

IMD Smart City Index 2024



IMD / World Competitiveness Center

In partnership with
WeGO
World Smart Sustainable Cities Organization

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

— Michelangelo

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

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

IMD Smart City Index 2024

Introduction

A stable and mature dataset

IMD Smart City Index 2024

Introduction: a stable and mature dataset

Welcome to the 2024 edition of the IMD Smart City Index.

Following the methodological changes made last year, the IMD Smart City Index (SCI) has now reached what can be considered as its stable configuration – its cruising altitude. Analysts and users of the SCI can now use reliable time series (across five years) to make meaningful comparisons between the performance of specific cities across time. As we have often underlined before – and as is always true with any kind of complex composite index – one should be careful not to read too much into year-to-year comparisons. We are proud that the SCI has now reached the stage at which comparisons can be made on a moving average basis, which is much more meaningful from a number of perspectives, as will be illustrated below.

We are delighted to continue working in partnership with WeGO. In 2023, it allowed us to further our thinking about the composition, architecture, and methodology of the index. It also provided opportunities to heighten the index’s visibility and bring it closer to the concerns and strategies of city leaders around the world, a central part of this being the Seoul Smart City Prize meeting of September 2023.

This year’s ranking is characterized by a high degree of stability. The index’s coverage remains practically the same (142 cities are included, as opposed to 141 in the previous edition), and its list of leading cities (the top 20) remains very much the same as last year. The cities that continue to perform highly (i.e. that edge up the rankings or barely shift¹) are also very much the same as last year’s. The SCI methodology has also entered its age of maturity, and as such the data used in 2024 is very much the same as that used in 2023.²

The SCI was designed as a tool for action. Since it is based on people’s perceptions (captured via surveys), it is critical that the answers are calibrated to the specific context of the cities assessed. Until the 2021 edition of the report, we relied on country-level HDI data (provided by the UNDP, or United Nations Development Programme). In 2022, we explored the possibility of using city-level HDI data, which provides a more granular, and therefore realistic, vision of the socio-economic environment of specific cities. In 2023, we ‘built back’ the SCI time series based on this updated methodology to allow for meaningful time comparisons. The 2024 edition is the first ever in which moving averages – typically calculated over three consecutive editions of the SCI report – can be analyzed.

Against this background of stability and maturity of the SCI, several important messages emerge from this year’s data, as well as from the enhanced capabilities the index offers to compare them across time:

- 1 The global landscape of smart cities continues to change, but such changes are more spectacular among middle-ranking cities than among the top performers.
- 2 The experience of SCI champions (now enriched by the new analytical possibilities offered by a mature SCI³) continues to be a possible source of inspiration for all cities across the world.
- 3 Globally, as the world continues to change rapidly in the face of increased uncertainties, cities are places where new solutions and ways to be future-ready are emerging. In such a world, digital inequalities take on a new meaning.

¹ Given the new possibility offered by SCI to use moving averages, this continuous level of high performance has been redefined on the basis of average ranking on three-year periods (2019-2021, 2020-2023, and 2021-2024), as explained later in this section.

² For a complete description of the SCI methodology, please see the relevant section of the report’s website.

³ In particular, the way we can now look at the dynamic performance of such champions through three-year moving averages.

IMD Smart City Index 2024

Introduction: a stable and mature dataset

1

The global landscape of smart cities continues to change but at a slower pace than in recent years. At the top, it is becoming even more of an Asia-Europe game.

One of the signs that the Smart City Index has reached maturity can be found in its ability to call on significant time series, spanning the 2019-2024 period. This new situation also allows observers and analysts to take a step back from 'year-to-year' comparisons, which can be both perilous and misleading.

Regarding 2024 data, the top 20 cities remain largely those seen in 2023.

Apart from the rather spectacular progression of Taipei City (which enters the top 20 for the first time), most other SCI leaders remain largely where they were in 2023. However, the absence of any North American city in the top 20 is conspicuous. Using three-year moving averages (i.e. comparing a city's average ranking for the period 2021-24 to that of the period 2020-23), a significant number of US cities have been losing ground. This is the case in particular for Washington DC, Denver, and Los Angeles (-12, -12, and -11 respectively), but also for San Francisco (-9), New York City (-7), and Chicago (-4).

Canadian cities seem to follow the same movement, with Ottawa moving down three positions and Montreal nine. A more detailed look into the data shows that several key areas of concern have grown in most Northern American cities, especially infrastructure and safety. On the contrary, overall quality of life has played a positive role in an increasing number of European cities.

1	Zurich	11	Stockholm
2	Oslo	12	Dubai
3	Canberra	13	Beijing
4	Geneva	14	Hamburg
5	Singapore	15	Prague
6	Copenhagen	16	Taipei City
7	Lausanne	17	Seoul
8	London	18	Amsterdam
9	Helsinki	19	Shanghai
10	Abu Dhabi	20	Hong Kong



IMD Smart City Index 2024

Introduction: a stable and mature dataset

2

SCI super-champions continue to show the way by maintaining high performance levels. A few fast-moving contenders are on their heels.

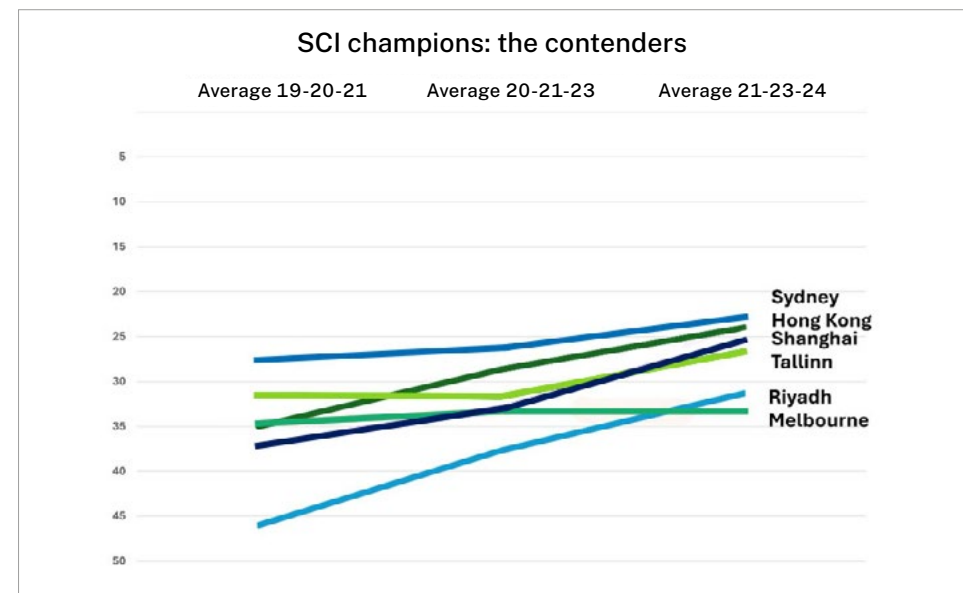
Using a definition of 'SCI champions' as those cities that (since the creation of the SCI in 2019) have never dropped in terms of average rankings established for three years (moving average), twelve cities stand out.

Within that group of 12, we can further distinguish two sub-groups, namely (1) that of the 'super-champions' (currently members of the SCI top 20), and (2) that of the 'fast-moving contenders' (currently ranked between 20 and 35).

Based on the period covered by all previous editions of the SCI Report, super-champions (ranked in the top 20) include six cities: Zurich, Oslo, Singapore, Abu Dhabi, Beijing, and Seoul.



On the same basis, the group of fast-moving contenders (ranked between 20 and 40) is also composed of six cities: Sydney, Hong Kong, Shanghai, Tallinn⁴, Riyadh and Melbourne.



What do these champions have in common? With very few exceptions, cities in the top 20 are geographically located in areas where social and economic environments are relatively predictable, even against the overall climate of global uncertainties. They are also cities in which visible initiatives have been taken to facilitate the lives of citizens (e.g., by developing public transportation networks or eco-compatible mobilities), and to improve the overall 'quality of life' associated with their respective names.

Relative to specific local conditions, culture, and history, such initiatives have focused on developing green spaces and broadening opportunities for cultural events and social bonding, for example. In the majority of these leading cities, such efforts have been combined with innovative strategies to attract and retain talent, foster investment in a selective fashion (e.g. pro-sustainability), and tackle longstanding issues regarding geographical inequalities and inclusion.

⁴Tallinn started to be included in the index in 2020. The first data point hence reflects only a two-editions moving average.

IMD Smart City Index 2024

Introduction: a stable and mature dataset

3 Faced with growing uncertainties, cities are on new paths toward future readiness. Addressing digital divides is a priority.

Like most other economic agents, cities have to design and adopt strategies that will resist the test of a future plagued with growing uncertainties. As was underlined in previous editions of the Smart City Index Report – as well as in the accompanying book ‘Cities in Times of Global Emergencies’ (2022) – it is vital that such strategies should increase the resilience of cities, without compromising their fundamental goals, aspirations, and principles. Health-related concerns remain high, while climate-related ones grow even larger. This combination is now compounded by the emergence of renewed international tensions, both economic and geopolitical.

What can cities do in such a context? In other words, how can they remain future-ready if they cannot link their efforts to any credible scenario? The examples set by SCI champions suggest a few possible innovative paths in this respect. Three major principles seem to emerge as effective ways to keep cities at the forefront of future readiness. They can be summarized as follows:

1 Identify and consolidate existing comparative advantages: geographical situation, natural environment, and particular strengths based on history and culture. Incidentally, such advantages and strengths can just as likely be linked to those of the country where a particular city happens to be, or – on the contrary – have a different branding strategy vis-à-vis that country.

2 Single out the particular strengths existing locally that match key emerging trends likely to shape the future. The existence of a high-quality education system (possibly with the presence of one or several first-tier universities or business schools) would be one key example, as assets allowing a city to be labeled as ‘globally connected’ (airports, road/rail networks, for example).

3 Align (or re-align) resources to fit local strategies to emerging trends (sustainability, inclusion, digital).

A special note on the digital transformation of cities. It is clear that – whatever the level of surrounding uncertainties – the future of cities will be increasingly digital. The rapid spread of artificial intelligence across municipal services (traffic, surveillance, energy consumption, for instance) has raised both new hopes and new concerns. Trust and governance will be key ingredients in making cities both future-ready and human-centric. In other words, to make tomorrow’s cities green, digital, and human-centric we will need to give more attention to talent strategies, education, and openness (for instance, for trade, investment, and exchanges of experiences).

In that context, combining inclusion and digitalization will remain a challenge for all kinds of cities. It will be even more visible in those that claim to be (or become) smart cities: not leaving anyone behind (though design, infrastructure, education, and policies will remain a motto for those who want to be – or remain – at the top of SCI rankings. Giving special attention to vulnerable groups (aging people, people with disabilities, marginalized groups, but also small enterprises and startups) will require strategic approaches, and possibly a redefinition of ‘digital divides’.



IMD Smart City Index 2024

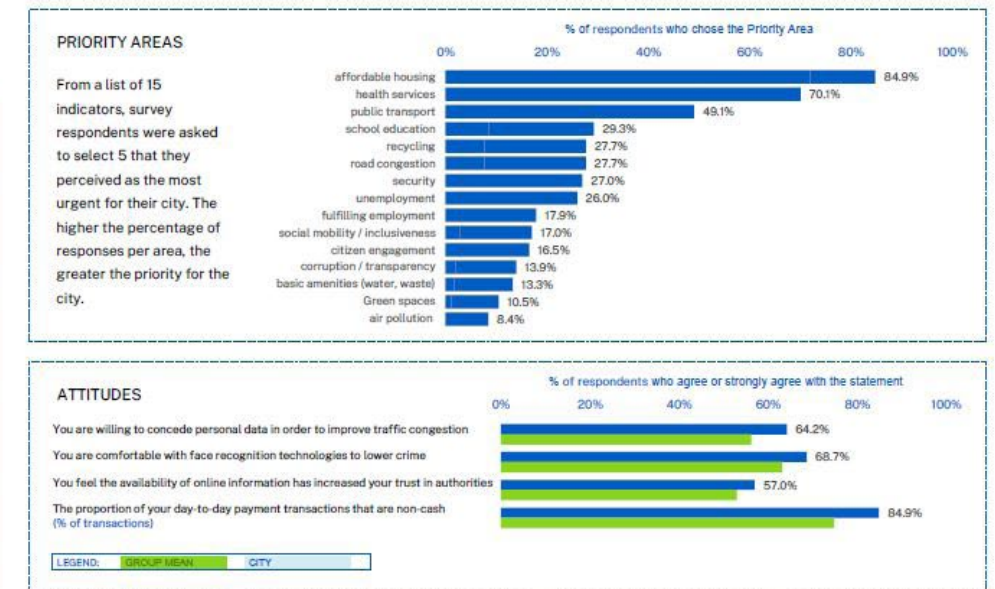
Introduction: a stable and mature dataset

Continuing to improve the SCI

As underlined earlier, and contrary to last year, this edition of the Smart City Index does not include any significant change in the index's methodology or coverage. Reaching an age of maturity however should be no reason for complacency, and we continue to strive to uncover new data that may increase the value of SCI.

In parallel, we also try to improve the readability and usability of the index by developing new visual tools to help decision-makers and analysts make sense of the complex sets of data involved. This year, SCI users will find new displays and tools on the index's website, thanks to new ways of presenting the data therefore enhancing its operational value.

Canberra



We would also like to encourage our readers to use and disseminate the infographics that have been produced for this edition of the SCI report.

We hope that you enjoy reading and using this report and we look forward to your feedback.



IMD Smart City Index 2024

Table of Contents

Introduction	03	Bangkok	43	Cape Town	66	Hong Kong	89
Table of Contents	09	Barcelona	44	Cardiff	67	Hyderabad	90
The IMD World Competitiveness Center	11	Beijing	45	Chengdu	68	Islamabad	91
City Performance Overview	12	Beirut	46	Chicago	69	Istanbul	92
In 2024 City Ranking Order and 2023 Comparison	13	Belfast	47	Chongqing	70	Jakarta	93
In Alphabetical Order by City and 2023 Comparison	17	Bengaluru	48	Copenhagen	71	Jeddah	94
In Alphabetical Order by Country with HDI Context and 2019-2024 Rankings	21	Berlin	49	Delhi	72	Kiel	95
A User's Guide	27	Bilbao	50	Denver	73	Krakov	96
Methodology	30	Birmingham	51	Doha	74	Kuala Lumpur	97
City Profiles	32	Bogota	52	Dubai	75	Lagos	98
Abu Dhabi	33	Bologna	53	Dublin	76	Lausanne	99
Abuja	34	Bordeaux	54	Dusseldorf	77	Leeds	100
Accra	35	Boston	55	Geneva	78	Lille	101
Al-Khobar	36	Brasilia	56	Glasgow	79	Lima	102
Algiers	37	Bratislava	57	Gothenburg	80	Lisbon	103
Amman	38	Brisbane	58	Guangzhou	81	Ljubljana	104
Amsterdam	39	Brussels	59	Guatemala City	82	London	105
Ankara	40	Bucharest	60	Hamburg	83	Los Angeles	106
Athens	41	Budapest	61	Hangzhou	84	Luxembourg	107
Auckland	42	Buenos Aires	62	Hanoi	85	Lyon	108
		Busan	63	Hanover	86	Madrid	109
		Cairo	64	Helsinki	87	Makassar	110
		Canberra	65	Ho Chi Minh City	88	Manchester	111

IMD Smart City Index 2024

Table of Contents

Manila	112	Phoenix	135	Tallinn	158
Marseille	113	Prague	136	Tel Aviv	159
Mecca	114	Rabat	137	The Hague	160
Medan	115	Reykjavik	138	Tianjin	161
Medellin	116	Riga	139	Tokyo	162
Medina	117	Rio de Janeiro	140	Toronto	163
Melbourne	118	Riyadh	141	Tunis	164
Mexico City	119	Rome	142	Vancouver	165
Milan	120	Rotterdam	143	Vienna	166
Montreal	121	San Francisco	144	Vilnius	167
Mumbai	122	San José	145	Warsaw	168
Munich	123	Sana'a	146	Washington D.C.	169
Muscat	124	Santiago	147	Wellington	170
Nairobi	125	Sao Paulo	148	Zagreb	171
Nanjing	126	Seattle	149	Zaragoza	172
New York	127	Seoul	150	Zhuhai	173
Newcastle	128	Shanghai	151	Zurich	174
Nicosia	129	Shenzhen	152		
Osaka	130	Singapore	153		
Oslo	131	Sofia	154		
Ottawa	132	Stockholm	155		
Paris	133	Sydney	156		
Philadelphia	134	Taipei City	157		

IMD Smart City Index 2024

The IMD World Competitiveness Center

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

The IMD World Competitiveness Center Team:

Professor Arturo Bris

Director

Christos Cabolis

Chief Economist & Head of Operations

Bruno Lanvin

President, Smart City Observatory

William Milner

Associate Director

Odete Madureira

WCC Coordinator

José Caballero

Senior Economist

Maryam Zargari

Research Associate

Chinar Sharma

Projects Analyst

Fabian Grimm

Research Specialist

Alice Tozer

Content Manager

IMD Smart City Index 2024

City Performance Overview:

A Series of Tables Showcasing the Results

IMD Smart City Index 2024: Results

In 2024 City Ranking Order and 2023 Comparison

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Zurich	1	AAA	AAA	AA	1	—
Oslo	2	AA	AA	A	2	—
Canberra	3	AA	AAA	A	3	—
Geneva	4	AAA	AAA	AA	9	+5▲
Singapore	5	A	A	A	7	+2▲
Copenhagen	6	AA	AA	A	4	-2▼
Lausanne	7	AA	AA	A	5	-2▼
London	8	A	BBB	AA	6	-2▼
Helsinki	9	AA	AA	A	8	-1▼
Abu Dhabi	10	BB	BB	BB	13	+3▲
Stockholm	11	A	A	A	10	-1▼
Dubai	12	BB	BB	BB	17	+5▲
Beijing	13	BB	BB	BB	12	-1▼
Hamburg	14	BBB	BBB	BBB	11	-3▼
Prague	15	A	A	A	14	-1▼
Taipei City	16	A	BBB	A	29	+13▲
Seoul	17	AA	BBB	AAA	16	-1▼
Amsterdam	18	A	BBB	A	15	-3▼
Shanghai	19	BB	BB	BB	25	+6▲
Hong Kong	20	A	BBB	AAA	19	-1▼
Munich	21	A	A	A	20	-1▼
Sydney	22	A	BBB	A	18	-4▼

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Vienna	23	AA	AA	A	28	+5▲
Tallinn	24	BBB	BBB	BBB	32	+8▲
Riyadh	25	B	B	B	30	+5▲
Reykjavik	26	BBB	A	BBB	26	—
Luxembourg	27	BBB	A	BB	45	+18▲
Wellington	28	BBB	A	BBB	23	-5▼
Bilbao	29	BBB	BBB	BB	27	-2▼
Brisbane	30	A	A	A	24	-6▼
Auckland	31	BBB	BBB	A	22	-9▼
Ljubljana	32	BBB	BBB	A	47	+15▲
Melbourne	33	A	BBB	A	31	-2▼
New York	34	BB	BB	BB	21	-13▼
Madrid	35	BB	BB	BBB	37	+2▲
Boston	36	BBB	BBB	A	34	-2▼
Berlin	37	BBB	BBB	BBB	33	-4▼
Warsaw	38	BBB	BBB	BBB	44	+6▲
Gothenburg	39	A	BBB	A	36	-3▼
Brussels	40	BBB	BB	A	35	-5▼
Rotterdam	41	A	BBB	A	41	—
The Hague	42	A	BBB	A	43	+1▲
Vancouver	43	BBB	BBB	BBB	42	-1▼
Dusseldorf	44	BB	BBB	B	38	-6▼

IMD Smart City Index 2024: Results

In 2024 City Ranking Order and 2023 Comparison

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Busan	45	BB	BB	BBB	49	+4▲
Ottawa	46	BBB	A	BBB	40	-6▼
Vilnius	47	BBB	BBB	BBB	65	+18▲
Doha	48	B	BB	B	59	+11▲
Paris	49	BBB	BB	A	46	-3▼
Washington D.C.	50	BB	BB	BB	39	-11▼
Toronto	51	BBB	BBB	A	48	-3▼
Mecca	52	B	B	B	52	—
Hanover	53	BB	BBB	B	57	+4▲
Tianjin	54	BB	BB	BB	67	+13▲
Jeddah	55	B	B	B	56	+1▲
Bratislava	56	BBB	BB	A	62	+6▲
Zaragoza	57	CCC	B	CC	54	-3▼
Zhuhai	58	CCC	CCC	CCC	60	+2▲
Riga	59	BB	BB	BB	83	+24▲
Shenzhen	60	CCC	CCC	CCC	66	+6▲
Lyon	61	BB	BB	BBB	64	+3▲
Nanjing	62	CCC	CCC	CCC	58	-4▼
Seattle	63	BB	BB	B	55	-8▼
Hangzhou	64	CCC	CCC	CCC	70	+6▲
Guangzhou	65	CCC	CCC	CCC	71	+6▲
Denver	66	BBB	BBB	BBB	53	-13▼

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Chicago	67	BB	BB	BB	61	-6▼
Los Angeles	68	BB	BB	BB	50	-18▼
Dublin	69	BB	BB	BBB	63	-6▼
Bordeaux	70	CCC	CCC	CC	78	+8▲
Manchester	71	BB	BB	BB	73	+2▲
Leeds	72	CC	CCC	CC	76	+4▲
Kuala Lumpur	73	B	B	CCC	89	+16▲
Medina	74	CCC	B	CCC	85	+11▲
San Francisco	75	BB	BB	B	68	-7▼
Krakow	76	CCC	CCC	CC	79	+3▲
Newcastle	77	CC	B	CC	77	—
Bologna	78	BB	BB	B	51	-27▼
Kiel	79	BB	BBB	CCC	81	+2▲
Montreal	80	BB	BB	B	69	-11▼
Barcelona	81	BB	BB	BB	75	-6▼
Chongqing	82	CCC	CCC	CCC	86	+4▲
Birmingham	83	BB	BB	BB	74	-9▼
Bangkok	84	CCC	CCC	B	88	+4▲
Lille	85	CCC	CCC	CC	84	-1▼
Tokyo	86	BB	BB	BB	72	-14▼
Glasgow	87	B	BB	B	80	-7▼
Muscat	88	B	B	CCC	96	+8▲

IMD Smart City Index 2024: Results

In 2024 City Ranking Order and 2023 Comparison

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Budapest	89	B	B	BB	87	-2▼
Philadelphia	90	B	B	B	92	+2▲
Milan	91	B	B	B	82	-9▼
Cardiff	92	CC	CCC	CC	94	+2▲
Chengdu	93	CCC	CCC	CCC	97	+4▲
Tel Aviv	94	B	B	B	91	-3▼
Osaka	95	B	BB	CCC	98	+3▲
Ankara	96	CCC	CCC	CCC	90	-6▼
Hanoi	97	CCC	CCC	CCC	100	+3▲
Phoenix	98	CC	CCC	C	93	-5▼
Al-Khobar	99	CCC	CCC	CC		NEW
Bucharest	100	B	B	B	104	+4▲
Belfast	101	CC	CCC	C	95	-6▼
Zagreb	102	B	B	B	106	+4▲
Jakarta	103	CC	CC	CCC	102	-1▼
Marseille	104	CC	CC	CC	101	-3▼
Ho Chi Minh City	105	CC	CC	CCC	103	-2▼
Delhi	106	CC	CC	CC	105	-1▼
Mumbai	107	CC	CC	CCC	109	+2▲
Lisbon	108	C	CC	CC	99	-9▼
Bengaluru	109	CCC	CCC	CCC	110	+1▲

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Istanbul	110	CC	C	CC	107	-3▼
Hyderabad	111	CC	CC	CC	116	+5▲
Medan	112	CC	CC	CC	112	—
Sofia	113	C	CC	CC	111	-2▼
Cairo	114	C	C	CC	108	-6▼
Makassar	115	CC	CC	CC	114	-1▼
Islamabad	116	CC	CC	CC	120	+4▲
Santiago	117	C	C	C	119	+2▲
Nicosia	118	C	CC	C	117	-1▼
Medellin	119	C	C	C	118	-1▼
Athens	120	C	C	C	113	-7▼
Manila	121	C	C	C	115	-6▼
Mexico City	122	C	D	C	121	-1▼
Buenos Aires	123	C	C	C	124	+1▲
Algiers	124	C	C	C	123	-1▼
San José	125	C	CC	C	127	+2▲
Rabat	126	C	C	C	126	—
Bogota	127	D	D	D	129	+2▲
Amman	128	D	D	C	135	+7▲
Cape Town	129	D	D	D	125	-4▼
Brasilia	130	C	C	C	128	-2▼

IMD Smart City Index 2024: Results

In 2024 City Ranking Order and 2023 Comparison

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Nairobi	131	C	C	C	131	—
Sao Paulo	132	D	D	C	130	-2▼
Rome	133	CCC	CCC	CCC	122	-11▼
Lima	134	C	C	C	134	—
Abuja	135	D	C	D	133	-2▼
Lagos	136	D	D	D	132	-4▼
Tunis	137	D	D	D	137	—
Accra	138	D	D	D	138	—
Rio de Janeiro	139	D	D	D	136	-3▼
Beirut	140	D	D	D	139	-1▼
Sana'a	141	D	D	D	140	-1▼
Guatemala City	142	D	D	D	141	-1▼

IMD Smart City Index 2024: Results

In Alphabetical Order by City and 2023 Comparison

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Abu Dhabi	10	BB	BB	BB	13	+3▲
Abuja	135	D	C	D	133	-2▼
Accra	138	D	D	D	138	—
Algiers	124	C	C	C	123	-1▼
Al-Khobar	99	CCC	CCC	CC	NEW	NEW
Amman	128	D	D	C	135	+7▲
Amsterdam	18	A	BBB	A	15	-3▼
Ankara	96	CCC	CCC	CCC	90	-6▼
Athens	120	C	C	C	113	-7▼
Auckland	31	BBB	BBB	A	22	-9▼
Bangkok	84	CCC	CCC	B	88	+4▲
Barcelona	81	BB	BB	BB	75	-6▼
Beijing	13	BB	BB	BB	12	-1▼
Beirut	140	D	D	D	139	-1▼
Belfast	101	CC	CCC	C	95	-6▼
Bengaluru	109	CCC	CCC	CCC	110	+1▲
Berlin	37	BBB	BBB	BBB	33	-4▼
Bilbao	29	BBB	BBB	BB	27	-2▼
Birmingham	83	BB	BB	BB	74	-9▼
Bogota	127	D	D	D	129	+2▲
Bologna	78	BB	BB	B	51	-27▼
Bordeaux	70	CCC	CCC	CC	78	+8▲

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Boston	36	BBB	BBB	A	34	-2▼
Brasilia	130	C	C	C	128	-2▼
Bratislava	56	BBB	BB	A	62	+6▲
Brisbane	30	A	A	A	24	-6▼
Brussels	40	BBB	BB	A	35	-5▼
Bucharest	100	B	B	B	104	+4▲
Budapest	89	B	B	BB	87	-2▼
Buenos Aires	123	C	C	C	124	+1▲
Busan	45	BB	BB	BBB	49	+4▲
Cairo	114	C	C	CC	108	-6▼
Canberra	3	AA	AAA	A	3	—
Cape Town	129	D	D	D	125	-4▼
Cardiff	92	CC	CCC	CC	94	+2▲
Chengdu	93	CCC	CCC	CCC	97	+4▲
Chicago	67	BB	BB	BB	61	-6▼
Chongqing	82	CCC	CCC	CCC	86	+4▲
Copenhagen	6	AA	AA	A	4	-2▼
Delhi	106	CC	CC	CC	105	-1▼
Denver	66	BBB	BBB	BBB	53	-13▼
Doha	48	B	BB	B	59	+11▲
Dubai	12	BB	BB	BB	17	+5▲
Dublin	69	BB	BB	BBB	63	-6▼

IMD Smart City Index 2024: Results

In Alphabetical Order by City and 2023 Comparison

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Dusseldorf	44	BB	BBB	B	38	-6▼
Geneva	4	AAA	AAA	AA	9	+5▲
Glasgow	87	B	BB	B	80	-7▼
Gothenburg	39	A	BBB	A	36	-3▼
Guangzhou	65	CCC	CCC	CCC	71	+6▲
Guatemala City	142	D	D	D	141	-1▼
Hamburg	14	BBB	BBB	BBB	11	-3▼
Hangzhou	64	CCC	CCC	CCC	70	+6▲
Hanoi	97	CCC	CCC	CCC	100	+3▲
Hanover	53	BB	BBB	B	57	+4▲
Helsinki	9	AA	AA	A	8	-1▼
Ho Chi Minh City	105	CC	CC	CCC	103	-2▼
Hong Kong	20	A	BBB	AAA	19	-1▼
Hyderabad	111	CC	CC	CC	116	+5▲
Islamabad	116	CC	CC	CC	120	+4▲
Istanbul	110	CC	C	CC	107	-3▼
Jakarta	103	CC	CC	CCC	102	-1▼
Jeddah	55	B	B	B	56	+1▲
Kiel	79	BB	BBB	CCC	81	+2▲
Krakow	76	CCC	CCC	CC	79	+3▲
Kuala Lumpur	73	B	B	CCC	89	+16▲
Lagos	136	D	D	D	132	-4▼

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Lausanne	7	AA	AA	A	5	-2▼
Leeds	72	CC	CCC	CC	76	+4▲
Lille	85	CCC	CCC	CC	84	-1▼
Lima	134	C	C	C	134	—
Lisbon	108	C	CC	CC	99	-9▼
Ljubljana	32	BBB	BBB	A	47	+15▲
London	8	A	BBB	AA	6	-2▼
Los Angeles	68	BB	BB	BB	50	-18▼
Luxembourg	27	BBB	A	BB	45	+18▲
Lyon	61	BB	BB	BBB	64	+3▲
Madrid	35	BB	BB	BBB	37	+2▲
Makassar	115	CC	CC	CC	114	-1▼
Manchester	71	BB	BB	BB	73	+2▲
Manila	121	C	C	C	115	-6▼
Marseille	104	CC	CC	CC	101	-3▼
Mecca	52	B	B	B	52	—
Medan	112	CC	CC	CC	112	—
Medellin	119	C	C	C	118	-1▼
Medina	74	CCC	B	CCC	85	+11▲
Melbourne	33	A	BBB	A	31	-2▼
Mexico City	122	C	D	C	121	-1▼
Milan	91	B	B	B	82	-9▼

IMD Smart City Index 2024: Results

In Alphabetical Order by City and 2023 Comparison

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Montreal	80	BB	BB	B	69	-11▼
Mumbai	107	CC	CC	CCC	109	+2▲
Munich	21	A	A	A	20	-1▼
Muscat	88	B	B	CCC	96	+8▲
Nairobi	131	C	C	C	131	—
Nanjing	62	CCC	CCC	CCC	58	-4▼
New York	34	BB	BB	BB	21	-13▼
Newcastle	77	CC	B	CC	77	—
Nicosia	118	C	CC	C	117	-1▼
Osaka	95	B	BB	CCC	98	+3▲
Oslo	2	AA	AA	A	2	—
Ottawa	46	BBB	A	BBB	40	-6▼
Paris	49	BBB	BB	A	46	-3▼
Philadelphia	90	B	B	B	92	+2▲
Phoenix	98	CC	CCC	C	93	-5▼
Prague	15	A	A	A	14	-1▼
Rabat	126	C	C	C	126	—
Reykjavik	26	BBB	A	BBB	26	—
Riga	59	BB	BB	BB	83	+24▲
Rio de Janeiro	139	D	D	D	136	-3▼
Riyadh	25	B	B	B	30	+5▲
Rome	133	CCC	CCC	CCC	122	-11▼

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Rotterdam	41	A	BBB	A	41	—
San Francisco	75	BB	BB	B	68	-7▼
San José	125	C	CC	C	127	+2▲
Sana'a	141	D	D	D	140	-1▼
Santiago	117	C	C	C	119	+2▲
Sao Paulo	132	D	D	C	130	-2▼
Seattle	63	BB	BB	B	55	-8▼
Seoul	17	AA	BBB	AAA	16	-1▼
Shanghai	19	BB	BB	BB	25	+6▲
Shenzhen	60	CCC	CCC	CCC	66	+6▲
Singapore	5	A	A	A	7	+2▲
Sofia	113	C	CC	CC	111	-2▼
Stockholm	11	A	A	A	10	-1▼
Sydney	22	A	BBB	A	18	-4▼
Taipei City	16	A	BBB	A	29	+13▲
Tallinn	24	BBB	BBB	BBB	32	+8▲
Tel Aviv	94	B	B	B	91	-3▼
The Hague	42	A	BBB	A	43	+1▲
Tianjin	54	BB	BB	BB	67	+13▲
Tokyo	86	BB	BB	BB	72	-14▼
Toronto	51	BBB	BBB	A	48	-3▼
Tunis	137	D	D	D	137	—

IMD Smart City Index 2024: Results

In Alphabetical Order by City and 2023 Comparison

City	Smart City Rank 2024	Smart City Rating 2024	Structure 2024	Technology 2024	Smart City Rank 2023	Change
Vancouver	43	BBB	BBB	BBB	42	-1▼
Vienna	23	AA	AA	A	28	+5▲
Vilnius	47	BBB	BBB	BBB	65	+18▲
Warsaw	38	BBB	BBB	BBB	44	+6▲
Washington D.C.	50	BB	BB	BB	39	-11▼
Wellington	28	BBB	A	BBB	23	-5▼
Zagreb	102	B	B	B	106	+4▲
Zaragoza	57	CCC	B	CC	54	-3▼
Zhuhai	58	CCC	CCC	CCC	60	+2▲
Zurich	1	AAA	AAA	AA	1	—

IMD Smart City Index 2024: Results

In Alphabetical Order by Country with HDI Context and 2019-2024 Rankings (2023 Methodology Applied)

Country	Country HDI	City	HDI city	2024 Smart City Ranking	AVERAGE 19-20-21	AVERAGE 20-21-23	AVERAGE 21-23-24
Algeria	0.745	Algiers	0.767	124	-	123	124
Argentina	0.849	Buenos Aires	0.844	123	95	107	117
Australia	0.946	Brisbane	0.944	30	36	30	31
Australia	0.946	Canberra	0.980	3	-	3	3
Australia	0.946	Melbourne	0.948	33	35	33	33
Australia	0.946	Sydney	0.952	22	28	26	23
Austria	0.926	Vienna	0.942	23	17	22	24
Belgium	0.942	Brussels	0.953	40	37	32	40
Brazil	0.76	Brasilia	0.816	130	-	128	129
Brazil	0.76	Rio de Janeiro	0.783	139	110	121	131
Brazil	0.76	Sao Paulo	0.780	132	107	118	126
Bulgaria	0.799	Sofia	0.856	113	92	100	109
Canada	0.935	Montreal	0.923	80	52	59	68
Canada	0.935	Ottawa	0.943	46	-	40	43
Canada	0.935	Toronto	0.943	51	35	42	43
Canada	0.935	Vancouver	0.944	43	29	37	38
Chile	0.86	Santiago	0.886	117	96	109	114
China	0.788	Beijing	0.907	13	23	17	14
China	0.788	Chengdu	0.740	93	78	86	91
China	0.788	Chongqing	0.774	82	69	75	81
China	0.788	Guangzhou	0.799	65	66	67	67
China	0.788	Hangzhou	0.801	64	63	64	66
China	0.788	Nanjing	0.810	62	60	58	59
China	0.788	Shanghai	0.880	19	37	33	25

IMD Smart City Index 2024: Results

In Alphabetical Order by Country with HDI Context and 2019-2024 Rankings

Country	Country HDI	City	HDI city	2024 Smart City Ranking	AVERAGE 19-20-21	AVERAGE 20-21-23	AVERAGE 21-23-24
China	0.788	Shenzhen	0.799	60	62	64	62
China	0.788	Tianjin	0.844	54	48	54	57
China	0.788	Zhuhai	0.799	58	54	56	57
Colombia	0.758	Bogota	0.797	127	103	115	123
Colombia	0.758	Medellin	0.757	119	90	102	112
Costa Rica	0.806	San José	0.826	125	112	120	121
Croatia	0.878	Zagreb	0.916	102	-	106	104
Cyprus	0.907	Nicosia	0.896	118	-	117	118
Czech Rep.	0.895	Prague	0.960	15	7	9	13
Denmark	0.952	Copenhagen	0.967	6	4	4	5
Egypt	0.728	Cairo	0.779	114	100	104	109
Estonia	0.899	Tallinn	0.932	24	32	32	27
Finland	0.942	Helsinki	0.960	9	7	7	9
France	0.91	Bordeaux	0.900	70	68	73	72
France	0.91	Lille	0.880	85	82	83	84
France	0.91	Lyon	0.914	61	59	62	62
France	0.91	Marseille	0.899	104	87	92	99
France	0.91	Paris	0.949	49	45	47	48
Germany	0.95	Berlin	0.959	37	20	25	30
Germany	0.95	Dusseldorf	0.939	44	27	34	36
Germany	0.95	Hamburg	0.972	14	7	8	11
Germany	0.95	Hanover	0.930	53	49	54	54
Germany	0.95	Kiel	0.921	79	72	77	77
Germany	0.95	Munich	0.950	21	16	17	19

IMD Smart City Index 2024: Results

In Alphabetical Order by Country with HDI Context and 2019-2024 Rankings

Country	Country HDI	City	HDI city	2024 Smart City Ranking	AVERAGE 19-20-21	AVERAGE 20-21-23	AVERAGE 21-23-24
Ghana	0.602	Accra	0.707	138	-	138	138
Greece	0.893	Athens	0.909	120	100	106	114
Guatemala	0.629	Guatemala City	0.722	142	-	141	142
Hong Kong	0.956	Hong Kong	0.950	20	35	29	24
Hungary	0.851	Budapest	0.922	89	68	76	85
Iceland	0.959	Reykjavik	0.959	26	-	26	26
India	0.644	Bengaluru	0.667	109	93	101	105
India	0.644	Delhi	0.730	106	86	95	102
India	0.644	Hyderabad	0.647	111	91	103	109
India	0.644	Mumbai	0.688	107	89	98	104
Indonesia	0.713	Jakarta	0.759	103	84	92	99
Indonesia	0.713	Makassar	0.699	115	93	102	110
Indonesia	0.713	Medan	0.711	112	93	101	107
Ireland	0.95	Dublin	0.950	69	31	45	59
Israel	0.915	Tel Aviv	0.919	94	54	68	81
Italy	0.906	Bologna	0.924	78	46	50	59
Italy	0.906	Milan	0.915	91	64	74	81
Italy	0.906	Rome	0.917	133	102	110	122
Japan	0.92	Osaka	0.928	95	81	91	94
Japan	0.92	Tokyo	0.951	86	62	71	75
Jordan	0.736	Amman	0.737	128	-	135	132
Kenya	0.601	Nairobi	0.636	131	107	118	126
Korea, South	0.929	Busan	0.936	45	40	42	47
Korea, South	0.929	Seoul	0.952	17	20	18	17

IMD Smart City Index 2024: Results

In Alphabetical Order by Country with HDI Context and 2019-2024 Rankings

Country	Country HDI	City	HDI city	2024 Smart City Ranking	AVERAGE 19-20-21	AVERAGE 20-21-23	AVERAGE 21-23-24
Latvia	0.879	Riga	0.929	59	-	83	71
Lebanon	0.723	Beirut	0.677	140	-	139	140
Lithuania	0.879	Vilnius	0.913	47	-	65	56
Luxembourg	0.927	Luxembourg	0.930	27	-	45	36
Malaysia	0.807	Kuala Lumpur	0.858	73	70	80	81
Mexico	0.781	Mexico City	0.815	122	101	111	118
Morocco	0.698	Rabat	0.702	126	103	112	120
Netherlands	0.946	Amsterdam	0.962	18	12	13	15
Netherlands	0.946	Rotterdam	0.941	41	39	40	42
Netherlands	0.946	The Hague	0.941	42	36	39	40
New Zealand	0.939	Auckland	0.951	31	12	18	23
New Zealand	0.939	Wellington	0.958	28	-	23	26
Nigeria	0.548	Abuja	0.646	135	106	118	127
Nigeria	0.548	Lagos	0.681	136	107	118	128
Norway	0.966	Oslo	0.980	2	2	2	2
Oman	0.819	Muscat	0.816	88	-	96	92
Pakistan	0.54	Islamabad	0.659	116	-	120	118
Peru	0.762	Lima	0.820	134	-	134	134
Philippines	0.71	Manila	0.760	121	96	103	112
Poland	0.881	Krakow	0.888	76	64	75	77
Poland	0.881	Warsaw	0.926	38	34	44	41
Portugal	0.874	Lisbon	0.900	108	73	85	96
Qatar	0.875	Doha	0.855	48	-	59	54
Romania	0.827	Bucharest	0.926	100	74	89	97

IMD Smart City Index 2024: Results

In Alphabetical Order by Country with HDI Context and 2019-2024 Rankings

Country	Country HDI	City	HDI city	2024 Smart City Ranking	AVERAGE 19-20-21	AVERAGE 20-21-23	AVERAGE 21-23-24
Saudi Arabia	0.875	Al-Khobar	0.862	99	-	-	-
Saudi Arabia	0.875	Jeddah	0.871	55	-	56	56
Saudi Arabia	0.875	Mecca	0.871	52	-	52	52
Saudi Arabia	0.875	Medina	0.871	74	79	82	79
Saudi Arabia	0.875	Riyadh	0.900	25	46	38	31
Singapore	0.949	Singapore	0.939	5	8	7	6
Slovakia	0.855	Bratislava	0.944	56	33	43	53
Slovenia	0.926	Ljubljana	0.953	32	-	47	40
South Africa	0.717	Cape Town	0.751	129	99	110	120
Spain	0.911	Barcelona	0.916	81	61	68	75
Spain	0.911	Bilbao	0.932	29	22	25	26
Spain	0.911	Madrid	0.940	35	31	35	36
Spain	0.911	Zaragoza	0.912	57	54	53	54
Sweden	0.952	Gothenburg	0.944	39	41	42	40
Sweden	0.952	Stockholm	0.972	11	10	10	11
Switzerland	0.967	Geneva	0.966	4	7	8	6
Switzerland	0.967	Lausanne	0.966	7	4	5	5
Switzerland	0.967	Zurich	0.989	1	1	1	1
Taiwan	0.926	Taipei City	0.930	16	24	26	23
Thailand	0.803	Bangkok	0.839	84	80	84	86
Tunisia	0.732	Tunis	0.775	137	-	137	137
Turkey	0.855	Ankara	0.854	96	74	80	87
Turkey	0.855	Istanbul	0.867	110	88	98	102
United Arab Emirates	0.937	Abu Dhabi	0.911	10	14	13	12

IMD Smart City Index 2024: Results

In Alphabetical Order by Country with HDI Context and 2019-2024 Rankings

Country	Country HDI	City	HDI city	2024 Smart City Ranking	AVERAGE 19-20-21	AVERAGE 20-21-23	AVERAGE 21-23-24
United Arab Emirates	0.937	Dubai	0.911	12	15	17	14
United Kingdom	0.94	Belfast	0.896	101	-	95	98
United Kingdom	0.94	Birmingham	0.913	83	68	72	77
United Kingdom	0.94	Glasgow	0.921	87	65	73	77
United Kingdom	0.94	Leeds	0.908	72	64	70	71
United Kingdom	0.94	London	0.973	8	5	6	6
United Kingdom	0.94	Manchester	0.915	71	58	63	67
United Kingdom	0.94	Newcastle	0.901	77	62	67	72
United Kingdom	0.94	Cardiff	0.898	92	-	94	93
USA	0.927	Boston	0.949	36	20	27	31
USA	0.927	Chicago	0.929	67	56	57	61
USA	0.927	Denver	0.942	66	31	39	51
USA	0.927	Los Angeles	0.931	68	37	39	49
USA	0.927	New York	0.938	34	22	17	25
USA	0.927	Philadelphia	0.923	90	78	85	89
USA	0.927	Phoenix	0.908	98	75	81	89
USA	0.927	San Francisco	0.931	75	44	57	66
USA	0.927	Seattle	0.940	63	37	45	52
USA	0.927	Washington D.C.	0.940	50	22	26	38
Vietnam	0.726	Hanoi	0.744	97	83	90	95
Vietnam	0.726	Ho Chi Minh City	0.714	105	85	94	100
Yemen	0.424	Sana'a	0.521	141	-	140	141

IMD Smart City Index 2024

A User's Guide

IMD Smart City Index 2024

A User's Guide

SMART CITY RANKING

10

Out of 142



13 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

Smart City Ranking

Smart City Ranking: The Ranking position of the city amongst the 142 cities measured, based upon the Rating and its components.

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

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

The Methodology section provides the exact procedure for these calculations.

The 2023 Ranking and Rating are also shown for the 141 cities included in the last edition's index.

BACKGROUND INFORMATION

City

Population 1,480,000
(UN World Urbanization Prospects)

HDI 0.911
(Global Data Lab)



Country

United Arab Emirates

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.930	0.931	0.937	+0.006
Life expectancy at birth	79.7	78.9	78.7	79.2	+0.5
Expected years of schooling	16.8	17.2	17.2	17.2	+0.0
Mean years of schooling	12.7	12.7	12.8	12.8	+0.0
GNI per capita (PPP \$)	72,131	67,353	69,550	74,104	+4,553

Background Information

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

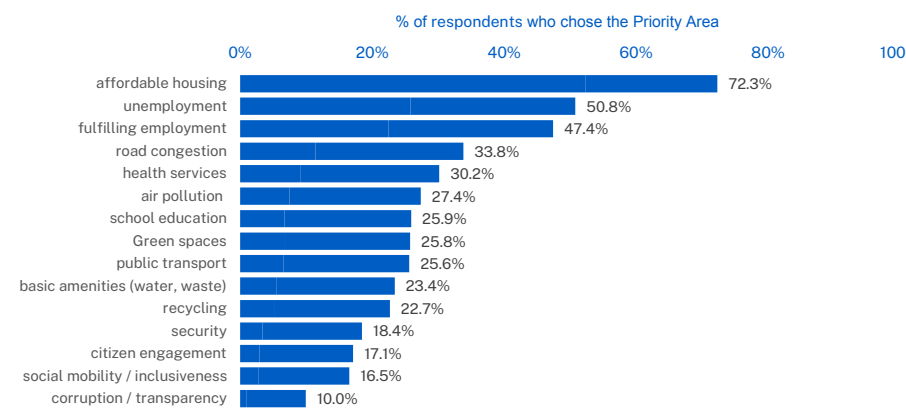
It also presents the United Nations HDI (country-level - for the parent economy of a given city) and its four components, as well as the city's position on the map. Please note: for Taipei City only, the data is calculated using the same methodology and comparable data.

Priority Areas

Summarizes the areas that the respondents perceive as the priority area for their city. From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The total bar indicates the percentage of the respondents that included a given area as one of their five choices. The higher the percentage of responses per area, the greater the priority for the city.

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.

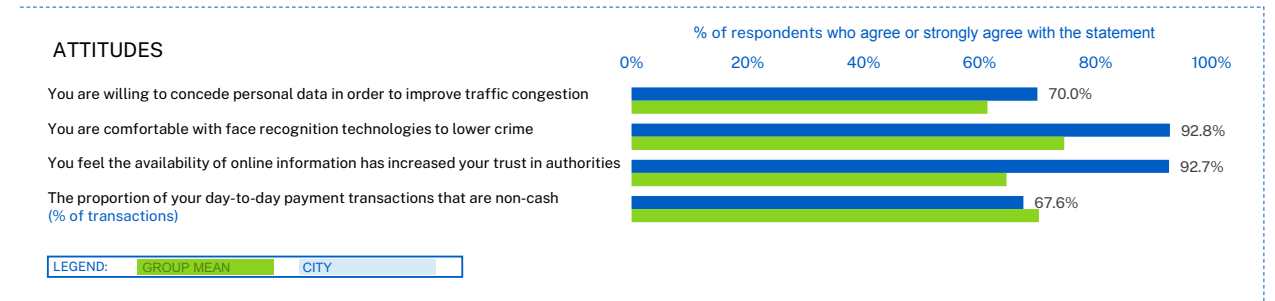


IMD Smart City Index 2024

A User's Guide

Attitudes

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



Structures and Technologies

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

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

This table can be read in two ways: down to examine all Structures or Technologies indicators, or across to examine a key area in both Structures and Technologies.



IMD Smart City Index 2024

Methodology

IMD Smart City Index 2024

Methodology

- 1 The IMD Smart City Index 2024 assesses the perceptions of residents on issues related to structures and technology applications available to them in their city.
- 2 This edition of the SCI ranks 142 cities worldwide by capturing the perceptions of 120 residents in each city. The final score for each city is computed by using the perceptions of the last three years of the survey, with the weight of 3:2:1 for 2024:2023:2021.
- 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 Global Data Lab's Human Development Index (HDI) score of the city 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.
For group 1 (highest HDI quartile), scale
AAA-AA-A-BBB-BB
For group 2 (second HDI quartile), scale
A-BBB-BB-B-CCC
For group 3 (third HDI quartile), scale
BB-B-CCC-CC-C
For group 4 (lowest HDI quartile), scale
CCC-CC-C-D
- 7 **Rankings are then presented in two formats:**
 - an overall ranking (1 to 142)
 - a rating for each pillar and overall

IMD Smart City Index 2024

City Profiles

Abu Dhabi

SMART CITY RANKING

10

Out of 142



13 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,480,000
(UN World Urbanization Prospects)

HDI 0.911
(Global Data Lab)



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

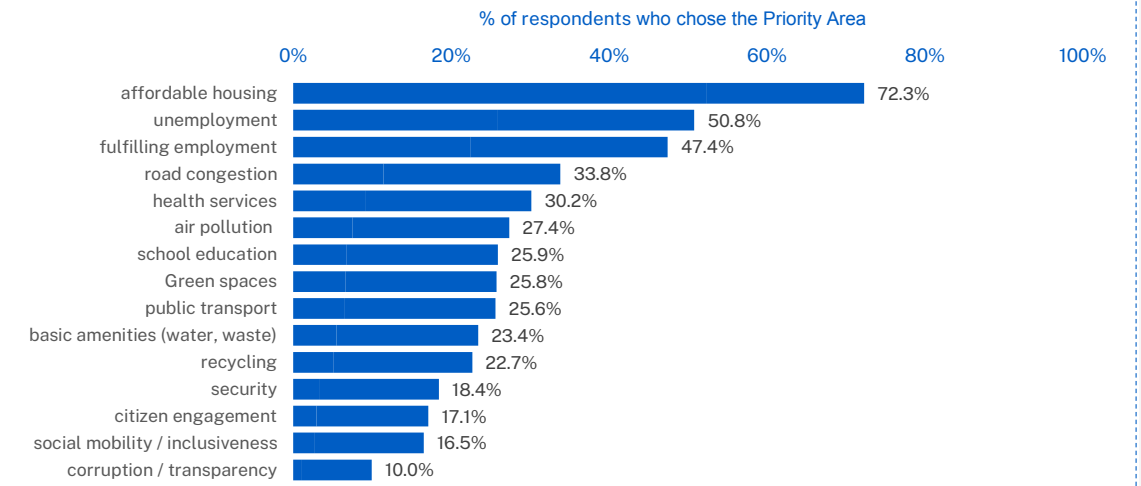
Country

United Arab Emirates

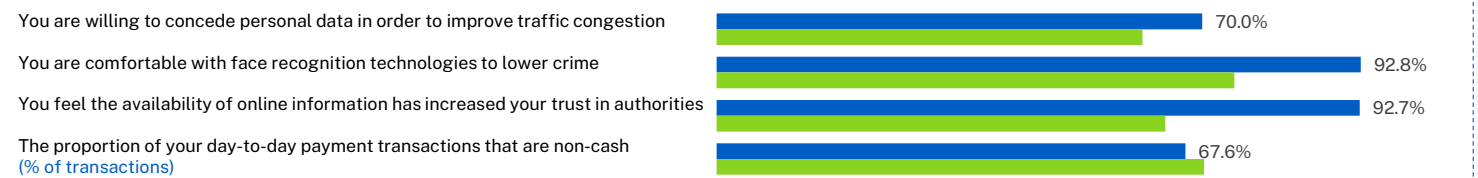
	2019	2020	2021	2022	1 yr change
HDI	0.933	0.930	0.931	0.937	+0.006
Life expectancy at birth	79.7	78.9	78.7	79.2	+0.5
Expected years of schooling	16.8	17.2	17.2	17.2	+0.0
Mean years of schooling	12.7	12.7	12.8	12.8	+0.0
GNI per capita (PPP \$)	72,131	67,353	69,550	74,104	+4,553

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

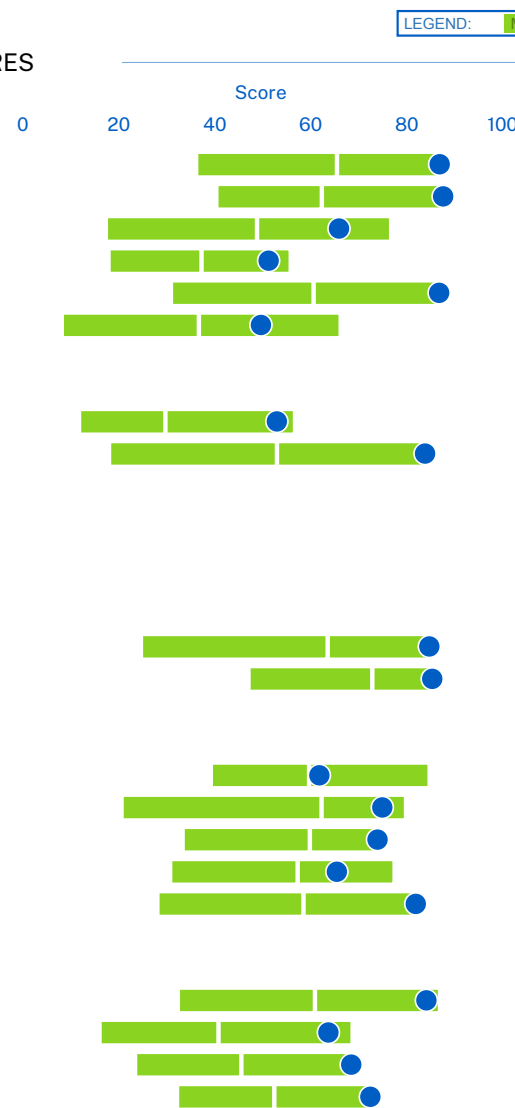
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

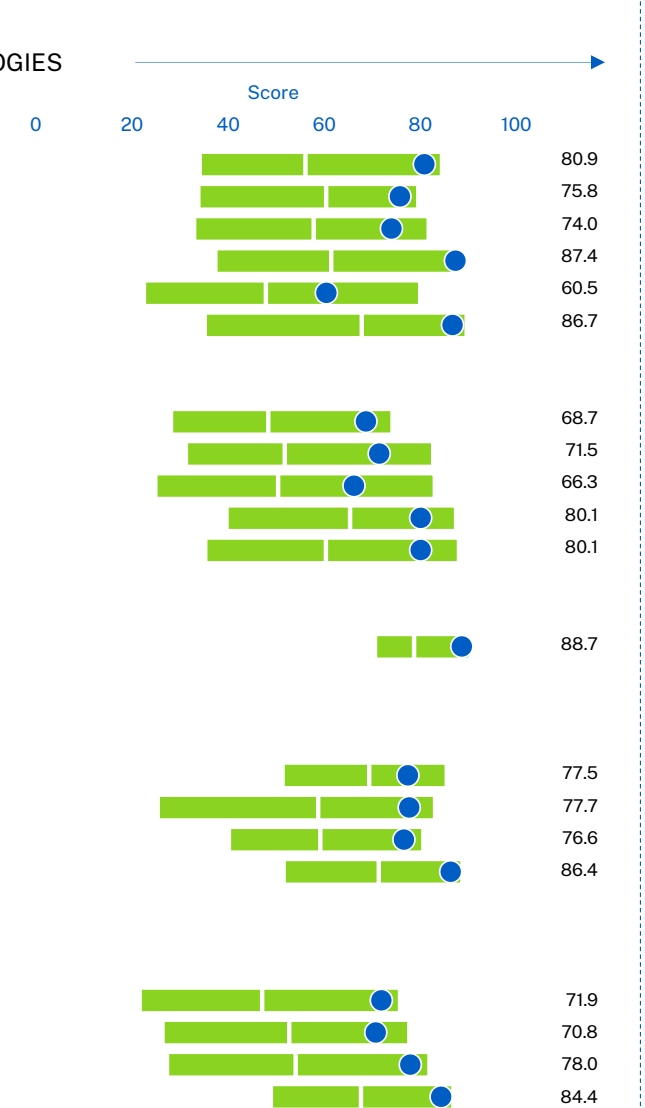
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Abuja

SMART CITY RANKING

135

Out of 142



133 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

C

STRUCTURES

D

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 3,280,000
(UN World Urbanization Prospects)

HDI 0.646
(Global Data Lab)



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

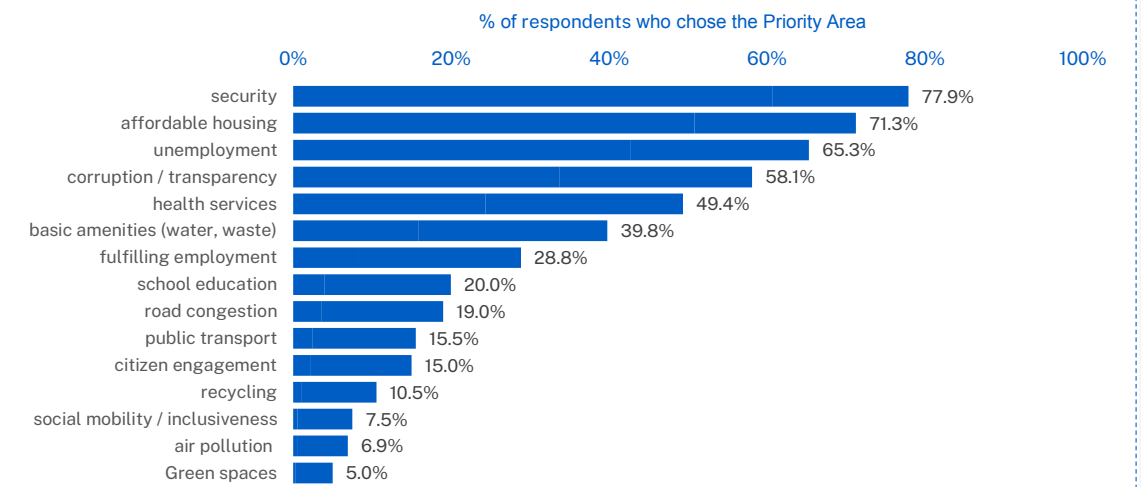
Country

Nigeria

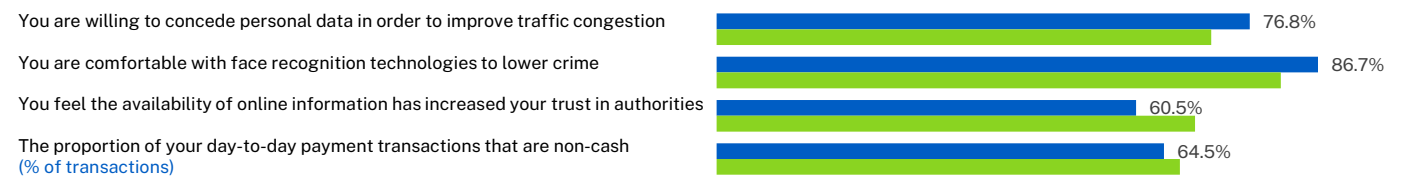
	2019	2020	2021	2022	1 yr change
HDI	0.537	0.539	0.542	0.548	+0.006
Life expectancy at birth	52.9	52.9	52.7	53.6	+1.0
Expected years of schooling	10.1	10.3	10.5	10.5	+0.0
Mean years of schooling	7.2	7.4	7.6	7.6	+0.0
GNI per capita (PPP \$)	4,914	4,685	4,716	4,755	+39

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.



