 13.6 | 13.6 |
| Mean years of schooling | 10.6 | 10.8 | 10.8 |
| GNI per capita (PPP \$) | 66,923 | 68,121 | 67,805 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Dubai | 2,415,000 |



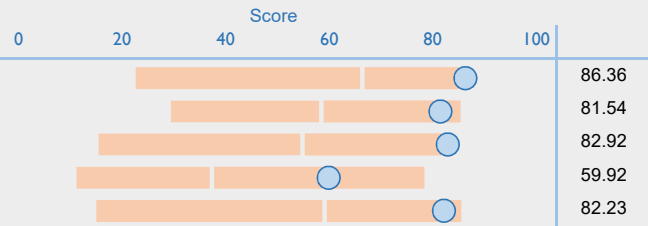
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES



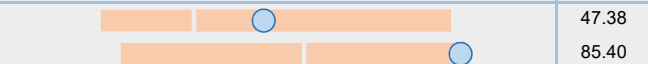
Health & Safety

- 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.



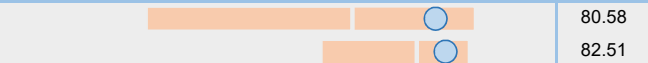
Mobility

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



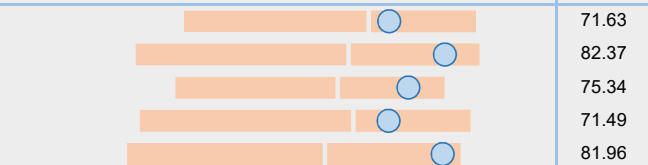
Activities

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



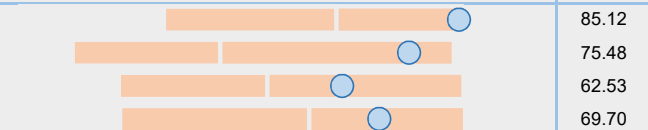
Opportunities (Work & School)

- Employment finding services are 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.



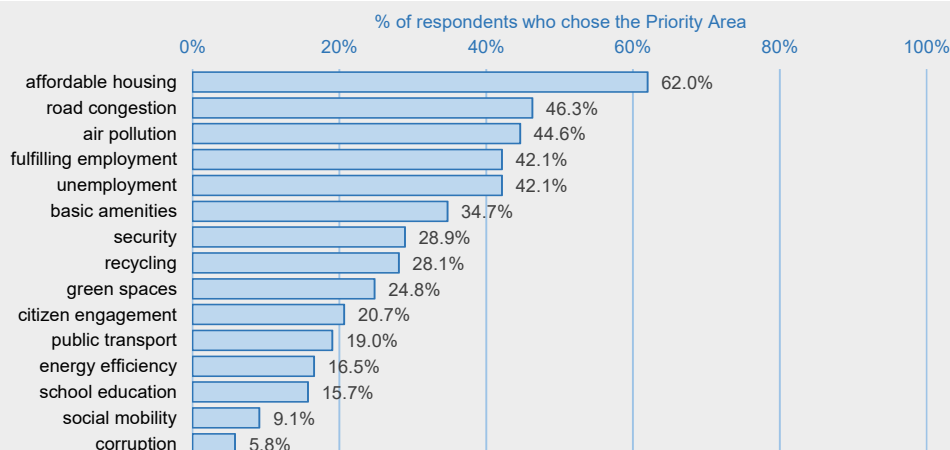
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



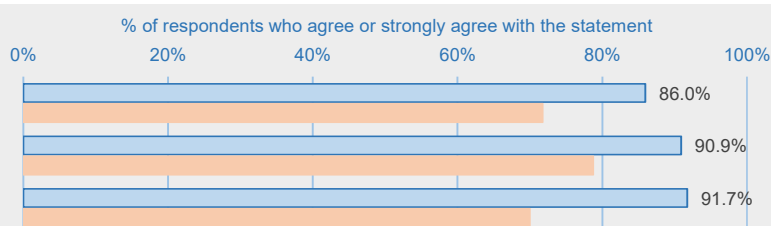
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 76.72 |
| A website or App allows to give away unwanted items to other city residents. | 72.18 |
| Free public wifi has improved access to services. | 80.44 |
| CCTV cameras make residents feel safer. | 85.81 |
| A website or App allows effective monitoring of air pollution. | 58.95 |
| Arranging medical appointments online has improved access. | 82.09 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 61.71 |
| Apps that direct you to an available parking space have reduced journey time. | 66.25 |
| Bicycle hiring has reduced congestion. | 58.40 |
| Online scheduling and ticket sales make public transport easier to use. | 79.75 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 86.91 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 77.13 |
| IT skills are taught well in schools. | 78.24 |
| Online services provided by the city has made it easier to start a new business. | 83.20 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 73.00 |
| Online voting has increased participation. | 69.01 |
| An online platform where residents can propose ideas has improved city life. | 74.66 |
| Processing Identification Documents online has reduced waiting times. | 83.33 |

Dublin

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 30th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.929 | 0.934 | 0.938 |
| Life expectancy at Birth | 81.3 | 81.5 | 81.6 |
| Expected years of schooling | 19.6 | 19.6 | 19.6 |
| Mean years of schooling | 12.3 | 12.5 | 12.5 |
| GNI per capita (PPP \$) | 48,551 | 50,475 | 53,754 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Dublin | 1,169,000 |



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STRUCTURES

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

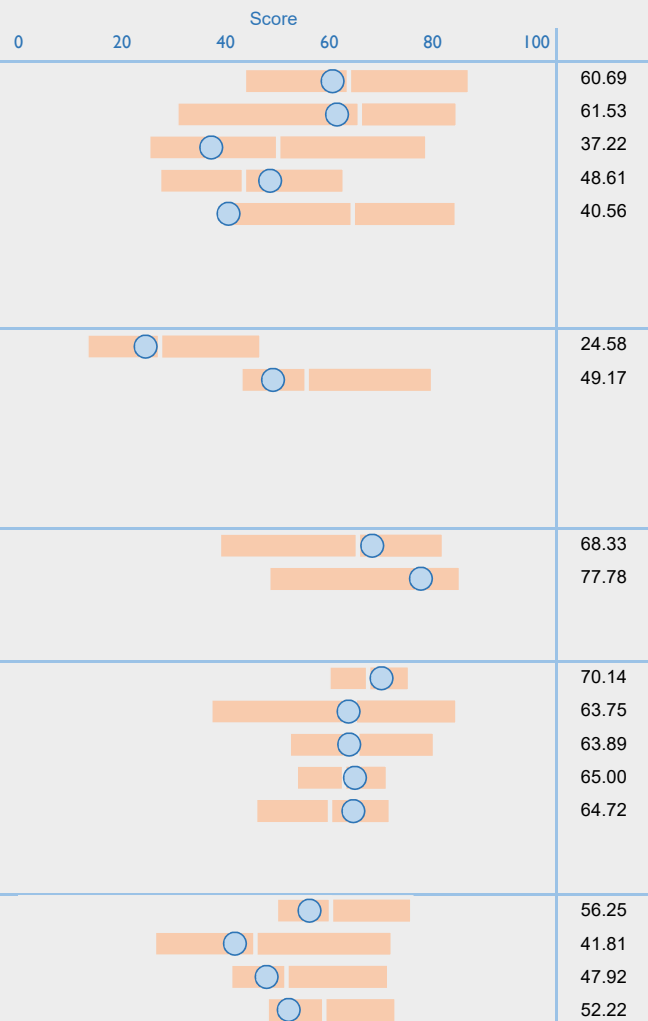
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

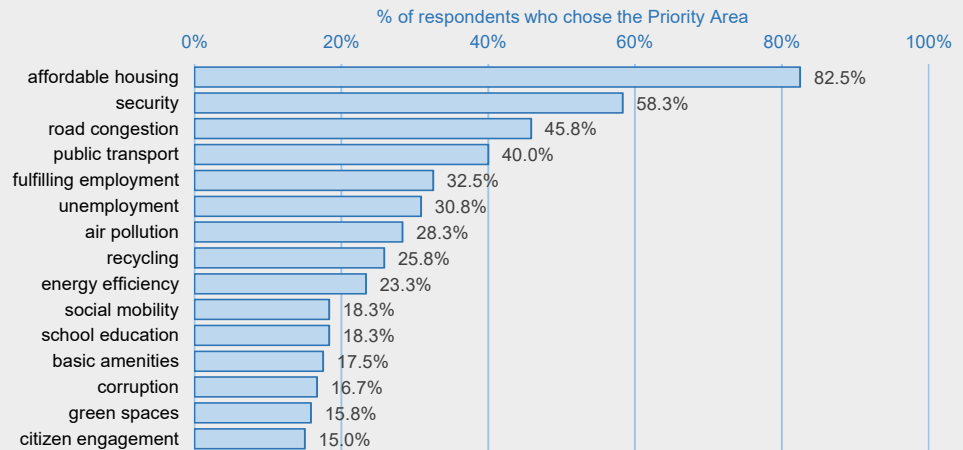
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

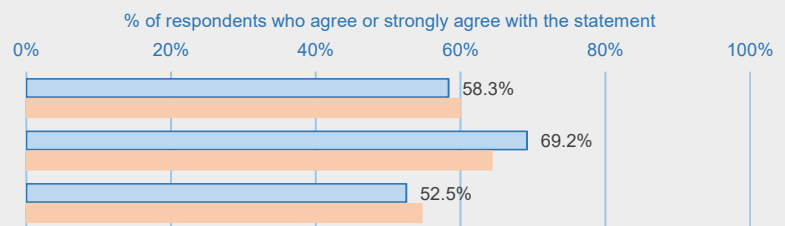


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 42.50 |
| A website or App allows to give away unwanted items to other city residents. | 55.42 |
| Free public wifi has improved access to services. | 48.89 |
| CCTV cameras make residents feel safer. | 56.53 |
| A website or App allows effective monitoring of air pollution. | 36.94 |
| Arranging medical appointments online has improved access. | 47.08 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 40.56 |
| Apps that direct you to an available parking space have reduced journey time. | 39.72 |
| Bicycle hiring has reduced congestion. | 62.22 |
| Online scheduling and ticket sales make public transport easier to use. | 61.81 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 72.78 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 72.78 |
| IT skills are taught well in schools. | 60.56 |
| Online services provided by the city has made it easier to start a new business. | 60.28 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 37.78 |
| Online voting has increased participation. | 44.31 |
| An online platform where residents can propose ideas has improved city life. | 43.61 |
| Processing Identification Documents online has reduced waiting times. | 60.97 |

Dusseldorf

SMART CITY RANKING **10th**
Out of 102

GROUP **1**

RATING **A**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| AA | A |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.933 | 0.934 | 0.936 |
| Life expectancy at Birth | 80.8 | 81.0 | 81.2 |
| Expected years of schooling | 17.0 | 17.0 | 17.0 |
| Mean years of schooling | 14.1 | 14.1 | 14.1 |
| GNI per capita (PPP \$) | 44,766 | 45,203 | 46,136 |

City

| | |
|-----------------------|---------|
| Population (Eurostat) | 617,000 |
|-----------------------|---------|



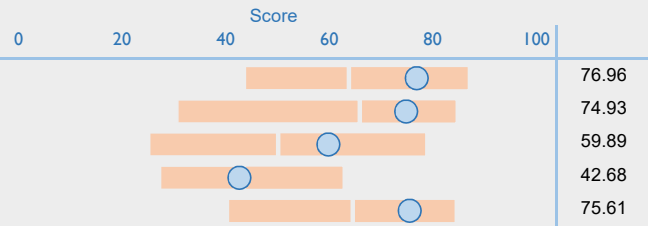
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES



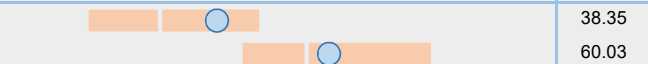
Health & Safety

- 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.



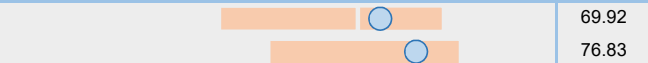
Mobility

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



Activities

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



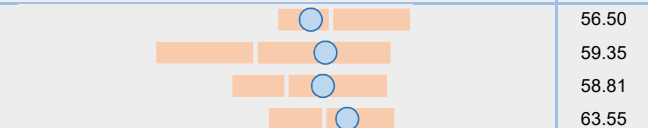
Opportunities (Work & School)

- Employment finding services are 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.



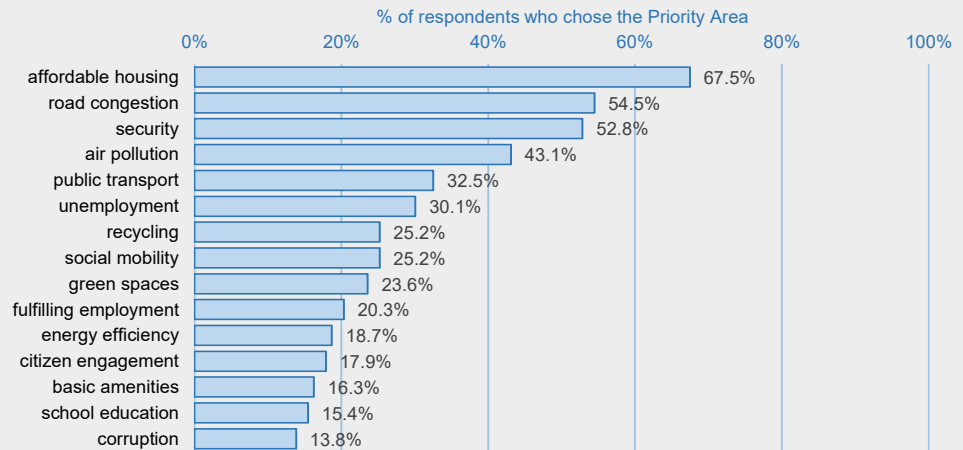
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



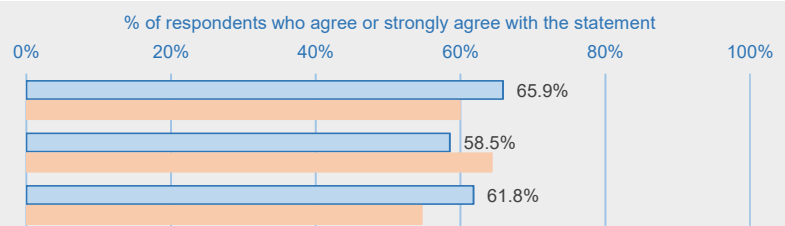
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 53.79 |
| A website or App allows to give away unwanted items to other city residents. | 60.03 |
| Free public wifi has improved access to services. | 59.49 |
| CCTV cameras make residents feel safer. | 53.25 |
| A website or App allows effective monitoring of air pollution. | 46.75 |
| Arranging medical appointments online has improved access. | 54.34 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 38.89 |
| Apps that direct you to an available parking space have reduced journey time. | 49.19 |
| Bicycle hiring has reduced congestion. | 44.04 |
| Online scheduling and ticket sales make public transport easier to use. | 61.38 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 68.83 |
|---|-------|

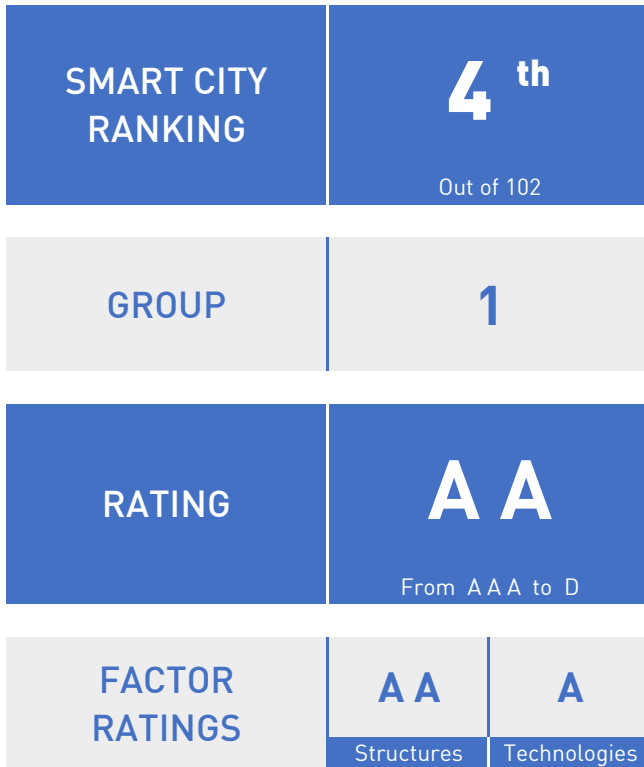
Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 70.87 |
| IT skills are taught well in schools. | 55.83 |
| Online services provided by the city has made it easier to start a new business. | 48.92 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 49.46 |
| Online voting has increased participation. | 54.34 |
| An online platform where residents can propose ideas has improved city life. | 53.66 |
| Processing Identification Documents online has reduced waiting times. | 58.94 |

Geneva



BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.942 | 0.943 | 0.944 |
| Life expectancy at Birth | 83.1 | 83.3 | 83.5 |
| Expected years of schooling | 16.2 | 16.2 | 16.2 |
| Mean years of schooling | 13.4 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 58,280 | 57,636 | 57,625 |

City

Population (Eurostat) 371,000



STRUCTURES

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

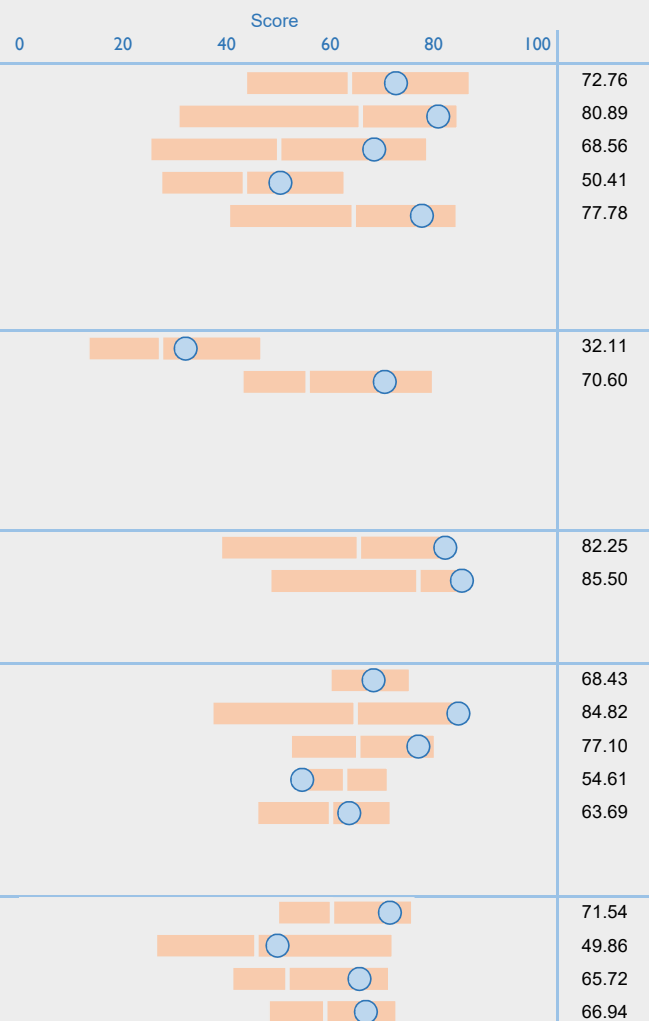
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

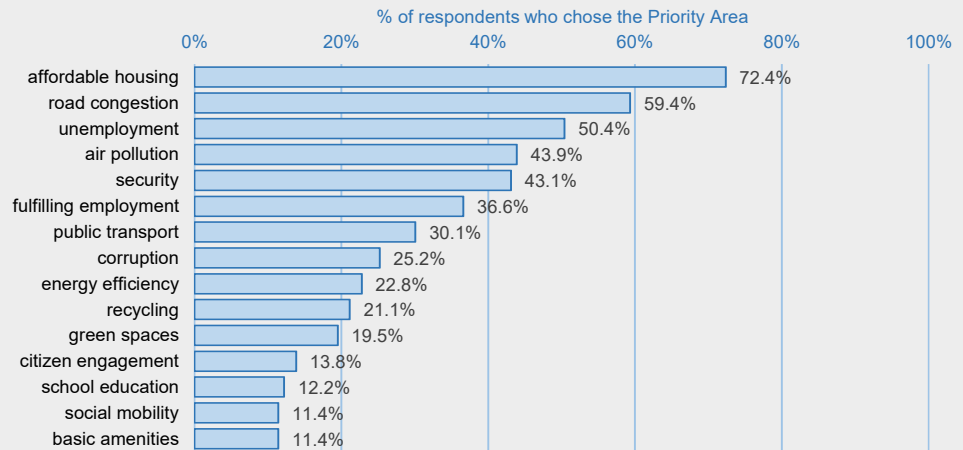
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



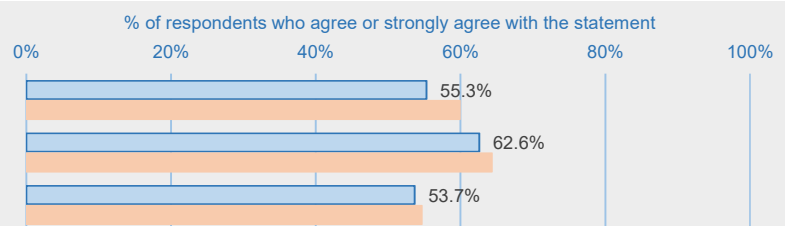
ATTITUDES

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You are comfortable with face recognition technologies to lower crime

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 55.01 |
| A website or App allows to give away unwanted items to other city residents. | 63.96 |
| Free public wifi has improved access to services. | 64.63 |
| CCTV cameras make residents feel safer. | 59.21 |
| A website or App allows effective monitoring of air pollution. | 49.19 |
| Arranging medical appointments online has improved access. | 53.79 |

Mobility

| Statement | Score |
|---|-------|
| Car-sharing Apps have reduced congestion. | 38.08 |
| Apps that direct you to an available parking space have reduced journey time. | 40.65 |
| Bicycle hiring has reduced congestion. | 49.59 |
| Online scheduling and ticket sales make public transport easier to use. | 74.53 |

Activities

| Statement | Score |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 82.38 |

Opportunities (Work & School)

| Statement | Score |
|--|-------|
| Online access to job listings has made it easier to find work. | 60.03 |
| IT skills are taught well in schools. | 65.99 |
| Online services provided by the city has made it easier to start a new business. | 50.54 |

Governance

| Statement | Score |
|--|-------|
| Online public access to city finances has reduced corruption. | 38.89 |
| Online voting has increased participation. | 55.42 |
| An online platform where residents can propose ideas has improved city life. | 41.33 |
| Processing Identification Documents online has reduced waiting times. | 58.67 |

Gothenburg

SMART CITY RANKING **28th**
Out of 102

GROUP **1**

RATING **BBB**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| BBB | BBB |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.929 | 0.932 | 0.933 |
| Life expectancy at Birth | 82.3 | 82.5 | 82.6 |
| Expected years of schooling | 17.6 | 17.6 | 17.6 |
| Mean years of schooling | 12.4 | 12.4 | 12.4 |
| GNI per capita (PPP \$) | 46,380 | 47,378 | 47,766 |

City
Population (UN World Cities Report) 557,000



STRUCTURES

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

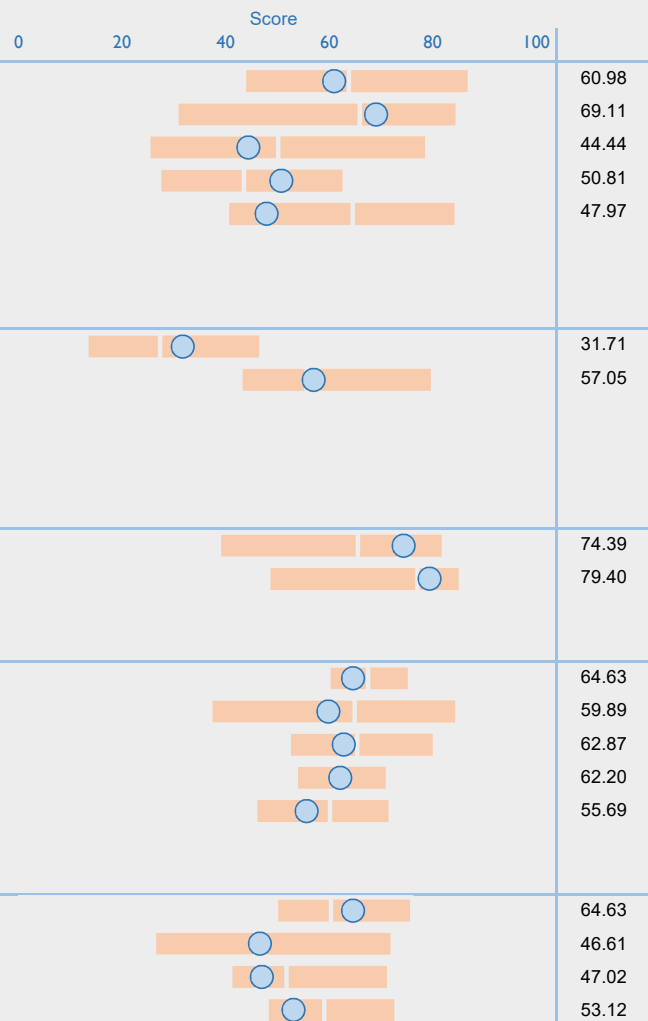
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

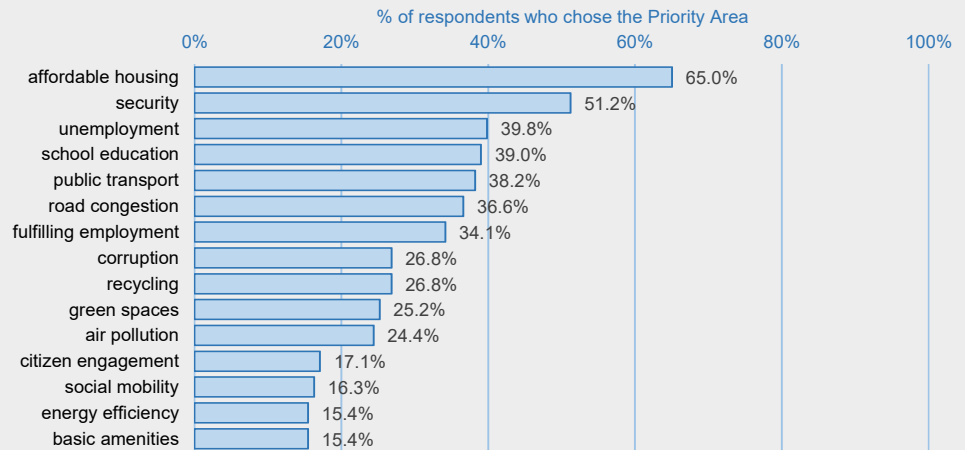
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



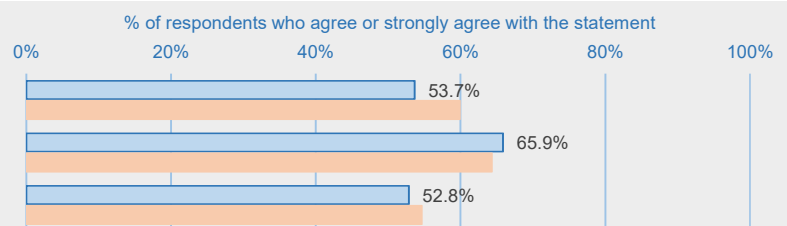
ATTITUDES

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

LEGEND: GROUP MEAN CITY



TECHNOLOGIES

LEGEND: GROUP MIN CITY GROUP MEAN GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 49.05 |
| A website or App allows to give away unwanted items to other city residents. | 57.18 |
| Free public wifi has improved access to services. | 58.67 |
| CCTV cameras make residents feel safer. | 43.36 |
| A website or App allows effective monitoring of air pollution. | 33.74 |
| Arranging medical appointments online has improved access. | 54.34 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 33.74 |
| Apps that direct you to an available parking space have reduced journey time. | 43.90 |
| Bicycle hiring has reduced congestion. | 49.05 |
| Online scheduling and ticket sales make public transport easier to use. | 72.22 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 75.61 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 63.96 |
| IT skills are taught well in schools. | 53.52 |
| Online services provided by the city has made it easier to start a new business. | 46.21 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 36.86 |
| Online voting has increased participation. | 44.17 |
| An online platform where residents can propose ideas has improved city life. | 52.17 |
| Processing Identification Documents online has reduced waiting times. | 45.53 |

Guangzhou

SMART CITY RANKING **57th**
Out of 102

GROUP **3**

RATING **B**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| B | B B |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

City

| | |
|-------------------------------------|------------|
| Population (UN World Cities Report) | 12,458,000 |
|-------------------------------------|------------|



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

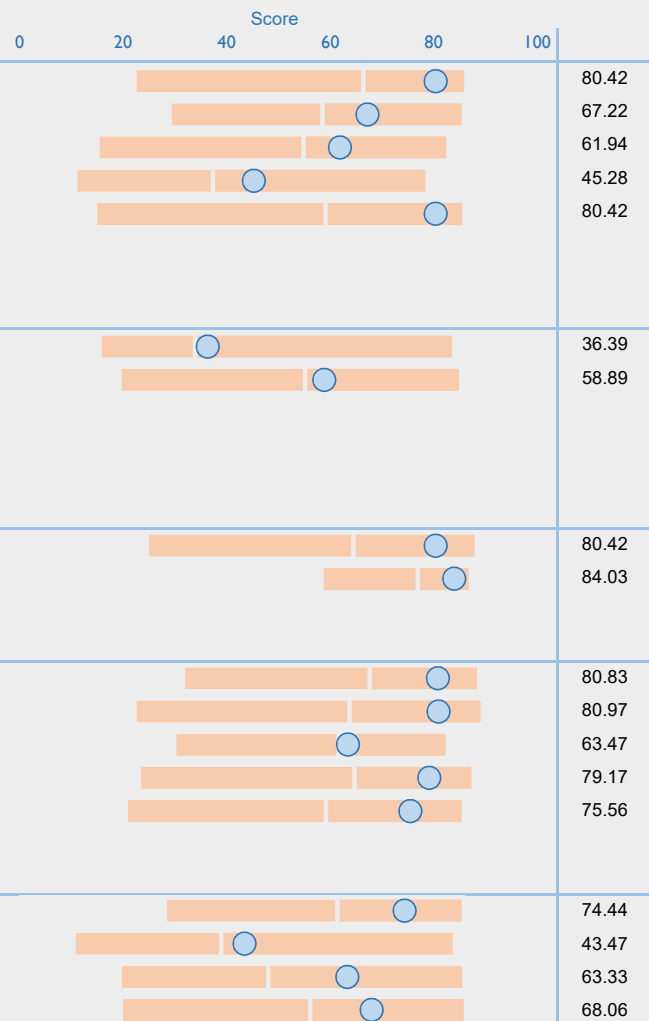
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

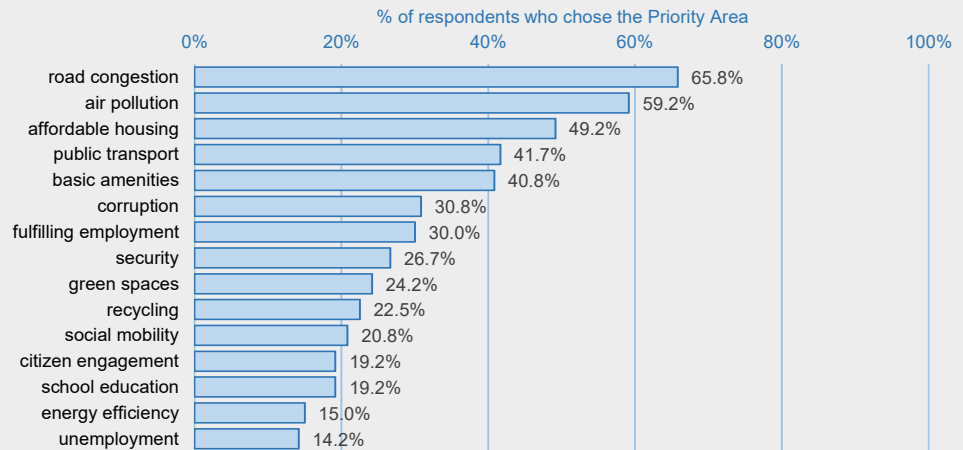
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



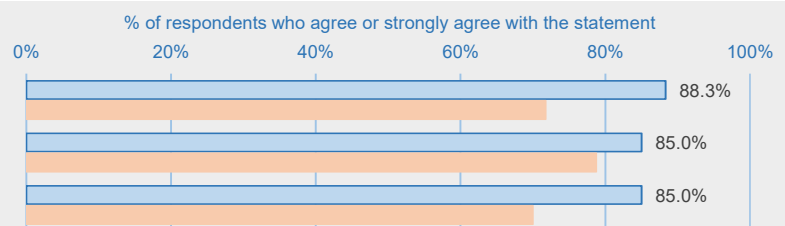
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 85.56 |
| A website or App allows to give away unwanted items to other city residents. | 70.83 |
| Free public wifi has improved access to services. | 82.78 |
| CCTV cameras make residents feel safer. | 80.83 |
| A website or App allows effective monitoring of air pollution. | 72.78 |
| Arranging medical appointments online has improved access. | 88.47 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 62.50 |
| Apps that direct you to an available parking space have reduced journey time. | 77.08 |
| Bicycle hiring has reduced congestion. | 77.64 |
| Online scheduling and ticket sales make public transport easier to use. | 92.64 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 93.61 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 91.25 |
| IT skills are taught well in schools. | 81.11 |
| Online services provided by the city has made it easier to start a new business. | 85.00 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 75.00 |
| Online voting has increased participation. | 71.39 |
| An online platform where residents can propose ideas has improved city life. | 80.56 |
| Processing Identification Documents online has reduced waiting times. | 83.61 |

Hangzhou

SMART CITY RANKING **44th**
Out of 102

GROUP **3**

RATING **B B**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| B | B B |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 6,391,000 |
|-------------------------------------|-----------|



STRUCTURES

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

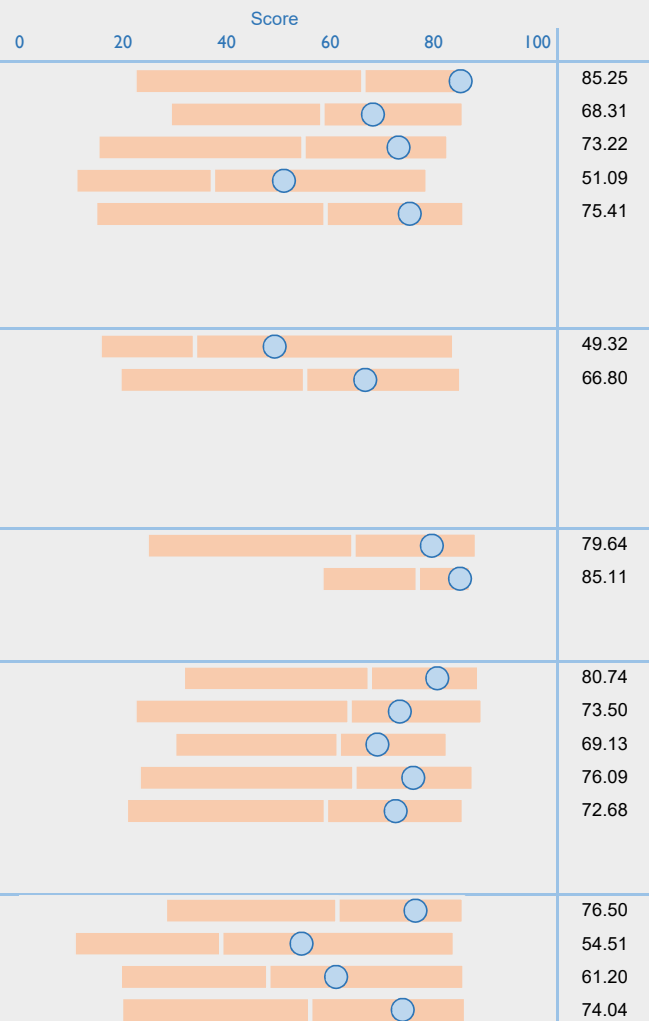
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

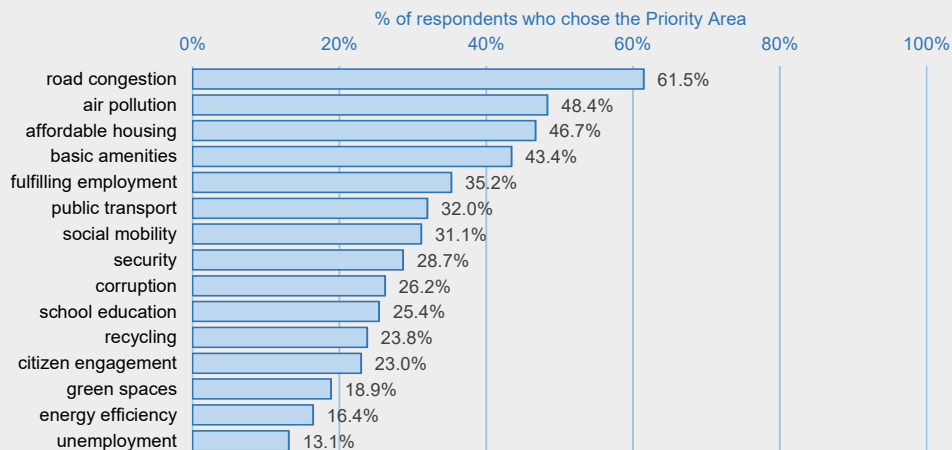
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

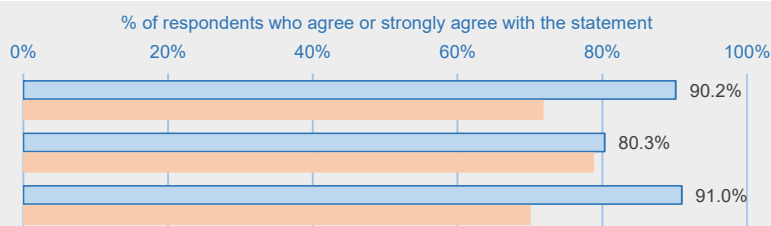


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 85.52 |
| A website or App allows to give away unwanted items to other city residents. | 73.91 |
| Free public wifi has improved access to services. | 82.92 |
| CCTV cameras make residents feel safer. | 78.55 |
| A website or App allows effective monitoring of air pollution. | 76.91 |
| Arranging medical appointments online has improved access. | 90.30 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 72.95 |
| Apps that direct you to an available parking space have reduced journey time. | 80.60 |
| Bicycle hiring has reduced congestion. | 83.06 |
| Online scheduling and ticket sales make public transport easier to use. | 92.08 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 92.08 |
|---|-------|

Opportunities (Work & School)

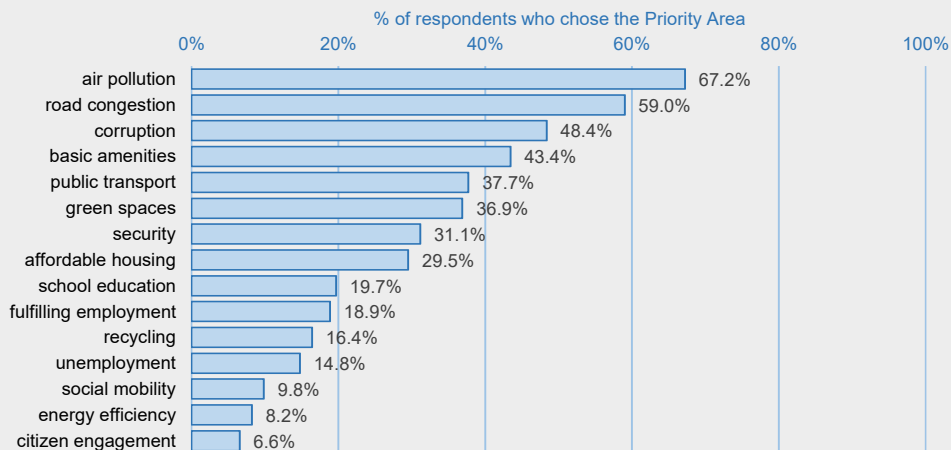
| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 93.17 |
| IT skills are taught well in schools. | 82.38 |
| Online services provided by the city has made it easier to start a new business. | 85.25 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 77.73 |
| Online voting has increased participation. | 77.73 |
| An online platform where residents can propose ideas has improved city life. | 81.97 |
| Processing Identification Documents online has reduced waiting times. | 84.84 |

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. The higher the percentage of responses per area, the greater the priority for the city.



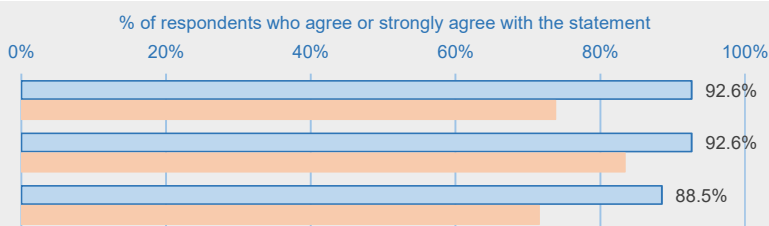
ATTITUDES

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LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 69.26 |
| A website or App allows to give away unwanted items to other city residents. | 64.21 |
| Free public wifi has improved access to services. | 70.08 |
| CCTV cameras make residents feel safer. | 69.40 |
| A website or App allows effective monitoring of air pollution. | 56.42 |
| Arranging medical appointments online has improved access. | 76.23 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 75.00 |
| Apps that direct you to an available parking space have reduced journey time. | 73.63 |
| Bicycle hiring has reduced congestion. | 60.79 |
| Online scheduling and ticket sales make public transport easier to use. | 80.87 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 84.02 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 83.61 |
| IT skills are taught well in schools. | 73.50 |
| Online services provided by the city has made it easier to start a new business. | 79.78 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 63.39 |
| Online voting has increased participation. | 65.16 |
| An online platform where residents can propose ideas has improved city life. | 72.81 |
| Processing Identification Documents online has reduced waiting times. | 80.46 |

Hanover

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 26th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | A | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.933 | 0.934 | 0.936 |
| Life expectancy at Birth | 80.8 | 81.0 | 81.2 |
| Expected years of schooling | 17.0 | 17.0 | 17.0 |
| Mean years of schooling | 14.1 | 14.1 | 14.1 |
| GNI per capita (PPP \$) | 44,766 | 45,203 | 46,136 |

| City | Population (Eurostat) |
|---------|-----------------------|
| Hanover | 535,000 |



STRUCTURES

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

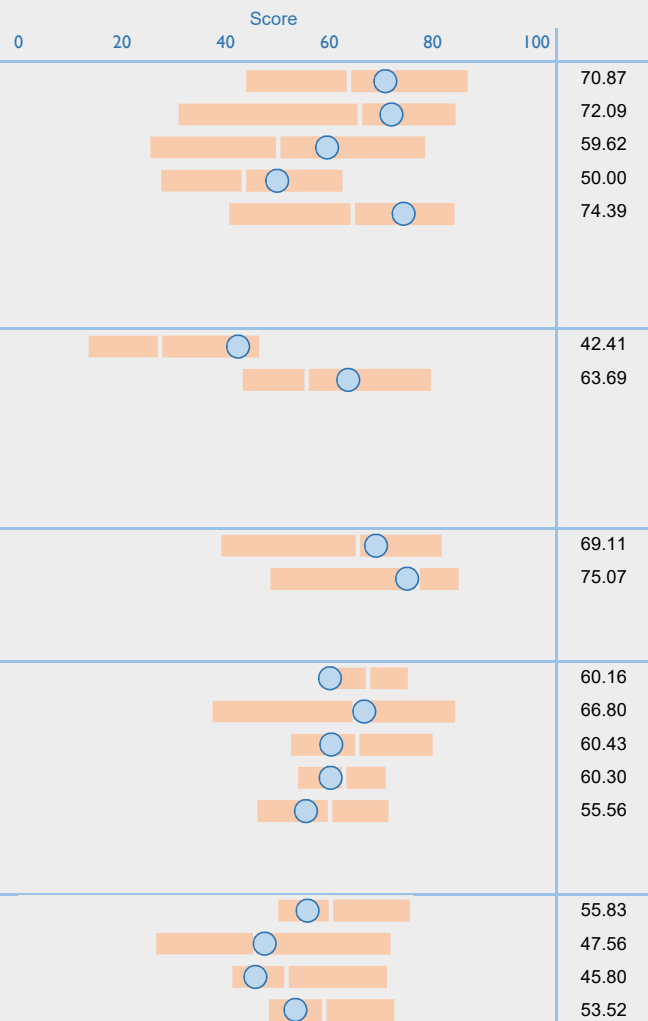
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

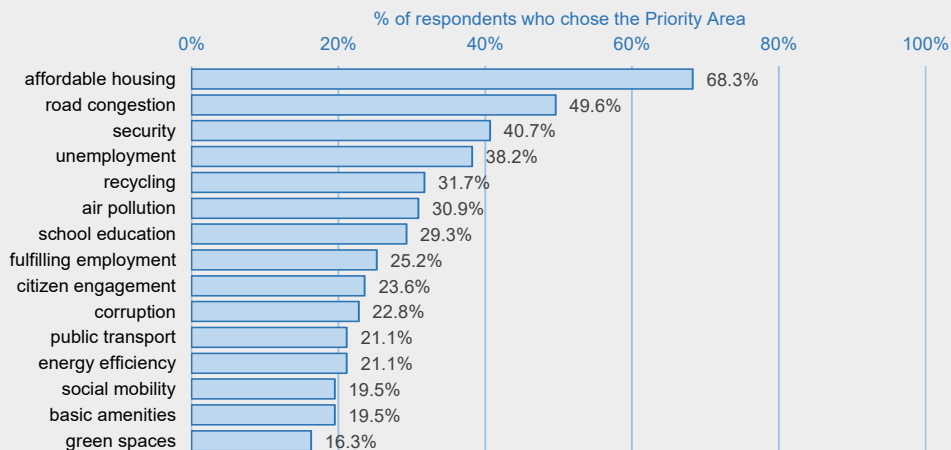
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

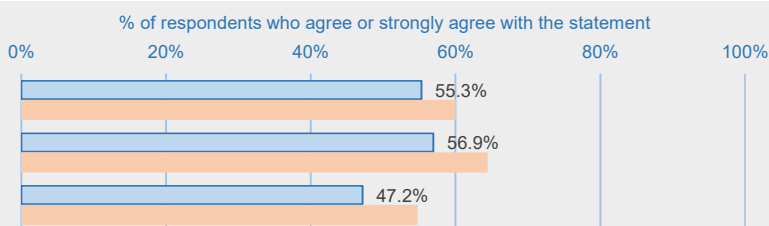


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 47.02 |
| A website or App allows to give away unwanted items to other city residents. | 52.03 |
| Free public wifi has improved access to services. | 45.93 |
| CCTV cameras make residents feel safer. | 45.66 |
| A website or App allows effective monitoring of air pollution. | 37.80 |
| Arranging medical appointments online has improved access. | 46.07 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 43.63 |
| Apps that direct you to an available parking space have reduced journey time. | 43.36 |
| Bicycle hiring has reduced congestion. | 43.63 |
| Online scheduling and ticket sales make public transport easier to use. | 71.27 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 69.65 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 69.65 |
| IT skills are taught well in schools. | 43.22 |
| Online services provided by the city has made it easier to start a new business. | 43.90 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 36.72 |
| Online voting has increased participation. | 48.10 |
| An online platform where residents can propose ideas has improved city life. | 44.58 |
| Processing Identification Documents online has reduced waiting times. | 49.86 |

Helsinki

SMART CITY RANKING **8th**
Out of 102

GROUP **2**

RATING **A**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| A | BBB |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.915 | 0.918 | 0.920 |
| Life expectancy at Birth | 81.1 | 81.3 | 81.5 |
| Expected years of schooling | 17.6 | 17.6 | 17.6 |
| Mean years of schooling | 12.4 | 12.4 | 12.4 |
| GNI per capita (PPP \$) | 39,248 | 40,066 | 41,002 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 1,180,000 |
|-------------------------------------|-----------|



STRUCTURES

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

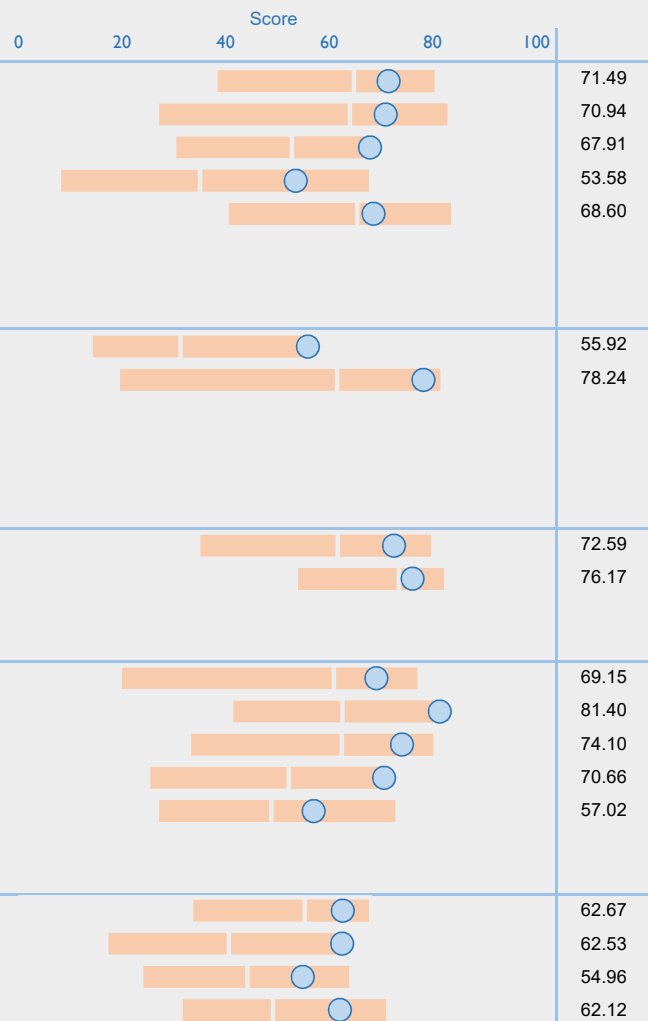
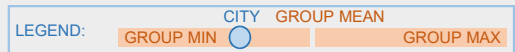
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

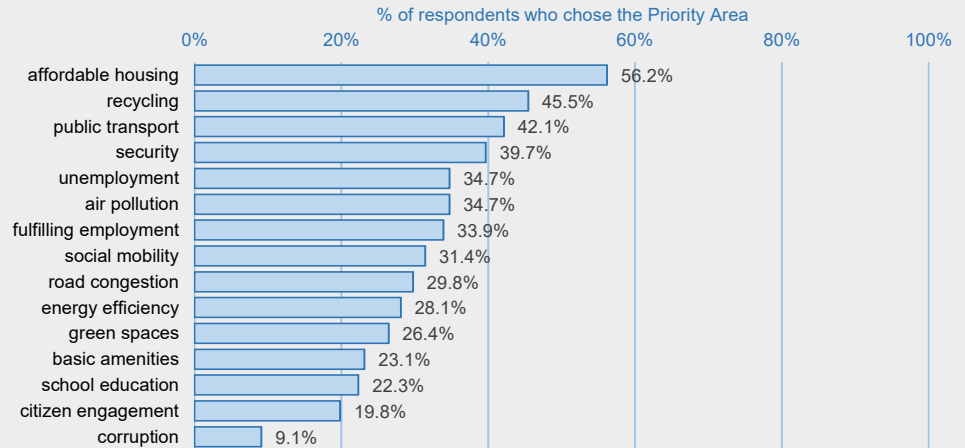
Governance

- 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.