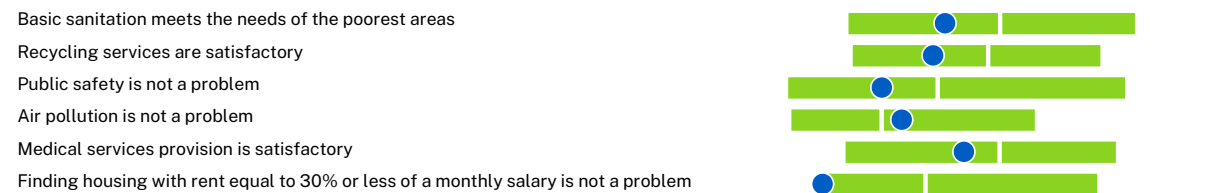
ATTITUDES



LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

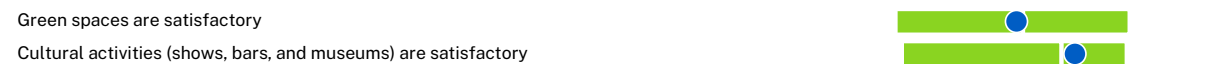
Health & Safety



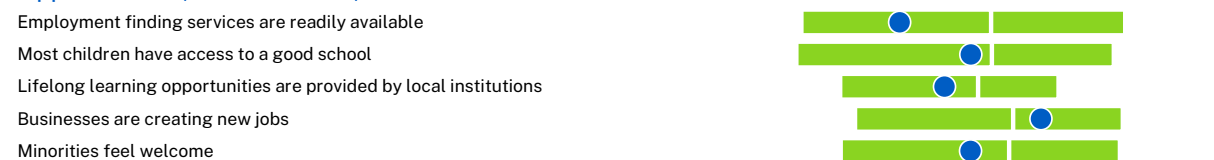
Mobility



Activities



Opportunities (Work & School)

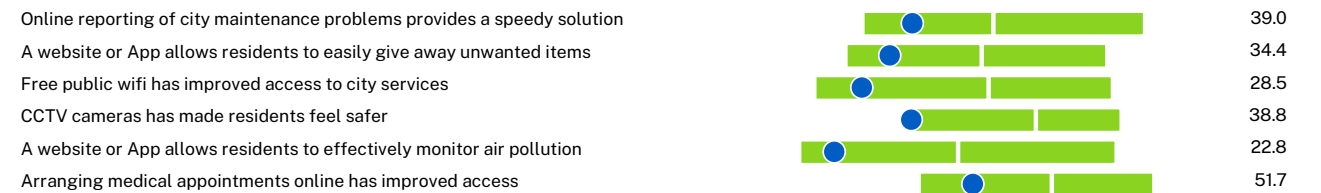


Governance

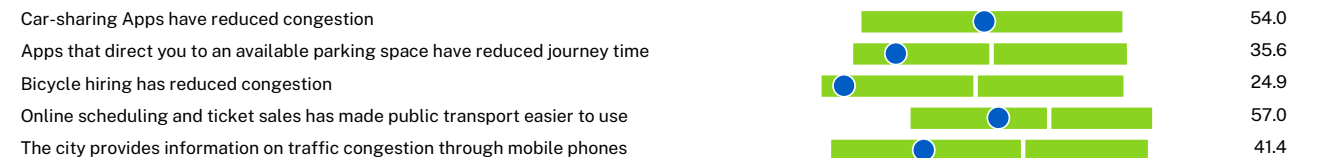


TECHNOLOGIES

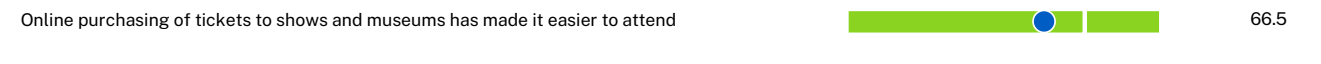
Health & Safety



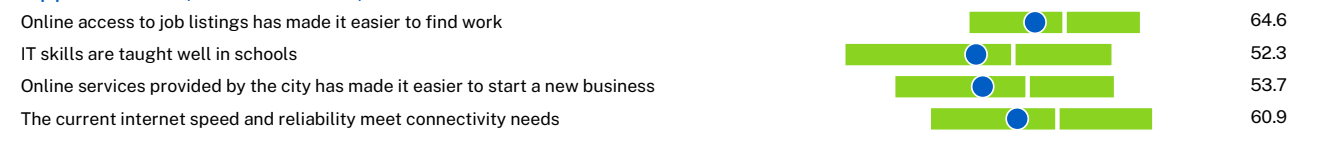
Mobility



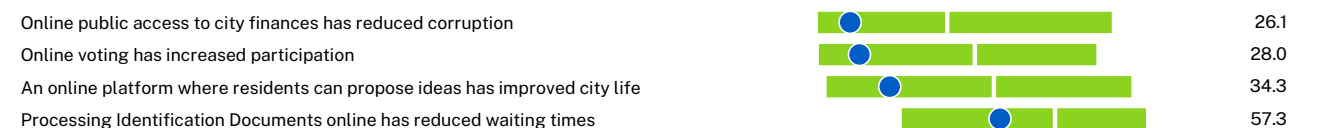
Activities



Opportunities (Work & School)



Governance



Accra

SMART CITY RANKING

138

Out of 142

138 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,610,000
(UN World Urbanization Prospects)

HDI 0.707
(Global Data Lab)



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

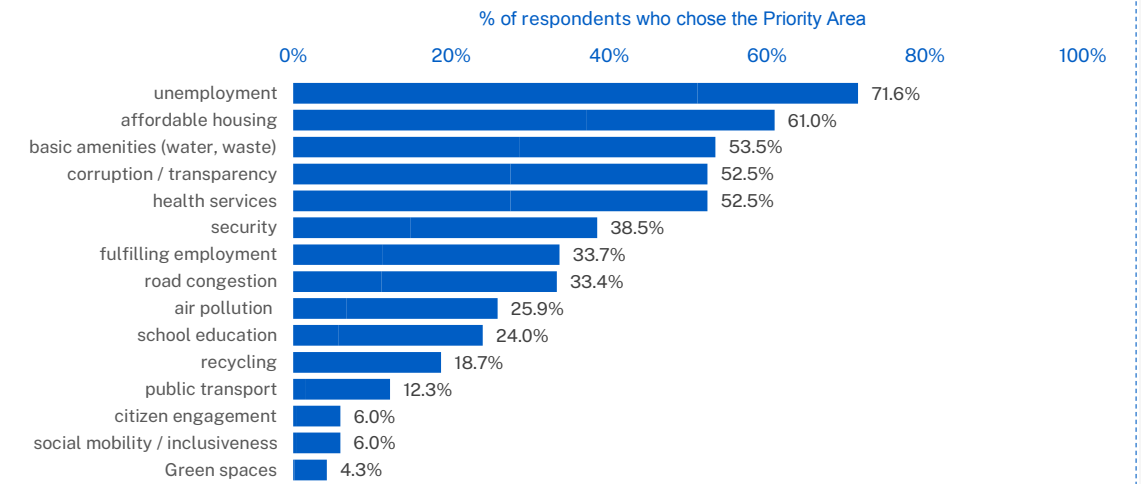
Country

Ghana

	2019	2020	2021	2022	1 yr change
HDI	0.599	0.601	0.600	0.602	+0.002
Life expectancy at birth	64.7	64.1	63.8	63.9	+0.1
Expected years of schooling	11.3	11.4	11.6	11.6	+0.0
Mean years of schooling	6.3	6.4	6.4	6.4	+0.0
GNI per capita (PPP \$)	5,121	5,305	5,279	5,380	+102

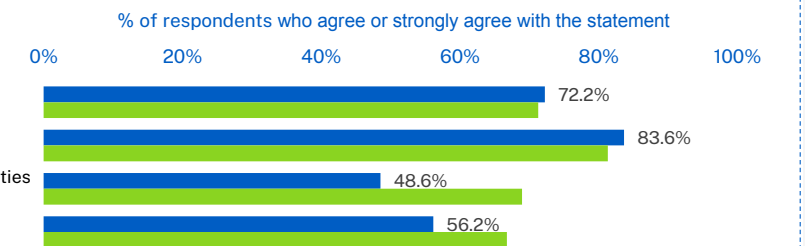
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

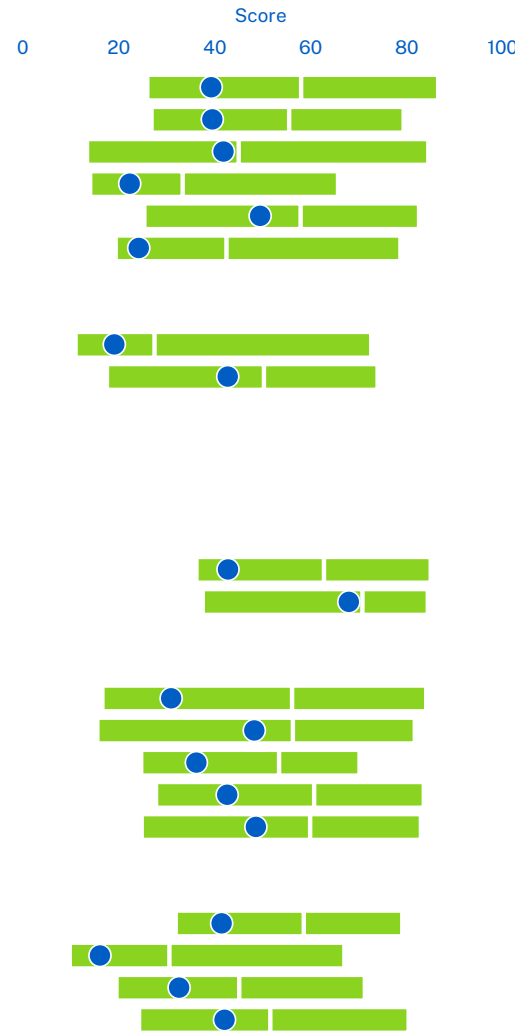
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

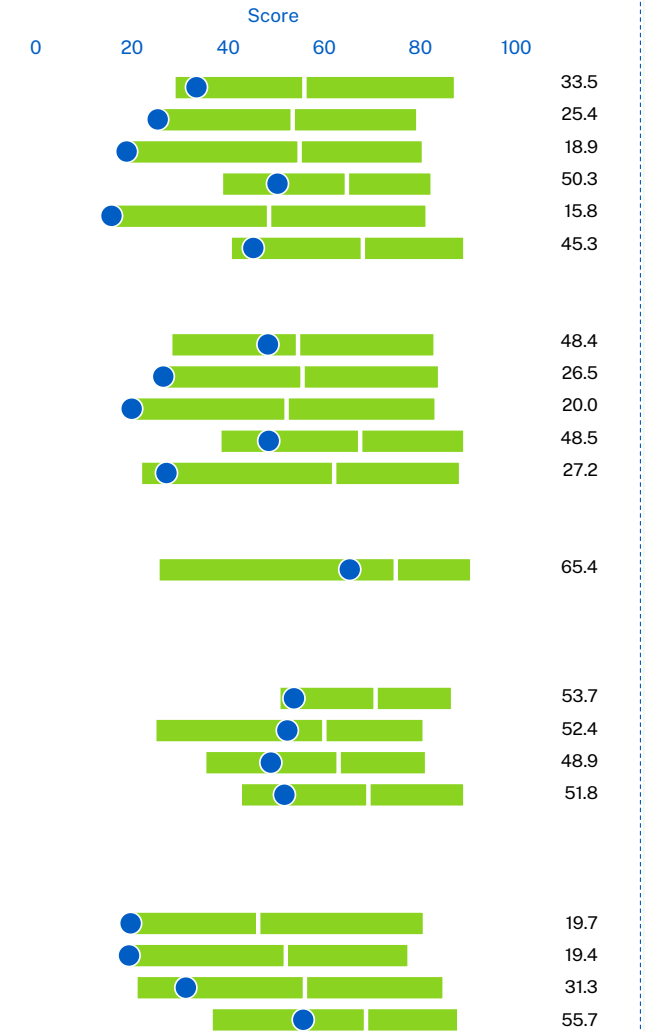
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Algiers

SMART CITY RANKING

124

Out of 142



123 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

C

STRUCTURES

C

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,850,000
(UN World Urbanization Prospects)

HDI 0.767
(Global Data Lab)



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

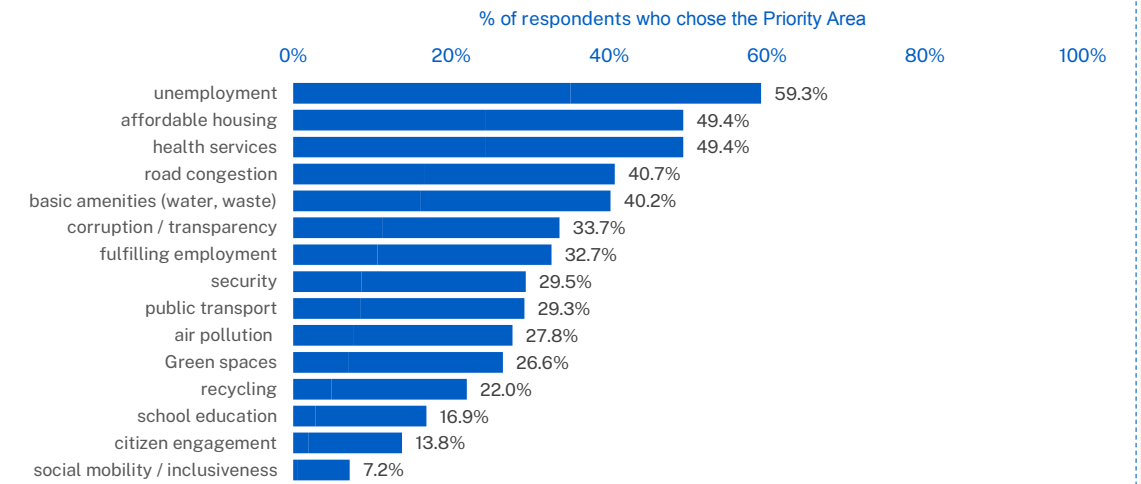
Country

Algeria

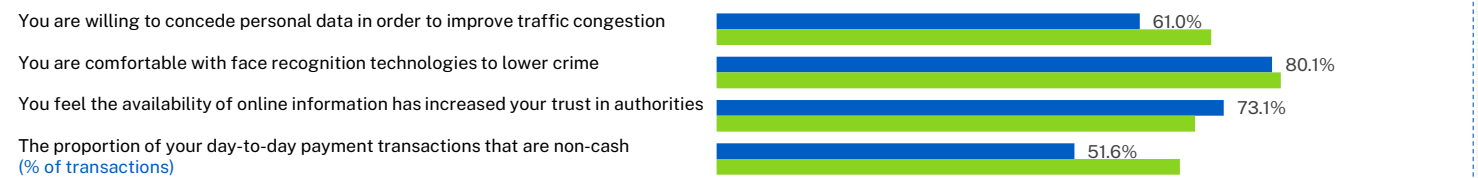
	2019	2020	2021	2022	1 yr change
HDI	0.742	0.730	0.740	0.745	+0.005
Life expectancy at birth	76.5	74.5	76.4	77.1	+0.8
Expected years of schooling	15.2	15.3	15.4	15.5	+0.1
Mean years of schooling	7.0	7.0	7.0	7.0	+0.0
GNI per capita (PPP \$)	11,354	10,635	10,823	10,978	+155

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

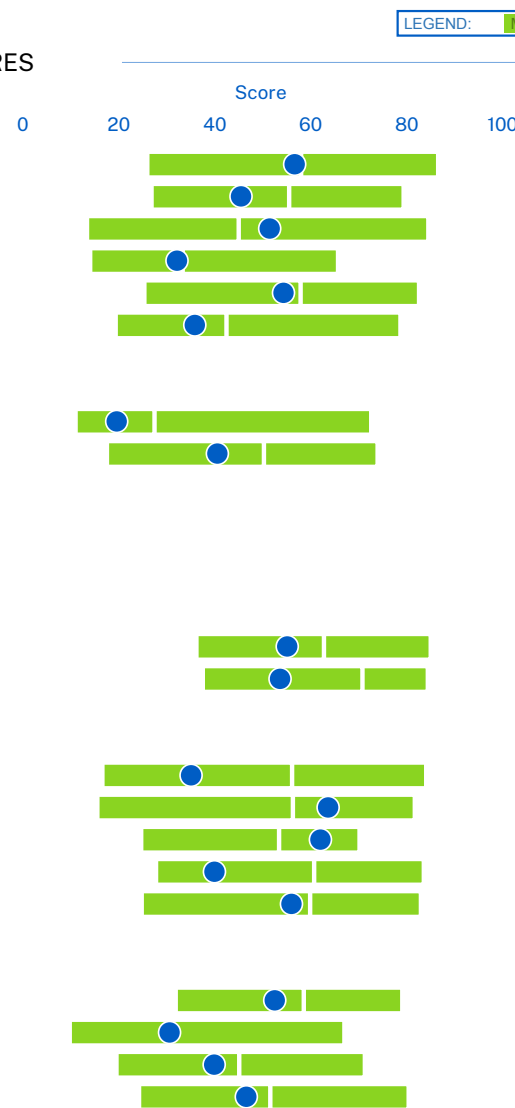
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

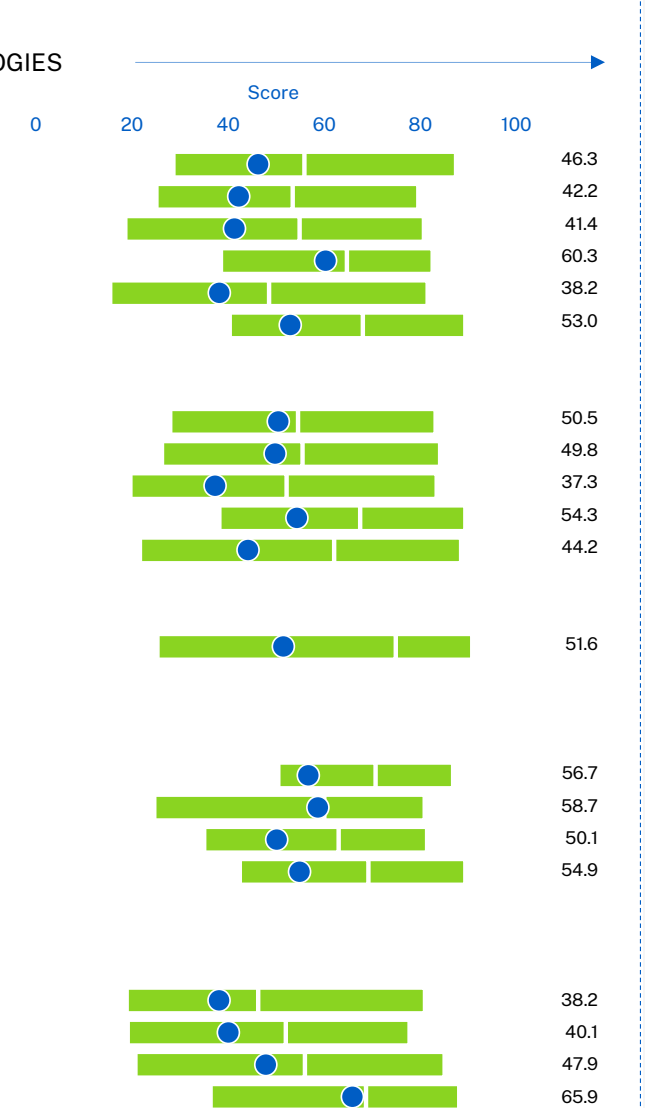
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Al-Khobar

SMART CITY RANKING

99

Out of 142

not in 2023

SMART CITY RATING

CCC

not in 2023

FACTOR RATINGS

CCC

STRUCTURES

CC

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 410,000
(Census)

HDI 0.862
(Global Data Lab)



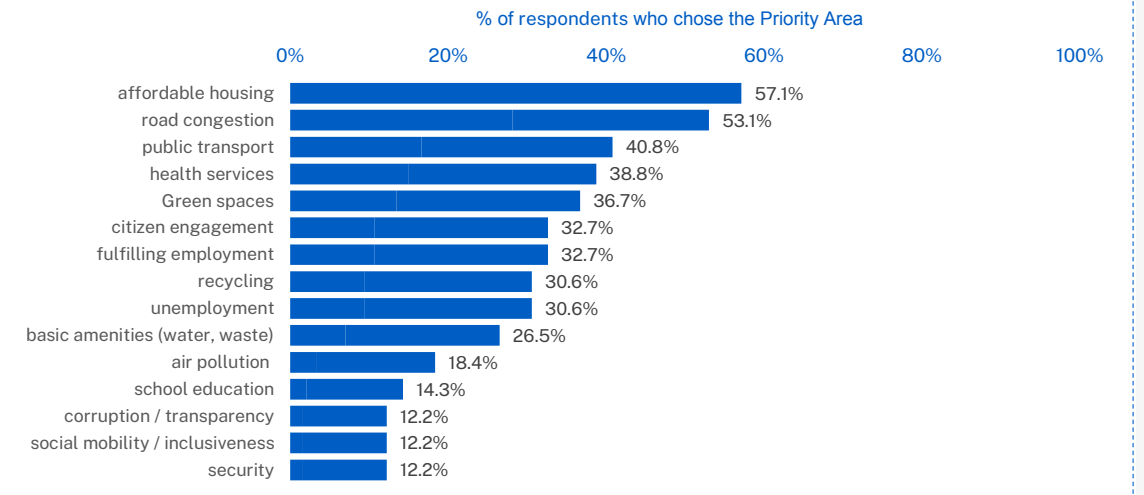
Country

Saudi Arabia

	2019	2020	2021	2022	1 yr change
HDI	0.862	0.861	0.867	0.875	+0.008
Life expectancy at birth	77.3	76.2	76.9	77.9	+1.0
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	10.9	11.3	11.3	11.3	+0.0
GNI per capita (PPP \$)	47,529	45,563	47,441	50,620	+3,179

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.



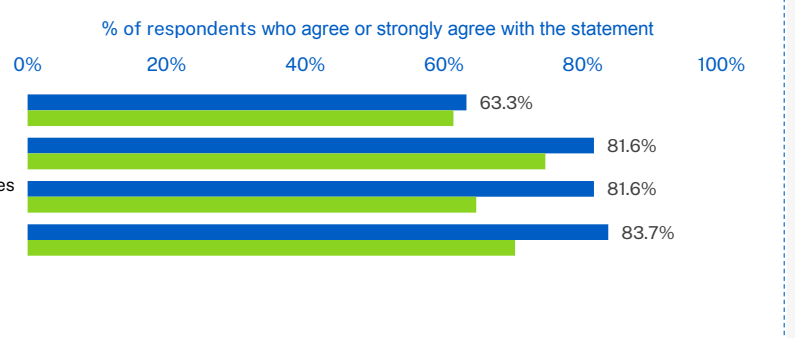
ATTITUDES

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

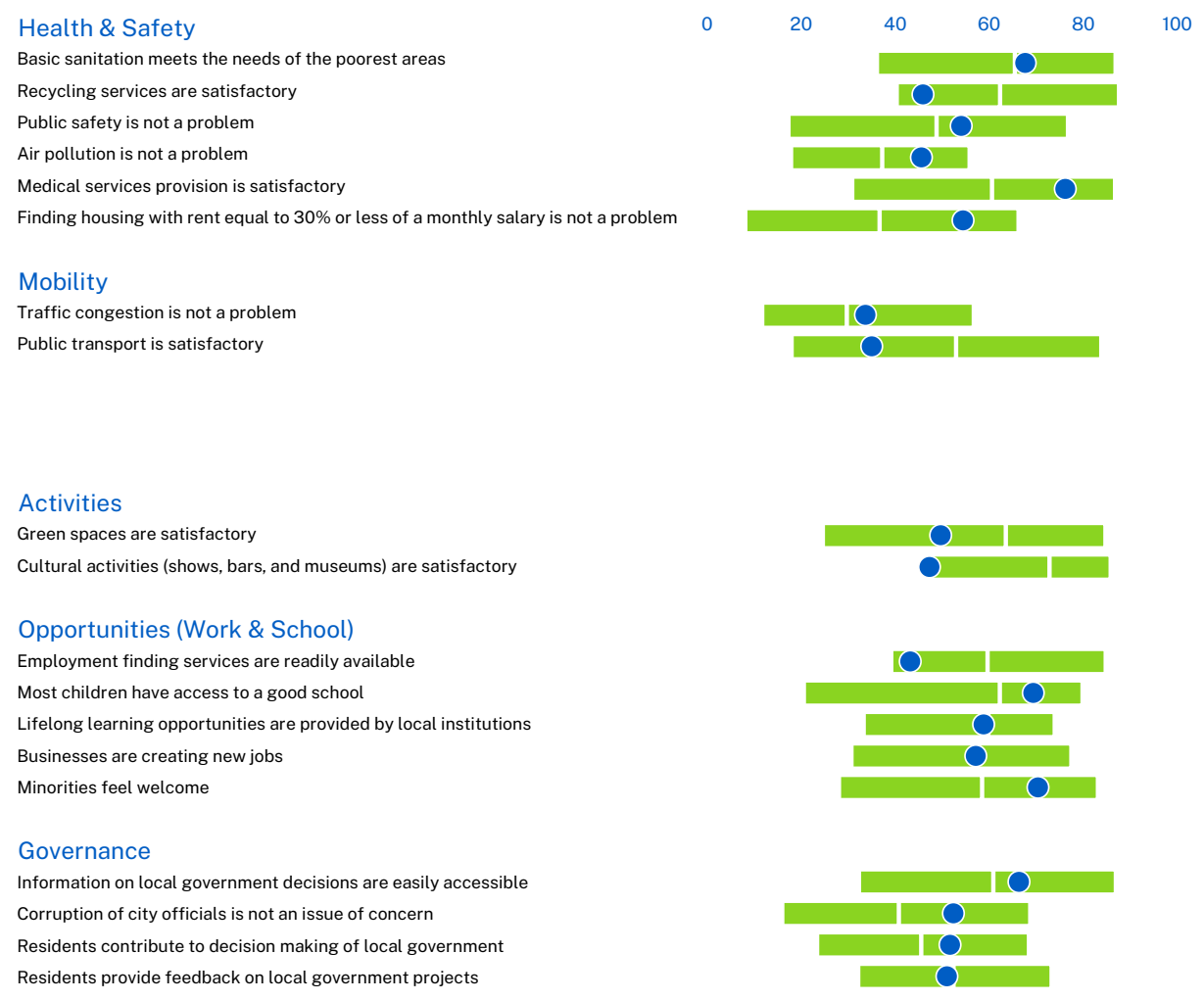
You are comfortable with face recognition technologies to lower crime

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

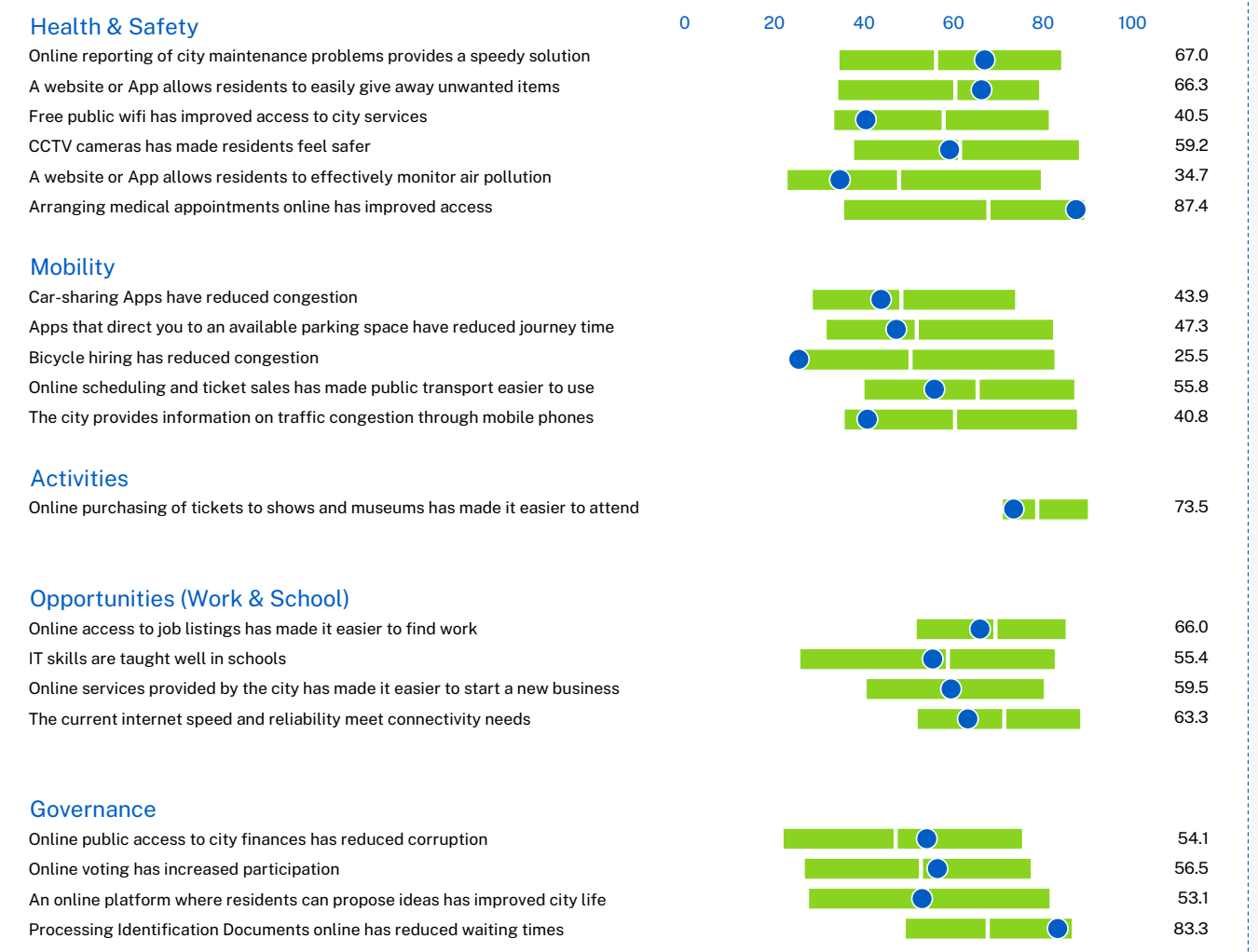
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)



STRUCTURES



TECHNOLOGIES



Amman

SMART CITY RANKING
128
 Out of 142

▲

135 in 2023
 Out of 141

SMART CITY RATING
D
 D in 2023

FACTOR RATINGS
D
 STRUCTURES

C
 TECHNOLOGIES

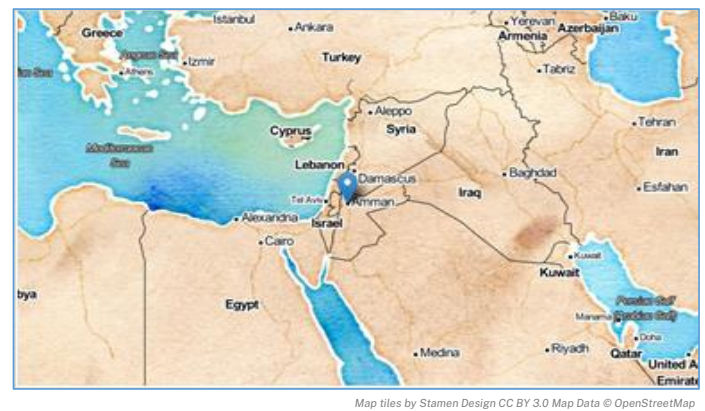
GROUP
4

All ratings range from AAA to D

BACKGROUND INFORMATION

City
 Population 4,010,000
 (UN Data)

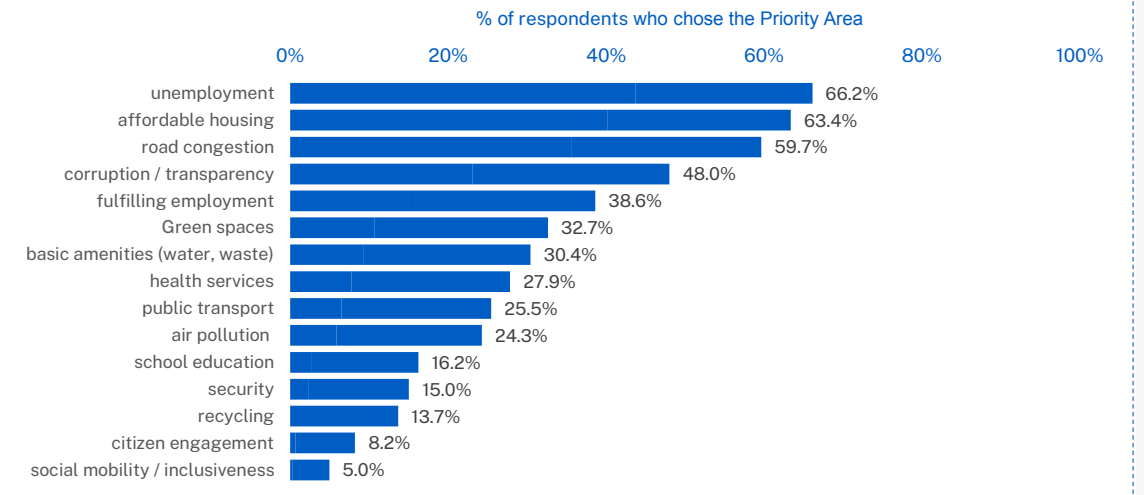
HDI 0.737
 (Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Jordan					
HDI	0.744	0.740	0.736	0.736	+0.000
Life expectancy at birth	76.0	75.2	74.3	74.2	-0.0
Expected years of schooling	12.5	12.6	12.6	12.6	+0.0
Mean years of schooling	10.4	10.4	10.4	10.4	+0.0
GNI per capita (PPP \$)	9,557	9,183	9,180	9,295	+115

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.



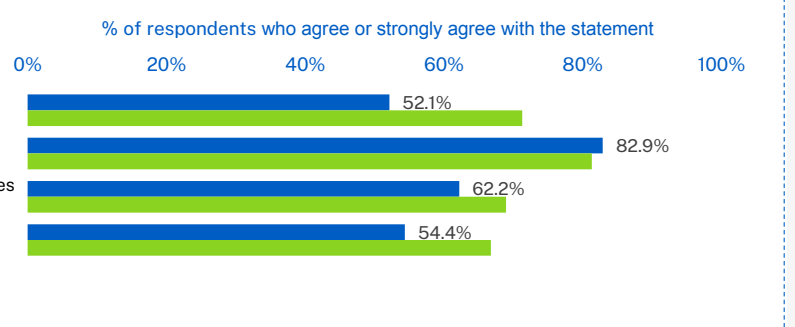
ATTITUDES

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

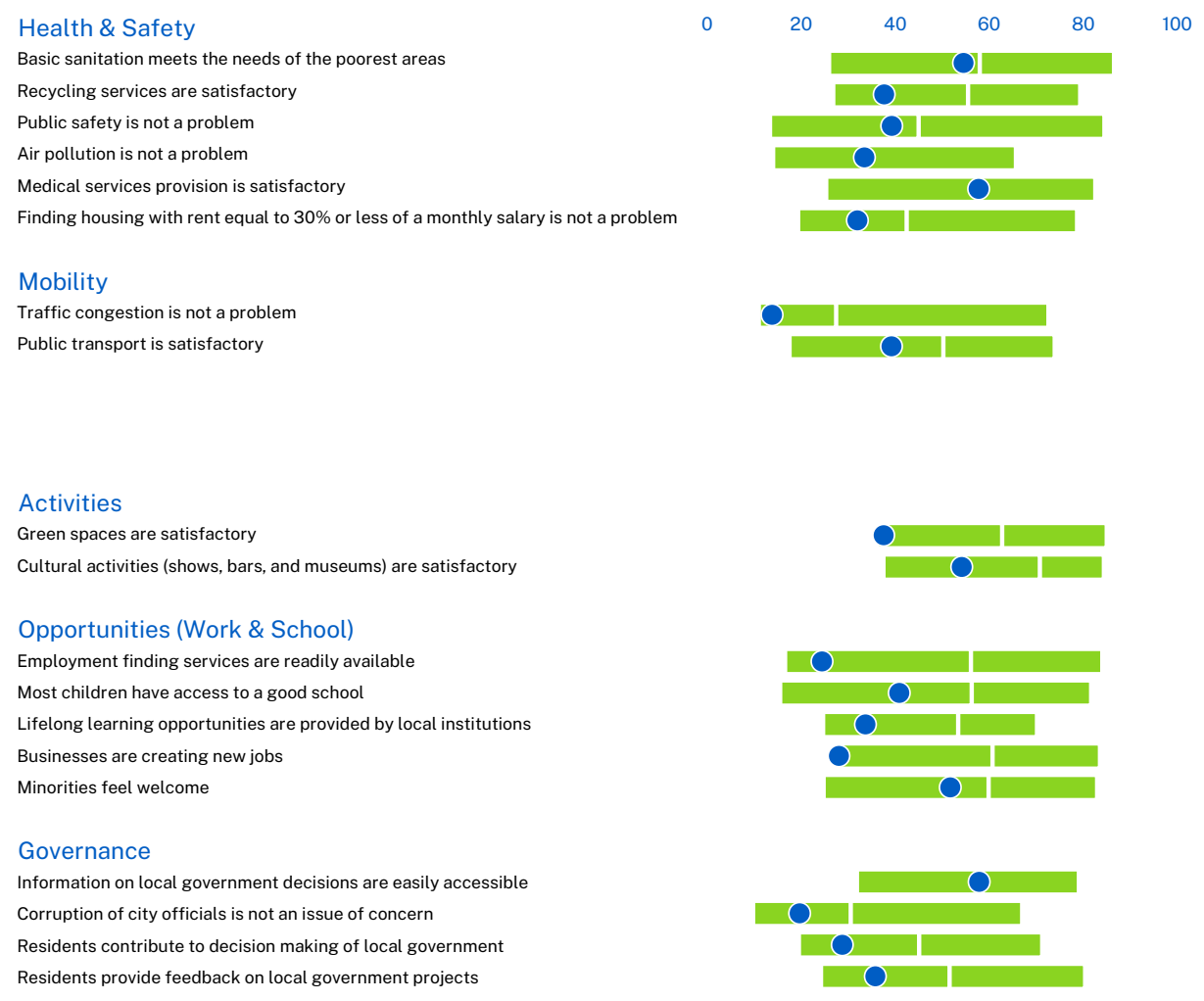
You are comfortable with face recognition technologies to lower crime

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

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



STRUCTURES



TECHNOLOGIES



Amsterdam

SMART CITY RANKING

18

Out of 142



15 in 2023
Out of 141

SMART CITY RATING

A

A in 2023

FACTOR RATINGS

BBB

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,000,000
(Eurostat)

HDI 0.962
(Global Data Lab)



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

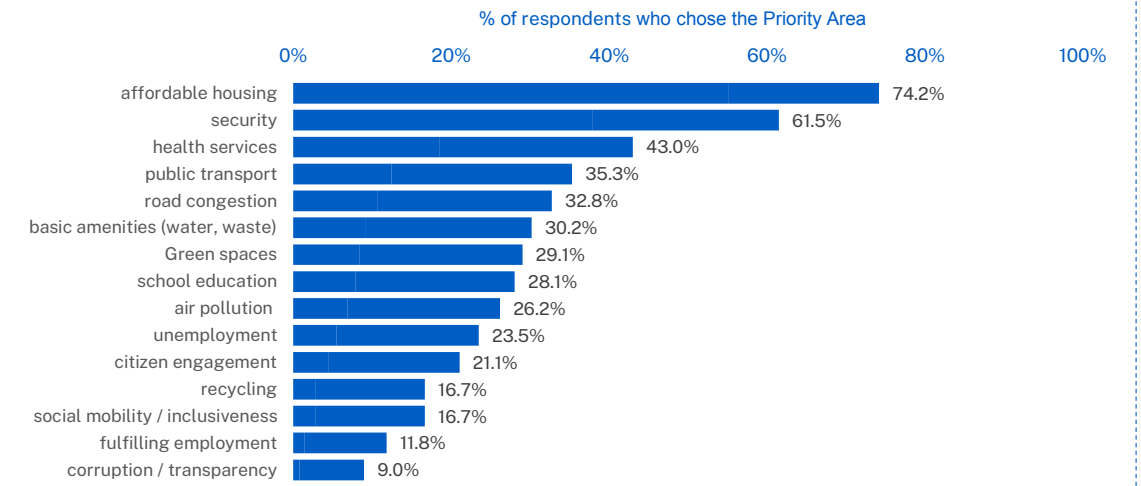
Country

Netherlands

	2019	2020	2021	2022	1 yr change
HDI	0.941	0.938	0.941	0.946	+0.005
Life expectancy at birth	82.0	81.6	81.7	82.5	+0.8
Expected years of schooling	18.4	18.4	18.6	18.6	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	55,628	52,500	55,355	57,278	+1,923

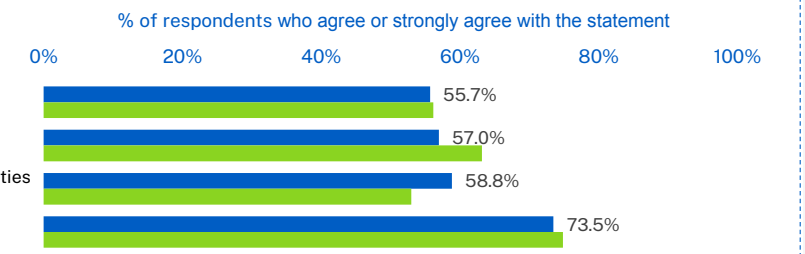
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

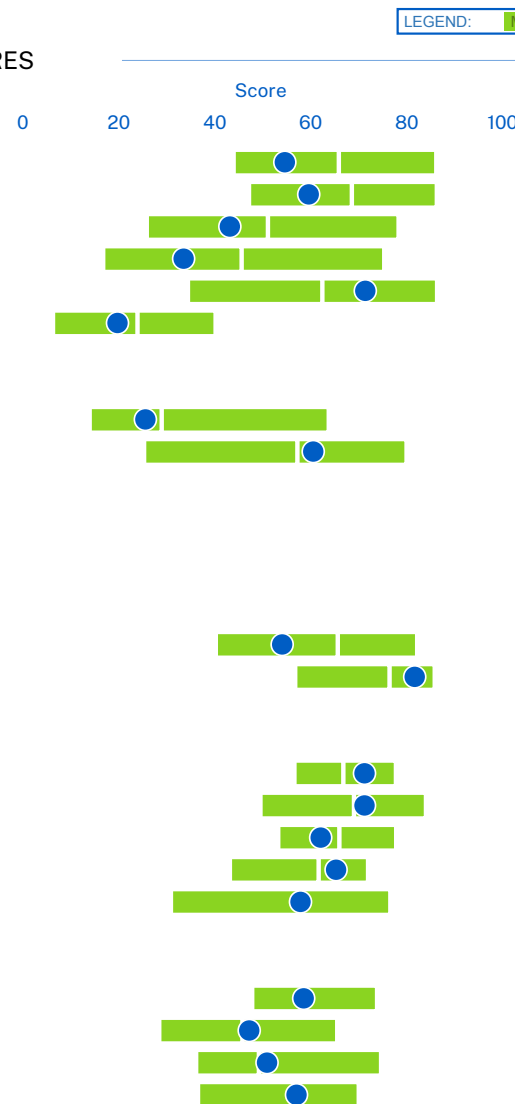
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

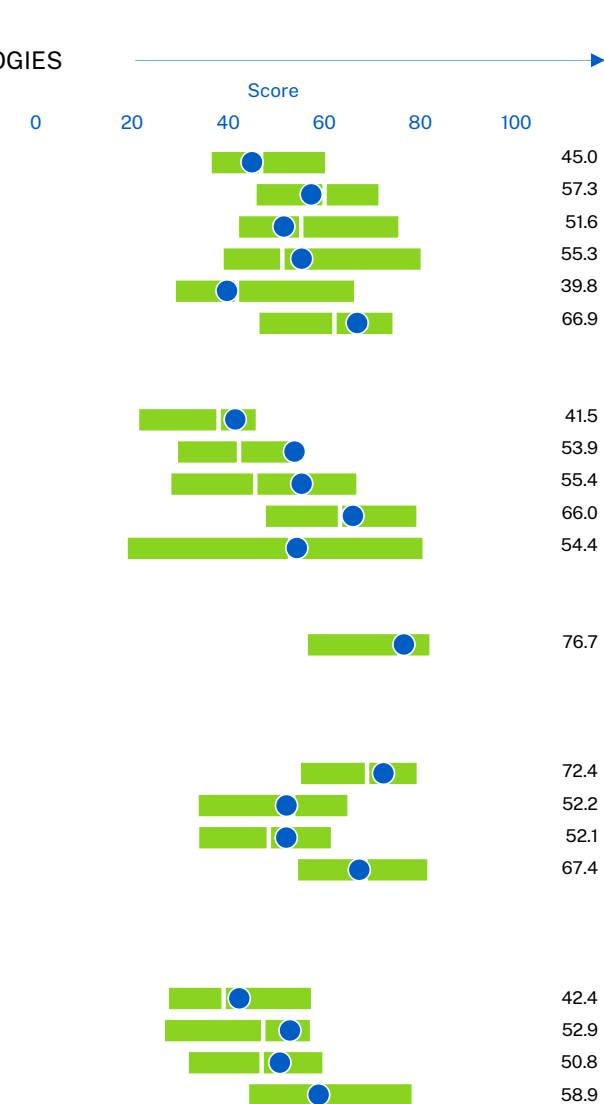
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Ankara

SMART CITY RANKING
96
Out of 142



90 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 5,120,000
(UN World Urbanization Prospects)

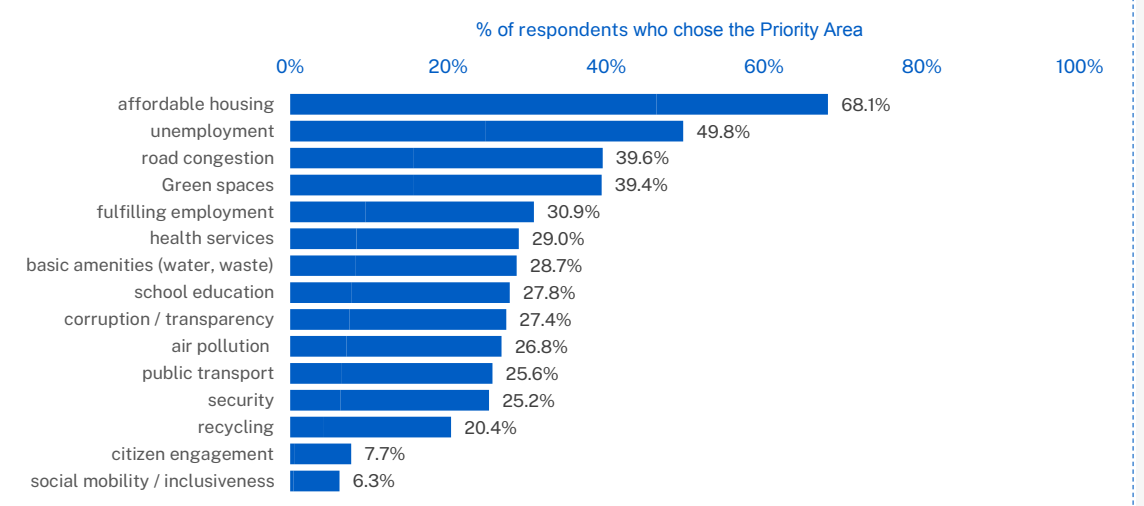
HDI 0.854
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Turkey	0.842	0.835	0.841	0.855	+0.014
Life expectancy at birth	77.8	75.9	76.0	78.5	+2.4
Expected years of schooling	19.2	19.3	19.7	19.7	+0.0
Mean years of schooling	8.6	8.8	8.8	8.8	+0.0
GNI per capita (PPP \$)	27,950	28,381	31,310	32,834	+1,524

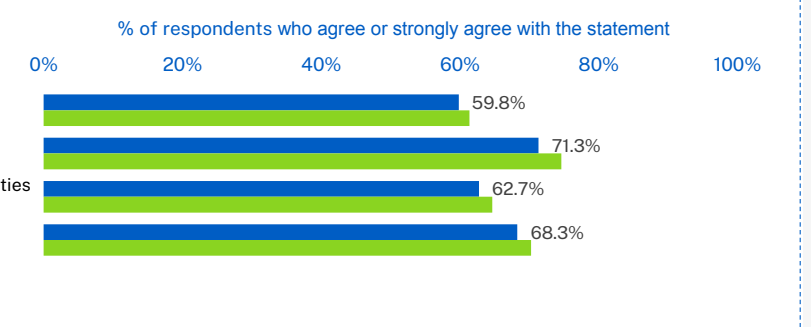
PRIORITY AREAS

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.

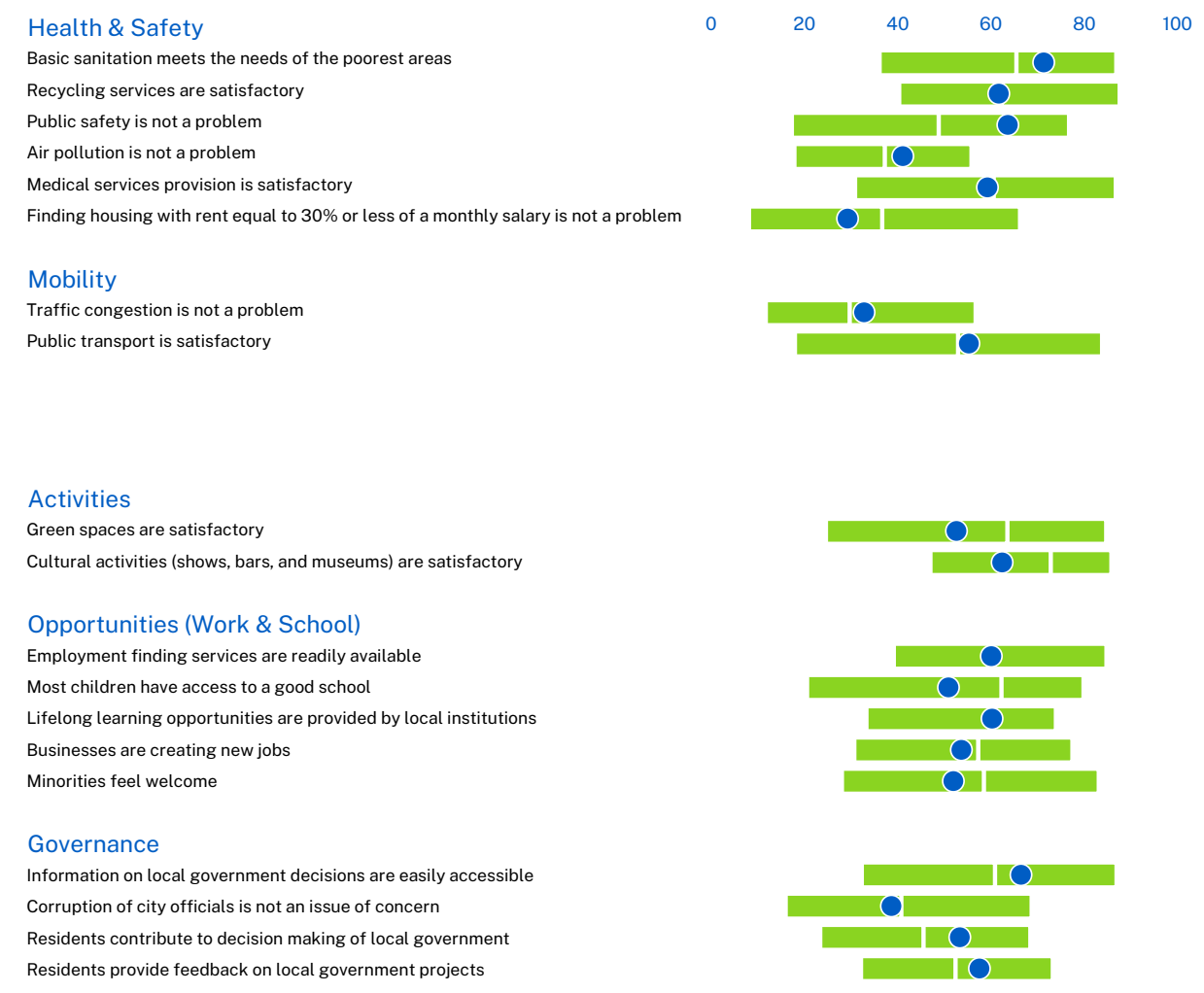


ATTITUDES

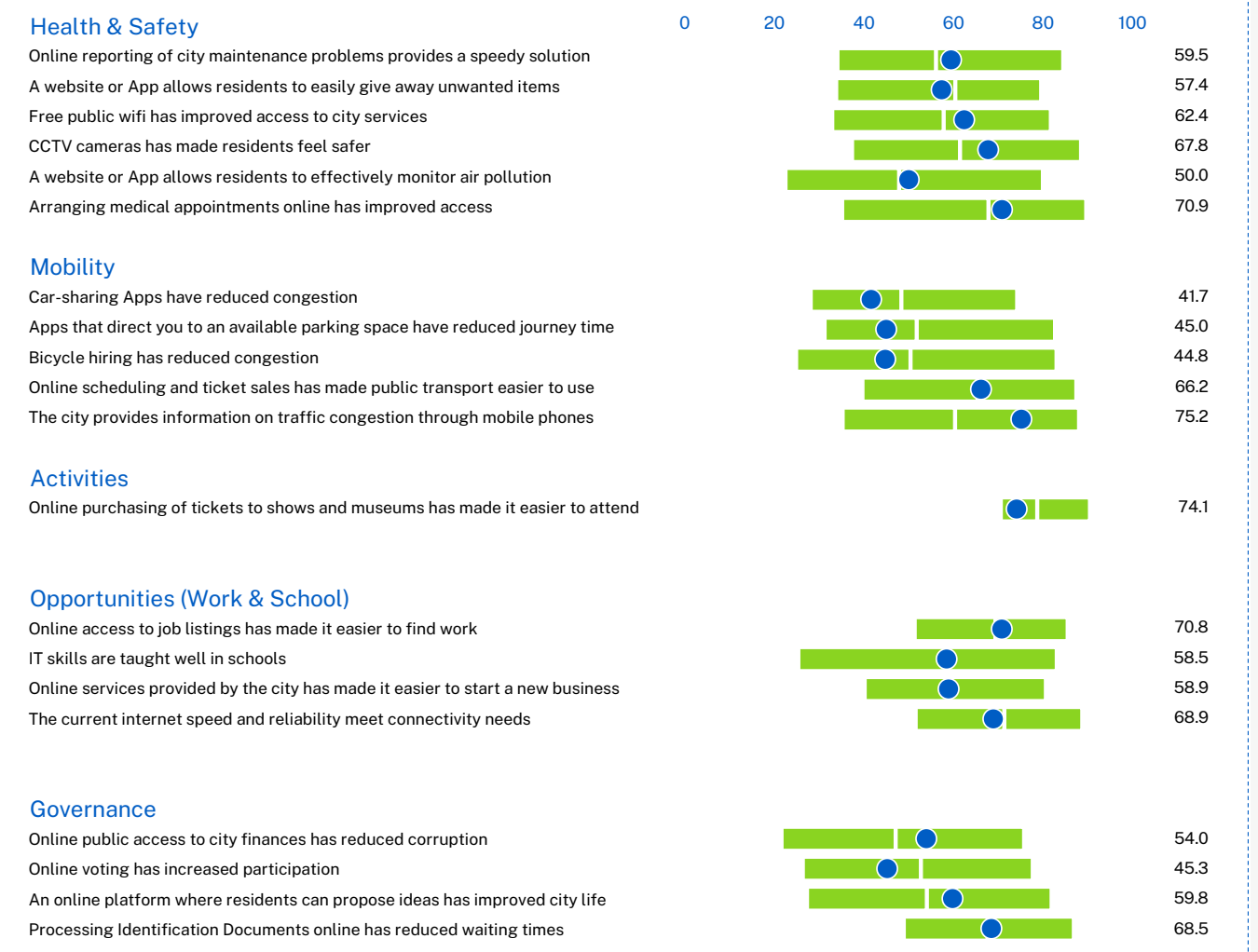
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Athens

SMART CITY RANKING

120

Out of 142



113 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

C

STRUCTURES

C

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 3,150,000
(UN World Urbanization Prospects)

HDI 0.909
(Global Data Lab)



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

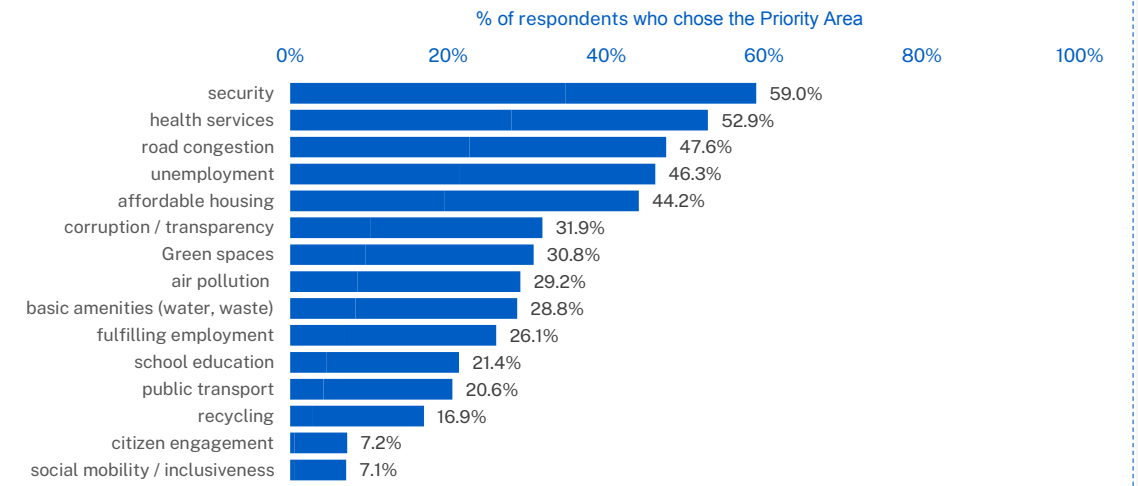
Country

Greece

	2019	2020	2021	2022	1 yr change
HDI	0.890	0.887	0.887	0.893	+0.006
Life expectancy at birth	81.2	80.9	80.1	80.6	+0.5
Expected years of schooling	19.7	19.7	20.0	20.0	+0.0
Mean years of schooling	11.1	11.4	11.4	11.4	+0.0
GNI per capita (PPP \$)	29,457	26,973	29,421	31,382	+1,960

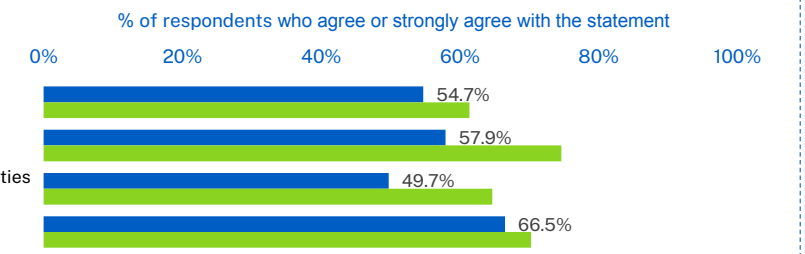
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

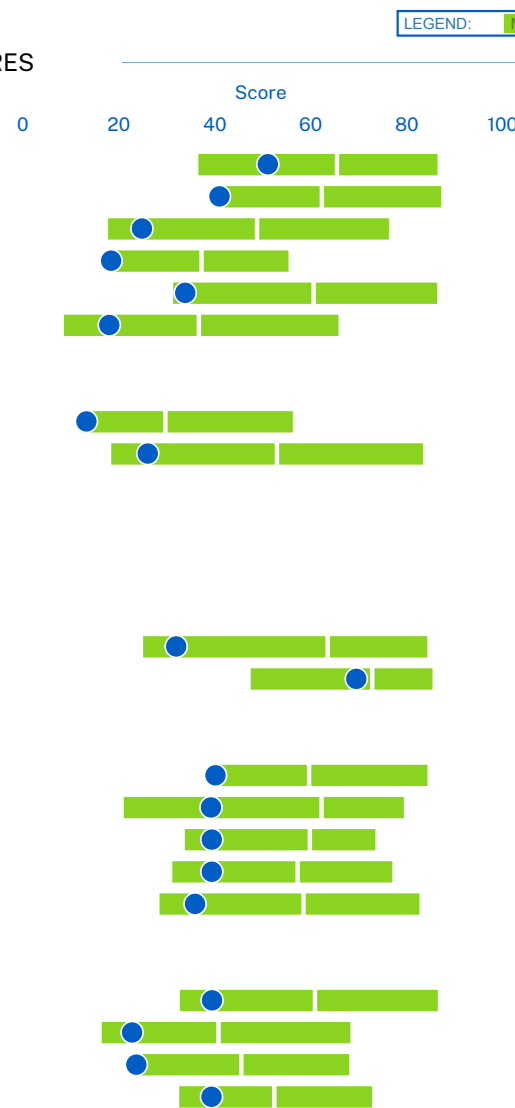
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

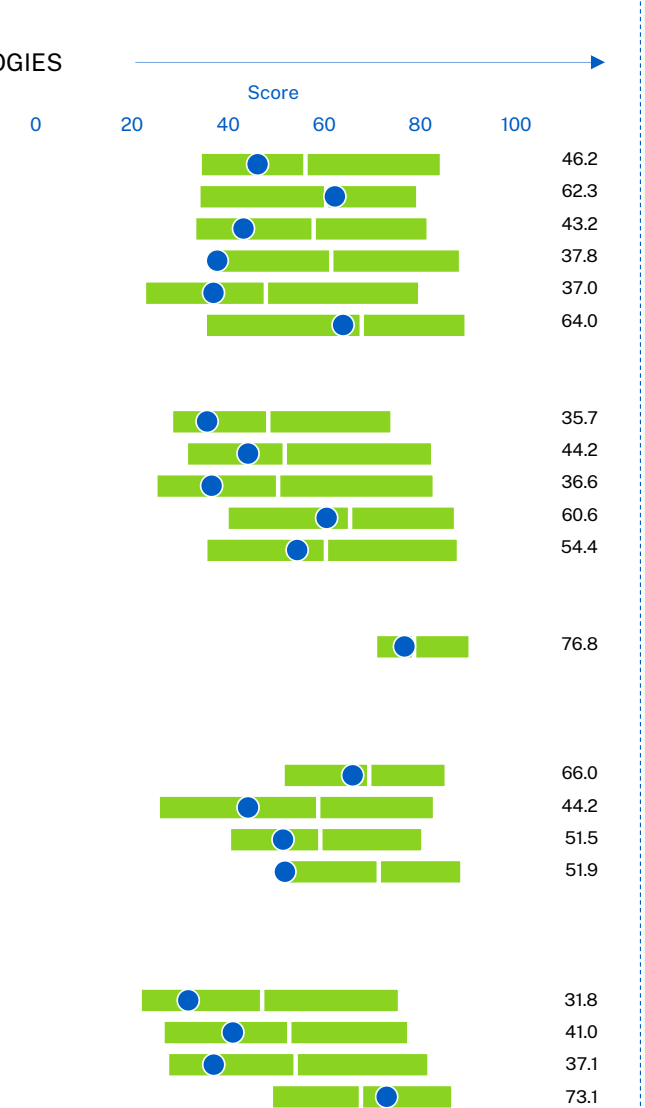
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Auckland

SMART CITY RANKING
31
 Out of 142

▼

22 in 2023
 Out of 141

SMART CITY RATING
BBB
 A in 2023

FACTOR RATINGS
BBB

STRUCTURES
A

TECHNOLOGIES
A

GROUP
1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

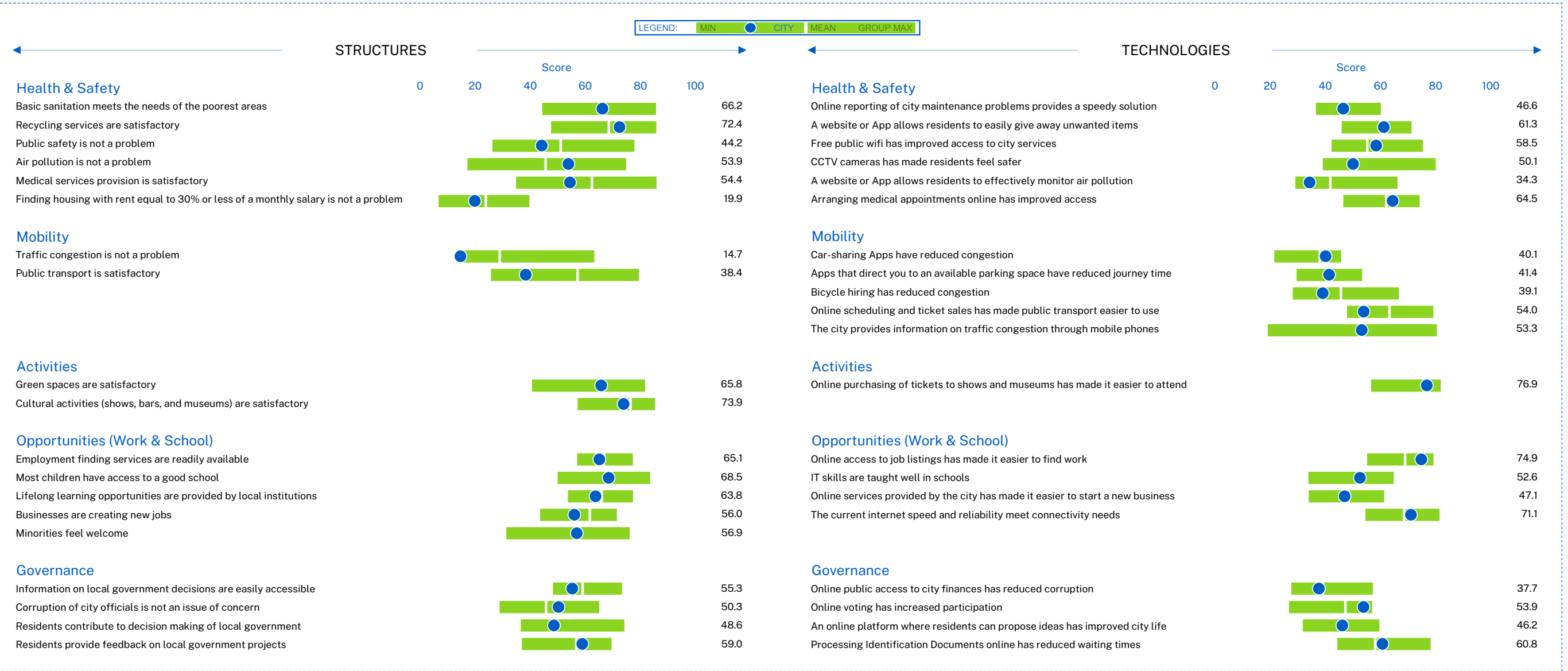
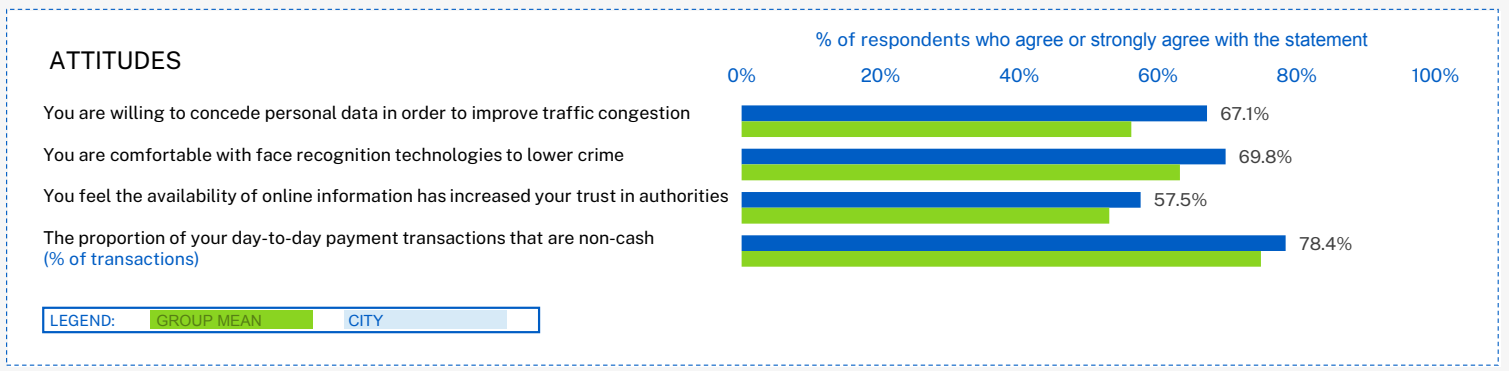
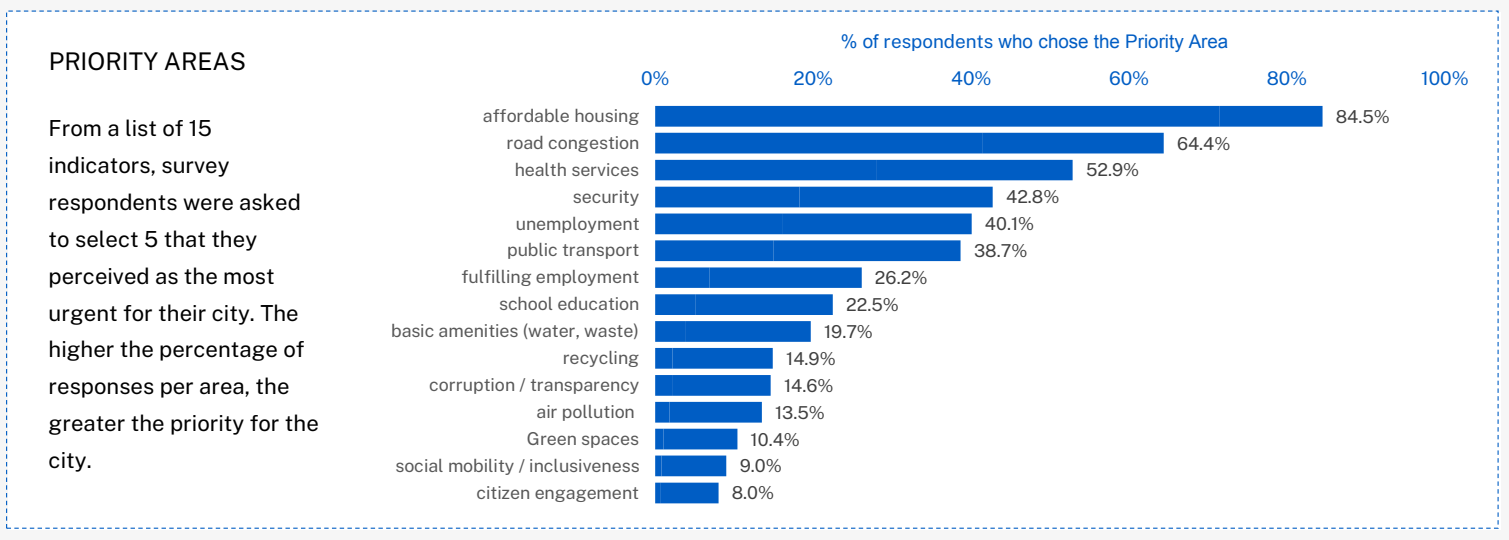
Population 1,610,000
 (UN World Urbanization Prospects)

HDI 0.951
 (Global Data Lab)



Country
 New Zealand

	2019	2020	2021	2022	1 yr change
HDI	0.937	0.935	0.936	0.939	+0.003
Life expectancy at birth	82.6	82.7	82.5	83.0	+0.6
Expected years of schooling	19.5	19.2	19.7	19.7	+0.0
Mean years of schooling	13.0	12.9	12.9	12.9	+0.0
GNI per capita (PPP \$)	42,210	41,225	42,850	43,665	+816



Bangkok

SMART CITY RANKING
84
 Out of 142

▲

88 in 2023
 Out of 141

SMART CITY RATING
CCC
 B in 2023

FACTOR RATINGS
CCC
 STRUCTURES

B
 TECHNOLOGIES

GROUP
3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 10,540,000
 (UN World Urbanization Prospects)

HDI 0.839
 (Global Data Lab)

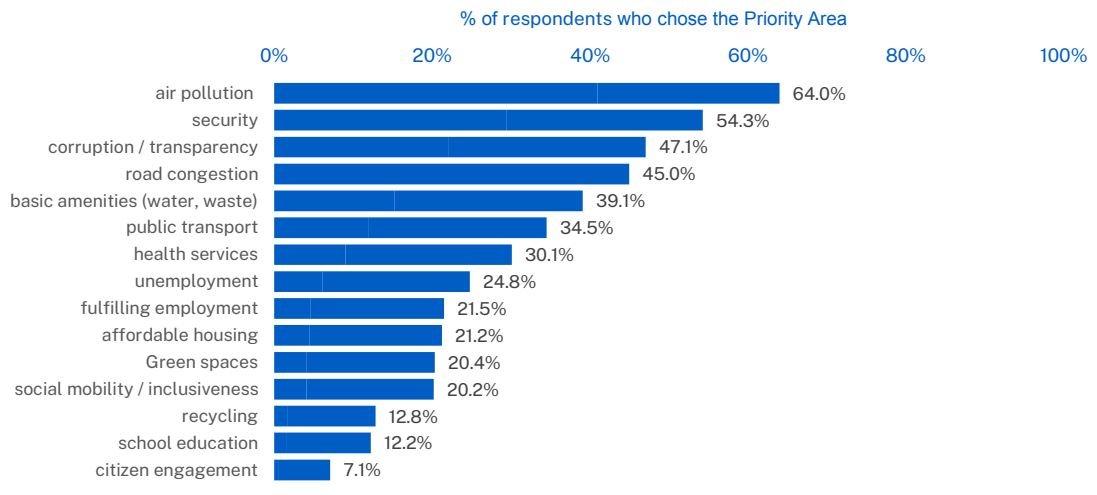


Country
 Thailand

	2019	2020	2021	2022	1 yr change
HDI	0.801	0.800	0.797	0.803	+0.006
Life expectancy at birth	79.0	79.3	78.7	79.7	+1.0
Expected years of schooling	15.8	15.6	15.6	15.6	+0.0
Mean years of schooling	8.7	8.8	8.8	8.8	+0.0
GNI per capita (PPP \$)	17,335	16,444	16,481	16,887	+405

PRIORITY AREAS

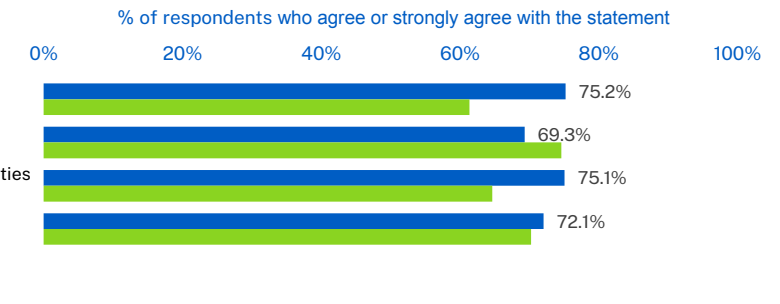
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
air pollution	64.0%
security	54.3%
corruption / transparency	47.1%
road congestion	45.0%
basic amenities (water, waste)	39.1%
public transport	34.5%
health services	30.1%
unemployment	24.8%
fulfilling employment	21.5%
affordable housing	21.2%
Green spaces	20.4%
social mobility / inclusiveness	20.2%
recycling	12.8%
school education	12.2%
citizen engagement	7.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	75.2%	60%
You are comfortable with face recognition technologies to lower crime	69.3%	60%
You feel the availability of online information has increased your trust in authorities	75.1%	60%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	72.1%	60%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 70.4
- Recycling services are satisfactory: 64.9
- Public safety is not a problem: 50.0
- Air pollution is not a problem: 32.9
- Medical services provision is satisfactory: 63.3
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 51.0

Mobility

- Traffic congestion is not a problem: 27.1
- Public transport is satisfactory: 47.5

Activities

- Green spaces are satisfactory: 61.6
- Cultural activities (shows, bars, and museums) are satisfactory: 67.3

Opportunities (Work & School)

- Employment finding services are readily available: 61.7
- Most children have access to a good school: 57.9
- Lifelong learning opportunities are provided by local institutions: 59.4
- Businesses are creating new jobs: 64.9
- Minorities feel welcome: 59.8

Governance

- Information on local government decisions are easily accessible: 57.6
- Corruption of city officials is not an issue of concern: 36.4
- Residents contribute to decision making of local government: 54.9
- Residents provide feedback on local government projects: 59.1

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 60.2
- A website or App allows residents to easily give away unwanted items: 63.3
- Free public wifi has improved access to city services: 60.0
- CCTV cameras has made residents feel safer: 75.1
- A website or App allows residents to effectively monitor air pollution: 71.5
- Arranging medical appointments online has improved access: 74.7

Mobility

- Car-sharing Apps have reduced congestion: 61.8
- Apps that direct you to an available parking space have reduced journey time: 64.4
- Bicycle hiring has reduced congestion: 60.4
- Online scheduling and ticket sales has made public transport easier to use: 73.6
- The city provides information on traffic congestion through mobile phones: 71.5

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 80.5

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 80.5
- IT skills are taught well in schools: 73.5
- Online services provided by the city has made it easier to start a new business: 70.5
- The current internet speed and reliability meet connectivity needs: 78.7

Governance

- Online public access to city finances has reduced corruption: 61.7
- Online voting has increased participation: 71.5
- An online platform where residents can propose ideas has improved city life: 72.4
- Processing Identification Documents online has reduced waiting times: 78.3

Barcelona

SMART CITY RANKING
81
 Out of 142

▼

75 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS

BB
 STRUCTURES

BB
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

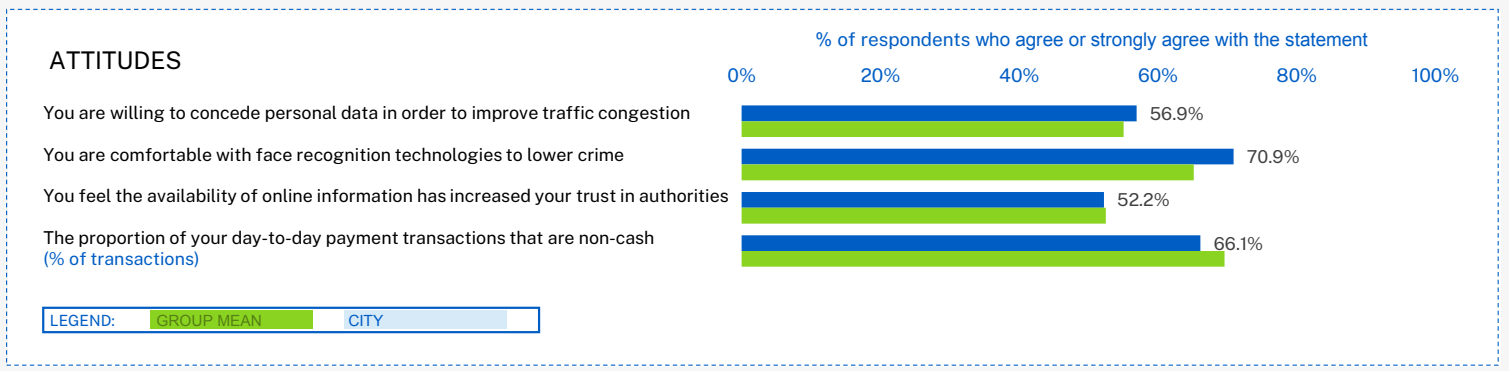
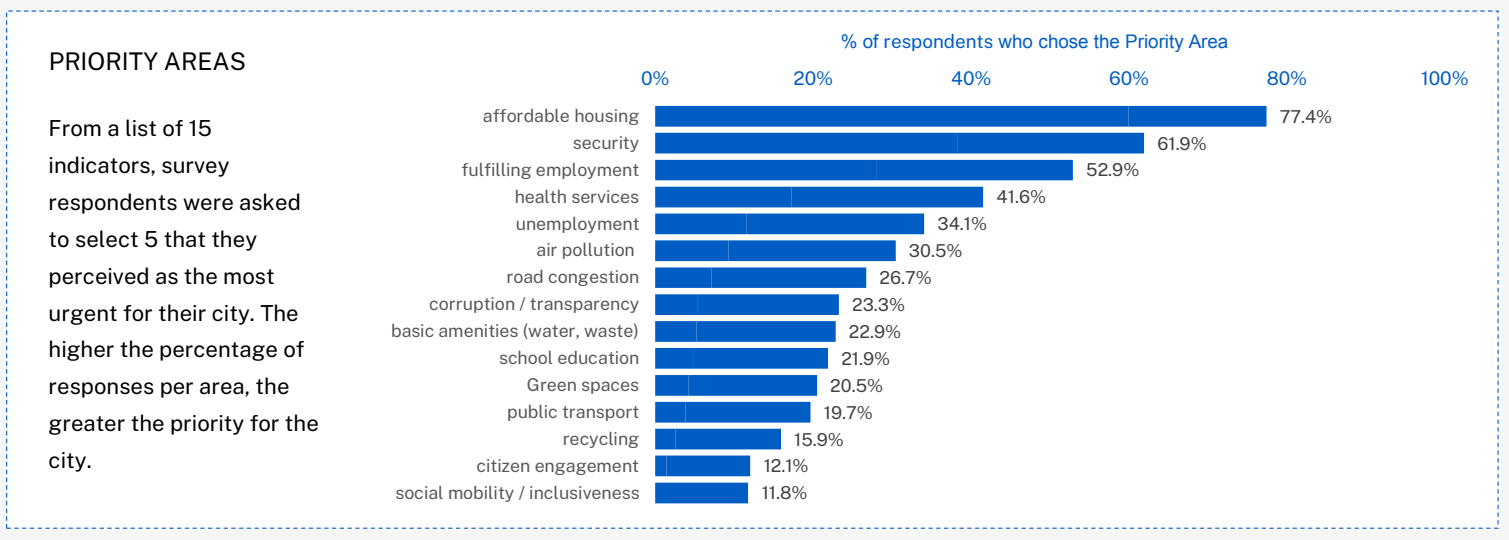
Population: 1,640,000 (Eurostat)

HDI: 0.916 (Global Data Lab)



Country
 Spain

	2019	2020	2021	2022	1 yr change
HDI	0.904	0.894	0.904	0.911	+0.007
Life expectancy at birth	83.5	82.3	83.0	83.9	+0.9
Expected years of schooling	17.5	17.5	17.8	17.8	+0.0
Mean years of schooling	10.4	10.6	10.6	10.6	+0.0
GNI per capita (PPP \$)	40,854	36,076	38,133	40,043	+1,911



Beijing

SMART CITY RANKING

13

Out of 142

▼

12 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 20,460,000
(UN World Urbanization Prospects)

HDI 0.907
(Global Data Lab)

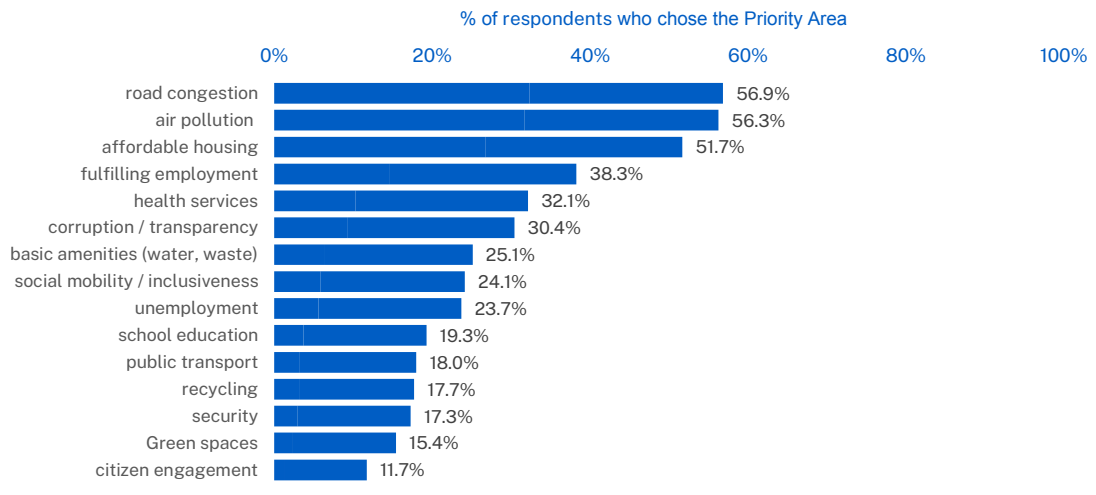


Country

China	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

PRIORITY AREAS

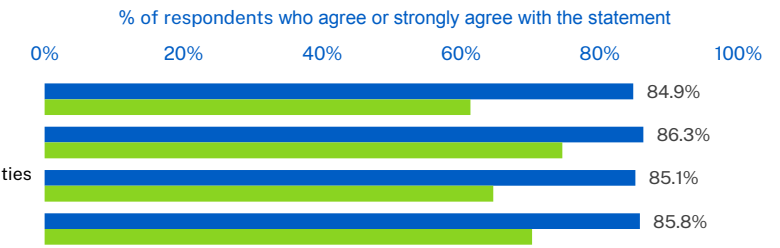
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents who chose the Priority Area
road congestion	56.9%
air pollution	56.3%
affordable housing	51.7%
fulfilling employment	38.3%
health services	32.1%
corruption / transparency	30.4%
basic amenities (water, waste)	25.1%
social mobility / inclusiveness	24.1%
unemployment	23.7%
school education	19.3%
public transport	18.0%
recycling	17.7%
security	17.3%
Green spaces	15.4%
citizen engagement	11.7%


ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents who agree or strongly agree with the statement
You are willing to concede personal data in order to improve traffic congestion	84.9%
You are comfortable with face recognition technologies to lower crime	86.3%
You feel the availability of online information has increased your trust in authorities	85.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	85.8%

LEGEND: GROUP MEAN CITY



STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 82.5
- Recycling services are satisfactory: 79.0
- Public safety is not a problem: 76.7
- Air pollution is not a problem: 50.1
- Medical services provision is satisfactory: 75.7
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 54.3

Mobility

- Traffic congestion is not a problem: 34.3
- Public transport is satisfactory: 66.6

Activities

- Green spaces are satisfactory: 80.4
- Cultural activities (shows, bars, and museums) are satisfactory: 83.4

Opportunities (Work & School)

- Employment finding services are readily available: 78.8
- Most children have access to a good school: 77.0
- Lifelong learning opportunities are provided by local institutions: 69.1
- Businesses are creating new jobs: 75.3
- Minorities feel welcome: 81.5

Governance

- Information on local government decisions are easily accessible: 77.8
- Corruption of city officials is not an issue of concern: 55.2
- Residents contribute to decision making of local government: 63.8
- Residents provide feedback on local government projects: 70.5

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 79.6
- A website or App allows residents to easily give away unwanted items: 77.6
- Free public wifi has improved access to city services: 75.5
- CCTV cameras has made residents feel safer: 79.1
- A website or App allows residents to effectively monitor air pollution: 75.5
- Arranging medical appointments online has improved access: 86.5

Mobility

- Car-sharing Apps have reduced congestion: 63.4
- Apps that direct you to an available parking space have reduced journey time: 77.2
- Bicycle hiring has reduced congestion: 79.5
- Online scheduling and ticket sales has made public transport easier to use: 85.3
- The city provides information on traffic congestion through mobile phones: 83.7

Activities

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

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 80.0
- IT skills are taught well in schools: 79.9
- Online services provided by the city has made it easier to start a new business: 77.0
- The current internet speed and reliability meet connectivity needs: 86.3

Governance

- Online public access to city finances has reduced corruption: 70.4
- Online voting has increased participation: 73.7
- An online platform where residents can propose ideas has improved city life: 78.4
- Processing Identification Documents online has reduced waiting times: 82.0

Beirut

SMART CITY RANKING

140

Out of 142

▼

139 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

D

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,430,000
(UN World Urbanization Prospects)

HDI 0.677
(Global Data Lab)



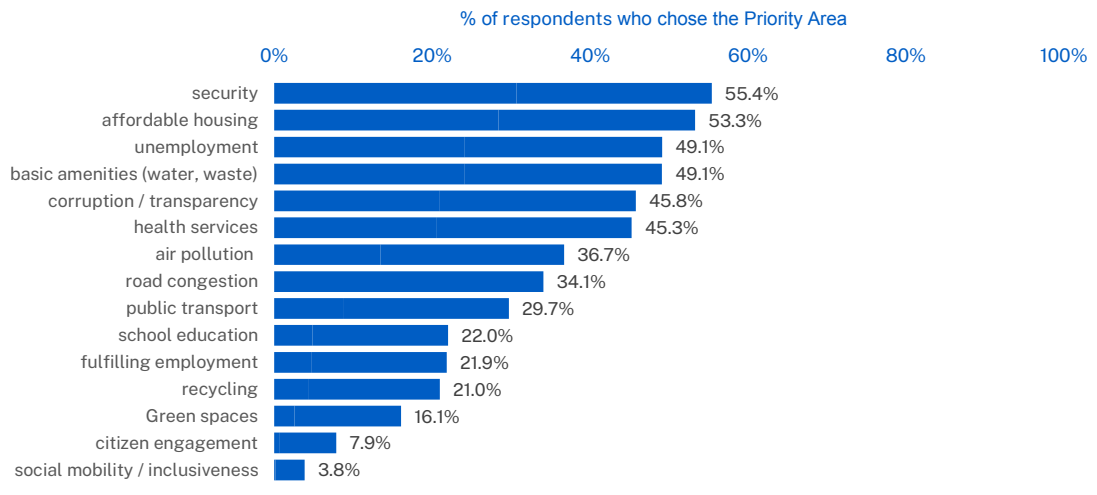
Country

Lebanon

	2019	2020	2021	2022	1 yr change
HDI	0.760	0.742	0.725	0.723	-0.002
Life expectancy at birth	79.2	77.8	75.0	74.4	-0.6
Expected years of schooling	12.1	12.1	12.1	12.1	+0.0
Mean years of schooling	8.6	8.6	8.6	8.6	+0.0
GNI per capita (PPP \$)	16,724	13,311	12,146	12,313	+167

PRIORITY AREAS

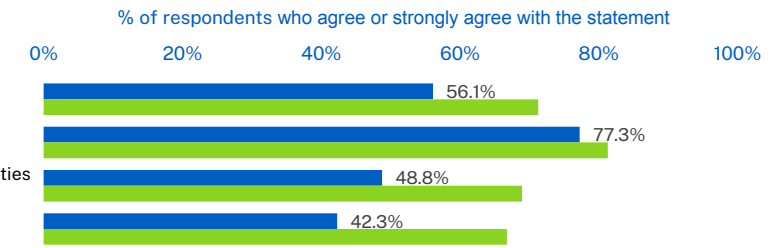
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
security	55.4%
affordable housing	53.3%
unemployment	49.1%
basic amenities (water, waste)	49.1%
corruption / transparency	45.8%
health services	45.3%
air pollution	36.7%
road congestion	34.1%
public transport	29.7%
school education	22.0%
fulfilling employment	21.9%
recycling	21.0%
Green spaces	16.1%
citizen engagement	7.9%
social mobility / inclusiveness	3.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	56.1%	~45%
You are comfortable with face recognition technologies to lower crime	77.3%	~65%
You feel the availability of online information has increased your trust in authorities	48.8%	~55%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	42.3%	~55%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 to 100

LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

Category	Statement	Score	
Health & Safety	Basic sanitation meets the needs of the poorest areas	40.5	
	Recycling services are satisfactory	36.7	
	Public safety is not a problem	27.6	
	Air pollution is not a problem	18.1	
	Medical services provision is satisfactory	38.8	
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	26.3	
Mobility	Traffic congestion is not a problem	14.3	
	Public transport is satisfactory	27.2	
Activities	Green spaces are satisfactory	36.5	
	Cultural activities (shows, bars, and museums) are satisfactory	58.2	
Opportunities (Work & School)	Employment finding services are readily available	29.5	
	Most children have access to a good school	29.1	
	Lifelong learning opportunities are provided by local institutions	30.6	
	Businesses are creating new jobs	35.1	
	Minorities feel welcome	42.6	
Governance	Information on local government decisions are easily accessible	39.7	
	Corruption of city officials is not an issue of concern	20.0	
	Residents contribute to decision making of local government	24.4	
	Residents provide feedback on local government projects	29.3	

TECHNOLOGIES

Score: 0 to 100

Category	Statement	Score
Health & Safety	Online reporting of city maintenance problems provides a speedy solution	35.0
	A website or App allows residents to easily give away unwanted items	43.0
	Free public wifi has improved access to city services	33.9
	CCTV cameras has made residents feel safer	46.1
	A website or App allows residents to effectively monitor air pollution	29.7
	Arranging medical appointments online has improved access	54.9
Mobility	Car-sharing Apps have reduced congestion	34.1
	Apps that direct you to an available parking space have reduced journey time	40.2
	Bicycle hiring has reduced congestion	41.9
	Online scheduling and ticket sales has made public transport easier to use	44.3
	The city provides information on traffic congestion through mobile phones	51.4
Activities	Online purchasing of tickets to shows and museums has made it easier to attend	60.7
Opportunities (Work & School)	Online access to job listings has made it easier to find work	61.7
	IT skills are taught well in schools	49.7
	Online services provided by the city has made it easier to start a new business	41.8
	The current internet speed and reliability meet connectivity needs	42.8
Governance	Online public access to city finances has reduced corruption	26.9
	Online voting has increased participation	40.8
	An online platform where residents can propose ideas has improved city life	36.9
	Processing Identification Documents online has reduced waiting times	39.9

Belfast

SMART CITY RANKING
101
 Out of 142

▼

95 in 2023
 Out of 141

SMART CITY RATING
CC
 CC in 2023

FACTOR RATINGS
CCC
 STRUCTURES

TECHNOLOGIES
C

GROUP
3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

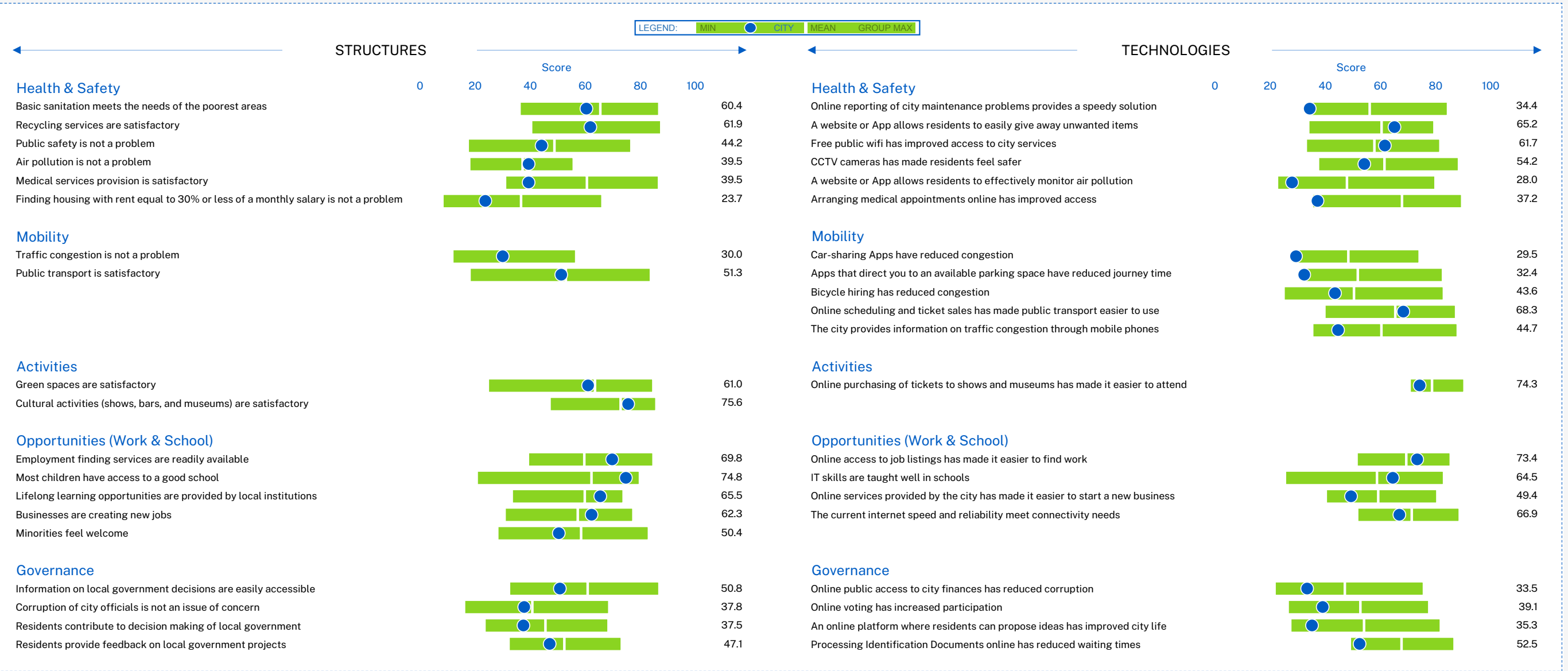
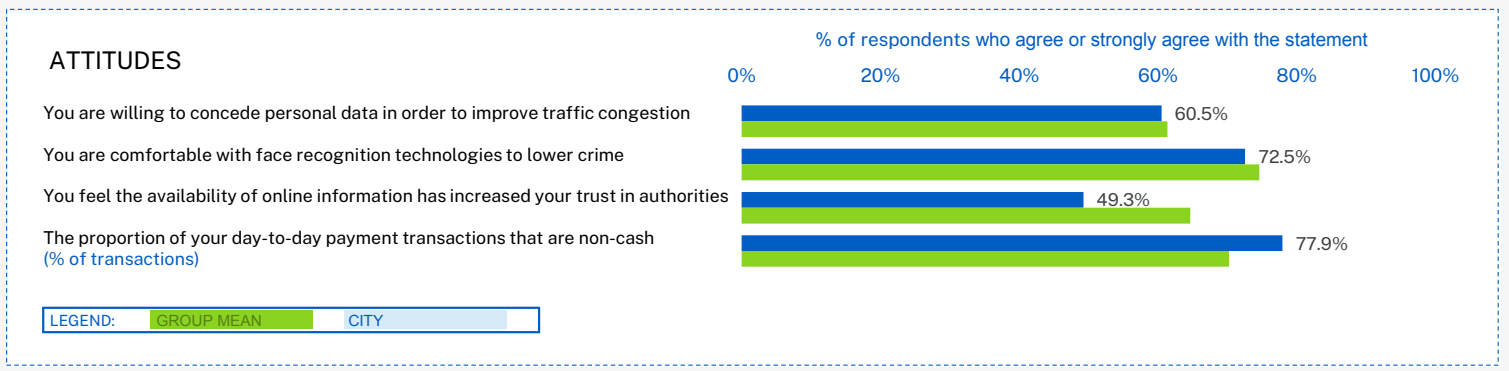
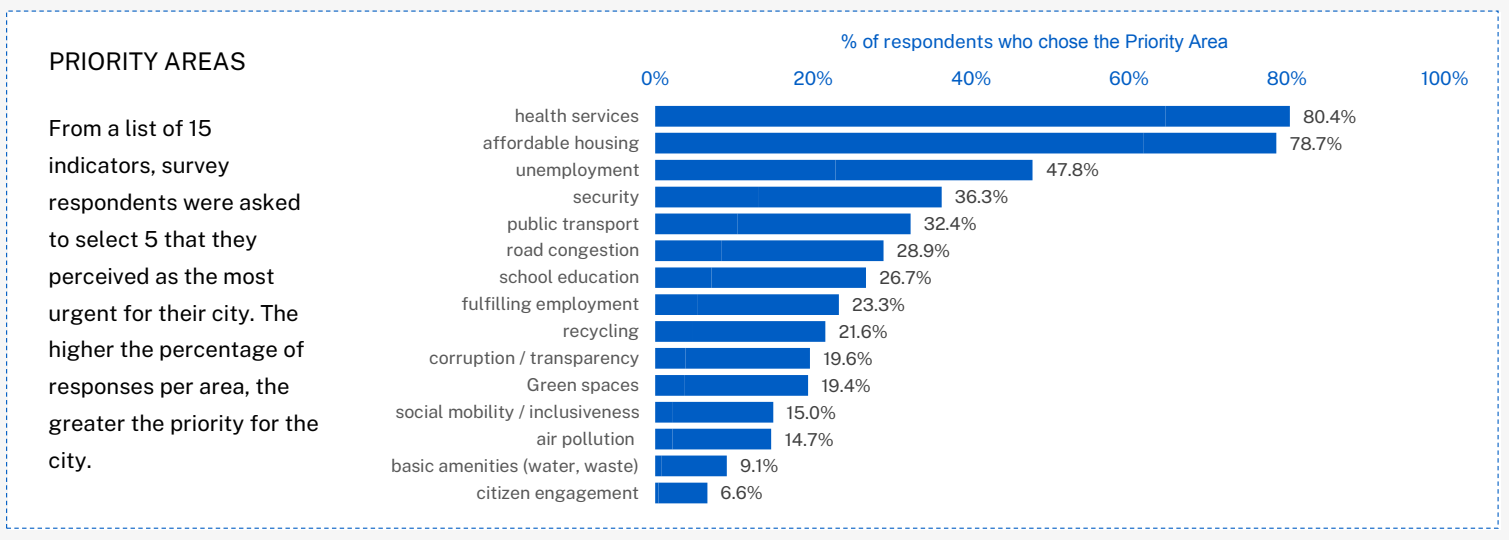
Population: 340,000 (Eurostat)

HDI: 0.896 (Global Data Lab)



Country
 United Kingdom

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	47,066	40,799	44,750	46,624	+1,874



Bengaluru

SMART CITY RANKING
109
 Out of 142

▲

110 in 2023
 Out of 141

SMART CITY RATING
CCC
 CC in 2023

FACTOR RATINGS
CCC
 STRUCTURES

CCC
 TECHNOLOGIES

GROUP
4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 12,330,000
 (UN World Urbanization Prospects)

HDI 0.667
 (Global Data Lab)

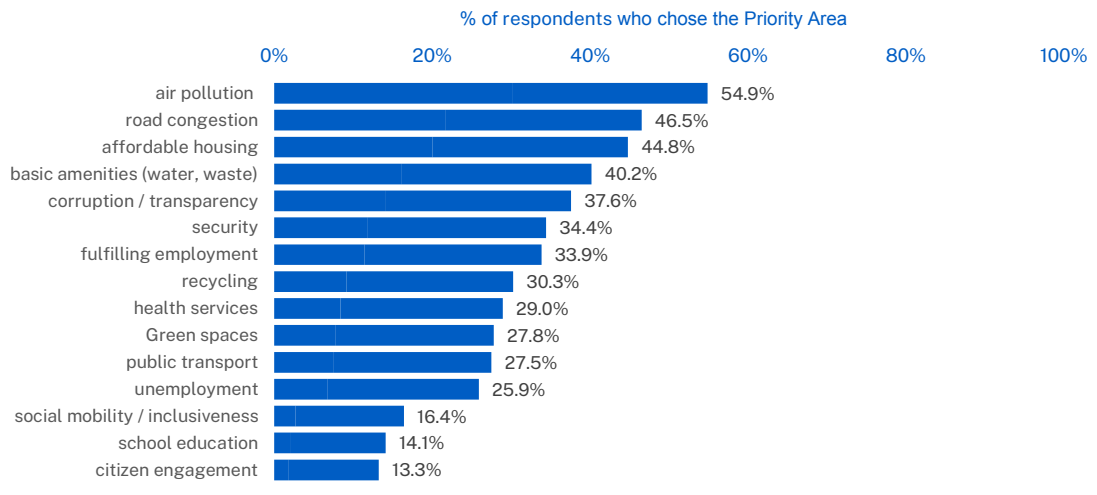


Country

Country	2019	2020	2021	2022	1 yr change
India	0.638	0.638	0.633	0.644	+0.011
Life expectancy at birth	70.9	70.2	67.2	67.7	+0.5
Expected years of schooling	11.4	11.7	12.0	12.6	+0.6
Mean years of schooling	6.3	6.5	6.5	6.6	+0.0
GNI per capita (PPP \$)	6,554	6,090	6,542	6,951	+408

PRIORITY AREAS

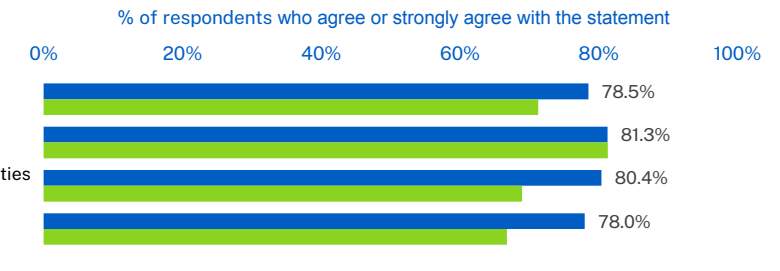
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
air pollution	54.9%
road congestion	46.5%
affordable housing	44.8%
basic amenities (water, waste)	40.2%
corruption / transparency	37.6%
security	34.4%
fulfilling employment	33.9%
recycling	30.3%
health services	29.0%
Green spaces	27.8%
public transport	27.5%
unemployment	25.9%
social mobility / inclusiveness	16.4%
school education	14.1%
citizen engagement	13.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	78.5%	68%
You are comfortable with face recognition technologies to lower crime	81.3%	75%
You feel the availability of online information has increased your trust in authorities	80.4%	70%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	78.0%	65%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 71.3
- Recycling services are satisfactory: 70.3
- Public safety is not a problem: 51.3
- Air pollution is not a problem: 35.4
- Medical services provision is satisfactory: 73.9
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 53.2

Mobility

- Traffic congestion is not a problem: 28.7
- Public transport is satisfactory: 70.6

Activities

- Green spaces are satisfactory: 74.3
- Cultural activities (shows, bars, and museums) are satisfactory: 79.5

Opportunities (Work & School)

- Employment finding services are readily available: 76.9
- Most children have access to a good school: 78.4
- Lifelong learning opportunities are provided by local institutions: 70.2
- Businesses are creating new jobs: 81.8
- Minorities feel welcome: 73.5

Governance

- Information on local government decisions are easily accessible: 72.2
- Corruption of city officials is not an issue of concern: 42.9
- Residents contribute to decision making of local government: 63.1
- Residents provide feedback on local government projects: 66.4

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 66.3
- A website or App allows residents to easily give away unwanted items: 64.7
- Free public wifi has improved access to city services: 60.0
- CCTV cameras has made residents feel safer: 74.4
- A website or App allows residents to effectively monitor air pollution: 60.2
- Arranging medical appointments online has improved access: 82.3

Mobility

- Car-sharing Apps have reduced congestion: 67.2
- Apps that direct you to an available parking space have reduced journey time: 61.5
- Bicycle hiring has reduced congestion: 64.6
- Online scheduling and ticket sales has made public transport easier to use: 79.3
- The city provides information on traffic congestion through mobile phones: 71.3

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 85.6

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 79.3
- IT skills are taught well in schools: 72.6
- Online services provided by the city has made it easier to start a new business: 78.7
- The current internet speed and reliability meet connectivity needs: 83.9

Governance

- Online public access to city finances has reduced corruption: 60.4
- Online voting has increased participation: 65.6
- An online platform where residents can propose ideas has improved city life: 70.0
- Processing Identification Documents online has reduced waiting times: 81.1

Berlin

SMART CITY RANKING
37
 Out of 142

▼

33 in 2023
 Out of 141

SMART CITY RATING
BBB
 BBB in 2023

FACTOR RATINGS
BBB
 STRUCTURES

TECHNOLOGIES
BBB

GROUP
1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 3,670,000 (Eurostat)

HDI: 0.959 (Global Data Lab)

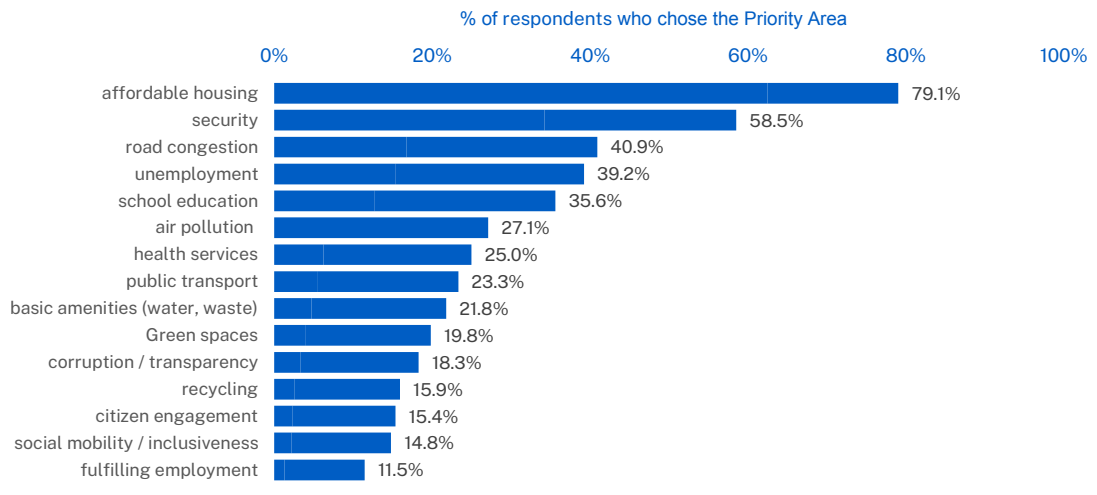


Country
 Germany

	2019	2020	2021	2022	1 yr change
HDI	0.951	0.948	0.948	0.950	+0.002
Life expectancy at birth	81.6	81.1	80.6	81.0	+0.4
Expected years of schooling	17.2	17.2	17.3	17.3	+0.0
Mean years of schooling	14.2	14.3	14.3	14.3	+0.0
GNI per capita (PPP \$)	55,685	53,375	55,057	55,340	+284

PRIORITY AREAS

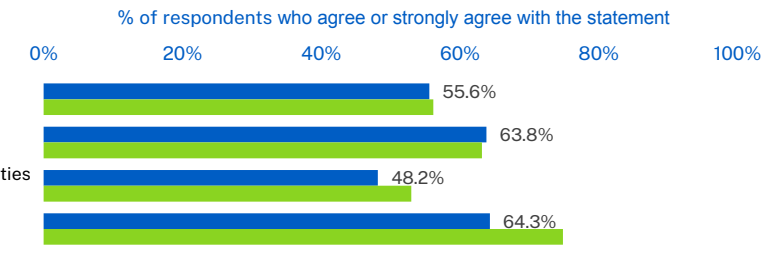
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	79.1%
security	58.5%
road congestion	40.9%
unemployment	39.2%
school education	35.6%
air pollution	27.1%
health services	25.0%
public transport	23.3%
basic amenities (water, waste)	21.8%
Green spaces	19.8%
corruption / transparency	18.3%
recycling	15.9%
citizen engagement	15.4%
social mobility / inclusiveness	14.8%
fulfilling employment	11.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City Score	Group Mean
You are willing to concede personal data in order to improve traffic congestion	55.6%	48.2%
You are comfortable with face recognition technologies to lower crime	63.8%	48.2%
You feel the availability of online information has increased your trust in authorities	48.2%	48.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	64.3%	48.2%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 to 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 60.5
- Recycling services are satisfactory: 66.5
- Public safety is not a problem: 39.5
- Air pollution is not a problem: 35.6
- Medical services provision is satisfactory: 63.9
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 24.3

Mobility

- Traffic congestion is not a problem: 34.6
- Public transport is satisfactory: 60.7

Activities

- Green spaces are satisfactory: 59.7
- Cultural activities (shows, bars, and museums) are satisfactory: 74.7

Opportunities (Work & School)

- Employment finding services are readily available: 60.7
- Most children have access to a good school: 52.5
- Lifelong learning opportunities are provided by local institutions: 56.6
- Businesses are creating new jobs: 58.8
- Minorities feel welcome: 54.2

Governance

- Information on local government decisions are easily accessible: 49.4
- Corruption of city officials is not an issue of concern: 46.7
- Residents contribute to decision making of local government: 42.8
- Residents provide feedback on local government projects: 49.8

TECHNOLOGIES

Score: 0 to 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 37.0
- A website or App allows residents to easily give away unwanted items: 61.1
- Free public wifi has improved access to city services: 48.7
- CCTV cameras has made residents feel safer: 43.3
- A website or App allows residents to effectively monitor air pollution: 36.8
- Arranging medical appointments online has improved access: 55.9

Mobility

- Car-sharing Apps have reduced congestion: 39.8
- Apps that direct you to an available parking space have reduced journey time: 44.4
- Bicycle hiring has reduced congestion: 44.7
- Online scheduling and ticket sales has made public transport easier to use: 67.0
- The city provides information on traffic congestion through mobile phones: 53.7

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 72.6

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 67.2
- IT skills are taught well in schools: 42.7
- Online services provided by the city has made it easier to start a new business: 43.2
- The current internet speed and reliability meet connectivity needs: 58.2

Governance

- Online public access to city finances has reduced corruption: 34.6
- Online voting has increased participation: 53.6
- An online platform where residents can propose ideas has improved city life: 43.1
- Processing Identification Documents online has reduced waiting times: 50.7

Bilbao

SMART CITY RANKING
29
Out of 142



27 in 2023
Out of 141

SMART CITY RATING

BBB

BBB in 2023

FACTOR RATINGS

BBB

STRUCTURES

BB

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 350,000
(Eurostat)

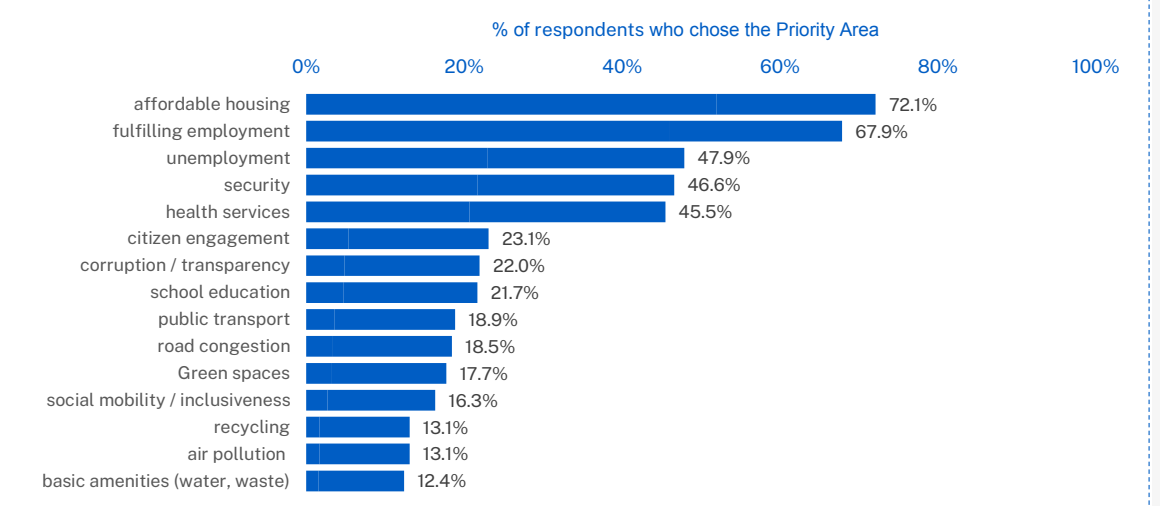
HDI 0.932
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Spain					
HDI	0.904	0.894	0.904	0.911	+0.007
Life expectancy at birth	83.5	82.3	83.0	83.9	+0.9
Expected years of schooling	17.5	17.5	17.8	17.8	+0.0
Mean years of schooling	10.4	10.6	10.6	10.6	+0.0
GNI per capita (PPP \$)	40,854	36,076	38,133	40,043	+1,911

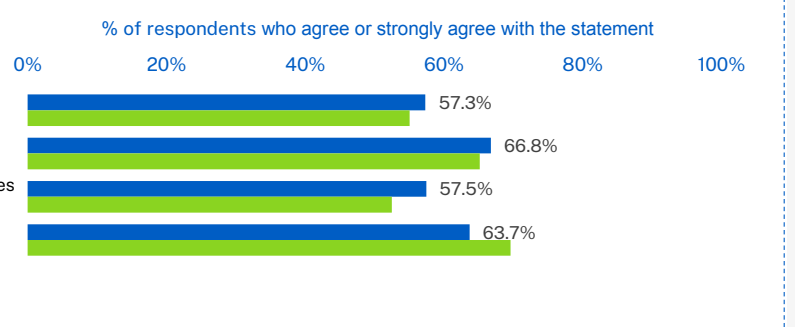
PRIORITY AREAS

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.