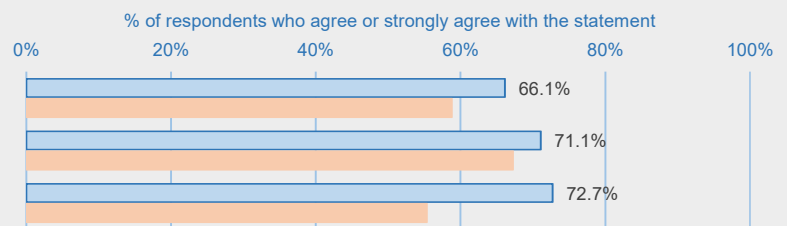
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score | Value |
|--|-------|-------|
| Online reporting of city maintenance problems provides a speedy solution. | ~50 | 59.23 |
| A website or App allows to give away unwanted items to other city residents. | ~65 | 68.87 |
| Free public wifi has improved access to services. | ~60 | 62.81 |
| CCTV cameras make residents feel safer. | ~55 | 56.61 |
| A website or App allows effective monitoring of air pollution. | ~60 | 60.47 |
| Arranging medical appointments online has improved access. | ~65 | 64.33 |

Mobility

| | | |
|---|-----|-------|
| Car-sharing Apps have reduced congestion. | ~45 | 46.69 |
| Apps that direct you to an available parking space have reduced journey time. | ~55 | 53.99 |
| Bicycle hiring has reduced congestion. | ~65 | 66.94 |
| Online scheduling and ticket sales make public transport easier to use. | ~75 | 77.41 |

Activities

| | | |
|---|-----|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | ~70 | 69.97 |
|---|-----|-------|

Opportunities (Work & School)

| | | |
|--|-----|-------|
| Online access to job listings has made it easier to find work. | ~75 | 74.52 |
| IT skills are taught well in schools. | ~70 | 69.97 |
| Online services provided by the city has made it easier to start a new business. | ~65 | 64.74 |

Governance

| | | |
|--|-----|-------|
| Online public access to city finances has reduced corruption. | ~50 | 53.44 |
| Online voting has increased participation. | ~55 | 51.52 |
| An online platform where residents can propose ideas has improved city life. | ~60 | 59.78 |
| Processing Identification Documents online has reduced waiting times. | ~65 | 65.70 |

Ho Chi Minh City

SMART CITY RANKING **65th**
Out of 102

GROUP **4**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.684 | 0.689 | 0.694 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.5 |
| Expected years of schooling | 12.7 | 12.7 | 12.7 |
| Mean years of schooling | 8.0 | 8.1 | 8.2 |
| GNI per capita (PPP \$) | 5,263 | 5,589 | 5,859 |

| City | Population (UN World Cities Report) |
|------------------|-------------------------------------|
| Ho Chi Minh City | 7,298,000 |



STRUCTURES

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

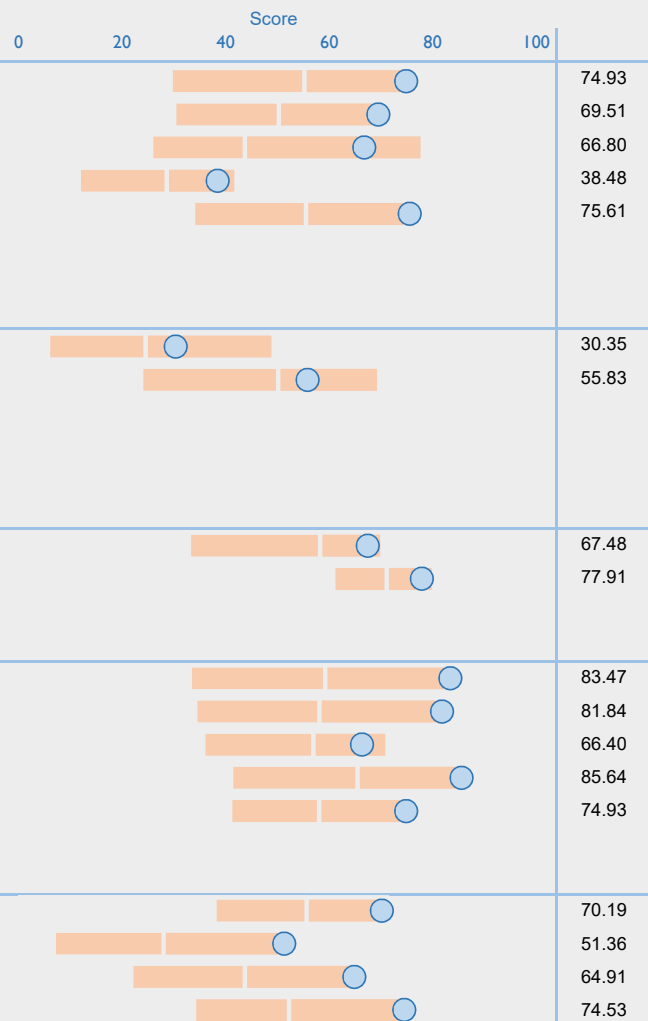
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

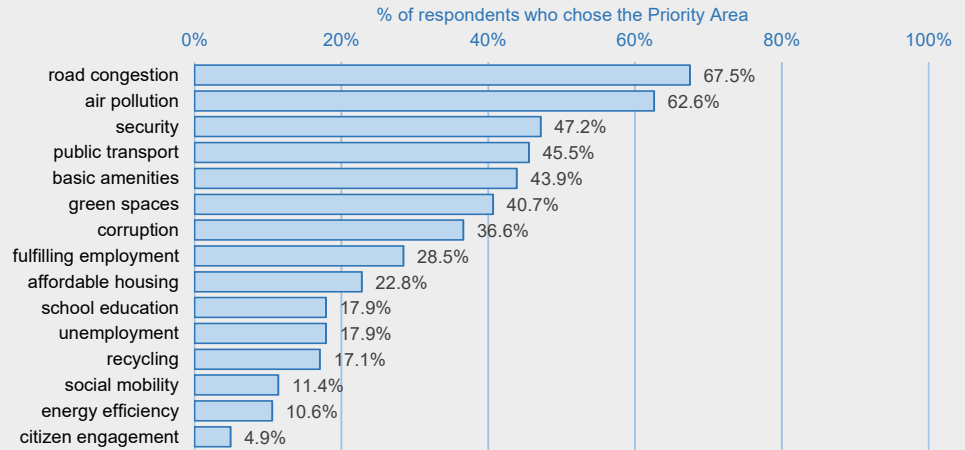
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

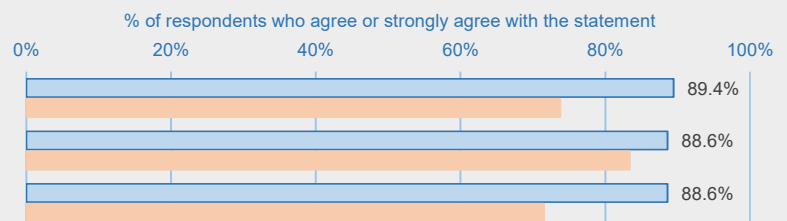


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 76.29 |
| A website or App allows to give away unwanted items to other city residents. | 66.67 |
| Free public wifi has improved access to services. | 69.51 |
| CCTV cameras make residents feel safer. | 80.49 |
| A website or App allows effective monitoring of air pollution. | 68.83 |
| Arranging medical appointments online has improved access. | 84.42 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 76.69 |
| Apps that direct you to an available parking space have reduced journey time. | 80.22 |
| Bicycle hiring has reduced congestion. | 57.18 |
| Online scheduling and ticket sales make public transport easier to use. | 74.80 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 81.30 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 88.75 |
| IT skills are taught well in schools. | 80.89 |
| Online services provided by the city has made it easier to start a new business. | 81.84 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 70.33 |
| Online voting has increased participation. | 69.11 |
| An online platform where residents can propose ideas has improved city life. | 74.66 |
| Processing Identification Documents online has reduced waiting times. | 78.32 |

Hong Kong

SMART CITY RANKING **37th**
Out of 102

GROUP **1**

RATING **B B B**
From AAA to D

FACTOR RATINGS **B B** **A**
Structures Technologies

BACKGROUND INFORMATION

| SAR | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.927 | 0.930 | 0.933 |
| Life expectancy at Birth | 83.8 | 84.0 | 84.1 |
| Expected years of schooling | 16.3 | 16.3 | 16.3 |
| Mean years of schooling | 12.0 | 12.0 | 12.0 |
| GNI per capita (PPP \$) | 54,608 | 55,809 | 58,420 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 7,314,000 |
|-------------------------------------|-----------|



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STRUCTURES

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

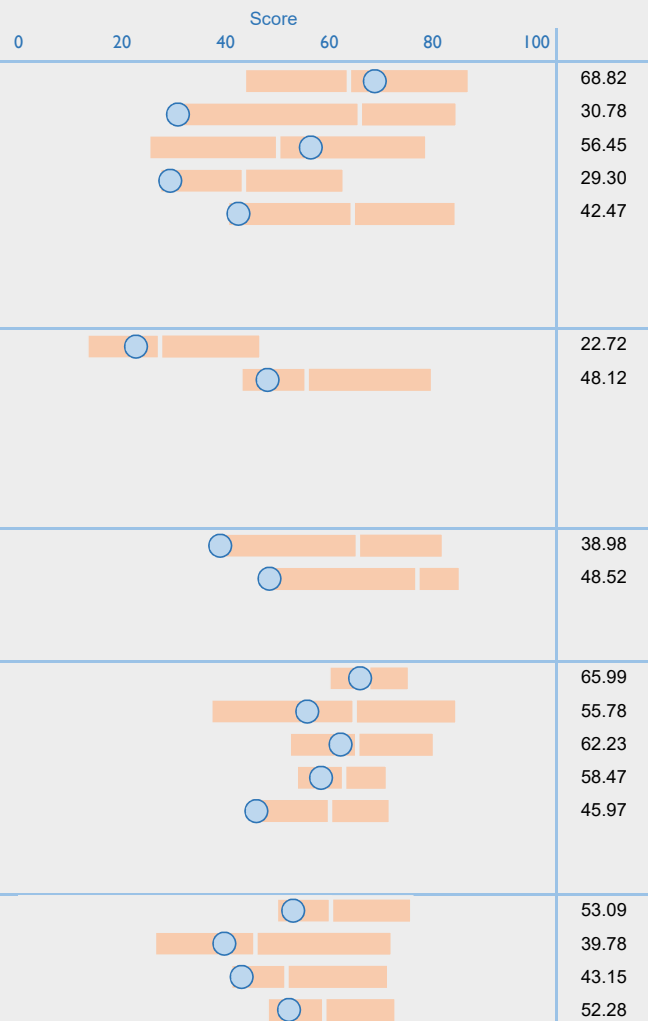
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

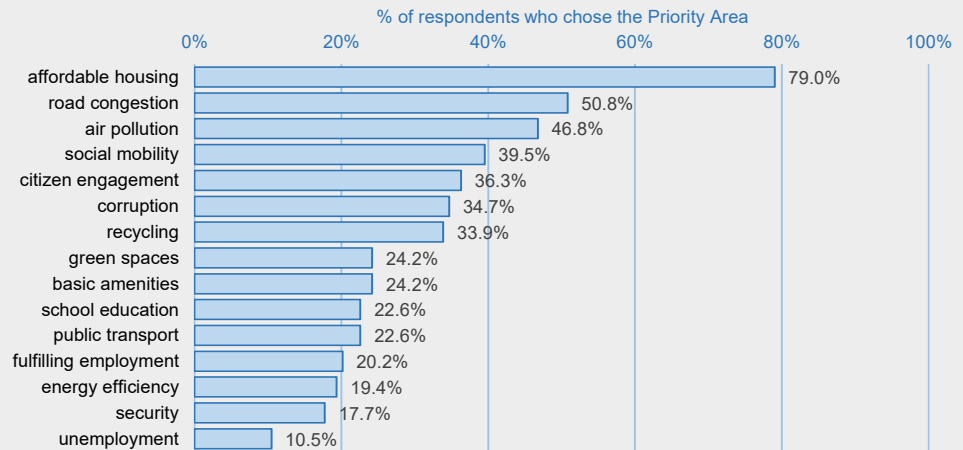
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



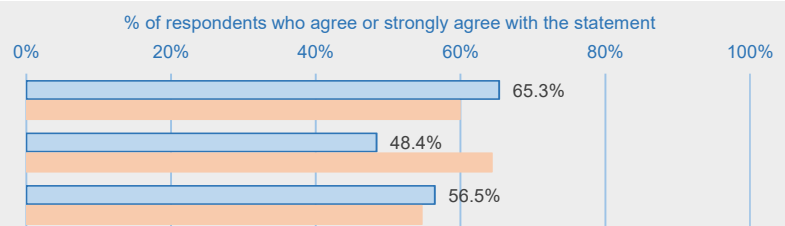
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 51.34 |
| A website or App allows to give away unwanted items to other city residents. | 53.63 |
| Free public wifi has improved access to services. | 65.19 |
| CCTV cameras make residents feel safer. | 61.56 |
| A website or App allows effective monitoring of air pollution. | 55.91 |
| Arranging medical appointments online has improved access. | 55.78 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 40.19 |
| Apps that direct you to an available parking space have reduced journey time. | 51.75 |
| Bicycle hiring has reduced congestion. | 36.29 |
| Online scheduling and ticket sales make public transport easier to use. | 56.85 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 69.49 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 70.03 |
| IT skills are taught well in schools. | 61.83 |
| Online services provided by the city has made it easier to start a new business. | 68.15 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 59.01 |
| Online voting has increased participation. | 50.67 |
| An online platform where residents can propose ideas has improved city life. | 57.66 |
| Processing Identification Documents online has reduced waiting times. | 67.74 |

Hyderabad

SMART CITY RANKING **67th**
Out of 102

GROUP **4**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.627 | 0.636 | 0.640 |
| Life expectancy at Birth | 68.3 | 68.6 | 68.8 |
| Expected years of schooling | 12.0 | 12.3 | 12.3 |
| Mean years of schooling | 6.3 | 6.4 | 6.4 |
| GNI per capita (PPP \$) | 5,691 | 6,026 | 6,353 |

City

| | |
|-------------------------------------|------------|
| Population (UN World Cities Report) | 10,716,000 |
|-------------------------------------|------------|



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STRUCTURES

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

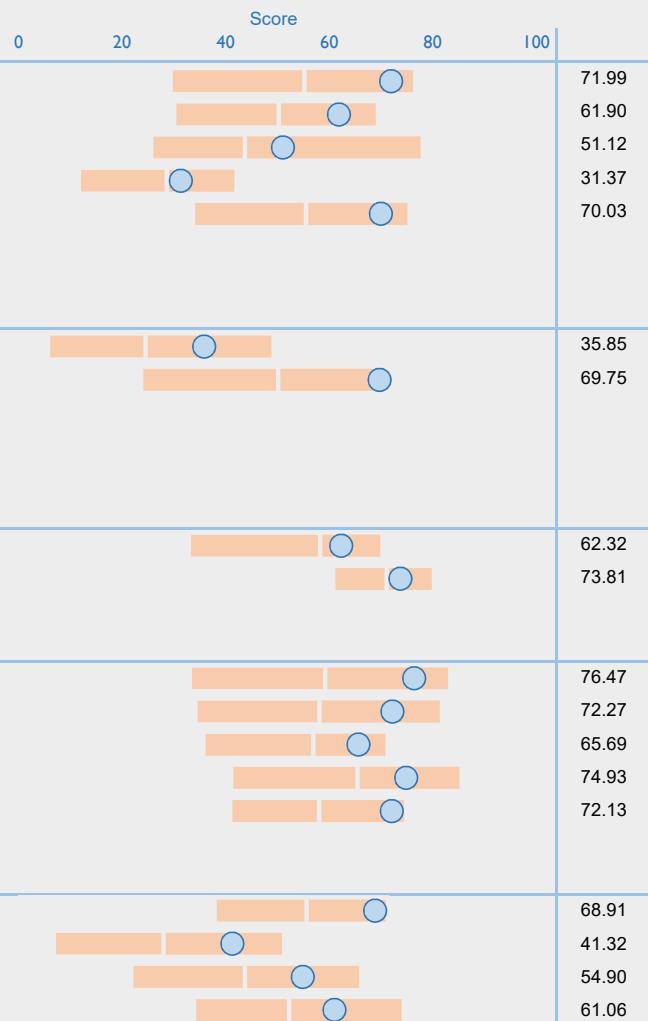
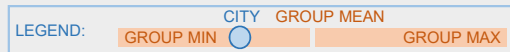
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

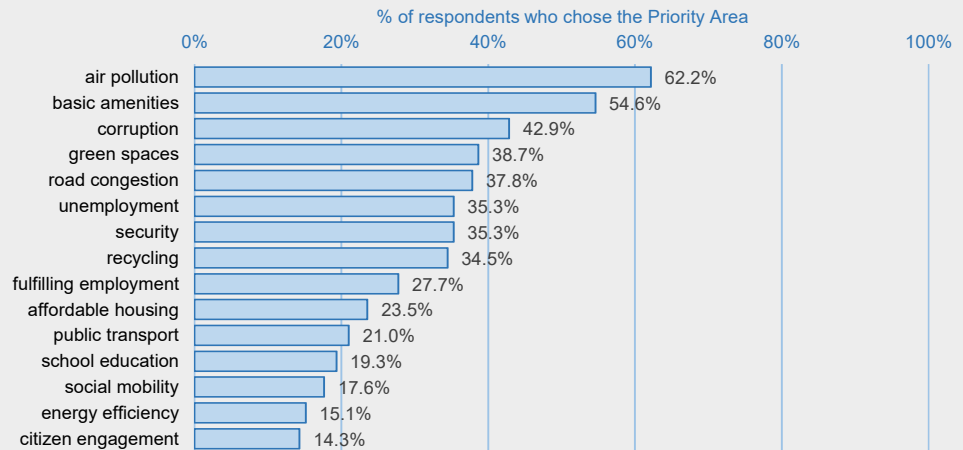
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



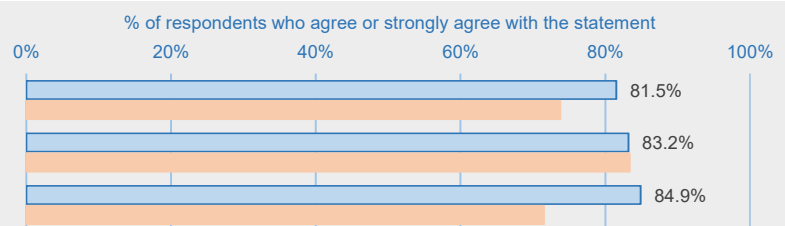
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 64.15 |
| A website or App allows to give away unwanted items to other city residents. | 62.89 |
| Free public wifi has improved access to services. | 63.87 |
| CCTV cameras make residents feel safer. | 80.11 |
| A website or App allows effective monitoring of air pollution. | 51.54 |
| Arranging medical appointments online has improved access. | 77.03 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 68.21 |
| Apps that direct you to an available parking space have reduced journey time. | 58.54 |
| Bicycle hiring has reduced congestion. | 59.52 |
| Online scheduling and ticket sales make public transport easier to use. | 81.23 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 83.05 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 84.17 |
| IT skills are taught well in schools. | 76.75 |
| Online services provided by the city has made it easier to start a new business. | 82.07 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 60.22 |
| Online voting has increased participation. | 61.20 |
| An online platform where residents can propose ideas has improved city life. | 70.45 |
| Processing Identification Documents online has reduced waiting times. | 74.65 |

Jakarta

SMART CITY RANKING **81st**
Out of 102

GROUP **4**

RATING **CC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| C | CC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.686 | 0.691 | 0.694 |
| Life expectancy at Birth | 69.0 | 69.2 | 69.4 |
| Expected years of schooling | 12.7 | 12.8 | 12.8 |
| Mean years of schooling | 7.9 | 8.0 | 8.0 |
| GNI per capita (PPP \$) | 10,037 | 10,437 | 10,846 |

City

| | |
|-------------------------------------|------------|
| Population (UN World Cities Report) | 10,323,000 |
|-------------------------------------|------------|



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STRUCTURES

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

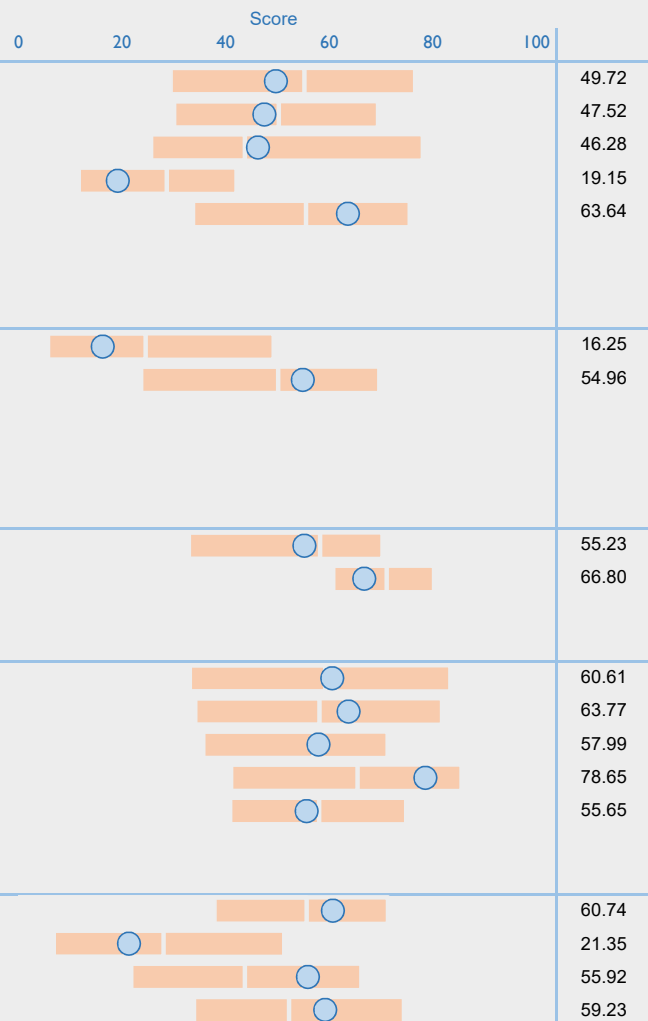
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

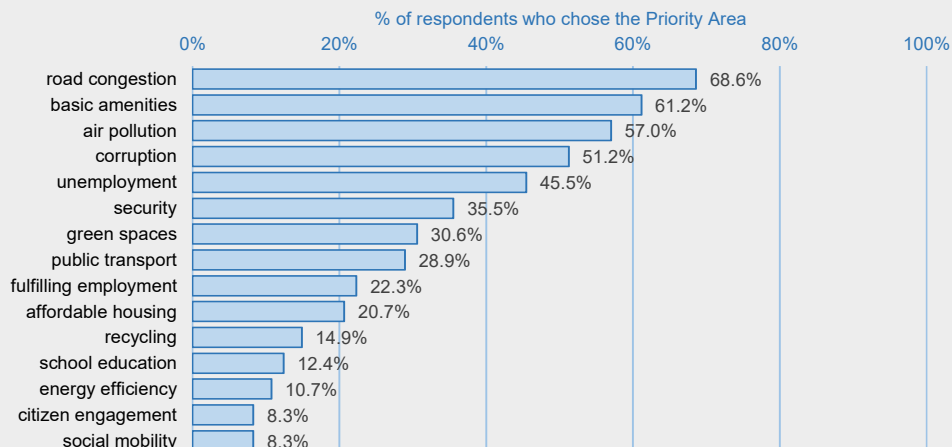
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



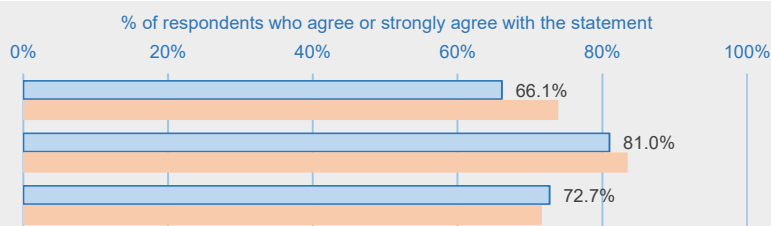
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 57.44 |
| A website or App allows to give away unwanted items to other city residents. | 57.30 |
| Free public wifi has improved access to services. | 70.11 |
| CCTV cameras make residents feel safer. | 71.63 |
| A website or App allows effective monitoring of air pollution. | 54.82 |
| Arranging medical appointments online has improved access. | 64.05 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 55.23 |
| Apps that direct you to an available parking space have reduced journey time. | 56.61 |
| Bicycle hiring has reduced congestion. | 61.29 |
| Online scheduling and ticket sales make public transport easier to use. | 71.90 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 72.31 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 74.10 |
| IT skills are taught well in schools. | 66.39 |
| Online services provided by the city has made it easier to start a new business. | 70.11 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 52.89 |
| Online voting has increased participation. | 54.55 |
| An online platform where residents can propose ideas has improved city life. | 63.77 |
| Processing Identification Documents online has reduced waiting times. | 65.56 |

Kiev

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 92nd Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 4 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | C From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | C | C |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.743 | 0.746 | 0.751 |
| Life expectancy at Birth | 71.8 | 72.0 | 72.1 |
| Expected years of schooling | 15.0 | 15.0 | 15.0 |
| Mean years of schooling | 11.3 | 11.3 | 11.3 |
| GNI per capita (PPP \$) | 7,375 | 7,593 | 8,130 |

| City | Population (UN World Cities Report) |
|------|-------------------------------------|
| Kiev | 2,942,000 |



STRUCTURES

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

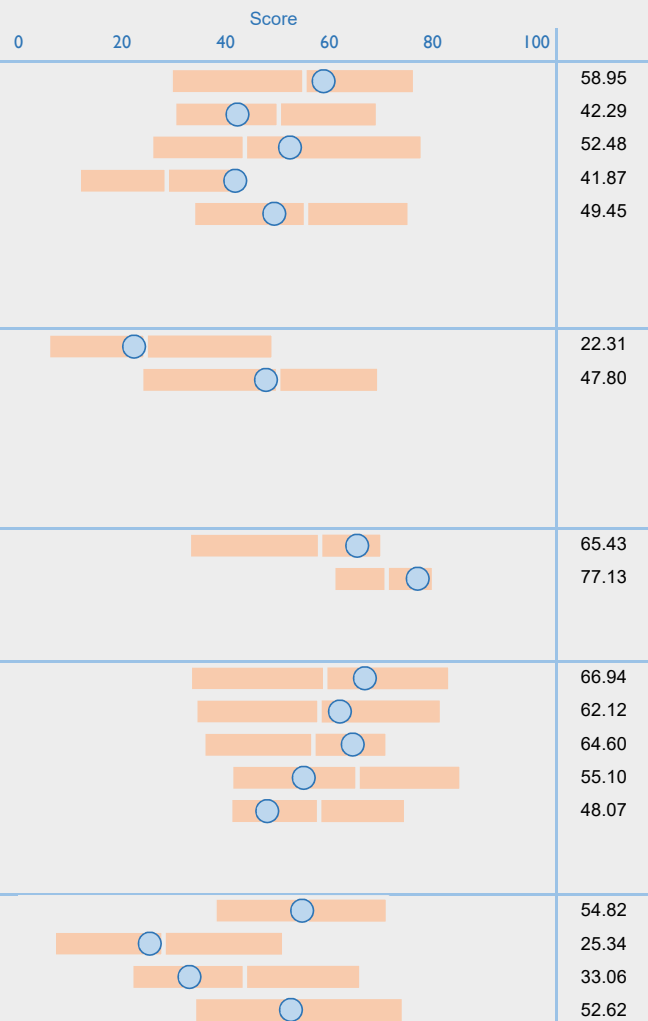
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

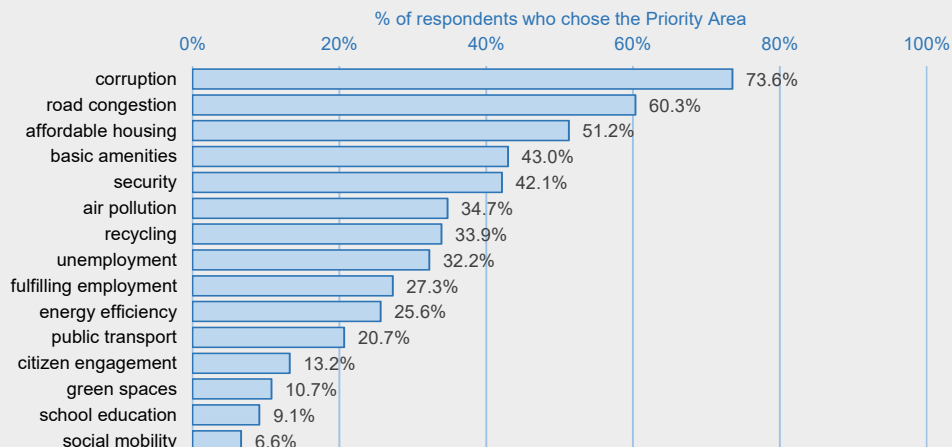
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



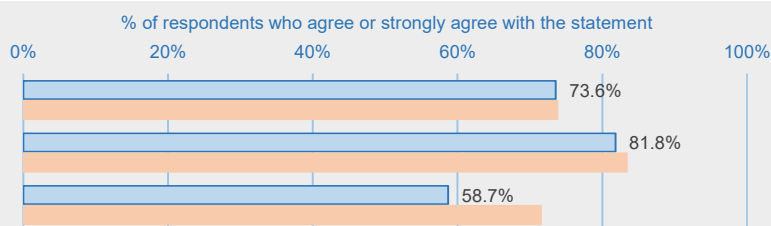
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 59.37 |
| A website or App allows to give away unwanted items to other city residents. | 44.08 |
| Free public wifi has improved access to services. | 55.51 |
| CCTV cameras make residents feel safer. | 53.58 |
| A website or App allows effective monitoring of air pollution. | 31.82 |
| Arranging medical appointments online has improved access. | 60.74 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 44.21 |
| Apps that direct you to an available parking space have reduced journey time. | 61.29 |
| Bicycle hiring has reduced congestion. | 46.42 |
| Online scheduling and ticket sales make public transport easier to use. | 70.80 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 82.64 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 77.41 |
| IT skills are taught well in schools. | 56.61 |
| Online services provided by the city has made it easier to start a new business. | 53.58 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 37.60 |
| Online voting has increased participation. | 52.75 |
| An online platform where residents can propose ideas has improved city life. | 56.20 |
| Processing Identification Documents online has reduced waiting times. | 62.81 |

Krakow

SMART CITY RANKING **69th**
Out of 102

GROUP **3**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.855 | 0.860 | 0.865 |
| Life expectancy at Birth | 77.4 | 77.6 | 77.8 |
| Expected years of schooling | 16.1 | 16.4 | 16.4 |
| Mean years of schooling | 12.1 | 12.2 | 12.3 |
| GNI per capita (PPP \$) | 24,418 | 24,983 | 26,150 |

City

Population (UN World Cities Report) 760,000



STRUCTURES

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

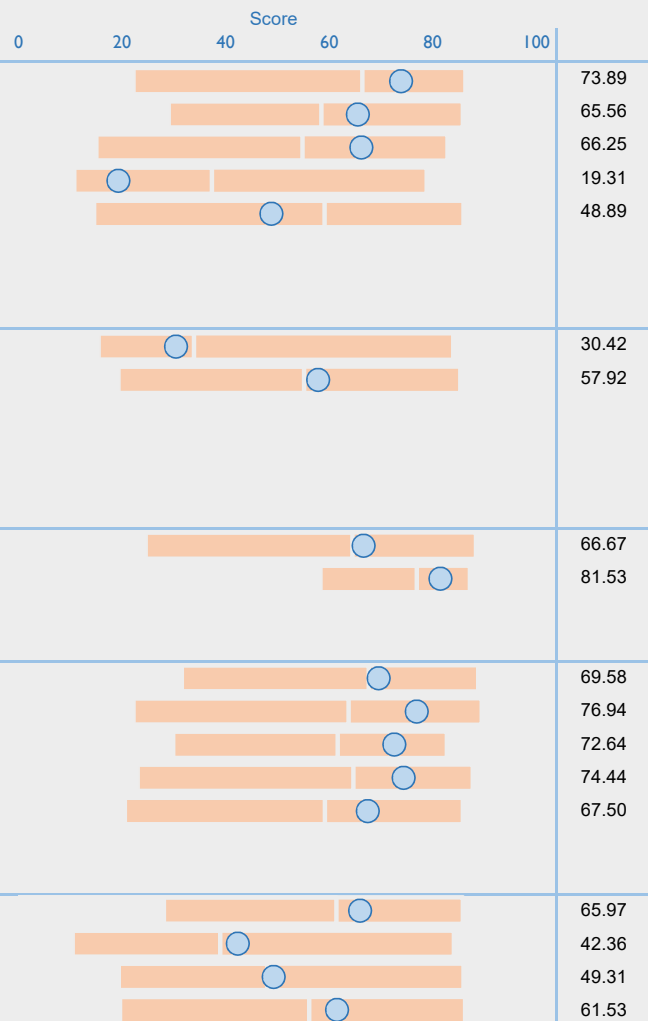
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

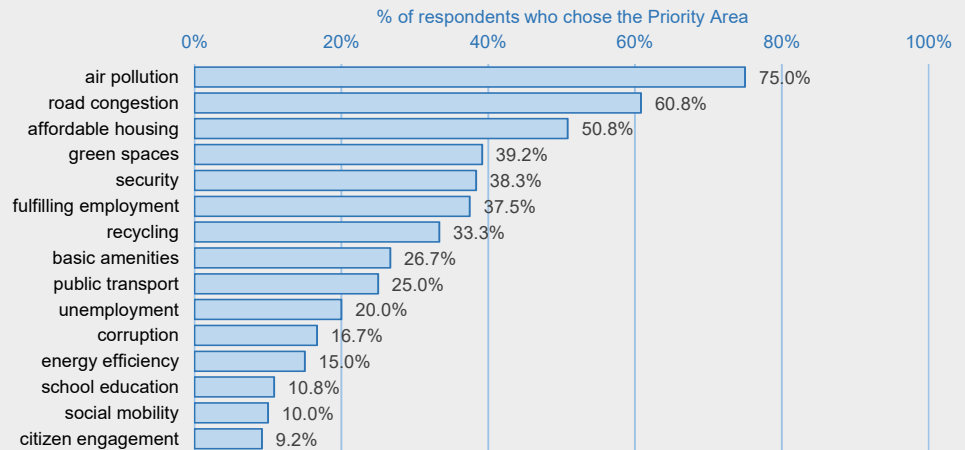
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



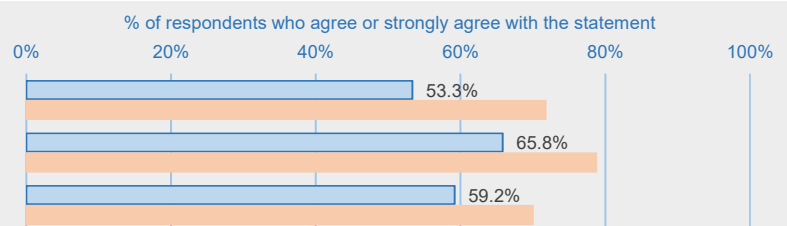
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 57.22 |
| A website or App allows to give away unwanted items to other city residents. | 56.53 |
| Free public wifi has improved access to services. | 64.44 |
| CCTV cameras make residents feel safer. | 73.61 |
| A website or App allows effective monitoring of air pollution. | 77.08 |
| Arranging medical appointments online has improved access. | 61.11 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 48.89 |
| Apps that direct you to an available parking space have reduced journey time. | 57.92 |
| Bicycle hiring has reduced congestion. | 62.22 |
| Online scheduling and ticket sales make public transport easier to use. | 72.36 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 82.36 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 79.86 |
| IT skills are taught well in schools. | 66.11 |
| Online services provided by the city has made it easier to start a new business. | 64.86 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 51.67 |
| Online voting has increased participation. | 54.86 |
| An online platform where residents can propose ideas has improved city life. | 64.44 |
| Processing Identification Documents online has reduced waiting times. | 71.67 |

Kuala Lumpur

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 70th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 3 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | CCC From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | CCC | CCC |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.795 | 0.799 | 0.802 |
| Life expectancy at Birth | 75.1 | 75.3 | 75.5 |
| Expected years of schooling | 13.5 | 13.7 | 13.7 |
| Mean years of schooling | 10.2 | 10.2 | 10.2 |
| GNI per capita (PPP \$) | 24,324 | 24,968 | 26,107 |

City
Population (UN World Cities Report) 6,837,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

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

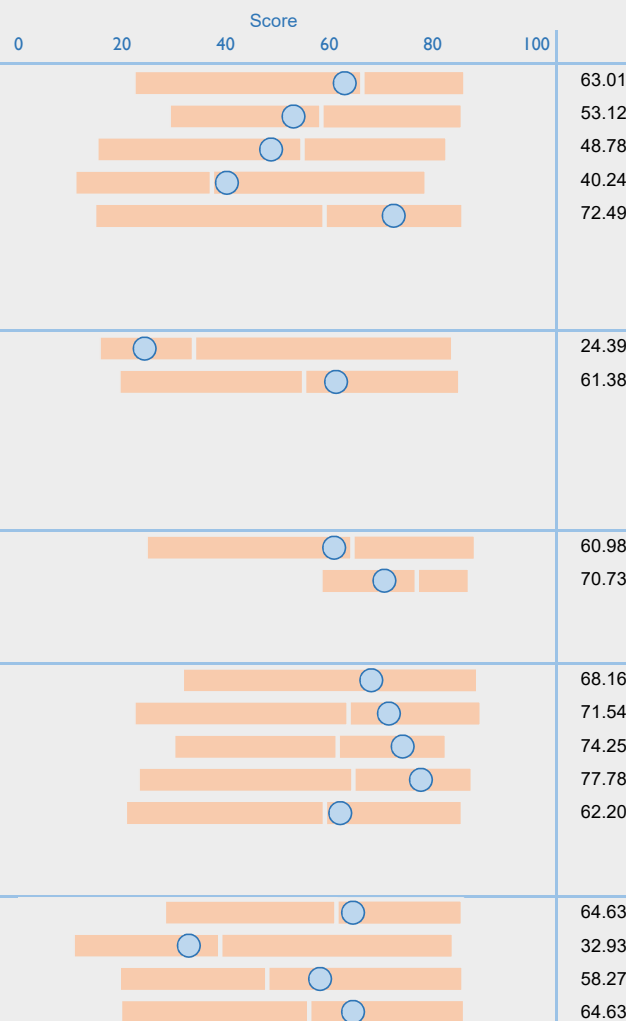
Opportunities (Work & School)

- Employment finding services are 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

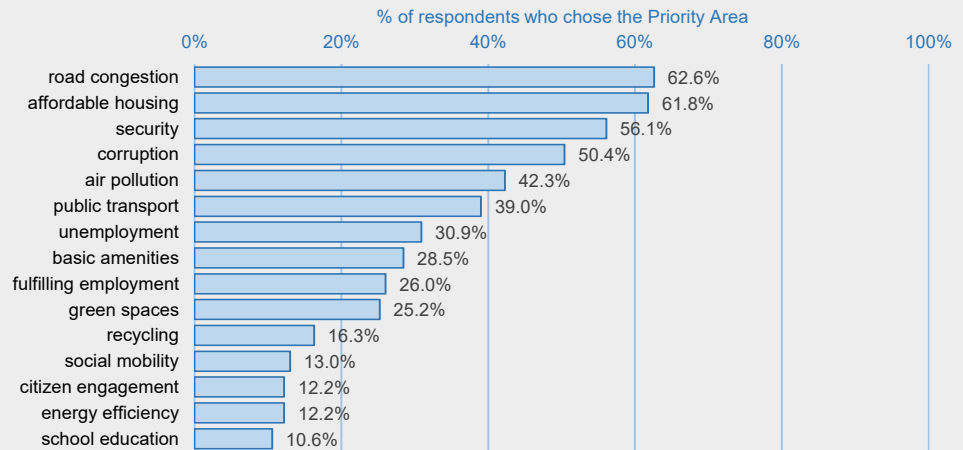
- Information on local government decisions are easily accessible.
- Corruption of city officials is not an issue of concern.
- Residents contribute to decision making of local government.
- Residents provide feedback on local government projects.

LEGEND: CITY (blue circle), GROUP MEAN (orange bar), GROUP MIN (orange bar), GROUP MAX (orange bar)



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. The higher the percentage of responses per area, the greater the priority for the city.



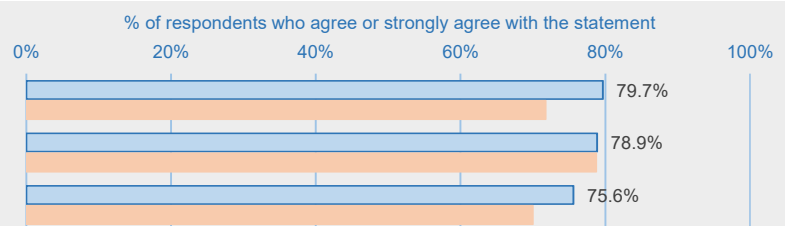
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 61.65 |
| A website or App allows to give away unwanted items to other city residents. | 53.39 |
| Free public wifi has improved access to services. | 59.08 |
| CCTV cameras make residents feel safer. | 63.69 |
| A website or App allows effective monitoring of air pollution. | 53.12 |
| Arranging medical appointments online has improved access. | 61.92 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 69.38 |
| Apps that direct you to an available parking space have reduced journey time. | 58.54 |
| Bicycle hiring has reduced congestion. | 49.05 |
| Online scheduling and ticket sales make public transport easier to use. | 73.85 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 82.66 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 83.47 |
| IT skills are taught well in schools. | 66.12 |
| Online services provided by the city has made it easier to start a new business. | 75.20 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 54.88 |
| Online voting has increased participation. | 60.43 |
| An online platform where residents can propose ideas has improved city life. | 62.87 |
| Processing Identification Documents online has reduced waiting times. | 70.33 |

Lagos

| | |
|---------------------------|---------------------------------------|
| SMART CITY RANKING | 102nd Out of 102 |
|---------------------------|---------------------------------------|

| | |
|--------------|----------|
| GROUP | 4 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | D From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | D | D |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.527 | 0.530 | 0.532 |
| Life expectancy at Birth | 53.0 | 53.4 | 53.9 |
| Expected years of schooling | 10.0 | 10.0 | 10.0 |
| Mean years of schooling | 6.0 | 6.2 | 6.2 |
| GNI per capita (PPP \$) | 5,527 | 5,326 | 5,231 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Lagos | 13,123,000 |



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STRUCTURES

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

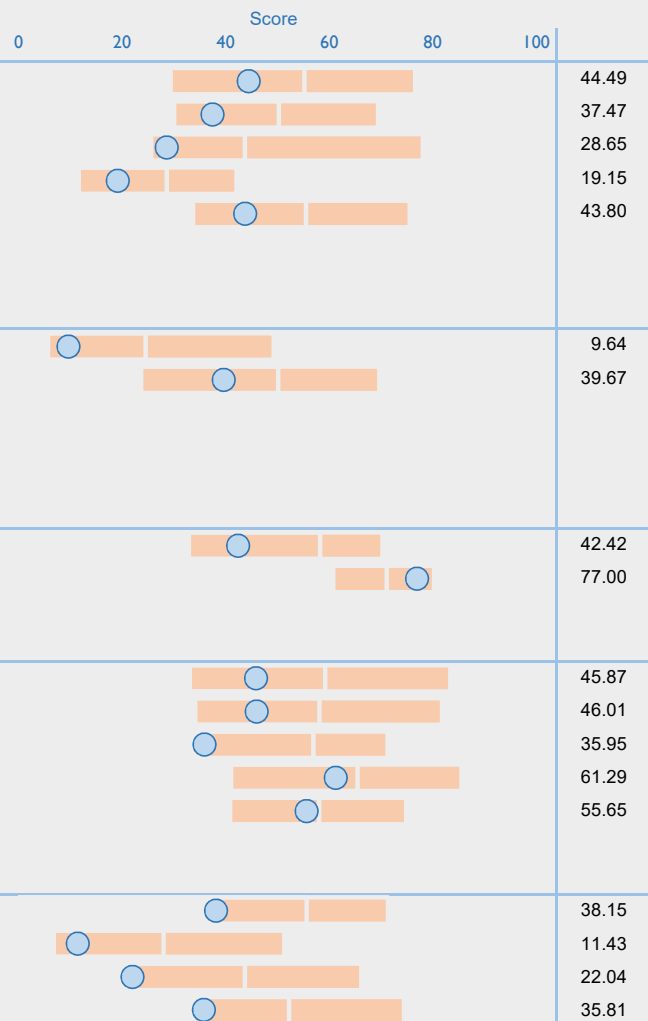
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

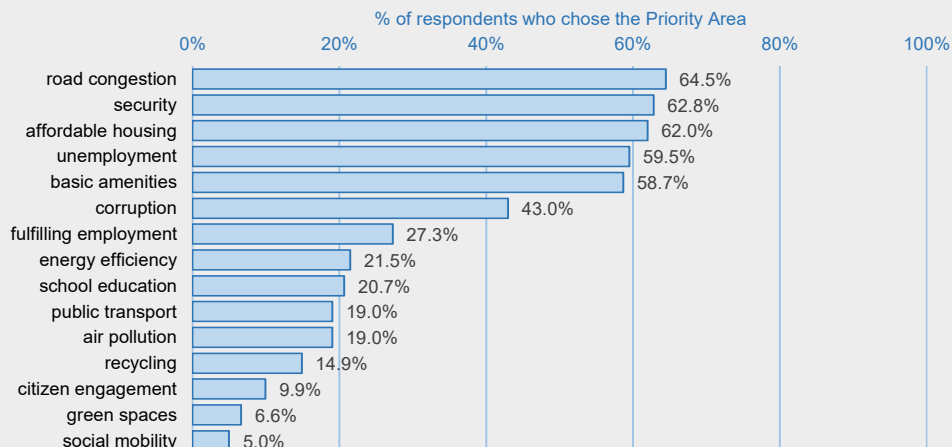
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

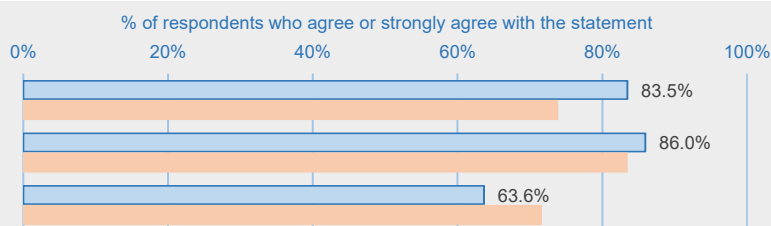


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 46.83 |
| A website or App allows to give away unwanted items to other city residents. | 33.75 |
| Free public wifi has improved access to services. | 37.33 |
| CCTV cameras make residents feel safer. | 36.78 |
| A website or App allows effective monitoring of air pollution. | 18.60 |
| Arranging medical appointments online has improved access. | 45.32 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 41.18 |
| Apps that direct you to an available parking space have reduced journey time. | 29.20 |
| Bicycle hiring has reduced congestion. | 22.04 |
| Online scheduling and ticket sales make public transport easier to use. | 53.99 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 77.00 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 76.03 |
| IT skills are taught well in schools. | 54.68 |
| Online services provided by the city has made it easier to start a new business. | 54.55 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 23.14 |
| Online voting has increased participation. | 18.32 |
| An online platform where residents can propose ideas has improved city life. | 30.85 |
| Processing Identification Documents online has reduced waiting times. | 51.79 |

Lisbon

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 76th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 3 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | CCC From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | CCC | CCC |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.842 | 0.845 | 0.847 |
| Life expectancy at Birth | 81.0 | 81.2 | 81.4 |
| Expected years of schooling | 16.4 | 16.3 | 16.3 |
| Mean years of schooling | 9.1 | 9.2 | 9.2 |
| GNI per capita (PPP \$) | 25,860 | 26,521 | 27,315 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Lisbon | 2,884,000 |



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STRUCTURES

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

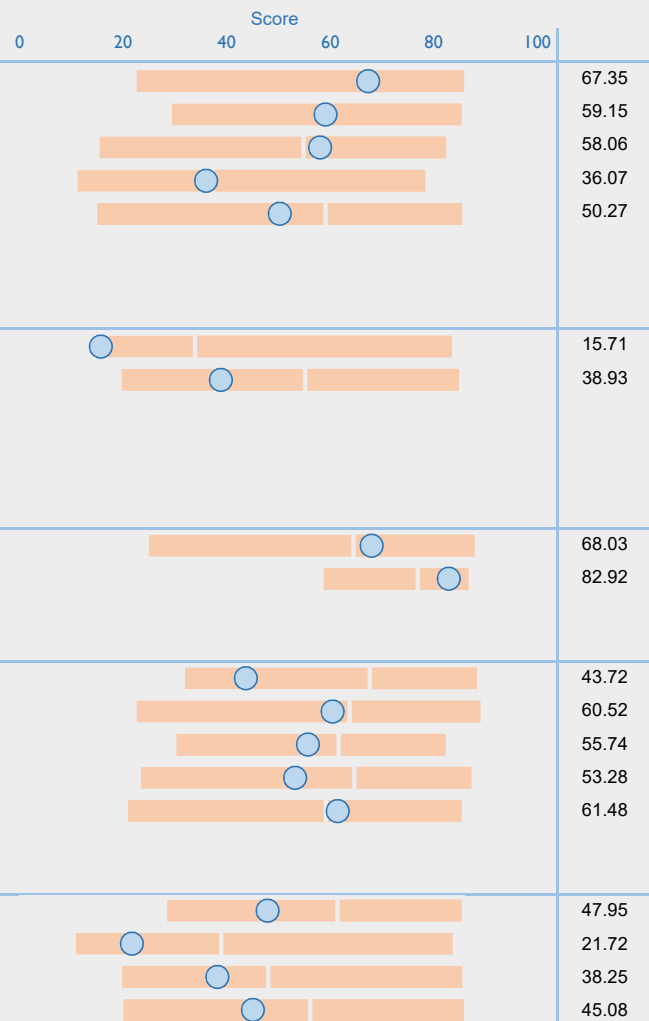
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

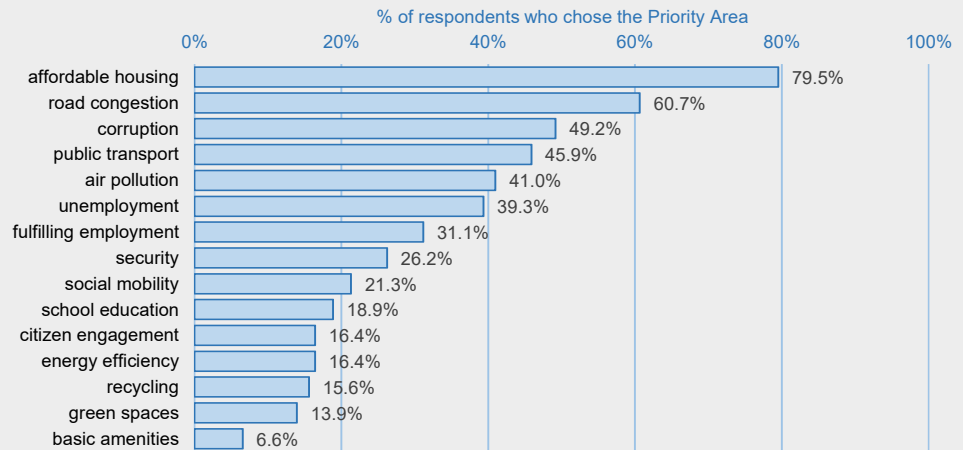
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



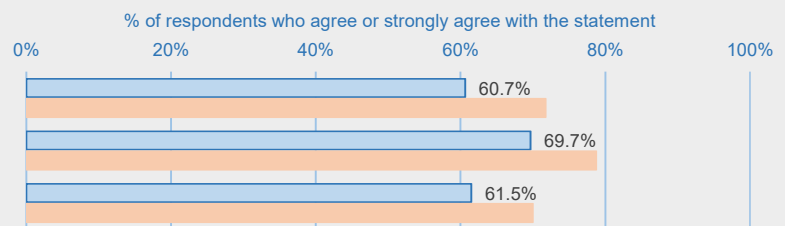
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 59.84 |
| A website or App allows to give away unwanted items to other city residents. | 58.20 |
| Free public wifi has improved access to services. | 67.62 |
| CCTV cameras make residents feel safer. | 59.15 |
| A website or App allows effective monitoring of air pollution. | 40.16 |
| Arranging medical appointments online has improved access. | 66.94 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 41.53 |
| Apps that direct you to an available parking space have reduced journey time. | 44.54 |
| Bicycle hiring has reduced congestion. | 48.50 |
| Online scheduling and ticket sales make public transport easier to use. | 65.85 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 87.70 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 79.51 |
| IT skills are taught well in schools. | 64.48 |
| Online services provided by the city has made it easier to start a new business. | 64.62 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 36.75 |
| Online voting has increased participation. | 44.67 |
| An online platform where residents can propose ideas has improved city life. | 58.74 |
| Processing Identification Documents online has reduced waiting times. | 68.03 |

London

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 20th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.918 | 0.920 | 0.922 |
| Life expectancy at Birth | 81.4 | 81.6 | 81.7 |
| Expected years of schooling | 17.4 | 17.4 | 17.4 |
| Mean years of schooling | 12.8 | 12.9 | 12.9 |
| GNI per capita (PPP \$) | 38,146 | 38,680 | 39,116 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| London | 10,313,000 |



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STRUCTURES

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

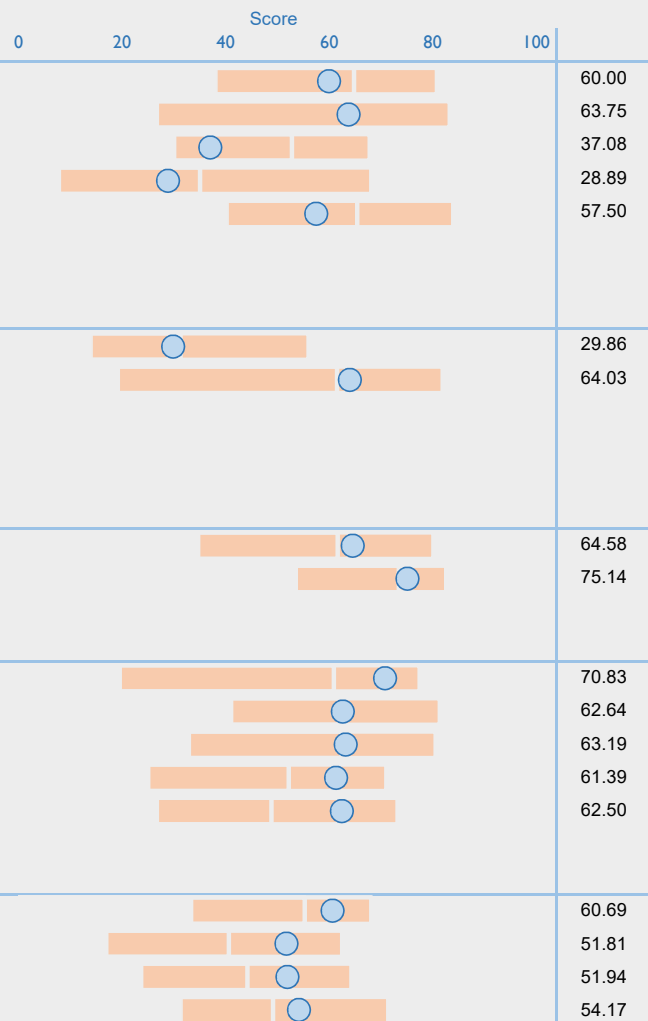
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

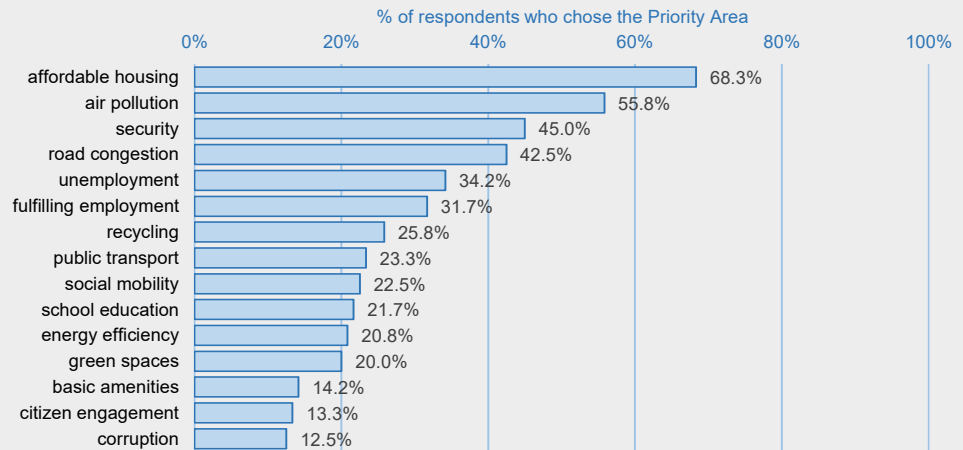
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



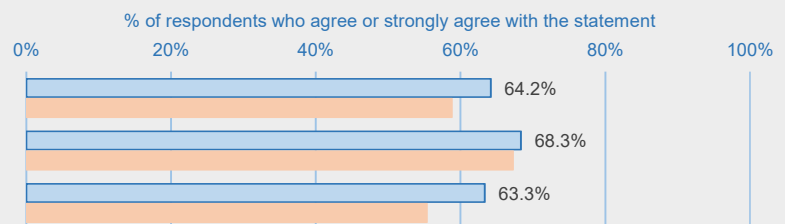
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

Online reporting of city maintenance problems provides a speedy solution.