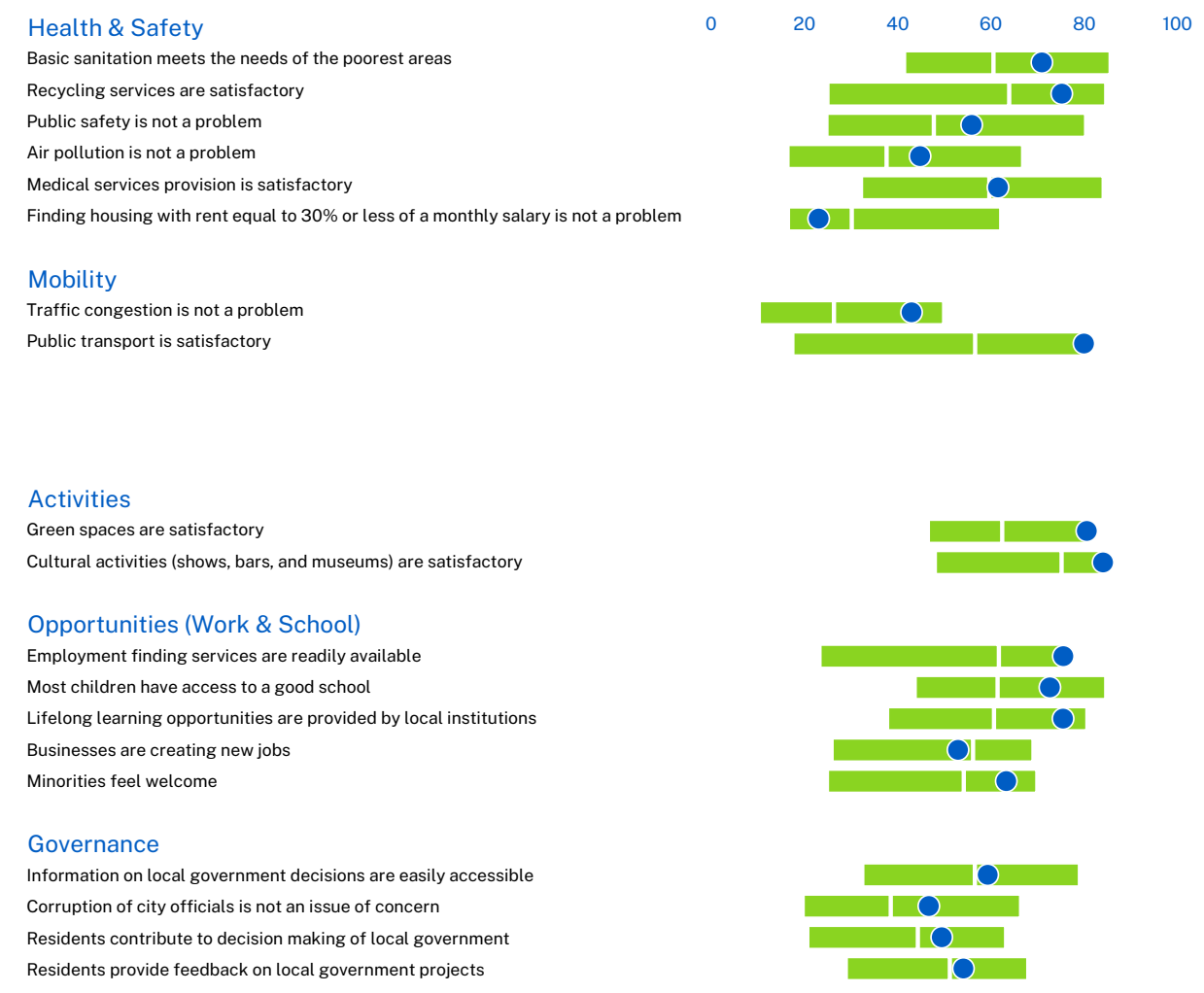


ATTITUDES

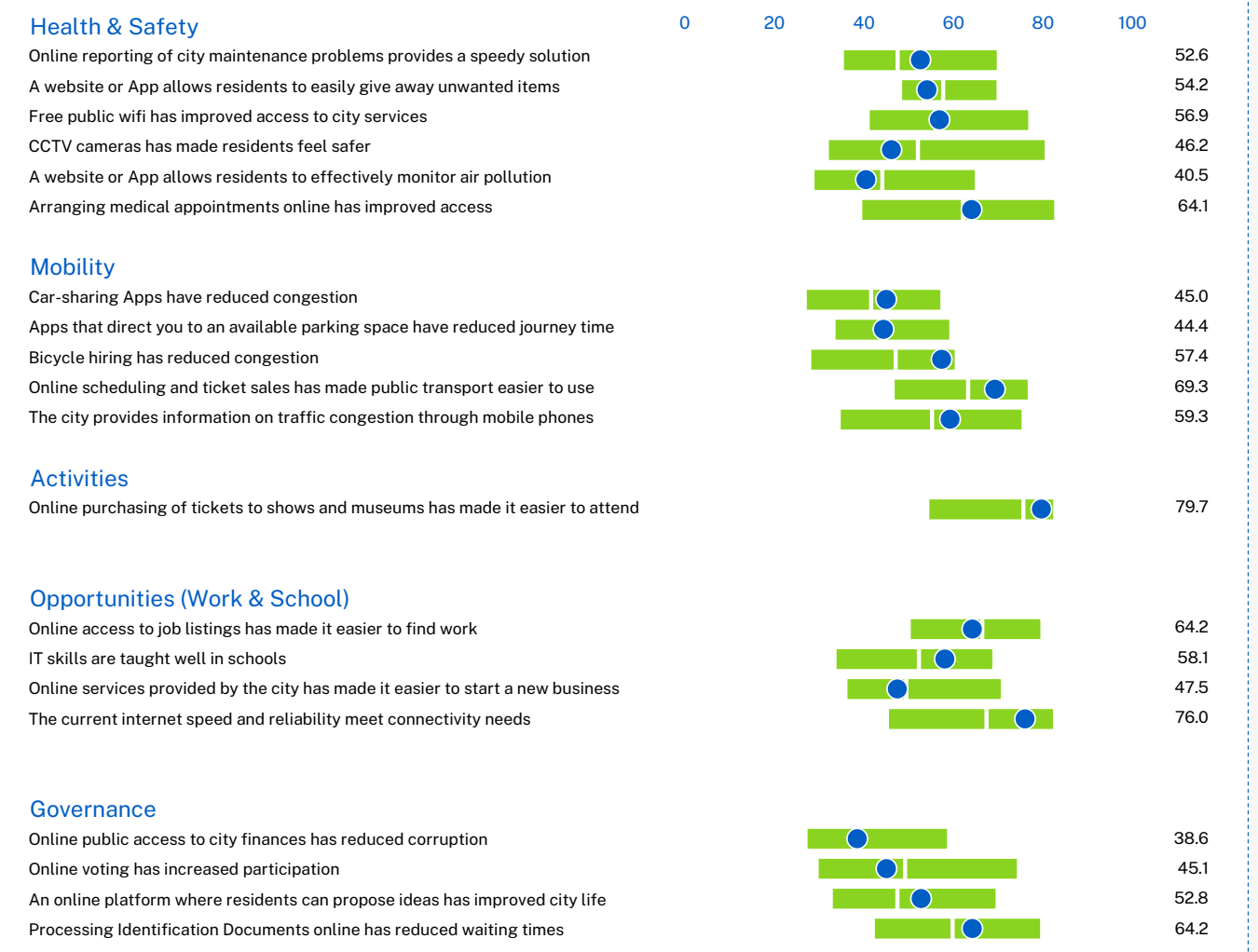
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Birmingham

SMART CITY RANKING
83
 Out of 142

▼

74 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS

BB
 STRUCTURES

BB
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

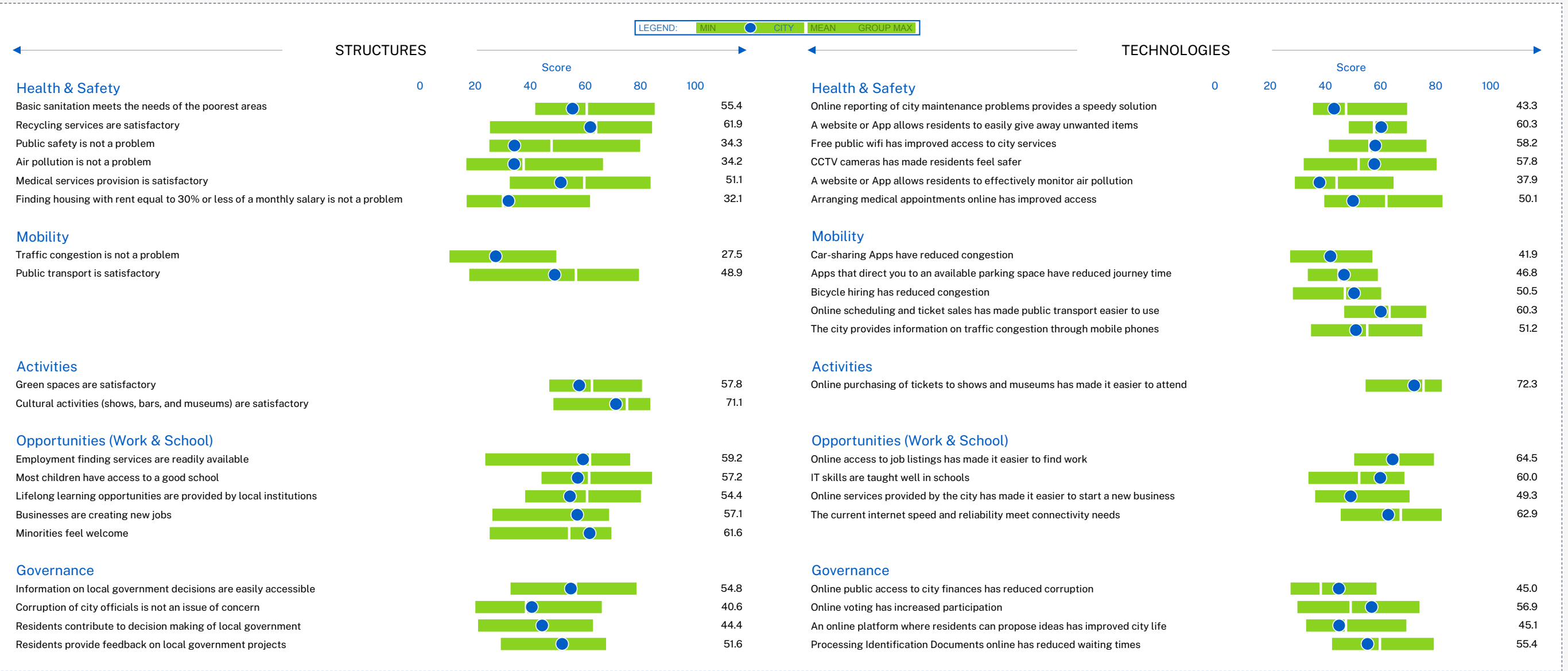
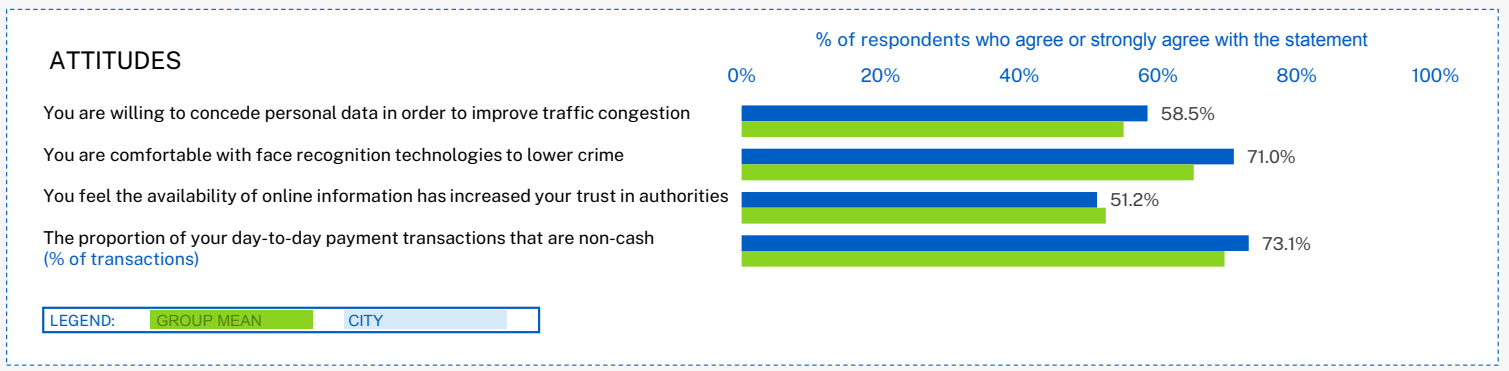
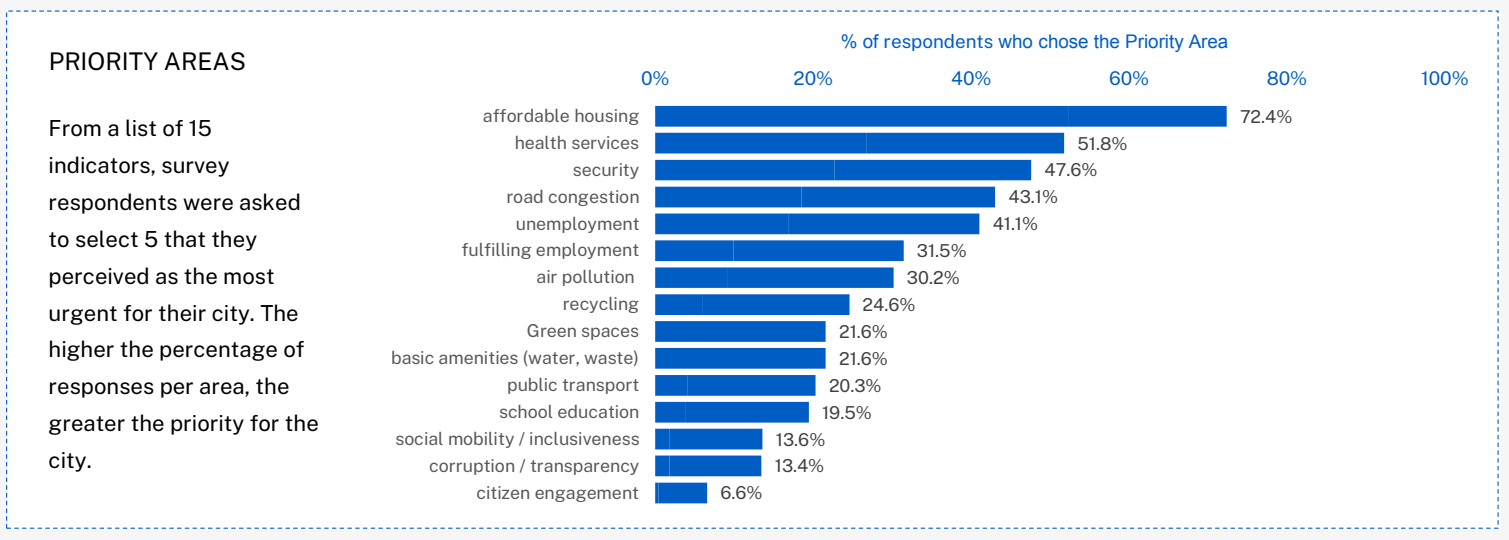
Population 1,140,000
 (Eurostat)

HDI 0.913
 (Global Data Lab)



Country
 United Kingdom

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	47,066	40,799	44,750	46,624	+1,874



Bogota

SMART CITY RANKING
127
 Out of 142

▲

129 in 2023
 Out of 141

SMART CITY RATING
D
 D in 2023

FACTOR RATINGS

STRUCTURES
D

TECHNOLOGIES
D

GROUP
4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 7,180,000
 (UN Data)

HDI: 0.797
 (Global Data Lab)

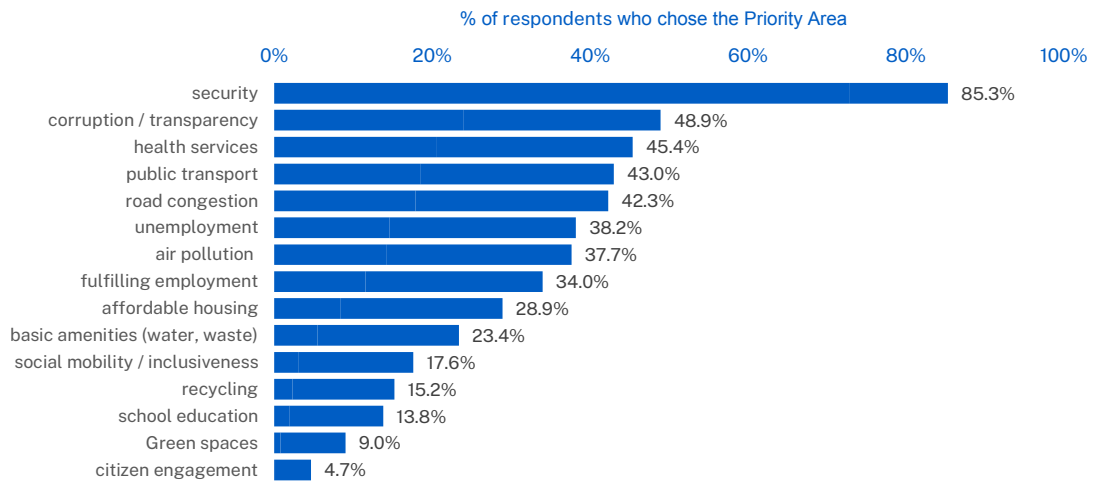


Country
 Colombia

	2019	2020	2021	2022	1 yr change
HDI	0.768	0.756	0.752	0.758	+0.006
Life expectancy at birth	76.8	74.8	72.8	73.7	+0.8
Expected years of schooling	14.5	14.4	14.4	14.4	+0.0
Mean years of schooling	8.6	8.9	8.9	8.9	+0.0
GNI per capita (PPP \$)	14,294	13,220	14,403	15,014	+611

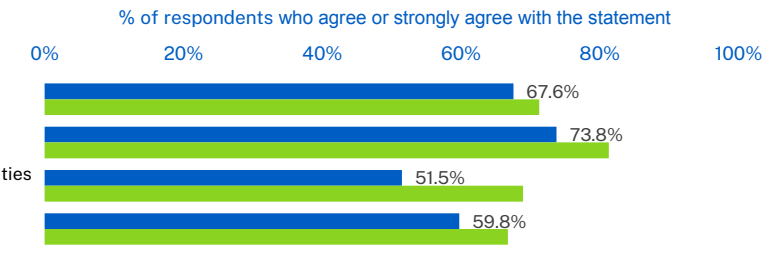
PRIORITY AREAS

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.



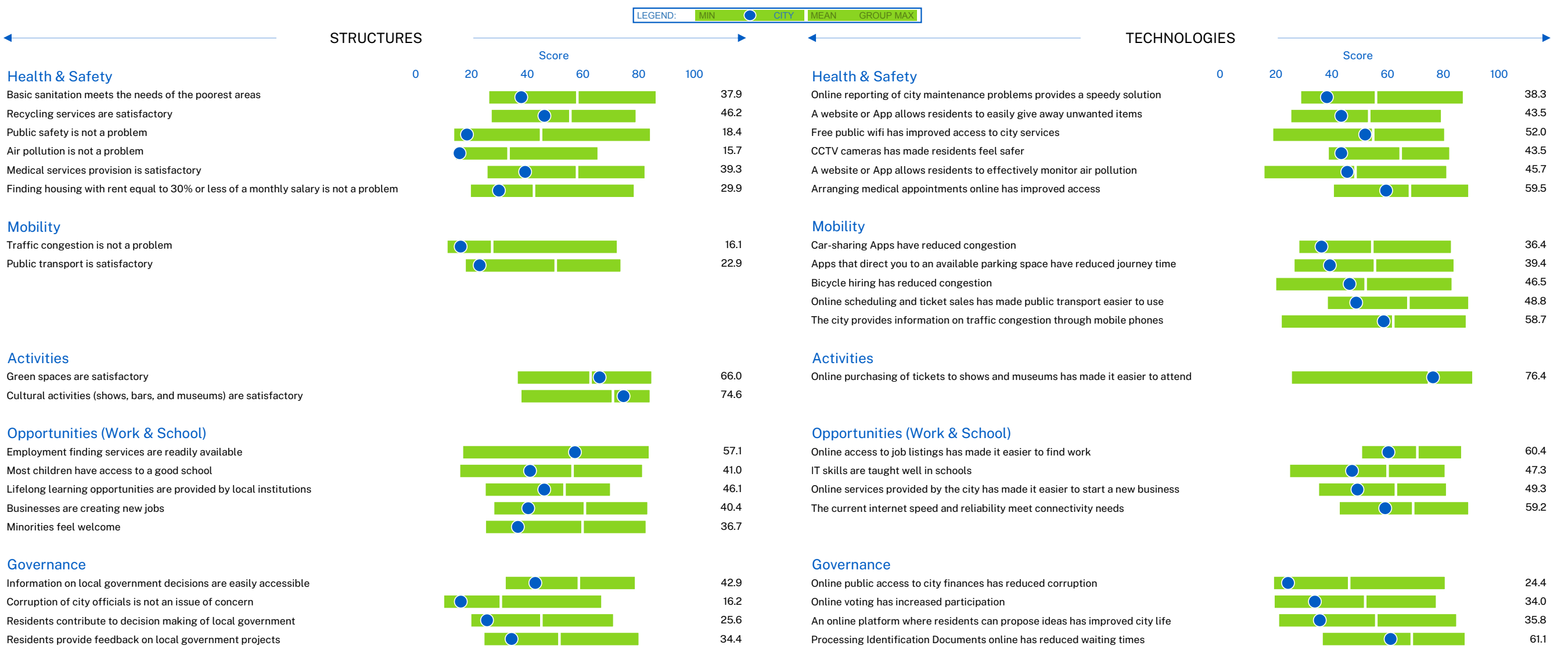
Priority Area	% of respondents
security	85.3%
corruption / transparency	48.9%
health services	45.4%
public transport	43.0%
road congestion	42.3%
unemployment	38.2%
air pollution	37.7%
fulfilling employment	34.0%
affordable housing	28.9%
basic amenities (water, waste)	23.4%
social mobility / inclusiveness	17.6%
recycling	15.2%
school education	13.8%
Green spaces	9.0%
citizen engagement	4.7%

ATTITUDES



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	67.6%	67.6%
You are comfortable with face recognition technologies to lower crime	73.8%	73.8%
You feel the availability of online information has increased your trust in authorities	51.5%	51.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	59.8%	59.8%

LEGEND: [GROUP MEAN] [CITY]



LEGEND: MIN CITY MEAN GROUP MAX

Category	Factor	Score
Health & Safety	Basic sanitation meets the needs of the poorest areas	37.9
	Recycling services are satisfactory	46.2
	Public safety is not a problem	18.4
	Air pollution is not a problem	15.7
	Medical services provision is satisfactory	39.3
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	29.9
Mobility	Traffic congestion is not a problem	16.1
	Public transport is satisfactory	22.9
Activities	Green spaces are satisfactory	66.0
	Cultural activities (shows, bars, and museums) are satisfactory	74.6
Opportunities (Work & School)	Employment finding services are readily available	57.1
	Most children have access to a good school	41.0
	Lifelong learning opportunities are provided by local institutions	46.1
	Businesses are creating new jobs	40.4
	Minorities feel welcome	36.7
Governance	Information on local government decisions are easily accessible	42.9
	Corruption of city officials is not an issue of concern	16.2
	Residents contribute to decision making of local government	25.6
	Residents provide feedback on local government projects	34.4
	Online reporting of city maintenance problems provides a speedy solution	38.3
Technologies	A website or App allows residents to easily give away unwanted items	43.5
	Free public wifi has improved access to city services	52.0
	CCTV cameras has made residents feel safer	43.5
	A website or App allows residents to effectively monitor air pollution	45.7
	Arranging medical appointments online has improved access	59.5
	Car-sharing Apps have reduced congestion	36.4
	Apps that direct you to an available parking space have reduced journey time	39.4
	Bicycle hiring has reduced congestion	46.5
	Online scheduling and ticket sales has made public transport easier to use	48.8
	The city provides information on traffic congestion through mobile phones	58.7
Activities	Online purchasing of tickets to shows and museums has made it easier to attend	76.4
	Opportunities (Work & School)	Online access to job listings has made it easier to find work
IT skills are taught well in schools		47.3
Online services provided by the city has made it easier to start a new business		49.3
The current internet speed and reliability meet connectivity needs		59.2
Governance	Online public access to city finances has reduced corruption	24.4
	Online voting has increased participation	34.0
	An online platform where residents can propose ideas has improved city life	35.8
Processing Identification Documents online has reduced waiting times	61.1	

Bologna

SMART CITY RANKING
78
 Out of 142

▼

51 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS

BB
 STRUCTURES

B
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

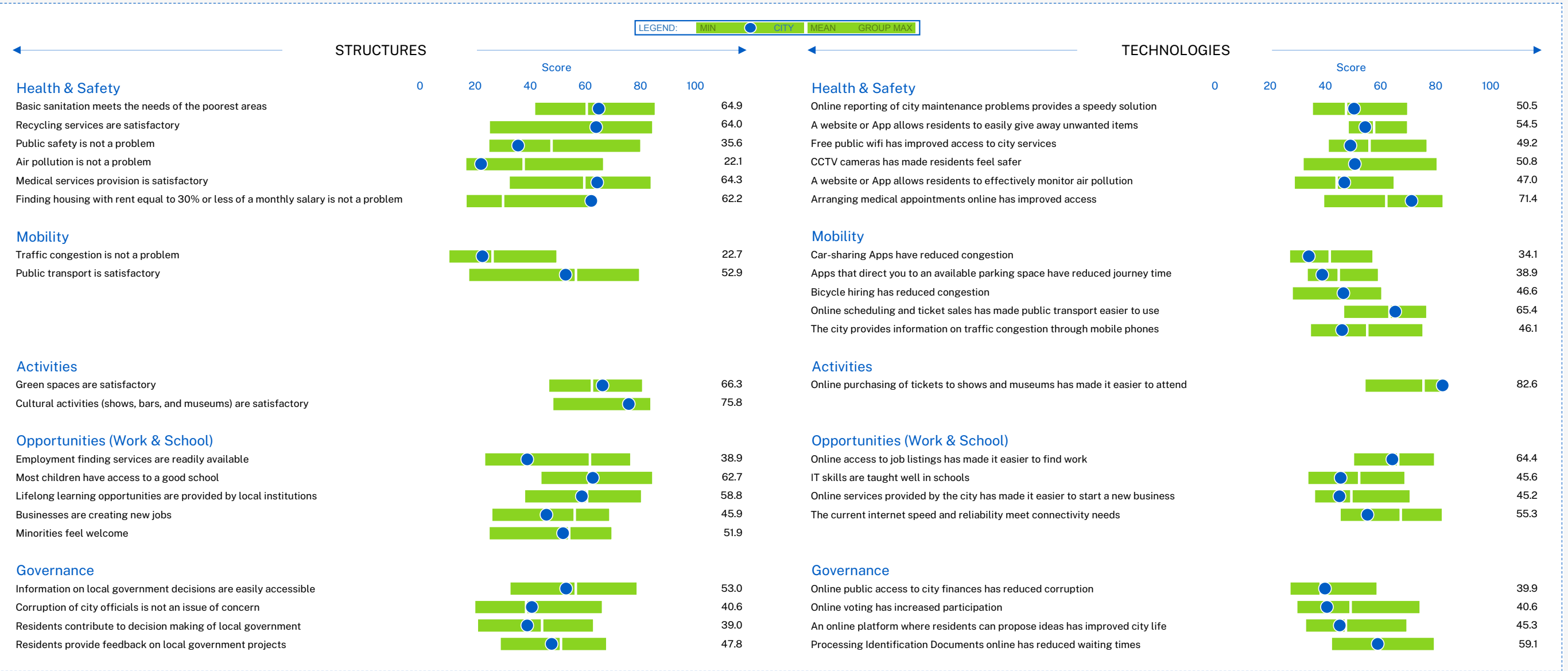
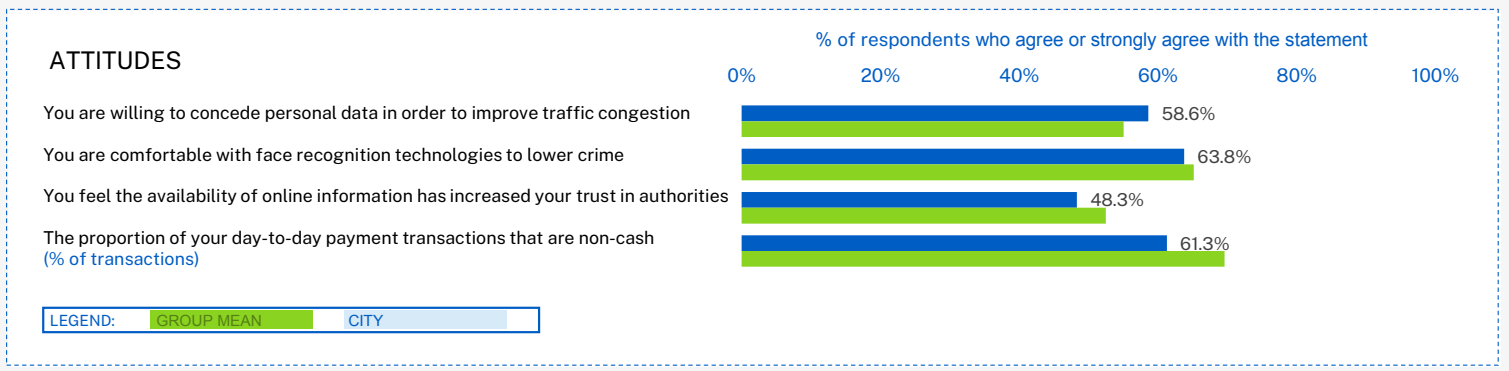
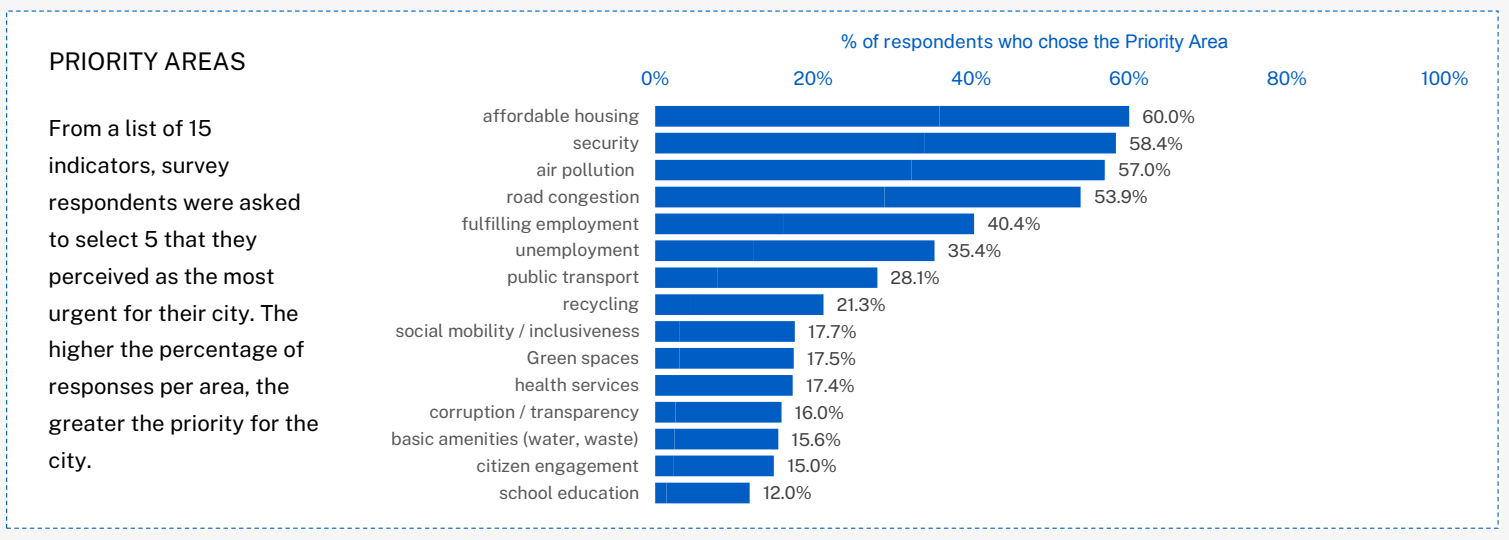
Population: 400,000 (Eurostat)

HDI: 0.924 (Global Data Lab)



Country

	2019	2020	2021	2022	1 yr change
Italy					
HDI	0.899	0.892	0.899	0.906	+0.007
Life expectancy at birth	83.6	82.4	82.9	84.1	+1.2
Expected years of schooling	16.4	16.5	16.7	16.7	+0.0
Mean years of schooling	10.7	10.7	10.7	10.7	+0.0
GNI per capita (PPP \$)	43,102	39,587	42,856	44,284	+1,428



Bordeaux

SMART CITY RANKING

70

Out of 142

▲

78 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CC

TECHNOLOGIES

GROUP

3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 650,000
(Eurostat)

HDI 0.900
(Global Data Lab)

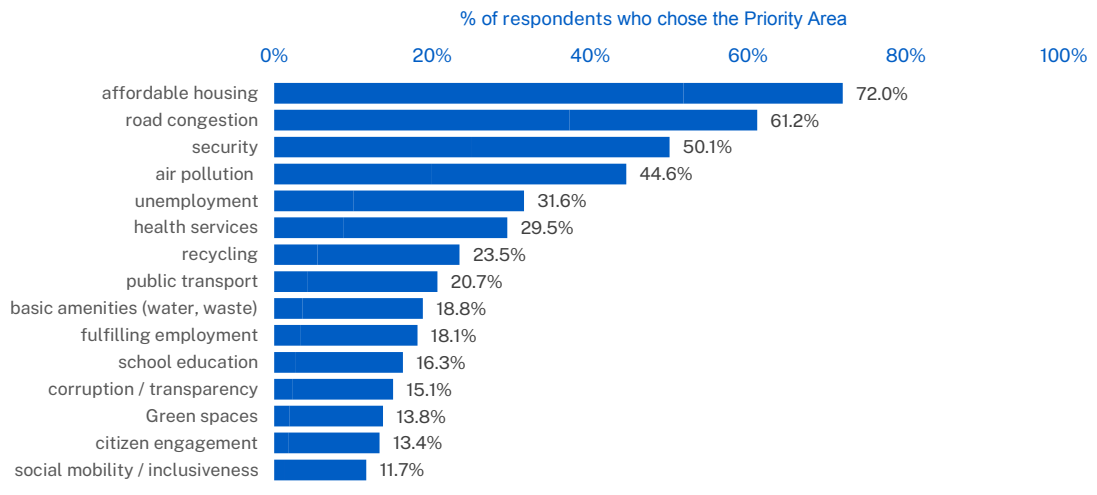


Country **France**

	2019	2020	2021	2022	1 yr change
HDI	0.905	0.900	0.906	0.910	+0.004
Life expectancy at birth	82.7	82.2	82.5	83.2	+0.7
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	11.6	11.7	11.7	11.7	+0.0
GNI per capita (PPP \$)	46,907	42,891	46,322	47,379	+1,057

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.



Priority Area	% of respondents
affordable housing	72.0%
road congestion	61.2%
security	50.1%
air pollution	44.6%
unemployment	31.6%
health services	29.5%
recycling	23.5%
public transport	20.7%
basic amenities (water, waste)	18.8%
fulfilling employment	18.1%
school education	16.3%
corruption / transparency	15.1%
Green spaces	13.8%
citizen engagement	13.4%
social mobility / inclusiveness	11.7%

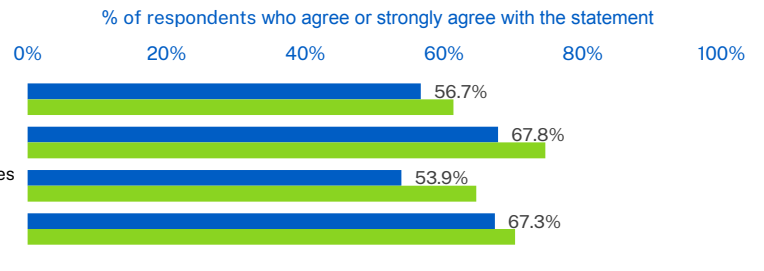
ATTITUDES

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

You are comfortable with face recognition technologies to lower crime

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

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



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	56.7%	56.7%
You are comfortable with face recognition technologies to lower crime	67.8%	67.8%
You feel the availability of online information has increased your trust in authorities	53.9%	53.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	67.3%	67.3%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 58.4
- Recycling services are satisfactory: 65.3
- Public safety is not a problem: 44.8
- Air pollution is not a problem: 31.0
- Medical services provision is satisfactory: 63.5
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 26.3

Mobility

- Traffic congestion is not a problem: 24.4
- Public transport is satisfactory: 63.2

Activities

- Green spaces are satisfactory: 82.4
- Cultural activities (shows, bars, and museums) are satisfactory: 85.5

Opportunities (Work & School)

- Employment finding services are readily available: 63.3
- Most children have access to a good school: 71.4
- Lifelong learning opportunities are provided by local institutions: 64.3
- Businesses are creating new jobs: 60.5
- Minorities feel welcome: 55.0

Governance

- Information on local government decisions are easily accessible: 60.6
- Corruption of city officials is not an issue of concern: 48.7
- Residents contribute to decision making of local government: 47.2
- Residents provide feedback on local government projects: 54.3

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 49.2
- A website or App allows residents to easily give away unwanted items: 56.1
- Free public wifi has improved access to city services: 60.2
- CCTV cameras has made residents feel safer: 54.5
- A website or App allows residents to effectively monitor air pollution: 48.1
- Arranging medical appointments online has improved access: 70.7

Mobility

- Car-sharing Apps have reduced congestion: 44.4
- Apps that direct you to an available parking space have reduced journey time: 48.0
- Bicycle hiring has reduced congestion: 59.6
- Online scheduling and ticket sales has made public transport easier to use: 69.7
- The city provides information on traffic congestion through mobile phones: 58.2

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 77.6

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 63.6
- IT skills are taught well in schools: 59.8
- Online services provided by the city has made it easier to start a new business: 51.5
- The current internet speed and reliability meet connectivity needs: 70.1

Governance

- Online public access to city finances has reduced corruption: 43.4
- Online voting has increased participation: 51.6
- An online platform where residents can propose ideas has improved city life: 53.2
- Processing Identification Documents online has reduced waiting times: 58.5

Boston

SMART CITY RANKING
36
Out of 142



34 in 2023
Out of 141

SMART CITY RATING

BBB

A in 2023

FACTOR RATINGS

BBB

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

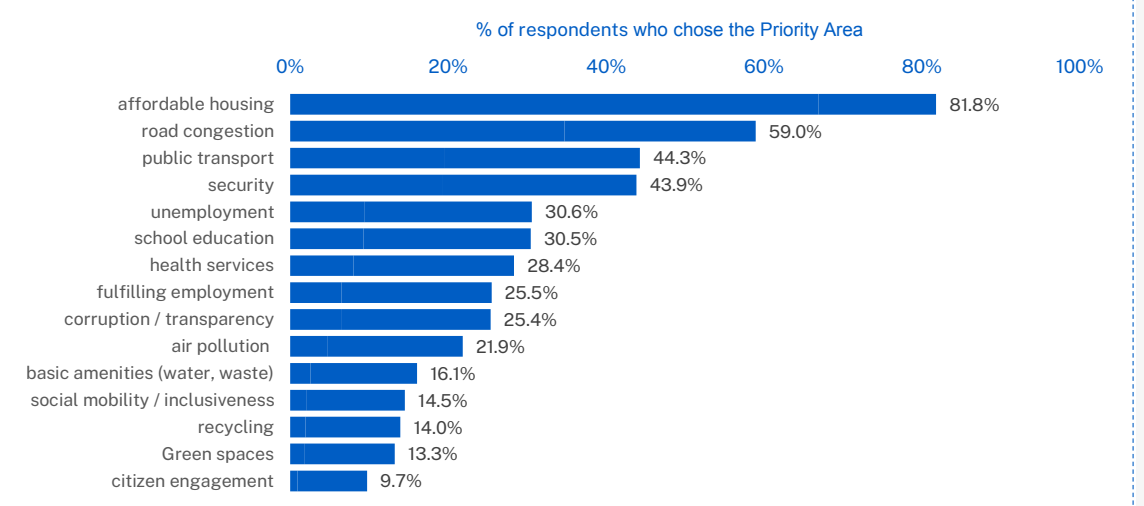
City
Population 680,000
(UN Data)
HDI 0.949
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
USA					
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081

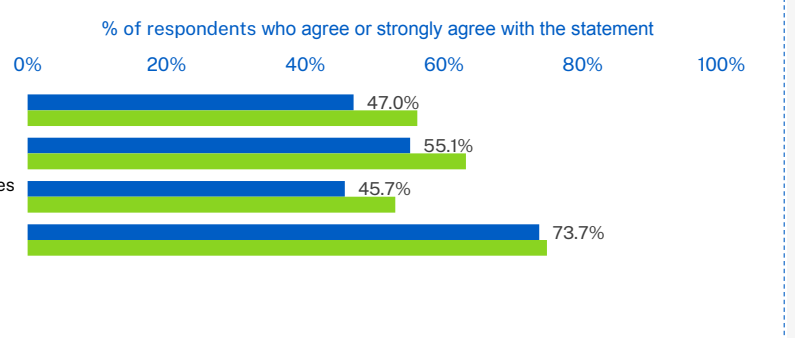
PRIORITY AREAS

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.

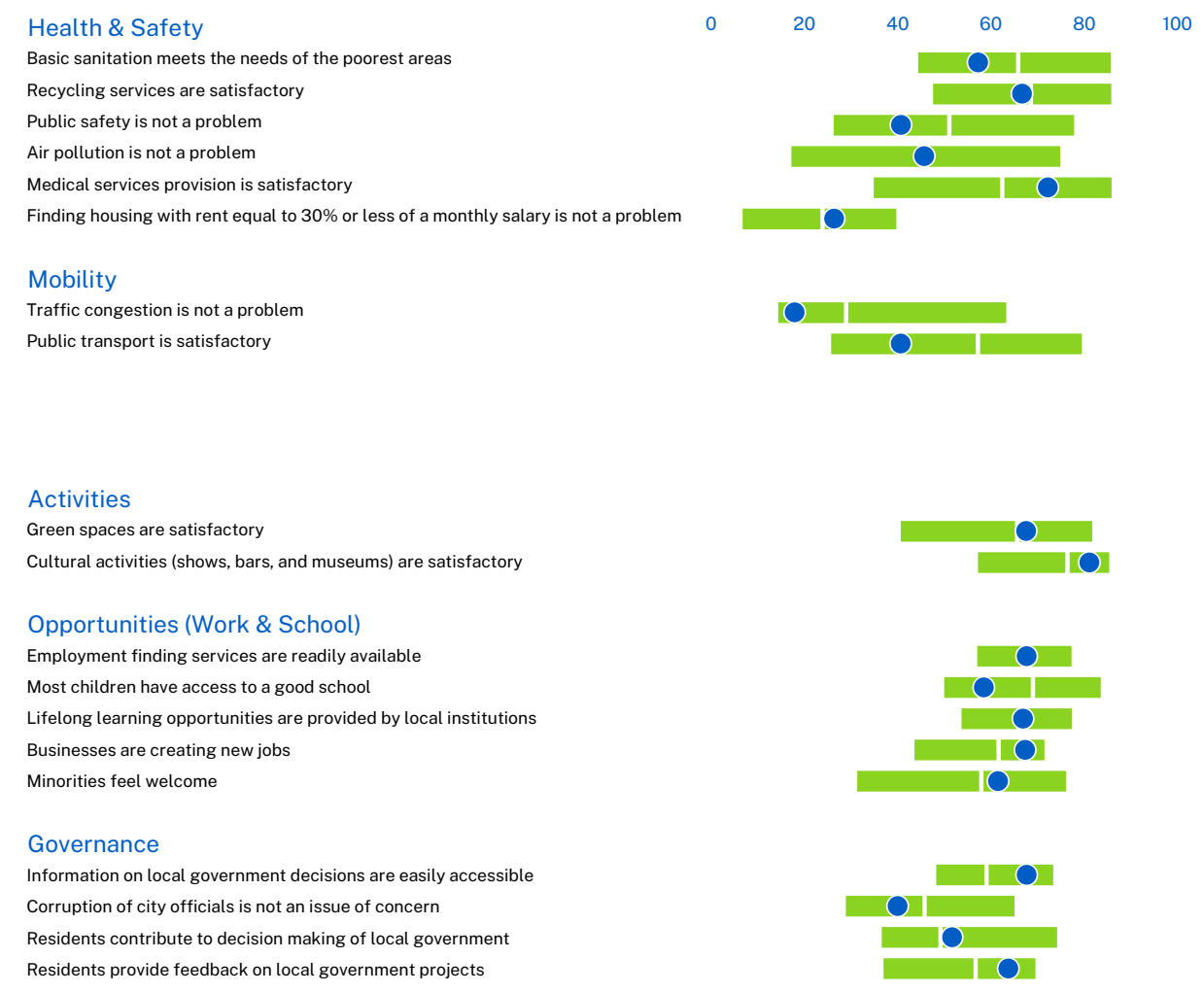


ATTITUDES

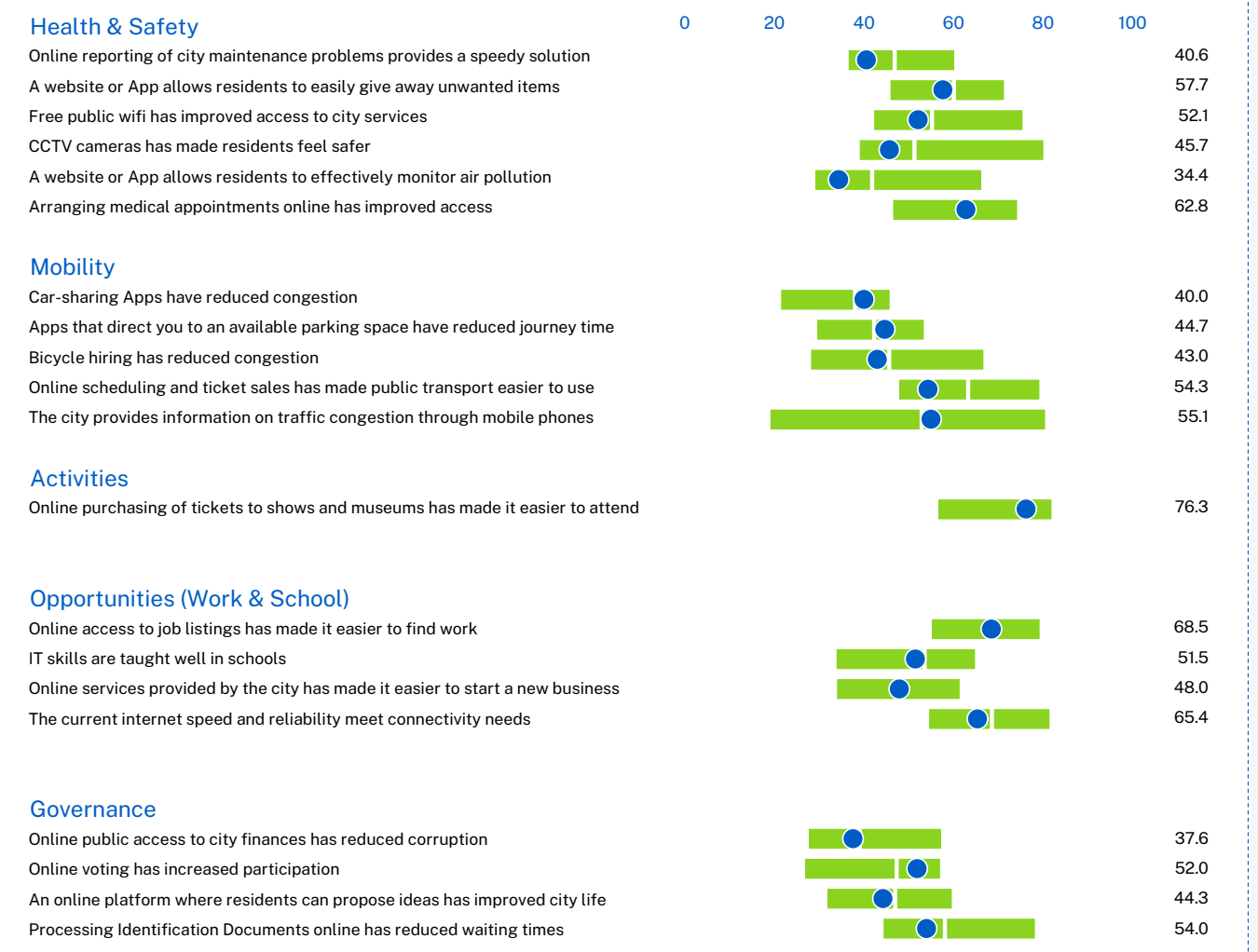
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Brasilia

SMART CITY RANKING

130

Out of 142



128 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

C

STRUCTURES

C

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 4,800,000
(UN World Urbanization Prospects)

HDI 0.816
(Global Data Lab)



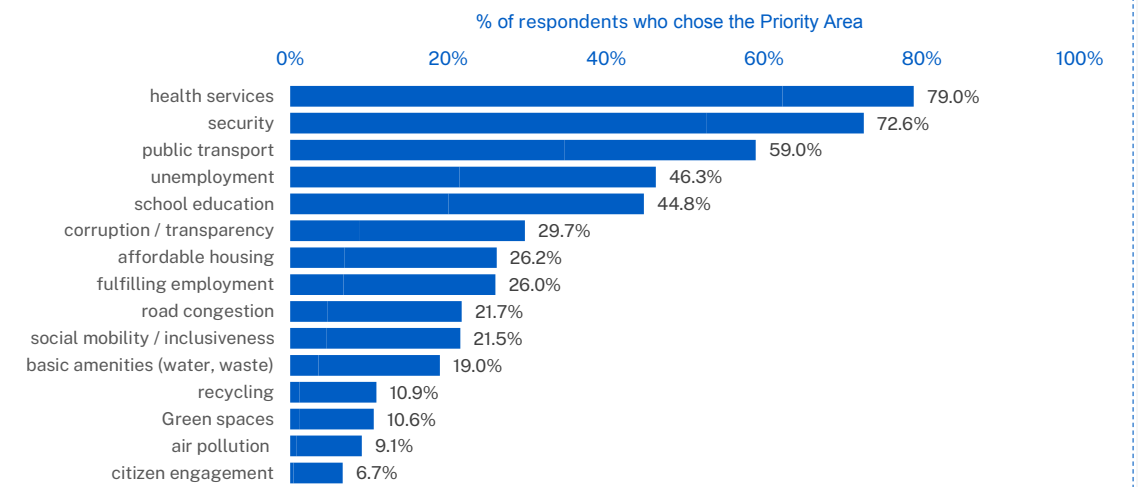
Country

Brazil

	2019	2020	2021	2022	1 yr change
HDI	0.764	0.758	0.756	0.760	+0.004
Life expectancy at birth	75.3	74.0	72.8	73.4	+0.7
Expected years of schooling	15.4	15.4	15.6	15.6	+0.0
Mean years of schooling	8.1	8.3	8.3	8.3	+0.0
GNI per capita (PPP \$)	14,291	13,815	14,342	14,616	+274

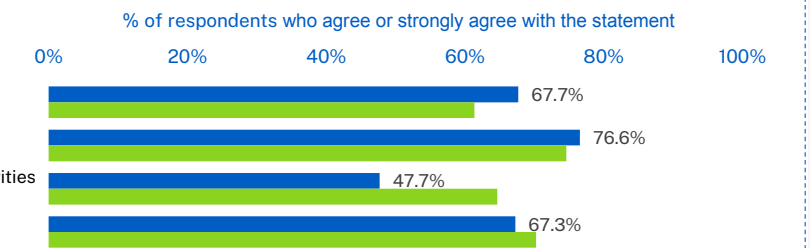
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

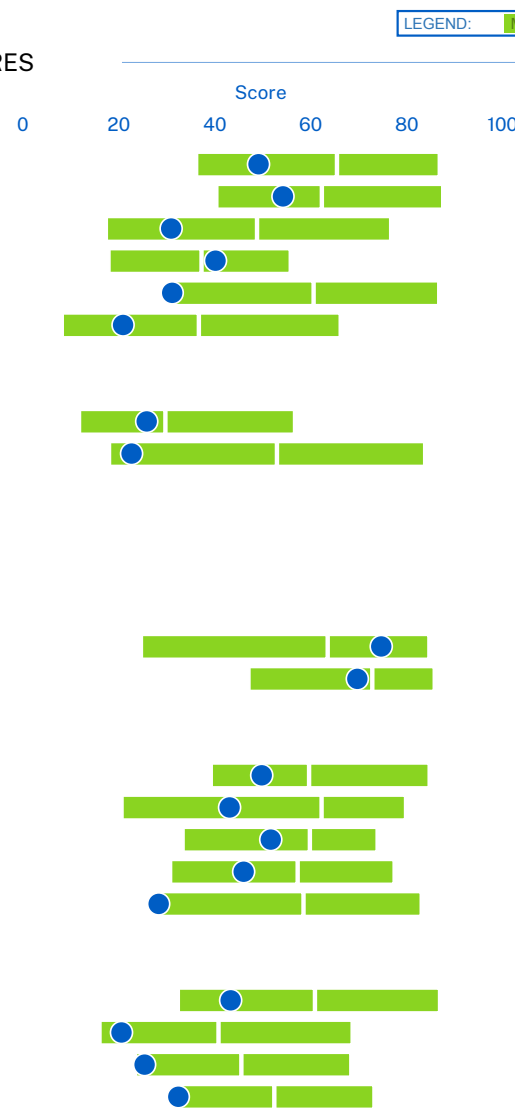
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

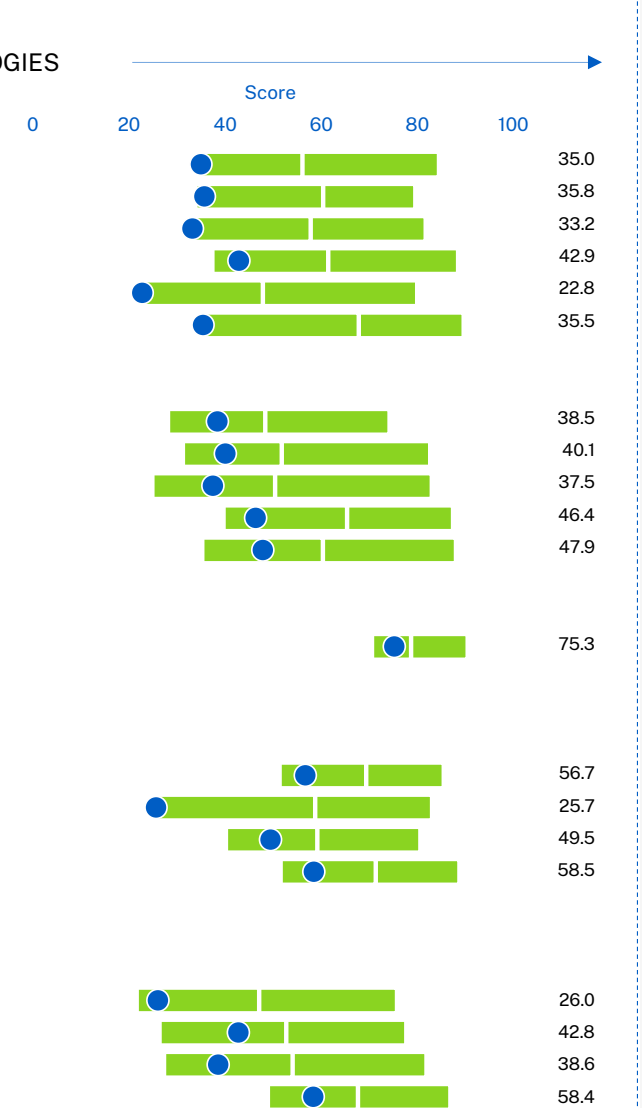
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Bratislava

SMART CITY RANKING

56

Out of 142



62 in 2023
Out of 141

SMART CITY RATING

BBB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 440,000
(Eurostat)

HDI 0.944
(Global Data Lab)



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

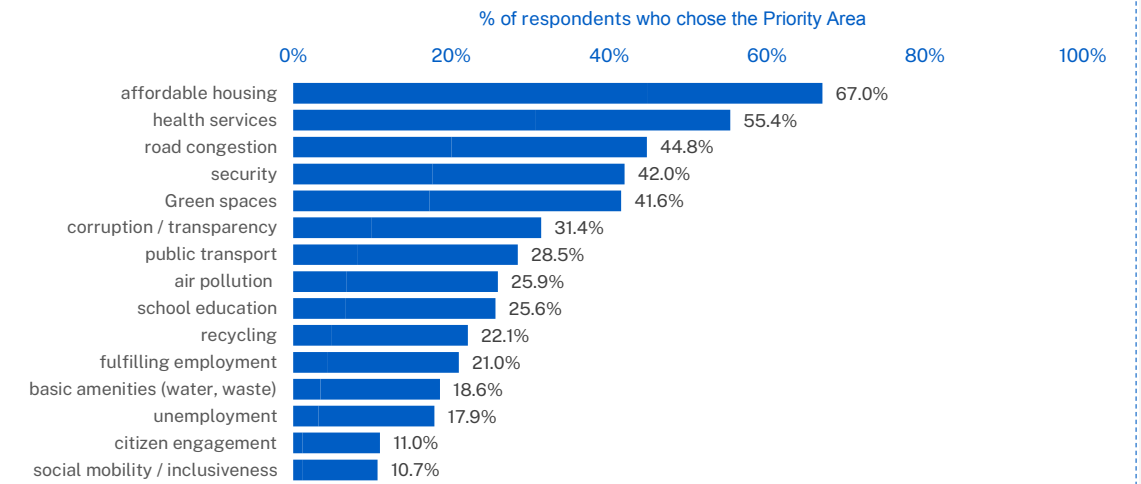
Country

Slovakia

	2019	2020	2021	2022	1 yr change
HDI	0.863	0.860	0.852	0.855	+0.003
Life expectancy at birth	77.7	77.0	74.9	75.3	+0.4
Expected years of schooling	14.5	14.6	14.7	14.7	+0.0
Mean years of schooling	12.9	13.0	13.0	13.0	+0.0
GNI per capita (PPP \$)	31,292	30,589	31,553	32,171	+618

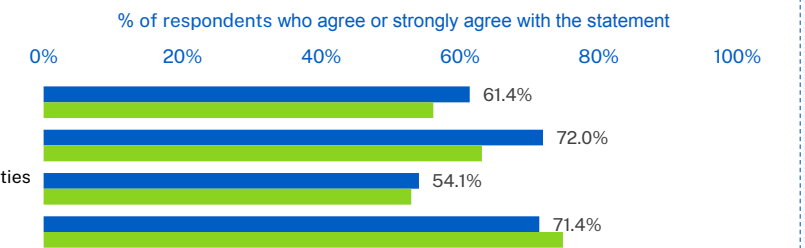
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

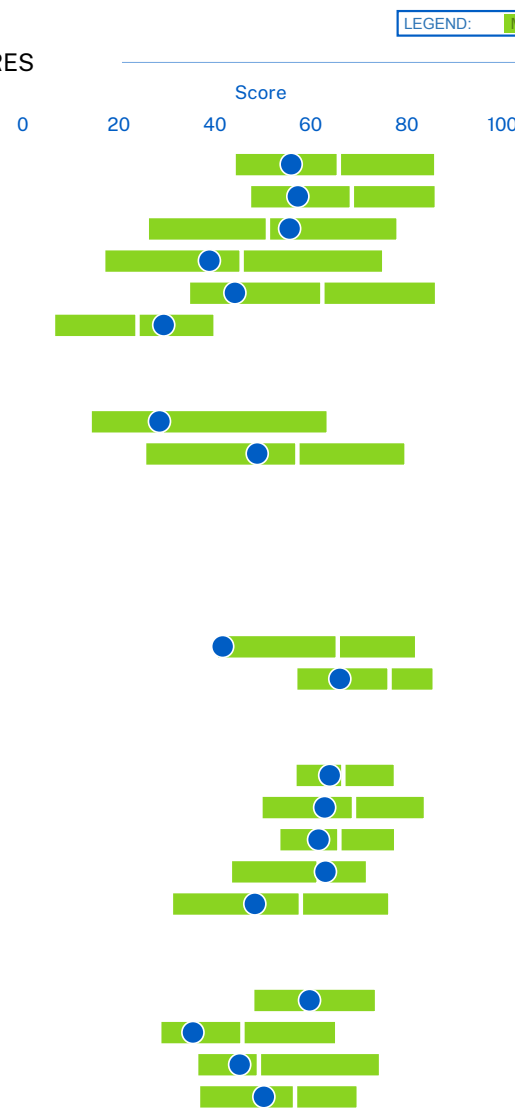
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

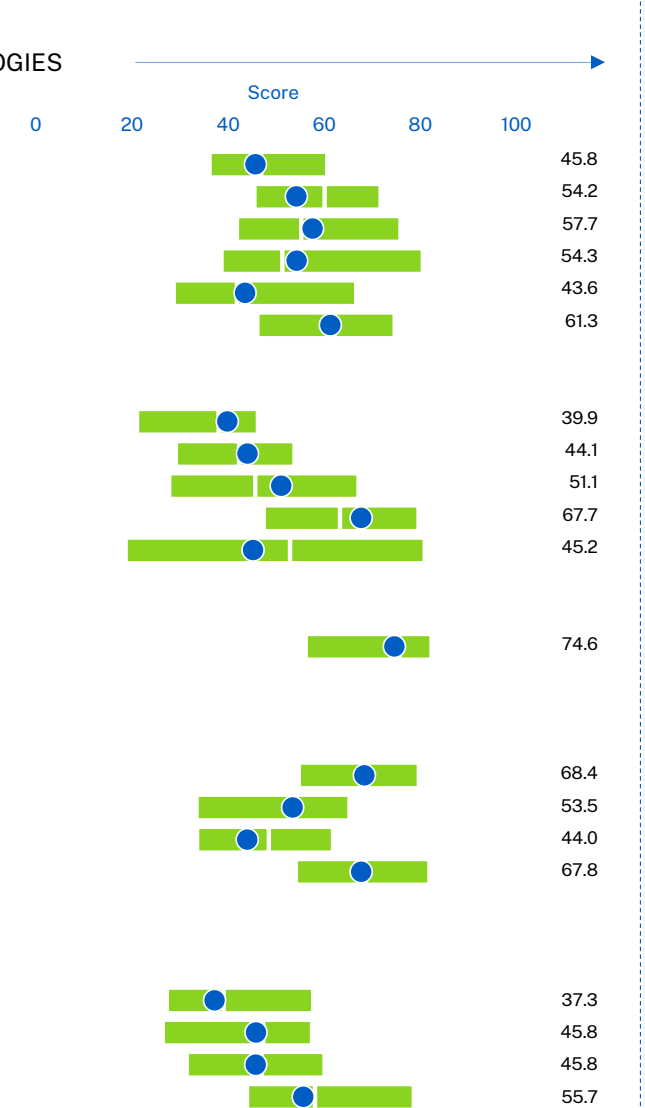
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Brisbane

SMART CITY RANKING
30
Out of 142



24 in 2023
Out of 141

SMART CITY RATING
A



AA in 2023

FACTOR RATINGS



STRUCTURES



TECHNOLOGIES

GROUP



All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,050,000
(UN Data)

HDI 0.944
(Global Data Lab)

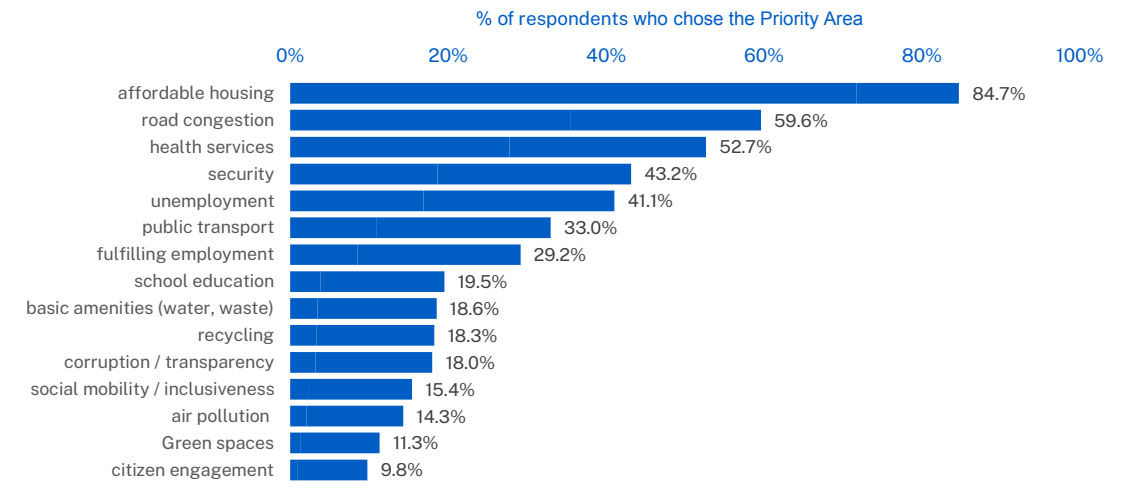


Country

Australia	2019	2020	2021	2022	1 yr change
HDI	0.941	0.948	0.949	0.946	-0.003
Life expectancy at birth	83.1	84.3	84.5	83.6	-0.9
Expected years of schooling	21.4	20.9	21.1	21.1	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	47,054	48,075	48,076	49,257	+1,181

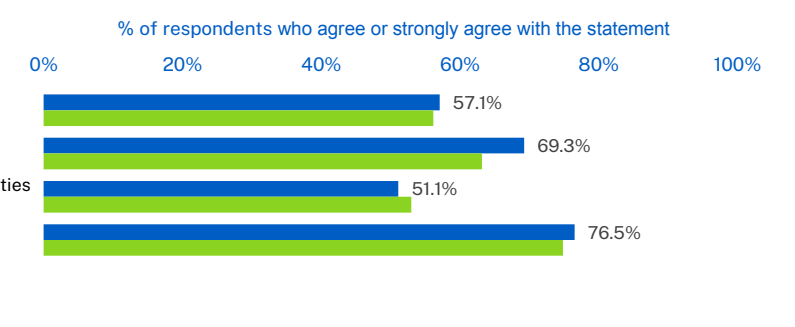
PRIORITY AREAS

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.

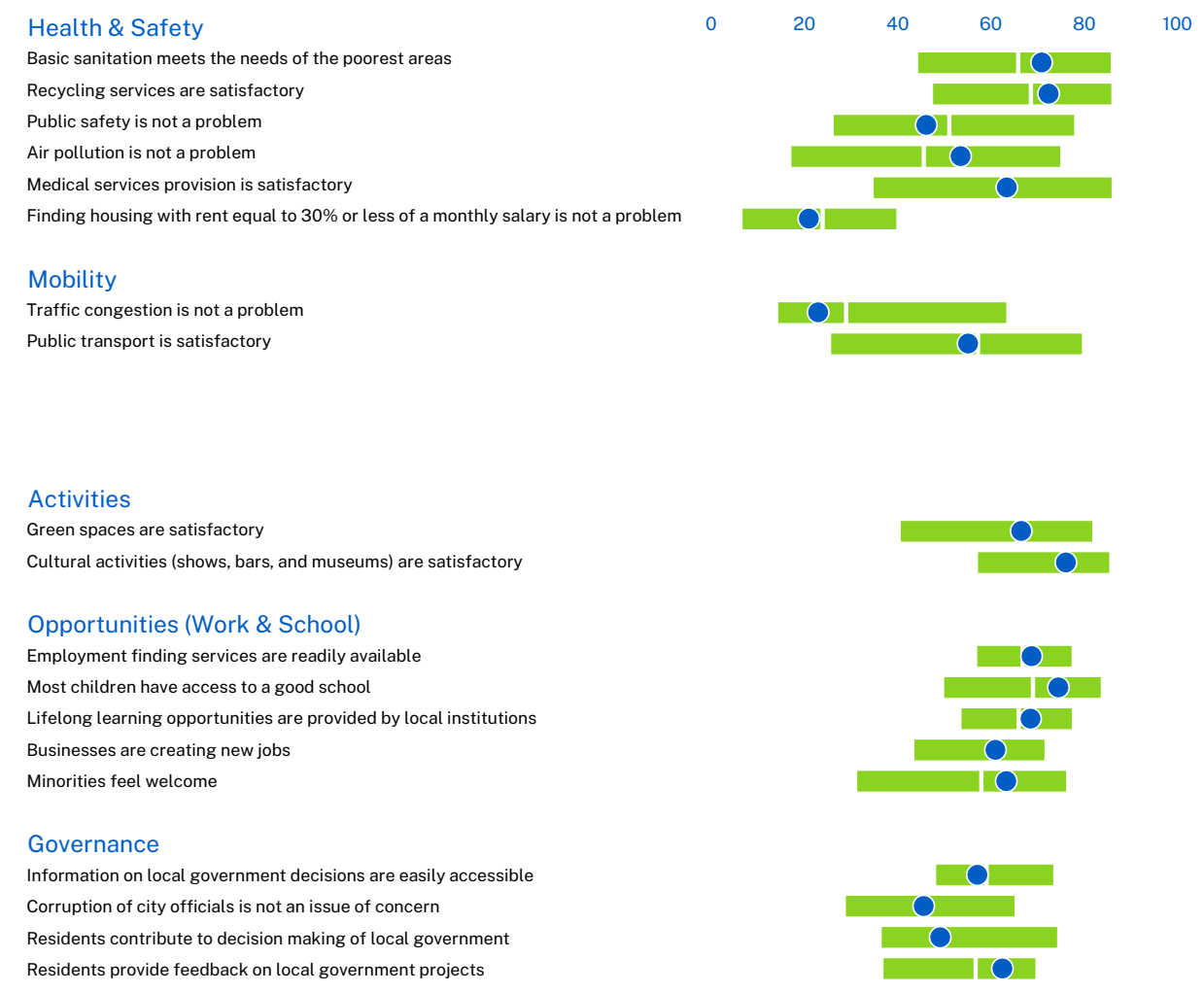


ATTITUDES

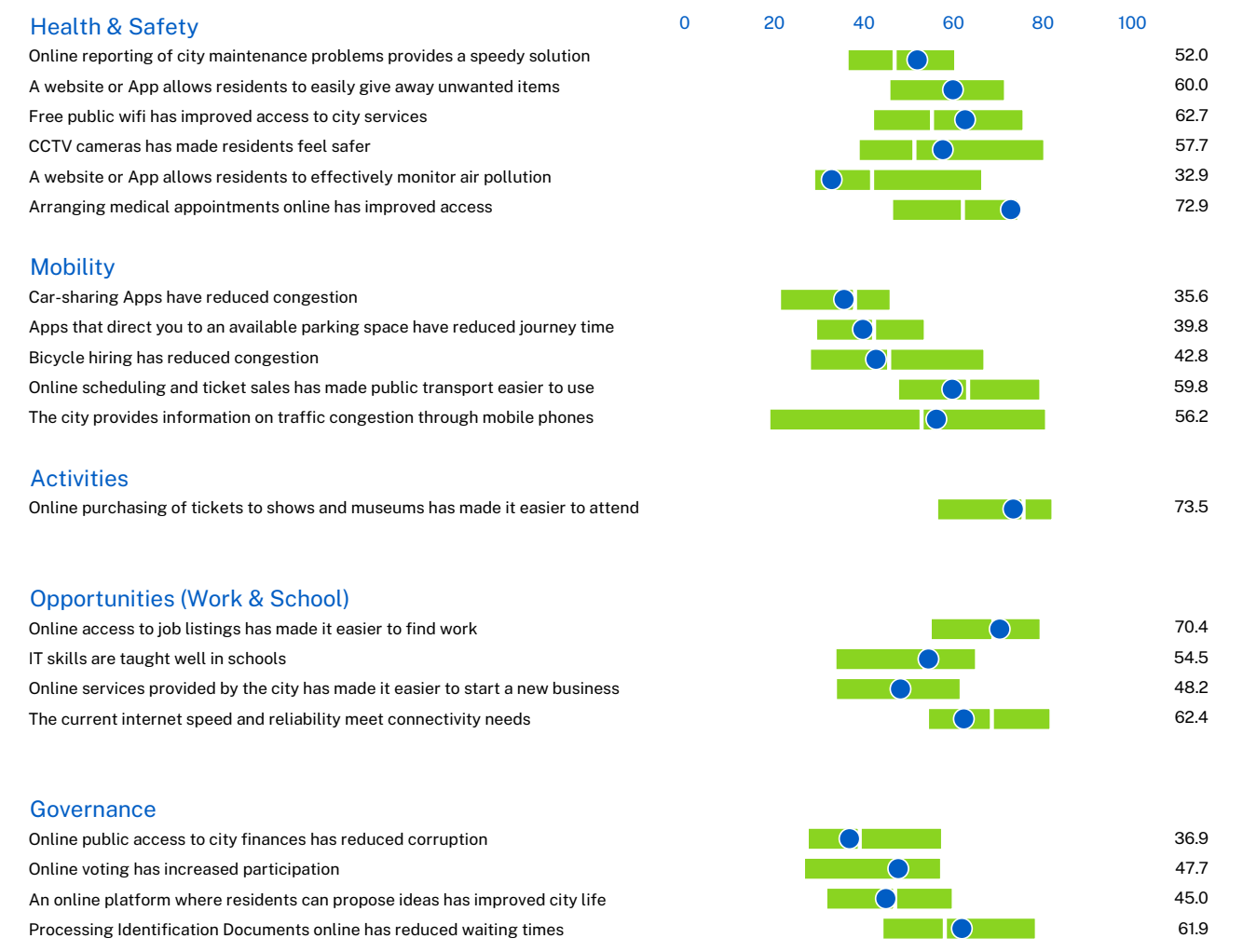
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Brussels

SMART CITY RANKING

40

Out of 142

▼

35 in 2023
Out of 141

SMART CITY RATING

BBB

BBB in 2023

FACTOR RATINGS

BB

STRUCTURES

A

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,230,000
(Eurostat)

HDI 0.953
(Global Data Lab)

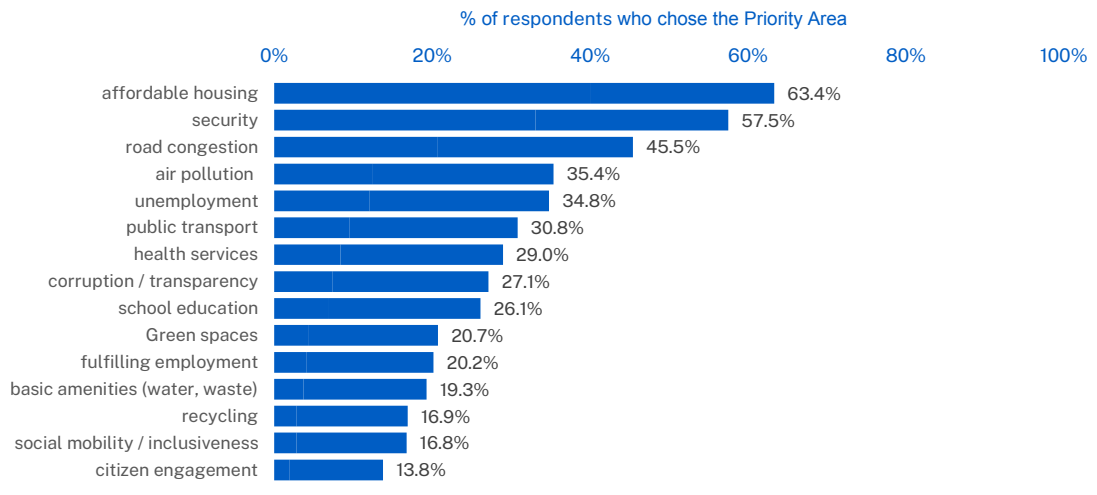


Country **Belgium**

	2019	2020	2021	2022	1 yr change
HDI	0.936	0.930	0.938	0.942	+0.004
Life expectancy at birth	81.8	80.8	81.9	82.3	+0.4
Expected years of schooling	19.6	19.3	18.9	18.9	+0.0
Mean years of schooling	12.4	12.5	12.5	12.5	+0.0
GNI per capita (PPP \$)	52,490	49,491	52,299	53,644	+1,345

PRIORITY AREAS

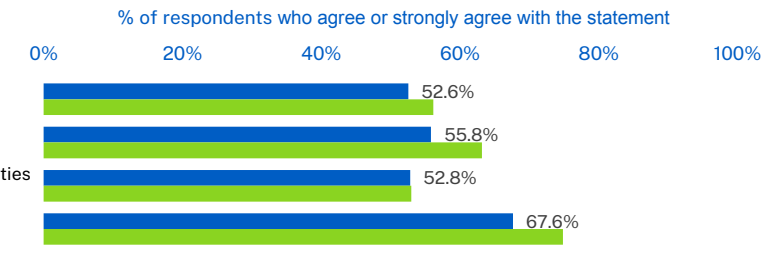
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	63.4%
security	57.5%
road congestion	45.5%
air pollution	35.4%
unemployment	34.8%
public transport	30.8%
health services	29.0%
corruption / transparency	27.1%
school education	26.1%
Green spaces	20.7%
fulfilling employment	20.2%
basic amenities (water, waste)	19.3%
recycling	16.9%
social mobility / inclusiveness	16.8%
citizen engagement	13.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	52.6%	52.6%
You are comfortable with face recognition technologies to lower crime	55.8%	55.8%
You feel the availability of online information has increased your trust in authorities	52.8%	52.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	67.6%	67.6%

LEGEND: ■ GROUP MEAN ■ CITY

STRUCTURES

Score: 0 20 40 60 80 100

LEGEND: MIN ● CITY ● MEAN GROUP MAX

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 54.0
- Recycling services are satisfactory: 61.0
- Public safety is not a problem: 39.1
- Air pollution is not a problem: 29.9
- Medical services provision is satisfactory: 65.7
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 28.1

Mobility

- Traffic congestion is not a problem: 28.2
- Public transport is satisfactory: 53.7

Activities

- Green spaces are satisfactory: 67.3
- Cultural activities (shows, bars, and museums) are satisfactory: 74.0

Opportunities (Work & School)

- Employment finding services are readily available: 63.9
- Most children have access to a good school: 54.6
- Lifelong learning opportunities are provided by local institutions: 62.1
- Businesses are creating new jobs: 50.7
- Minorities feel welcome: 50.6

Governance

- Information on local government decisions are easily accessible: 54.8
- Corruption of city officials is not an issue of concern: 40.5
- Residents contribute to decision making of local government: 37.5
- Residents provide feedback on local government projects: 48.2

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 46.5
- A website or App allows residents to easily give away unwanted items: 59.8
- Free public wifi has improved access to city services: 51.8
- CCTV cameras has made residents feel safer: 48.5
- A website or App allows residents to effectively monitor air pollution: 47.9
- Arranging medical appointments online has improved access: 59.4

Mobility

- Car-sharing Apps have reduced congestion: 37.8
- Apps that direct you to an available parking space have reduced journey time: 43.5
- Bicycle hiring has reduced congestion: 50.6
- Online scheduling and ticket sales has made public transport easier to use: 61.3
- The city provides information on traffic congestion through mobile phones: 51.6

Activities

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

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 59.2
- IT skills are taught well in schools: 54.7
- Online services provided by the city has made it easier to start a new business: 50.0
- The current internet speed and reliability meet connectivity needs: 65.7

Governance

- Online public access to city finances has reduced corruption: 40.1
- Online voting has increased participation: 47.9
- An online platform where residents can propose ideas has improved city life: 48.3
- Processing Identification Documents online has reduced waiting times: 63.0

Bucharest

SMART CITY RANKING
100
 Out of 142

▲

104 in 2023
 Out of 141

SMART CITY RATING
B

CCC in 2023

FACTOR RATINGS
B

STRUCTURES

B

TECHNOLOGIES

B

GROUP

2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 1,820,000 (UN Data)

HDI: 0.926 (Global Data Lab)

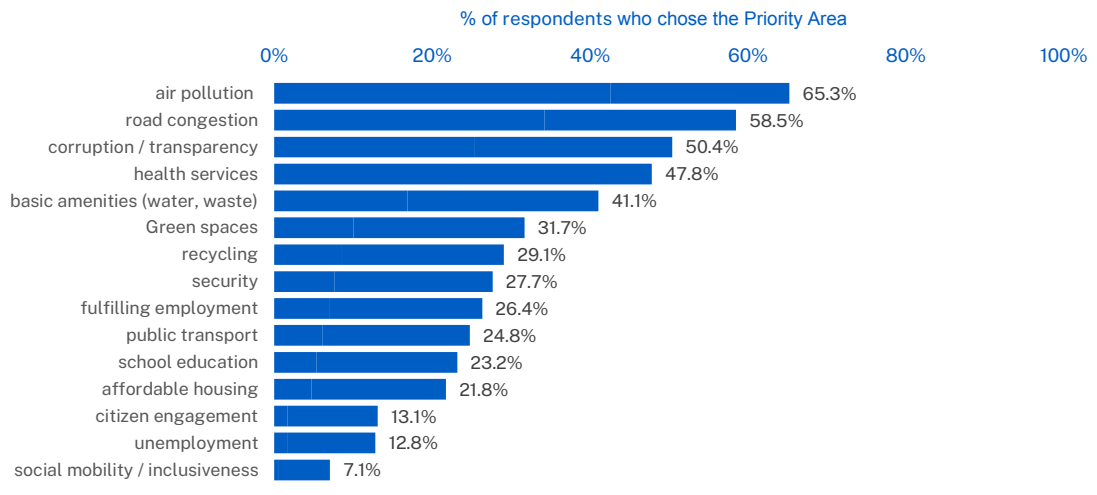


Country
 Romania

	2019	2020	2021	2022	1 yr change
HDI	0.834	0.828	0.825	0.827	+0.002
Life expectancy at birth	76.5	75.3	74.2	74.1	-0.1
Expected years of schooling	14.4	14.5	14.5	14.5	+0.0
Mean years of schooling	11.3	11.4	11.4	11.4	+0.0
GNI per capita (PPP \$)	29,569	28,603	30,312	31,641	+1,329

PRIORITY AREAS

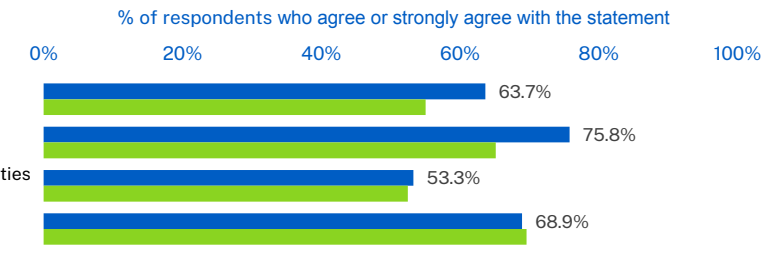
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
air pollution	65.3%
road congestion	58.5%
corruption / transparency	50.4%
health services	47.8%
basic amenities (water, waste)	41.1%
Green spaces	31.7%
recycling	29.1%
security	27.7%
fulfilling employment	26.4%
public transport	24.8%
school education	23.2%
affordable housing	21.8%
citizen engagement	13.1%
unemployment	12.8%
social mobility / inclusiveness	7.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	63.7%	48.5%
You are comfortable with face recognition technologies to lower crime	75.8%	60.9%
You feel the availability of online information has increased your trust in authorities	53.3%	41.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.9%	50.4%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 48.5
- Recycling services are satisfactory: 40.9
- Public safety is not a problem: 46.6
- Air pollution is not a problem: 21.6
- Medical services provision is satisfactory: 48.5
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 30.5

Mobility

- Traffic congestion is not a problem: 16.2
- Public transport is satisfactory: 37.2

Activities

- Green spaces are satisfactory: 50.2
- Cultural activities (shows, bars, and museums) are satisfactory: 67.7

Opportunities (Work & School)

- Employment finding services are readily available: 55.4
- Most children have access to a good school: 52.0
- Lifelong learning opportunities are provided by local institutions: 51.4
- Businesses are creating new jobs: 51.4
- Minorities feel welcome: 54.7

Governance

- Information on local government decisions are easily accessible: 41.0
- Corruption of city officials is not an issue of concern: 21.4
- Residents contribute to decision making of local government: 25.2
- Residents provide feedback on local government projects: 37.2

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 47.3
- A website or App allows residents to easily give away unwanted items: 54.1
- Free public wifi has improved access to city services: 52.8
- CCTV cameras has made residents feel safer: 50.6
- A website or App allows residents to effectively monitor air pollution: 51.7
- Arranging medical appointments online has improved access: 61.0

Mobility

- Car-sharing Apps have reduced congestion: 41.5
- Apps that direct you to an available parking space have reduced journey time: 47.7
- Bicycle hiring has reduced congestion: 47.2
- Online scheduling and ticket sales has made public transport easier to use: 59.7
- The city provides information on traffic congestion through mobile phones: 52.2

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 77.1

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 67.3
- IT skills are taught well in schools: 45.9
- Online services provided by the city has made it easier to start a new business: 43.9
- The current internet speed and reliability meet connectivity needs: 76.1

Governance

- Online public access to city finances has reduced corruption: 28.6
- Online voting has increased participation: 35.4
- An online platform where residents can propose ideas has improved city life: 43.6
- Processing Identification Documents online has reduced waiting times: 56.9

LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

Budapest

SMART CITY RANKING
89
 Out of 142

▼

87 in 2023
 Out of 141

SMART CITY RATING
B
 B in 2023

FACTOR RATINGS
B
 STRUCTURES

BB
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

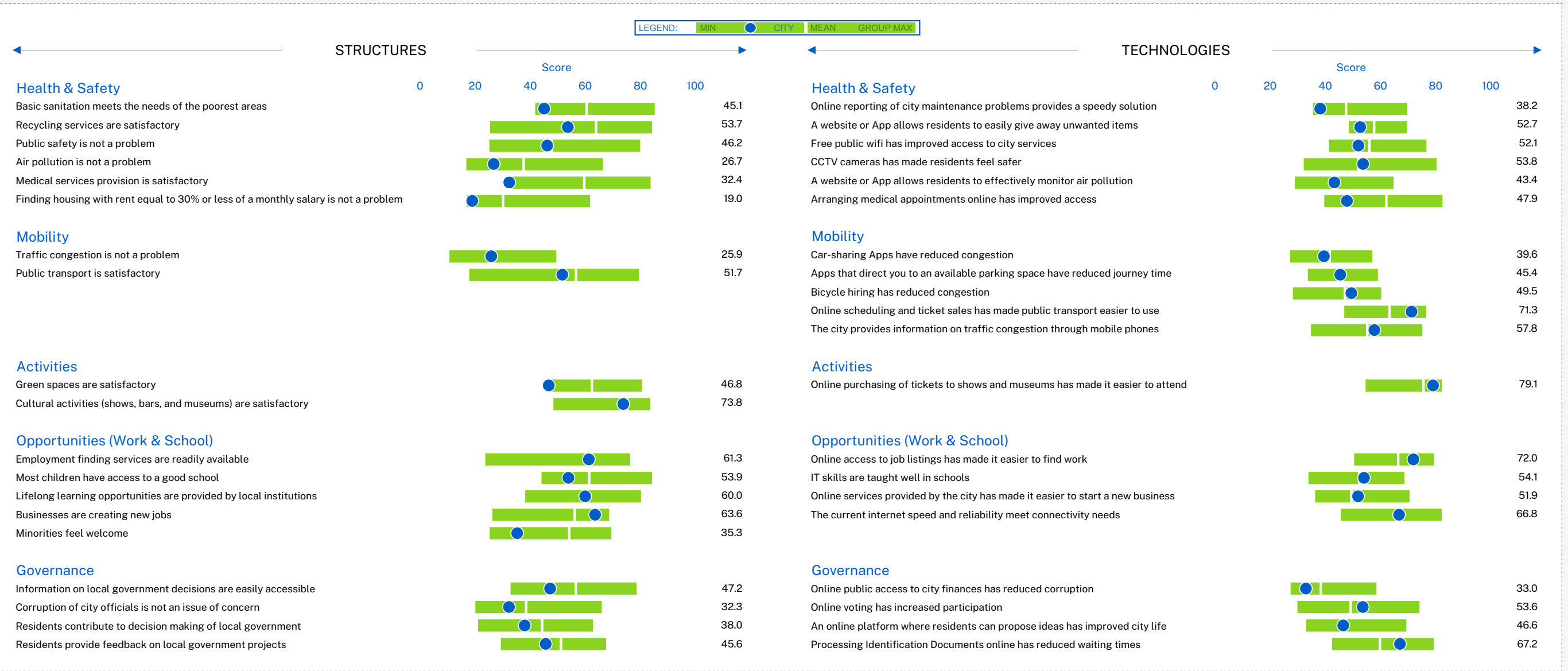
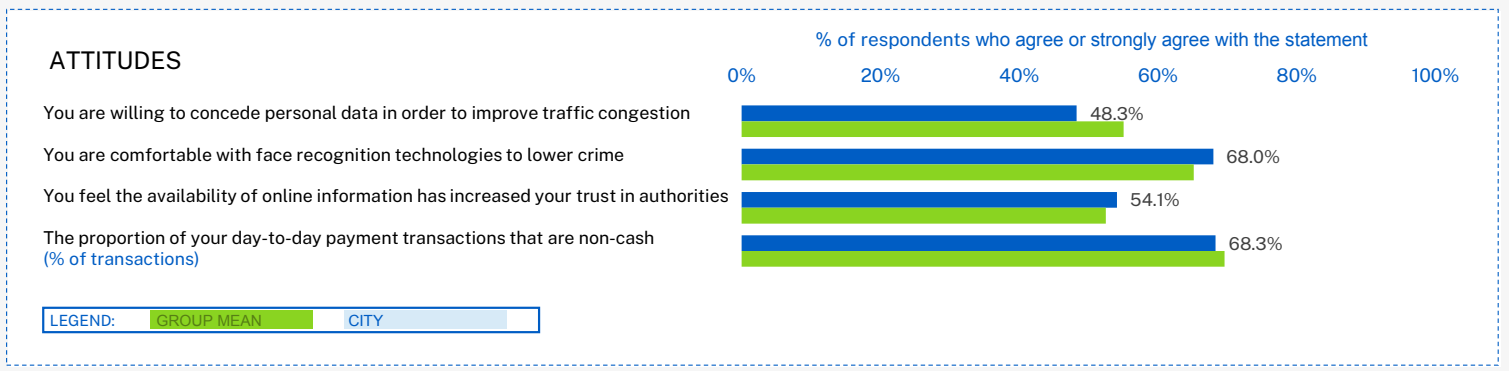
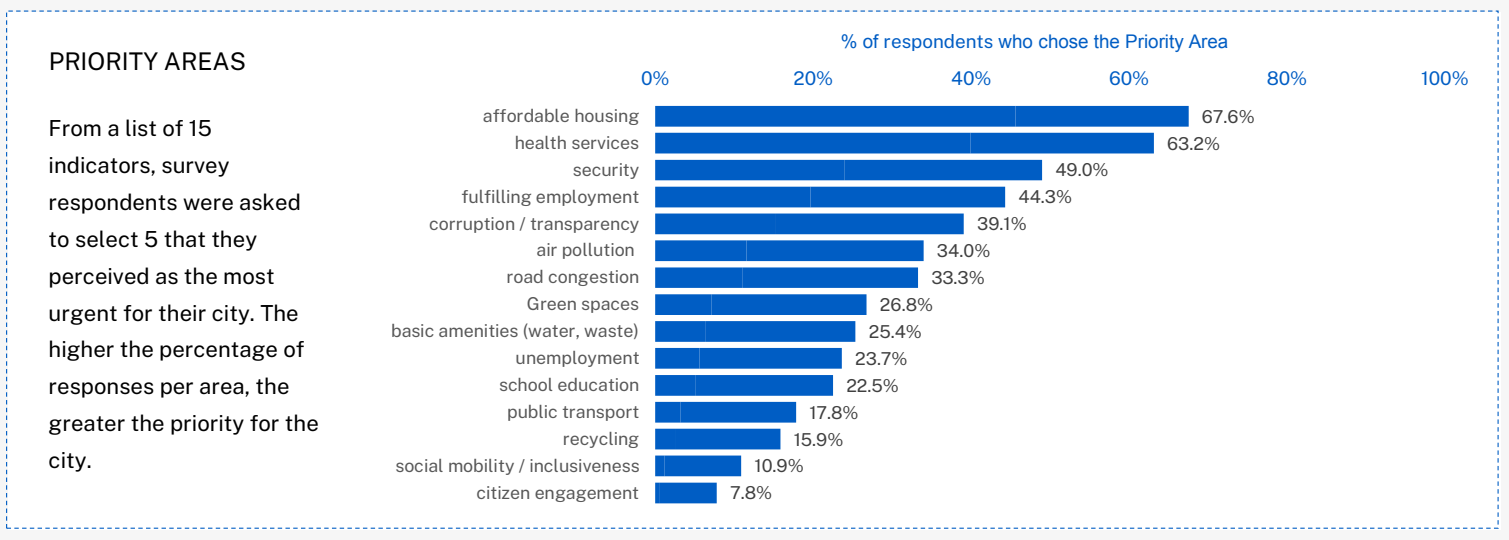
Population: 1,750,000 (Eurostat)

HDI: 0.922 (Global Data Lab)



Country

	2019	2020	2021	2022	1 yr change
Hungary					
HDI	0.854	0.849	0.846	0.851	+0.005
Life expectancy at birth	76.5	75.7	74.5	75.0	+0.4
Expected years of schooling	15.0	15.1	15.1	15.1	+0.0
Mean years of schooling	12.2	12.2	12.2	12.2	+0.0
GNI per capita (PPP \$)	31,790	30,483	32,610	34,196	+1,586



Buenos Aires

SMART CITY RANKING

123

Out of 142



124 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

C

STRUCTURES

C

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 15,150,000
(UN World Urbanization Prospects)

HDI 0.812
(Global Data Lab)



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

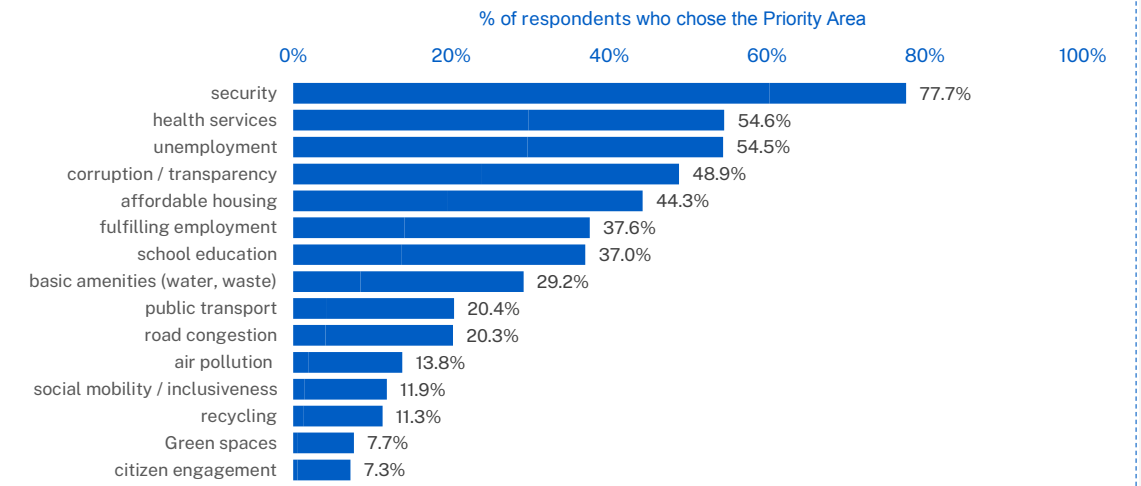
Country

Argentina

	2019	2020	2021	2022	1 yr change
HDI	0.853	0.841	0.844	0.849	+0.005
Life expectancy at birth	77.3	75.9	75.4	76.1	+0.7
Expected years of schooling	18.1	18.4	19.0	19.0	+0.0
Mean years of schooling	11.1	11.1	11.1	11.1	+0.0
GNI per capita (PPP \$)	21,205	19,183	21,093	22,048	+954

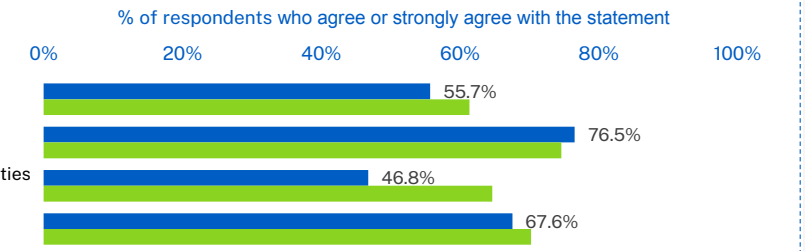
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

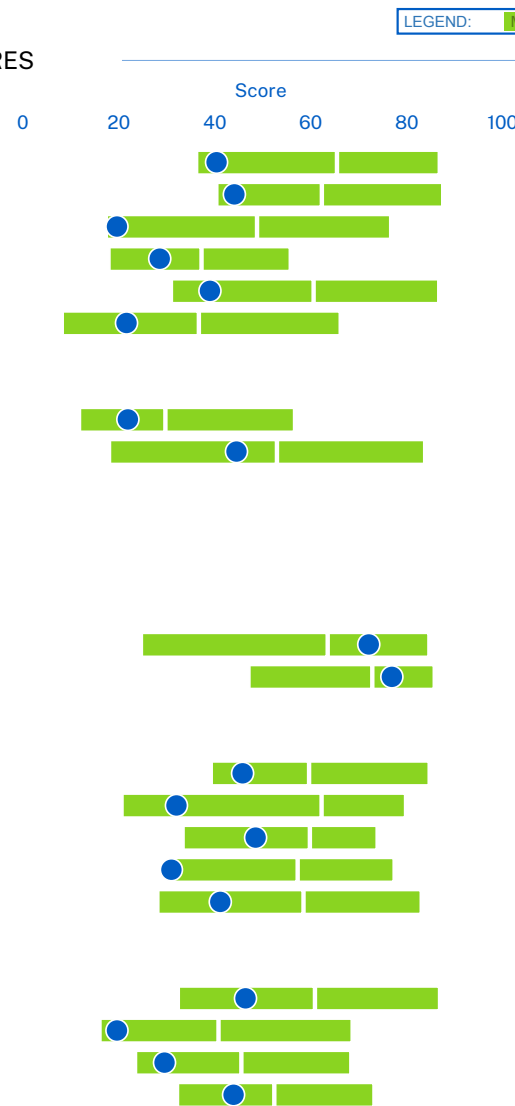
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

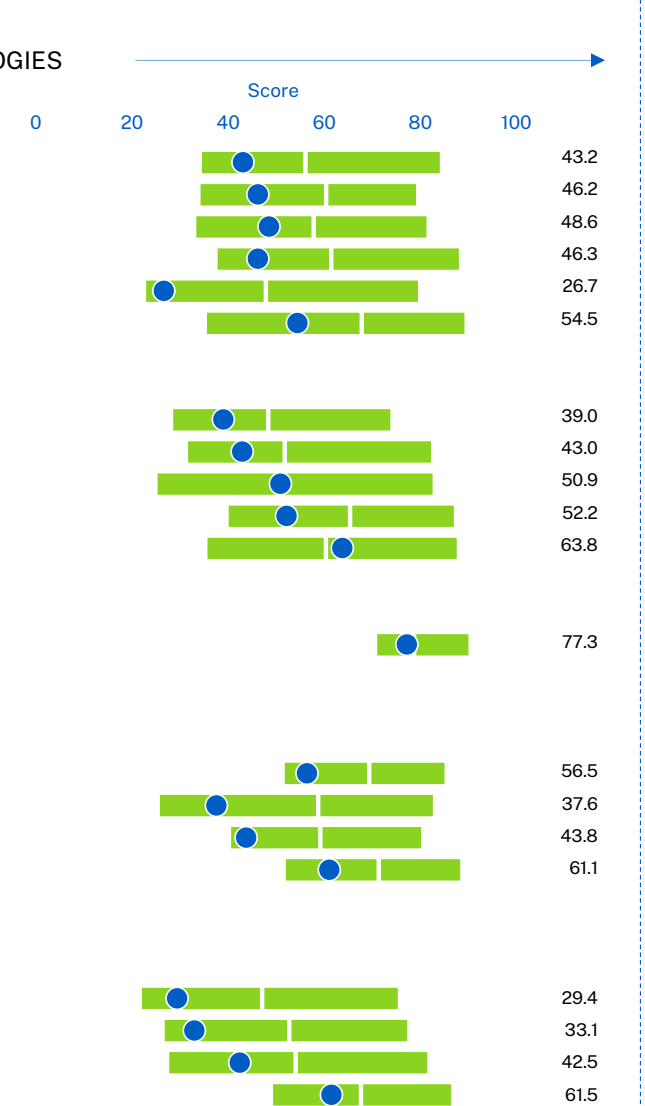
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Busan

SMART CITY RANKING
45
 Out of 142

▲

49 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS

BB
 STRUCTURES

BBB
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

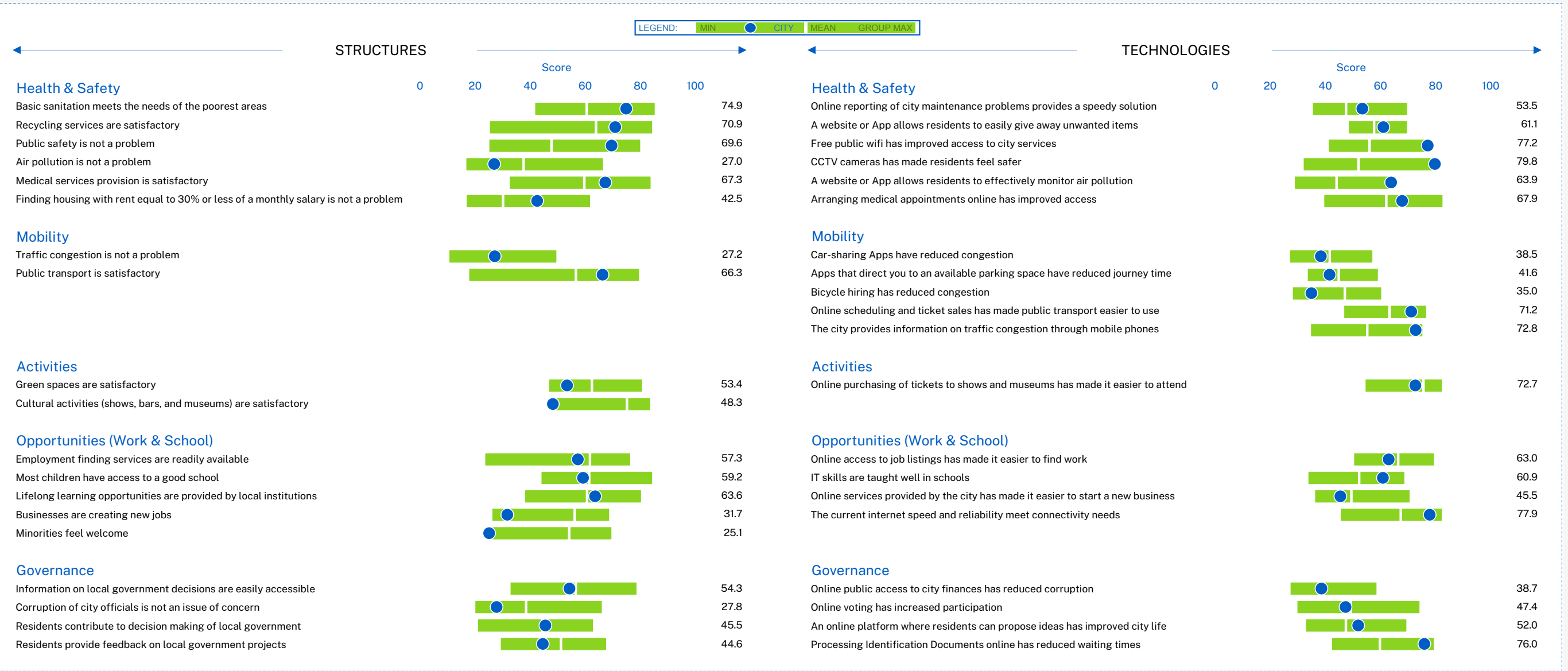
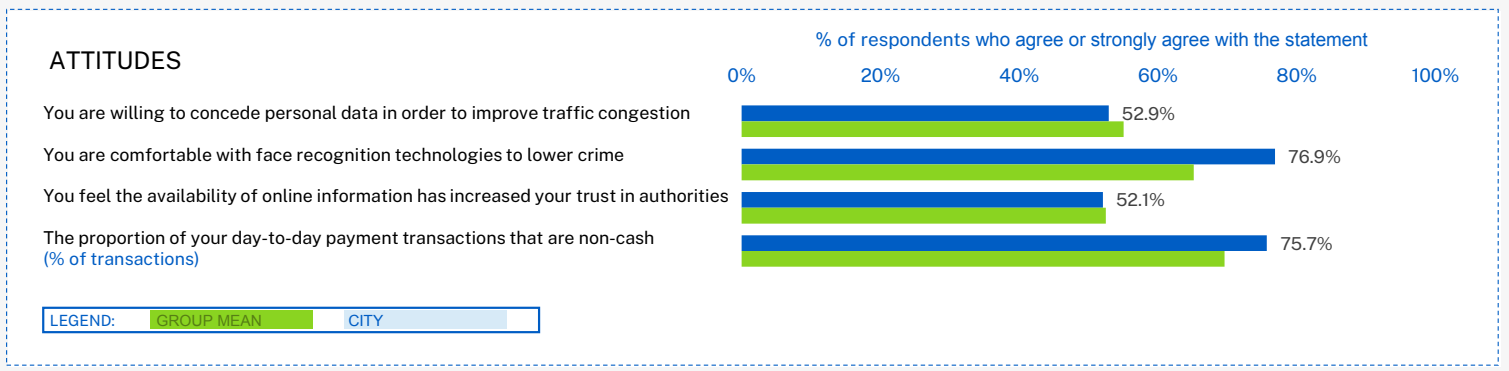
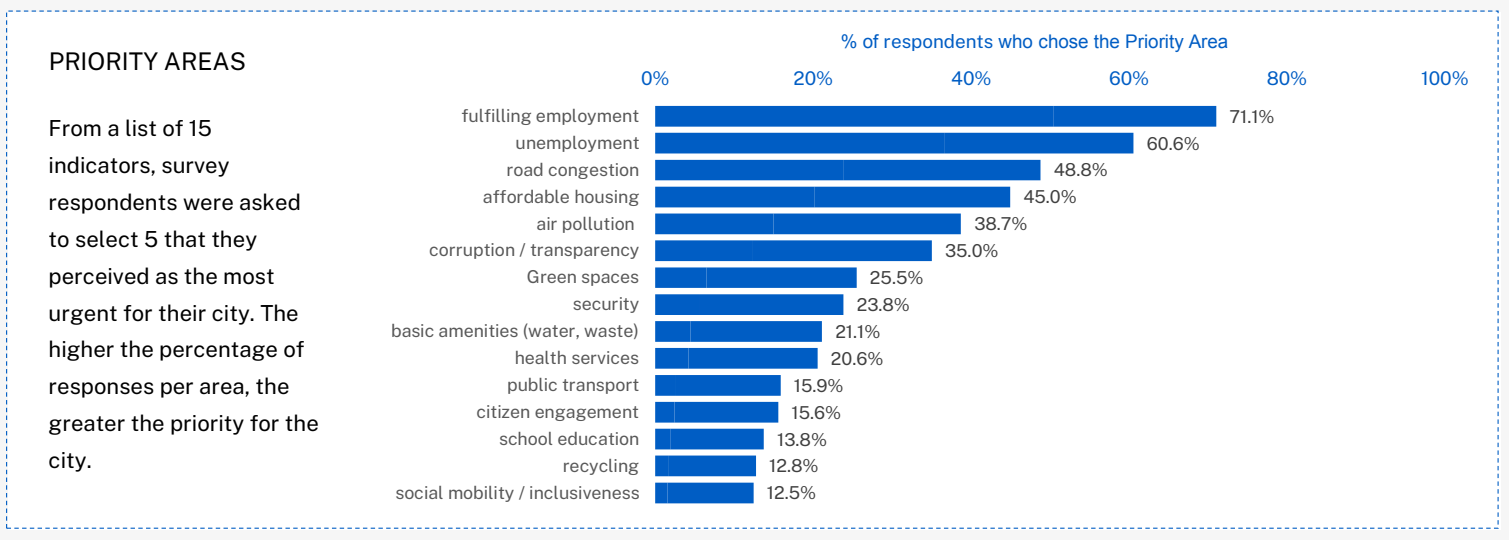
Population 3,470,000
 (UN World Urbanization Prospects)