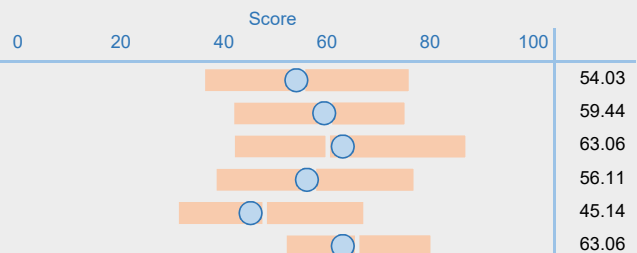
A website or App allows to give away unwanted items to other city residents.

Free public wifi has improved access to services.

CCTV cameras make residents feel safer.

A website or App allows effective monitoring of air pollution.

Arranging medical appointments online has improved access.



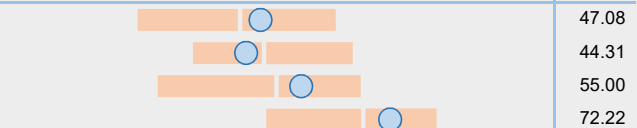
Mobility

Car-sharing Apps have reduced congestion.

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

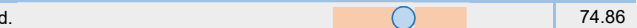
Bicycle hiring has reduced congestion.

Online scheduling and ticket sales make public transport easier to use.



Activities

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

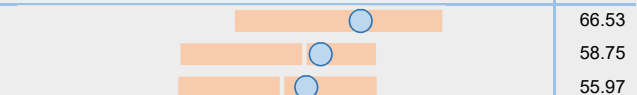


Opportunities (Work & School)

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.



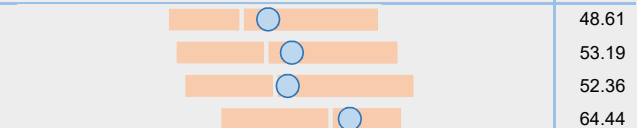
Governance

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.



Los Angeles

SMART CITY RANKING **35th**
Out of 102

GROUP **1**

RATING **B B B**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| B B | A |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

City
Population (UN World Cities Report) 12,310,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

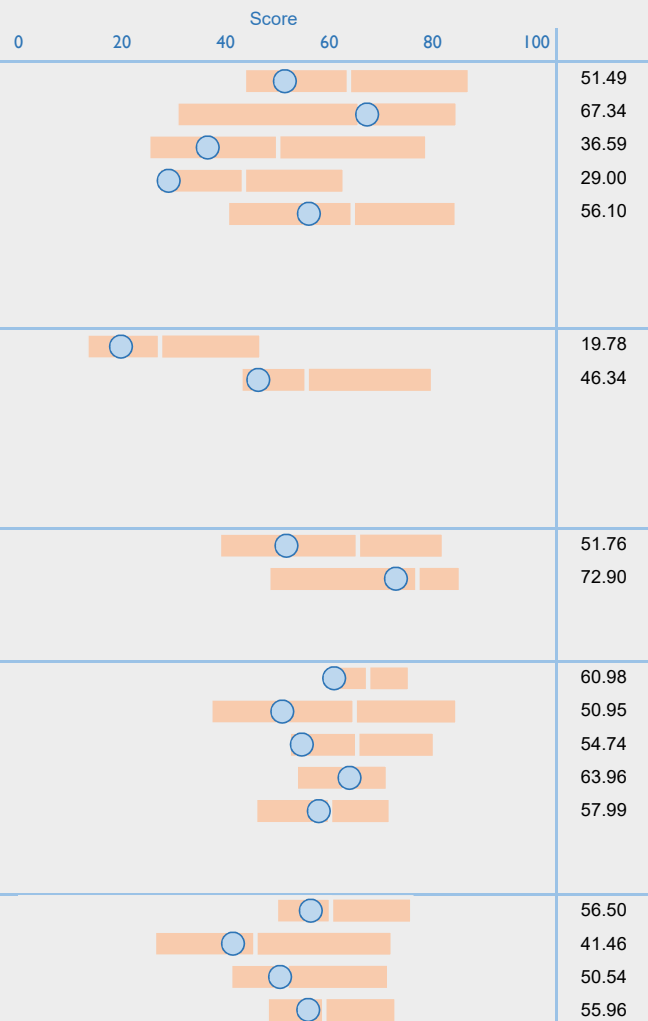
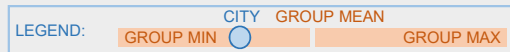
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

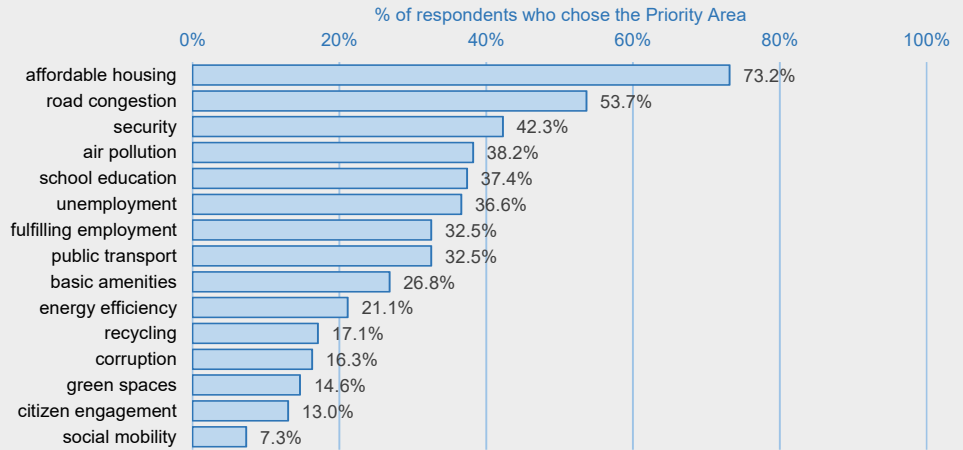
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

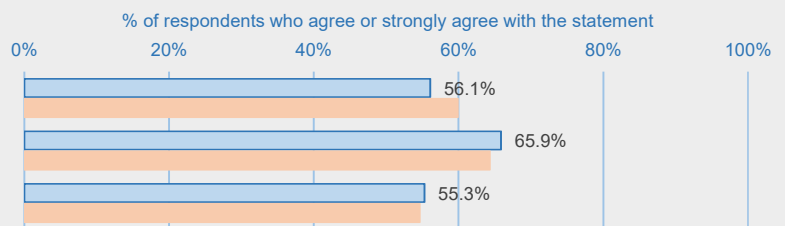


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 47.02 |
| A website or App allows to give away unwanted items to other city residents. | 64.36 |
| Free public wifi has improved access to services. | 60.98 |
| CCTV cameras make residents feel safer. | 48.78 |
| A website or App allows effective monitoring of air pollution. | 44.85 |
| Arranging medical appointments online has improved access. | 55.96 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 53.66 |
| Apps that direct you to an available parking space have reduced journey time. | 46.48 |
| Bicycle hiring has reduced congestion. | 40.65 |
| Online scheduling and ticket sales make public transport easier to use. | 56.10 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 76.02 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 69.78 |
| IT skills are taught well in schools. | 54.34 |
| Online services provided by the city has made it easier to start a new business. | 55.15 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 44.72 |
| Online voting has increased participation. | 55.15 |
| An online platform where residents can propose ideas has improved city life. | 52.98 |
| Processing Identification Documents online has reduced waiting times. | 57.18 |

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 23rd Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.898 | 0.899 | 0.901 |
| Life expectancy at Birth | 82.4 | 82.5 | 82.7 |
| Expected years of schooling | 16.4 | 16.4 | 16.4 |
| Mean years of schooling | 11.5 | 11.5 | 11.5 |
| GNI per capita (PPP \$) | 38,367 | 38,702 | 39,254 |

| City | Population (UN World Cities Report) |
|------|-------------------------------------|
| Lyon | 1,609,000 |



STRUCTURES

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

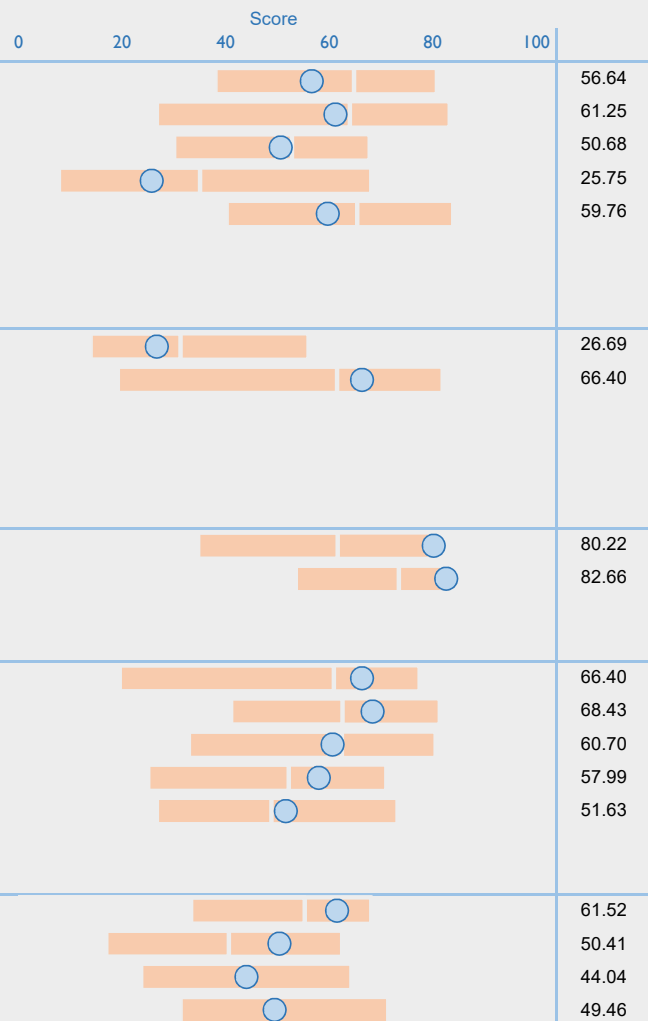
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

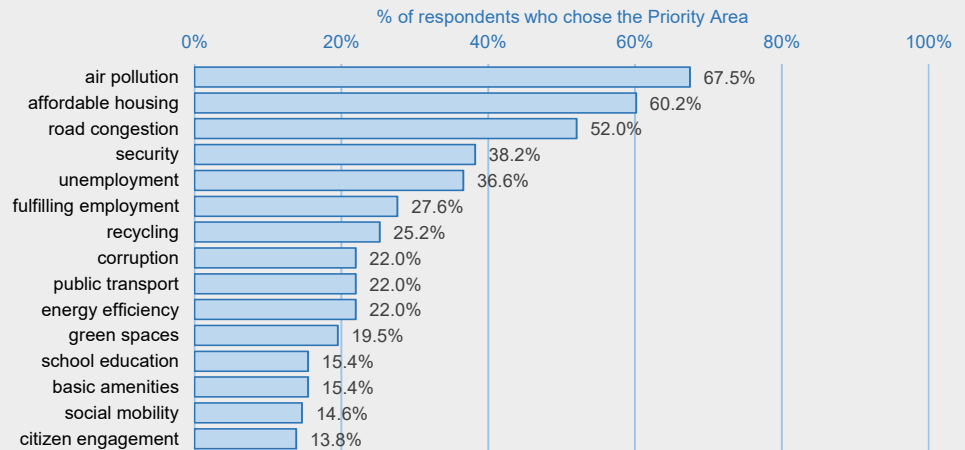
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



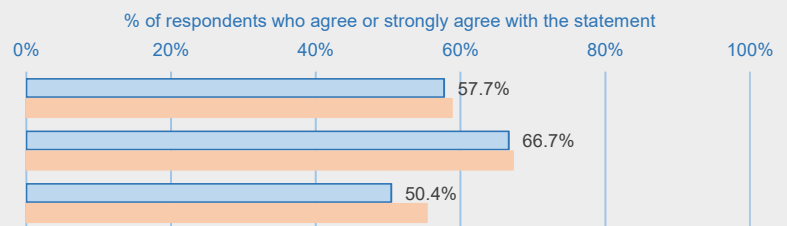
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 52.30 |
| A website or App allows to give away unwanted items to other city residents. | 58.94 |
| Free public wifi has improved access to services. | 59.49 |
| CCTV cameras make residents feel safer. | 61.65 |
| A website or App allows effective monitoring of air pollution. | 46.61 |
| Arranging medical appointments online has improved access. | 71.41 |

Mobility

| Statement | Score |
|---|-------|
| Car-sharing Apps have reduced congestion. | 44.99 |
| Apps that direct you to an available parking space have reduced journey time. | 47.97 |
| Bicycle hiring has reduced congestion. | 56.78 |
| Online scheduling and ticket sales make public transport easier to use. | 61.25 |

Activities

| Statement | Score |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 71.95 |

Opportunities (Work & School)

| Statement | Score |
|--|-------|
| Online access to job listings has made it easier to find work. | 63.82 |
| IT skills are taught well in schools. | 51.49 |
| Online services provided by the city has made it easier to start a new business. | 51.63 |

Governance

| Statement | Score |
|--|-------|
| Online public access to city finances has reduced corruption. | 40.65 |
| Online voting has increased participation. | 43.77 |
| An online platform where residents can propose ideas has improved city life. | 45.80 |
| Processing Identification Documents online has reduced waiting times. | 57.99 |

Madrid

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 21st Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.885 | 0.889 | 0.891 |
| Life expectancy at Birth | 83.0 | 83.1 | 83.3 |
| Expected years of schooling | 17.8 | 17.9 | 17.9 |
| Mean years of schooling | 9.7 | 9.8 | 9.8 |
| GNI per capita (PPP \$) | 32,217 | 33,307 | 34,258 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Madrid | 6,199,000 |



STRUCTURES

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

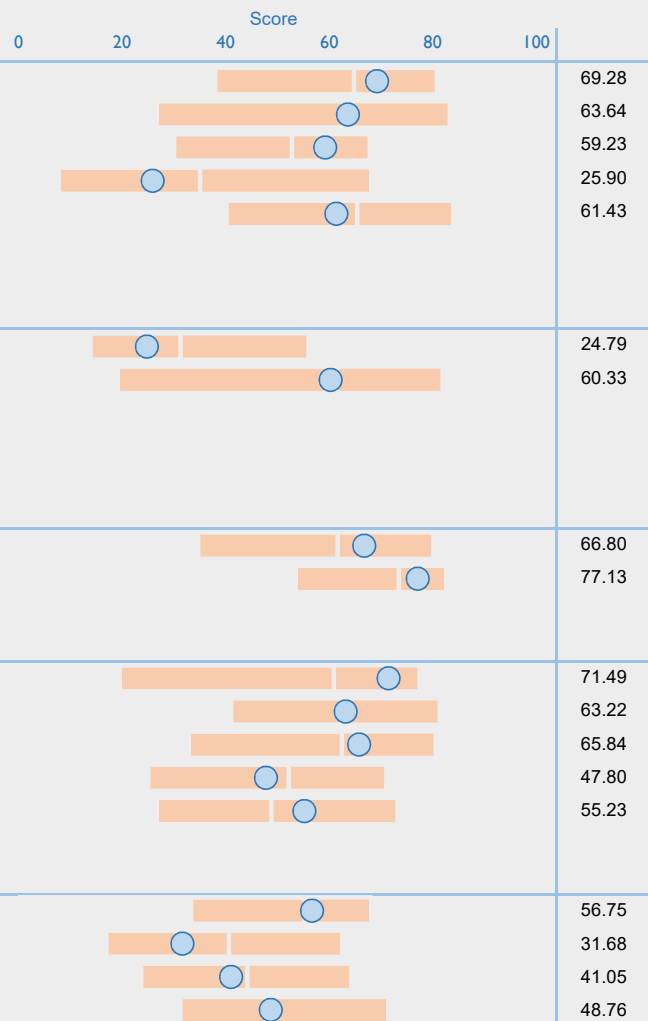
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

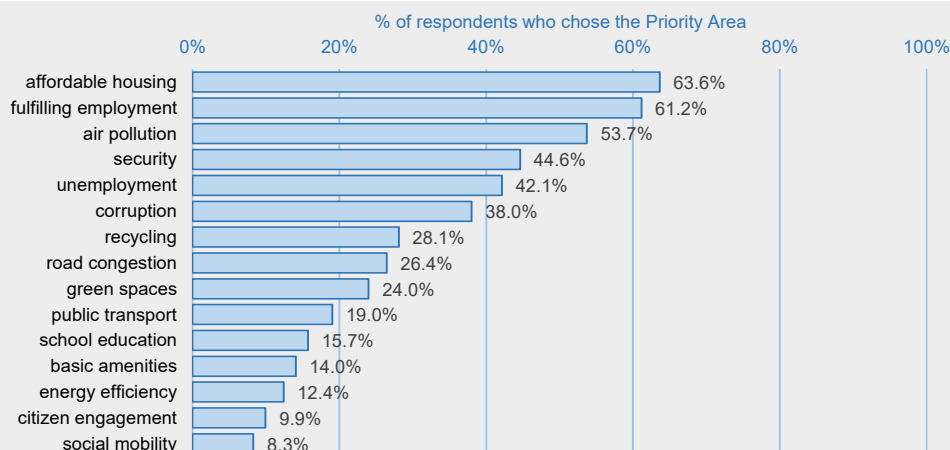
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



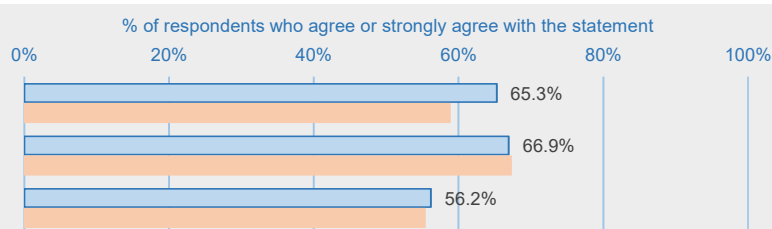
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 61.85 |
| A website or App allows to give away unwanted items to other city residents. | 58.68 |
| Free public wifi has improved access to services. | 56.61 |
| CCTV cameras make residents feel safer. | 54.13 |
| A website or App allows effective monitoring of air pollution. | 45.73 |
| Arranging medical appointments online has improved access. | 71.90 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 54.68 |
| Apps that direct you to an available parking space have reduced journey time. | 58.95 |
| Bicycle hiring has reduced congestion. | 54.55 |
| Online scheduling and ticket sales make public transport easier to use. | 67.08 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 81.68 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 65.84 |
| IT skills are taught well in schools. | 53.99 |
| Online services provided by the city has made it easier to start a new business. | 56.75 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 41.87 |
| Online voting has increased participation. | 53.44 |
| An online platform where residents can propose ideas has improved city life. | 57.58 |
| Processing Identification Documents online has reduced waiting times. | 66.94 |

Makassar

SMART CITY RANKING **80th**
Out of 102

GROUP **4**

RATING **CC**
From AAA to D

FACTOR RATINGS **CC** **CC**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.686 | 0.691 | 0.694 |
| Life expectancy at Birth | 69.0 | 69.2 | 69.4 |
| Expected years of schooling | 12.7 | 12.8 | 12.8 |
| Mean years of schooling | 7.9 | 8.0 | 8.0 |
| GNI per capita (PPP \$) | 10,037 | 10,437 | 10,846 |

City
Population (UN World Cities Report) 1,489,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

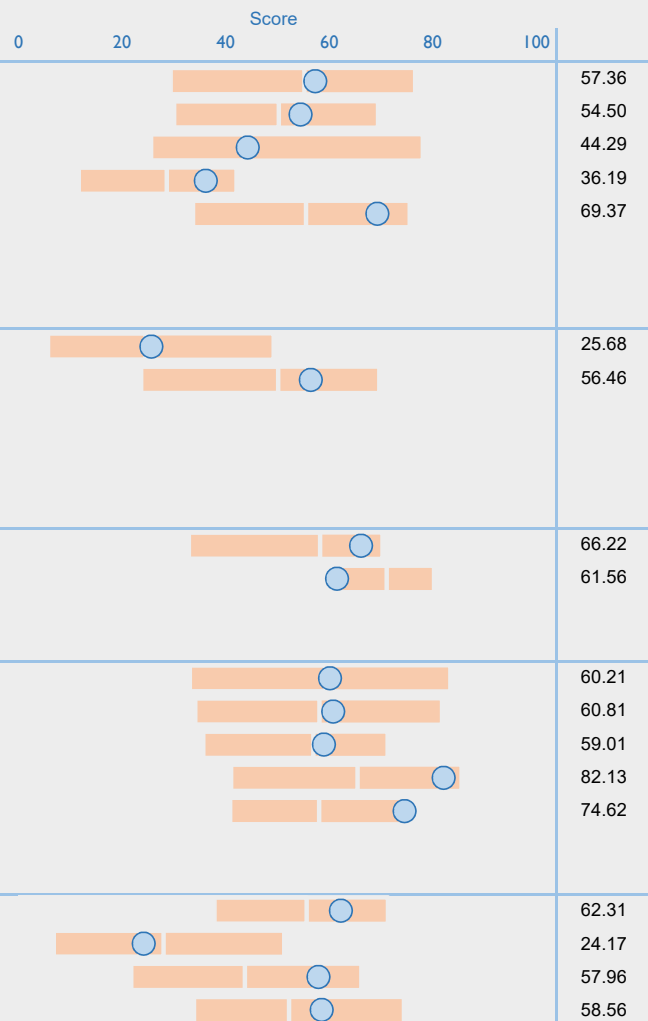
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

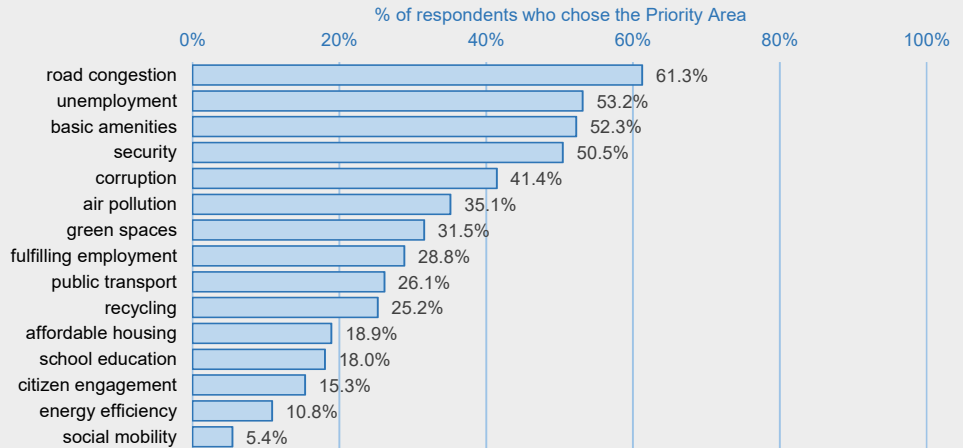
Governance

- 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.



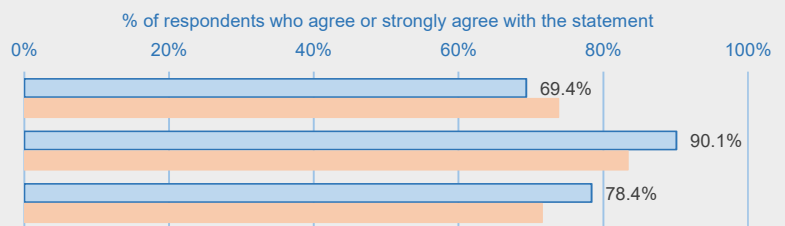
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 58.41 |
| A website or App allows to give away unwanted items to other city residents. | 55.26 |
| Free public wifi has improved access to services. | 56.76 |
| CCTV cameras make residents feel safer. | 69.82 |
| A website or App allows effective monitoring of air pollution. | 48.65 |
| Arranging medical appointments online has improved access. | 54.95 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 61.71 |
| Apps that direct you to an available parking space have reduced journey time. | 57.36 |
| Bicycle hiring has reduced congestion. | 48.95 |
| Online scheduling and ticket sales make public transport easier to use. | 69.97 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 69.82 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 76.43 |
| IT skills are taught well in schools. | 66.52 |
| Online services provided by the city has made it easier to start a new business. | 69.82 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 53.60 |
| Online voting has increased participation. | 53.75 |
| An online platform where residents can propose ideas has improved city life. | 63.96 |
| Processing Identification Documents online has reduced waiting times. | 63.36 |

Manila

SMART CITY RANKING **94th**
Out of 102

GROUP **4**

RATING **C**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| D | C |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.693 | 0.696 | 0.699 |
| Life expectancy at Birth | 69.0 | 69.1 | 69.2 |
| Expected years of schooling | 12.6 | 12.6 | 12.6 |
| Mean years of schooling | 9.3 | 9.3 | 9.3 |
| GNI per capita (PPP \$) | 8,323 | 8,729 | 9,154 |

City

| | |
|-------------------------------------|------------|
| Population (UN World Cities Report) | 12,946,000 |
|-------------------------------------|------------|



STRUCTURES

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

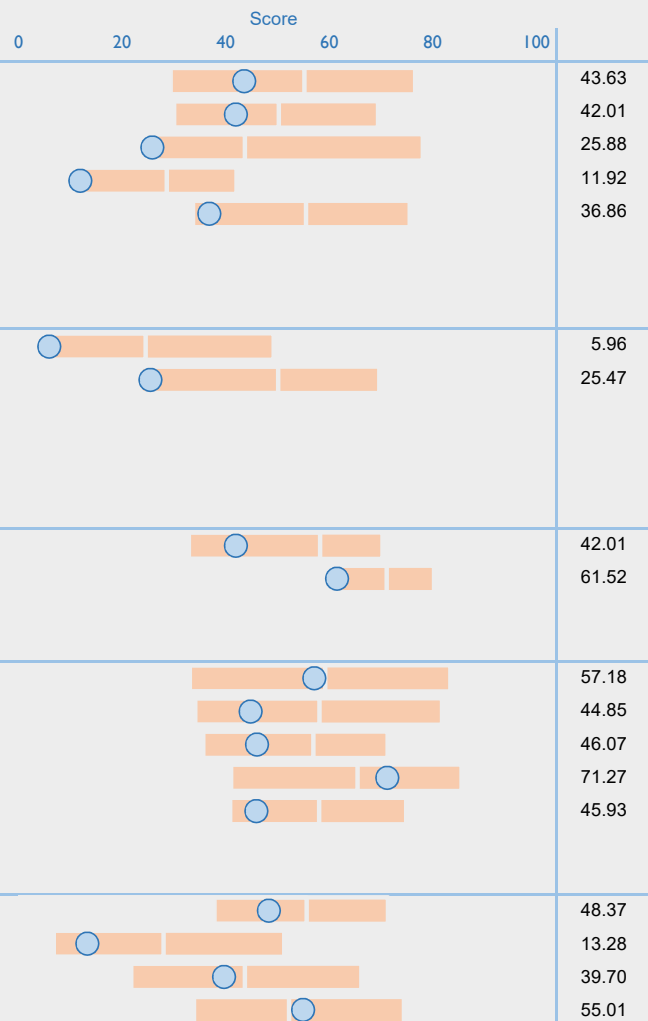
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

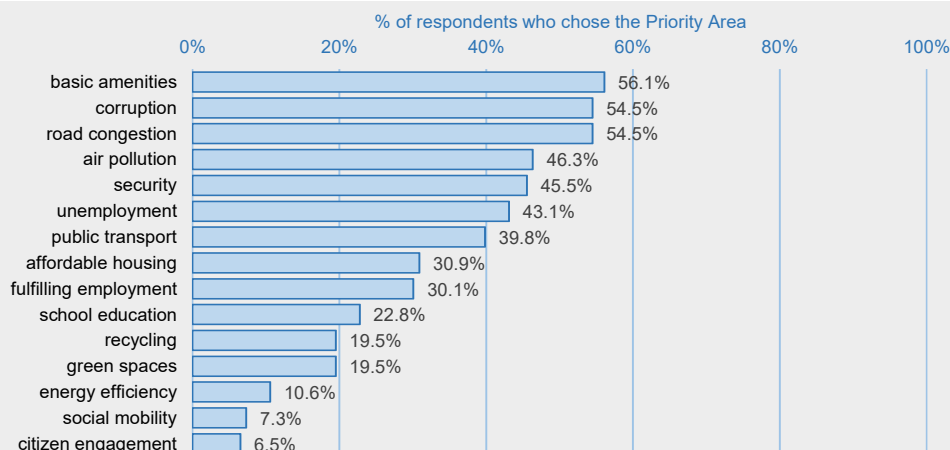
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



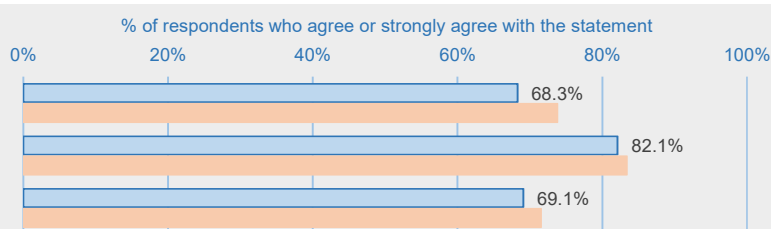
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 47.29 |
| A website or App allows to give away unwanted items to other city residents. | 43.63 |
| Free public wifi has improved access to services. | 43.36 |
| CCTV cameras make residents feel safer. | 66.26 |
| A website or App allows effective monitoring of air pollution. | 37.53 |
| Arranging medical appointments online has improved access. | 55.69 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 52.17 |
| Apps that direct you to an available parking space have reduced journey time. | 44.58 |
| Bicycle hiring has reduced congestion. | 48.92 |
| Online scheduling and ticket sales make public transport easier to use. | 64.09 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 76.69 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 79.67 |
| IT skills are taught well in schools. | 65.18 |
| Online services provided by the city has made it easier to start a new business. | 67.21 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 43.22 |
| Online voting has increased participation. | 53.79 |
| An online platform where residents can propose ideas has improved city life. | 50.81 |
| Processing Identification Documents online has reduced waiting times. | 73.17 |

Medan

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 82nd Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 4 |
|--------------|----------|

| | |
|---------------|----------------------------|
| RATING | CC From AAA to D |
|---------------|----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | C | CC |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.686 | 0.691 | 0.694 |
| Life expectancy at Birth | 69.0 | 69.2 | 69.4 |
| Expected years of schooling | 12.7 | 12.8 | 12.8 |
| Mean years of schooling | 7.9 | 8.0 | 8.0 |
| GNI per capita (PPP \$) | 10,037 | 10,437 | 10,846 |

City
Population (UN World Cities Report) 2,204,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

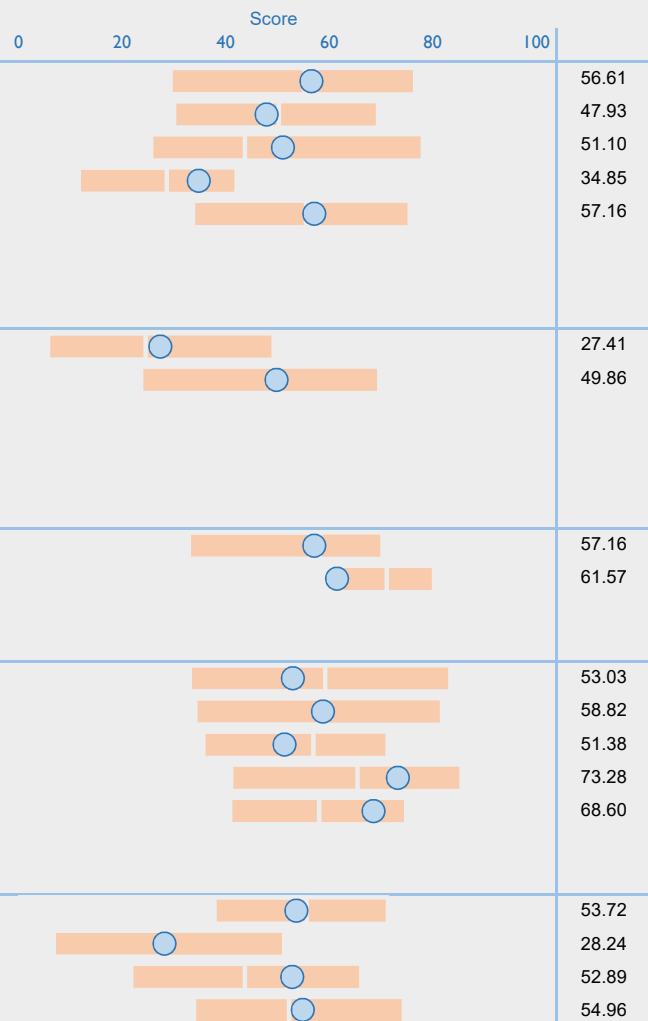
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

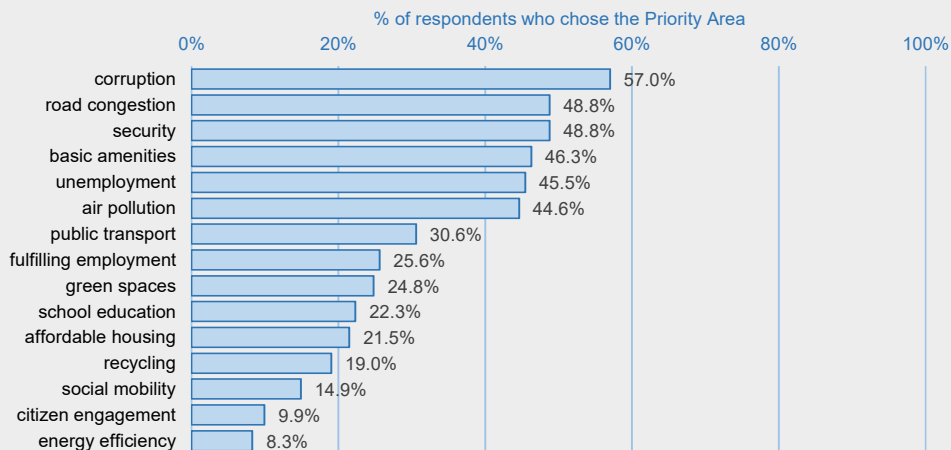
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



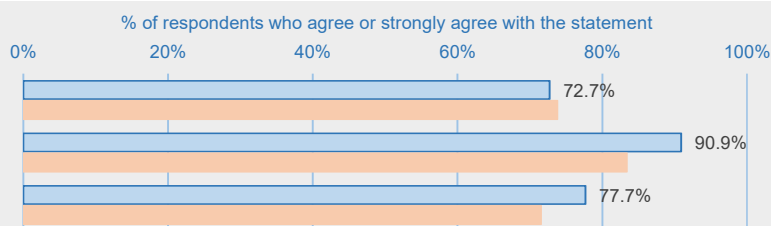
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 53.86 |
| A website or App allows to give away unwanted items to other city residents. | 50.55 |
| Free public wifi has improved access to services. | 59.09 |
| CCTV cameras make residents feel safer. | 65.56 |
| A website or App allows effective monitoring of air pollution. | 50.69 |
| Arranging medical appointments online has improved access. | 61.85 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 57.16 |
| Apps that direct you to an available parking space have reduced journey time. | 53.31 |
| Bicycle hiring has reduced congestion. | 49.17 |
| Online scheduling and ticket sales make public transport easier to use. | 70.94 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 69.01 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 72.18 |
| IT skills are taught well in schools. | 69.97 |
| Online services provided by the city has made it easier to start a new business. | 69.70 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 50.28 |
| Online voting has increased participation. | 56.34 |
| An online platform where residents can propose ideas has improved city life. | 55.37 |
| Processing Identification Documents online has reduced waiting times. | 64.33 |

Medellin

SMART CITY RANKING **91st**
Out of 102

GROUP **4**

RATING **C**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| C | CC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.742 | 0.747 | 0.747 |
| Life expectancy at Birth | 74.2 | 74.4 | 74.6 |
| Expected years of schooling | 14.4 | 14.4 | 14.4 |
| Mean years of schooling | 8.1 | 8.3 | 8.3 |
| GNI per capita (PPP \$) | 12,772 | 13,050 | 12,938 |

City
Population (UN World Cities Report) 3,911,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

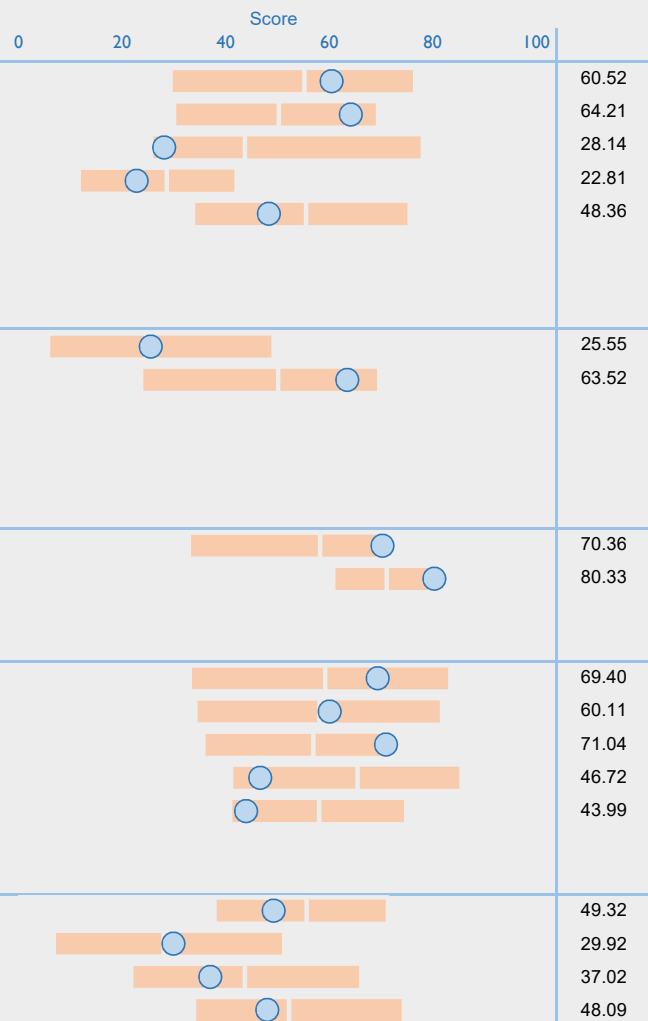
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

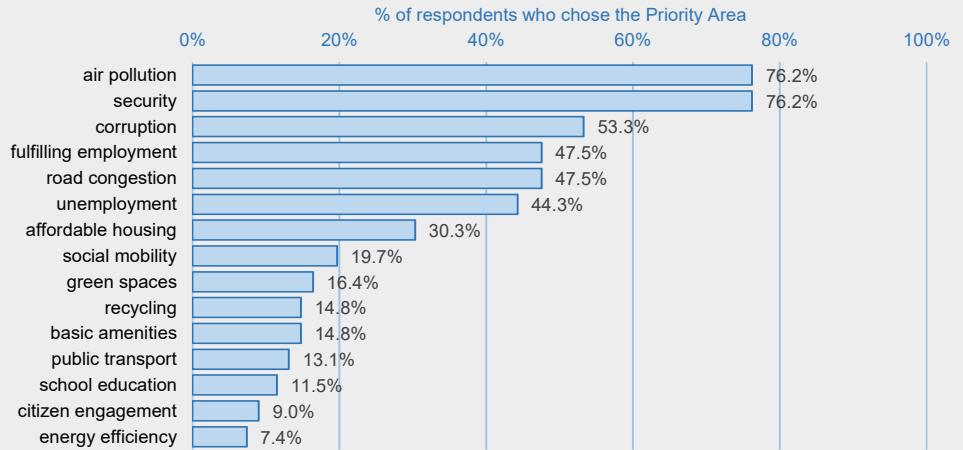
Governance

- 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.



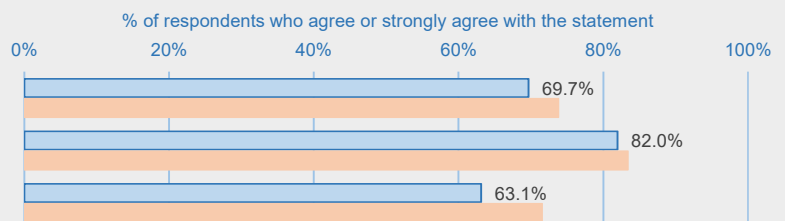
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 55.87 |
| A website or App allows to give away unwanted items to other city residents. | 52.32 |
| Free public wifi has improved access to services. | 77.32 |
| CCTV cameras make residents feel safer. | 60.93 |
| A website or App allows effective monitoring of air pollution. | 60.38 |
| Arranging medical appointments online has improved access. | 69.54 |

Mobility

| Statement | Score |
|---|-------|
| Car-sharing Apps have reduced congestion. | 50.96 |
| Apps that direct you to an available parking space have reduced journey time. | 59.43 |
| Bicycle hiring has reduced congestion. | 68.31 |
| Online scheduling and ticket sales make public transport easier to use. | 63.52 |

Activities

| Statement | Score |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 76.64 |

Opportunities (Work & School)

| Statement | Score |
|--|-------|
| Online access to job listings has made it easier to find work. | 65.71 |
| IT skills are taught well in schools. | 66.26 |
| Online services provided by the city has made it easier to start a new business. | 63.66 |

Governance

| Statement | Score |
|--|-------|
| Online public access to city finances has reduced corruption. | 38.66 |
| Online voting has increased participation. | 40.16 |
| An online platform where residents can propose ideas has improved city life. | 52.05 |
| Processing Identification Documents online has reduced waiting times. | 62.43 |

Melbourne

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 24th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.936 | 0.938 | 0.939 |
| Life expectancy at Birth | 82.7 | 82.9 | 83.1 |
| Expected years of schooling | 23.3 | 22.9 | 22.9 |
| Mean years of schooling | 12.8 | 12.9 | 12.9 |
| GNI per capita (PPP \$) | 43,138 | 43,637 | 43,560 |

| City | Population (UN World Cities Report) |
|-----------|-------------------------------------|
| Melbourne | 4,203,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

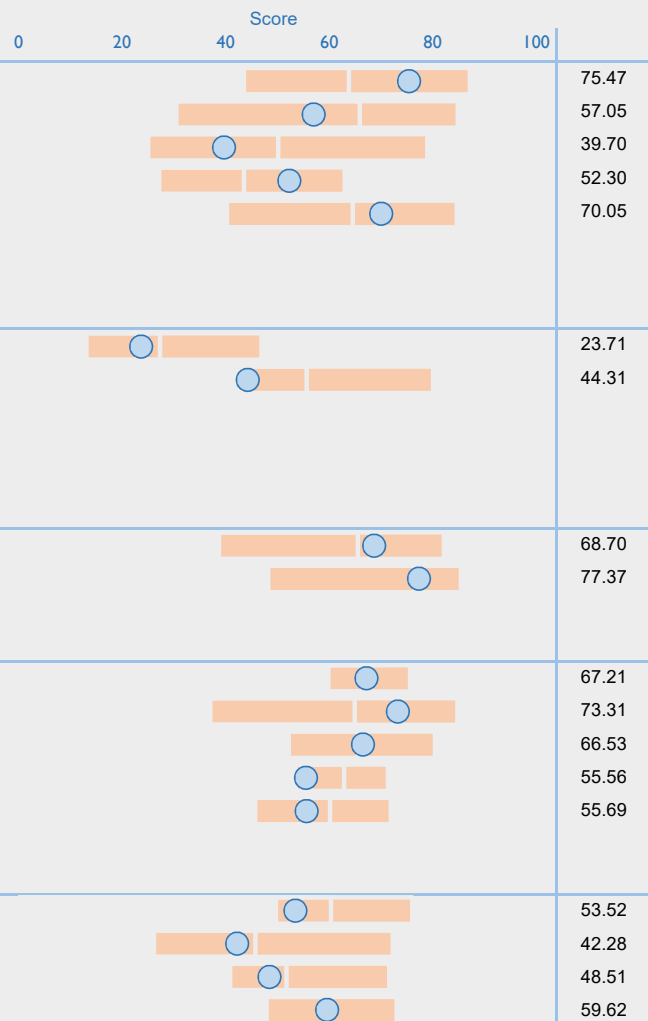
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

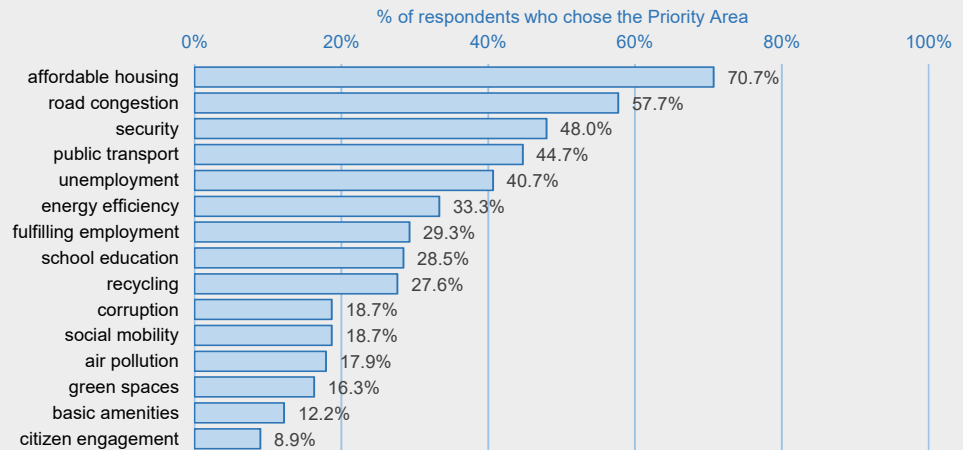
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



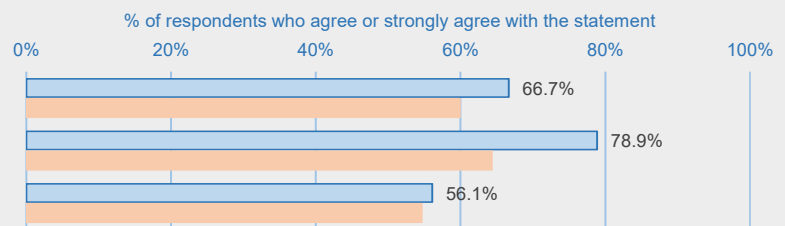
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 49.32 |
| A website or App allows to give away unwanted items to other city residents. | 57.86 |
| Free public wifi has improved access to services. | 58.67 |
| CCTV cameras make residents feel safer. | 61.79 |
| A website or App allows effective monitoring of air pollution. | 33.60 |
| Arranging medical appointments online has improved access. | 64.36 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 42.55 |
| Apps that direct you to an available parking space have reduced journey time. | 37.80 |
| Bicycle hiring has reduced congestion. | 36.86 |
| Online scheduling and ticket sales make public transport easier to use. | 55.42 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 73.71 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 72.76 |
| IT skills are taught well in schools. | 57.86 |
| Online services provided by the city has made it easier to start a new business. | 52.98 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 41.87 |
| Online voting has increased participation. | 45.93 |
| An online platform where residents can propose ideas has improved city life. | 47.29 |
| Processing Identification Documents online has reduced waiting times. | 57.45 |

Mexico City

SMART CITY RANKING **88th**
Out of 102

GROUP **3**

RATING **CC**
From AAA to D

FACTOR RATINGS **CC** **CC**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.767 | 0.772 | 0.774 |
| Life expectancy at Birth | 76.9 | 77.1 | 77.3 |
| Expected years of schooling | 13.7 | 14.1 | 14.1 |
| Mean years of schooling | 8.6 | 8.6 | 8.6 |
| GNI per capita (PPP \$) | 16,569 | 16,623 | 16,944 |

City
Population (UN World Cities Report) 20,999,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

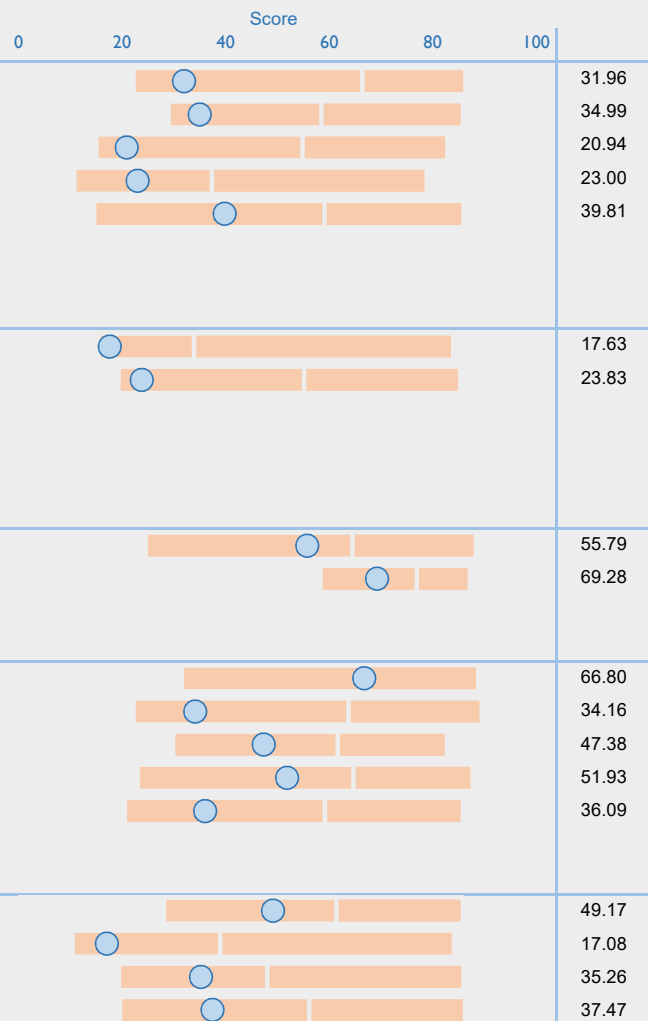
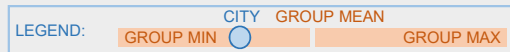
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

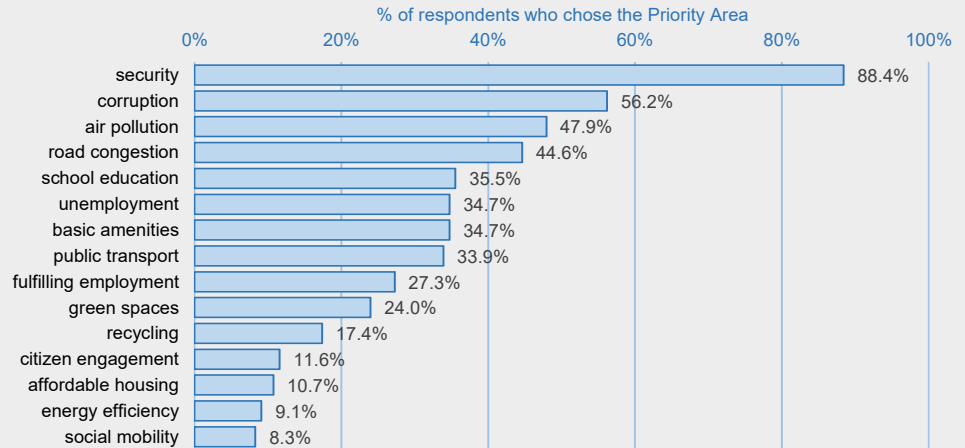
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

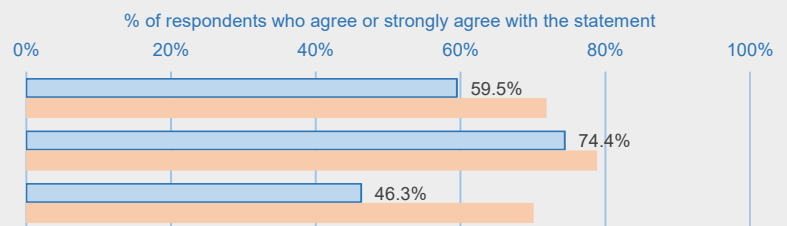


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 40.08 |
| A website or App allows to give away unwanted items to other city residents. | 48.07 |
| Free public wifi has improved access to services. | 59.64 |
| CCTV cameras make residents feel safer. | 52.34 |
| A website or App allows effective monitoring of air pollution. | 50.14 |
| Arranging medical appointments online has improved access. | 56.61 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 43.66 |
| Apps that direct you to an available parking space have reduced journey time. | 50.69 |
| Bicycle hiring has reduced congestion. | 53.72 |
| Online scheduling and ticket sales make public transport easier to use. | 46.42 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 81.40 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 71.63 |
| IT skills are taught well in schools. | 49.59 |
| Online services provided by the city has made it easier to start a new business. | 57.02 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 35.54 |
| Online voting has increased participation. | 42.42 |
| An online platform where residents can propose ideas has improved city life. | 49.59 |
| Processing Identification Documents online has reduced waiting times. | 67.91 |

Milan

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 22nd Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.876 | 0.878 | 0.880 |
| Life expectancy at Birth | 82.8 | 83.0 | 83.2 |
| Expected years of schooling | 16.3 | 16.3 | 16.3 |
| Mean years of schooling | 10.2 | 10.2 | 10.2 |
| GNI per capita (PPP \$) | 34,115 | 34,733 | 35,299 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Milan | 3,099,000 |



STRUCTURES

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

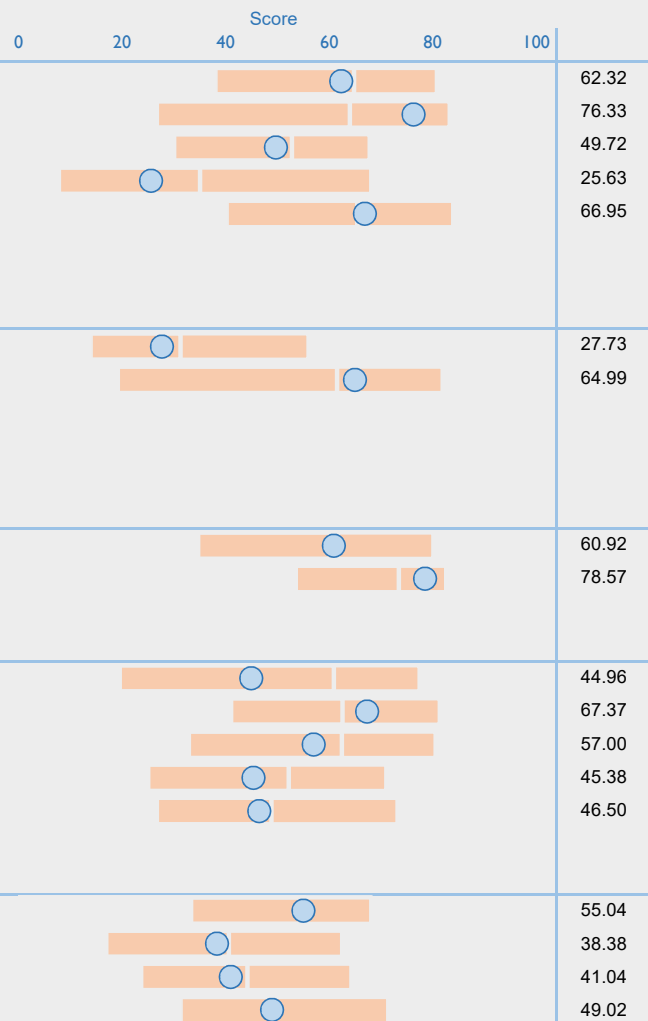
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

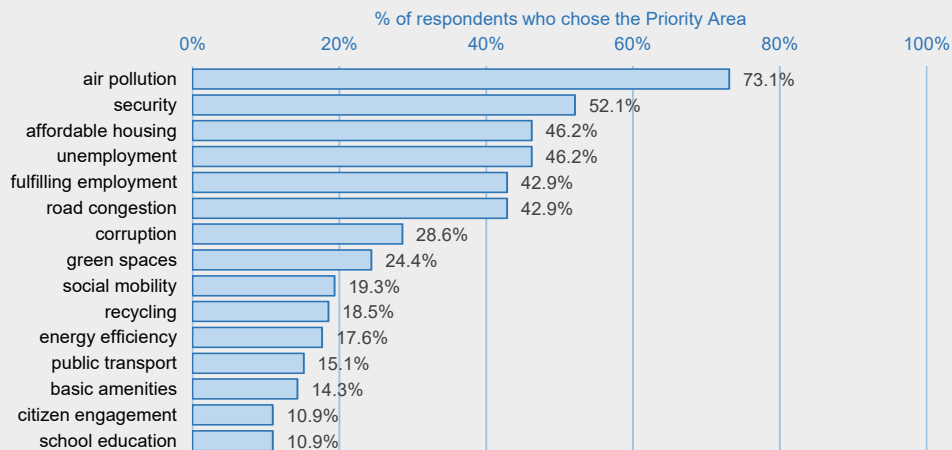
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



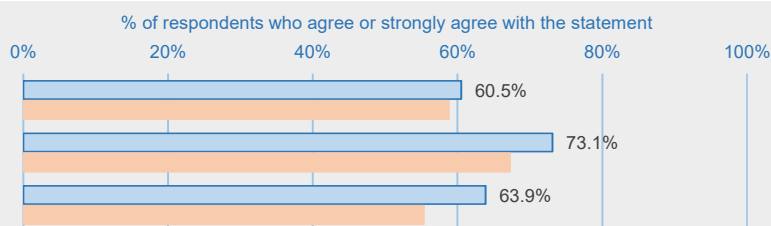
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score | Value |
|--|-------|-------|
| Online reporting of city maintenance problems provides a speedy solution. | ~50 | 57.14 |
| A website or App allows to give away unwanted items to other city residents. | ~55 | 56.44 |
| Free public wifi has improved access to services. | ~65 | 59.24 |
| CCTV cameras make residents feel safer. | ~55 | 59.38 |
| A website or App allows effective monitoring of air pollution. | ~45 | 51.68 |
| Arranging medical appointments online has improved access. | ~75 | 72.97 |

Mobility

| | | |
|---|-----|-------|
| Car-sharing Apps have reduced congestion. | ~50 | 53.50 |
| Apps that direct you to an available parking space have reduced journey time. | ~55 | 59.52 |
| Bicycle hiring has reduced congestion. | ~50 | 54.90 |
| Online scheduling and ticket sales make public transport easier to use. | ~75 | 75.35 |

Activities

| | | |
|---|-----|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | ~80 | 82.77 |
|---|-----|-------|

Opportunities (Work & School)

| | | |
|--|-----|-------|
| Online access to job listings has made it easier to find work. | ~60 | 68.07 |
| IT skills are taught well in schools. | ~50 | 51.96 |
| Online services provided by the city has made it easier to start a new business. | ~55 | 58.40 |

Governance

| | | |
|--|-----|-------|
| Online public access to city finances has reduced corruption. | ~50 | 48.04 |
| Online voting has increased participation. | ~55 | 46.78 |
| An online platform where residents can propose ideas has improved city life. | ~60 | 55.88 |
| Processing Identification Documents online has reduced waiting times. | ~70 | 65.97 |

Montreal

SMART CITY RANKING **16th**
Out of 102

GROUP **1**

RATING **A**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| A | BBB |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.926 |
| Life expectancy at Birth | 82.2 | 82.4 | 82.5 |
| Expected years of schooling | 16.3 | 16.4 | 16.4 |
| Mean years of schooling | 13.1 | 13.1 | 13.3 |
| GNI per capita (PPP \$) | 42,512 | 42,664 | 43,433 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 3,981,000 |
|-------------------------------------|-----------|



STRUCTURES

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

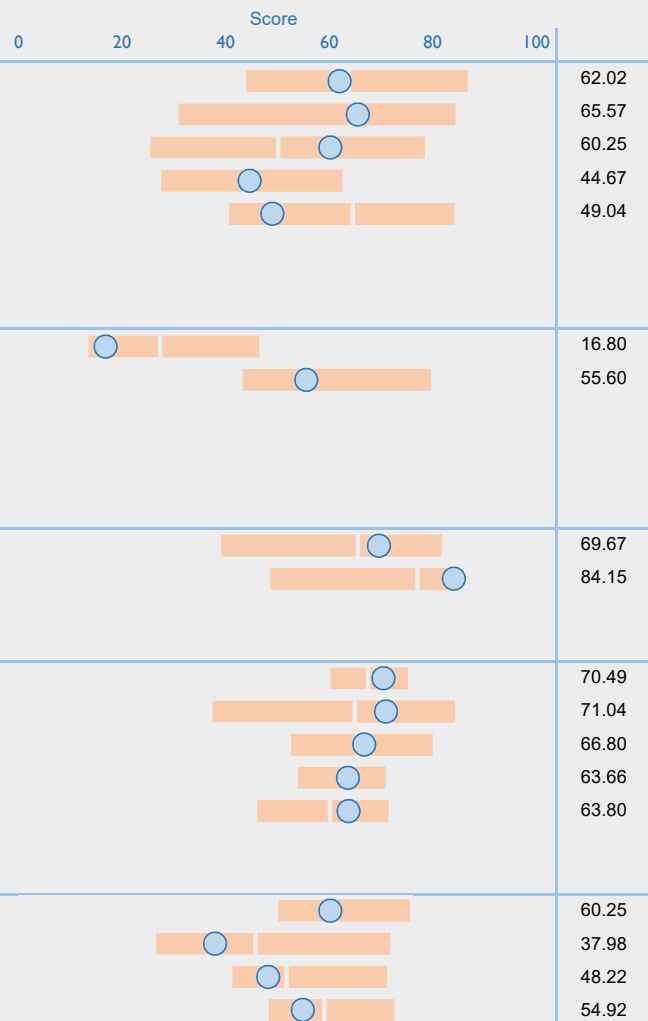
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

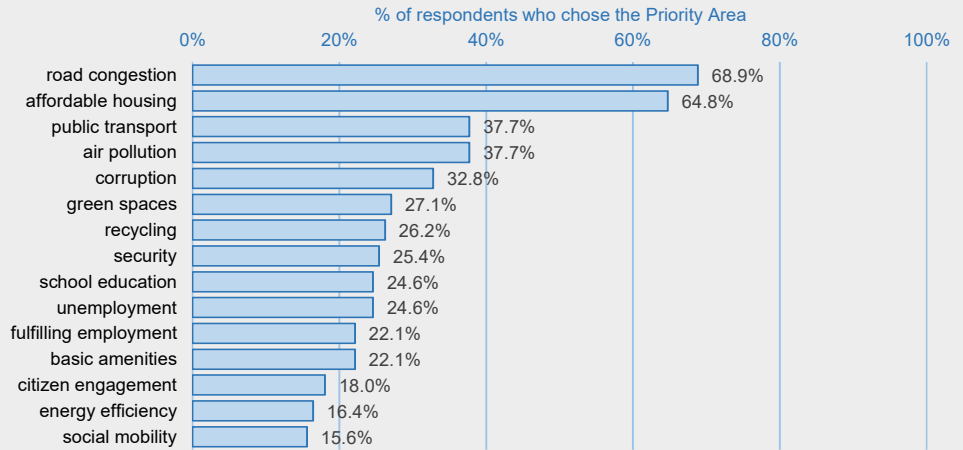
Governance

- 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.



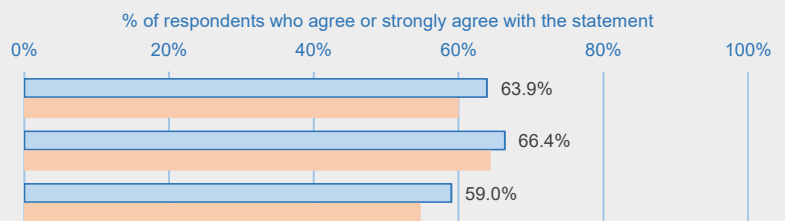
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 48.50 |
| A website or App allows to give away unwanted items to other city residents. | 62.16 |
| Free public wifi has improved access to services. | 60.79 |
| CCTV cameras make residents feel safer. | 46.45 |
| A website or App allows effective monitoring of air pollution. | 40.57 |
| Arranging medical appointments online has improved access. | 53.42 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 39.48 |
| Apps that direct you to an available parking space have reduced journey time. | 43.44 |
| Bicycle hiring has reduced congestion. | 54.92 |
| Online scheduling and ticket sales make public transport easier to use. | 54.92 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 79.92 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 73.91 |
| IT skills are taught well in schools. | 54.64 |
| Online services provided by the city has made it easier to start a new business. | 53.01 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 38.80 |
| Online voting has increased participation. | 43.85 |
| An online platform where residents can propose ideas has improved city life. | 44.40 |
| Processing Identification Documents online has reduced waiting times. | 51.91 |

Moscow

SMART CITY RANKING **72nd**
Out of 102

GROUP **3**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.813 | 0.815 | 0.816 |
| Life expectancy at Birth | 70.9 | 71.1 | 71.2 |
| Expected years of schooling | 15.4 | 15.5 | 15.5 |
| Mean years of schooling | 12.0 | 12.0 | 12.0 |
| GNI per capita (PPP \$) | 23,909 | 23,843 | 24,233 |

City
Population (UN World Cities Report) 12,166,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

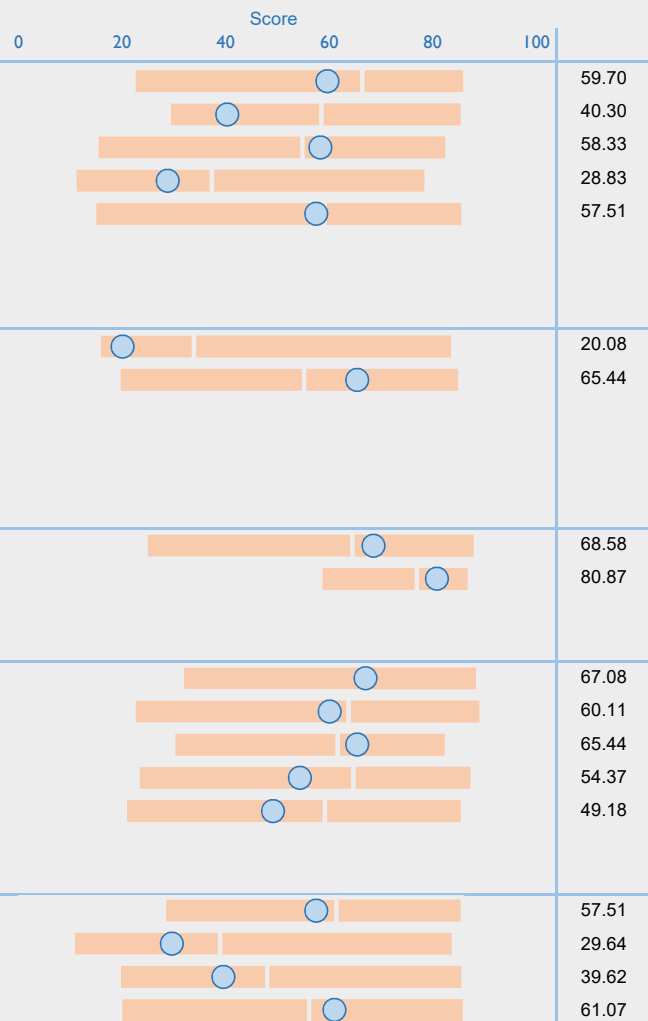
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

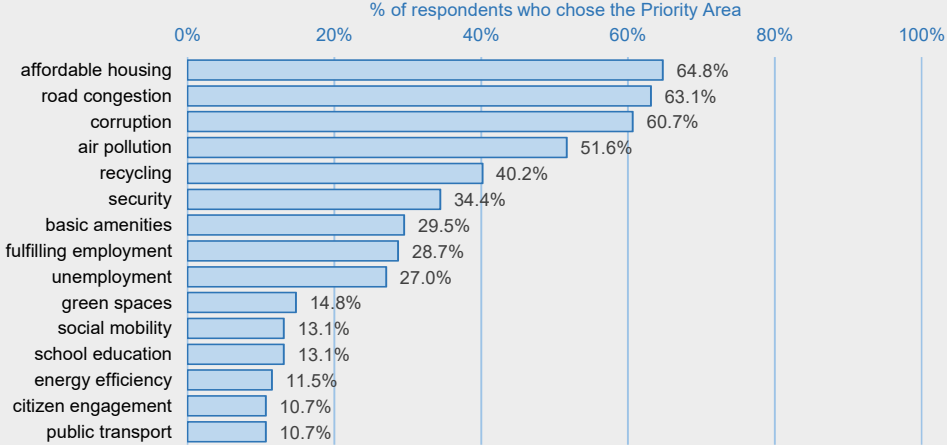
Governance

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- Residents contribute to decision making of local government.
- Residents provide feedback on local government projects.



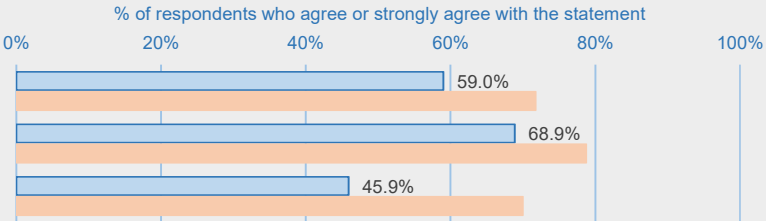
PRIORITY AREAS

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



ATTITUDES

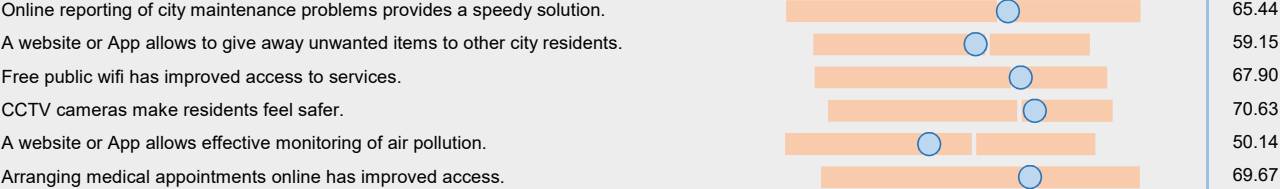
You are willing to concede personal data in order to improve traffic congestion
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 You feel the availability of online information has increased your trust in authorities



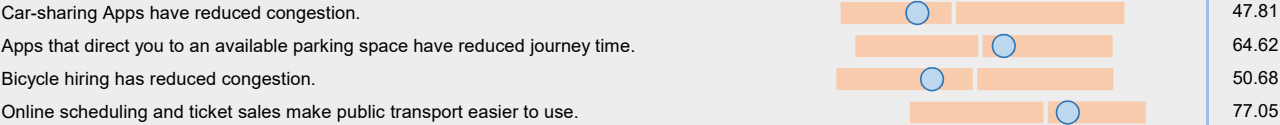
TECHNOLOGIES



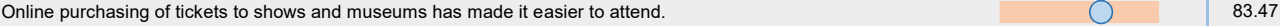
Health & Safety



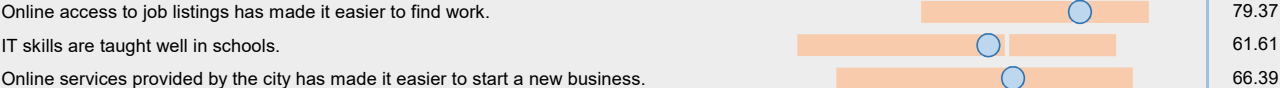
Mobility



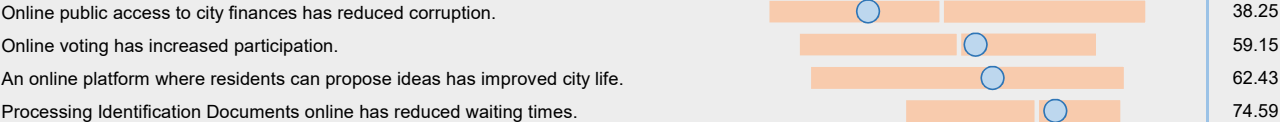
Activities



Opportunities (Work & School)



Governance



Mumbai

SMART CITY RANKING **78th**
Out of 102

GROUP **4**

RATING **CC**
From AAA to D

FACTOR RATINGS **CC** **CC**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.627 | 0.636 | 0.640 |
| Life expectancy at Birth | 68.3 | 68.6 | 68.8 |
| Expected years of schooling | 12.0 | 12.3 | 12.3 |
| Mean years of schooling | 6.3 | 6.4 | 6.4 |
| GNI per capita (PPP \$) | 5,691 | 6,026 | 6,353 |

City
Population (UN World Cities Report) 21,043,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

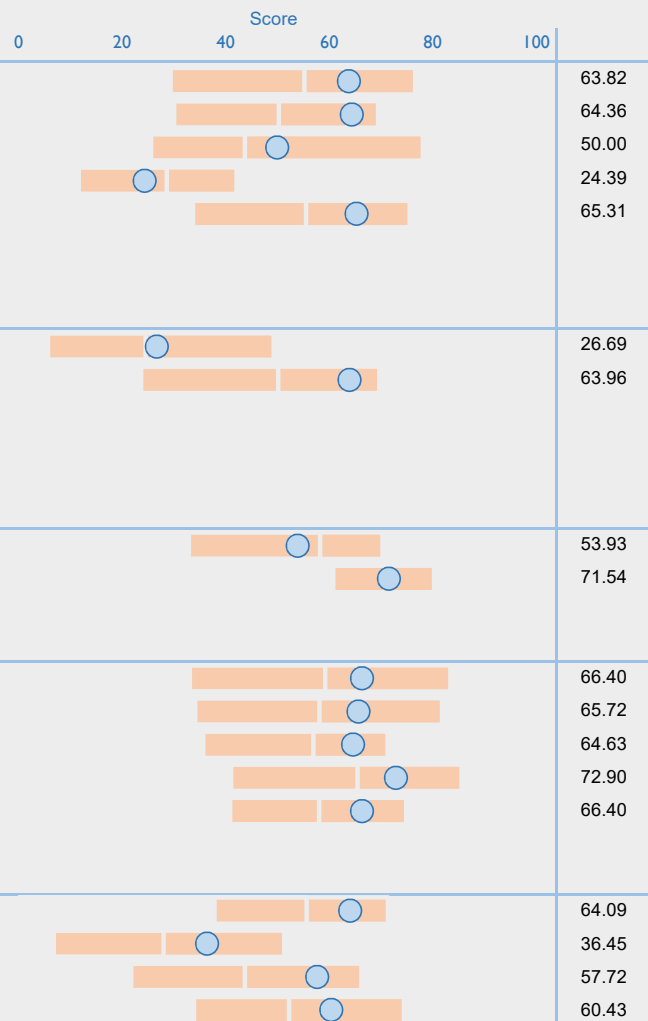
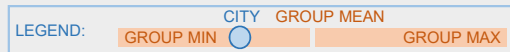
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

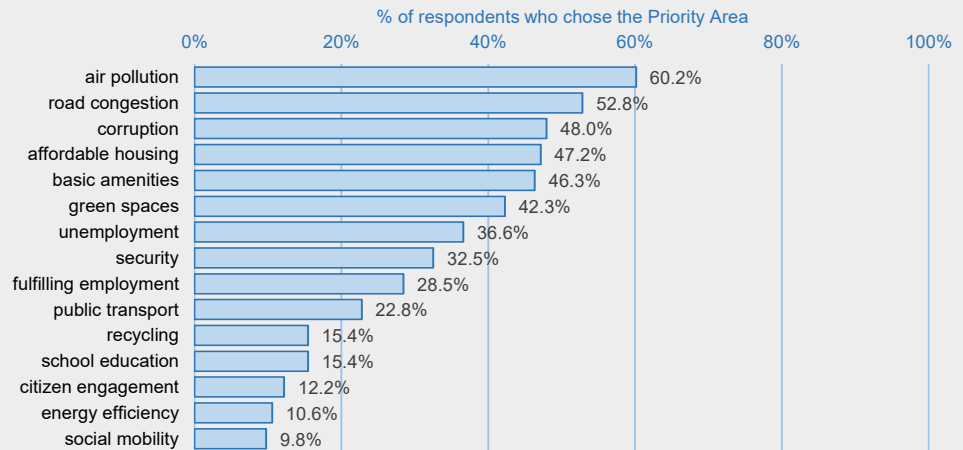
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



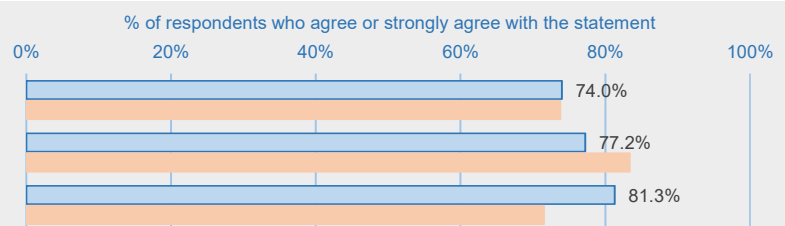
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 59.21 |
| A website or App allows to give away unwanted items to other city residents. | 57.59 |
| Free public wifi has improved access to services. | 65.04 |
| CCTV cameras make residents feel safer. | 76.15 |
| A website or App allows effective monitoring of air pollution. | 50.81 |
| Arranging medical appointments online has improved access. | 71.00 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 65.04 |
| Apps that direct you to an available parking space have reduced journey time. | 58.94 |
| Bicycle hiring has reduced congestion. | 51.76 |
| Online scheduling and ticket sales make public transport easier to use. | 78.59 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 84.28 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 79.67 |
| IT skills are taught well in schools. | 68.56 |
| Online services provided by the city has made it easier to start a new business. | 73.98 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 58.13 |
| Online voting has increased participation. | 62.33 |
| An online platform where residents can propose ideas has improved city life. | 66.53 |
| Processing Identification Documents online has reduced waiting times. | 77.37 |

Nairobi

SMART CITY RANKING **100th**
Out of 102

GROUP **4**

RATING **D**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| D | D |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.578 | 0.585 | 0.590 |
| Life expectancy at Birth | 66.7 | 67.0 | 67.3 |
| Expected years of schooling | 11.7 | 11.9 | 12.1 |
| Mean years of schooling | 6.3 | 6.4 | 6.5 |
| GNI per capita (PPP \$) | 2,806 | 2,898 | 2,961 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 3,915,000 |
|-------------------------------------|-----------|



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STRUCTURES

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

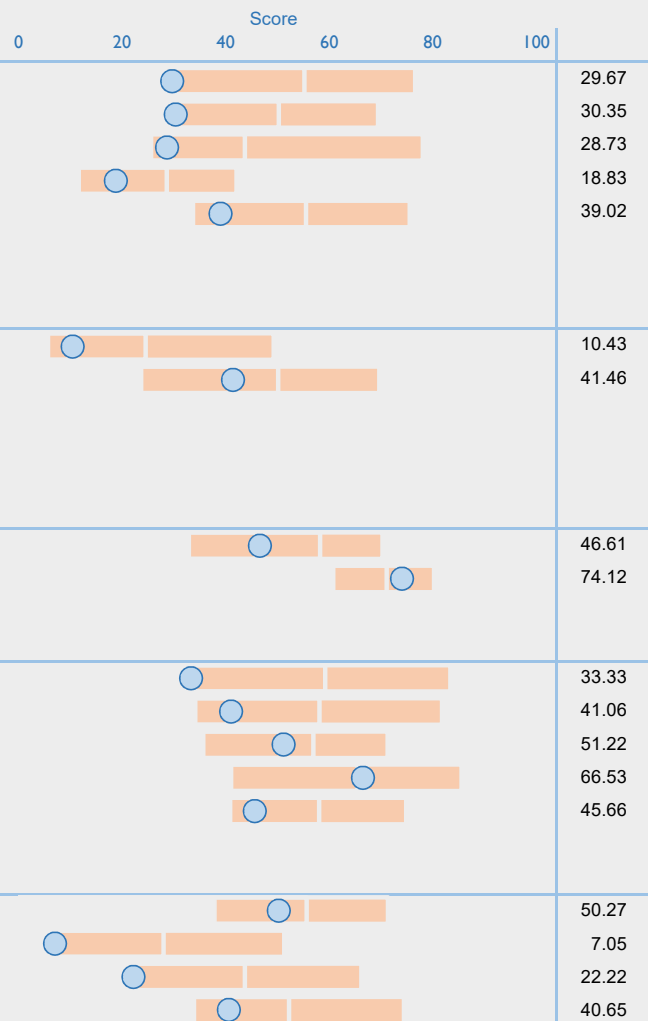
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

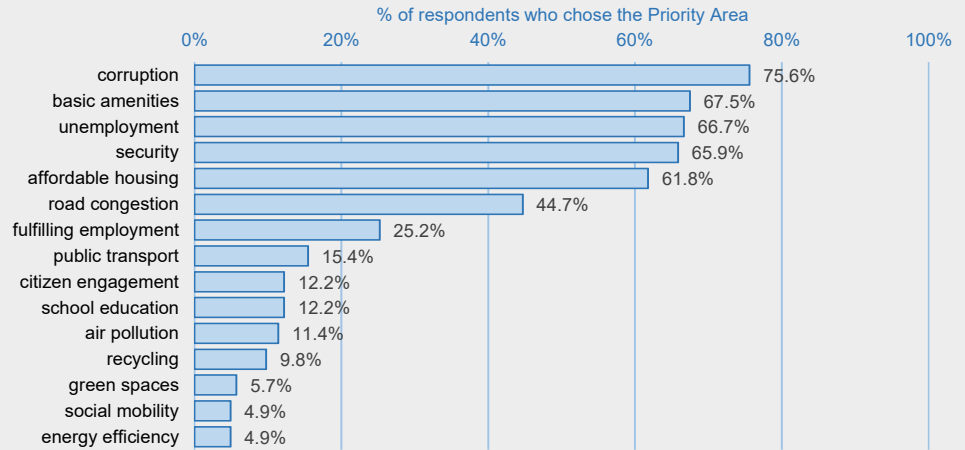
Governance

- 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.



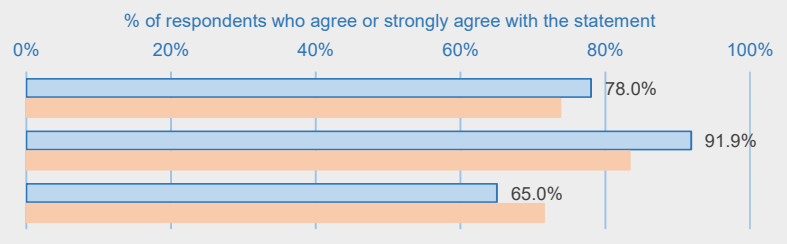
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 42.14 |
| A website or App allows to give away unwanted items to other city residents. | 40.38 |
| Free public wifi has improved access to services. | 45.93 |
| CCTV cameras make residents feel safer. | 63.28 |
| A website or App allows effective monitoring of air pollution. | 17.34 |
| Arranging medical appointments online has improved access. | 54.34 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 48.10 |
| Apps that direct you to an available parking space have reduced journey time. | 34.42 |
| Bicycle hiring has reduced congestion. | 19.51 |
| Online scheduling and ticket sales make public transport easier to use. | 58.94 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 80.49 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 74.25 |
| IT skills are taught well in schools. | 60.03 |
| Online services provided by the city has made it easier to start a new business. | 64.09 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 27.24 |
| Online voting has increased participation. | 26.83 |
| An online platform where residents can propose ideas has improved city life. | 40.38 |
| Processing Identification Documents online has reduced waiting times. | 72.36 |

Nanjing

| | | | | | |
|---------------------------|---|----------|------------|------------|--------------|
| SMART CITY RANKING | 55th Out of 102 | | | | |
| GROUP | 3 | | | | |
| RATING | B From AAA to D | | | | |
| FACTOR RATINGS | <table border="1"> <tr> <td>B</td> <td>B B</td> </tr> <tr> <td>Structures</td> <td>Technologies</td> </tr> </table> | B | B B | Structures | Technologies |
| B | B B | | | | |
| Structures | Technologies | | | | |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

City

Population (UN World Cities Report) 7,369,000



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

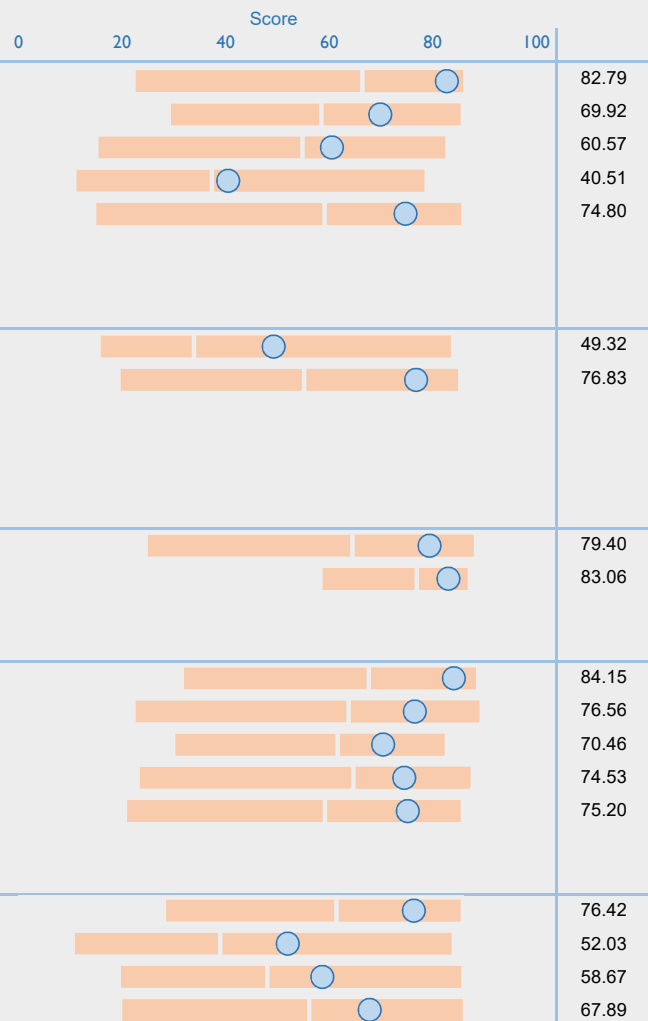
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

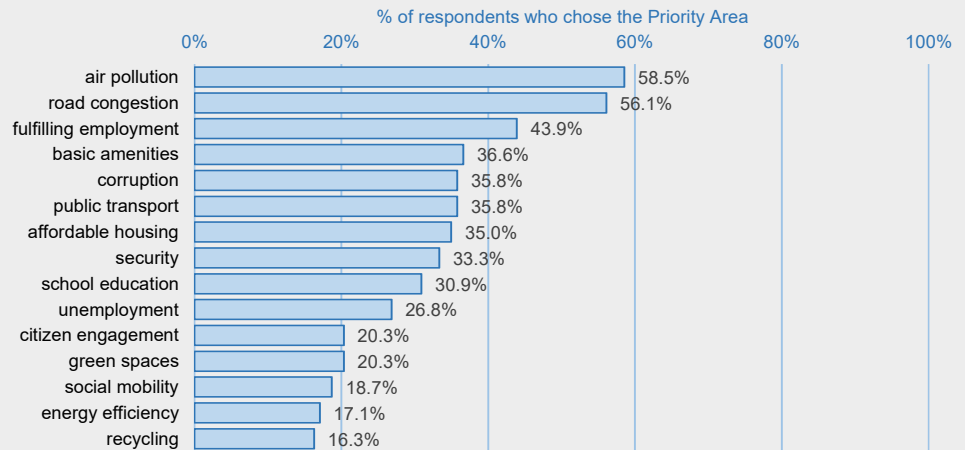
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



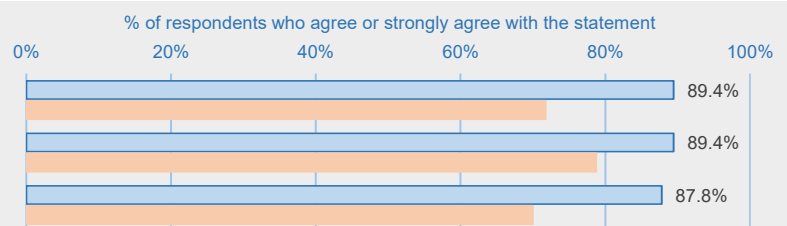
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 84.28 |
| A website or App allows to give away unwanted items to other city residents. | 68.43 |
| Free public wifi has improved access to services. | 81.71 |
| CCTV cameras make residents feel safer. | 80.62 |
| A website or App allows effective monitoring of air pollution. | 80.22 |
| Arranging medical appointments online has improved access. | 87.26 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 68.70 |
| Apps that direct you to an available parking space have reduced journey time. | 76.56 |
| Bicycle hiring has reduced congestion. | 80.89 |
| Online scheduling and ticket sales make public transport easier to use. | 89.43 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 90.79 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 88.89 |
| IT skills are taught well in schools. | 85.91 |
| Online services provided by the city has made it easier to start a new business. | 83.06 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 76.15 |
| Online voting has increased participation. | 71.27 |
| An online platform where residents can propose ideas has improved city life. | 80.08 |
| Processing Identification Documents online has reduced waiting times. | 75.34 |

New Delhi

SMART CITY RANKING **68th**
Out of 102

GROUP **4**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.627 | 0.636 | 0.640 |
| Life expectancy at Birth | 68.3 | 68.6 | 68.8 |
| Expected years of schooling | 12.0 | 12.3 | 12.3 |
| Mean years of schooling | 6.3 | 6.4 | 6.4 |
| GNI per capita (PPP \$) | 5,691 | 6,026 | 6,353 |

City

| | |
|-------------------------------------|------------|
| Population (UN World Cities Report) | 25,703,000 |
|-------------------------------------|------------|



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STRUCTURES

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

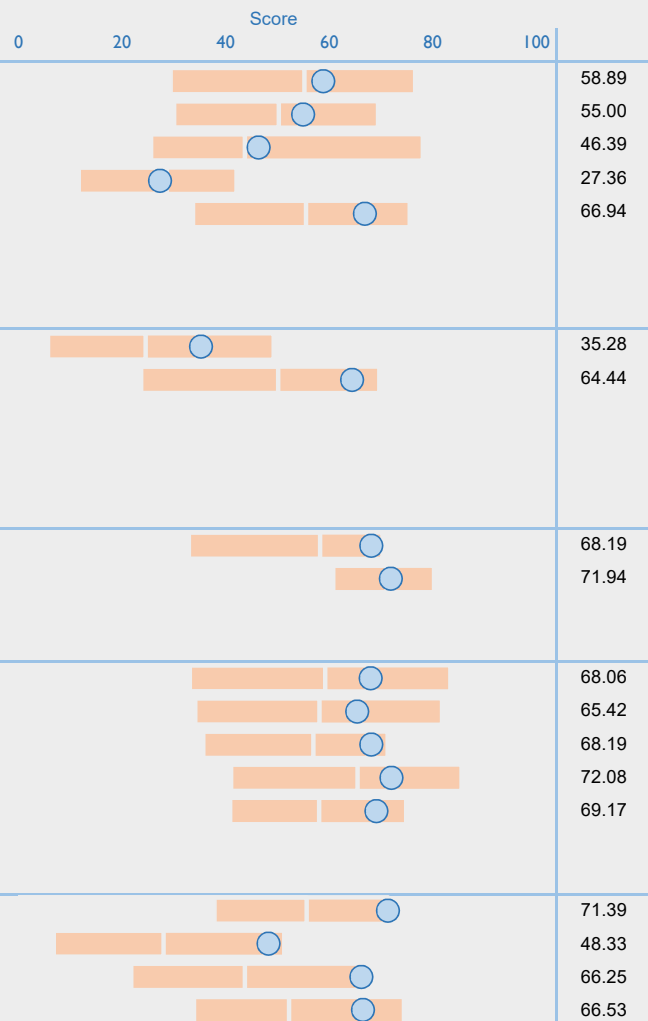
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

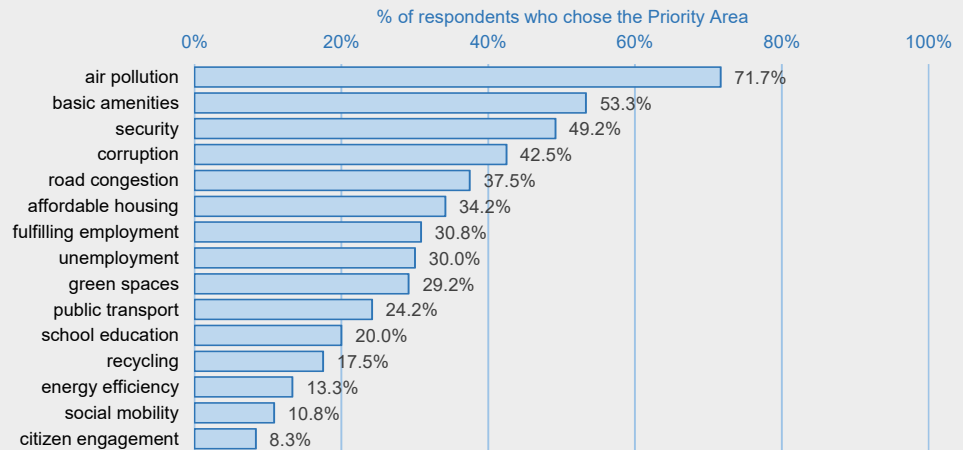
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

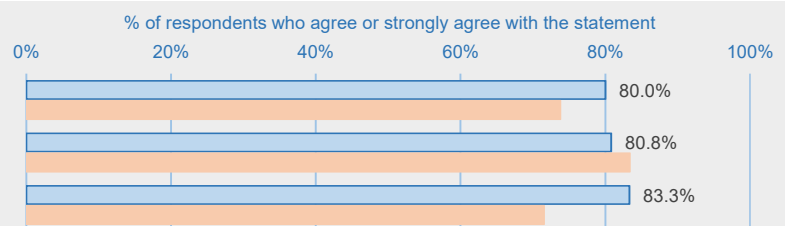


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 60.14 |
| A website or App allows to give away unwanted items to other city residents. | 61.94 |
| Free public wifi has improved access to services. | 64.31 |
| CCTV cameras make residents feel safer. | 71.11 |
| A website or App allows effective monitoring of air pollution. | 65.14 |
| Arranging medical appointments online has improved access. | 74.58 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 67.50 |
| Apps that direct you to an available parking space have reduced journey time. | 61.67 |
| Bicycle hiring has reduced congestion. | 61.94 |
| Online scheduling and ticket sales make public transport easier to use. | 77.08 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 84.03 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 73.06 |
| IT skills are taught well in schools. | 70.56 |
| Online services provided by the city has made it easier to start a new business. | 75.56 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 69.03 |
| Online voting has increased participation. | 70.00 |
| An online platform where residents can propose ideas has improved city life. | 68.89 |
| Processing Identification Documents online has reduced waiting times. | 78.75 |

New York

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 38th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | A |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

| City | Population (UN World Cities Report) |
|----------|-------------------------------------|
| New York | 18,593,000 |



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STRUCTURES

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

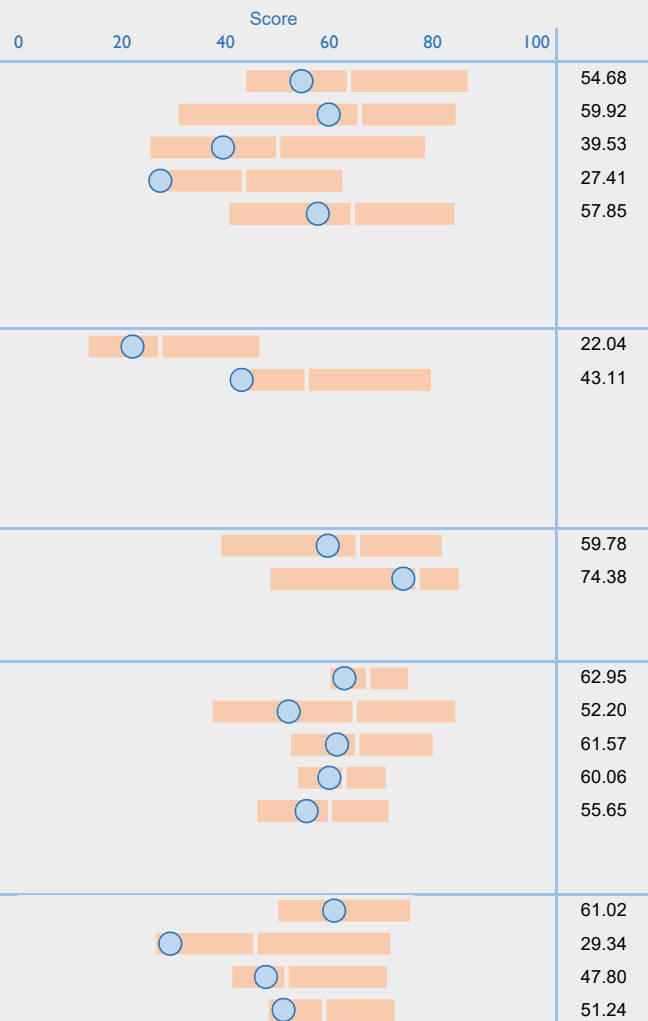
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