HDI 0.936
 (Global Data Lab)



Country
 Korea, South

	2019	2020	2021	2022	1 yr change
HDI	0.922	0.922	0.926	0.929	+0.003
Life expectancy at birth	83.7	83.6	83.7	84.0	+0.3
Expected years of schooling	16.4	16.4	16.5	16.5	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	43,117	42,757	44,710	46,026	+1,317



Cairo

SMART CITY RANKING
114
 Out of 142

▼

108 in 2023
 Out of 141

SMART CITY RATING
C
 CC in 2023

FACTOR RATINGS
C
 STRUCTURES

TECHNOLOGIES
CC

GROUP
4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

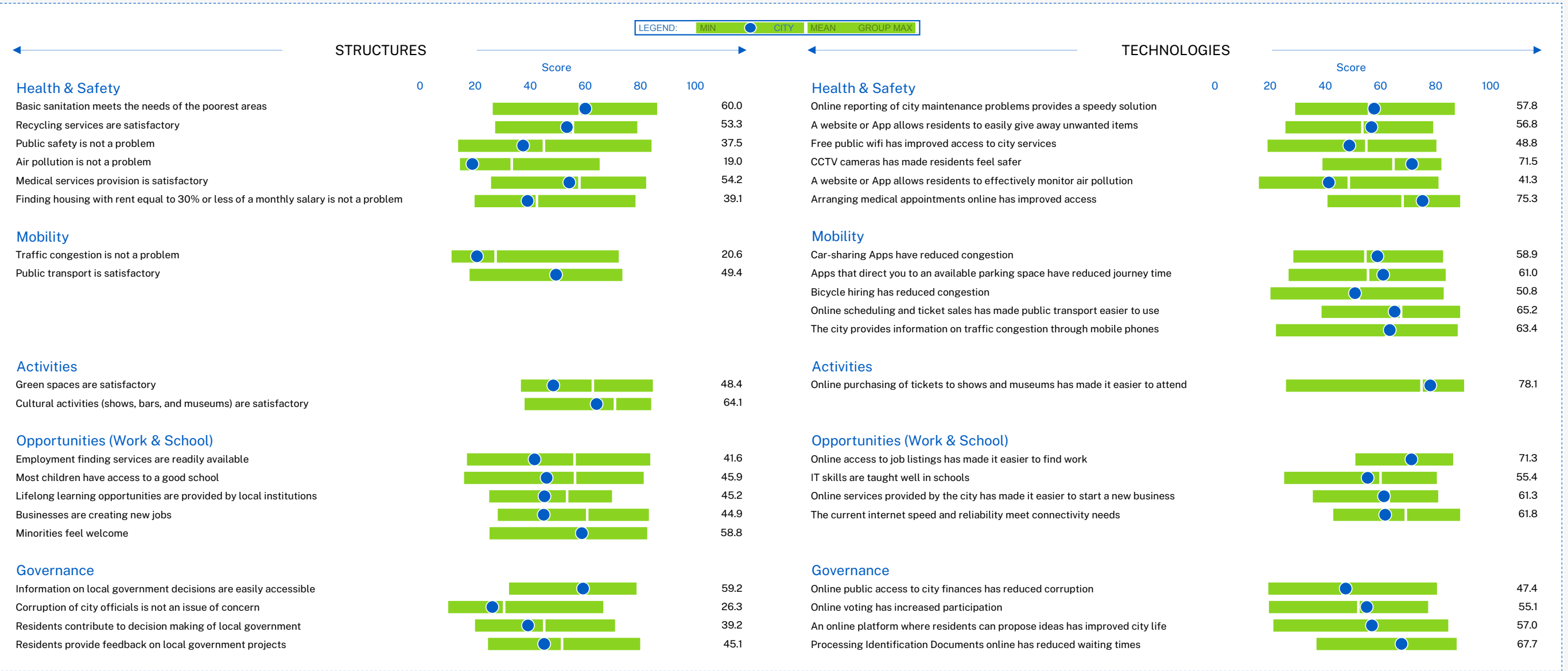
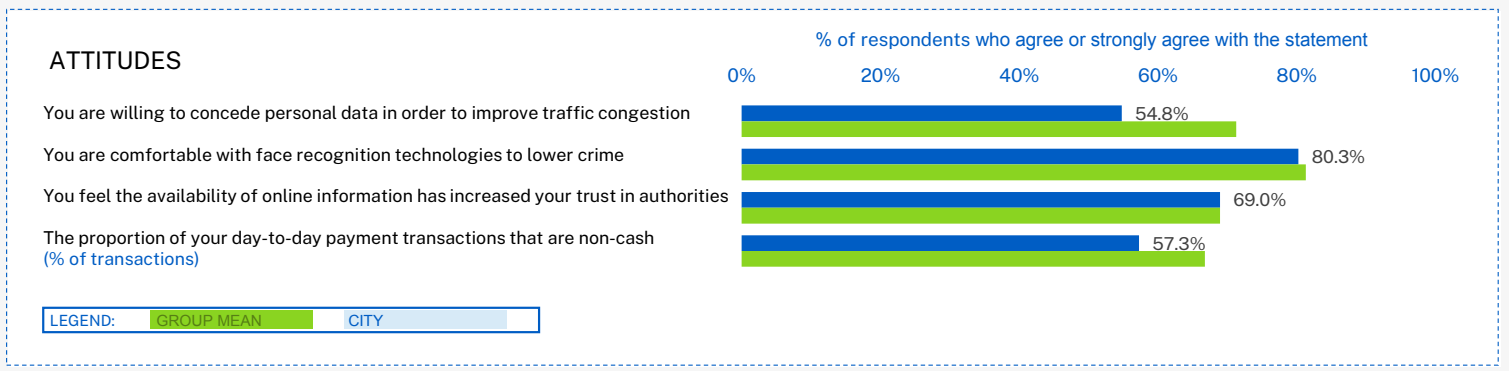
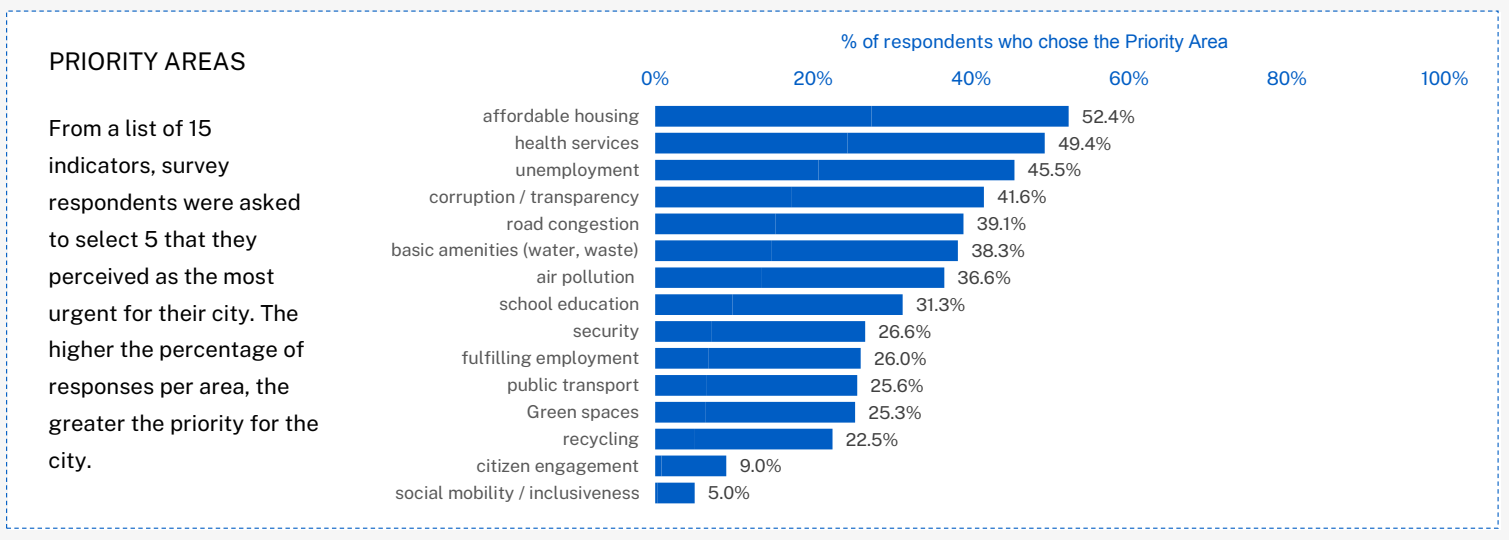
Population: 9,540,000 (UN Data)

HDI: 0.779 (Global Data Lab)



Country
Egypt

	2019	2020	2021	2022	1 yr change
HDI	0.724	0.729	0.726	0.728	+0.002
Life expectancy at birth	71.4	71.0	70.2	70.2	-0.1
Expected years of schooling	12.7	12.9	12.9	12.9	+0.0
Mean years of schooling	9.6	9.8	9.8	9.8	+0.0
GNI per capita (PPP \$)	11,376	11,637	11,827	12,361	+534



Canberra

SMART CITY RANKING

3

Out of 142

3 in 2023
Out of 141

SMART CITY RATING

AA

AA in 2023

FACTOR RATINGS

AAA

STRUCTURES

A

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 400,000
(UN Data)

HDI 0.980
(Global Data Lab)

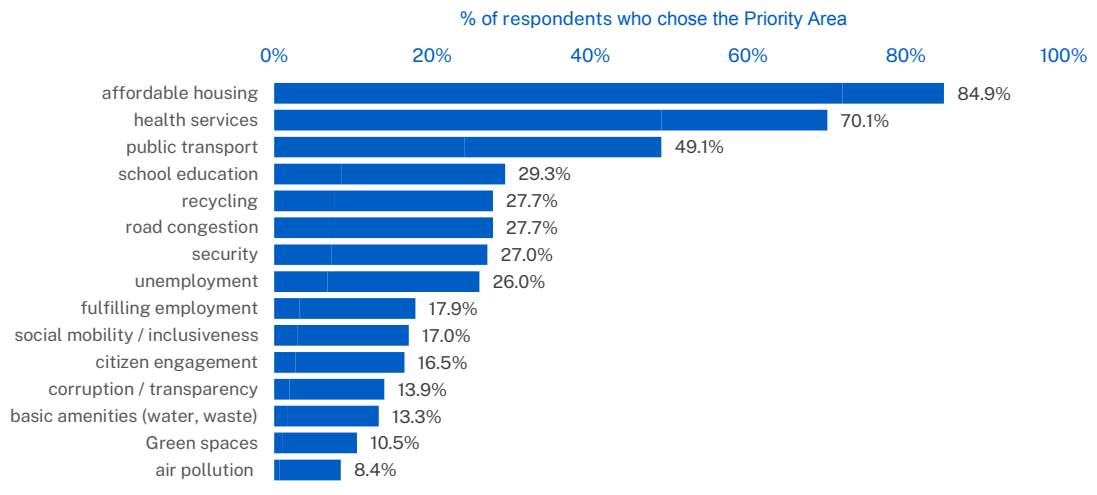


Country

	2019	2020	2021	2022	1 yr change
Australia					
HDI	0.941	0.948	0.949	0.946	-0.003
Life expectancy at birth	83.1	84.3	84.5	83.6	-0.9
Expected years of schooling	21.4	20.9	21.1	21.1	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	47,054	48,075	48,076	49,257	+1,181

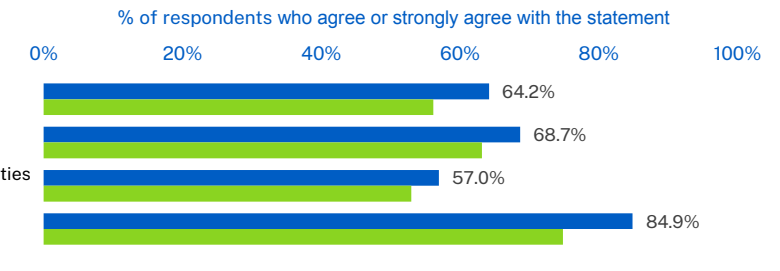
PRIORITY AREAS

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.



Priority Area	% of respondents
affordable housing	84.9%
health services	70.1%
public transport	49.1%
school education	29.3%
recycling	27.7%
road congestion	27.7%
security	27.0%
unemployment	26.0%
fulfilling employment	17.9%
social mobility / inclusiveness	17.0%
citizen engagement	16.5%
corruption / transparency	13.9%
basic amenities (water, waste)	13.3%
Green spaces	10.5%
air pollution	8.4%

ATTITUDES



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	64.2%	~50%
You are comfortable with face recognition technologies to lower crime	68.7%	~50%
You feel the availability of online information has increased your trust in authorities	57.0%	~50%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	84.9%	~50%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 79.6
- Recycling services are satisfactory: 78.0
- Public safety is not a problem: 64.4
- Air pollution is not a problem: 75.3
- Medical services provision is satisfactory: 61.5
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 25.0

Mobility

- Traffic congestion is not a problem: 63.8
- Public transport is satisfactory: 55.7

Activities

- Green spaces are satisfactory: 81.3
- Cultural activities (shows, bars, and museums) are satisfactory: 80.3

Opportunities (Work & School)

- Employment finding services are readily available: 72.7
- Most children have access to a good school: 80.6
- Lifelong learning opportunities are provided by local institutions: 77.7
- Businesses are creating new jobs: 66.8
- Minorities feel welcome: 76.6

Governance

- Information on local government decisions are easily accessible: 64.4
- Corruption of city officials is not an issue of concern: 58.3
- Residents contribute to decision making of local government: 50.2
- Residents provide feedback on local government projects: 64.4

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 49.9
- A website or App allows residents to easily give away unwanted items: 65.5
- Free public wifi has improved access to city services: 61.4
- CCTV cameras has made residents feel safer: 53.8
- A website or App allows residents to effectively monitor air pollution: 43.3
- Arranging medical appointments online has improved access: 74.6

Mobility

- Car-sharing Apps have reduced congestion: 37.9
- Apps that direct you to an available parking space have reduced journey time: 32.6
- Bicycle hiring has reduced congestion: 37.4
- Online scheduling and ticket sales has made public transport easier to use: 47.7
- The city provides information on traffic congestion through mobile phones: 41.3

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 77.7

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 73.9
- IT skills are taught well in schools: 55.8
- Online services provided by the city has made it easier to start a new business: 44.7
- The current internet speed and reliability meet connectivity needs: 66.9

Governance

- Online public access to city finances has reduced corruption: 33.5
- Online voting has increased participation: 37.4
- An online platform where residents can propose ideas has improved city life: 42.4
- Processing Identification Documents online has reduced waiting times: 57.1

Cape Town

SMART CITY RANKING

129

Out of 142



125 in 2023
Out of 141

SMART CITY RATING

D

C in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 4,620,000
(UN World Urbanization Prospects)

HDI 0.751
(Global Data Lab)



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

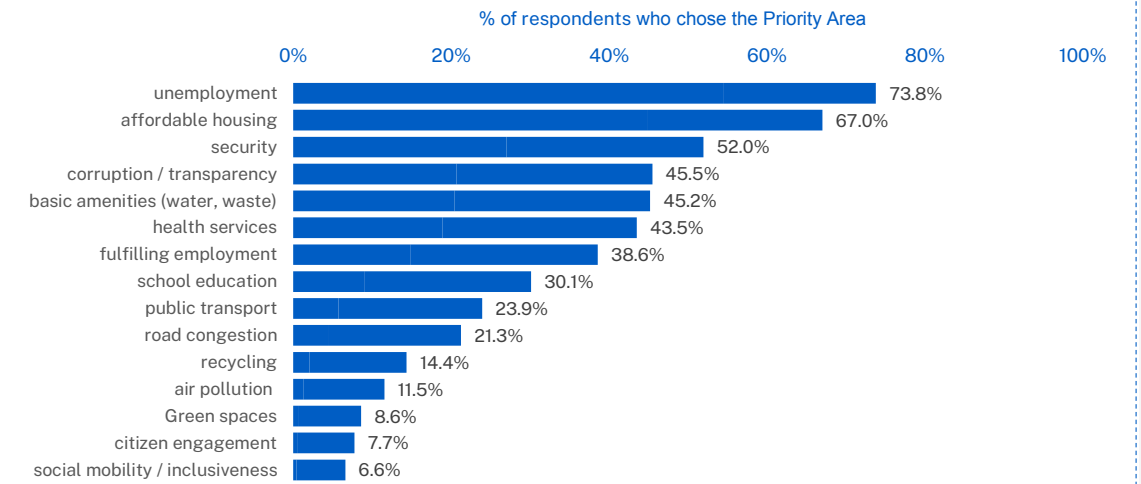
Country

South Africa

	2019	2020	2021	2022	1 yr change
HDI	0.741	0.722	0.721	0.717	-0.004
Life expectancy at birth	66.2	65.3	62.3	61.5	-0.9
Expected years of schooling	14.2	14.0	14.3	14.3	+0.0
Mean years of schooling	11.4	10.6	11.6	11.6	+0.0
GNI per capita (PPP \$)	13,506	12,598	13,048	13,186	+138

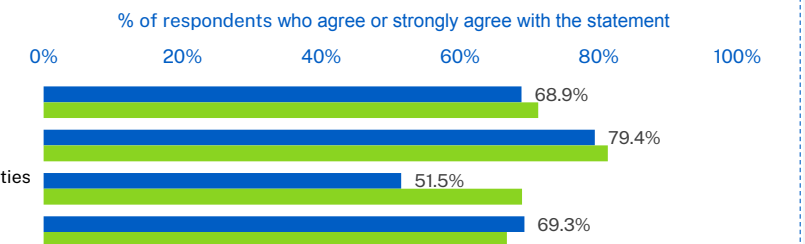
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

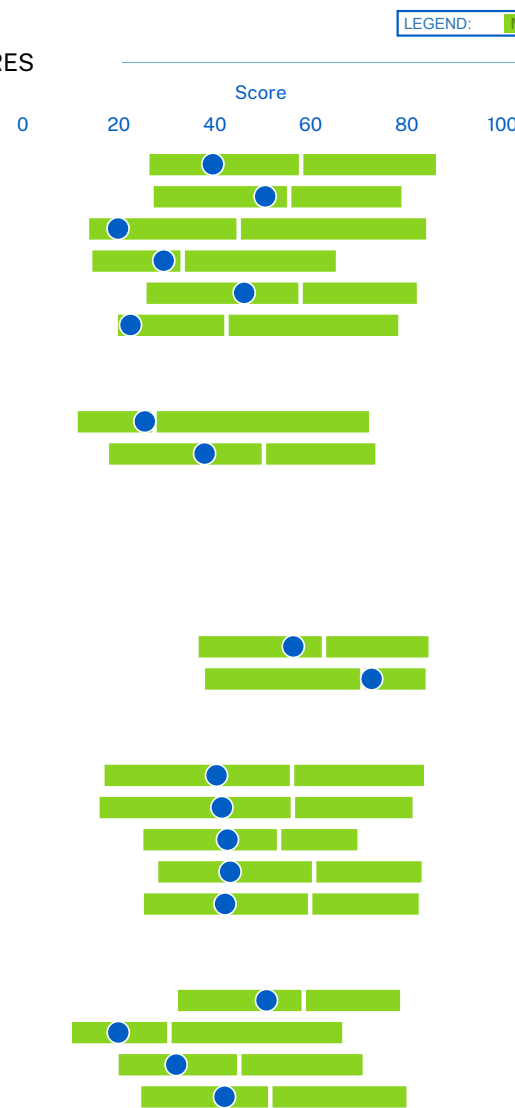
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

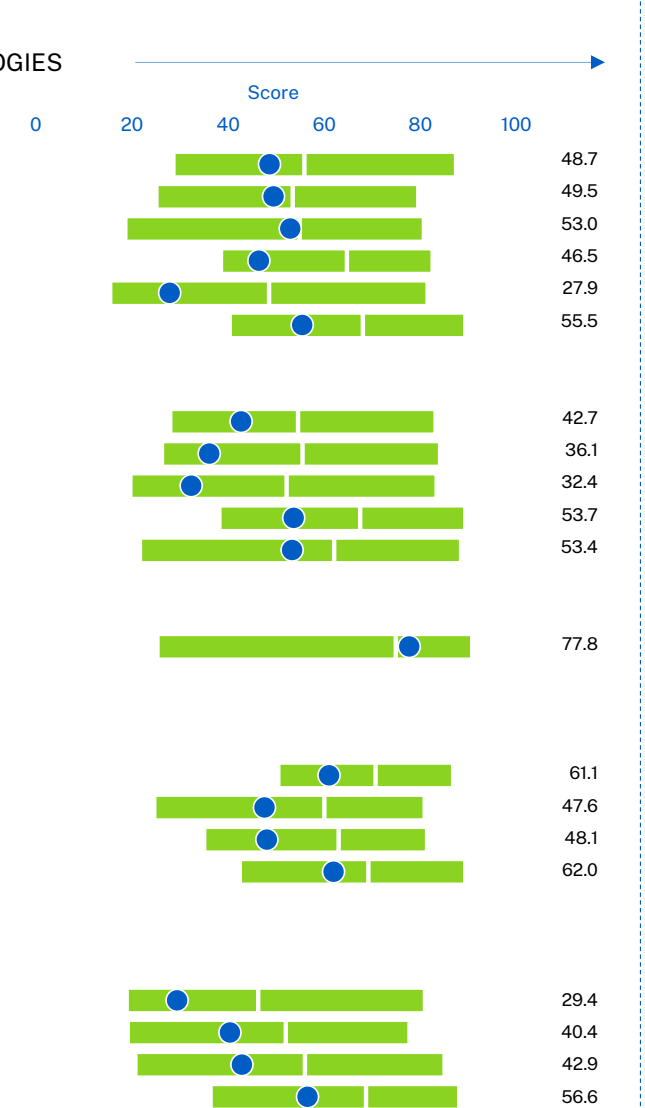
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Cardiff

SMART CITY RANKING
92
Out of 142



94 in 2023
Out of 141

SMART CITY RATING

CC
CC in 2023

FACTOR RATINGS

CCC
STRUCTURES

CC
TECHNOLOGIES

GROUP
3

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 360,000
(Eurostat)

HDI 0.898
(Global Data Lab)

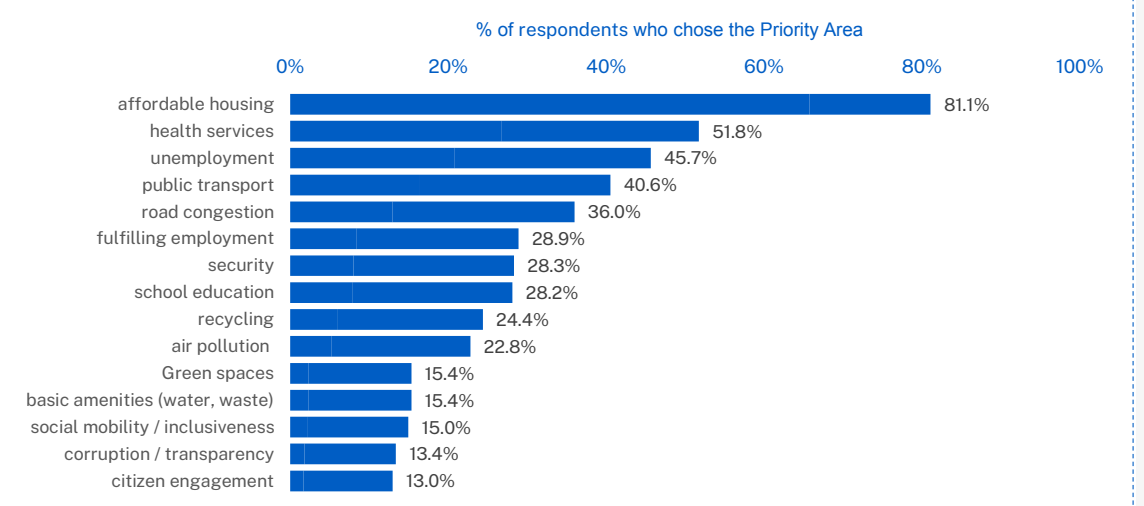


Country
United Kingdom

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	47,066	40,799	44,750	46,624	+1,874

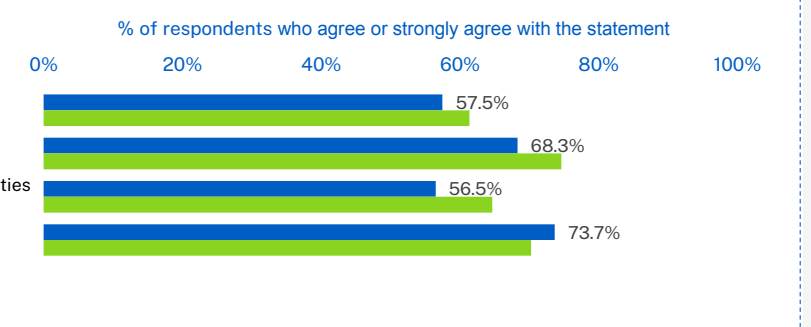
PRIORITY AREAS

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.

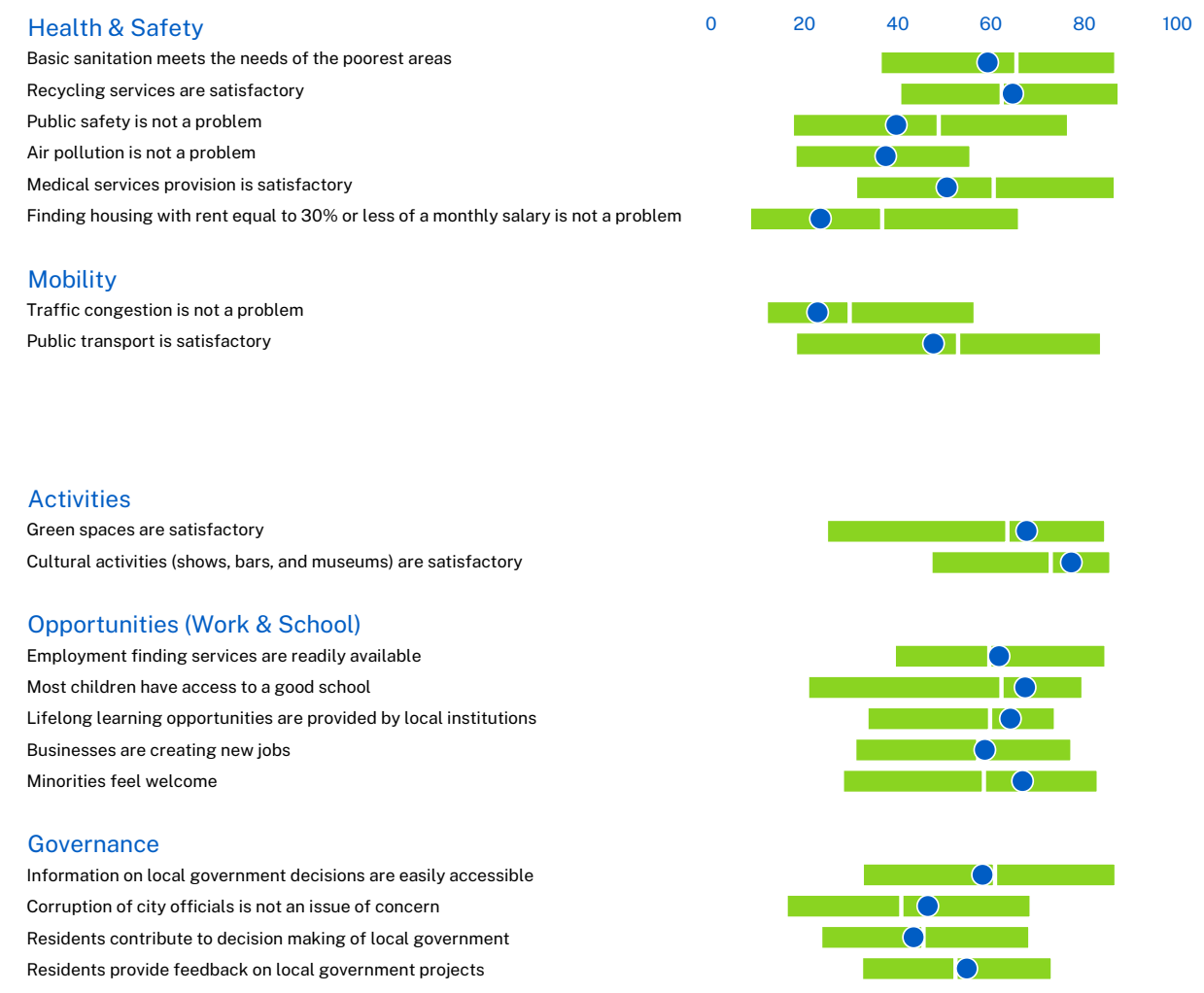


ATTITUDES

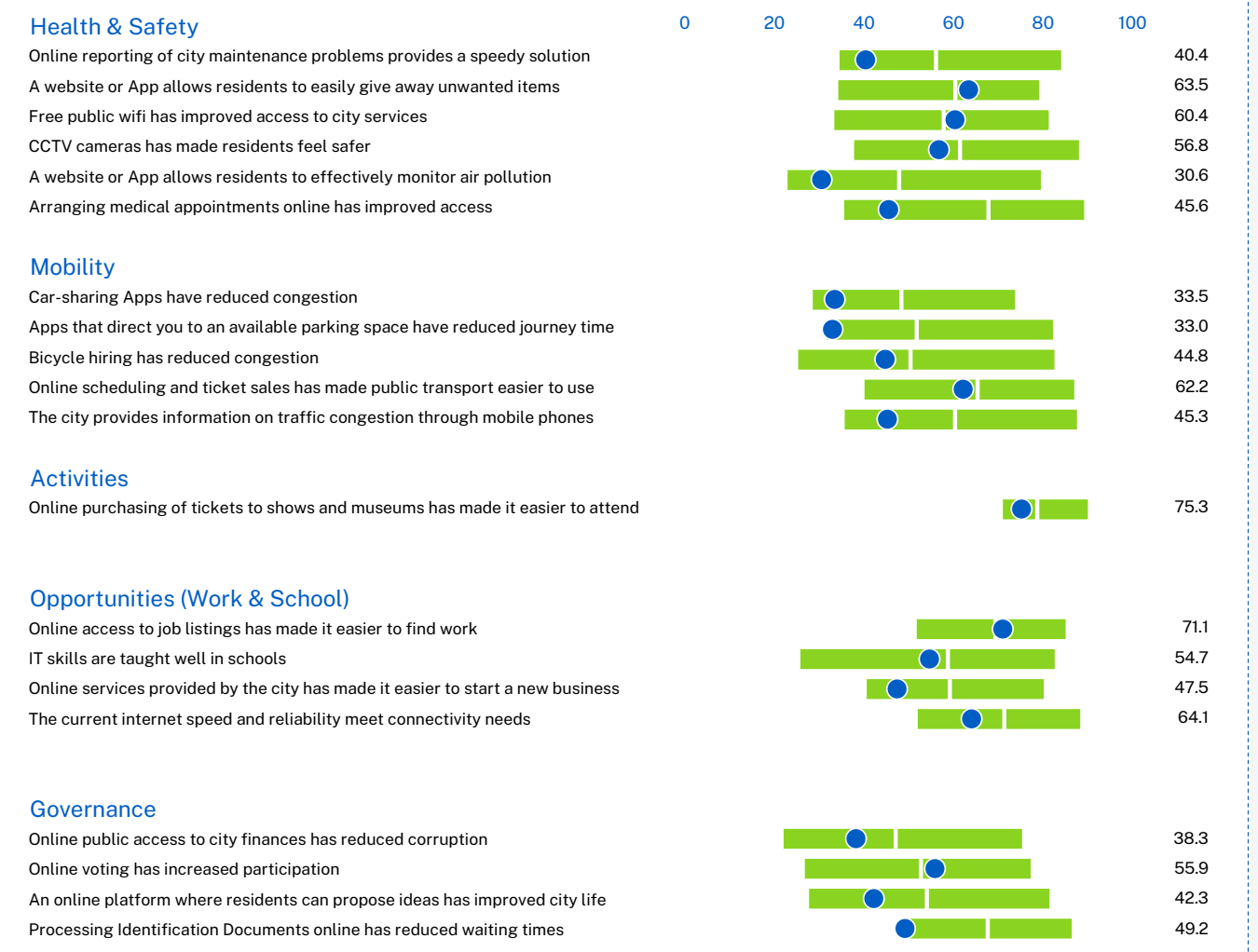
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Chengdu

SMART CITY RANKING

93

Out of 142

▲

97 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 9,140,000
(UN World Urbanization Prospects)

HDI 0.740
(Global Data Lab)

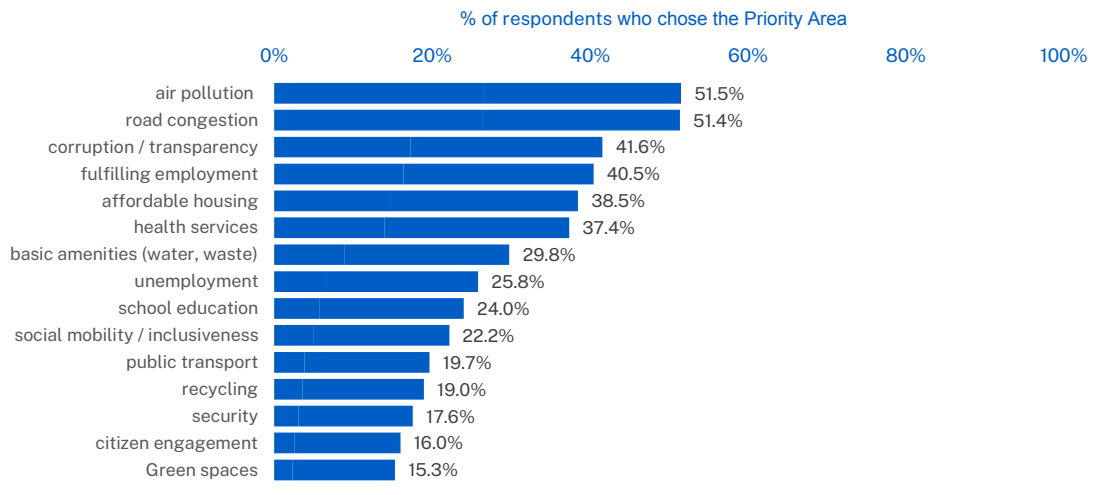


Country

China	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

PRIORITY AREAS

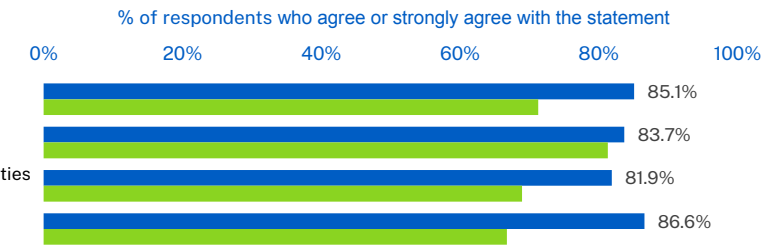
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
air pollution	51.5%
road congestion	51.4%
corruption / transparency	41.6%
fulfilling employment	40.5%
affordable housing	38.5%
health services	37.4%
basic amenities (water, waste)	29.8%
unemployment	25.8%
school education	24.0%
social mobility / inclusiveness	22.2%
public transport	19.7%
recycling	19.0%
security	17.6%
citizen engagement	16.0%
Green spaces	15.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	85.1%
You are comfortable with face recognition technologies to lower crime	83.7%
You feel the availability of online information has increased your trust in authorities	81.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	86.6%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 79.4
- Recycling services are satisfactory: 73.8
- Public safety is not a problem: 68.5
- Air pollution is not a problem: 51.1
- Medical services provision is satisfactory: 75.1
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 62.1

Mobility

- Traffic congestion is not a problem: 41.3
- Public transport is satisfactory: 67.3

Activities

- Green spaces are satisfactory: 83.0
- Cultural activities (shows, bars, and museums) are satisfactory: 82.0

Opportunities (Work & School)

- Employment finding services are readily available: 78.6
- Most children have access to a good school: 74.3
- Lifelong learning opportunities are provided by local institutions: 64.3
- Businesses are creating new jobs: 73.3
- Minorities feel welcome: 78.1

Governance

- Information on local government decisions are easily accessible: 73.2
- Corruption of city officials is not an issue of concern: 47.4
- Residents contribute to decision making of local government: 57.2
- Residents provide feedback on local government projects: 67.9

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 79.8
- A website or App allows residents to easily give away unwanted items: 71.5
- Free public wifi has improved access to city services: 75.1
- CCTV cameras has made residents feel safer: 76.8
- A website or App allows residents to effectively monitor air pollution: 71.3
- Arranging medical appointments online has improved access: 87.4

Mobility

- Car-sharing Apps have reduced congestion: 66.0
- Apps that direct you to an available parking space have reduced journey time: 75.2
- Bicycle hiring has reduced congestion: 78.3
- Online scheduling and ticket sales has made public transport easier to use: 87.0
- The city provides information on traffic congestion through mobile phones: 83.3

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 90.1

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 84.7
- IT skills are taught well in schools: 73.1
- Online services provided by the city has made it easier to start a new business: 75.5
- The current internet speed and reliability meet connectivity needs: 86.7

Governance

- Online public access to city finances has reduced corruption: 65.5
- Online voting has increased participation: 68.2
- An online platform where residents can propose ideas has improved city life: 76.5
- Processing Identification Documents online has reduced waiting times: 79.0

Chicago

SMART CITY RANKING
67
 Out of 142

▼

61 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS

BB
 STRUCTURES

BB
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

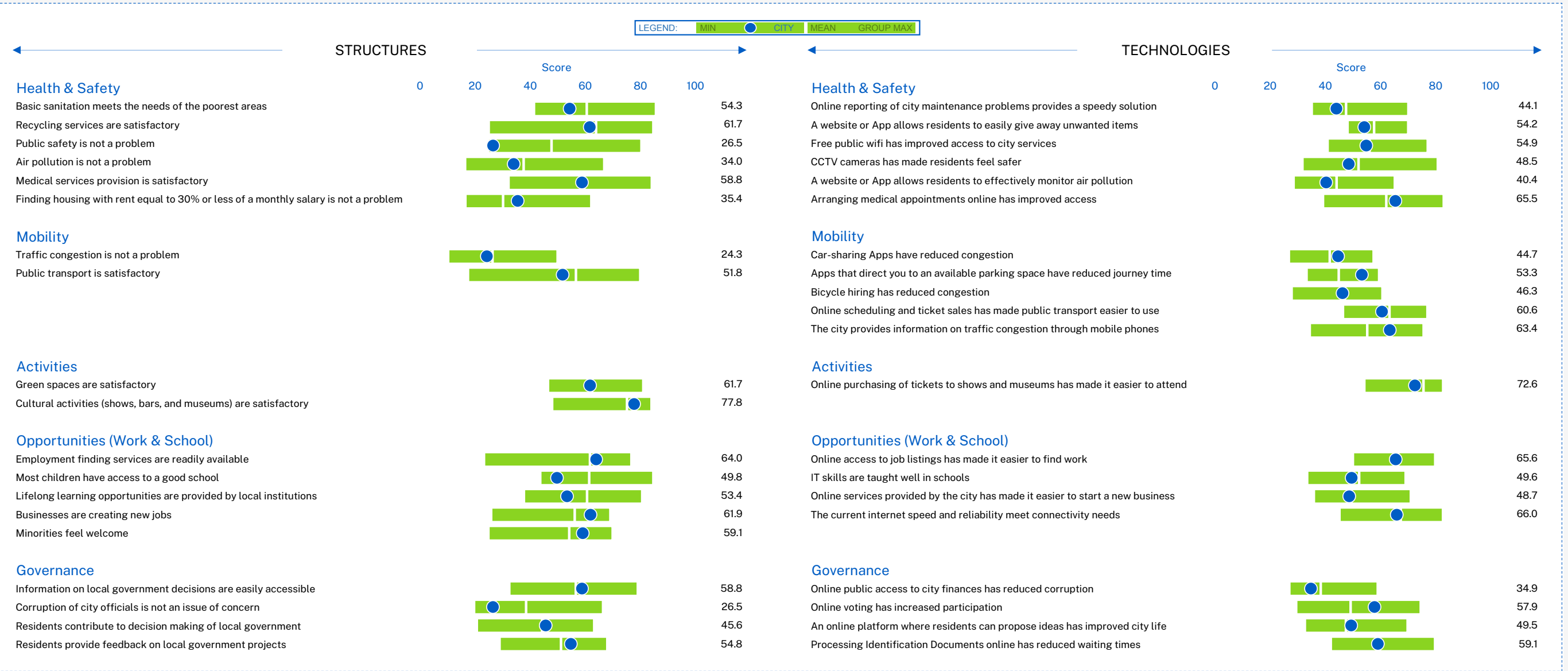
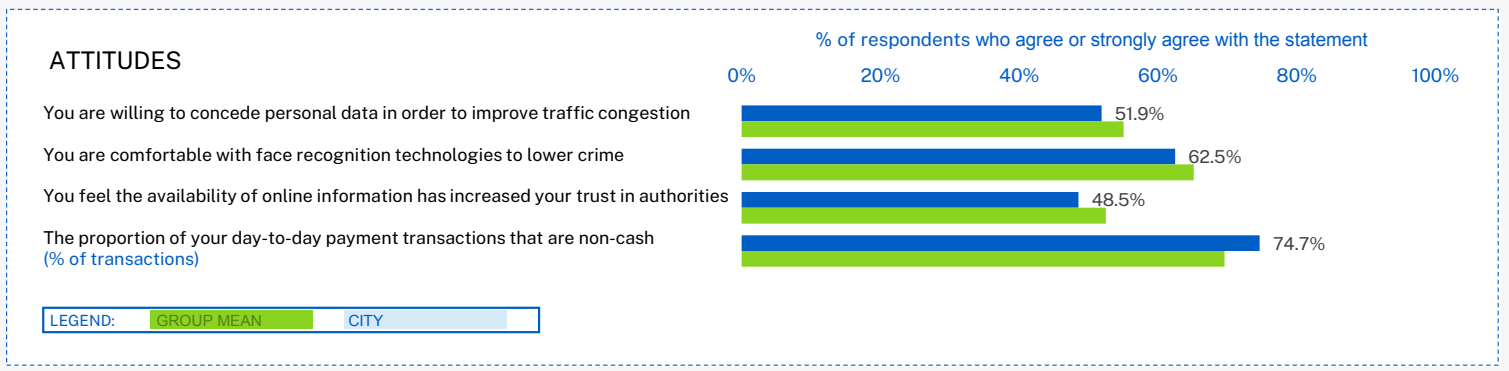
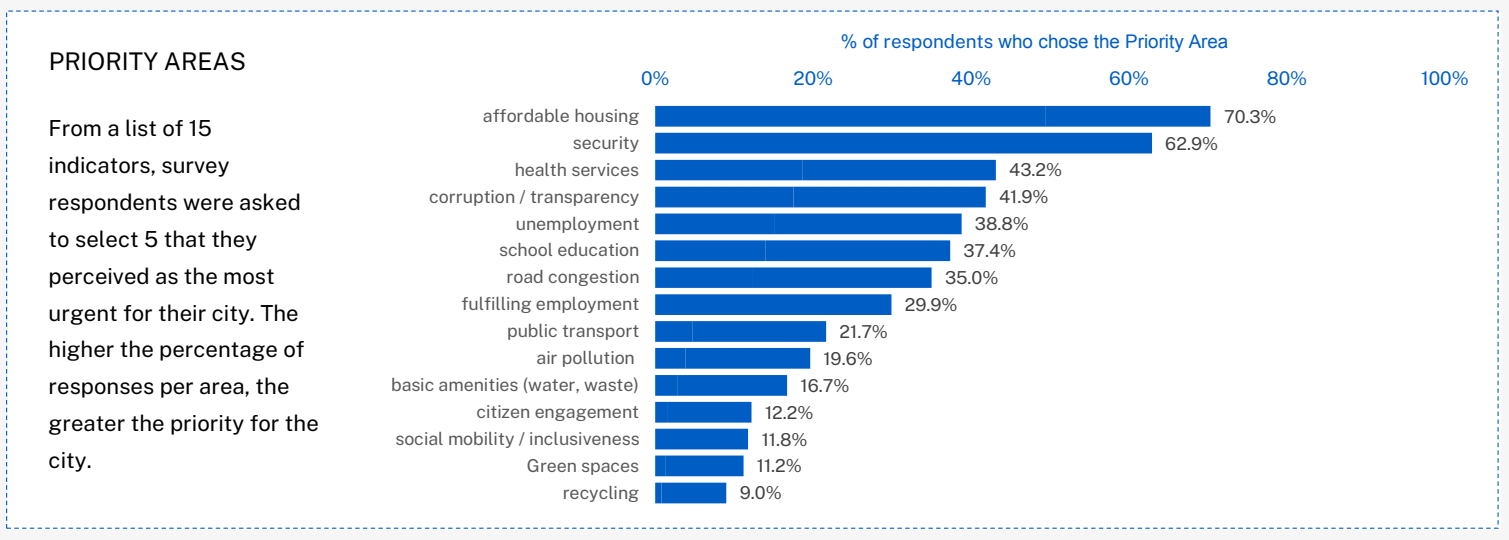
Population: 2,750,000
 (UN Data)

HDI: 0.929
 (Global Data Lab)



Country
 USA

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081



Chongqing

SMART CITY RANKING

82

Out of 142



86 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 15,870,000
(UN World Urbanization Prospects)

HDI 0.774
(Global Data Lab)



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

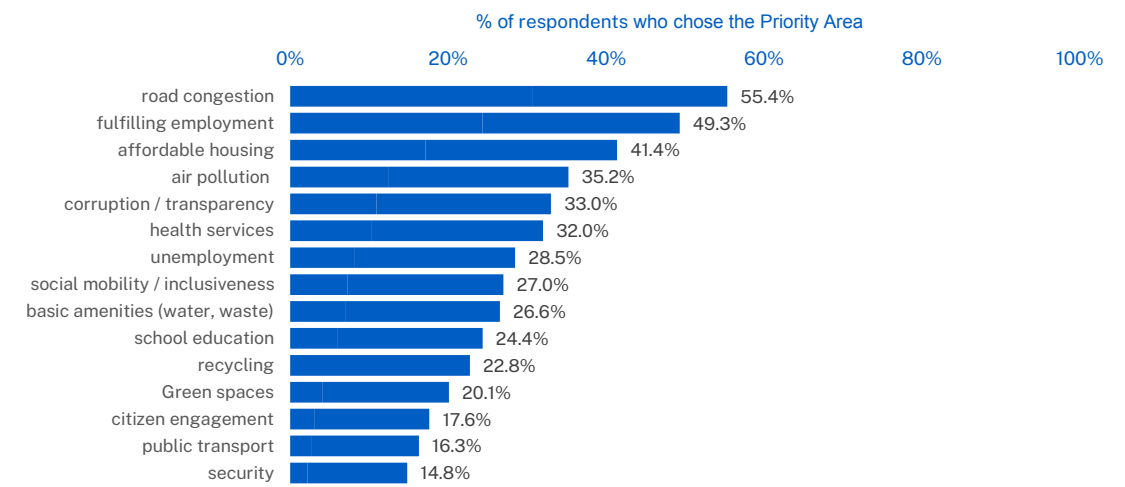
Country

China

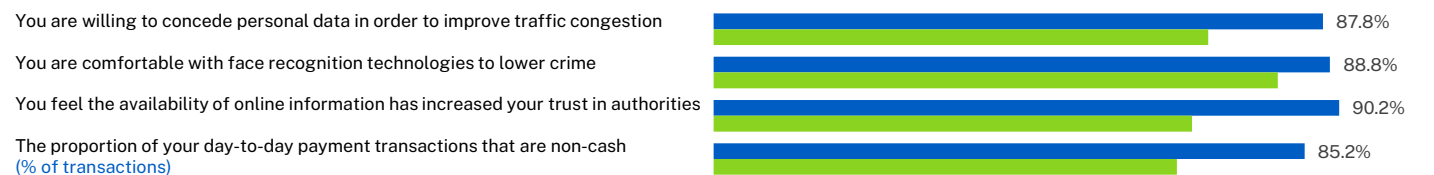
	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

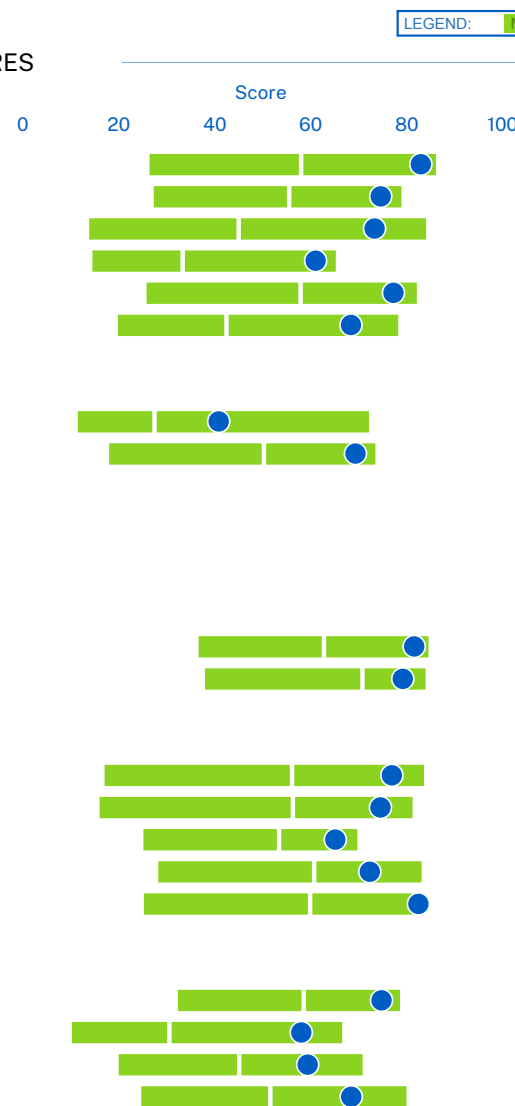
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

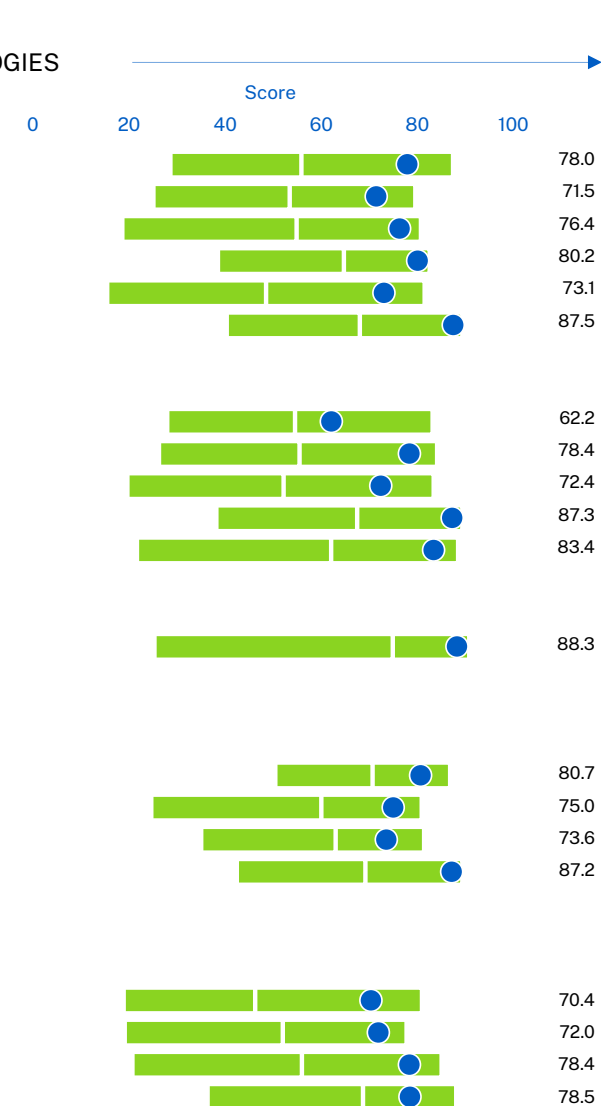
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Copenhagen

SMART CITY RANKING

6

Out of 142

4 in 2023
Out of 141

SMART CITY RATING

AA

AA in 2023

FACTOR RATINGS

AA

STRUCTURES

A

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,350,000
(UN World Urbanization Prospects)

HDI 0.967
(Global Data Lab)

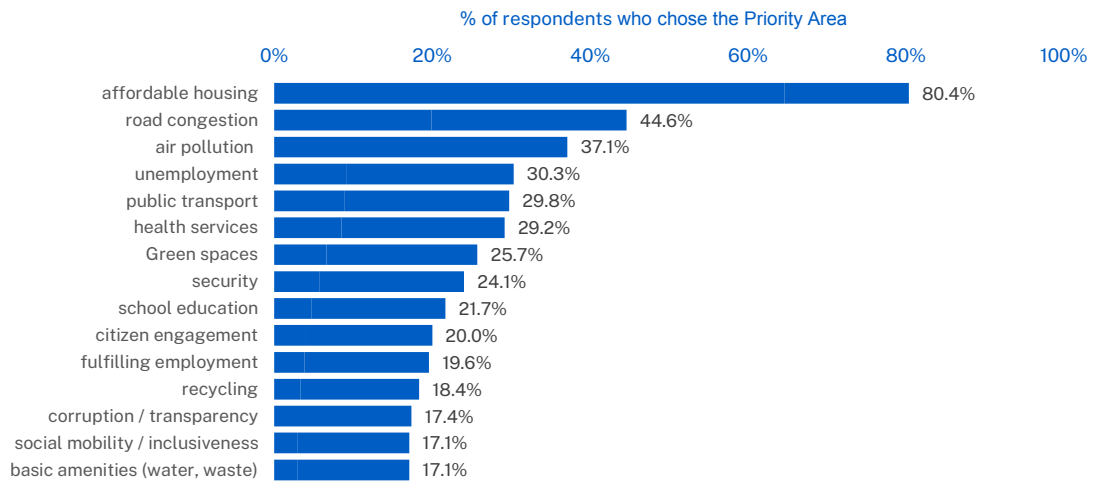


Country **Denmark**

	2019	2020	2021	2022	1 yr change
HDI	0.946	0.946	0.947	0.952	+0.005
Life expectancy at birth	81.4	81.5	81.4	81.9	+0.5
Expected years of schooling	18.6	18.6	18.8	18.8	+0.0
Mean years of schooling	12.9	13.0	13.0	13.0	+0.0
GNI per capita (PPP \$)	58,454	57,324	59,993	62,019	+2.026

PRIORITY AREAS

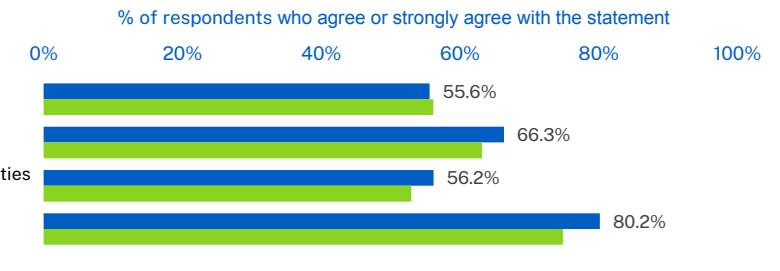
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	80.4%
road congestion	44.6%
air pollution	37.1%
unemployment	30.3%
public transport	29.8%
health services	29.2%
Green spaces	25.7%
security	24.1%
school education	21.7%
citizen engagement	20.0%
fulfilling employment	19.6%
recycling	18.4%
corruption / transparency	17.4%
social mobility / inclusiveness	17.1%
basic amenities (water, waste)	17.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	55.6%
You are comfortable with face recognition technologies to lower crime	66.3%
You feel the availability of online information has increased your trust in authorities	56.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	80.2%

LEGEND: ■ GROUP MEAN ■ CITY

STRUCTURES

Score: 0 20 40 60 80 100

LEGEND: ■ MIN ● CITY ■ MEAN ■ GROUP MAX

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 76.9
- Recycling services are satisfactory: 78.8
- Public safety is not a problem: 71.8
- Air pollution is not a problem: 50.4
- Medical services provision is satisfactory: 74.3
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 22.9

Mobility

- Traffic congestion is not a problem: 32.3
- Public transport is satisfactory: 65.9