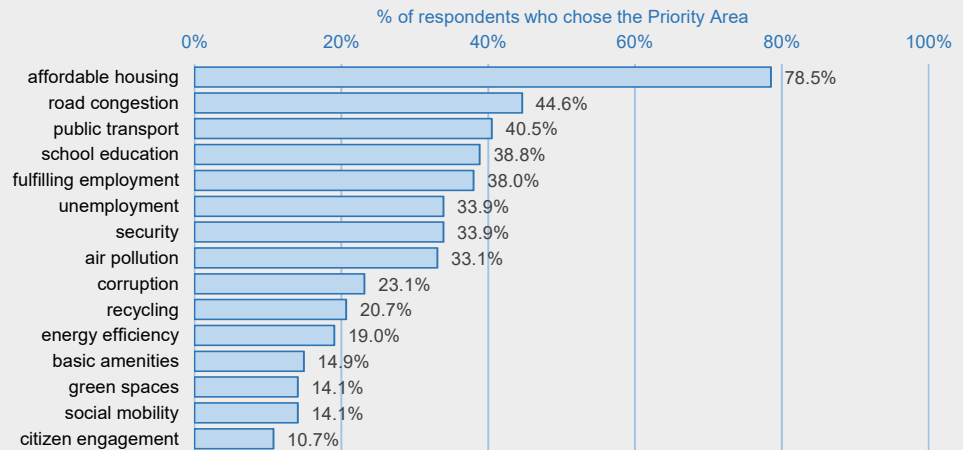
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



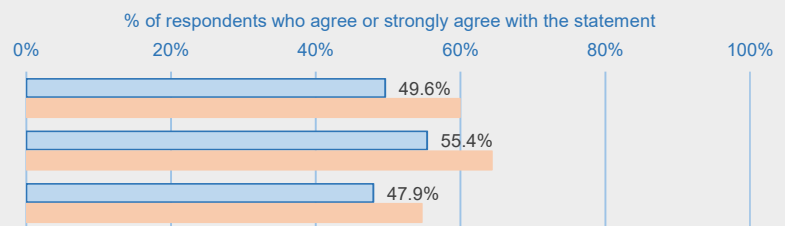
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 45.87 |
| A website or App allows to give away unwanted items to other city residents. | 54.13 |
| Free public wifi has improved access to services. | 69.01 |
| CCTV cameras make residents feel safer. | 57.16 |
| A website or App allows effective monitoring of air pollution. | 39.81 |
| Arranging medical appointments online has improved access. | 64.33 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 45.59 |
| Apps that direct you to an available parking space have reduced journey time. | 47.25 |
| Bicycle hiring has reduced congestion. | 49.86 |
| Online scheduling and ticket sales make public transport easier to use. | 58.54 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 78.10 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 69.15 |
| IT skills are taught well in schools. | 48.62 |
| Online services provided by the city has made it easier to start a new business. | 49.04 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 43.94 |
| Online voting has increased participation. | 48.07 |
| An online platform where residents can propose ideas has improved city life. | 46.83 |
| Processing Identification Documents online has reduced waiting times. | 53.44 |

SMART CITY RANKING **63rd**
Out of 102

GROUP **2**

RATING **B**
From AAA to D

FACTOR RATINGS **BB** **CCC**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.905 | 0.907 | 0.909 |
| Life expectancy at Birth | 83.6 | 83.8 | 83.9 |
| Expected years of schooling | 15.2 | 15.2 | 15.2 |
| Mean years of schooling | 12.5 | 12.7 | 12.8 |
| GNI per capita (PPP \$) | 39,322 | 38,267 | 38,986 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Osaka | 20,238,000 |



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STRUCTURES

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

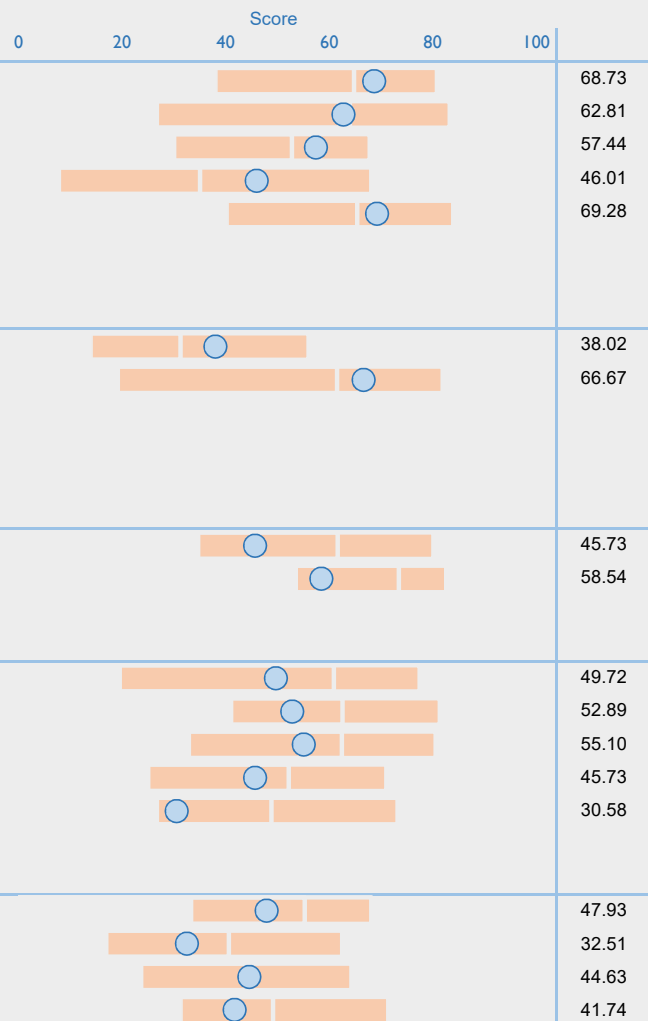
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

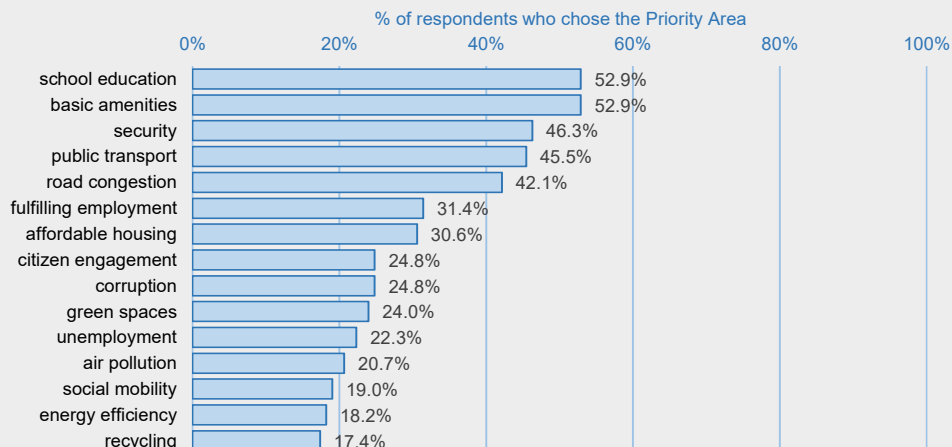
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

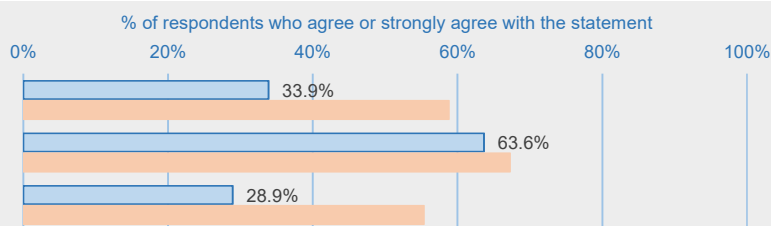


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score | Value |
|--|-------|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 51.93 | 51.93 |
| A website or App allows to give away unwanted items to other city residents. | 60.19 | 60.19 |
| Free public wifi has improved access to services. | 52.75 | 52.75 |
| CCTV cameras make residents feel safer. | 59.78 | 59.78 |
| A website or App allows effective monitoring of air pollution. | 39.26 | 39.26 |
| Arranging medical appointments online has improved access. | 54.41 | 54.41 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 27.13 |
| Apps that direct you to an available parking space have reduced journey time. | 37.47 |
| Bicycle hiring has reduced congestion. | 31.13 |
| Online scheduling and ticket sales make public transport easier to use. | 55.65 |

Activities

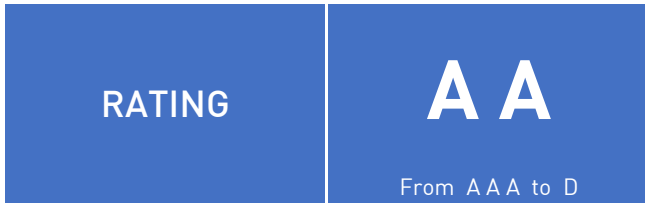
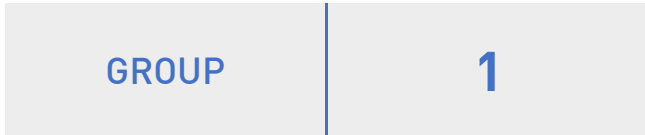
| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 61.16 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 64.05 |
| IT skills are taught well in schools. | 34.02 |
| Online services provided by the city has made it easier to start a new business. | 31.13 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 33.75 |
| Online voting has increased participation. | 30.85 |
| An online platform where residents can propose ideas has improved city life. | 32.51 |
| Processing Identification Documents online has reduced waiting times. | 39.53 |



BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.948 | 0.951 | 0.953 |
| Life expectancy at Birth | 82.0 | 82.2 | 82.3 |
| Expected years of schooling | 17.7 | 17.9 | 17.9 |
| Mean years of schooling | 12.5 | 12.6 | 12.6 |
| GNI per capita (PPP \$) | 67,028 | 67,340 | 68,012 |

| City | Population (UN World Cities Report) |
|------|-------------------------------------|
| Oslo | 986,000 |



STRUCTURES

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

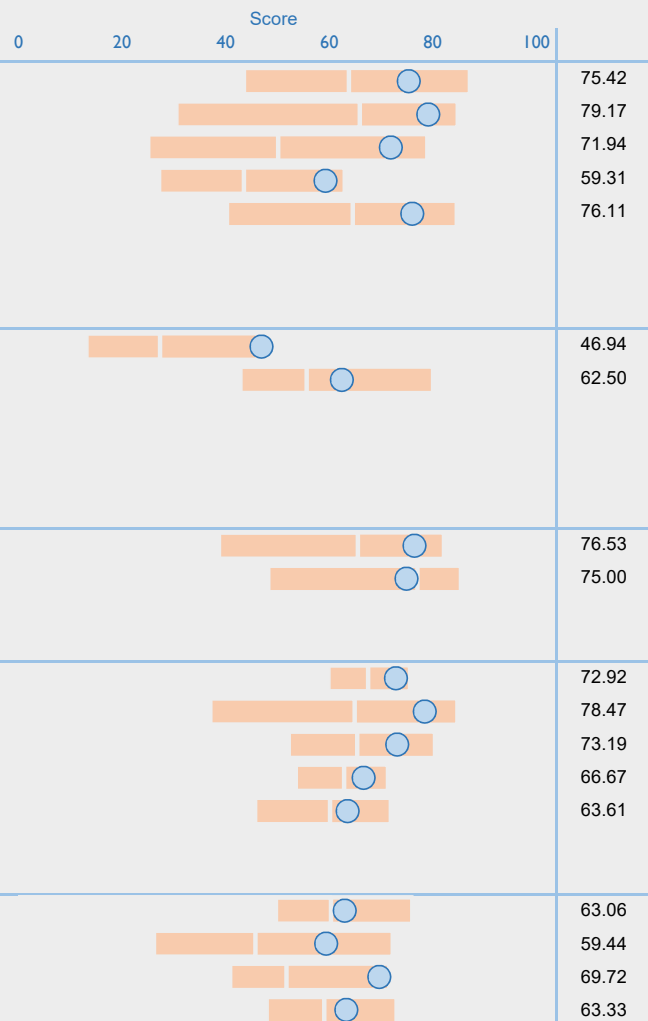
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

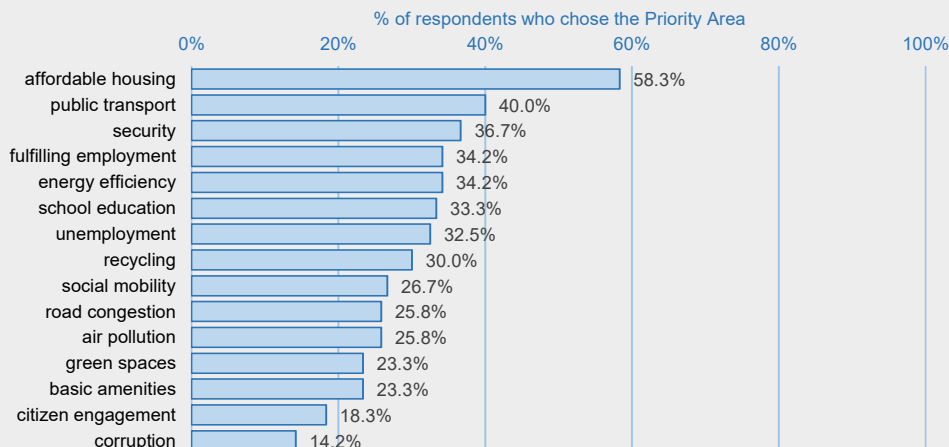
Governance

- 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.



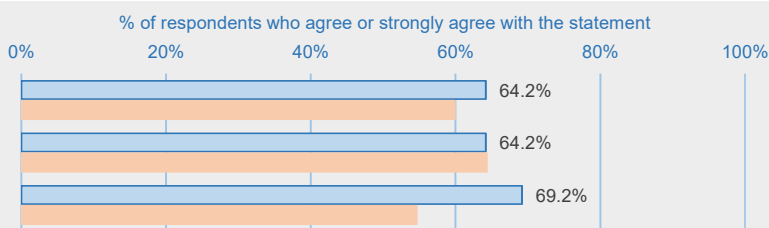
PRIORITY AREAS

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

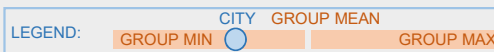


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 58.06 |
| A website or App allows to give away unwanted items to other city residents. | 66.11 |
| Free public wifi has improved access to services. | 55.56 |
| CCTV cameras make residents feel safer. | 50.14 |
| A website or App allows effective monitoring of air pollution. | 53.61 |
| Arranging medical appointments online has improved access. | 70.56 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 43.06 |
| Apps that direct you to an available parking space have reduced journey time. | 45.14 |
| Bicycle hiring has reduced congestion. | 66.39 |
| Online scheduling and ticket sales make public transport easier to use. | 73.33 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 78.47 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 71.67 |
| IT skills are taught well in schools. | 62.92 |
| Online services provided by the city has made it easier to start a new business. | 56.53 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 50.83 |
| Online voting has increased participation. | 54.72 |
| An online platform where residents can propose ideas has improved city life. | 50.56 |
| Processing Identification Documents online has reduced waiting times. | 66.11 |

Paris

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 51st Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | B B From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.898 | 0.899 | 0.901 |
| Life expectancy at Birth | 82.4 | 82.5 | 82.7 |
| Expected years of schooling | 16.4 | 16.4 | 16.4 |
| Mean years of schooling | 11.5 | 11.5 | 11.5 |
| GNI per capita (PPP \$) | 38,367 | 38,702 | 39,254 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Paris | 10,843,000 |



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STRUCTURES

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

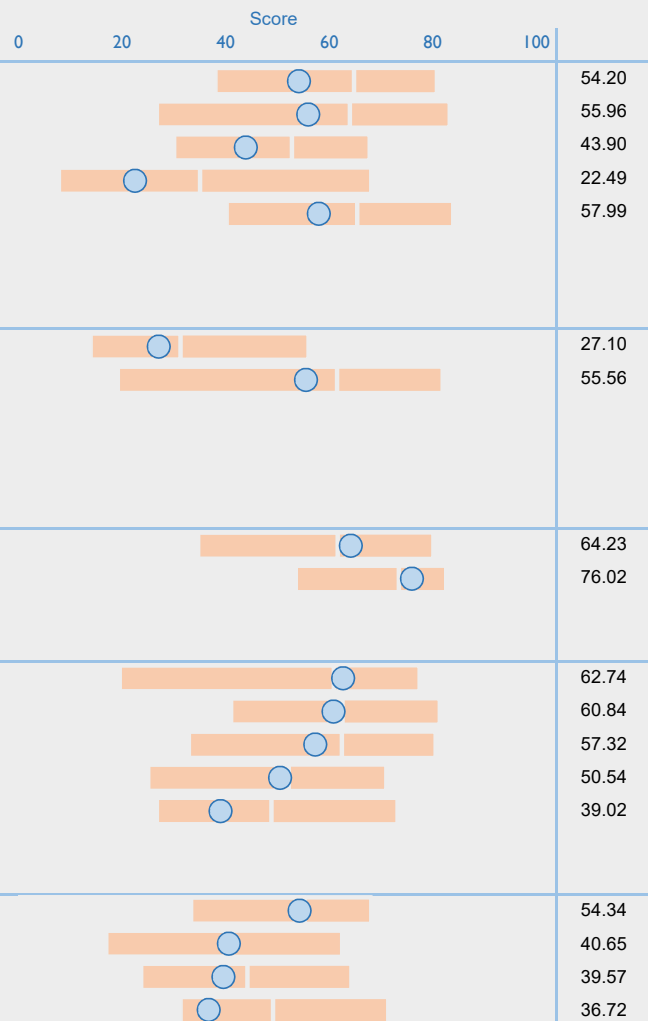
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

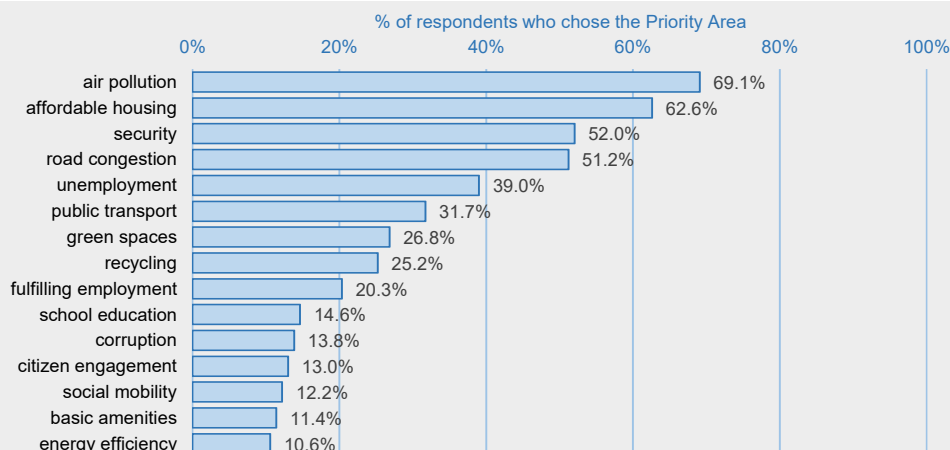
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

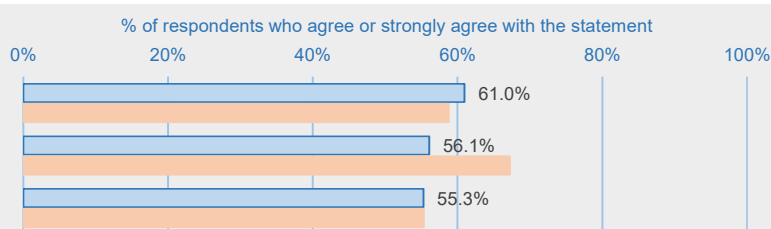


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 50.54 |
| A website or App allows to give away unwanted items to other city residents. | 59.08 |
| Free public wifi has improved access to services. | 54.88 |
| CCTV cameras make residents feel safer. | 52.44 |
| A website or App allows effective monitoring of air pollution. | 51.63 |
| Arranging medical appointments online has improved access. | 66.53 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 43.22 |
| Apps that direct you to an available parking space have reduced journey time. | 51.36 |
| Bicycle hiring has reduced congestion. | 52.44 |
| Online scheduling and ticket sales make public transport easier to use. | 59.49 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 73.31 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 57.99 |
| IT skills are taught well in schools. | 57.86 |
| Online services provided by the city has made it easier to start a new business. | 52.17 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 38.08 |
| Online voting has increased participation. | 44.72 |
| An online platform where residents can propose ideas has improved city life. | 49.86 |
| Processing Identification Documents online has reduced waiting times. | 56.91 |

Philadelphia

SMART CITY RANKING **54th**
Out of 102

GROUP **1**

RATING **B B**
From AAA to D

FACTOR RATINGS **B B** **B B**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

| City | Population (UN World Cities Report) |
|--------------|-------------------------------------|
| Philadelphia | 5,585,000 |



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STRUCTURES

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

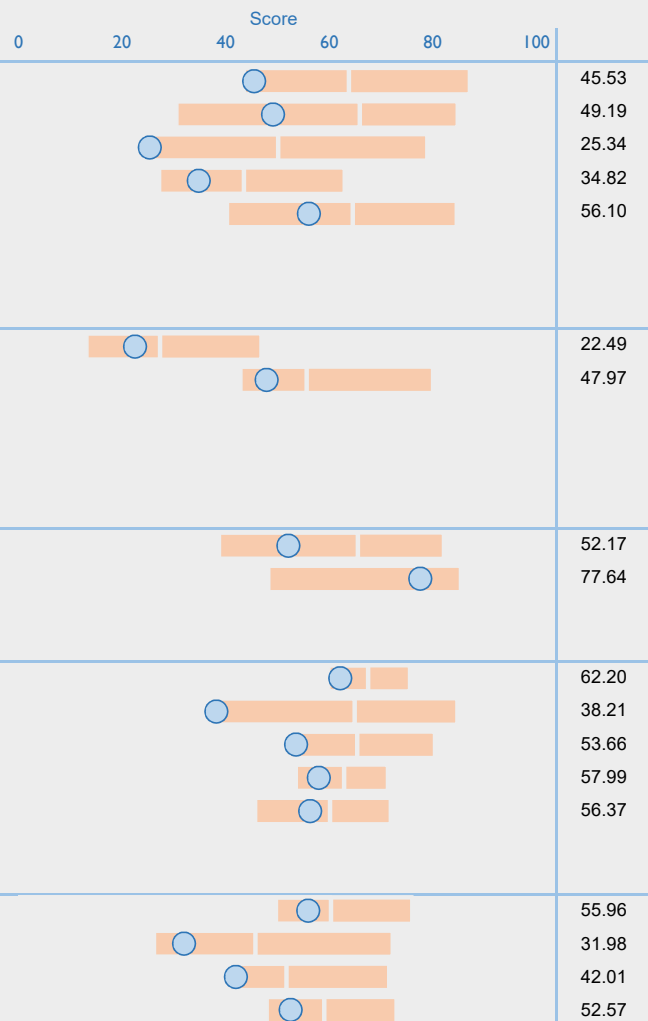
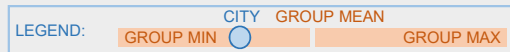
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

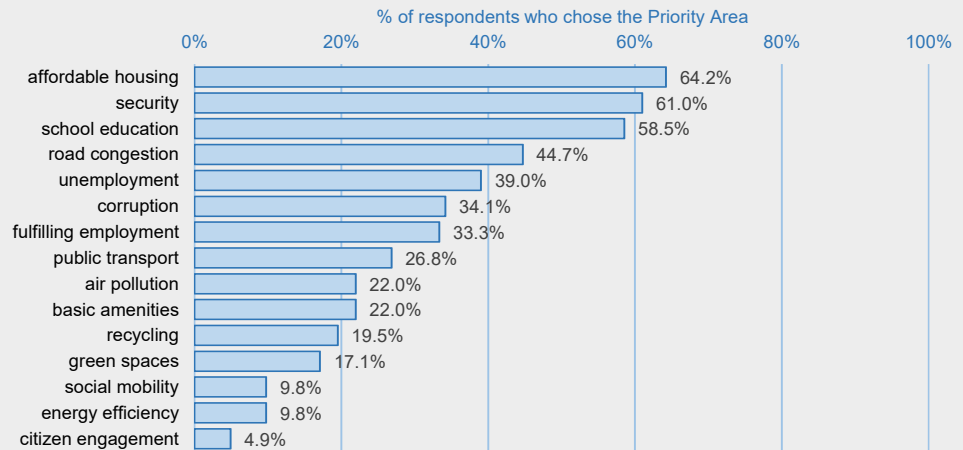
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



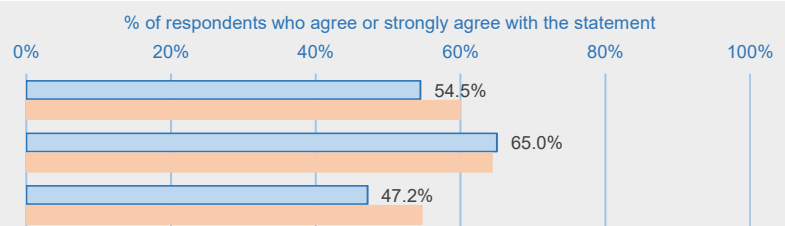
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 29.54 |
| A website or App allows to give away unwanted items to other city residents. | 48.10 |
| Free public wifi has improved access to services. | 44.99 |
| CCTV cameras make residents feel safer. | 38.89 |
| A website or App allows effective monitoring of air pollution. | 27.10 |
| Arranging medical appointments online has improved access. | 58.27 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 43.22 |
| Apps that direct you to an available parking space have reduced journey time. | 38.48 |
| Bicycle hiring has reduced congestion. | 41.06 |
| Online scheduling and ticket sales make public transport easier to use. | 56.23 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 77.24 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 66.12 |
| IT skills are taught well in schools. | 36.31 |
| Online services provided by the city has made it easier to start a new business. | 37.80 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 31.17 |
| Online voting has increased participation. | 42.14 |
| An online platform where residents can propose ideas has improved city life. | 39.84 |
| Processing Identification Documents online has reduced waiting times. | 49.59 |

Prague

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 19th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.882 | 0.885 | 0.888 |
| Life expectancy at Birth | 78.6 | 78.7 | 78.9 |
| Expected years of schooling | 16.9 | 16.9 | 16.9 |
| Mean years of schooling | 12.7 | 12.7 | 12.7 |
| GNI per capita (PPP \$) | 28,567 | 29,400 | 30,588 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Prague | 1,314,000 |



STRUCTURES

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

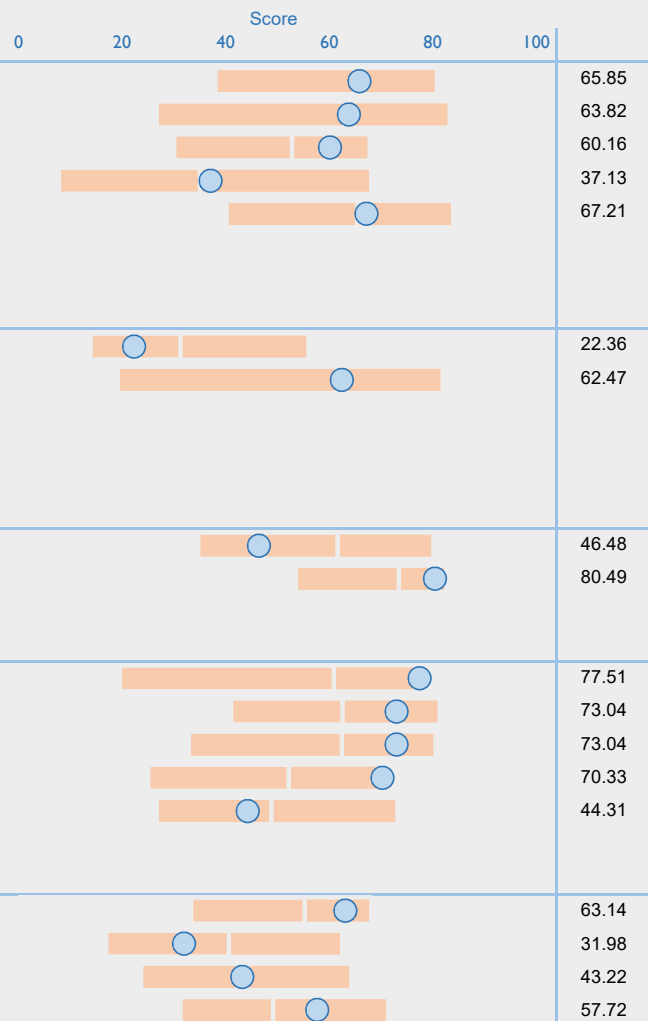
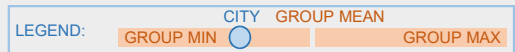
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

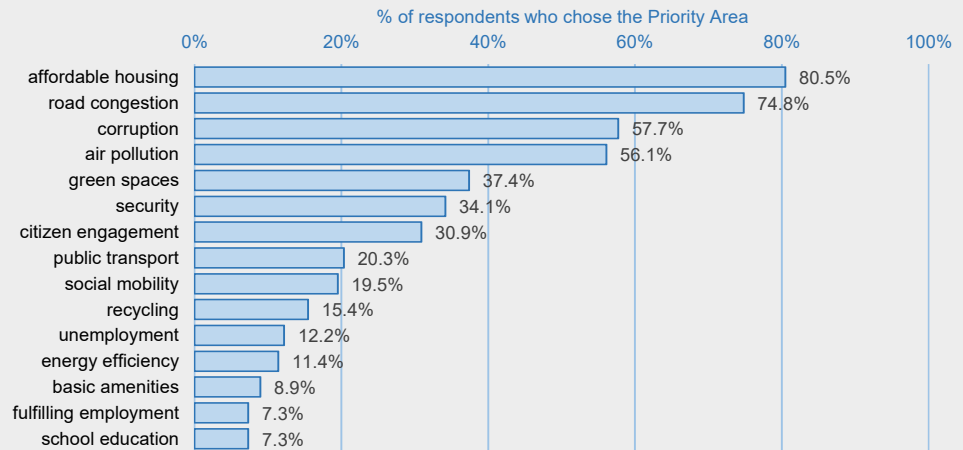
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



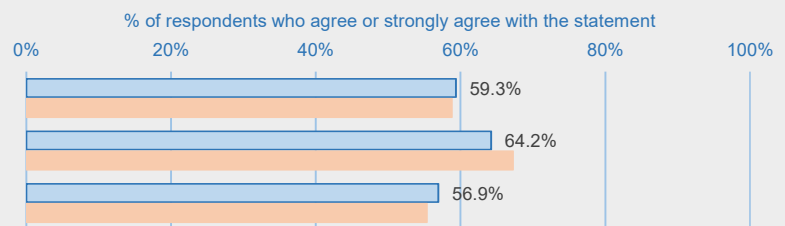
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 50.68 |
| A website or App allows to give away unwanted items to other city residents. | 63.55 |
| Free public wifi has improved access to services. | 62.06 |
| CCTV cameras make residents feel safer. | 64.36 |
| A website or App allows effective monitoring of air pollution. | 45.93 |
| Arranging medical appointments online has improved access. | 58.94 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 39.16 |
| Apps that direct you to an available parking space have reduced journey time. | 50.41 |
| Bicycle hiring has reduced congestion. | 43.09 |
| Online scheduling and ticket sales make public transport easier to use. | 78.32 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 83.88 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 75.34 |
| IT skills are taught well in schools. | 60.70 |
| Online services provided by the city has made it easier to start a new business. | 46.48 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 39.43 |
| Online voting has increased participation. | 54.88 |
| An online platform where residents can propose ideas has improved city life. | 48.37 |
| Processing Identification Documents online has reduced waiting times. | 65.85 |

Rabat

| | |
|---------------------------|---------------------------------------|
| SMART CITY RANKING | 101st Out of 102 |
|---------------------------|---------------------------------------|

| | |
|--------------|----------|
| GROUP | 4 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | D From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | D | D |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|-------|-------|-------|
| UN HDI | 0.655 | 0.662 | 0.667 |
| Life expectancy at Birth | 75.6 | 75.8 | 76.1 |
| Expected years of schooling | 12.3 | 12.4 | 12.4 |
| Mean years of schooling | 5.0 | 5.4 | 5.5 |
| GNI per capita (PPP \$) | 7,154 | 7,149 | 7,340 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Rabat | 1,967,000 |



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STRUCTURES

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

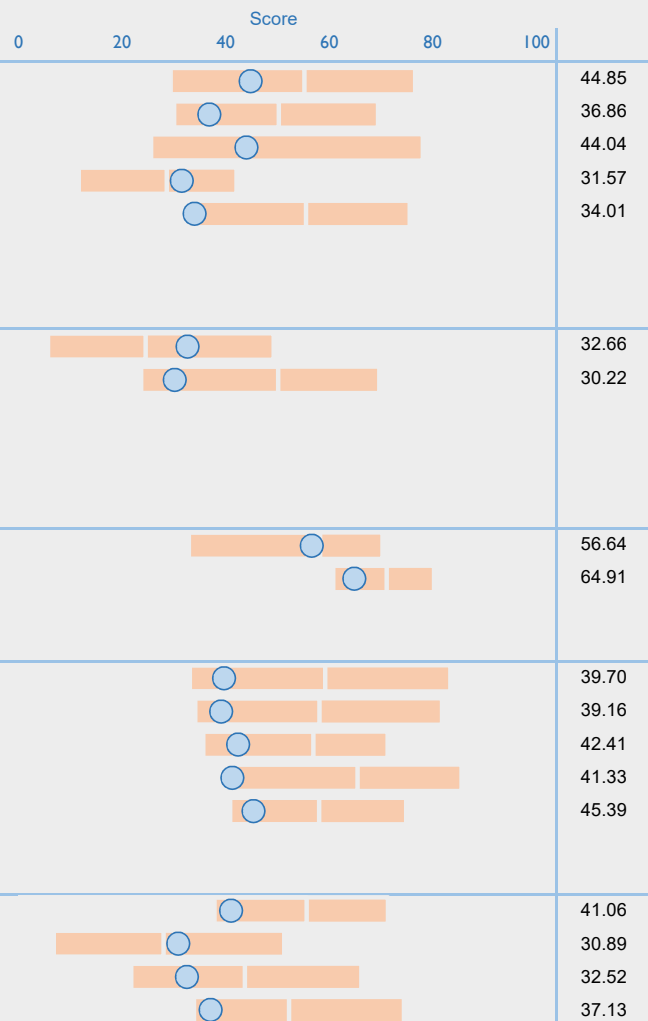
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

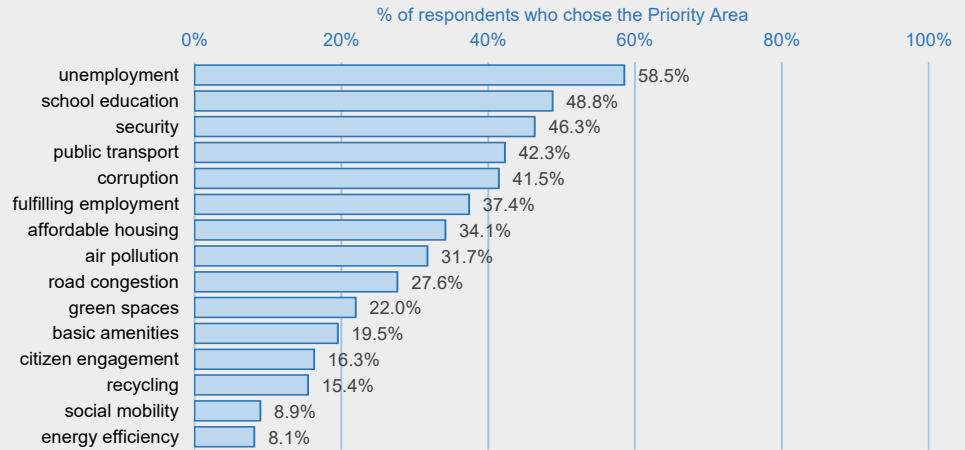
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

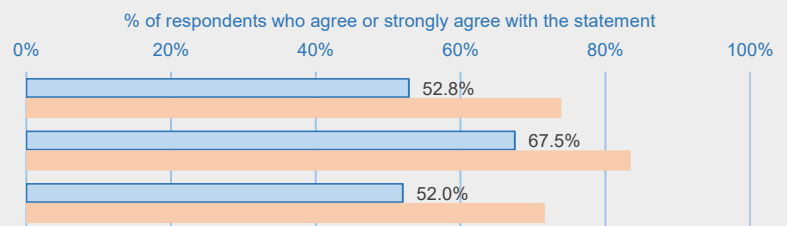


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 38.62 |
| A website or App allows to give away unwanted items to other city residents. | 40.51 |
| Free public wifi has improved access to services. | 37.67 |
| CCTV cameras make residents feel safer. | 51.08 |
| A website or App allows effective monitoring of air pollution. | 27.64 |
| Arranging medical appointments online has improved access. | 45.93 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 34.96 |
| Apps that direct you to an available parking space have reduced journey time. | 42.28 |
| Bicycle hiring has reduced congestion. | 32.93 |
| Online scheduling and ticket sales make public transport easier to use. | 55.69 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 56.23 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 56.78 |
| IT skills are taught well in schools. | 49.73 |
| Online services provided by the city has made it easier to start a new business. | 47.29 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 35.77 |
| Online voting has increased participation. | 34.01 |
| An online platform where residents can propose ideas has improved city life. | 36.99 |
| Processing Identification Documents online has reduced waiting times. | 44.17 |

Rio de Janeiro

SMART CITY RANKING **96th**
Out of 102

GROUP **3**

RATING **C**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| C | C |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.757 | 0.758 | 0.759 |
| Life expectancy at Birth | 75.3 | 75.5 | 75.7 |
| Expected years of schooling | 15.4 | 15.4 | 15.4 |
| Mean years of schooling | 7.6 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 14,350 | 13,730 | 13,755 |

City
Population (UN World Cities Report) 12,902,000



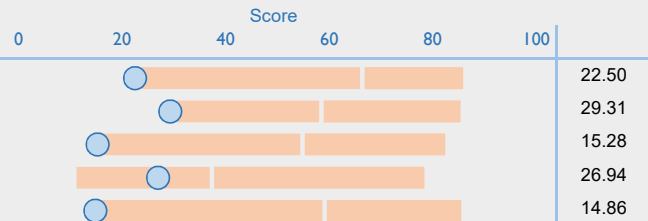
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES



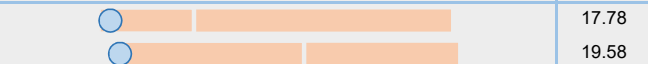
Health & Safety

- 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.



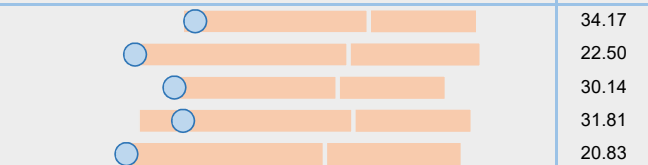
Activities

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



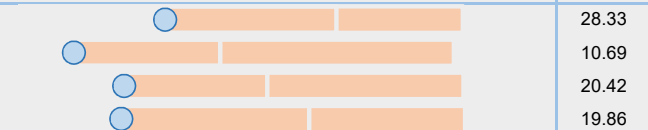
Opportunities (Work & School)

- Employment finding services are 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.



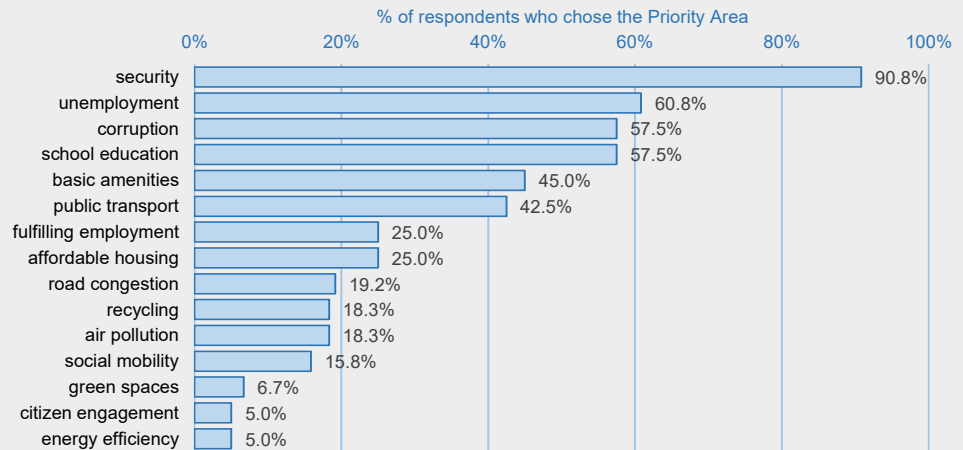
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



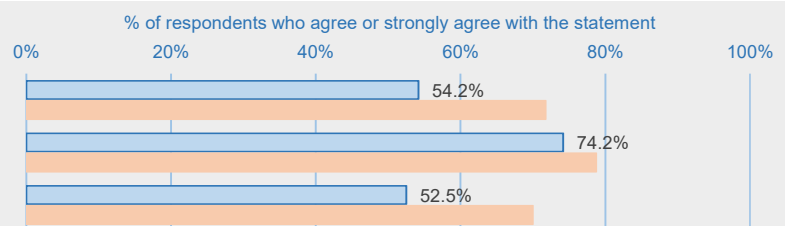
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 22.36 |
| A website or App allows to give away unwanted items to other city residents. | 27.64 |
| Free public wifi has improved access to services. | 27.92 |
| CCTV cameras make residents feel safer. | 33.61 |
| A website or App allows effective monitoring of air pollution. | 22.22 |
| Arranging medical appointments online has improved access. | 29.17 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 41.25 |
| Apps that direct you to an available parking space have reduced journey time. | 37.92 |
| Bicycle hiring has reduced congestion. | 43.75 |
| Online scheduling and ticket sales make public transport easier to use. | 48.19 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 73.33 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 48.61 |
| IT skills are taught well in schools. | 24.58 |
| Online services provided by the city has made it easier to start a new business. | 36.94 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 19.17 |
| Online voting has increased participation. | 33.75 |
| An online platform where residents can propose ideas has improved city life. | 27.22 |
| Processing Identification Documents online has reduced waiting times. | 45.69 |

Riyadh

SMART CITY RANKING **71st**
Out of 102

GROUP **3**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.854 | 0.854 | 0.853 |
| Life expectancy at Birth | 74.4 | 74.6 | 74.7 |
| Expected years of schooling | 16.9 | 16.9 | 16.9 |
| Mean years of schooling | 9.5 | 9.5 | 9.5 |
| GNI per capita (PPP \$) | 51,885 | 51,329 | 49,680 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 6,370,000 |
|-------------------------------------|-----------|



STRUCTURES

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

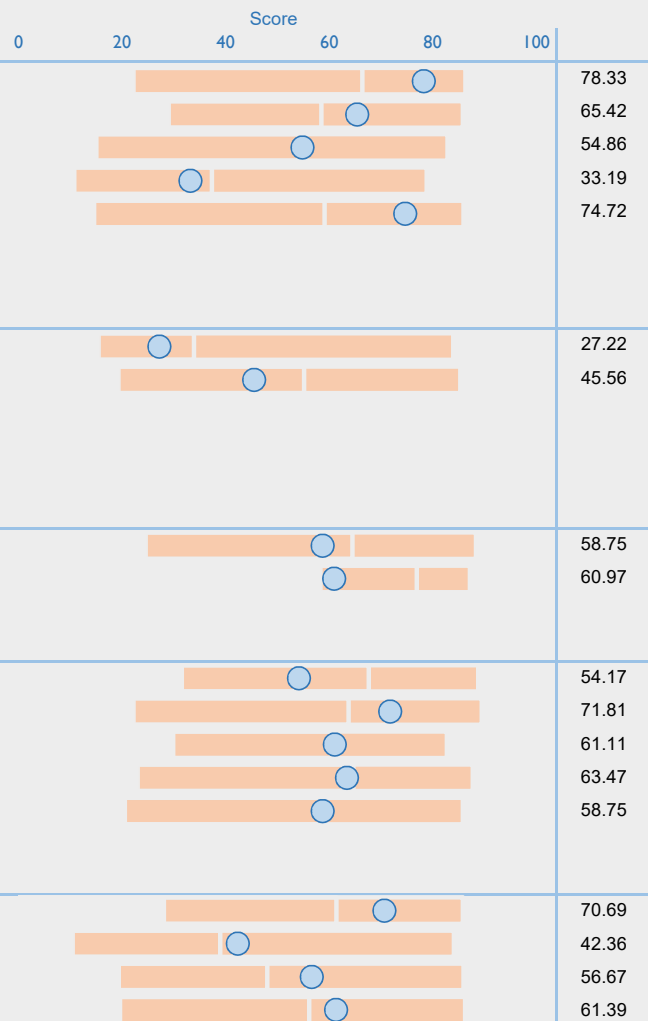
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

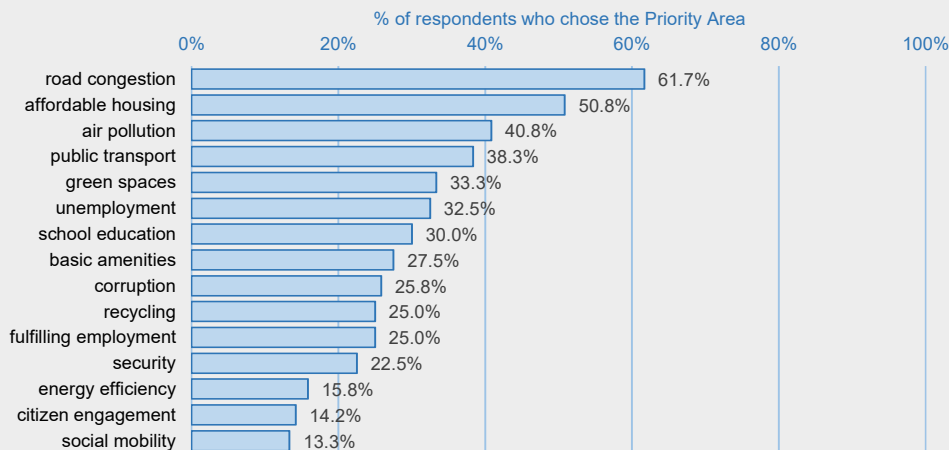
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



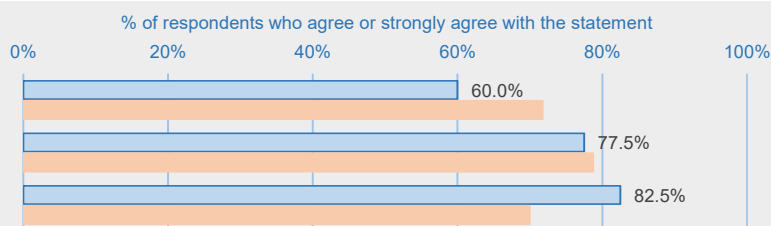
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 73.19 |
| A website or App allows to give away unwanted items to other city residents. | 64.58 |
| Free public wifi has improved access to services. | 62.22 |
| CCTV cameras make residents feel safer. | 73.89 |
| A website or App allows effective monitoring of air pollution. | 53.75 |
| Arranging medical appointments online has improved access. | 75.69 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 61.39 |
| Apps that direct you to an available parking space have reduced journey time. | 61.67 |
| Bicycle hiring has reduced congestion. | 40.42 |
| Online scheduling and ticket sales make public transport easier to use. | 64.03 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 75.56 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 71.53 |
| IT skills are taught well in schools. | 60.83 |
| Online services provided by the city has made it easier to start a new business. | 68.61 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 60.56 |
| Online voting has increased participation. | 59.31 |
| An online platform where residents can propose ideas has improved city life. | 64.72 |
| Processing Identification Documents online has reduced waiting times. | 73.33 |

Rome

SMART CITY RANKING **77th**
Out of 102

GROUP **2**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.876 | 0.878 | 0.880 |
| Life expectancy at Birth | 82.8 | 83.0 | 83.2 |
| Expected years of schooling | 16.3 | 16.3 | 16.3 |
| Mean years of schooling | 10.2 | 10.2 | 10.2 |
| GNI per capita (PPP \$) | 34,115 | 34,733 | 35,299 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 3,718,000 |
|-------------------------------------|-----------|



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STRUCTURES

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

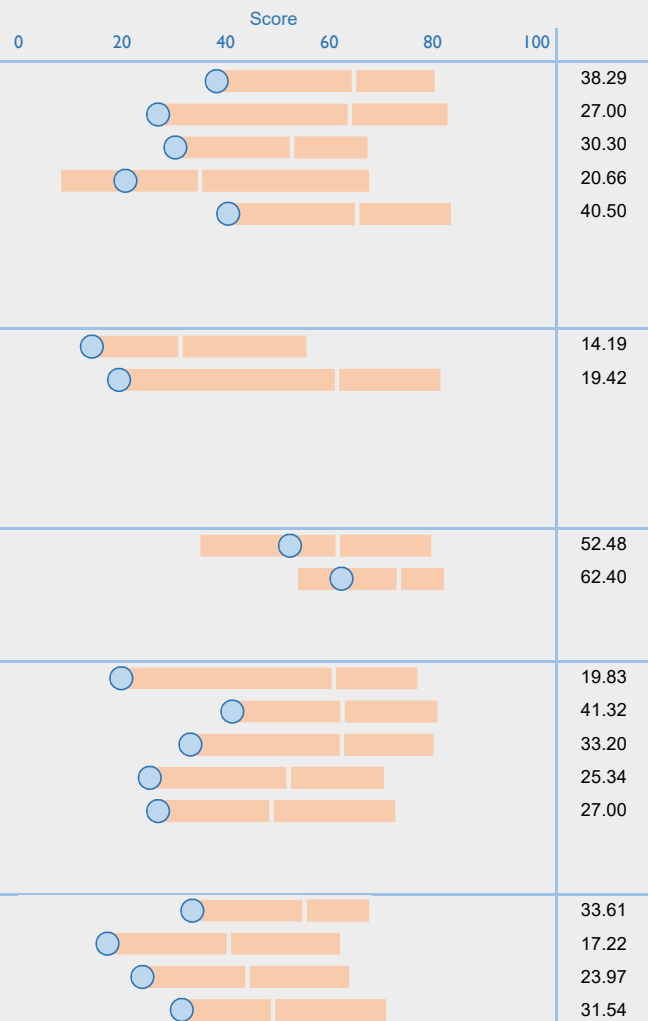
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

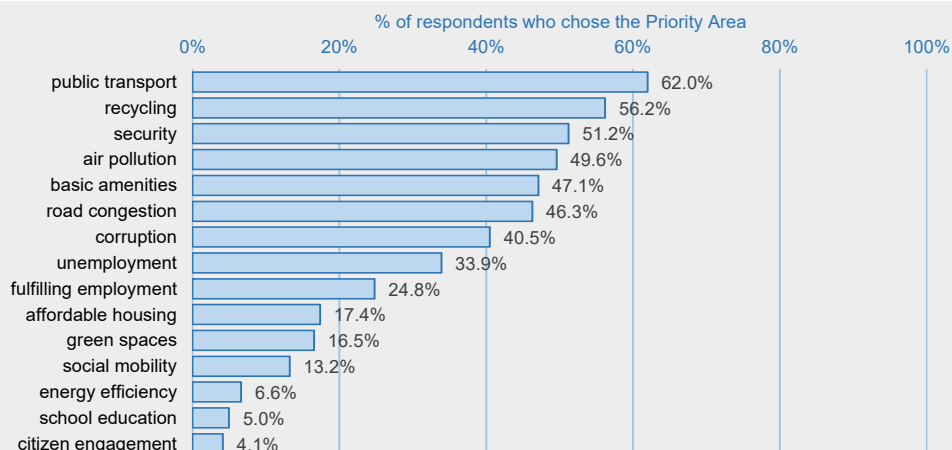
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

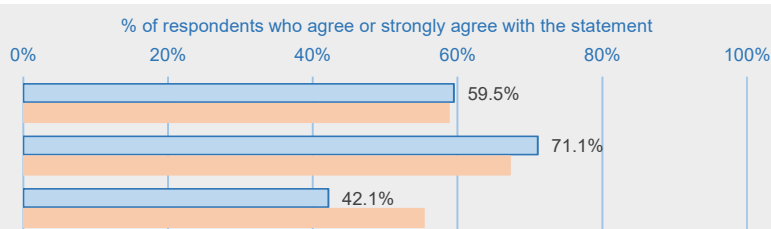


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 36.36 |
| A website or App allows to give away unwanted items to other city residents. | 42.01 |
| Free public wifi has improved access to services. | 42.15 |
| CCTV cameras make residents feel safer. | 45.45 |
| A website or App allows effective monitoring of air pollution. | 35.40 |
| Arranging medical appointments online has improved access. | 53.31 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 36.50 |
| Apps that direct you to an available parking space have reduced journey time. | 34.57 |
| Bicycle hiring has reduced congestion. | 32.09 |
| Online scheduling and ticket sales make public transport easier to use. | 48.21 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 77.55 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 42.15 |
| IT skills are taught well in schools. | 34.71 |
| Online services provided by the city has made it easier to start a new business. | 35.40 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 29.34 |
| Online voting has increased participation. | 30.85 |
| An online platform where residents can propose ideas has improved city life. | 32.51 |
| Processing Identification Documents online has reduced waiting times. | 45.45 |

Rotterdam

| | | | | | |
|---------------------------|---|------------|------------|------------|--------------|
| SMART CITY RANKING | 36th Out of 102 | | | | |
| GROUP | 1 | | | | |
| RATING | BBB From AAA to D | | | | |
| FACTOR RATINGS | <table border="1"> <tr> <td>BBB</td> <td>BBB</td> </tr> <tr> <td>Structures</td> <td>Technologies</td> </tr> </table> | BBB | BBB | Structures | Technologies |
| BBB | BBB | | | | |
| Structures | Technologies | | | | |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.926 | 0.928 | 0.931 |
| Life expectancy at Birth | 81.7 | 81.9 | 82.0 |
| Expected years of schooling | 18.1 | 18.0 | 18.0 |
| Mean years of schooling | 12.1 | 12.1 | 12.2 |
| GNI per capita (PPP \$) | 46,239 | 46,711 | 47,900 |

City

Population (UN World Cities Report) 993,000



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STRUCTURES

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

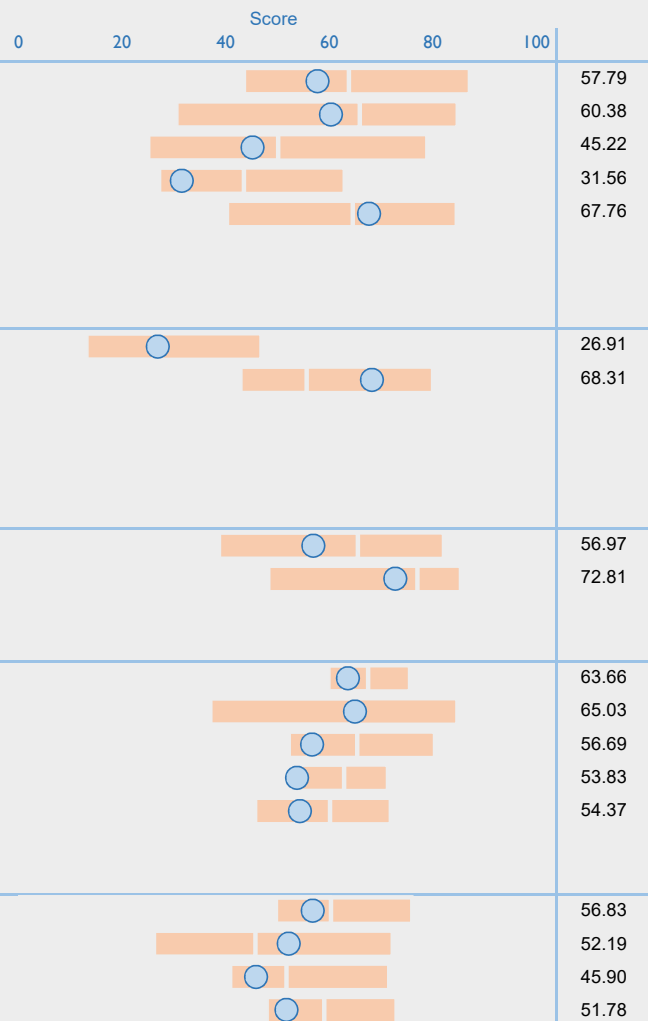
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

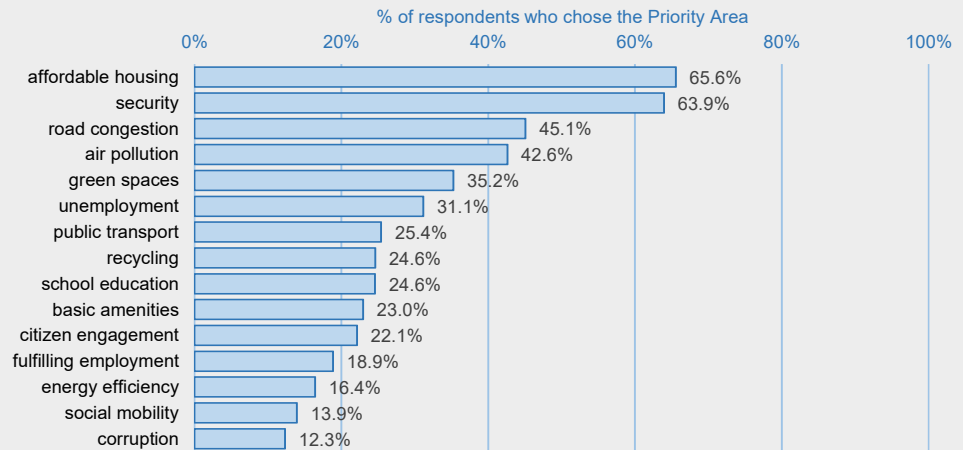
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



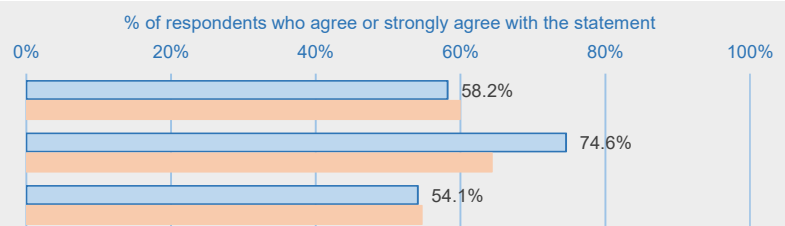
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 50.96 |
| A website or App allows to give away unwanted items to other city residents. | 55.74 |
| Free public wifi has improved access to services. | 56.83 |
| CCTV cameras make residents feel safer. | 58.20 |
| A website or App allows effective monitoring of air pollution. | 38.66 |
| Arranging medical appointments online has improved access. | 56.69 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 34.56 |
| Apps that direct you to an available parking space have reduced journey time. | 42.49 |
| Bicycle hiring has reduced congestion. | 44.67 |
| Online scheduling and ticket sales make public transport easier to use. | 57.92 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 70.22 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 68.58 |
| IT skills are taught well in schools. | 53.96 |
| Online services provided by the city has made it easier to start a new business. | 44.40 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 39.75 |
| Online voting has increased participation. | 41.67 |
| An online platform where residents can propose ideas has improved city life. | 49.45 |
| Processing Identification Documents online has reduced waiting times. | 52.05 |

San Francisco

SMART CITY RANKING **12th**
Out of 102

GROUP **1**

RATING **A**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| A | A |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

City
Population (UN World Cities Report) 3,300,000



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STRUCTURES

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

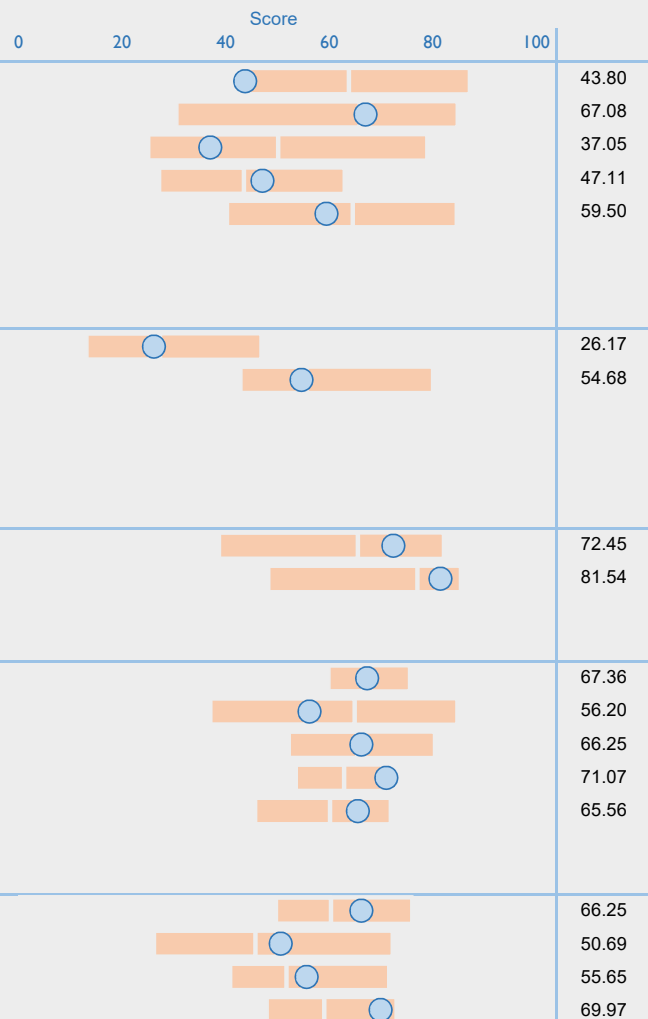
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

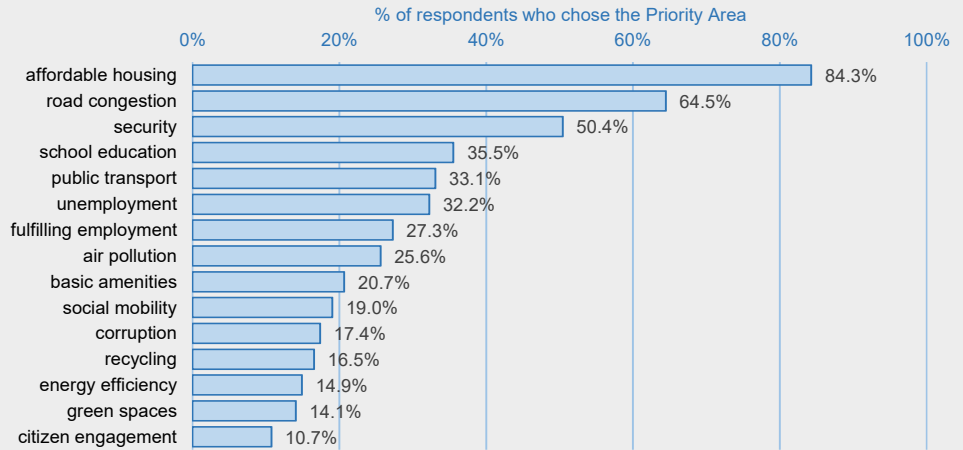
Governance

- 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.



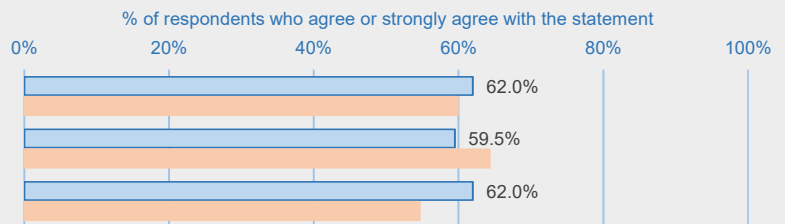
PRIORITY AREAS

From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. 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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 43.53 |
| A website or App allows to give away unwanted items to other city residents. | 62.95 |
| Free public wifi has improved access to services. | 55.10 |
| CCTV cameras make residents feel safer. | 48.48 |
| A website or App allows effective monitoring of air pollution. | 52.48 |
| Arranging medical appointments online has improved access. | 64.05 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 45.45 |
| Apps that direct you to an available parking space have reduced journey time. | 50.14 |
| Bicycle hiring has reduced congestion. | 54.41 |
| Online scheduling and ticket sales make public transport easier to use. | 65.29 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 73.28 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 72.18 |
| IT skills are taught well in schools. | 53.17 |
| Online services provided by the city has made it easier to start a new business. | 55.65 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 46.14 |
| Online voting has increased participation. | 56.20 |
| An online platform where residents can propose ideas has improved city life. | 50.69 |
| Processing Identification Documents online has reduced waiting times. | 56.75 |

Santiago

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 86th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 3 |
|--------------|----------|

| | |
|---------------|----------------------------|
| RATING | CC From AAA to D |
|---------------|----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | CC | CC |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.840 | 0.842 | 0.843 |
| Life expectancy at Birth | 79.3 | 79.5 | 79.7 |
| Expected years of schooling | 16.3 | 16.4 | 16.4 |
| Mean years of schooling | 10.3 | 10.3 | 10.3 |
| GNI per capita (PPP \$) | 21,854 | 21,768 | 21,910 |

| City | Population (UN World Cities Report) |
|----------|-------------------------------------|
| Santiago | 6,507,000 |



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STRUCTURES

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

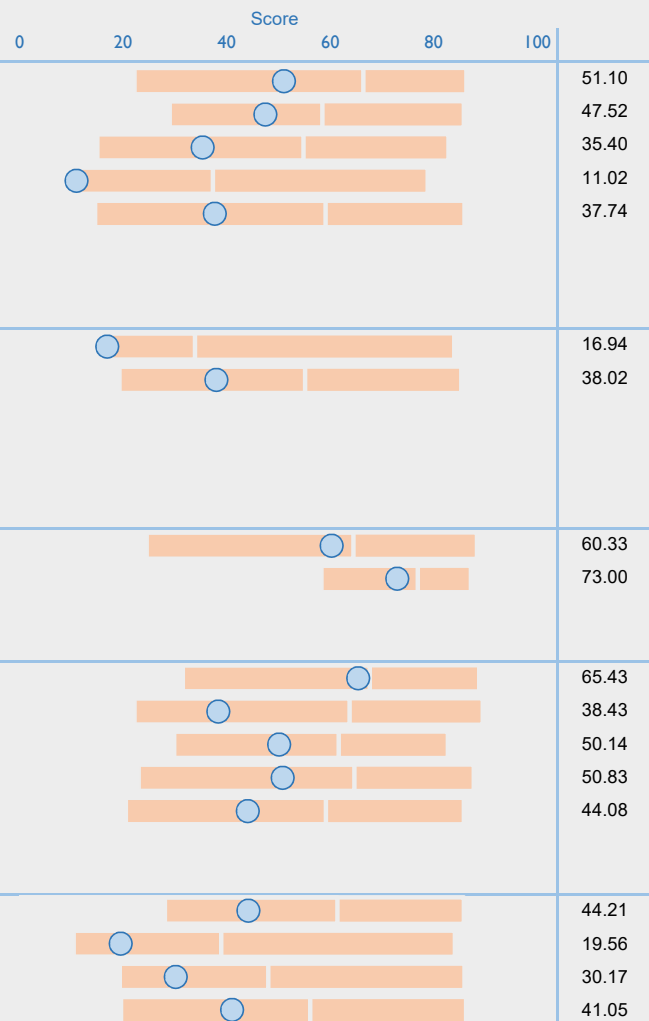
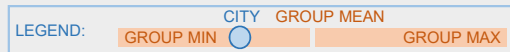
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

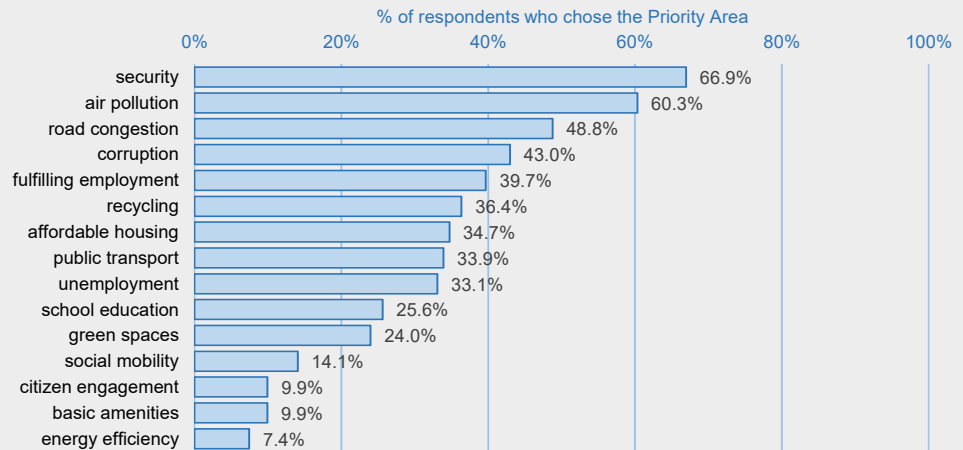
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

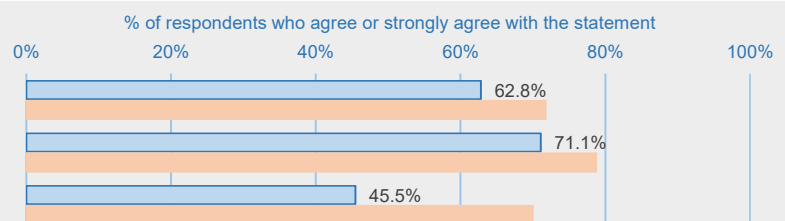


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 47.52 |
| A website or App allows to give away unwanted items to other city residents. | 43.39 |
| Free public wifi has improved access to services. | 63.77 |
| CCTV cameras make residents feel safer. | 60.06 |
| A website or App allows effective monitoring of air pollution. | 39.94 |
| Arranging medical appointments online has improved access. | 68.87 |

Mobility

| Statement | Score |
|---|-------|
| Car-sharing Apps have reduced congestion. | 41.46 |
| Apps that direct you to an available parking space have reduced journey time. | 43.94 |
| Bicycle hiring has reduced congestion. | 53.99 |
| Online scheduling and ticket sales make public transport easier to use. | 54.96 |

Activities

| Statement | Score |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 82.09 |

Opportunities (Work & School)

| Statement | Score |
|--|-------|
| Online access to job listings has made it easier to find work. | 68.18 |
| IT skills are taught well in schools. | 46.28 |
| Online services provided by the city has made it easier to start a new business. | 60.19 |

Governance

| Statement | Score |
|--|-------|
| Online public access to city finances has reduced corruption. | 27.27 |
| Online voting has increased participation. | 25.07 |
| An online platform where residents can propose ideas has improved city life. | 39.53 |
| Processing Identification Documents online has reduced waiting times. | 65.98 |

Sao Paulo

SMART CITY RANKING **90th**
Out of 102

GROUP **3**

RATING **CC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| C | CC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.757 | 0.758 | 0.759 |
| Life expectancy at Birth | 75.3 | 75.5 | 75.7 |
| Expected years of schooling | 15.4 | 15.4 | 15.4 |
| Mean years of schooling | 7.6 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 14,350 | 13,730 | 13,755 |

City

| | |
|-------------------------------------|------------|
| Population (UN World Cities Report) | 21,066,000 |
|-------------------------------------|------------|



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STRUCTURES

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

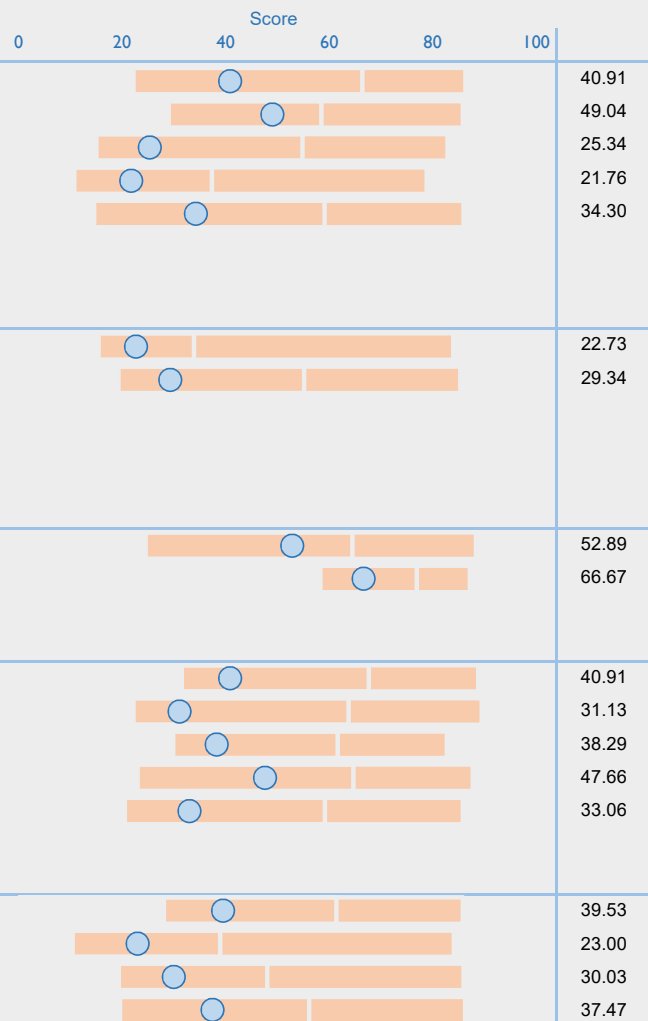
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

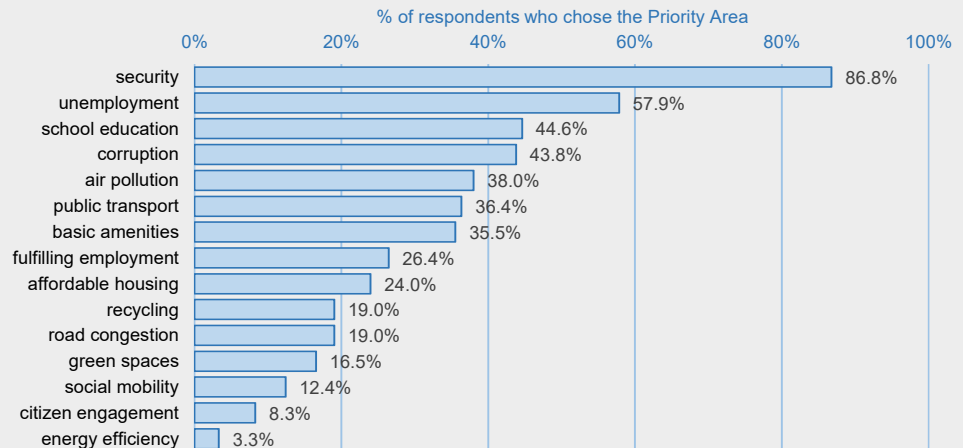
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



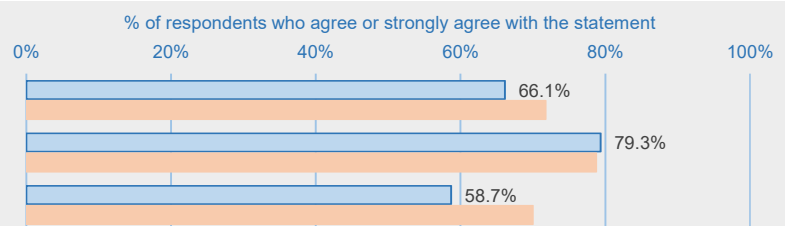
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 39.67 |
| A website or App allows to give away unwanted items to other city residents. | 45.59 |
| Free public wifi has improved access to services. | 54.68 |
| CCTV cameras make residents feel safer. | 46.01 |
| A website or App allows effective monitoring of air pollution. | 40.22 |
| Arranging medical appointments online has improved access. | 53.31 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 44.63 |
| Apps that direct you to an available parking space have reduced journey time. | 49.72 |
| Bicycle hiring has reduced congestion. | 56.89 |
| Online scheduling and ticket sales make public transport easier to use. | 49.45 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 73.69 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 54.68 |
| IT skills are taught well in schools. | 40.50 |
| Online services provided by the city has made it easier to start a new business. | 52.62 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 33.61 |
| Online voting has increased participation. | 53.17 |
| An online platform where residents can propose ideas has improved city life. | 50.69 |
| Processing Identification Documents online has reduced waiting times. | 61.98 |

Seattle

SMART CITY RANKING **34th**
Out of 102

GROUP **1**

RATING **B B B**
From AAA to D

FACTOR RATINGS

| | |
|--------------|--------------|
| B B B | B B B |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 3,249,000 |
|-------------------------------------|-----------|



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STRUCTURES

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

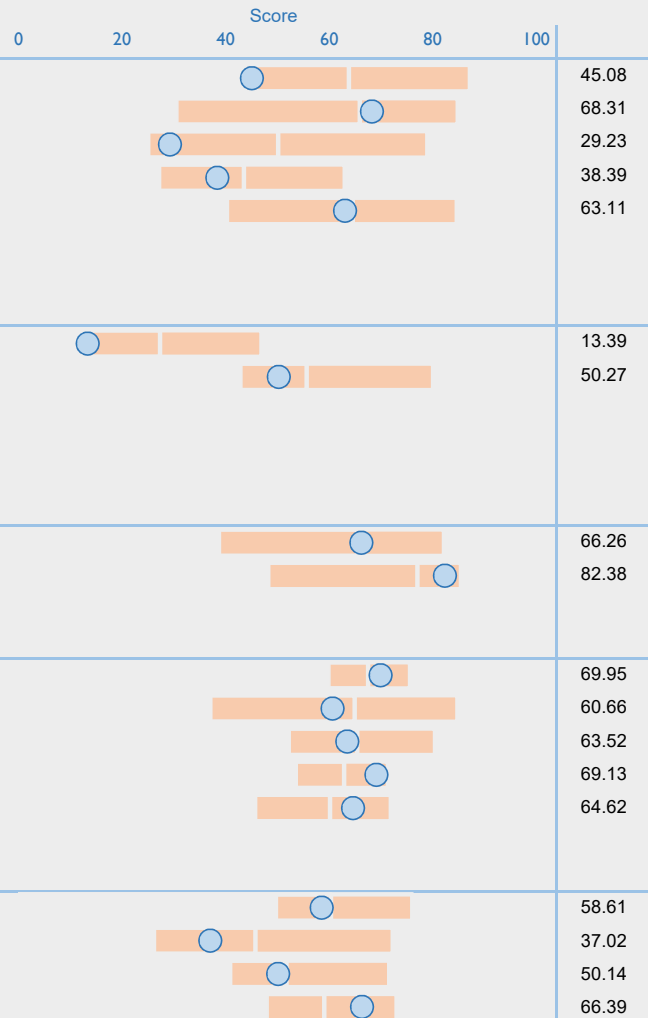
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

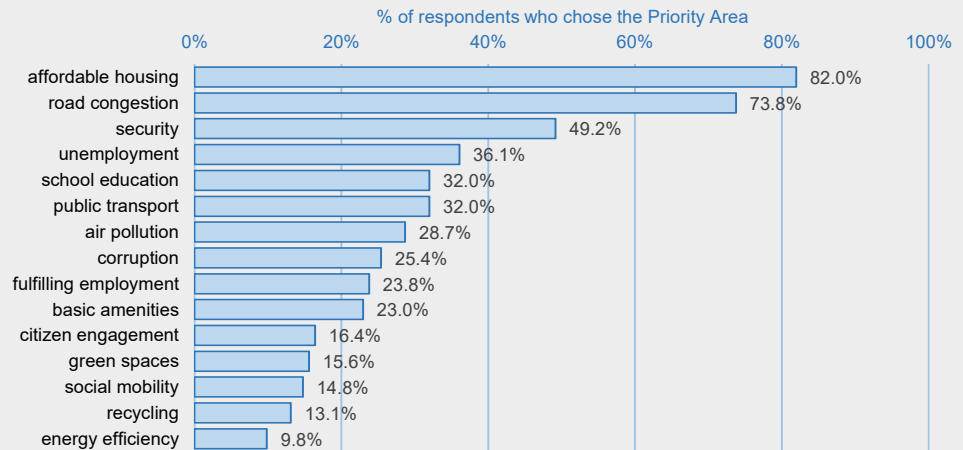
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

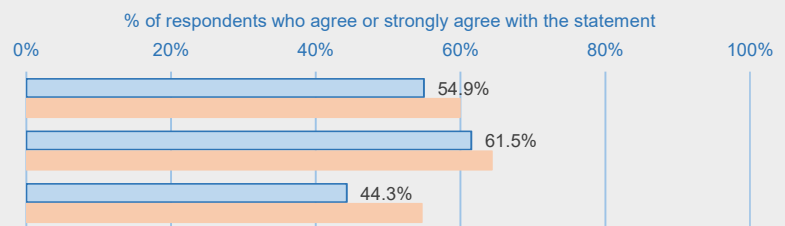


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 44.26 |
| A website or App allows to give away unwanted items to other city residents. | 68.58 |
| Free public wifi has improved access to services. | 53.96 |
| CCTV cameras make residents feel safer. | 41.26 |
| A website or App allows effective monitoring of air pollution. | 36.07 |
| Arranging medical appointments online has improved access. | 67.21 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 42.62 |
| Apps that direct you to an available parking space have reduced journey time. | 36.61 |
| Bicycle hiring has reduced congestion. | 39.07 |
| Online scheduling and ticket sales make public transport easier to use. | 54.37 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 76.09 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 72.40 |
| IT skills are taught well in schools. | 50.96 |
| Online services provided by the city has made it easier to start a new business. | 47.54 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 33.06 |
| Online voting has increased participation. | 51.91 |
| An online platform where residents can propose ideas has improved city life. | 45.22 |
| Processing Identification Documents online has reduced waiting times. | 54.23 |

Seoul

| | | | | | |
|---------------------------|--|-----------|------------|------------|--------------|
| SMART CITY RANKING | 47th Out of 102 | | | | |
| GROUP | 2 | | | | |
| RATING | BB From AAA to D | | | | |
| FACTOR RATINGS | <table border="1"> <tr> <td>BB</td> <td>BBB</td> </tr> <tr> <td>Structures</td> <td>Technologies</td> </tr> </table> | BB | BBB | Structures | Technologies |
| BB | BBB | | | | |
| Structures | Technologies | | | | |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.898 | 0.900 | 0.903 |
| Life expectancy at Birth | 81.9 | 82.2 | 82.4 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 12.1 | 12.1 | 12.1 |
| GNI per capita (PPP \$) | 34,276 | 35,122 | 35,945 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Seoul | 9,774,000 |



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STRUCTURES

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

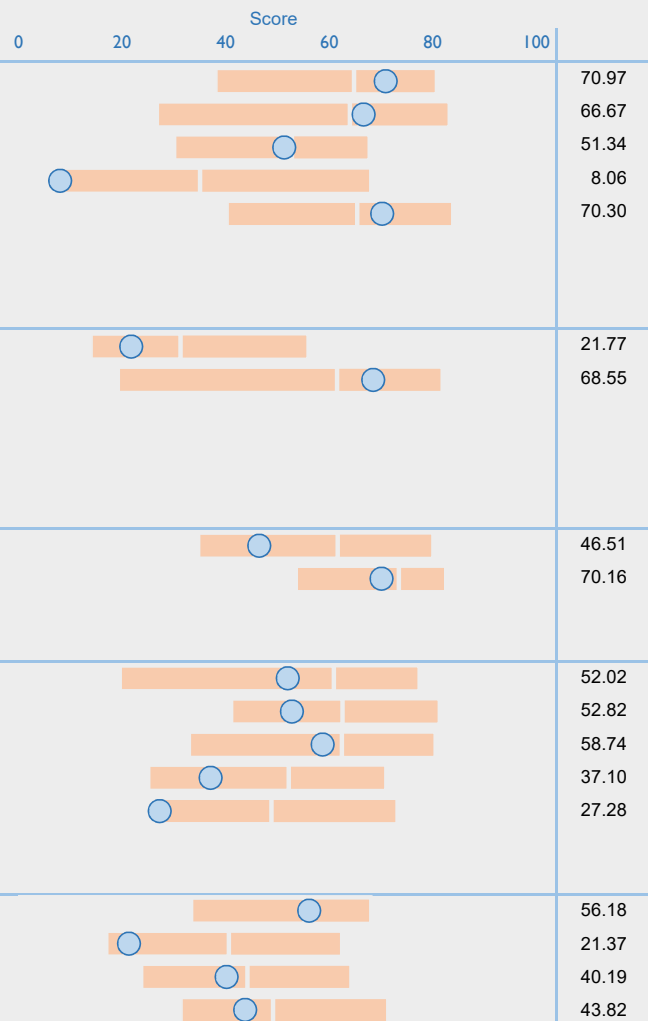
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

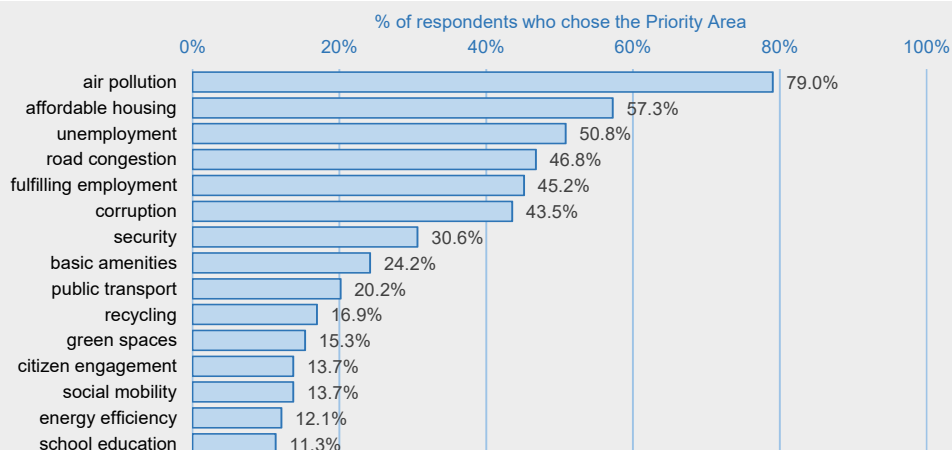
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



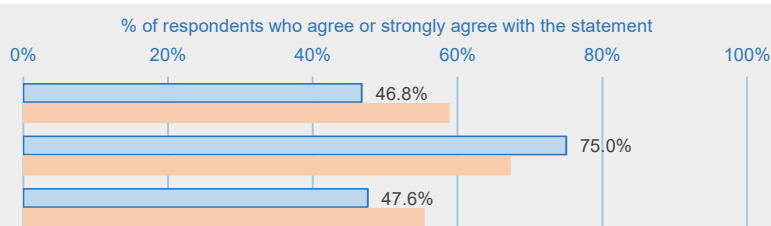
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 64.78 |
| A website or App allows to give away unwanted items to other city residents. | 68.01 |
| Free public wifi has improved access to services. | 73.79 |
| CCTV cameras make residents feel safer. | 72.58 |
| A website or App allows effective monitoring of air pollution. | 66.40 |
| Arranging medical appointments online has improved access. | 60.89 |

Mobility

| Statement | Score |
|---|-------|
| Car-sharing Apps have reduced congestion. | 42.20 |
| Apps that direct you to an available parking space have reduced journey time. | 47.72 |
| Bicycle hiring has reduced congestion. | 49.87 |
| Online scheduling and ticket sales make public transport easier to use. | 75.94 |

Activities

| Statement | Score |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 84.41 |

Opportunities (Work & School)

| Statement | Score |
|--|-------|
| Online access to job listings has made it easier to find work. | 69.35 |
| IT skills are taught well in schools. | 62.23 |
| Online services provided by the city has made it easier to start a new business. | 55.91 |

Governance

| Statement | Score |
|--|-------|
| Online public access to city finances has reduced corruption. | 39.52 |
| Online voting has increased participation. | 57.39 |
| An online platform where residents can propose ideas has improved city life. | 50.94 |
| Processing Identification Documents online has reduced waiting times. | 74.73 |

Shanghai

| | | |
|---------------------------|--------------------------------------|----------------------------|
| SMART CITY RANKING | 59th Out of 102 | |
| GROUP | 3 | |
| RATING | B From AAA to D | |
| FACTOR RATINGS | B Structures | B B Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

City

Population (UN World Cities Report) 23,741,000



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STRUCTURES

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

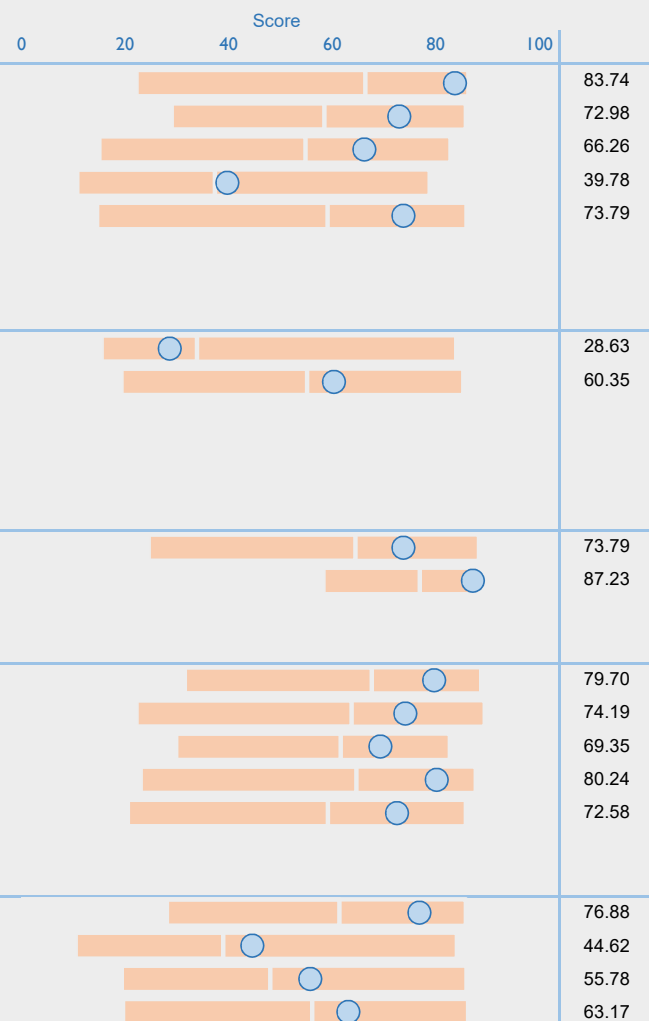
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

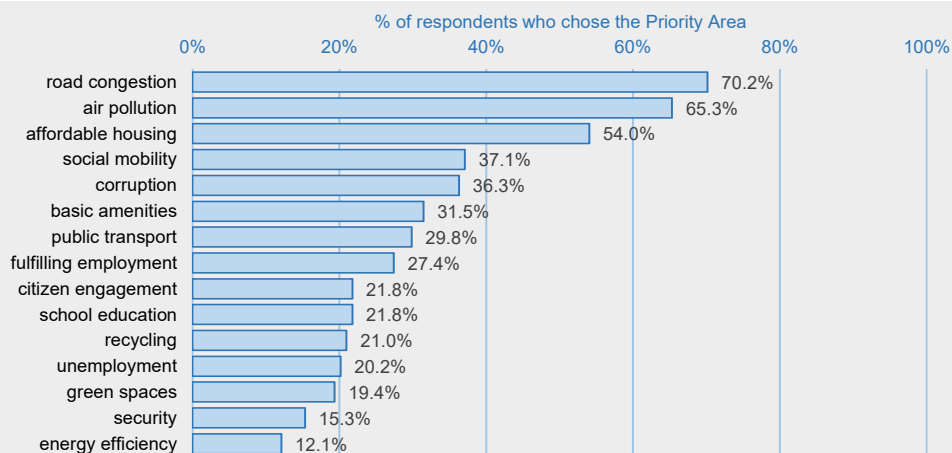
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



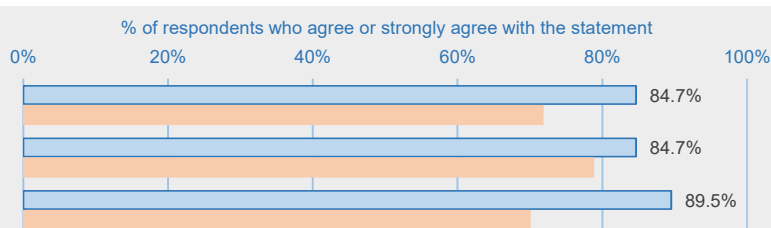
ATTITUDES

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You are comfortable with face recognition technologies to lower crime

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 84.41 |
| A website or App allows to give away unwanted items to other city residents. | 71.91 |
| Free public wifi has improved access to services. | 82.12 |
| CCTV cameras make residents feel safer. | 81.99 |
| A website or App allows effective monitoring of air pollution. | 79.44 |
| Arranging medical appointments online has improved access. | 84.95 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 61.16 |
| Apps that direct you to an available parking space have reduced journey time. | 81.05 |
| Bicycle hiring has reduced congestion. | 73.79 |
| Online scheduling and ticket sales make public transport easier to use. | 91.53 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 95.16 |
|---|-------|

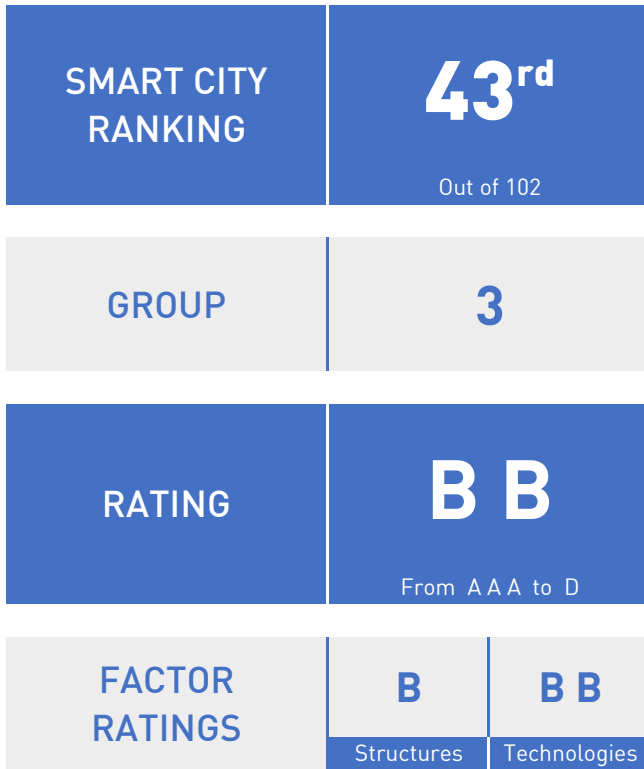
Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 87.37 |
| IT skills are taught well in schools. | 85.35 |
| Online services provided by the city has made it easier to start a new business. | 84.41 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 74.46 |
| Online voting has increased participation. | 71.24 |
| An online platform where residents can propose ideas has improved city life. | 81.05 |
| Processing Identification Documents online has reduced waiting times. | 82.80 |

Shenzhen



BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

City

Population (UN World Cities Report) 10,749,000



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STRUCTURES

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

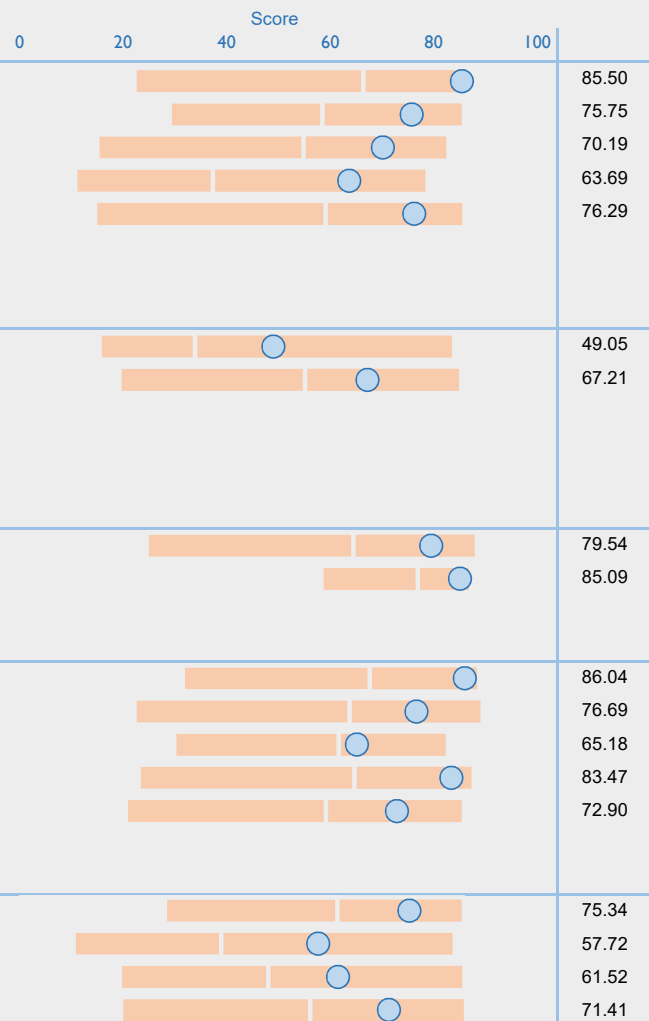
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

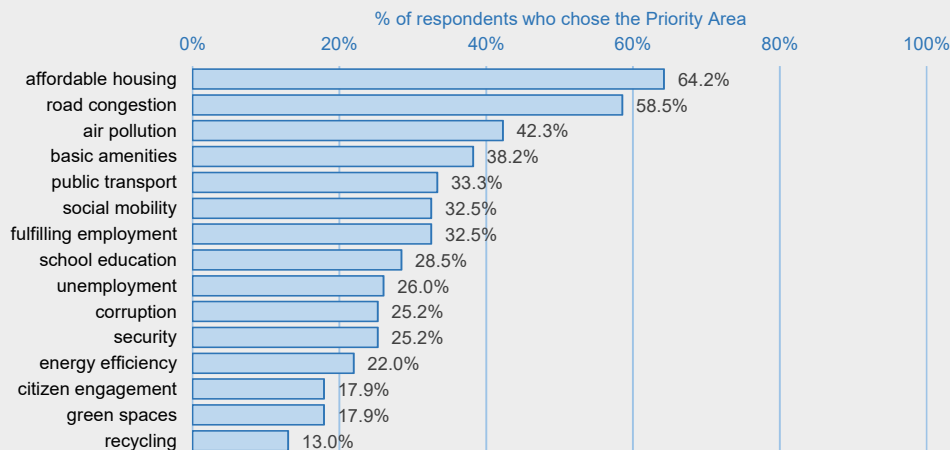
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



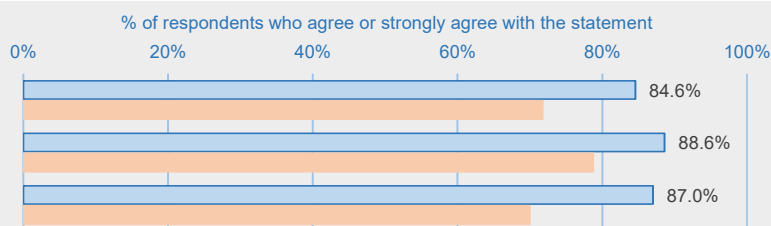
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 88.35 |
| A website or App allows to give away unwanted items to other city residents. | 76.96 |
| Free public wifi has improved access to services. | 79.00 |
| CCTV cameras make residents feel safer. | 86.18 |
| A website or App allows effective monitoring of air pollution. | 77.10 |
| Arranging medical appointments online has improved access. | 91.46 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 65.18 |
| Apps that direct you to an available parking space have reduced journey time. | 76.96 |
| Bicycle hiring has reduced congestion. | 74.53 |
| Online scheduling and ticket sales make public transport easier to use. | 91.87 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 93.63 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 91.06 |
| IT skills are taught well in schools. | 84.15 |
| Online services provided by the city has made it easier to start a new business. | 87.26 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 73.98 |
| Online voting has increased participation. | 72.36 |
| An online platform where residents can propose ideas has improved city life. | 79.27 |
| Processing Identification Documents online has reduced waiting times. | 87.67 |

Singapore

| | |
|---------------------------|-------------------------------------|
| SMART CITY RANKING | 1st Out of 102 |
|---------------------------|-------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | AAA From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | AAA | AAA |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.929 | 0.930 | 0.932 |
| Life expectancy at Birth | 82.8 | 83.0 | 83.2 |
| Expected years of schooling | 16.1 | 16.1 | 16.2 |
| Mean years of schooling | 11.5 | 11.5 | 11.5 |
| GNI per capita (PPP \$) | 78,742 | 78,427 | 82,503 |

| City | Population (UN World Cities Report) |
|-----------|-------------------------------------|
| Singapore | 5,619,000 |



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STRUCTURES

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

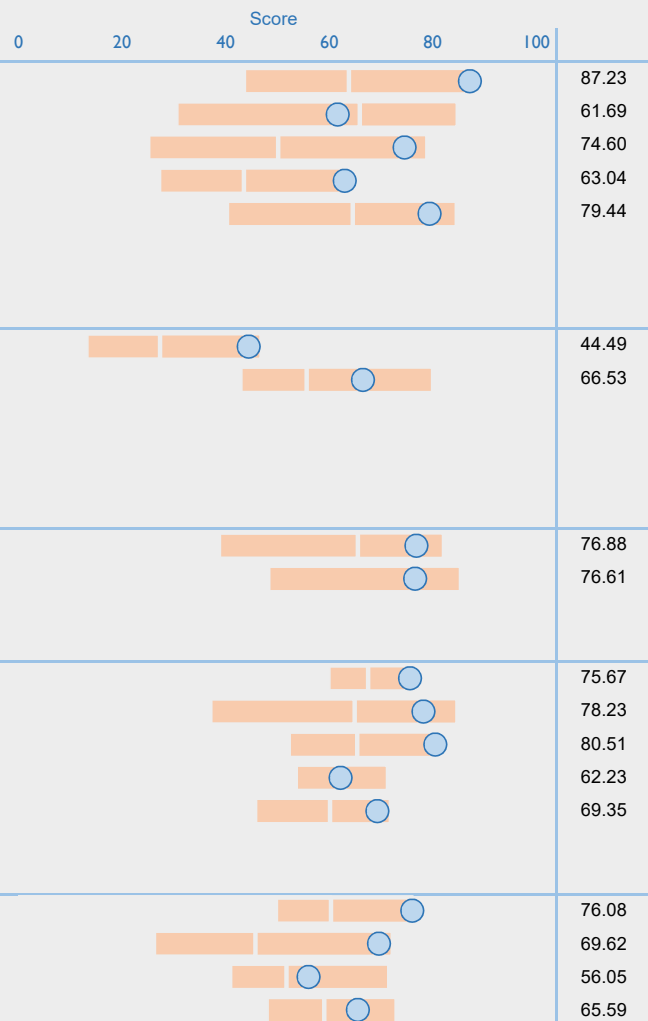
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