Activities

- Green spaces are satisfactory: 72.2
- Cultural activities (shows, bars, and museums) are satisfactory: 83.1

Opportunities (Work & School)

- Employment finding services are readily available: 77.7
- Most children have access to a good school: 78.5
- Lifelong learning opportunities are provided by local institutions: 73.1
- Businesses are creating new jobs: 70.7
- Minorities feel welcome: 59.7

Governance

- Information on local government decisions are easily accessible: 63.8
- Corruption of city officials is not an issue of concern: 62.9
- Residents contribute to decision making of local government: 58.1
- Residents provide feedback on local government projects: 67.9

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 47.3
- A website or App allows residents to easily give away unwanted items: 66.5
- Free public wifi has improved access to city services: 49.4
- CCTV cameras has made residents feel safer: 46.5
- A website or App allows residents to effectively monitor air pollution: 43.6
- Arranging medical appointments online has improved access: 71.2

Mobility

- Car-sharing Apps have reduced congestion: 37.8
- Apps that direct you to an available parking space have reduced journey time: 41.3
- Bicycle hiring has reduced congestion: 46.8
- Online scheduling and ticket sales has made public transport easier to use: 62.9
- The city provides information on traffic congestion through mobile phones: 43.6

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 78.9

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 70.8
- IT skills are taught well in schools: 61.4
- Online services provided by the city has made it easier to start a new business: 46.9
- The current internet speed and reliability meet connectivity needs: 67.9

Governance

- Online public access to city finances has reduced corruption: 44.5
- Online voting has increased participation: 46.3
- An online platform where residents can propose ideas has improved city life: 49.1
- Processing Identification Documents online has reduced waiting times: 52.7

Delhi

SMART CITY RANKING
106
 Out of 142

▼

105 in 2023
 Out of 141

SMART CITY RATING
CC
 CC in 2023

FACTOR RATINGS
CC
 STRUCTURES

TECHNOLOGIES
CC

GROUP
4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 30,290,000
 (UN World Urbanization Prospects)

HDI 0.730
 (Global Data Lab)

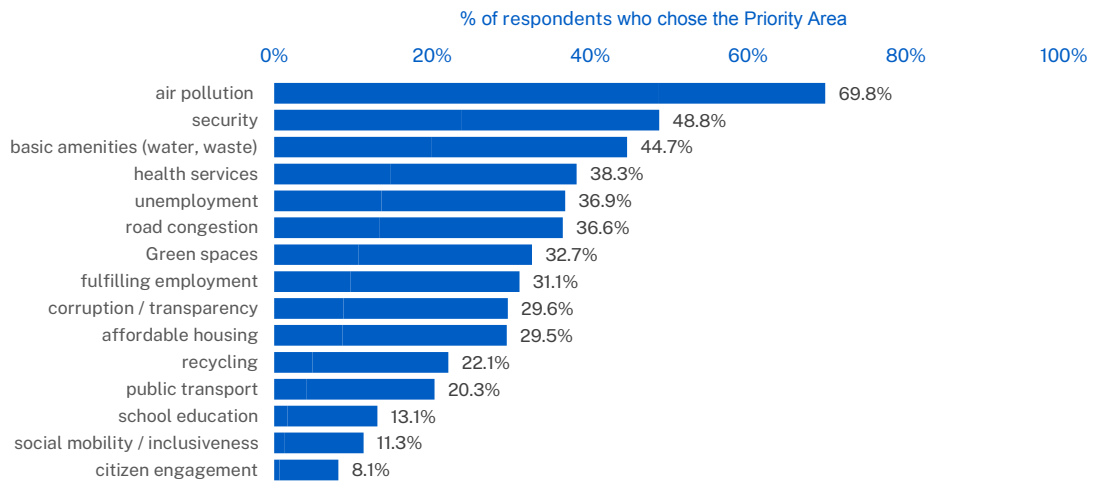


Country

Country	2019	2020	2021	2022	1 yr change
India	0.638	0.638	0.633	0.644	+0.011
Life expectancy at birth	70.9	70.2	67.2	67.7	+0.5
Expected years of schooling	11.4	11.7	12.0	12.6	+0.6
Mean years of schooling	6.3	6.5	6.5	6.6	+0.0
GNI per capita (PPP \$)	6,554	6,090	6,542	6,951	+408

PRIORITY AREAS

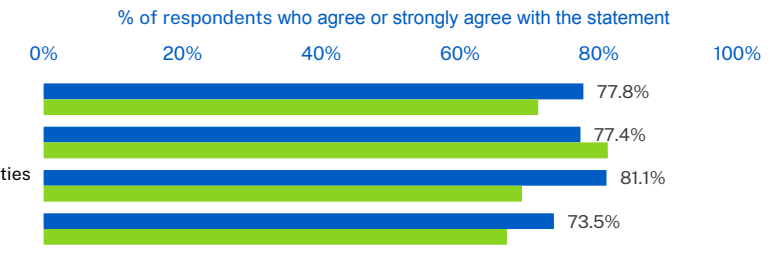
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
air pollution	69.8%
security	48.8%
basic amenities (water, waste)	44.7%
health services	38.3%
unemployment	36.9%
road congestion	36.6%
Green spaces	32.7%
fulfilling employment	31.1%
corruption / transparency	29.6%
affordable housing	29.5%
recycling	22.1%
public transport	20.3%
school education	13.1%
social mobility / inclusiveness	11.3%
citizen engagement	8.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	77.8%
You are comfortable with face recognition technologies to lower crime	77.4%
You feel the availability of online information has increased your trust in authorities	81.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.5%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 69.3
- Recycling services are satisfactory: 66.3
- Public safety is not a problem: 37.1
- Air pollution is not a problem: 21.4
- Medical services provision is satisfactory: 69.9
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 49.0

Mobility

- Traffic congestion is not a problem: 25.3
- Public transport is satisfactory: 67.5

Activities

- Green spaces are satisfactory: 63.1
- Cultural activities (shows, bars, and museums) are satisfactory: 73.8

Opportunities (Work & School)

- Employment finding services are readily available: 65.1
- Most children have access to a good school: 67.4
- Lifelong learning opportunities are provided by local institutions: 65.2
- Businesses are creating new jobs: 75.0
- Minorities feel welcome: 68.7

Governance

- Information on local government decisions are easily accessible: 70.5
- Corruption of city officials is not an issue of concern: 38.7
- Residents contribute to decision making of local government: 64.2
- Residents provide feedback on local government projects: 65.9

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 63.4
- A website or App allows residents to easily give away unwanted items: 58.7
- Free public wifi has improved access to city services: 68.1
- CCTV cameras has made residents feel safer: 75.4
- A website or App allows residents to effectively monitor air pollution: 64.3
- Arranging medical appointments online has improved access: 77.4

Mobility

- Car-sharing Apps have reduced congestion: 64.9
- Apps that direct you to an available parking space have reduced journey time: 65.5
- Bicycle hiring has reduced congestion: 69.0
- Online scheduling and ticket sales has made public transport easier to use: 78.2
- The city provides information on traffic congestion through mobile phones: 71.7

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 80.5

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 74.5
- IT skills are taught well in schools: 68.7
- Online services provided by the city has made it easier to start a new business: 75.3
- The current internet speed and reliability meet connectivity needs: 75.9

Governance

- Online public access to city finances has reduced corruption: 62.9
- Online voting has increased participation: 70.6
- An online platform where residents can propose ideas has improved city life: 70.8
- Processing Identification Documents online has reduced waiting times: 77.3

Denver

SMART CITY RANKING

66

Out of 142



53 in 2023
Out of 141

SMART CITY RATING

BBB

BBB in 2023

FACTOR RATINGS

BBB

STRUCTURES

BBB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 720,000
(UN Data)

HDI 0.942
(Global Data Lab)



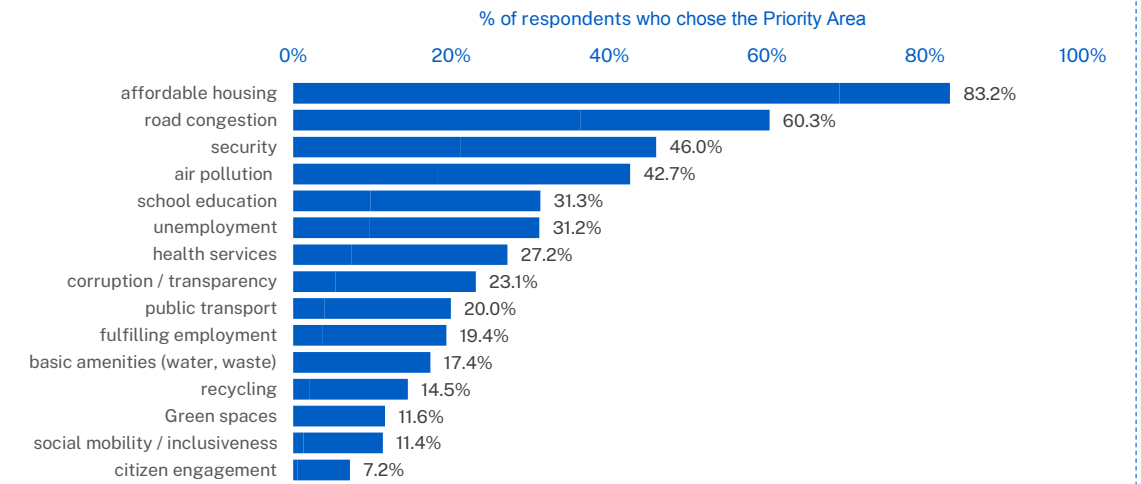
Country

USA

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081

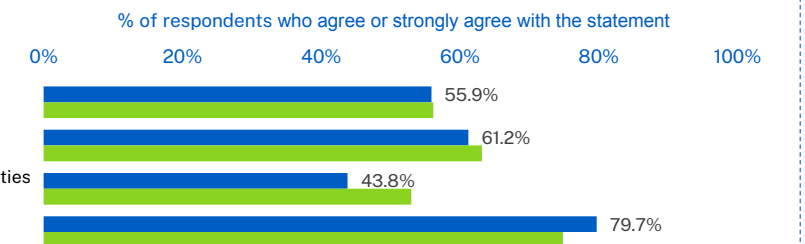
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

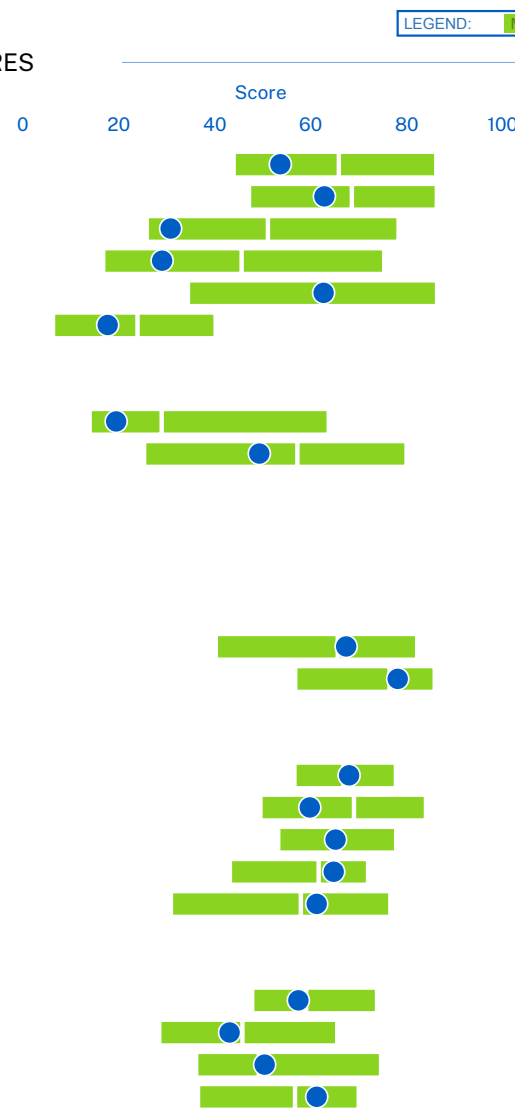
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

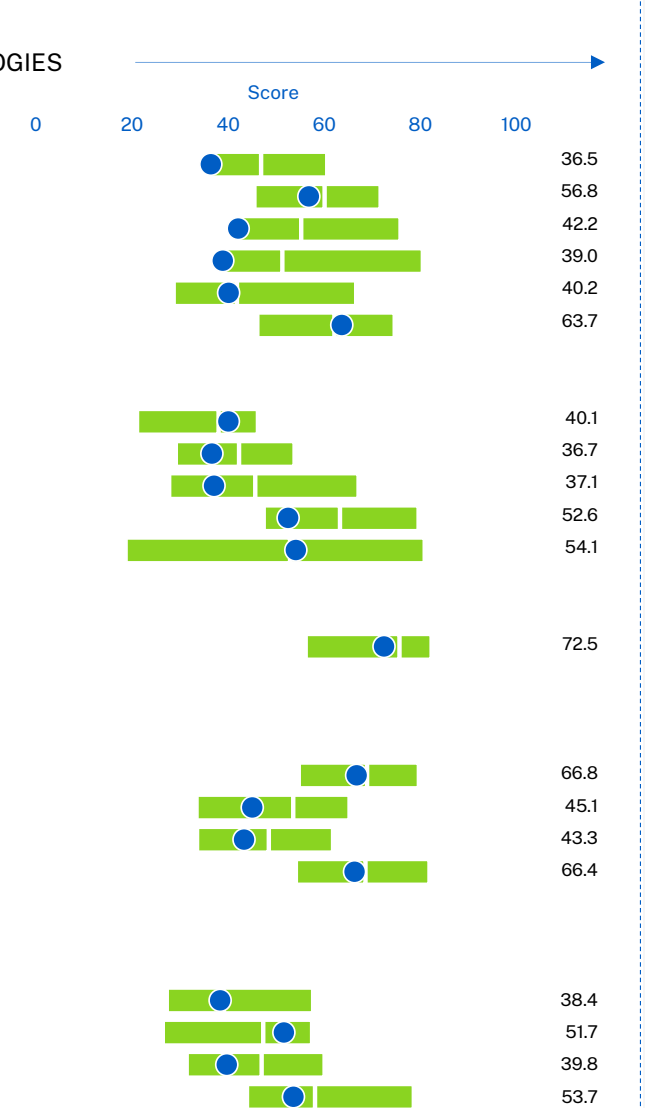
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Doha

SMART CITY RANKING
48
Out of 142



59 in 2023
Out of 141

SMART CITY RATING

B

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

B

TECHNOLOGIES

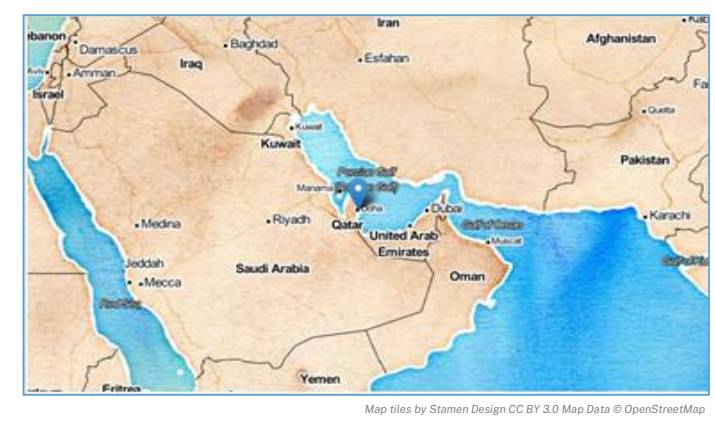
GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

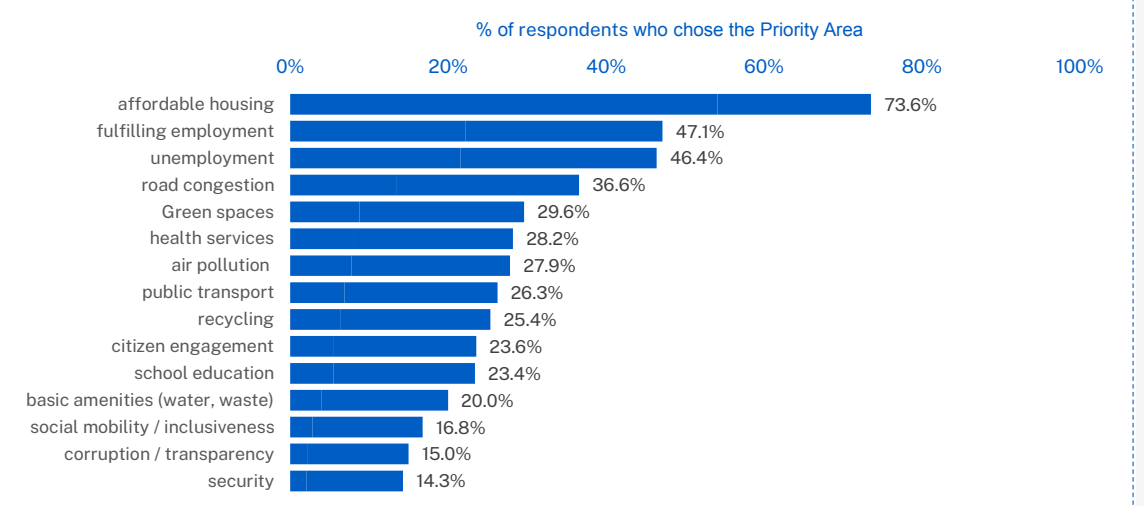
City
Population 1,190,000
(UN Data)
HDI 0.855
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Qatar					
HDI	0.869	0.863	0.864	0.875	+0.011
Life expectancy at birth	81.0	79.1	79.3	81.6	+2.3
Expected years of schooling	13.2	13.3	13.3	13.3	+0.0
Mean years of schooling	10.0	10.1	10.1	10.1	+0.0
GNI per capita (PPP \$)	88,647	87,385	91,760	95,944	+4,184

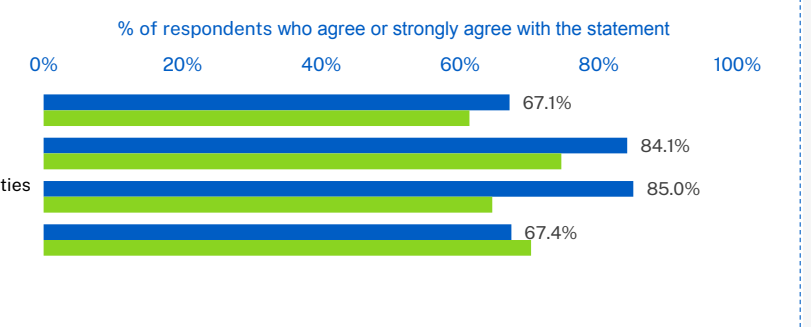
PRIORITY AREAS

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.

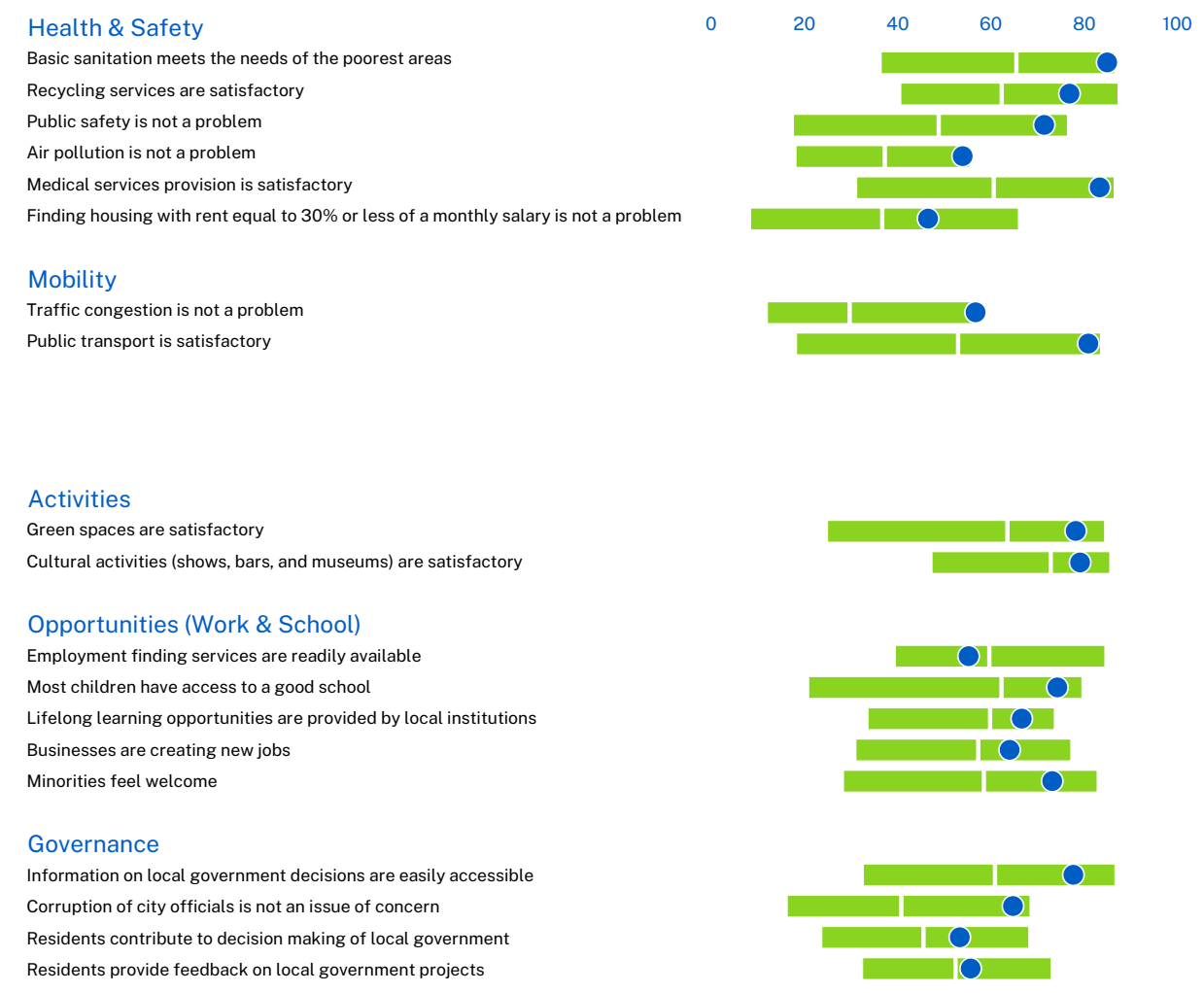


ATTITUDES

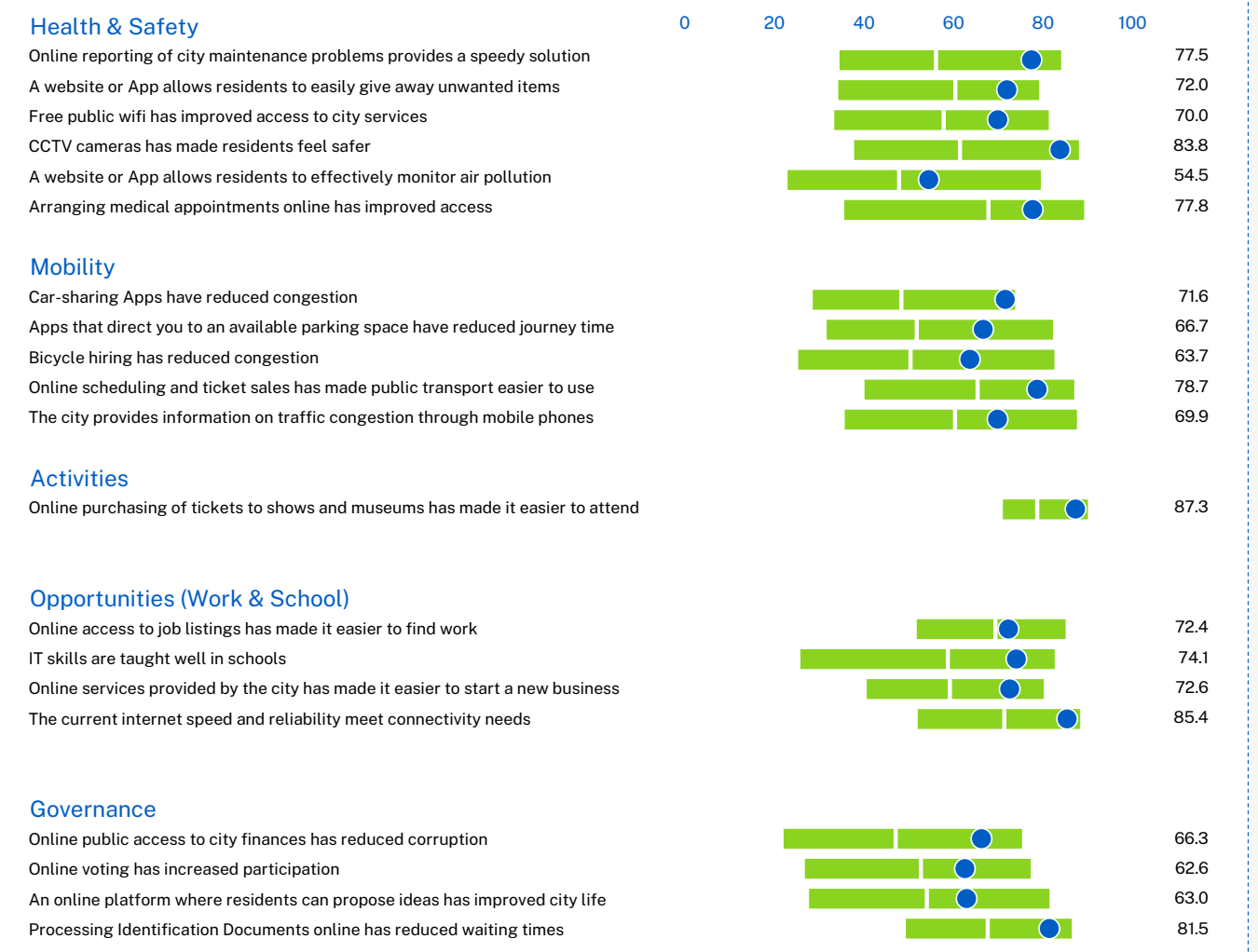
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Dubai

SMART CITY RANKING
12
 Out of 142

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS
BB
 STRUCTURES

TECHNOLOGIES
BB

GROUP
3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

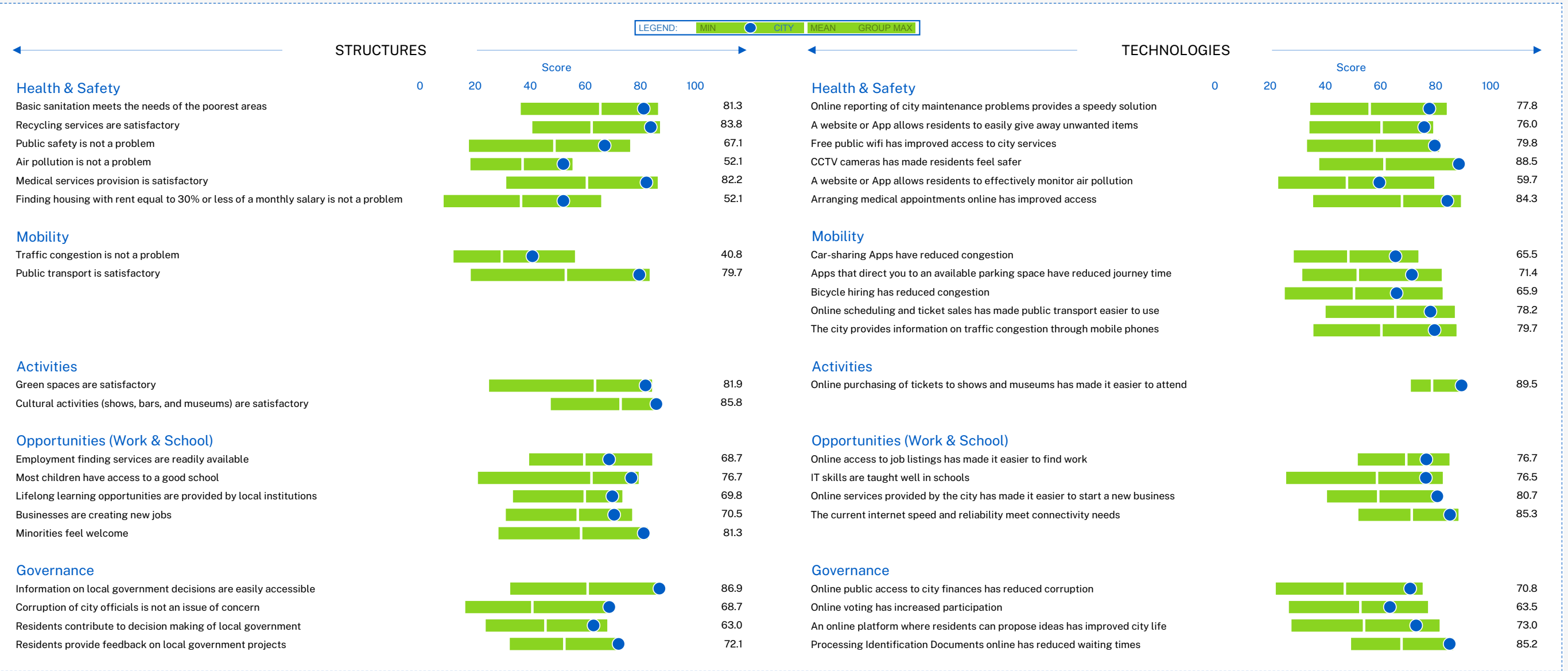
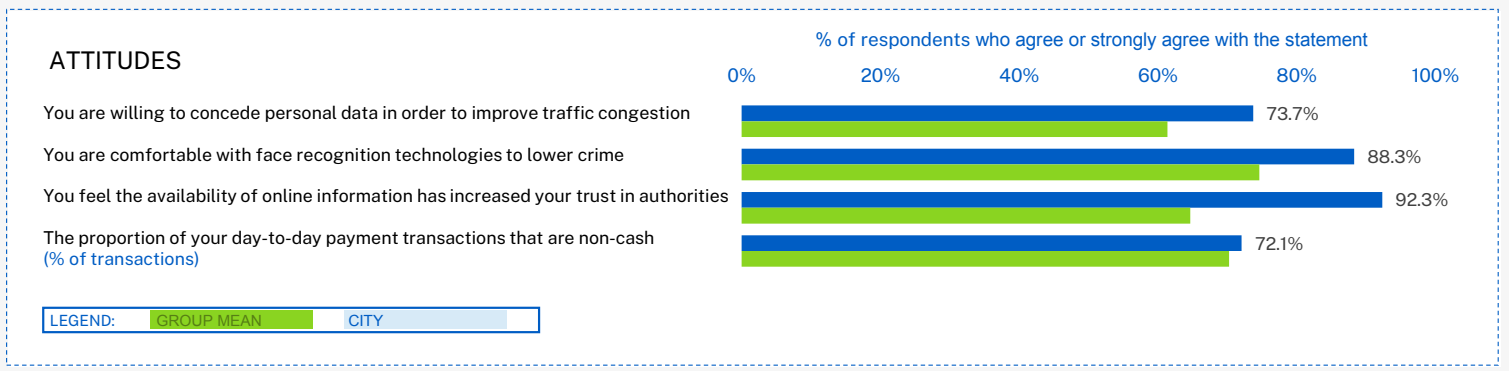
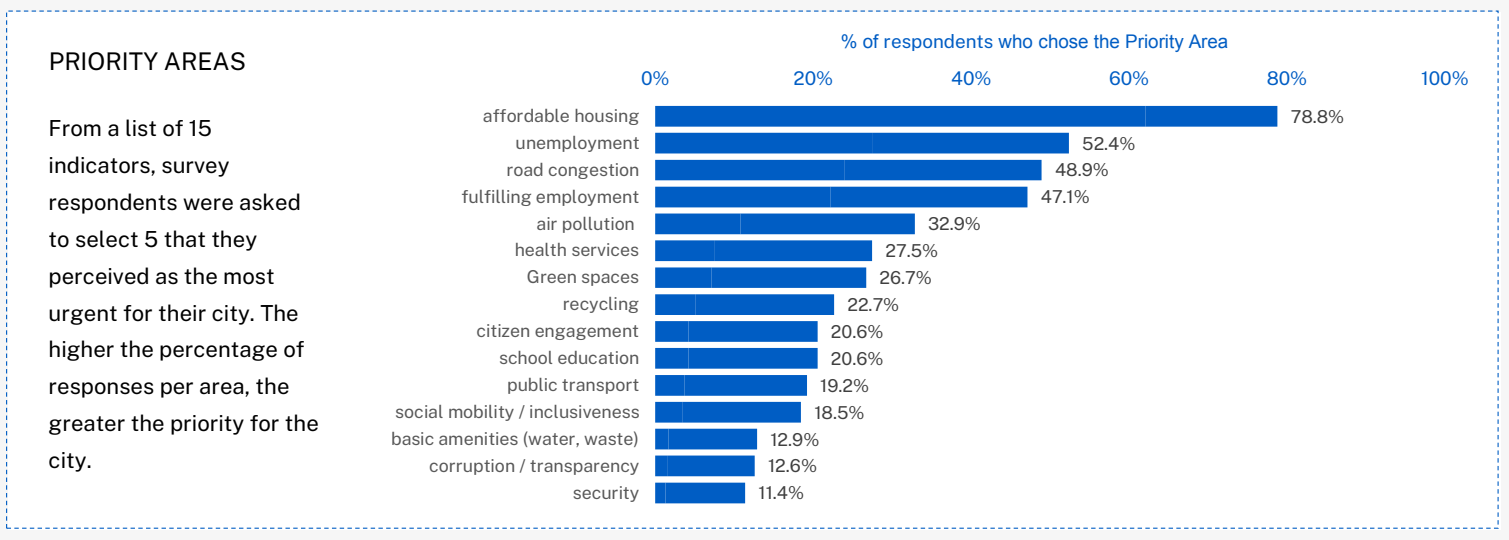
Population: 2,880,000
 (UN World Urbanization Prospects)

HDI: 0.911
 (Global Data Lab)



Country
 United Arab Emirates

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.930	0.931	0.937	+0.006
Life expectancy at birth	79.7	78.9	78.7	79.2	+0.5
Expected years of schooling	16.8	17.2	17.2	17.2	+0.0
Mean years of schooling	12.7	12.7	12.8	12.8	+0.0
GNI per capita (PPP \$)	72,131	67,353	69,550	74,104	+4,553



Dublin

SMART CITY RANKING

69

Out of 142



63 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BBB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,230,000
(UN World Urbanization Prospects)

HDI 0.950
(Global Data Lab)



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

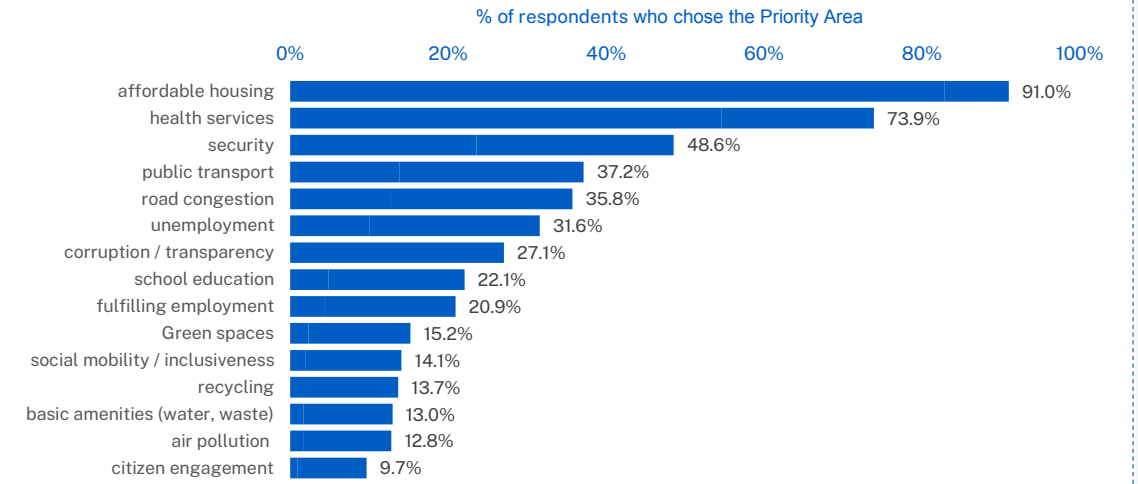
Country

Ireland

	2019	2020	2021	2022	1 yr change
HDI	0.942	0.945	0.946	0.950	+0.004
Life expectancy at birth	82.3	82.5	82.0	82.7	+0.7
Expected years of schooling	18.9	18.8	19.1	19.1	+0.0
Mean years of schooling	11.6	11.7	11.7	11.7	+0.0
GNI per capita (PPP \$)	67,652	69,109	78,953	87,468	+8,515

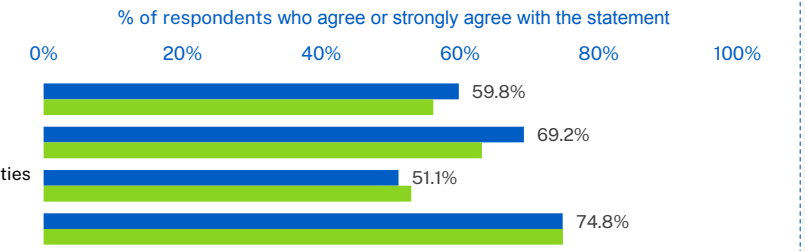
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

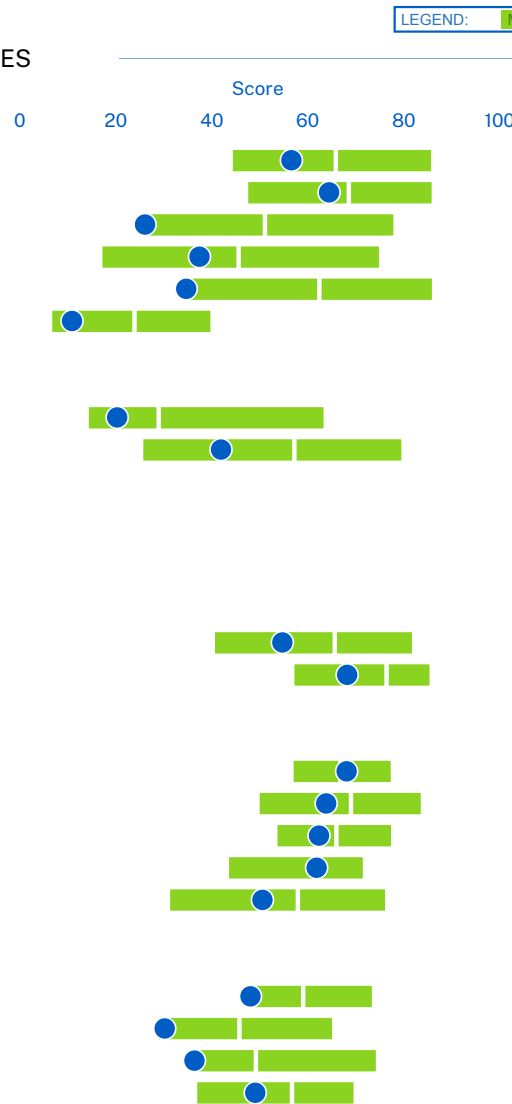
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

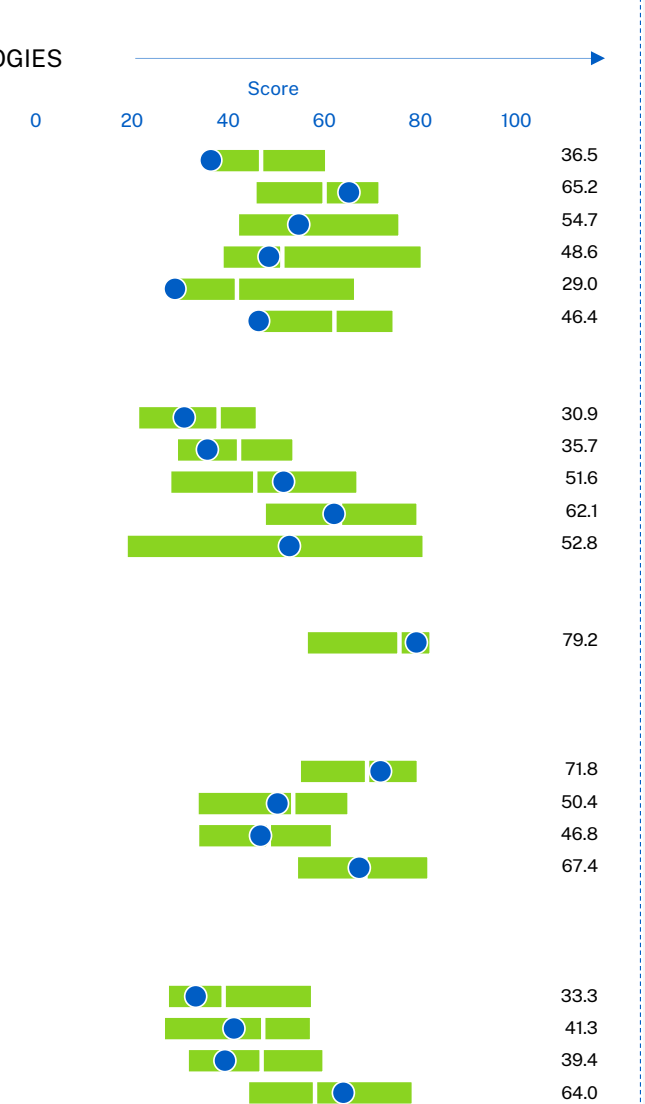
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Dusseldorf

SMART CITY RANKING
44
Out of 142



38 in 2023
Out of 141

SMART CITY RATING
BB

BB
BB in 2023

FACTOR RATINGS

BBB
STRUCTURES

B
TECHNOLOGIES

GROUP
2

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 630,000
(UN World Urbanization Prospects)

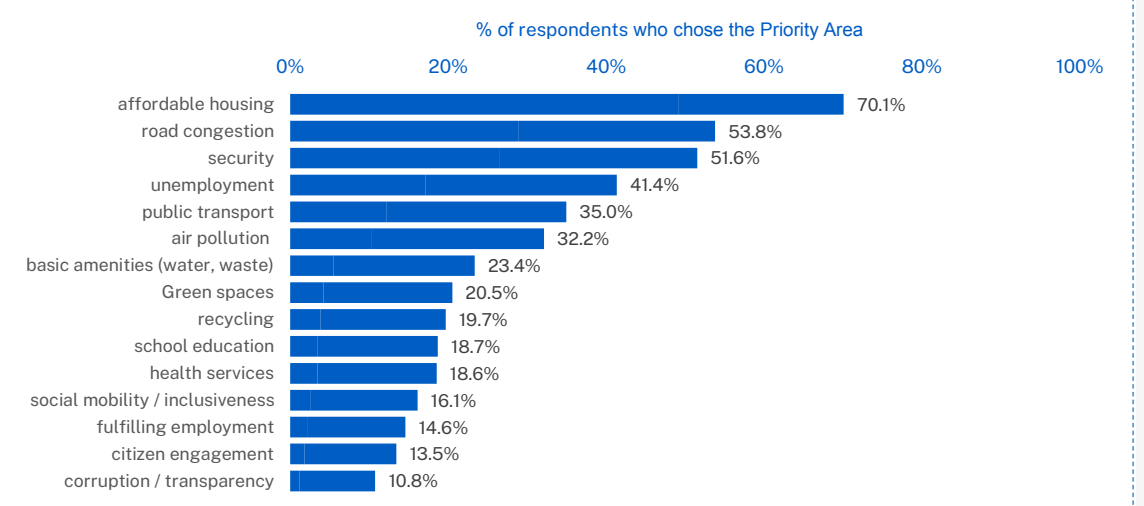
HDI 0.939
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Germany	0.951	0.948	0.948	0.950	+0.002
Life expectancy at birth	81.6	81.1	80.6	81.0	+0.4
Expected years of schooling	17.2	17.2	17.3	17.3	+0.0
Mean years of schooling	14.2	14.3	14.3	14.3	+0.0
GNI per capita (PPP \$)	55,685	53,375	55,057	55,340	+284

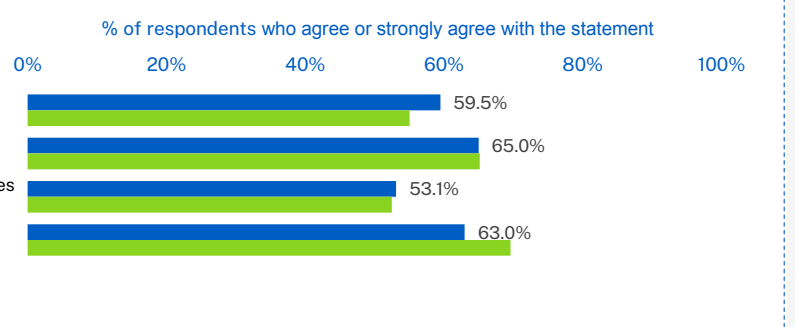
PRIORITY AREAS

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.

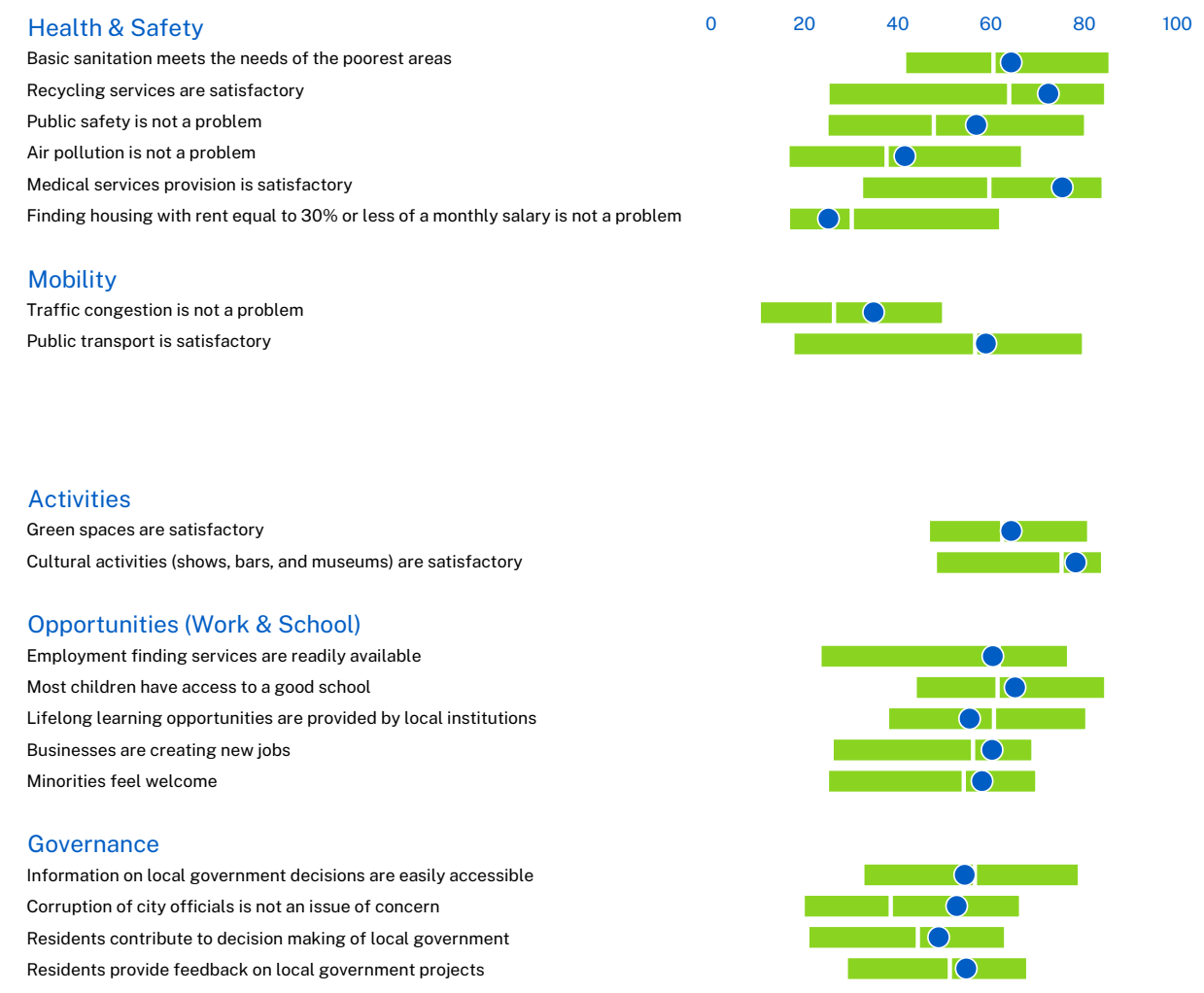


ATTITUDES

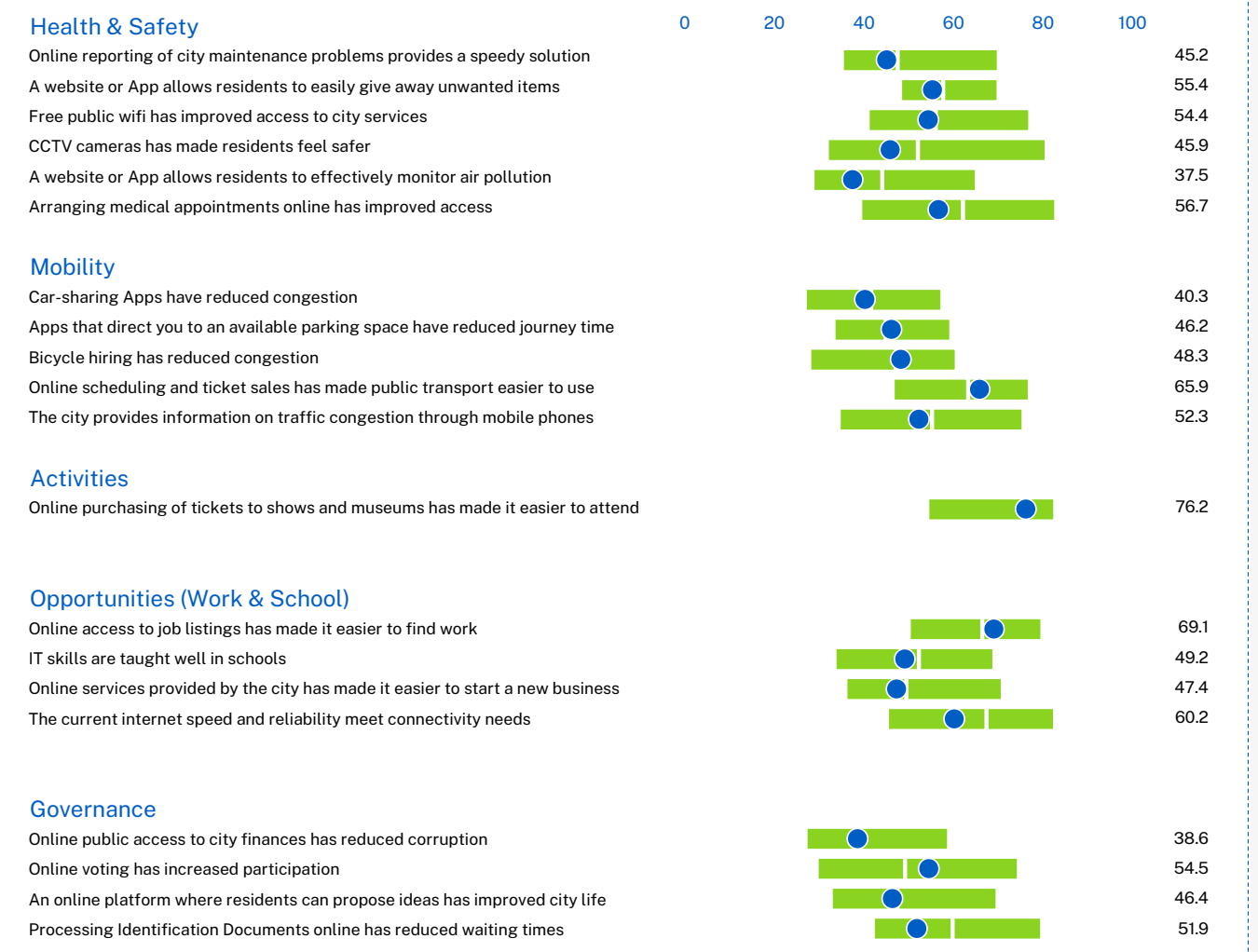
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Geneva

SMART CITY RANKING

4

Out of 142

▲

9 in 2023
Out of 141

SMART CITY RATING

AAA

AA in 2023

FACTOR RATINGS

AAA

STRUCTURES

AA

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 200,000
(Eurostat)

HDI 0.966
(Global Data Lab)

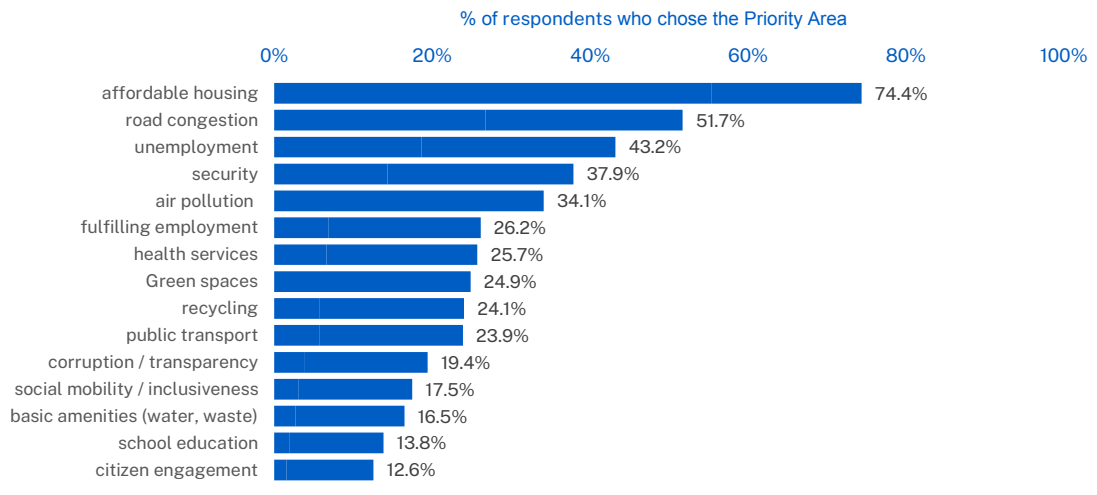


Country

Switzerland	2019	2020	2021	2022	1 yr change
HDI	0.960	0.957	0.965	0.967	+0.002
Life expectancy at birth	83.8	83.1	84.0	84.3	+0.3
Expected years of schooling	16.3	16.4	16.6	16.6	+0.0
Mean years of schooling	13.9	13.9	13.9	13.9	+0.0
GNI per capita (PPP \$)	67,531	66,267	68,550	69,433	+882

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.