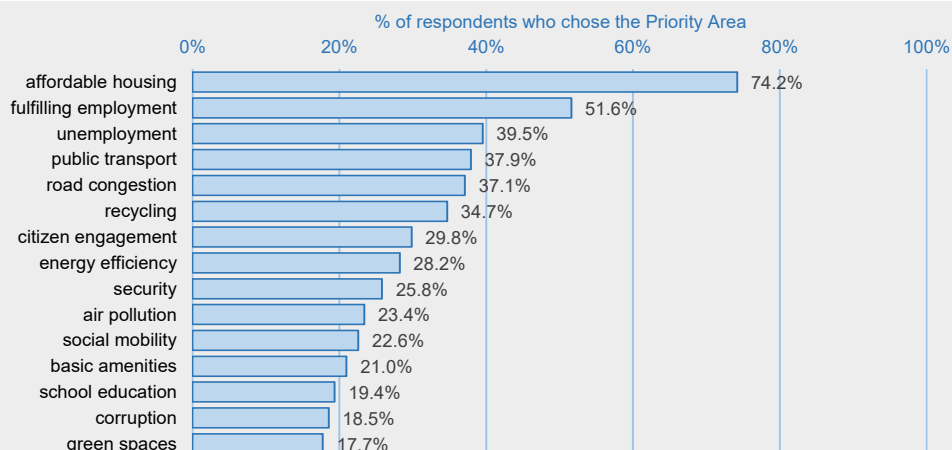
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

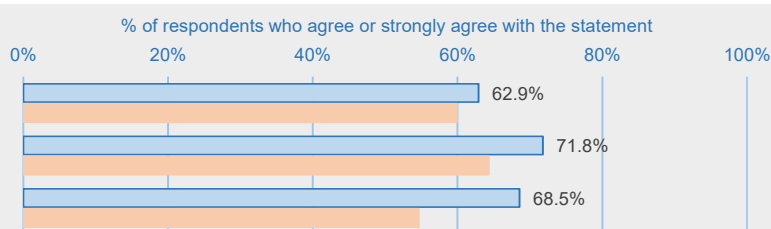


ATTITUDES

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



LEGEND: GROUP MEAN CITY

TECHNOLOGIES

LEGEND: GROUP MIN CITY GROUP MEAN GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 69.89 |
| A website or App allows to give away unwanted items to other city residents. | 61.96 |
| Free public wifi has improved access to services. | 72.58 |
| CCTV cameras make residents feel safer. | 80.11 |
| A website or App allows effective monitoring of air pollution. | 67.20 |
| Arranging medical appointments online has improved access. | 78.90 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 55.91 |
| Apps that direct you to an available parking space have reduced journey time. | 56.05 |
| Bicycle hiring has reduced congestion. | 45.30 |
| Online scheduling and ticket sales make public transport easier to use. | 65.46 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 85.48 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 82.53 |
| IT skills are taught well in schools. | 68.82 |
| Online services provided by the city has made it easier to start a new business. | 66.94 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 54.97 |
| Online voting has increased participation. | 52.69 |
| An online platform where residents can propose ideas has improved city life. | 60.08 |
| Processing Identification Documents online has reduced waiting times. | 81.59 |

Sofia



BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.807 | 0.810 | 0.813 |
| Life expectancy at Birth | 74.6 | 74.7 | 74.9 |
| Expected years of schooling | 15.1 | 14.8 | 14.8 |
| Mean years of schooling | 11.8 | 11.8 | 11.8 |
| GNI per capita (PPP \$) | 16,663 | 17,759 | 18,740 |

City

Population (UN World Cities Report) 1,226,000



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STRUCTURES

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

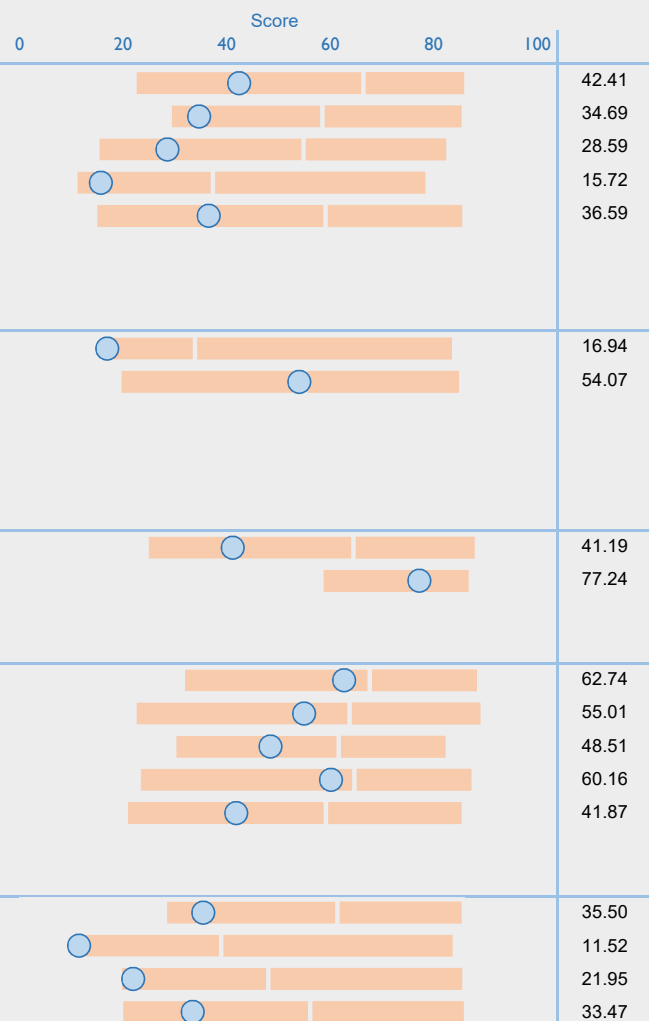
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

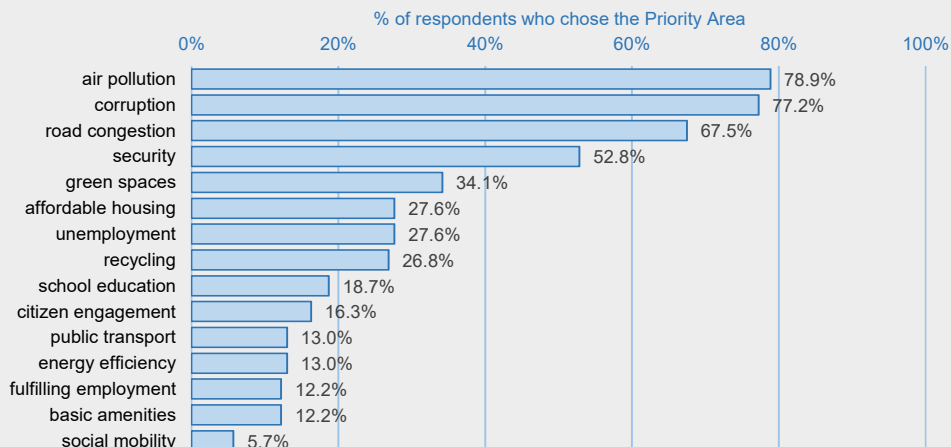
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



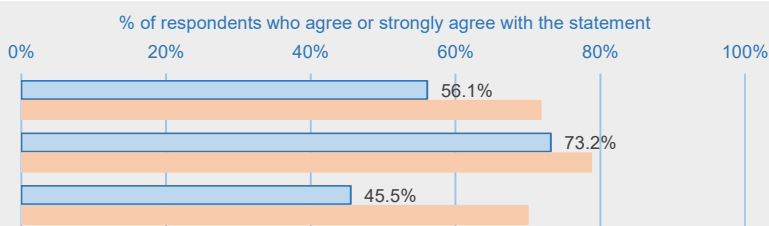
ATTITUDES

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You are comfortable with face recognition technologies to lower crime

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 37.53 |
| A website or App allows to give away unwanted items to other city residents. | 51.49 |
| Free public wifi has improved access to services. | 59.08 |
| CCTV cameras make residents feel safer. | 53.66 |
| A website or App allows effective monitoring of air pollution. | 57.18 |
| Arranging medical appointments online has improved access. | 44.04 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 32.93 |
| Apps that direct you to an available parking space have reduced journey time. | 38.89 |
| Bicycle hiring has reduced congestion. | 35.50 |
| Online scheduling and ticket sales make public transport easier to use. | 54.34 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 78.32 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 77.24 |
| IT skills are taught well in schools. | 57.05 |
| Online services provided by the city has made it easier to start a new business. | 49.05 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 24.25 |
| Online voting has increased participation. | 31.17 |
| An online platform where residents can propose ideas has improved city life. | 36.31 |
| Processing Identification Documents online has reduced waiting times. | 51.63 |

St. Petersburg

SMART CITY RANKING **73rd**
Out of 102

GROUP **3**

RATING **CCC**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| CCC | CCC |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.813 | 0.815 | 0.816 |
| Life expectancy at Birth | 70.9 | 71.1 | 71.2 |
| Expected years of schooling | 15.4 | 15.5 | 15.5 |
| Mean years of schooling | 12.0 | 12.0 | 12.0 |
| GNI per capita (PPP \$) | 23,909 | 23,843 | 24,233 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 4,993,000 |
|-------------------------------------|-----------|



STRUCTURES

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

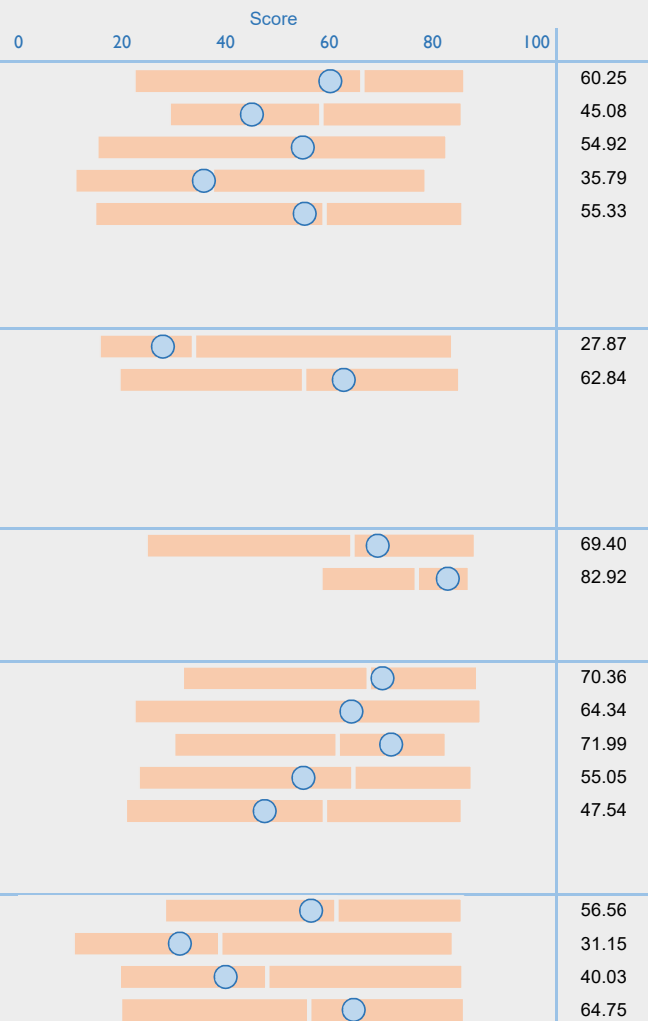
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

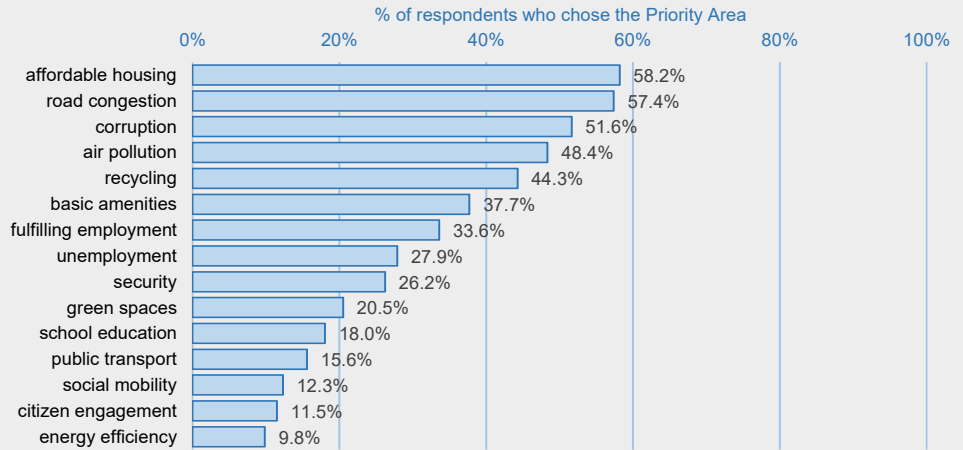
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

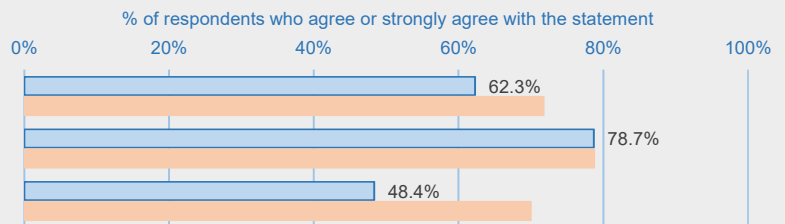


ATTITUDES

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



LEGEND: GROUP MEAN CITY

TECHNOLOGIES

LEGEND: GROUP MIN CITY GROUP MEAN GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 63.39 |
| A website or App allows to give away unwanted items to other city residents. | 62.70 |
| Free public wifi has improved access to services. | 55.19 |
| CCTV cameras make residents feel safer. | 64.07 |
| A website or App allows effective monitoring of air pollution. | 44.54 |
| Arranging medical appointments online has improved access. | 66.12 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 41.39 |
| Apps that direct you to an available parking space have reduced journey time. | 62.30 |
| Bicycle hiring has reduced congestion. | 43.85 |
| Online scheduling and ticket sales make public transport easier to use. | 71.58 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 84.15 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 81.15 |
| IT skills are taught well in schools. | 57.24 |
| Online services provided by the city has made it easier to start a new business. | 56.97 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 37.30 |
| Online voting has increased participation. | 51.64 |
| An online platform where residents can propose ideas has improved city life. | 53.01 |
| Processing Identification Documents online has reduced waiting times. | 72.54 |

Stockholm

| | | | | | |
|---------------------------|---|----------|--------------|------------|--------------|
| SMART CITY RANKING | 25th Out of 102 | | | | |
| GROUP | 1 | | | | |
| RATING | B B B From AAA to D | | | | |
| FACTOR RATINGS | <table border="1"> <tr> <td>A</td> <td>B B B</td> </tr> <tr> <td>Structures</td> <td>Technologies</td> </tr> </table> | A | B B B | Structures | Technologies |
| A | B B B | | | | |
| Structures | Technologies | | | | |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.929 | 0.932 | 0.933 |
| Life expectancy at Birth | 82.3 | 82.5 | 82.6 |
| Expected years of schooling | 17.6 | 17.6 | 17.6 |
| Mean years of schooling | 12.4 | 12.4 | 12.4 |
| GNI per capita (PPP \$) | 46,380 | 47,378 | 47,766 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 1,486,000 |
|-------------------------------------|-----------|



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STRUCTURES

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

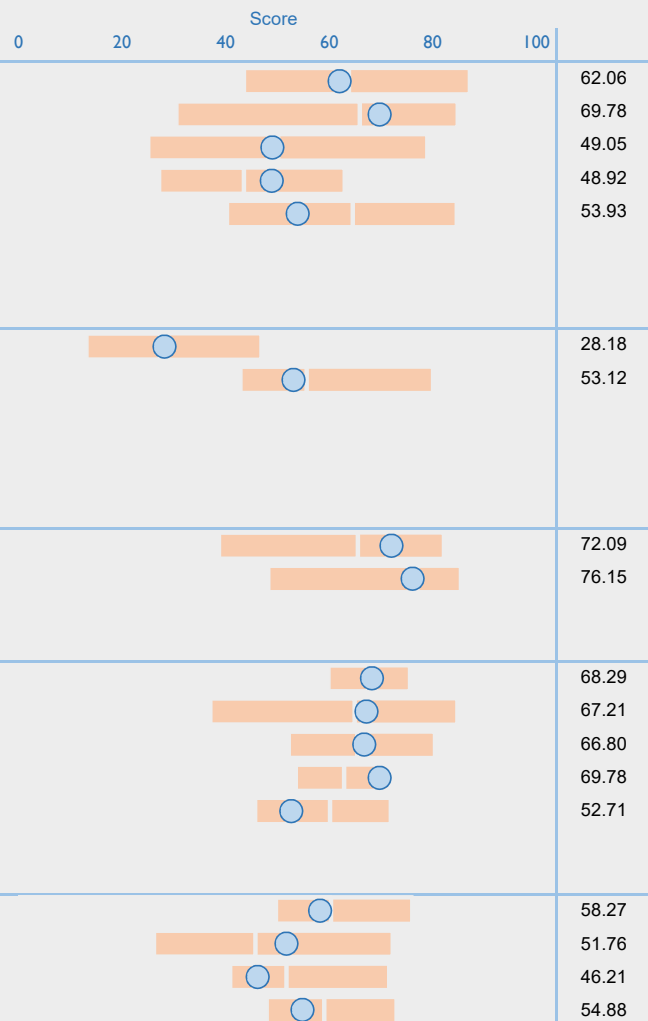
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

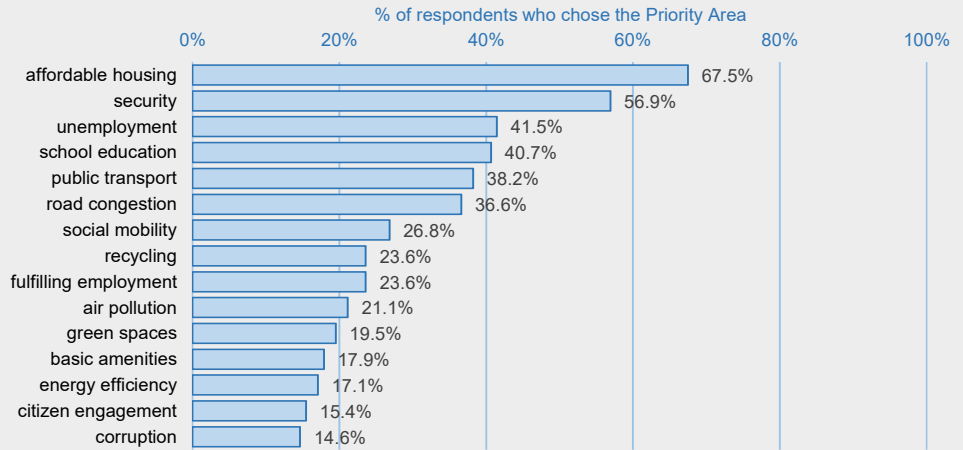
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

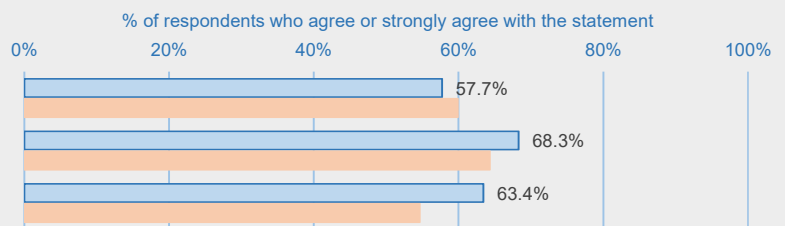


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 49.19 |
| A website or App allows to give away unwanted items to other city residents. | 70.73 |
| Free public wifi has improved access to services. | 58.27 |
| CCTV cameras make residents feel safer. | 48.37 |
| A website or App allows effective monitoring of air pollution. | 35.77 |
| Arranging medical appointments online has improved access. | 62.20 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 27.78 |
| Apps that direct you to an available parking space have reduced journey time. | 40.51 |
| Bicycle hiring has reduced congestion. | 41.73 |
| Online scheduling and ticket sales make public transport easier to use. | 66.40 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 74.53 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 64.09 |
| IT skills are taught well in schools. | 58.13 |
| Online services provided by the city has made it easier to start a new business. | 45.93 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 41.73 |
| Online voting has increased participation. | 37.94 |
| An online platform where residents can propose ideas has improved city life. | 43.77 |
| Processing Identification Documents online has reduced waiting times. | 51.76 |

Sydney

SMART CITY RANKING **14th**
Out of 102

GROUP **1**

RATING **A**
From AAA to D

FACTOR RATINGS **BBB** **A**
Structures Technologies

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.936 | 0.938 | 0.939 |
| Life expectancy at Birth | 82.7 | 82.9 | 83.1 |
| Expected years of schooling | 23.3 | 22.9 | 22.9 |
| Mean years of schooling | 12.8 | 12.9 | 12.9 |
| GNI per capita (PPP \$) | 43,138 | 43,637 | 43,560 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Sydney | 4,505,000 |



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STRUCTURES

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

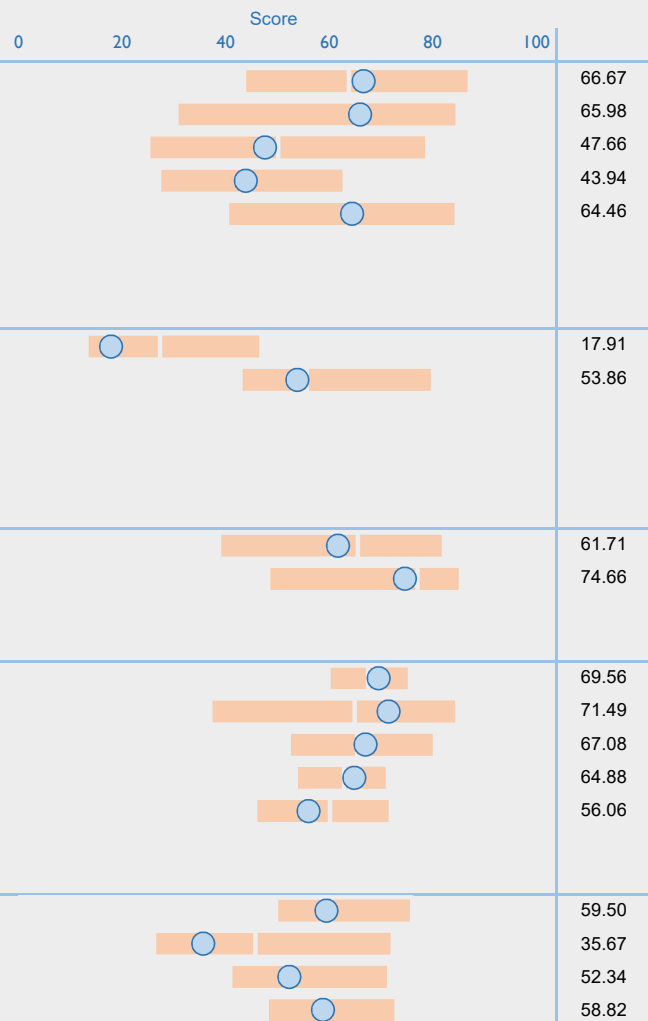
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

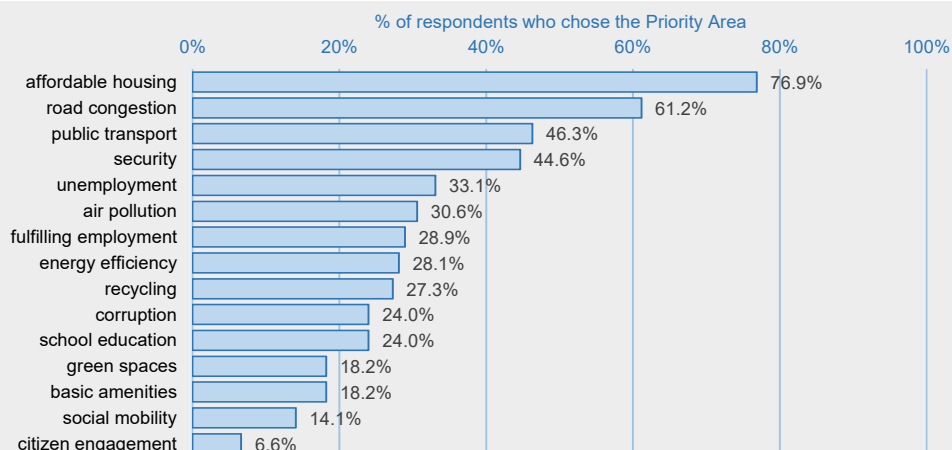
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

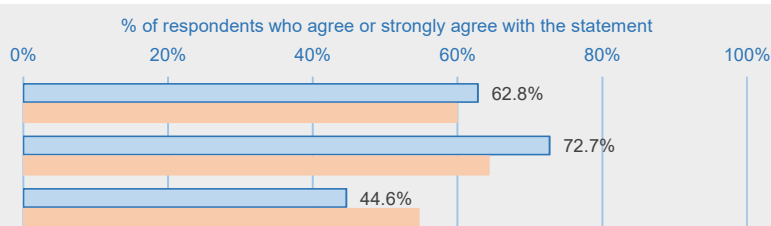


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 53.03 |
| A website or App allows to give away unwanted items to other city residents. | 70.66 |
| Free public wifi has improved access to services. | 58.68 |
| CCTV cameras make residents feel safer. | 61.16 |
| A website or App allows effective monitoring of air pollution. | 40.22 |
| Arranging medical appointments online has improved access. | 62.53 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 44.63 |
| Apps that direct you to an available parking space have reduced journey time. | 44.90 |
| Bicycle hiring has reduced congestion. | 35.26 |
| Online scheduling and ticket sales make public transport easier to use. | 68.46 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 77.82 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 75.34 |
| IT skills are taught well in schools. | 53.17 |
| Online services provided by the city has made it easier to start a new business. | 49.86 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 39.53 |
| Online voting has increased participation. | 56.89 |
| An online platform where residents can propose ideas has improved city life. | 47.66 |
| Processing Identification Documents online has reduced waiting times. | 60.61 |

Taipei City

SMART CITY RANKING **7th**
Out of 102

GROUP **2**

RATING **A**
From AAA to D

FACTOR RATINGS **BBB** **A**
Structures Technologies

BACKGROUND INFORMATION

| Calculation based on UN Methodology | 2015 | 2016 | 2017 |
|-------------------------------------|--------|--------|--------|
| HDI | 0.885 | 0.903 | 0.907 |
| Life expectancy at Birth | 80.2 | 80.0 | 80.4 |
| Expected years of schooling | 16.6 | 16.6 | 16.6 |
| Mean years of schooling | 11.9 | 12.0 | 12.1 |
| GNI per capita (PPP \$) | 45,547 | 46,054 | 47,144 |

City
Population (UN World Cities Report) 2,666,000



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STRUCTURES

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

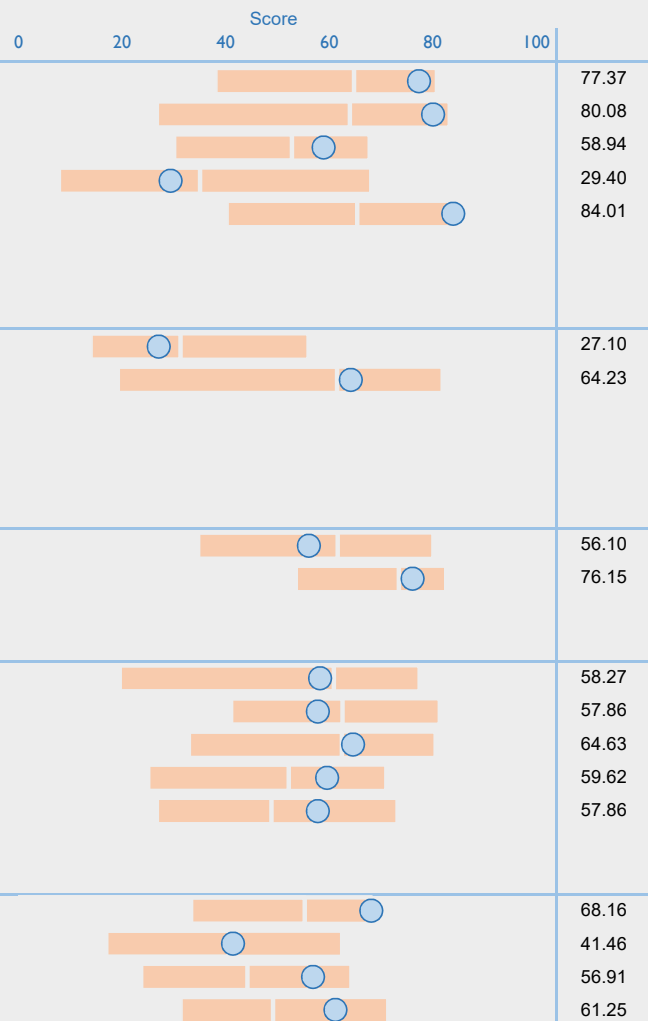
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

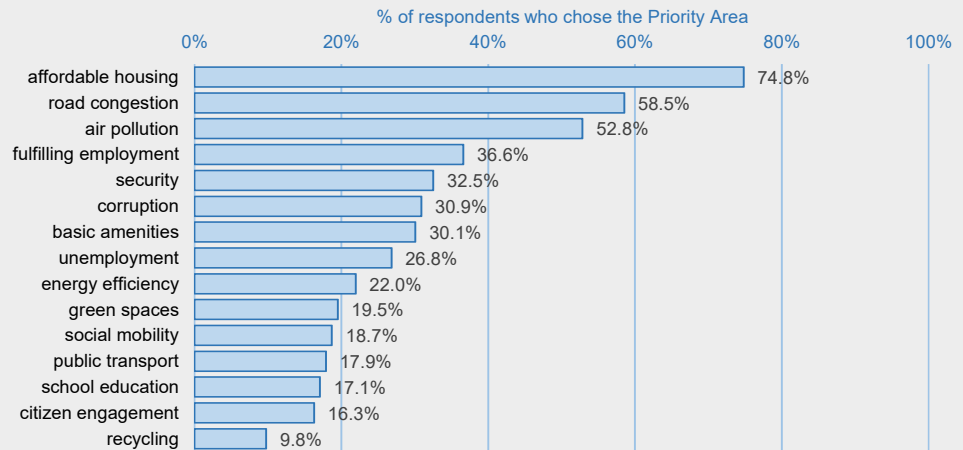
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



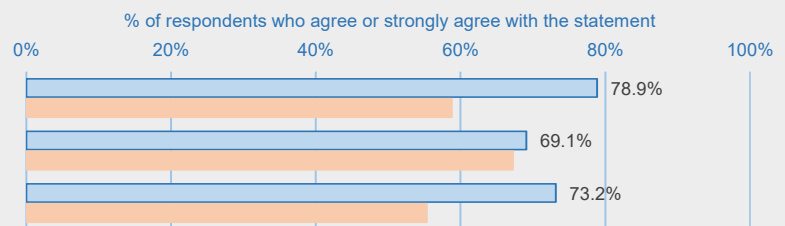
ATTITUDES

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

LEGEND: GROUP MEAN CITY



TECHNOLOGIES

LEGEND: GROUP MIN CITY GROUP MEAN GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 76.29 |
| A website or App allows to give away unwanted items to other city residents. | 74.80 |
| Free public wifi has improved access to services. | 87.26 |
| CCTV cameras make residents feel safer. | 73.04 |
| A website or App allows effective monitoring of air pollution. | 67.48 |
| Arranging medical appointments online has improved access. | 80.49 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 54.61 |
| Apps that direct you to an available parking space have reduced journey time. | 65.45 |
| Bicycle hiring has reduced congestion. | 64.50 |
| Online scheduling and ticket sales make public transport easier to use. | 81.71 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 87.53 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 70.73 |
| IT skills are taught well in schools. | 65.85 |
| Online services provided by the city has made it easier to start a new business. | 70.05 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 70.33 |
| Online voting has increased participation. | 74.12 |
| An online platform where residents can propose ideas has improved city life. | 77.24 |
| Processing Identification Documents online has reduced waiting times. | 73.58 |

Tel Aviv

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 46th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | B B From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.901 | 0.902 | 0.903 |
| Life expectancy at Birth | 82.3 | 82.5 | 82.7 |
| Expected years of schooling | 16.0 | 15.9 | 15.9 |
| Mean years of schooling | 13.0 | 13.0 | 13.0 |
| GNI per capita (PPP \$) | 31,734 | 32,273 | 32,711 |

| City | Population (UN World Cities Report) |
|----------|-------------------------------------|
| Tel Aviv | 3,608,000 |



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STRUCTURES

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

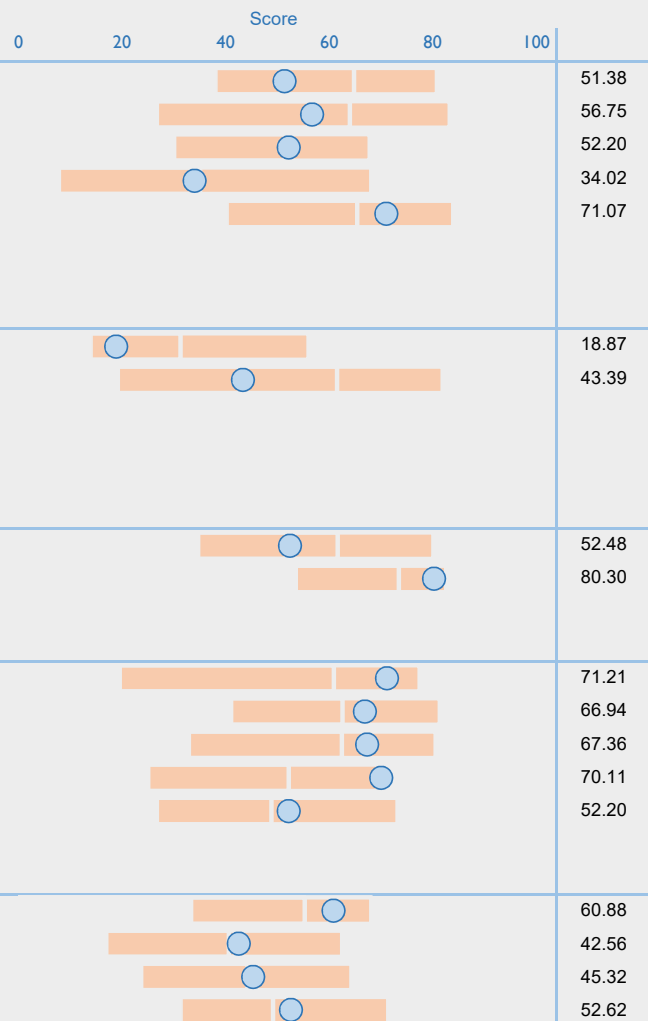
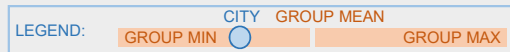
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

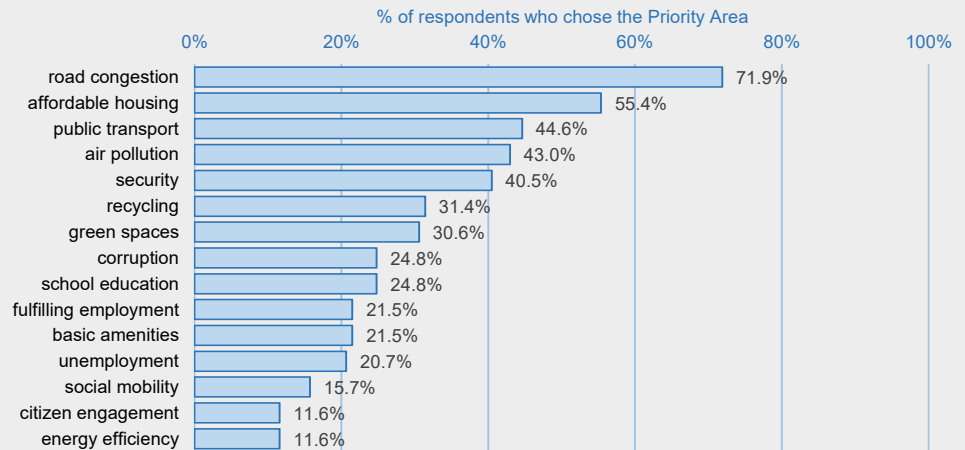
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



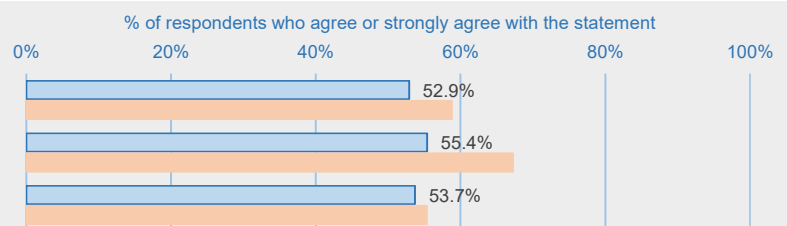
ATTITUDES

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

LEGEND: GROUP MEAN CITY



TECHNOLOGIES

LEGEND: GROUP MIN CITY GROUP MEAN GROUP MAX

Health & Safety

| Statement | Score | Value |
|--|-------|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 59.92 | 59.92 |
| A website or App allows to give away unwanted items to other city residents. | 59.23 | 59.23 |
| Free public wifi has improved access to services. | 58.13 | 58.13 |
| CCTV cameras make residents feel safer. | 48.62 | 48.62 |
| A website or App allows effective monitoring of air pollution. | 31.27 | 31.27 |
| Arranging medical appointments online has improved access. | 72.45 | 72.45 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 38.71 |
| Apps that direct you to an available parking space have reduced journey time. | 50.83 |
| Bicycle hiring has reduced congestion. | 56.20 |
| Online scheduling and ticket sales make public transport easier to use. | 56.34 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 74.66 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 71.21 |
| IT skills are taught well in schools. | 69.28 |
| Online services provided by the city has made it easier to start a new business. | 51.10 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 47.25 |
| Online voting has increased participation. | 45.45 |
| An online platform where residents can propose ideas has improved city life. | 50.55 |
| Processing Identification Documents online has reduced waiting times. | 59.23 |

The Hague

| | | |
|---------------------------|--------------------------------------|----------------------------|
| SMART CITY RANKING | 29th Out of 102 | |
| GROUP | 1 | |
| RATING | B B B From AAA to D | |
| FACTOR RATINGS | A Structures | B B Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.926 | 0.928 | 0.931 |
| Life expectancy at Birth | 81.7 | 81.9 | 82.0 |
| Expected years of schooling | 18.1 | 18.0 | 18.0 |
| Mean years of schooling | 12.1 | 12.1 | 12.2 |
| GNI per capita (PPP \$) | 46,239 | 46,711 | 47,900 |

City

| | |
|-----------------------|---------|
| Population (Eurostat) | 854,000 |
|-----------------------|---------|



STRUCTURES

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

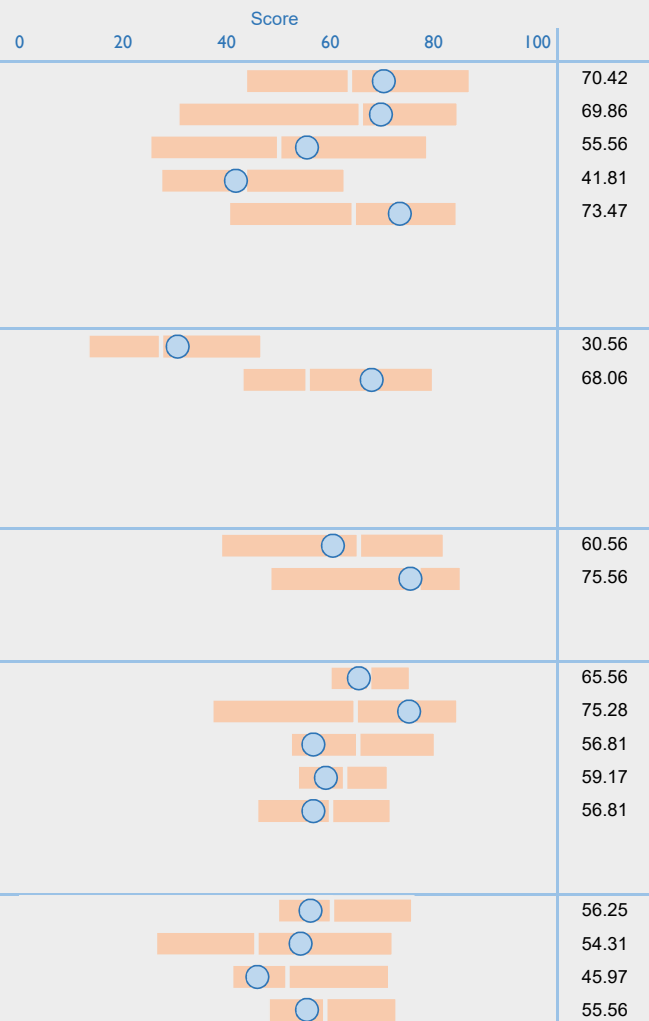
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

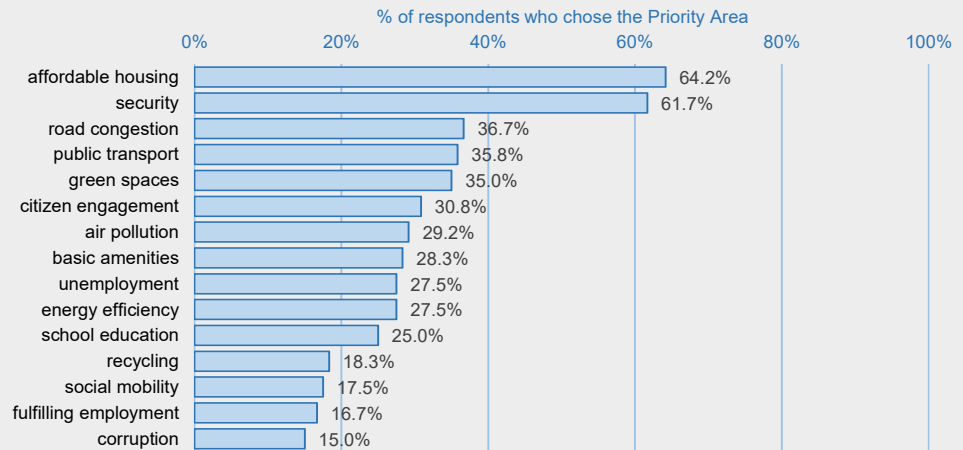
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

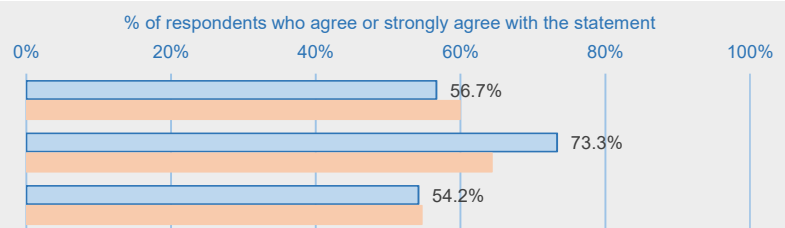


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 55.42 |
| A website or App allows to give away unwanted items to other city residents. | 58.19 |
| Free public wifi has improved access to services. | 46.11 |
| CCTV cameras make residents feel safer. | 55.97 |
| A website or App allows effective monitoring of air pollution. | 30.83 |
| Arranging medical appointments online has improved access. | 65.42 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 32.92 |
| Apps that direct you to an available parking space have reduced journey time. | 35.00 |
| Bicycle hiring has reduced congestion. | 40.28 |
| Online scheduling and ticket sales make public transport easier to use. | 52.92 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 71.67 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 61.25 |
| IT skills are taught well in schools. | 47.50 |
| Online services provided by the city has made it easier to start a new business. | 46.25 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 35.00 |
| Online voting has increased participation. | 40.28 |
| An online platform where residents can propose ideas has improved city life. | 45.00 |
| Processing Identification Documents online has reduced waiting times. | 52.08 |

Tianjin

SMART CITY RANKING **41st**
Out of 102

GROUP **3**

RATING **B B**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| B | B B |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

City

| | |
|-------------------------------------|------------|
| Population (UN World Cities Report) | 11,210,000 |
|-------------------------------------|------------|



STRUCTURES

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

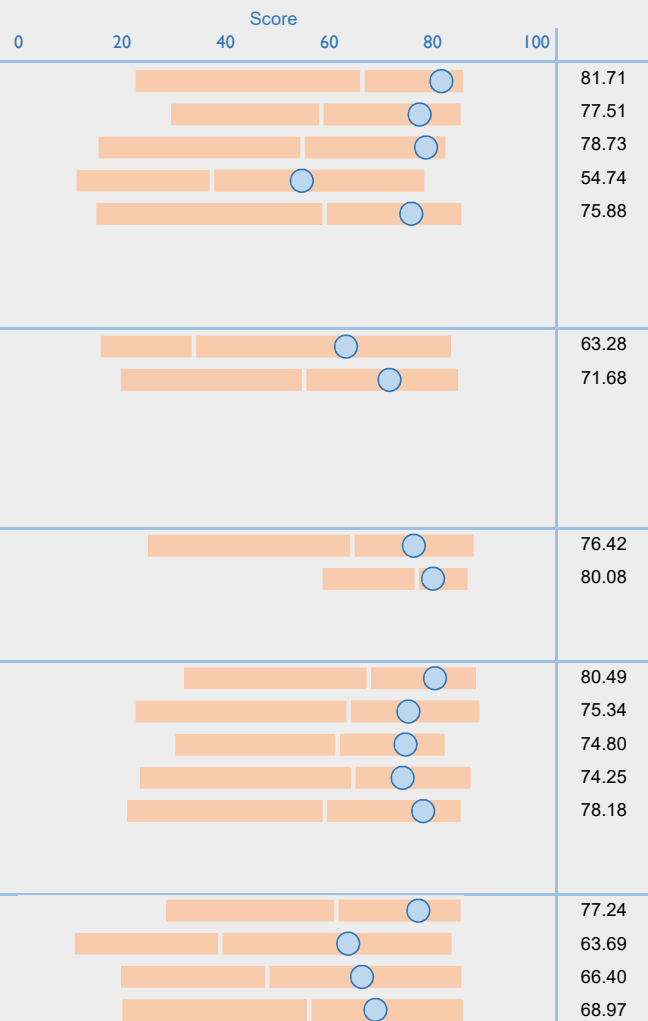
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

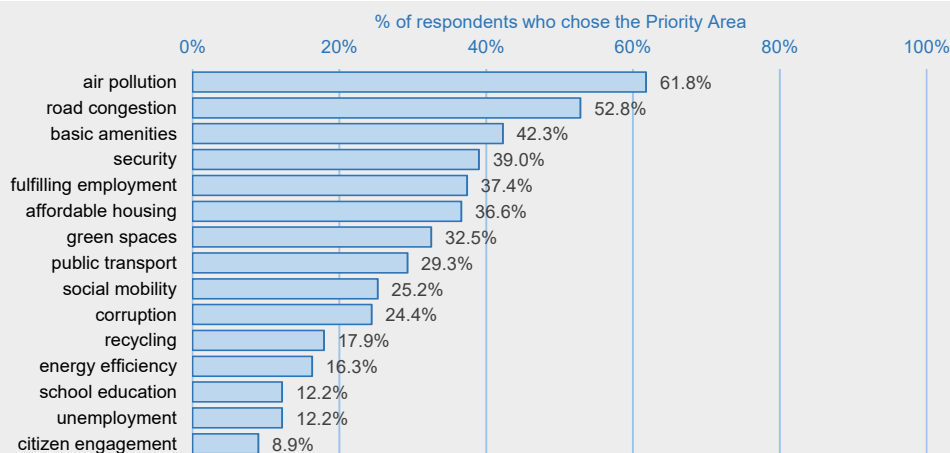
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



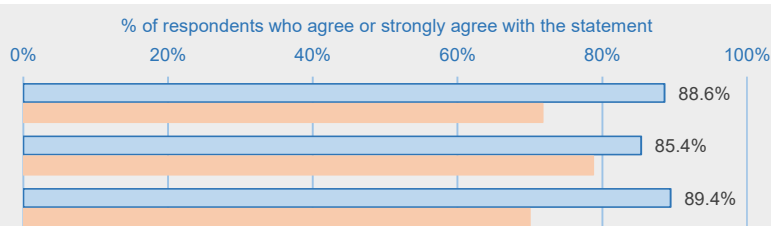
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 88.48 |
| A website or App allows to give away unwanted items to other city residents. | 73.31 |
| Free public wifi has improved access to services. | 85.09 |
| CCTV cameras make residents feel safer. | 85.64 |
| A website or App allows effective monitoring of air pollution. | 78.86 |
| Arranging medical appointments online has improved access. | 86.99 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 78.73 |
| Apps that direct you to an available parking space have reduced journey time. | 78.18 |
| Bicycle hiring has reduced congestion. | 86.04 |
| Online scheduling and ticket sales make public transport easier to use. | 89.43 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 89.57 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 89.70 |
| IT skills are taught well in schools. | 83.47 |
| Online services provided by the city has made it easier to start a new business. | 83.88 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 80.62 |
| Online voting has increased participation. | 72.76 |
| An online platform where residents can propose ideas has improved city life. | 83.20 |
| Processing Identification Documents online has reduced waiting times. | 83.74 |

Tokyo

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 62nd Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|---------------------------|
| RATING | B From AAA to D |
|---------------|---------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.905 | 0.907 | 0.909 |
| Life expectancy at Birth | 83.6 | 83.8 | 83.9 |
| Expected years of schooling | 15.2 | 15.2 | 15.2 |
| Mean years of schooling | 12.5 | 12.7 | 12.8 |
| GNI per capita (PPP \$) | 39,322 | 38,267 | 38,986 |

| City | Population (UN World Cities Report) |
|-------|-------------------------------------|
| Tokyo | 38,001,000 |



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

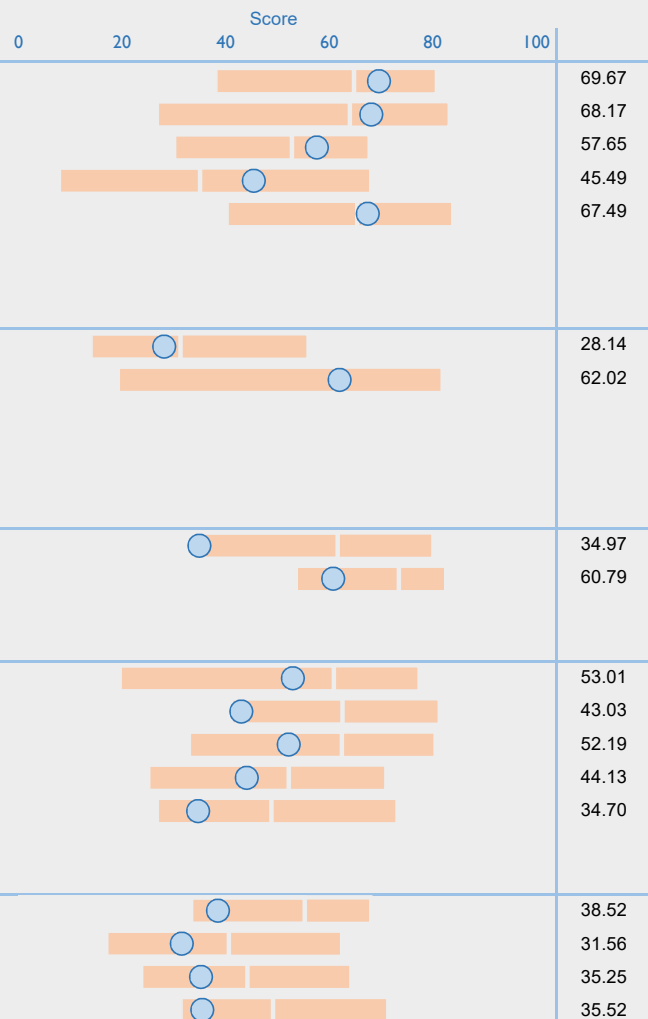
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

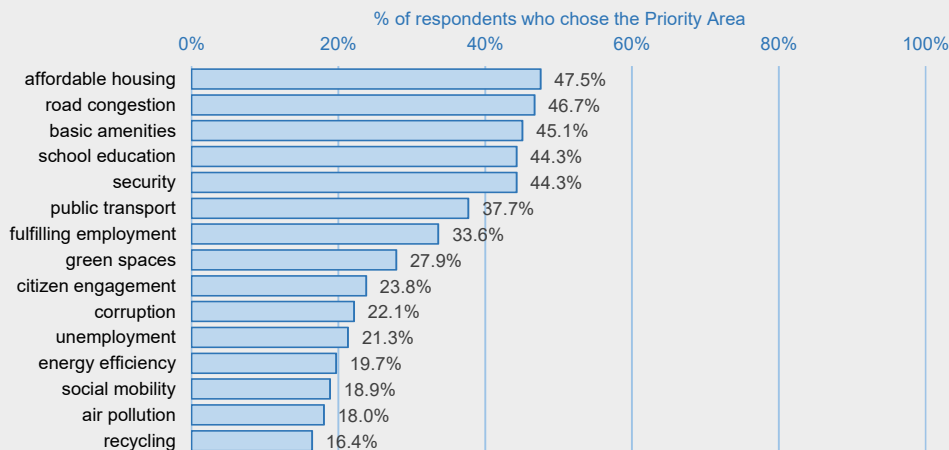
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



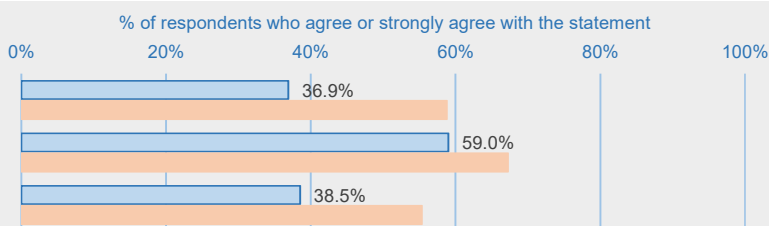
ATTITUDES

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

LEGEND: GROUP MEAN CITY



TECHNOLOGIES

LEGEND: GROUP MIN CITY GROUP MEAN GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 56.83 |
| A website or App allows to give away unwanted items to other city residents. | 68.58 |
| Free public wifi has improved access to services. | 53.14 |
| CCTV cameras make residents feel safer. | 62.57 |
| A website or App allows effective monitoring of air pollution. | 37.98 |
| Arranging medical appointments online has improved access. | 62.84 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 23.22 |
| Apps that direct you to an available parking space have reduced journey time. | 42.49 |
| Bicycle hiring has reduced congestion. | 27.19 |
| Online scheduling and ticket sales make public transport easier to use. | 65.44 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 68.03 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 70.63 |
| IT skills are taught well in schools. | 31.56 |
| Online services provided by the city has made it easier to start a new business. | 41.94 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 30.19 |
| Online voting has increased participation. | 37.16 |
| An online platform where residents can propose ideas has improved city life. | 37.16 |
| Processing Identification Documents online has reduced waiting times. | 45.77 |

Toronto

SMART CITY RANKING **15th**
Out of 102

GROUP **1**

RATING **A**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| A | A |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.926 |
| Life expectancy at Birth | 82.2 | 82.4 | 82.5 |
| Expected years of schooling | 16.3 | 16.4 | 16.4 |
| Mean years of schooling | 13.1 | 13.1 | 13.3 |
| GNI per capita (PPP \$) | 42,512 | 42,664 | 43,433 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 5,993,000 |
|-------------------------------------|-----------|



STRUCTURES

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

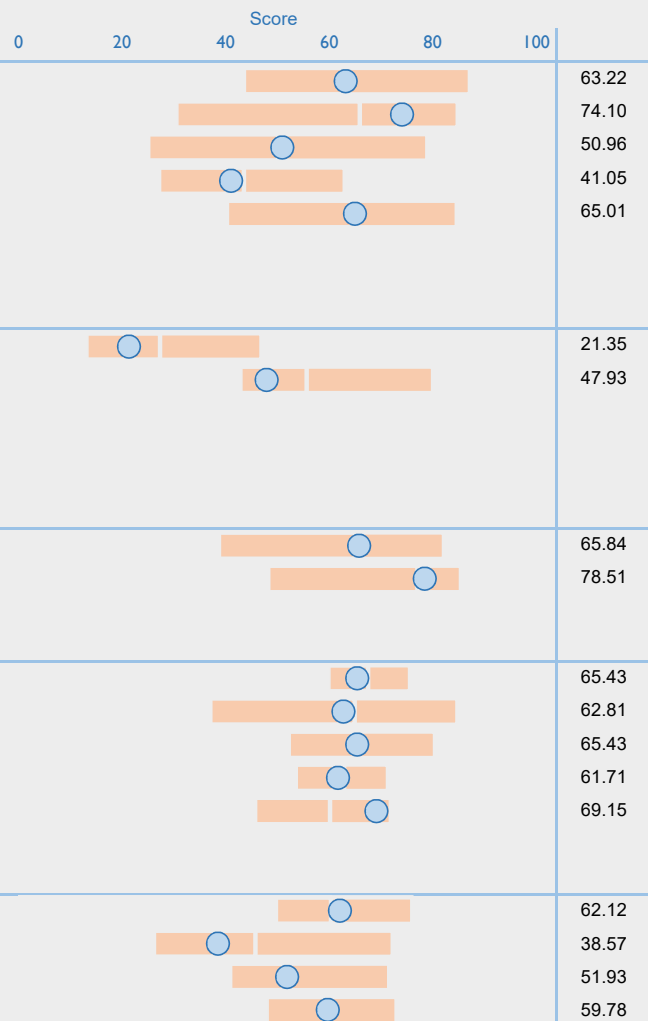
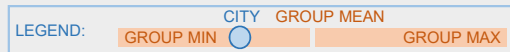
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

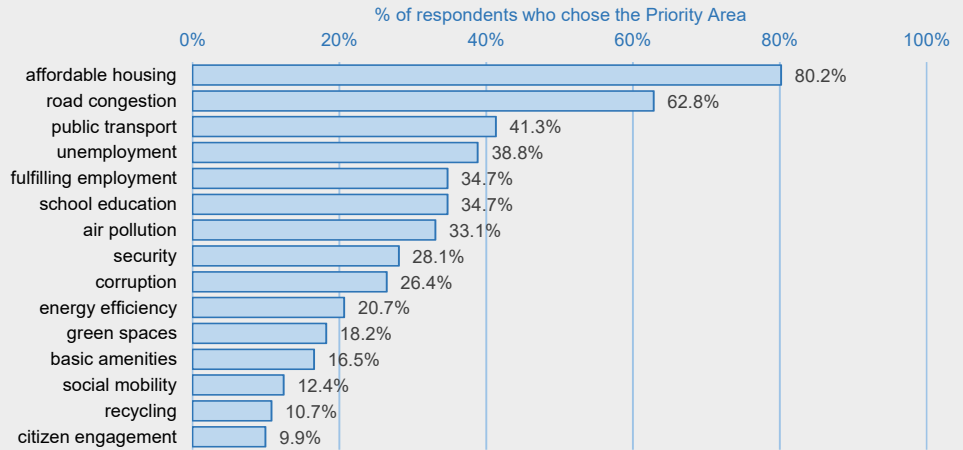
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

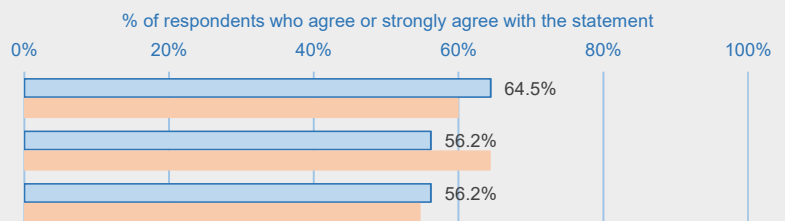


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 50.69 |
| A website or App allows to give away unwanted items to other city residents. | 60.33 |
| Free public wifi has improved access to services. | 65.01 |
| CCTV cameras make residents feel safer. | 54.68 |
| A website or App allows effective monitoring of air pollution. | 42.70 |
| Arranging medical appointments online has improved access. | 55.92 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 48.48 |
| Apps that direct you to an available parking space have reduced journey time. | 50.69 |
| Bicycle hiring has reduced congestion. | 42.01 |
| Online scheduling and ticket sales make public transport easier to use. | 61.85 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 73.97 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 67.36 |
| IT skills are taught well in schools. | 52.20 |
| Online services provided by the city has made it easier to start a new business. | 55.37 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 37.19 |
| Online voting has increased participation. | 48.76 |
| An online platform where residents can propose ideas has improved city life. | 46.01 |
| Processing Identification Documents online has reduced waiting times. | 55.51 |

Vancouver

SMART CITY RANKING **13th**
Out of 102

GROUP **1**

RATING **A**
From AAA to D

FACTOR RATINGS

| | |
|------------|--------------|
| A | BBB |
| Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.926 |
| Life expectancy at Birth | 82.2 | 82.4 | 82.5 |
| Expected years of schooling | 16.3 | 16.4 | 16.4 |
| Mean years of schooling | 13.1 | 13.1 | 13.3 |
| GNI per capita (PPP \$) | 42,512 | 42,664 | 43,433 |

City

| | |
|-------------------------------------|-----------|
| Population (UN World Cities Report) | 2,485,000 |
|-------------------------------------|-----------|



Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

STRUCTURES

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

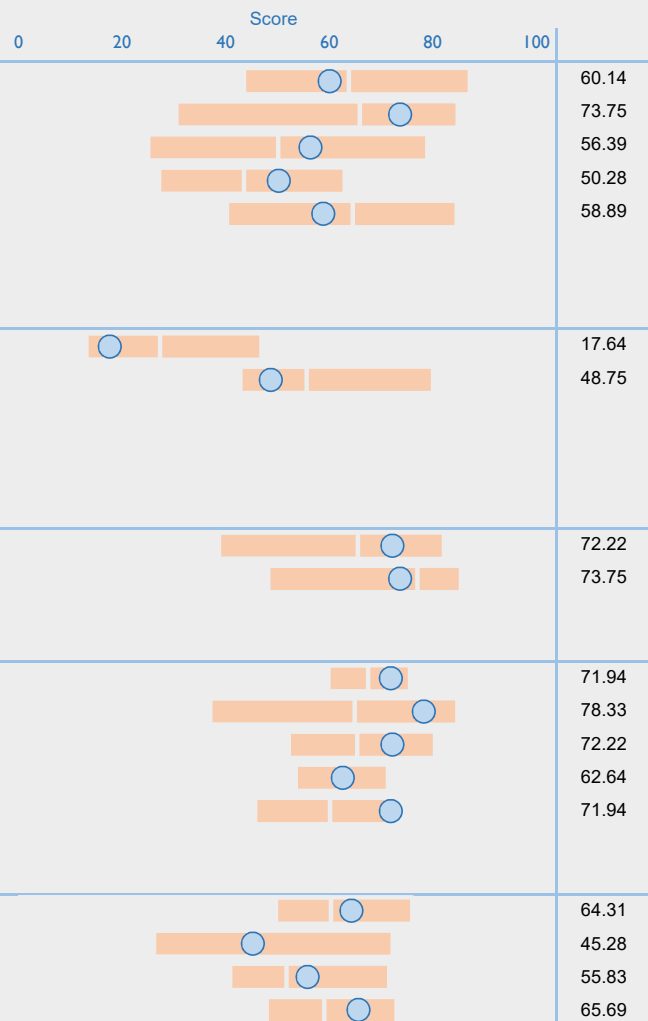
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

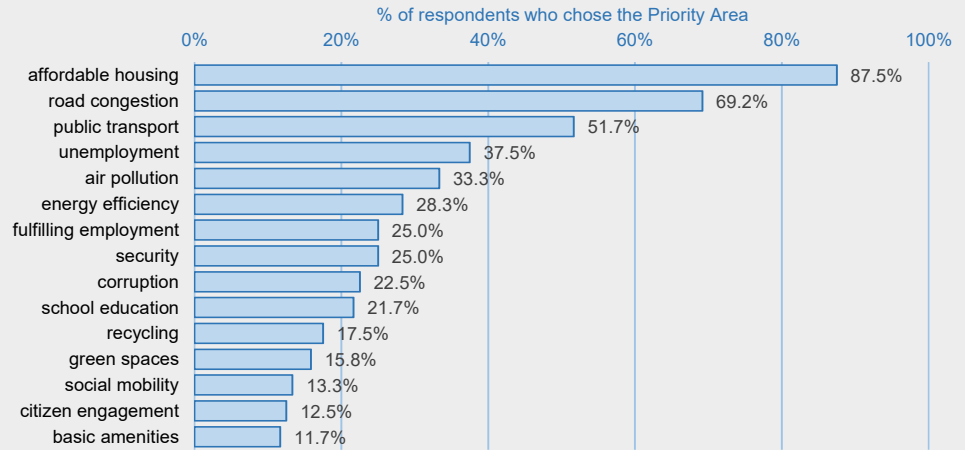
Governance

- 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

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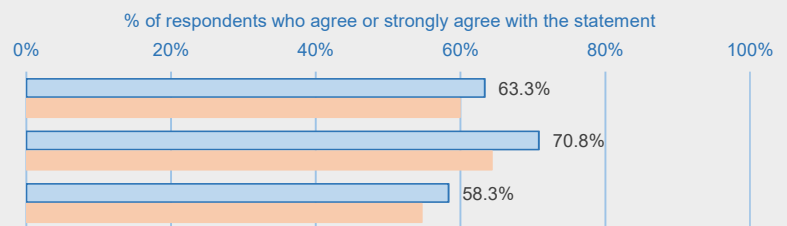


ATTITUDES

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You are comfortable with face recognition technologies to lower crime

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 53.61 |
| A website or App allows to give away unwanted items to other city residents. | 64.17 |
| Free public wifi has improved access to services. | 58.33 |
| CCTV cameras make residents feel safer. | 50.97 |
| A website or App allows effective monitoring of air pollution. | 38.33 |
| Arranging medical appointments online has improved access. | 60.69 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 35.28 |
| Apps that direct you to an available parking space have reduced journey time. | 35.56 |
| Bicycle hiring has reduced congestion. | 49.03 |
| Online scheduling and ticket sales make public transport easier to use. | 58.33 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 73.06 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 79.58 |
| IT skills are taught well in schools. | 55.14 |
| Online services provided by the city has made it easier to start a new business. | 50.97 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 41.53 |
| Online voting has increased participation. | 48.19 |
| An online platform where residents can propose ideas has improved city life. | 47.64 |
| Processing Identification Documents online has reduced waiting times. | 53.33 |

Vienna

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 17th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | A | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.903 | 0.906 | 0.908 |
| Life expectancy at Birth | 81.4 | 81.6 | 81.8 |
| Expected years of schooling | 15.9 | 16.1 | 16.1 |
| Mean years of schooling | 12.1 | 12.1 | 12.1 |
| GNI per capita (PPP \$) | 43,984 | 44,443 | 45,415 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Vienna | 1,753,000 |



STRUCTURES

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

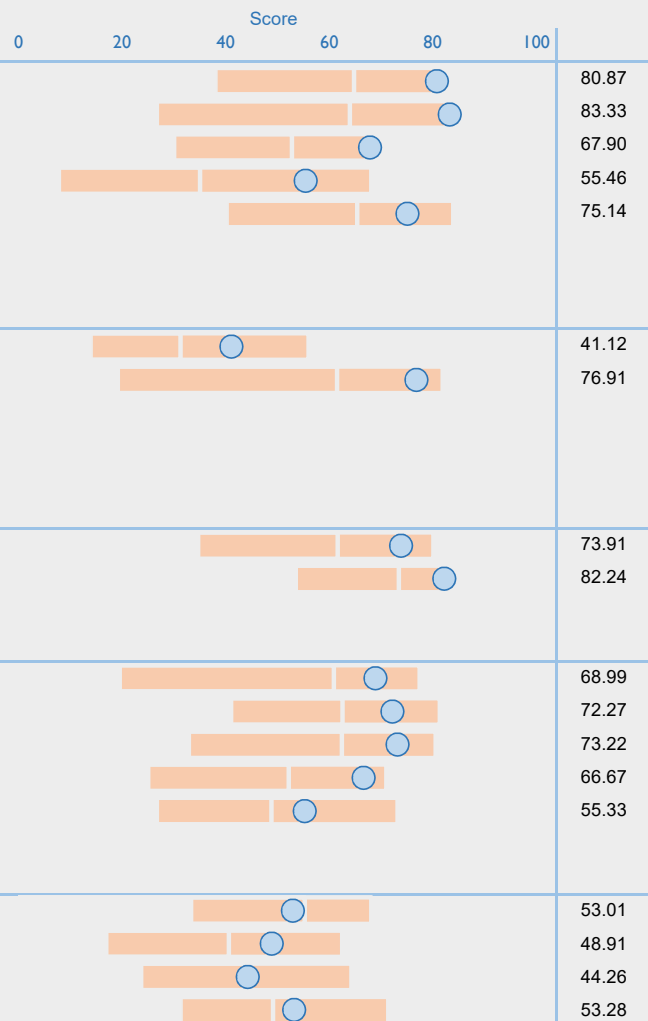
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

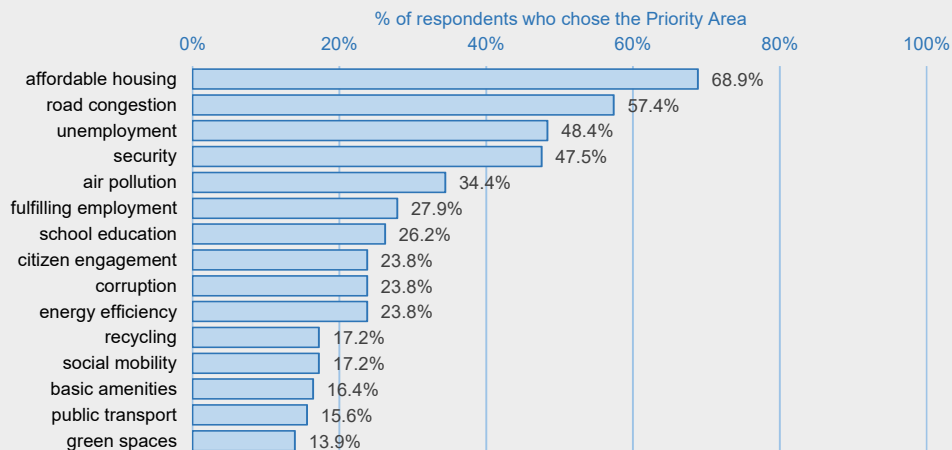
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

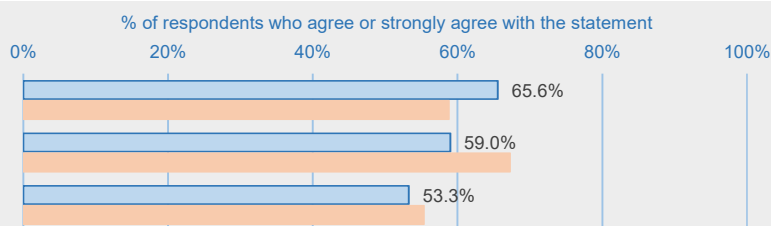


ATTITUDES

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



LEGEND: █ GROUP MEAN █ CITY

TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 50.96 |
| A website or App allows to give away unwanted items to other city residents. | 55.74 |
| Free public wifi has improved access to services. | 54.51 |
| CCTV cameras make residents feel safer. | 51.23 |
| A website or App allows effective monitoring of air pollution. | 43.72 |
| Arranging medical appointments online has improved access. | 57.10 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 43.44 |
| Apps that direct you to an available parking space have reduced journey time. | 39.48 |
| Bicycle hiring has reduced congestion. | 46.45 |
| Online scheduling and ticket sales make public transport easier to use. | 71.58 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 78.55 |
|---|-------|

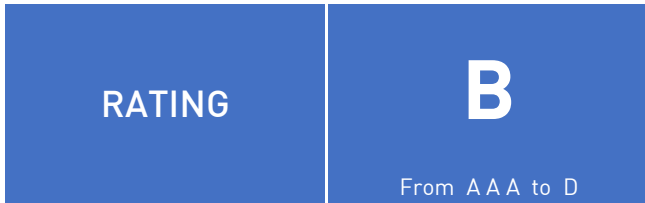
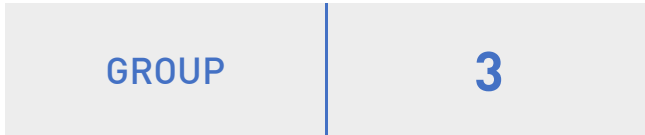
Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 74.45 |
| IT skills are taught well in schools. | 57.92 |
| Online services provided by the city has made it easier to start a new business. | 47.40 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 41.26 |
| Online voting has increased participation. | 52.32 |
| An online platform where residents can propose ideas has improved city life. | 46.45 |
| Processing Identification Documents online has reduced waiting times. | 61.20 |

Warsaw



BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.855 | 0.860 | 0.865 |
| Life expectancy at Birth | 77.4 | 77.6 | 77.8 |
| Expected years of schooling | 16.1 | 16.4 | 16.4 |
| Mean years of schooling | 12.1 | 12.2 | 12.3 |
| GNI per capita (PPP \$) | 24,418 | 24,983 | 26,150 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Warsaw | 1,722,000 |



STRUCTURES

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

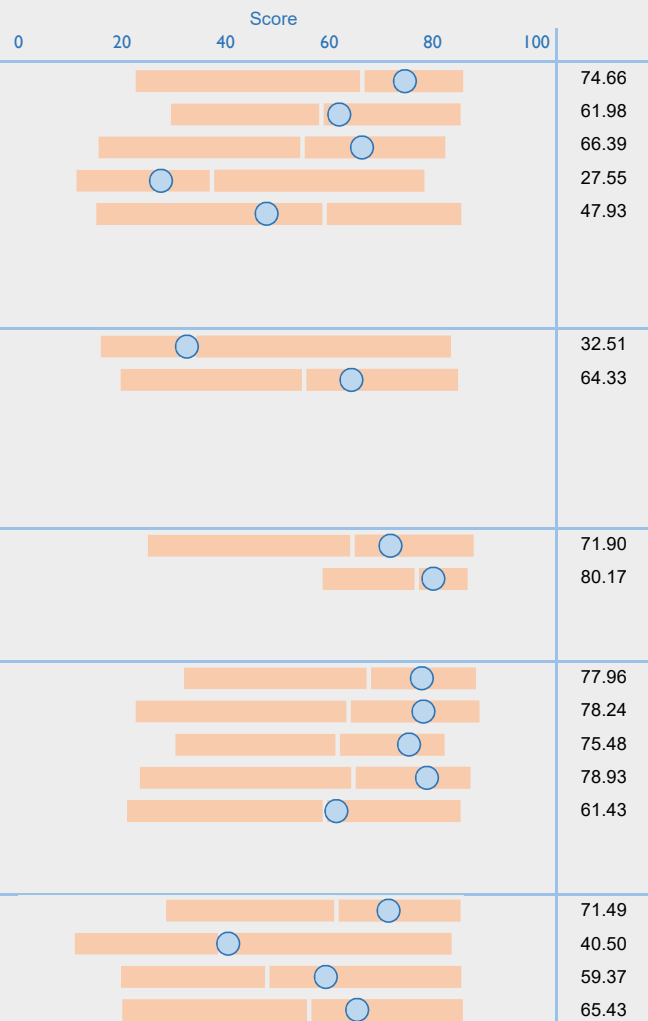
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

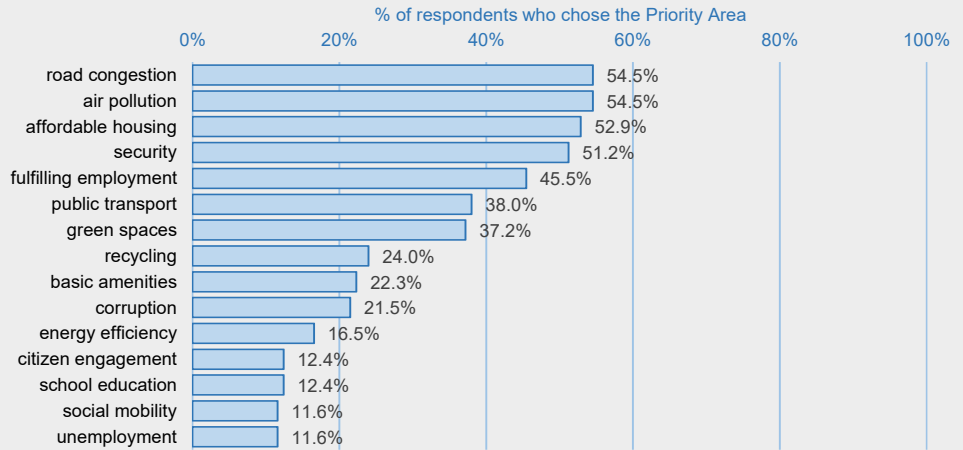
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

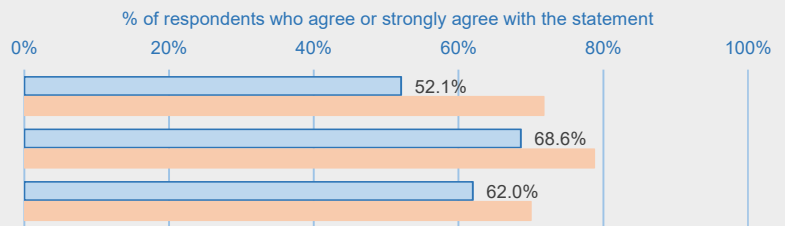


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score | Value |
|--|-------|-------|
| Online reporting of city maintenance problems provides a speedy solution. | ~57 | 57.30 |
| A website or App allows to give away unwanted items to other city residents. | ~67 | 66.67 |
| Free public wifi has improved access to services. | ~72 | 71.49 |
| CCTV cameras make residents feel safer. | ~72 | 71.21 |
| A website or App allows effective monitoring of air pollution. | ~74 | 73.42 |
| Arranging medical appointments online has improved access. | ~69 | 69.28 |

Mobility

| | | |
|---|-----|-------|
| Car-sharing Apps have reduced congestion. | ~55 | 55.10 |
| Apps that direct you to an available parking space have reduced journey time. | ~59 | 59.64 |
| Bicycle hiring has reduced congestion. | ~64 | 64.74 |
| Online scheduling and ticket sales make public transport easier to use. | ~77 | 77.41 |

Activities

| | | |
|---|-----|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | ~85 | 84.99 |
|---|-----|-------|

Opportunities (Work & School)

| | | |
|--|-----|-------|
| Online access to job listings has made it easier to find work. | ~83 | 83.20 |
| IT skills are taught well in schools. | ~66 | 66.39 |
| Online services provided by the city has made it easier to start a new business. | ~68 | 68.32 |

Governance

| | | |
|--|-----|-------|
| Online public access to city finances has reduced corruption. | ~46 | 46.97 |
| Online voting has increased participation. | ~54 | 54.55 |
| An online platform where residents can propose ideas has improved city life. | ~68 | 68.04 |
| Processing Identification Documents online has reduced waiting times. | ~75 | 75.07 |

Washington D.C.

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 31st Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-------------------------------|
| RATING | B B B From AAA to D |
|---------------|-------------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.920 | 0.922 | 0.924 |
| Life expectancy at Birth | 79.2 | 79.4 | 79.5 |
| Expected years of schooling | 16.5 | 16.5 | 16.5 |
| Mean years of schooling | 13.3 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 53,741 | 54,104 | 54,941 |

| City | Population (UN World Cities Report) |
|-----------------|-------------------------------------|
| Washington D.C. | 4,955,000 |



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STRUCTURES

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

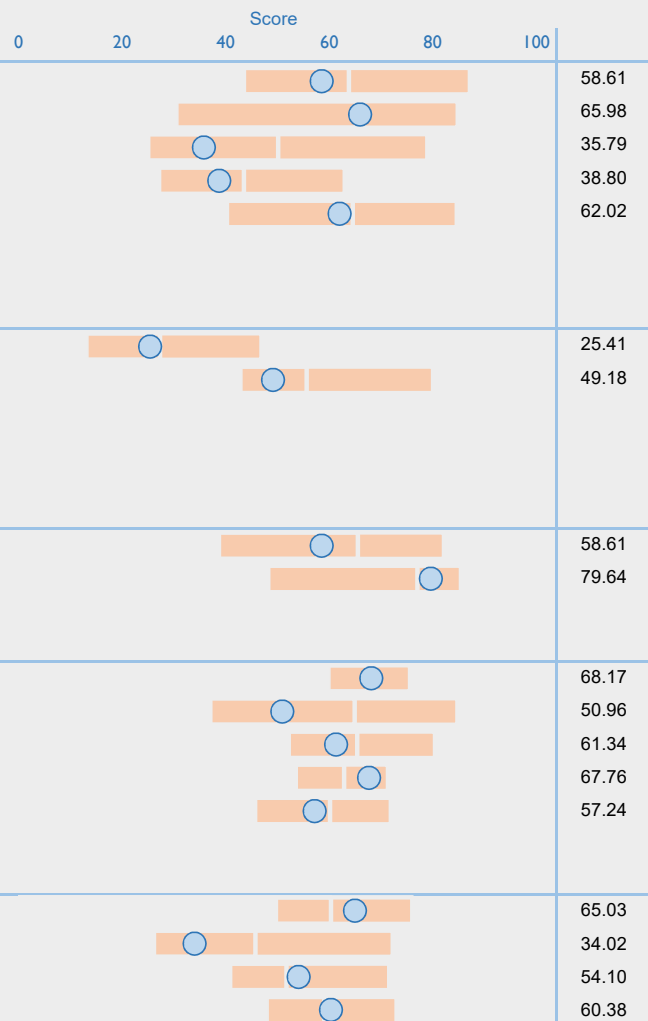
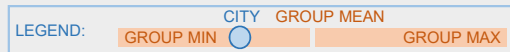
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

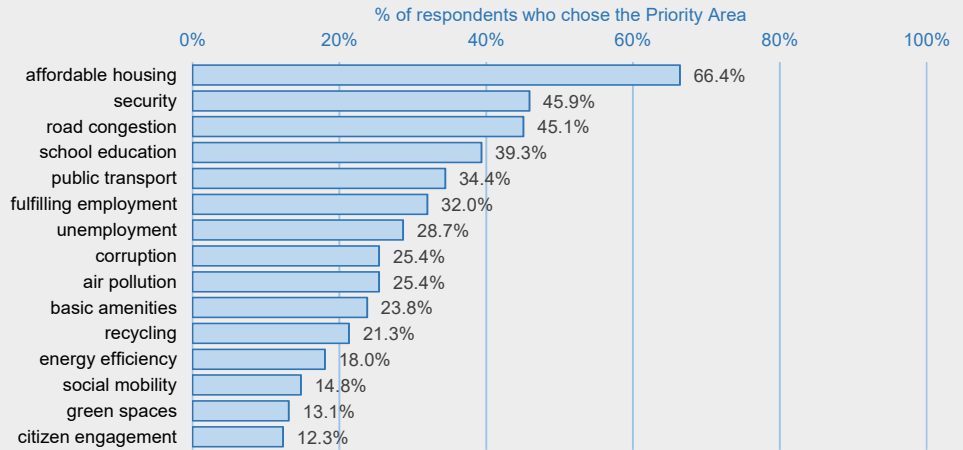
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.

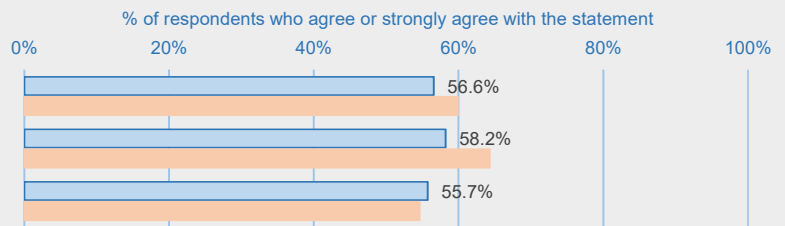


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 43.17 |
| A website or App allows to give away unwanted items to other city residents. | 55.46 |
| Free public wifi has improved access to services. | 60.52 |
| CCTV cameras make residents feel safer. | 52.87 |
| A website or App allows effective monitoring of air pollution. | 37.16 |
| Arranging medical appointments online has improved access. | 58.74 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 49.04 |
| Apps that direct you to an available parking space have reduced journey time. | 49.86 |
| Bicycle hiring has reduced congestion. | 49.45 |
| Online scheduling and ticket sales make public transport easier to use. | 54.78 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 71.99 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 65.30 |
| IT skills are taught well in schools. | 49.45 |
| Online services provided by the city has made it easier to start a new business. | 48.77 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 34.56 |
| Online voting has increased participation. | 54.23 |
| An online platform where residents can propose ideas has improved city life. | 49.04 |
| Processing Identification Documents online has reduced waiting times. | 55.19 |

Zaragoza

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 49th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 2 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | B B From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|--------------|--------------|
| FACTOR RATINGS | B B B | B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.885 | 0.889 | 0.891 |
| Life expectancy at Birth | 83.0 | 83.1 | 83.3 |
| Expected years of schooling | 17.8 | 17.9 | 17.9 |
| Mean years of schooling | 9.7 | 9.8 | 9.8 |
| GNI per capita (PPP \$) | 32,217 | 33,307 | 34,258 |

| City | Population (Eurostat) |
|----------|-----------------------|
| Zaragoza | 667,000 |



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STRUCTURES

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

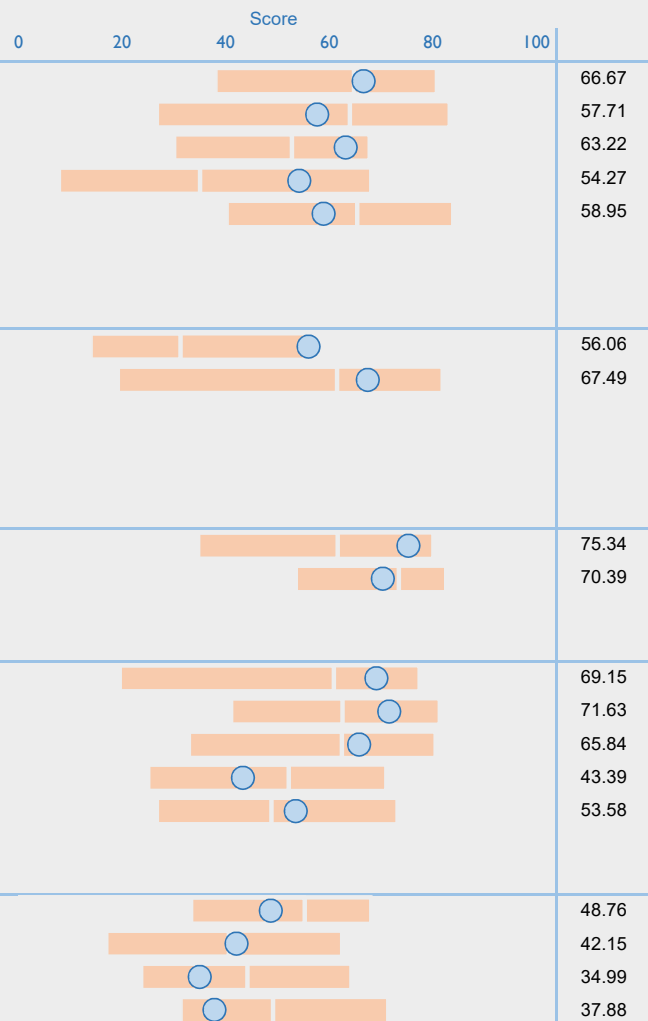
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

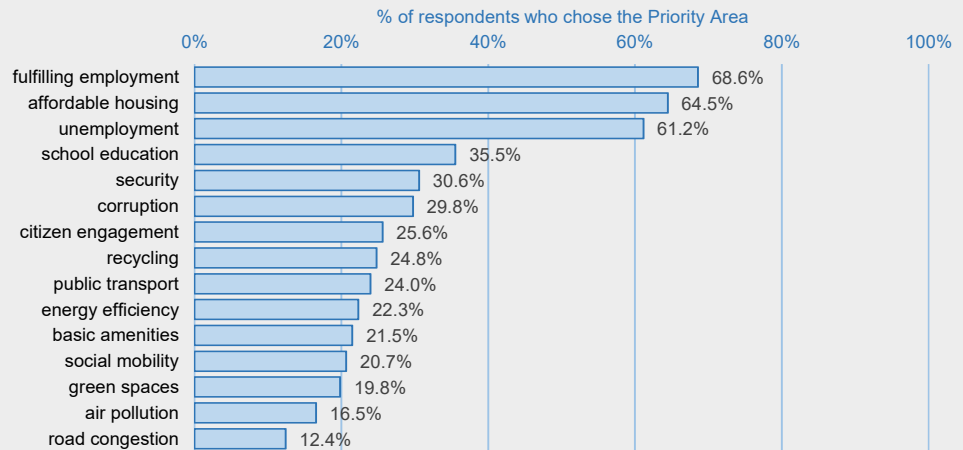
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



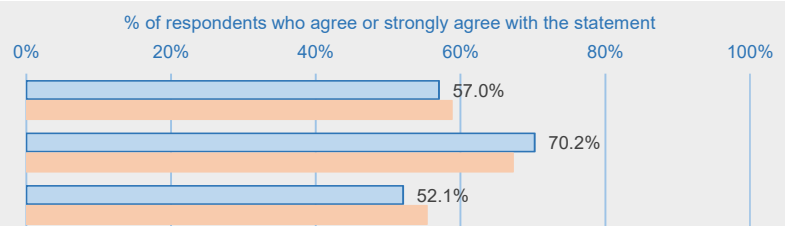
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 50.69 |
| A website or App allows to give away unwanted items to other city residents. | 54.68 |
| Free public wifi has improved access to services. | 44.77 |
| CCTV cameras make residents feel safer. | 38.57 |
| A website or App allows effective monitoring of air pollution. | 43.80 |
| Arranging medical appointments online has improved access. | 75.76 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 37.88 |
| Apps that direct you to an available parking space have reduced journey time. | 40.22 |
| Bicycle hiring has reduced congestion. | 54.96 |
| Online scheduling and ticket sales make public transport easier to use. | 61.85 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 83.88 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 64.05 |
| IT skills are taught well in schools. | 50.69 |
| Online services provided by the city has made it easier to start a new business. | 45.32 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 31.54 |
| Online voting has increased participation. | 38.57 |
| An online platform where residents can propose ideas has improved city life. | 42.70 |
| Processing Identification Documents online has reduced waiting times. | 56.06 |

Zhuhai

| | |
|---------------------------|--------------------------------------|
| SMART CITY RANKING | 40th Out of 102 |
|---------------------------|--------------------------------------|

| | |
|--------------|----------|
| GROUP | 3 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | B B From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | B B | B B |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.743 | 0.748 | 0.752 |
| Life expectancy at Birth | 76.1 | 76.3 | 76.4 |
| Expected years of schooling | 13.8 | 13.8 | 13.8 |
| Mean years of schooling | 7.7 | 7.8 | 7.8 |
| GNI per capita (PPP \$) | 13,519 | 14,354 | 15,270 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Zhuhai | 1,542,000 |



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STRUCTURES

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

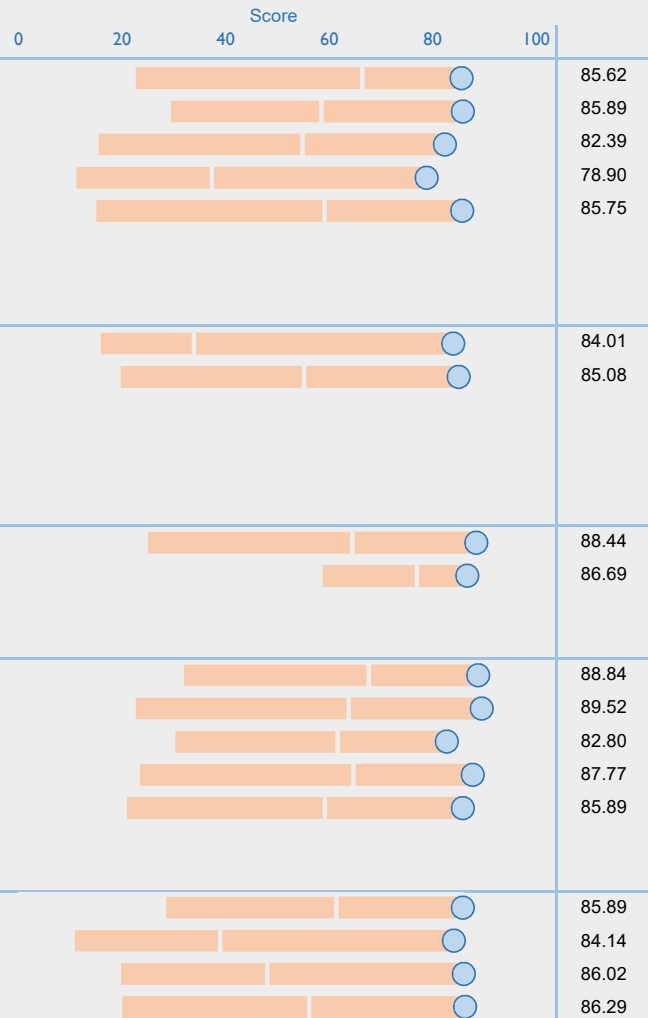
- Green spaces are satisfactory.
- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are 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.

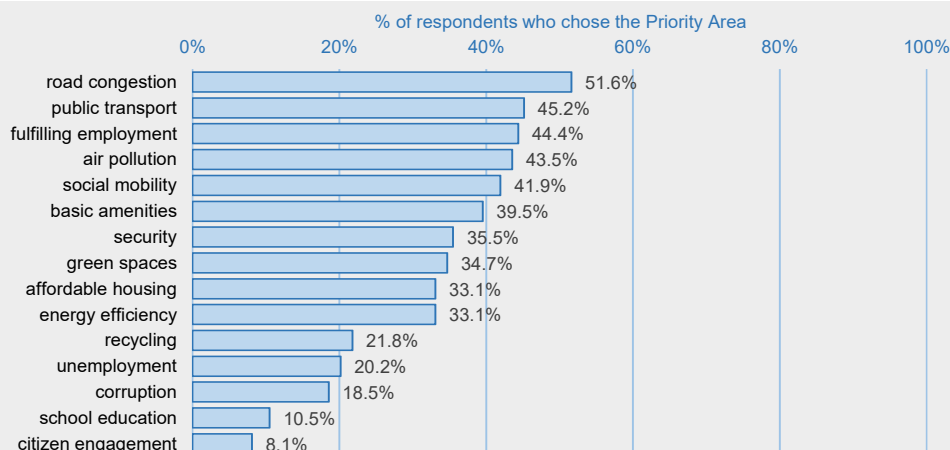
Governance

- 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. The higher the percentage of responses per area, the greater the priority for the city.



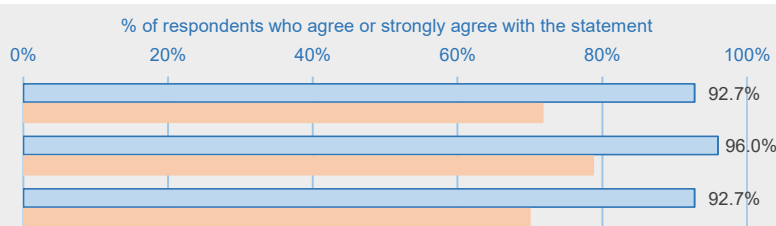
ATTITUDES

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

LEGEND: █ GROUP MEAN █ CITY



TECHNOLOGIES

LEGEND: █ GROUP MIN ● CITY █ GROUP MEAN █ GROUP MAX

Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 91.53 |
| A website or App allows to give away unwanted items to other city residents. | 81.72 |
| Free public wifi has improved access to services. | 80.91 |
| CCTV cameras make residents feel safer. | 85.08 |
| A website or App allows effective monitoring of air pollution. | 82.80 |
| Arranging medical appointments online has improved access. | 87.50 |

Mobility

| | |
|---|-------|
| Car-sharing Apps have reduced congestion. | 88.44 |
| Apps that direct you to an available parking space have reduced journey time. | 86.16 |
| Bicycle hiring has reduced congestion. | 86.29 |
| Online scheduling and ticket sales make public transport easier to use. | 86.83 |

Activities

| | |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 92.74 |
|---|-------|

Opportunities (Work & School)

| | |
|--|-------|
| Online access to job listings has made it easier to find work. | 90.86 |
| IT skills are taught well in schools. | 86.83 |
| Online services provided by the city has made it easier to start a new business. | 90.05 |

Governance

| | |
|--|-------|
| Online public access to city finances has reduced corruption. | 92.47 |
| Online voting has increased participation. | 82.93 |
| An online platform where residents can propose ideas has improved city life. | 88.31 |
| Processing Identification Documents online has reduced waiting times. | 85.62 |

Zurich

| | |
|---------------------------|-------------------------------------|
| SMART CITY RANKING | 2nd Out of 102 |
|---------------------------|-------------------------------------|

| | |
|--------------|----------|
| GROUP | 1 |
|--------------|----------|

| | |
|---------------|-----------------------------|
| RATING | AAA From AAA to D |
|---------------|-----------------------------|

| | | |
|-----------------------|------------|--------------|
| FACTOR RATINGS | AAA | A |
| | Structures | Technologies |

BACKGROUND INFORMATION

| Country | 2015 | 2016 | 2017 |
|-----------------------------|--------|--------|--------|
| UN HDI | 0.942 | 0.943 | 0.944 |
| Life expectancy at Birth | 83.1 | 83.3 | 83.5 |
| Expected years of schooling | 16.2 | 16.2 | 16.2 |
| Mean years of schooling | 13.4 | 13.4 | 13.4 |
| GNI per capita (PPP \$) | 58,280 | 57,636 | 57,625 |

| City | Population (UN World Cities Report) |
|--------|-------------------------------------|
| Zurich | 1,246,000 |



STRUCTURES

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

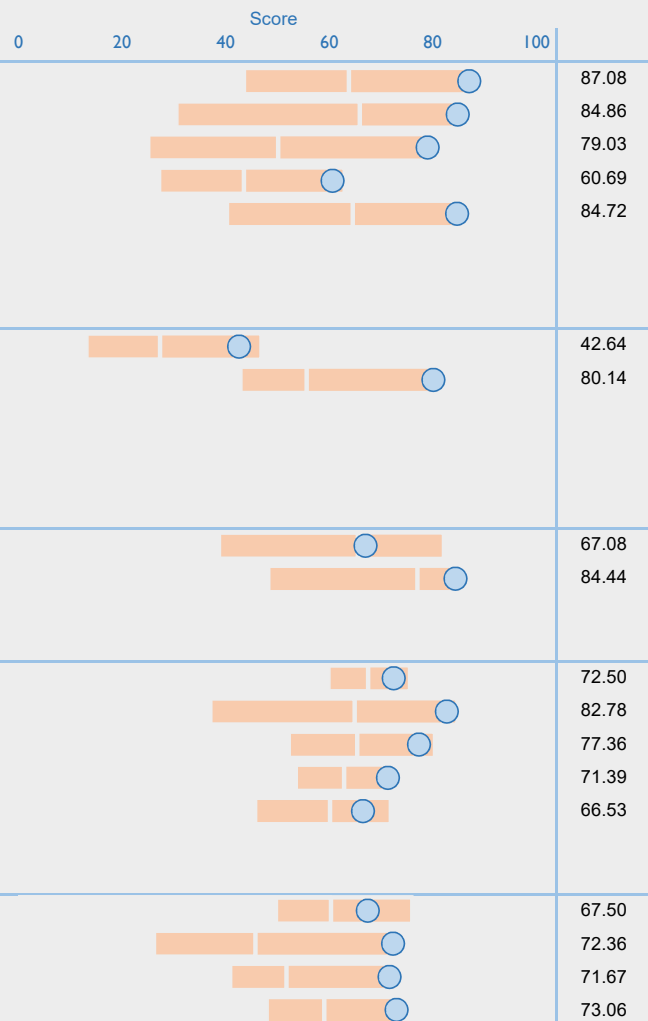
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- Cultural activities (shows, bars, and museums) are satisfactory.

Opportunities (Work & School)

- Employment finding services are available.
- Most children have access to a good school.
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- Businesses are creating new jobs.
- Minorities feel welcome.

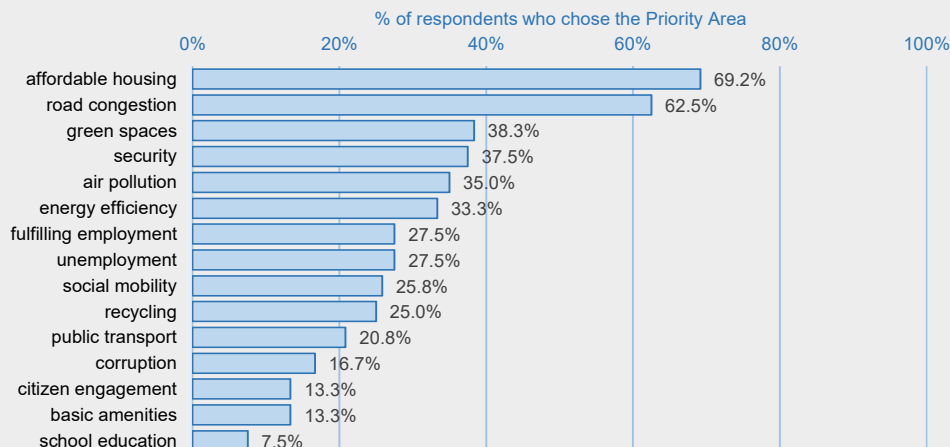
Governance

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- Residents contribute to decision making of local government.
- Residents provide feedback on local government projects.



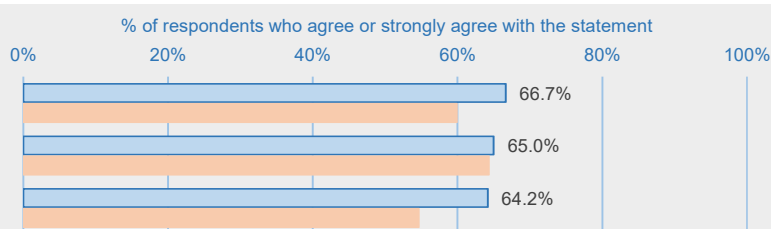
PRIORITY AREAS

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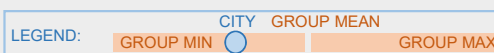


ATTITUDES

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



TECHNOLOGIES



Health & Safety

| Statement | Score |
|--|-------|
| Online reporting of city maintenance problems provides a speedy solution. | 61.39 |
| A website or App allows to give away unwanted items to other city residents. | 56.53 |
| Free public wifi has improved access to services. | 52.64 |
| CCTV cameras make residents feel safer. | 50.56 |
| A website or App allows effective monitoring of air pollution. | 41.67 |
| Arranging medical appointments online has improved access. | 46.25 |

Mobility

| Statement | Score |
|---|-------|
| Car-sharing Apps have reduced congestion. | 40.14 |
| Apps that direct you to an available parking space have reduced journey time. | 44.72 |
| Bicycle hiring has reduced congestion. | 52.78 |
| Online scheduling and ticket sales make public transport easier to use. | 75.97 |

Activities

| Statement | Score |
|---|-------|
| Online purchasing of tickets to shows and museums has made it easier to attend. | 80.28 |

Opportunities (Work & School)

| Statement | Score |
|--|-------|
| Online access to job listings has made it easier to find work. | 73.33 |
| IT skills are taught well in schools. | 58.47 |
| Online services provided by the city has made it easier to start a new business. | 55.00 |

Governance

| Statement | Score |
|--|-------|
| Online public access to city finances has reduced corruption. | 48.75 |
| Online voting has increased participation. | 49.03 |
| An online platform where residents can propose ideas has improved city life. | 46.67 |
| Processing Identification Documents online has reduced waiting times. | 55.14 |