Priority Area	% of respondents
affordable housing	74.4%
road congestion	51.7%
unemployment	43.2%
security	37.9%
air pollution	34.1%
fulfilling employment	26.2%
health services	25.7%
Green spaces	24.9%
recycling	24.1%
public transport	23.9%
corruption / transparency	19.4%
social mobility / inclusiveness	17.5%
basic amenities (water, waste)	16.5%
school education	13.8%
citizen engagement	12.6%

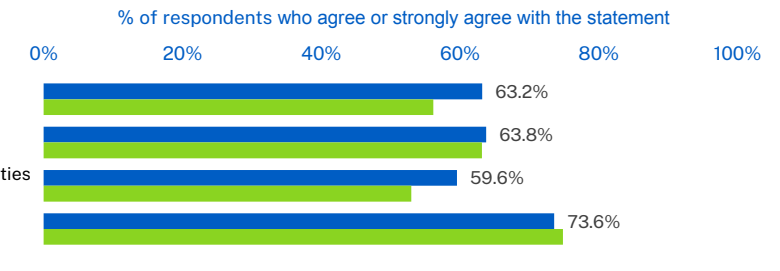
ATTITUDES

You are willing to concede personal data in order to improve traffic congestion: 63.2%

You are comfortable with face recognition technologies to lower crime: 63.8%

You feel the availability of online information has increased your trust in authorities: 59.6%

The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 73.6%



LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 74.0
- Recycling services are satisfactory: 76.0
- Public safety is not a problem: 70.8
- Air pollution is not a problem: 55.4
- Medical services provision is satisfactory: 78.2
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 32.2

Mobility

- Traffic congestion is not a problem: 39.1
- Public transport is satisfactory: 72.8

Activities

- Green spaces are satisfactory: 82.2
- Cultural activities (shows, bars, and museums) are satisfactory: 81.2

Opportunities (Work & School)

- Employment finding services are readily available: 67.9
- Most children have access to a good school: 82.9
- Lifelong learning opportunities are provided by local institutions: 71.7
- Businesses are creating new jobs: 56.8
- Minorities feel welcome: 67.5

Governance

- Information on local government decisions are easily accessible: 70.3
- Corruption of city officials is not an issue of concern: 56.3
- Residents contribute to decision making of local government: 69.3
- Residents provide feedback on local government projects: 70.0

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 54.0
- A website or App allows residents to easily give away unwanted items: 64.5
- Free public wifi has improved access to city services: 61.8
- CCTV cameras has made residents feel safer: 53.6
- A website or App allows residents to effectively monitor air pollution: 51.0
- Arranging medical appointments online has improved access: 70.6

Mobility

- Car-sharing Apps have reduced congestion: 41.3
- Apps that direct you to an available parking space have reduced journey time: 44.0
- Bicycle hiring has reduced congestion: 53.2
- Online scheduling and ticket sales has made public transport easier to use: 77.8
- The city provides information on traffic congestion through mobile phones: 59.1

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 81.1

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 62.4
- IT skills are taught well in schools: 62.5
- Online services provided by the city has made it easier to start a new business: 53.1
- The current internet speed and reliability meet connectivity needs: 77.9

Governance

- Online public access to city finances has reduced corruption: 47.8
- Online voting has increased participation: 53.0
- An online platform where residents can propose ideas has improved city life: 51.7
- Processing Identification Documents online has reduced waiting times: 68.8

Glasgow

SMART CITY RANKING

87

Out of 142



80 in 2023
Out of 141

SMART CITY RATING

B

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

B

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 620,000
(Eurostat)

HDI 0.921
(Global Data Lab)



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

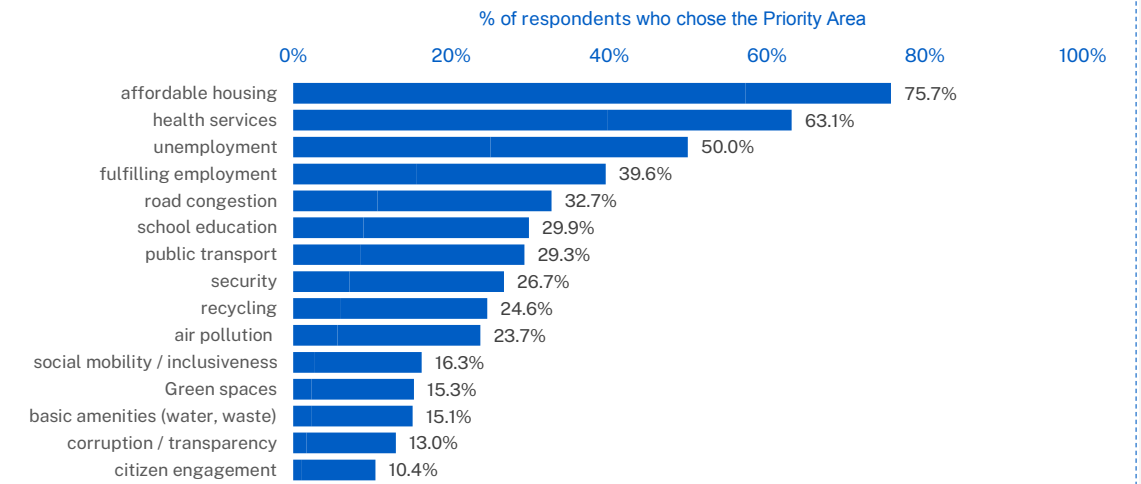
Country

United Kingdom

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	47,066	40,799	44,750	46,624	+1,874

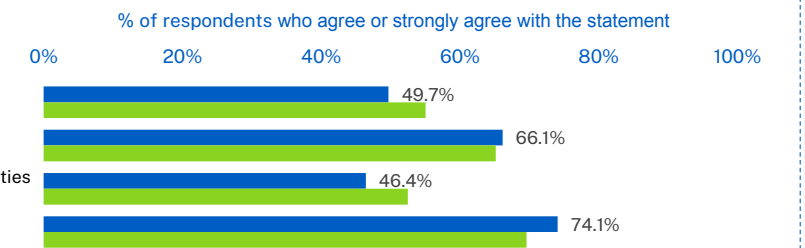
PRIORITY AREAS

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

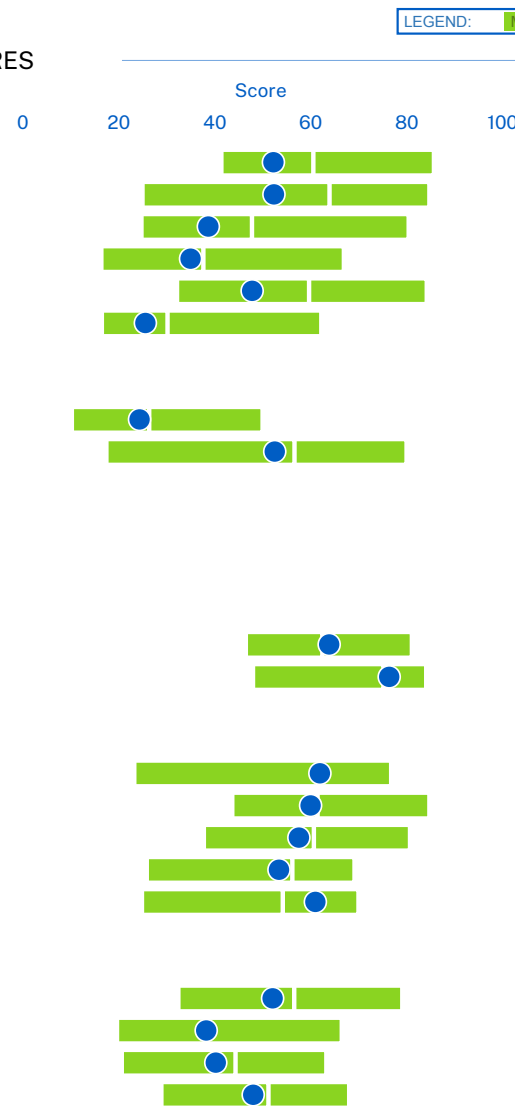
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

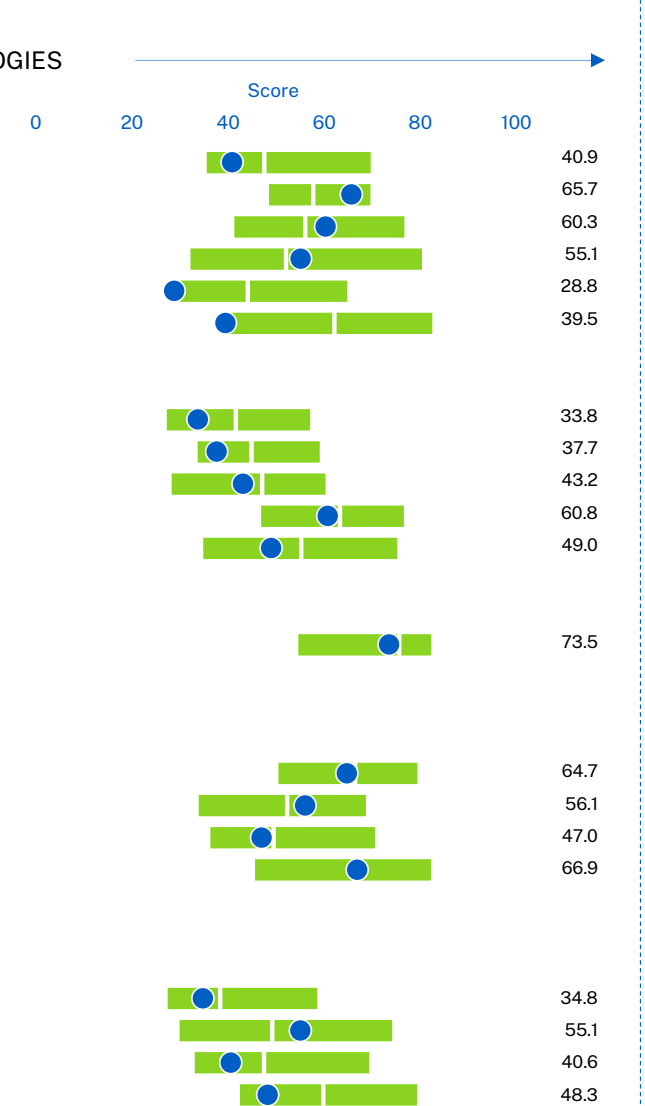
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Gothenburg

SMART CITY RANKING
39
 Out of 142

▼

36 in 2023
 Out of 141

SMART CITY RATING
A
 A in 2023

FACTOR RATINGS
BBB

STRUCTURES

TECHNOLOGIES

GROUP
1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 560,000 (Eurostat)

HDI: 0.944 (Global Data Lab)

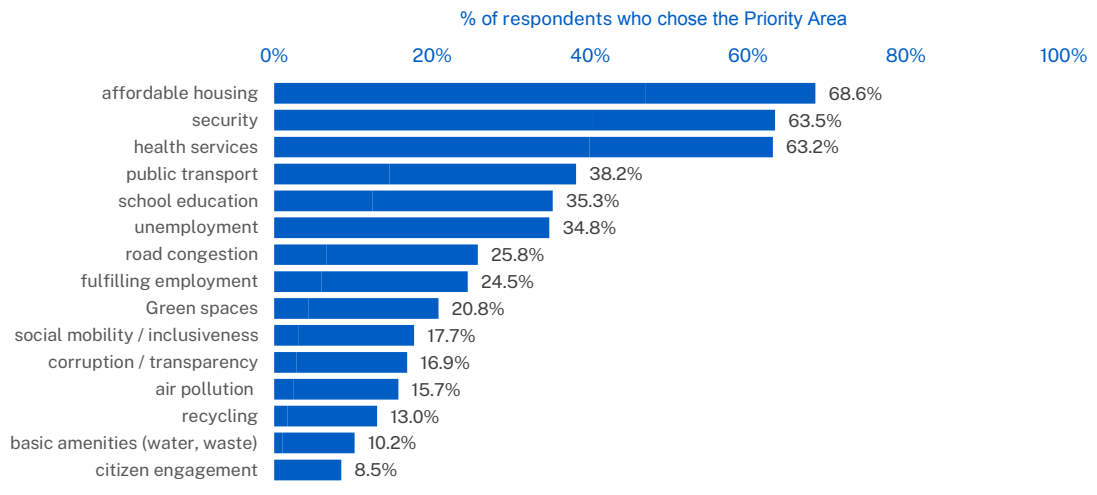


Country
 Sweden

	2019	2020	2021	2022	1 yr change
HDI	0.947	0.944	0.949	0.952	+0.003
Life expectancy at birth	83.1	82.4	83.0	83.5	+0.5
Expected years of schooling	18.5	18.7	19.0	19.0	+0.0
Mean years of schooling	12.6	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	54,441	53,195	55,908	56,996	+1,088

PRIORITY AREAS

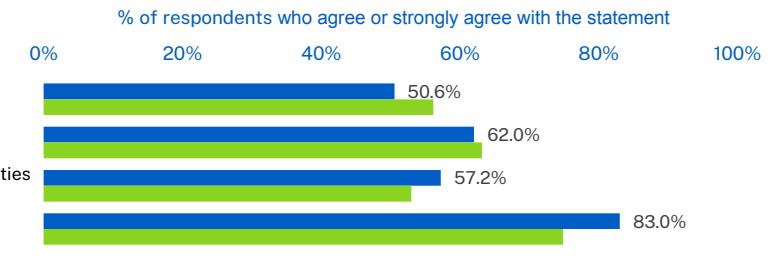
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	68.6%
security	63.5%
health services	63.2%
public transport	38.2%
school education	35.3%
unemployment	34.8%
road congestion	25.8%
fulfilling employment	24.5%
Green spaces	20.8%
social mobility / inclusiveness	17.7%
corruption / transparency	16.9%
air pollution	15.7%
recycling	13.0%
basic amenities (water, waste)	10.2%
citizen engagement	8.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	50.6%	50.6%
You are comfortable with face recognition technologies to lower crime	62.0%	62.0%
You feel the availability of online information has increased your trust in authorities	57.2%	57.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	83.0%	83.0%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 63.2
- Recycling services are satisfactory: 67.8
- Public safety is not a problem: 42.9
- Air pollution is not a problem: 50.2
- Medical services provision is satisfactory: 57.1
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 28.0

Mobility

- Traffic congestion is not a problem: 30.5
- Public transport is satisfactory: 50.9

Activities

- Green spaces are satisfactory: 76.5
- Cultural activities (shows, bars, and museums) are satisfactory: 75.1

Opportunities (Work & School)

- Employment finding services are readily available: 64.0
- Most children have access to a good school: 66.1
- Lifelong learning opportunities are provided by local institutions: 64.5
- Businesses are creating new jobs: 65.7
- Minorities feel welcome: 56.4

Governance

- Information on local government decisions are easily accessible: 59.4
- Corruption of city officials is not an issue of concern: 49.8
- Residents contribute to decision making of local government: 43.4
- Residents provide feedback on local government projects: 50.4

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 46.0
- A website or App allows residents to easily give away unwanted items: 60.2
- Free public wifi has improved access to city services: 58.5
- CCTV cameras has made residents feel safer: 47.7
- A website or App allows residents to effectively monitor air pollution: 35.9
- Arranging medical appointments online has improved access: 57.4

Mobility

- Car-sharing Apps have reduced congestion: 32.0
- Apps that direct you to an available parking space have reduced journey time: 42.3
- Bicycle hiring has reduced congestion: 46.2
- Online scheduling and ticket sales has made public transport easier to use: 71.1
- The city provides information on traffic congestion through mobile phones: 55.2

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 76.5

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 63.4
- IT skills are taught well in schools: 55.6
- Online services provided by the city has made it easier to start a new business: 47.7
- The current internet speed and reliability meet connectivity needs: 67.6

Governance

- Online public access to city finances has reduced corruption: 38.0
- Online voting has increased participation: 43.2
- An online platform where residents can propose ideas has improved city life: 45.3
- Processing Identification Documents online has reduced waiting times: 53.0

LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

Guangzhou

SMART CITY RANKING

65

Out of 142



71 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 13,300,000
(UN World Urbanization Prospects)

HDI 0.799
(Global Data Lab)



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

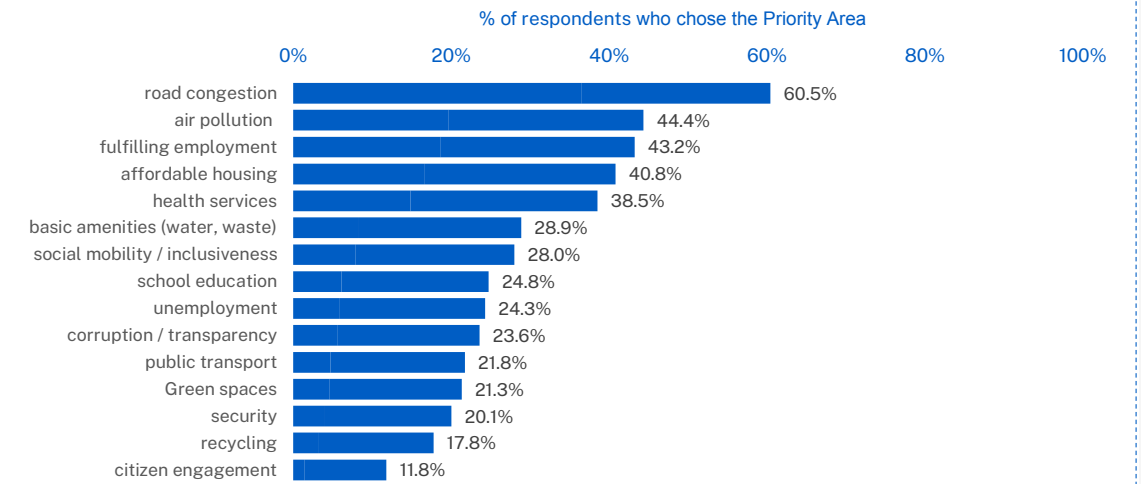
Country

China

	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

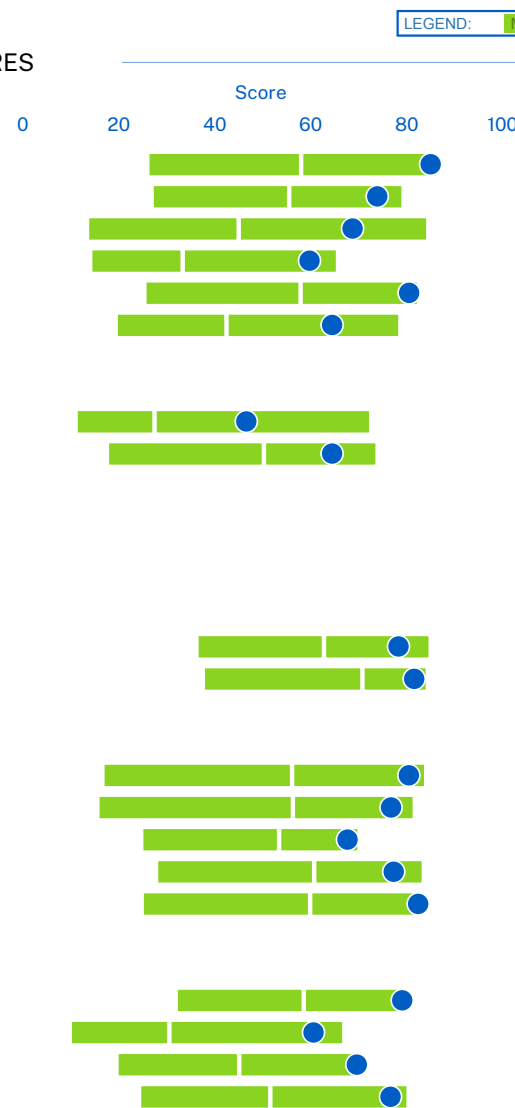
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

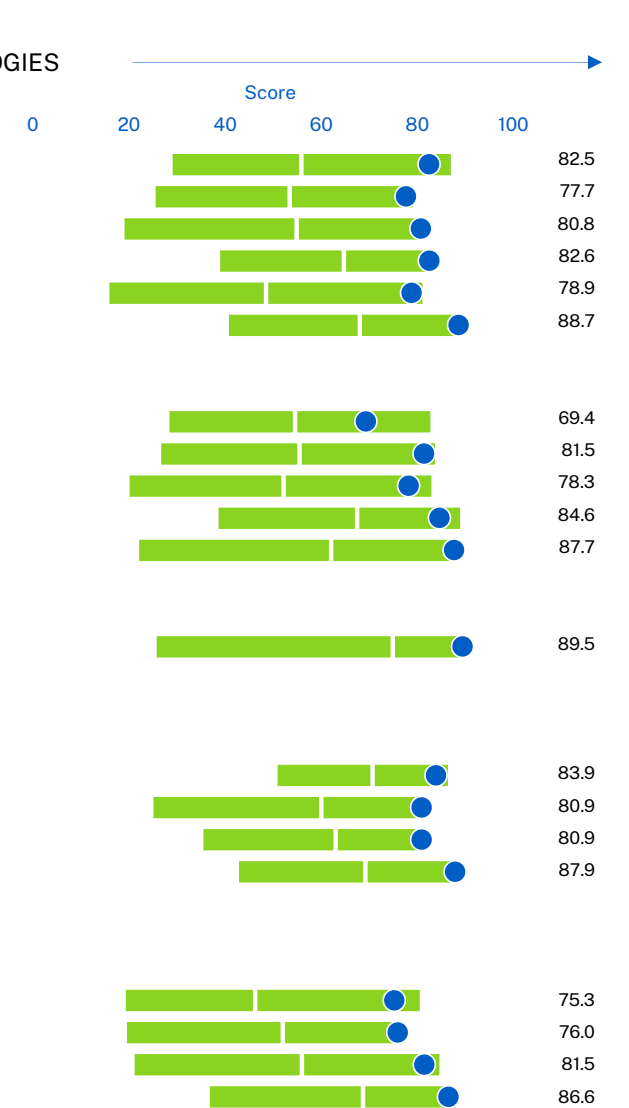
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Guatemala City

SMART CITY RANKING

142

Out of 142



141 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 3,040,000
(UN World Urbanization Prospects)

HDI 0.722
(Global Data Lab)



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

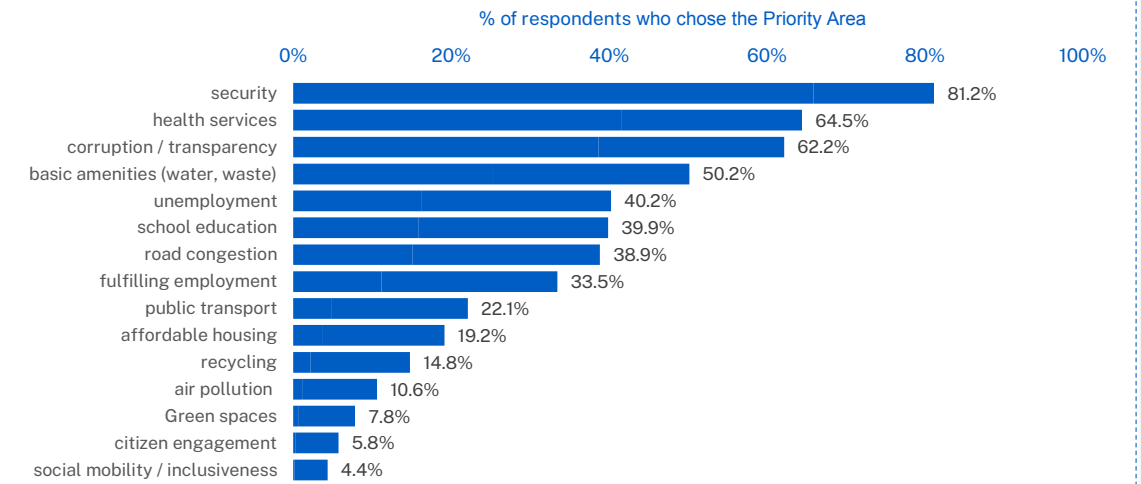
Country

Guatemala

	2019	2020	2021	2022	1 yr change
HDI	0.645	0.638	0.630	0.629	-0.001
Life expectancy at birth	73.1	71.8	69.2	68.7	-0.6
Expected years of schooling	10.8	10.8	10.8	10.8	+0.0
Mean years of schooling	5.7	5.7	5.7	5.7	+0.0
GNI per capita (PPP \$)	8,514	8,240	8,716	8,996	+280

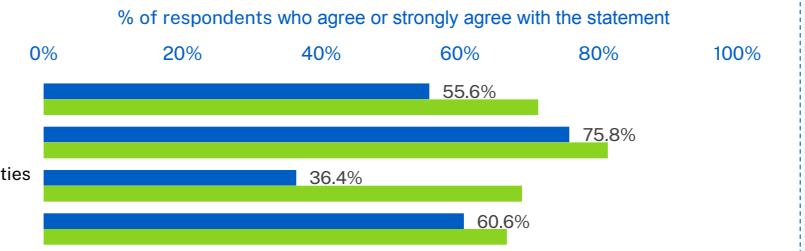
PRIORITY AREAS

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

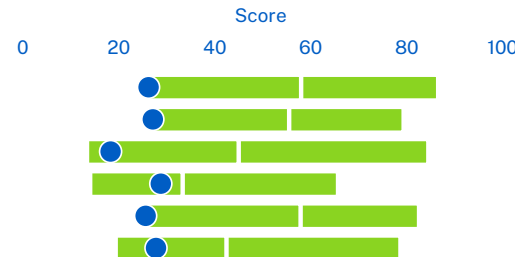


LEGEND: [GROUP MEAN] [CITY]

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



Mobility

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



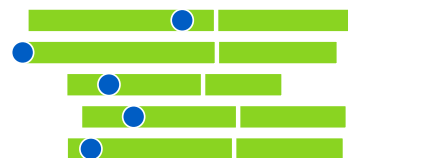
Activities

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



Opportunities (Work & School)

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



Governance

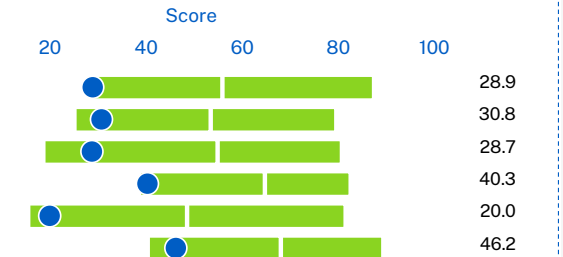
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects



TECHNOLOGIES

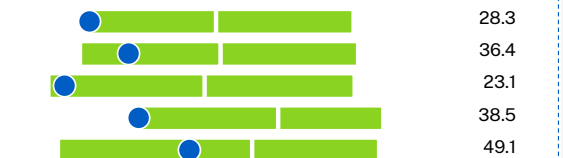
Health & Safety

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



Mobility

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



Activities

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



Opportunities (Work & School)

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



Governance

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



Hamburg

SMART CITY RANKING

14

Out of 142



11 in 2023
Out of 141

SMART CITY RATING

BBB

A in 2023

FACTOR RATINGS

BBB

STRUCTURES

BBB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,850,000
(Eurostat)

HDI 0.972
(Global Data Lab)



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

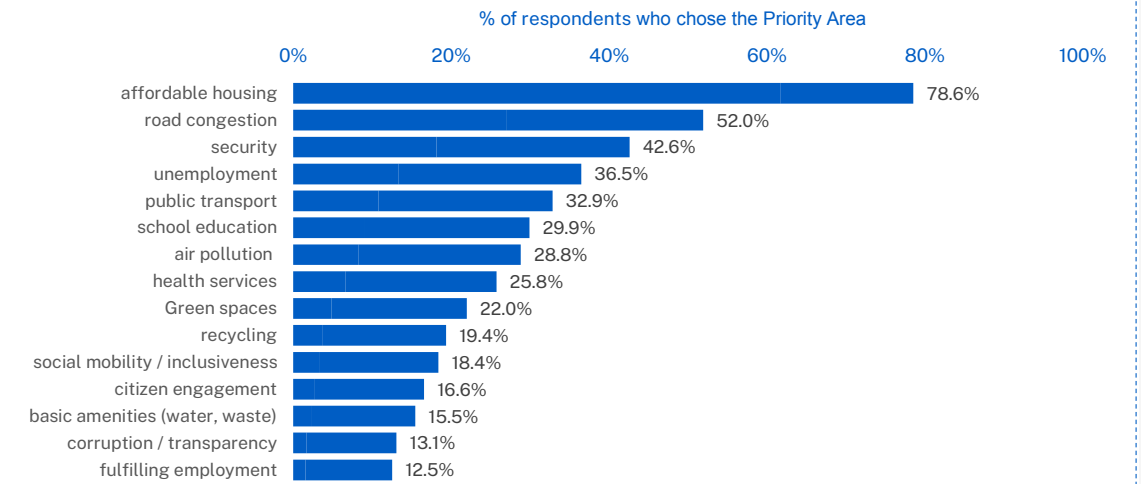
Country

Germany

	2019	2020	2021	2022	1 yr change
HDI	0.951	0.948	0.948	0.950	+0.002
Life expectancy at birth	81.6	81.1	80.6	81.0	+0.4
Expected years of schooling	17.2	17.2	17.3	17.3	+0.0
Mean years of schooling	14.2	14.3	14.3	14.3	+0.0
GNI per capita (PPP \$)	55,685	53,375	55,057	55,340	+284

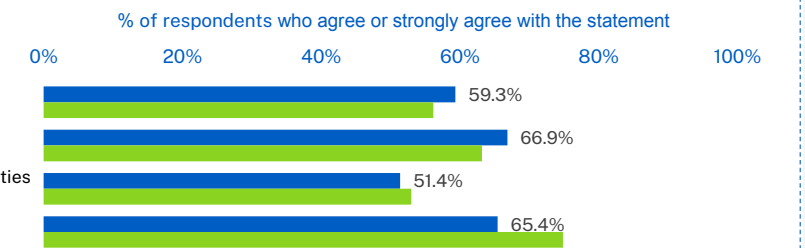
PRIORITY AREAS

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

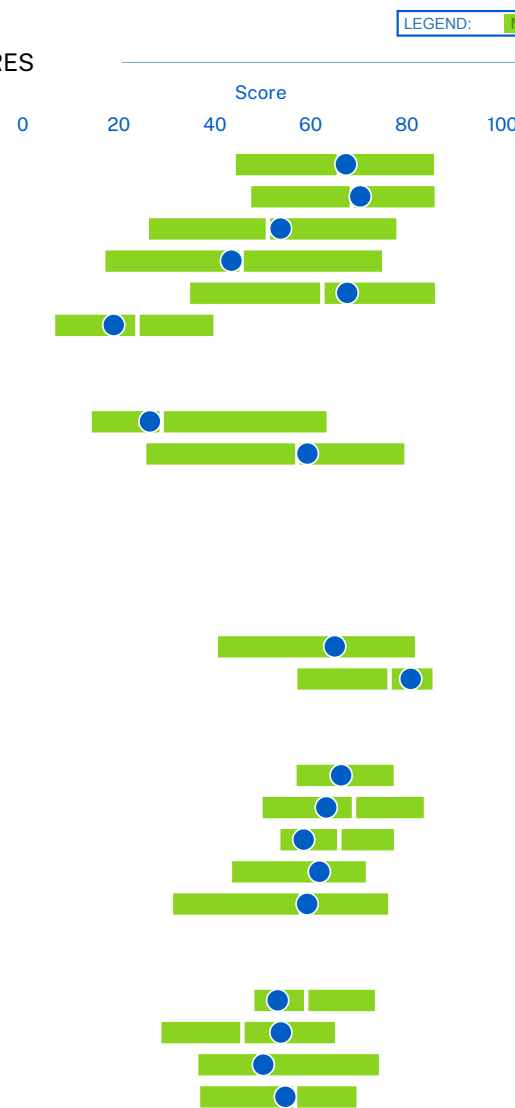
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

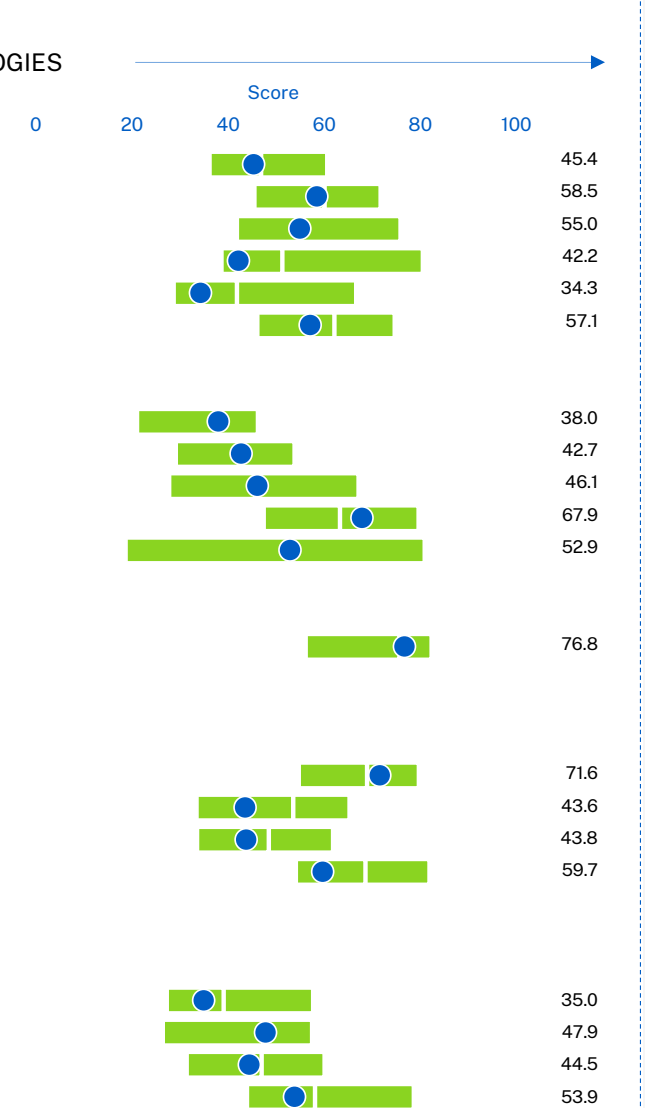
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Hangzhou

SMART CITY RANKING

64

Out of 142

▲

70 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 7,640,000
(UN World Urbanization Prospects)

HDI 0.801
(Global Data Lab)

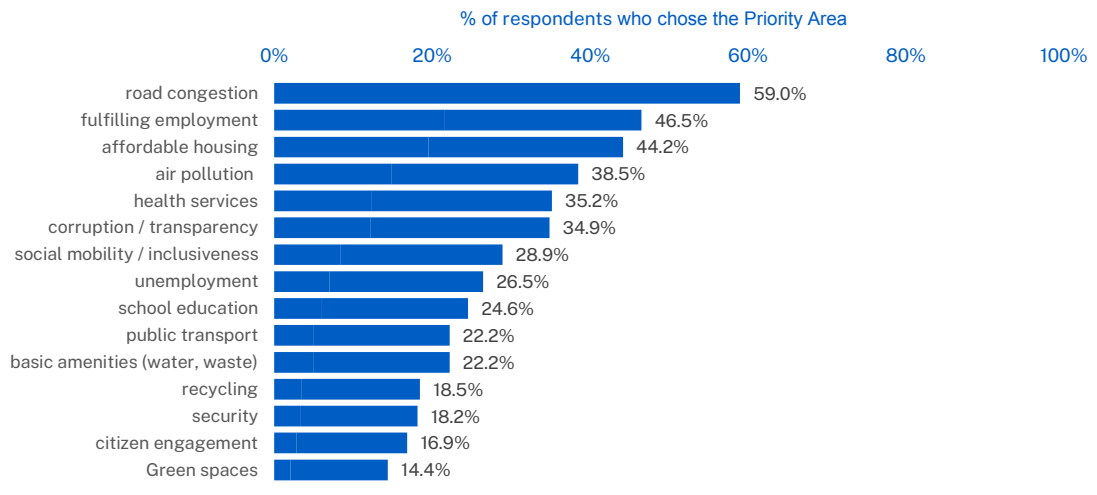


Country

China	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

PRIORITY AREAS

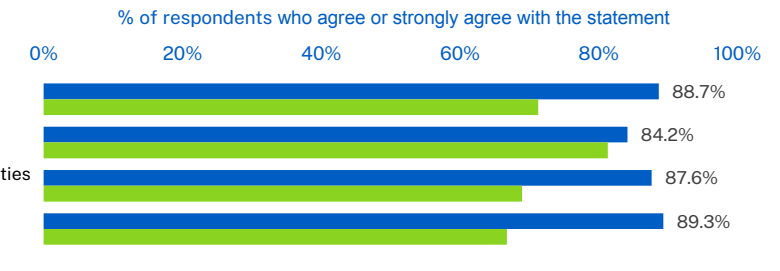
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
road congestion	59.0%
fulfilling employment	46.5%
affordable housing	44.2%
air pollution	38.5%
health services	35.2%
corruption / transparency	34.9%
social mobility / inclusiveness	28.9%
unemployment	26.5%
school education	24.6%
public transport	22.2%
basic amenities (water, waste)	22.2%
recycling	18.5%
security	18.2%
citizen engagement	16.9%
Green spaces	14.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	88.7%	75%
You are comfortable with face recognition technologies to lower crime	84.2%	78%
You feel the availability of online information has increased your trust in authorities	87.6%	72%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	89.3%	70%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 84.5
- Recycling services are satisfactory: 77.3
- Public safety is not a problem: 80.8
- Air pollution is not a problem: 63.1
- Medical services provision is satisfactory: 82.6
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 63.3

Mobility

- Traffic congestion is not a problem: 41.9
- Public transport is satisfactory: 67.8

Activities

- Green spaces are satisfactory: 84.3
- Cultural activities (shows, bars, and museums) are satisfactory: 81.4

Opportunities (Work & School)

- Employment finding services are readily available: 80.4
- Most children have access to a good school: 77.4
- Lifelong learning opportunities are provided by local institutions: 70.1
- Businesses are creating new jobs: 75.7
- Minorities feel welcome: 82.0

Governance

- Information on local government decisions are easily accessible: 77.3
- Corruption of city officials is not an issue of concern: 53.9
- Residents contribute to decision making of local government: 60.7
- Residents provide feedback on local government projects: 70.1

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 82.2
- A website or App allows residents to easily give away unwanted items: 75.6
- Free public wifi has improved access to city services: 78.6
- CCTV cameras has made residents feel safer: 81.3
- A website or App allows residents to effectively monitor air pollution: 74.3
- Arranging medical appointments online has improved access: 88.8

Mobility

- Car-sharing Apps have reduced congestion: 69.7
- Apps that direct you to an available parking space have reduced journey time: 77.5
- Bicycle hiring has reduced congestion: 83.3
- Online scheduling and ticket sales has made public transport easier to use: 89.1
- The city provides information on traffic congestion through mobile phones: 86.2

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 90.8

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 85.4
- IT skills are taught well in schools: 79.9
- Online services provided by the city has made it easier to start a new business: 80.5
- The current internet speed and reliability meet connectivity needs: 89.4

Governance

- Online public access to city finances has reduced corruption: 71.9
- Online voting has increased participation: 73.5
- An online platform where residents can propose ideas has improved city life: 80.5
- Processing Identification Documents online has reduced waiting times: 85.0

Hanoi

SMART CITY RANKING

97

Out of 142



100 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 4,680,000
(UN World Urbanization Prospects)

HDI 0.744
(Global Data Lab)



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

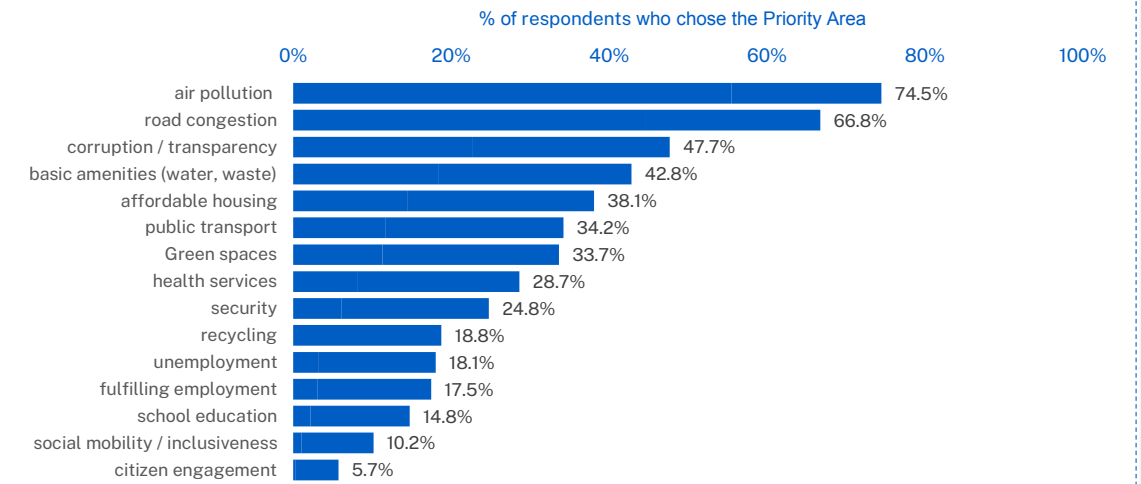
Country

Vietnam

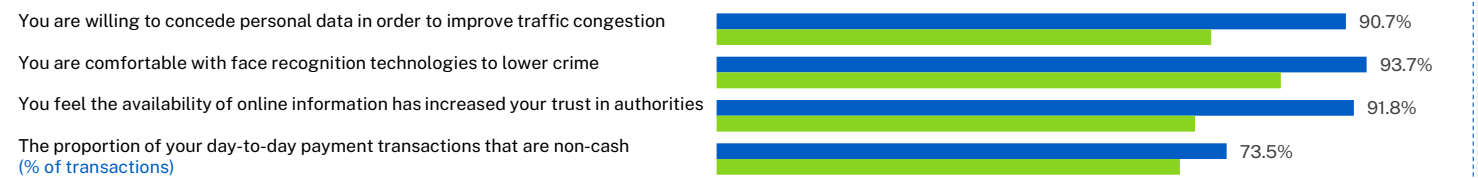
	2019	2020	2021	2022	1 yr change
HDI	0.717	0.726	0.718	0.726	+0.008
Life expectancy at birth	74.1	75.4	73.6	74.6	+1.0
Expected years of schooling	13.0	13.1	13.1	13.1	+0.0
Mean years of schooling	8.4	8.5	8.5	8.5	+0.0
GNI per capita (PPP \$)	9,734	10,005	10,085	10,814	+729

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

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

Opportunities (Work & School)

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

Governance

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

LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

Score 0 20 40 60 80 100

TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

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

Opportunities (Work & School)

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

Governance

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

Score 0 20 40 60 80 100

Hanover

SMART CITY RANKING
53
Out of 142



57 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BBB

STRUCTURES

B

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

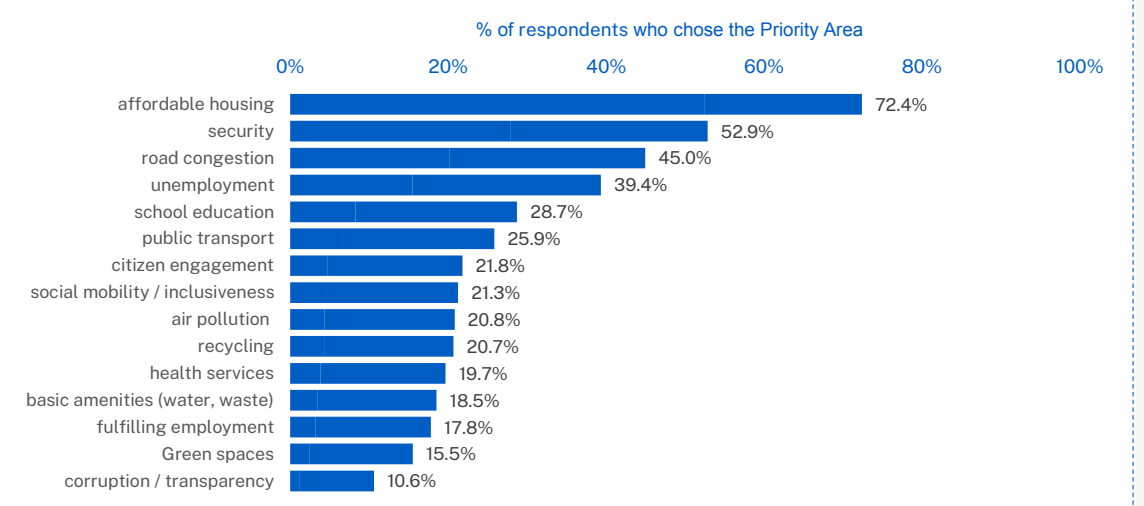
City
Population 540,000
(Eurostat)
HDI 0.930
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Germany	0.951	0.948	0.948	0.950	+0.002
HDI	0.951	0.948	0.948	0.950	+0.002
Life expectancy at birth	81.6	81.1	80.6	81.0	+0.4
Expected years of schooling	17.2	17.2	17.3	17.3	+0.0
Mean years of schooling	14.2	14.3	14.3	14.3	+0.0
GNI per capita (PPP \$)	55,685	53,375	55,057	55,340	+284

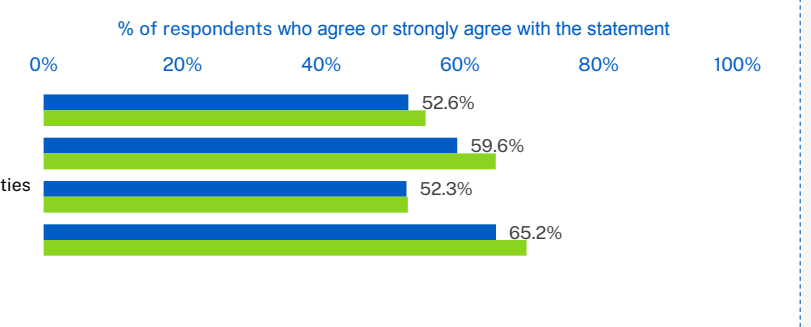
PRIORITY AREAS

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.

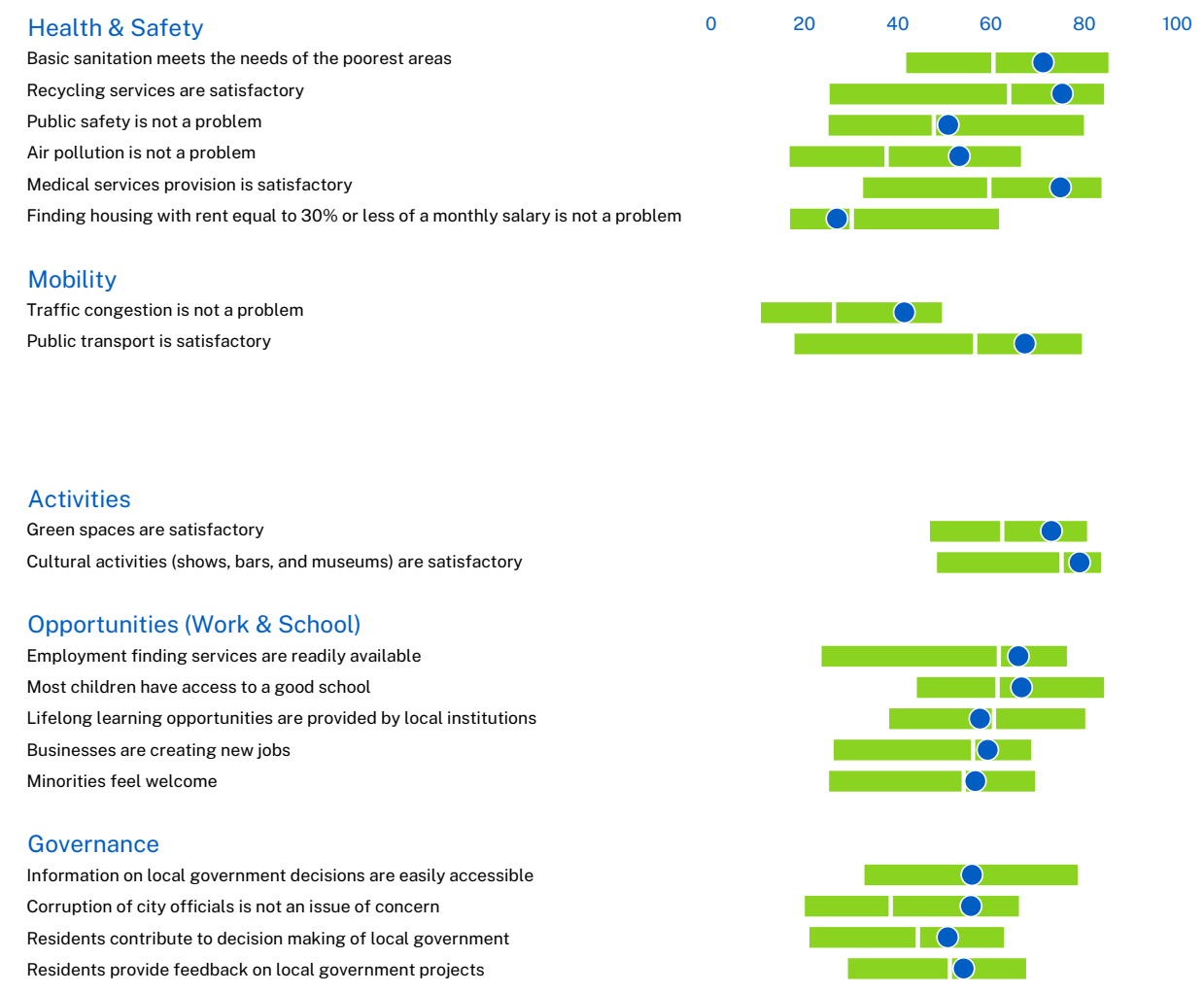


ATTITUDES

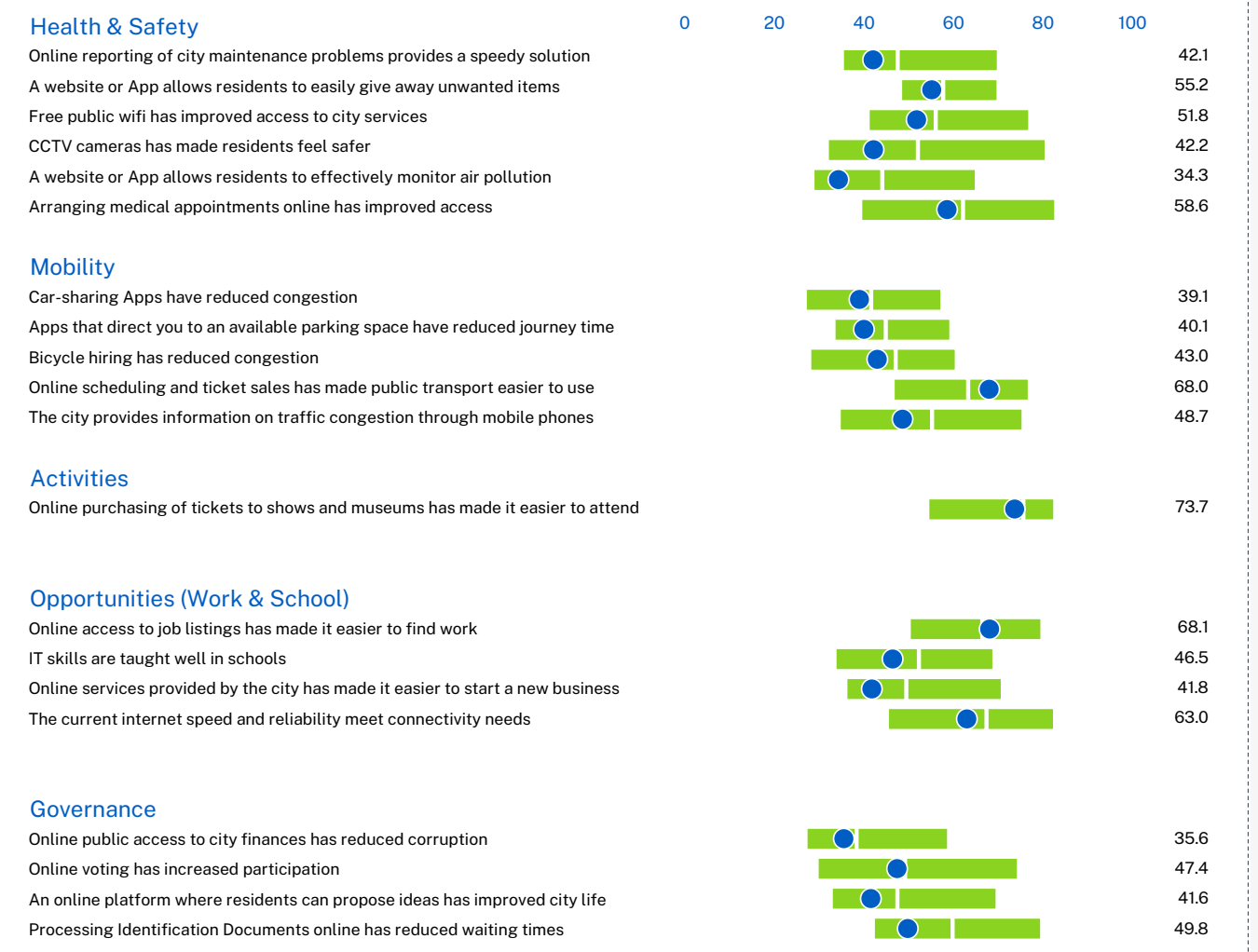
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Helsinki

SMART CITY RANKING

9

Out of 142

8 in 2023
Out of 141

SMART CITY RATING

AA

AAA in 2023

FACTOR RATINGS

AA

STRUCTURES

A

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 650,000
(Eurostat)

HDI 0.960
(Global Data Lab)



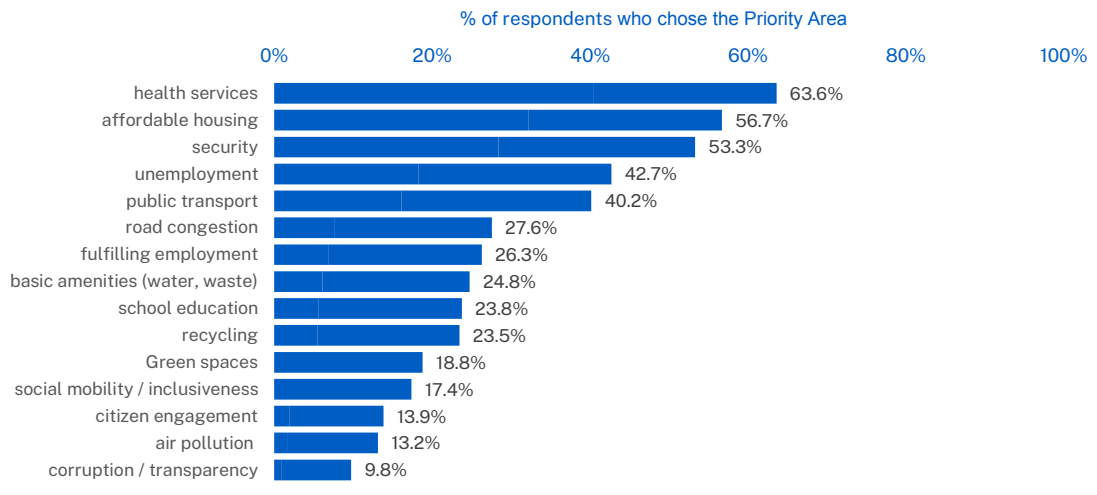
Country

Finland

	2019	2020	2021	2022	1 yr change
HDI	0.939	0.939	0.941	0.942	+0.001
Life expectancy at birth	81.9	81.9	82.0	82.4	+0.3
Expected years of schooling	19.0	19.0	19.2	19.2	+0.0
Mean years of schooling	12.9	12.9	12.9	12.9	+0.0
GNI per capita (PPP \$)	48,829	48,176	49,481	49,522	+42

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.



Priority Area	% of respondents
health services	63.6%
affordable housing	56.7%
security	53.3%
unemployment	42.7%
public transport	40.2%
road congestion	27.6%
fulfilling employment	26.3%
basic amenities (water, waste)	24.8%
school education	23.8%
recycling	23.5%
Green spaces	18.8%
social mobility / inclusiveness	17.4%
citizen engagement	13.9%
air pollution	13.2%
corruption / transparency	9.8%

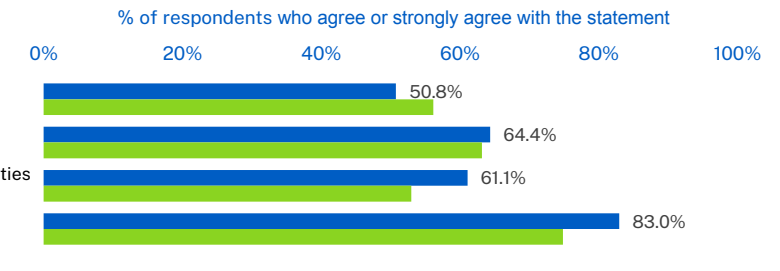
ATTITUDES

You are willing to concede personal data in order to improve traffic congestion: 50.8%

You are comfortable with face recognition technologies to lower crime: 64.4%

You feel the availability of online information has increased your trust in authorities: 61.1%

The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 83.0%



LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 66.5
- Recycling services are satisfactory: 75.9
- Public safety is not a problem: 52.4
- Air pollution is not a problem: 59.4
- Medical services provision is satisfactory: 58.6
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 31.5

Mobility

- Traffic congestion is not a problem: 42.2
- Public transport is satisfactory: 74.8

Activities

- Green spaces are satisfactory: 75.2
- Cultural activities (shows, bars, and museums) are satisfactory: 80.0

Opportunities (Work & School)

- Employment finding services are readily available: 64.8
- Most children have access to a good school: 78.2
- Lifelong learning opportunities are provided by local institutions: 72.0
- Businesses are creating new jobs: 69.0
- Minorities feel welcome: 53.7

Governance

- Information on local government decisions are easily accessible: 62.4
- Corruption of city officials is not an issue of concern: 56.6
- Residents contribute to decision making of local government: 49.3
- Residents provide feedback on local government projects: 64.0

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 49.8
- A website or App allows residents to easily give away unwanted items: 68.3
- Free public wifi has improved access to city services: 55.2
- CCTV cameras has made residents feel safer: 47.5
- A website or App allows residents to effectively monitor air pollution: 49.8
- Arranging medical appointments online has improved access: 54.9

Mobility

- Car-sharing Apps have reduced congestion: 36.1
- Apps that direct you to an available parking space have reduced journey time: 43.2
- Bicycle hiring has reduced congestion: 53.0
- Online scheduling and ticket sales has made public transport easier to use: 73.7
- The city provides information on traffic congestion through mobile phones: 45.3

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 73.1

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 65.2
- IT skills are taught well in schools: 63.6
- Online services provided by the city has made it easier to start a new business: 49.6
- The current internet speed and reliability meet connectivity needs: 71.9

Governance

- Online public access to city finances has reduced corruption: 43.6
- Online voting has increased participation: 43.7
- An online platform where residents can propose ideas has improved city life: 51.9
- Processing Identification Documents online has reduced waiting times: 60.8

Ho Chi Minh City

SMART CITY RANKING

105

Out of 142



103 in 2023
Out of 141

SMART CITY RATING

CC

CCC in 2023

FACTOR RATINGS

CC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 8,600,000
(UN World Urbanization Prospects)

HDI 0.714
(Global Data Lab)



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

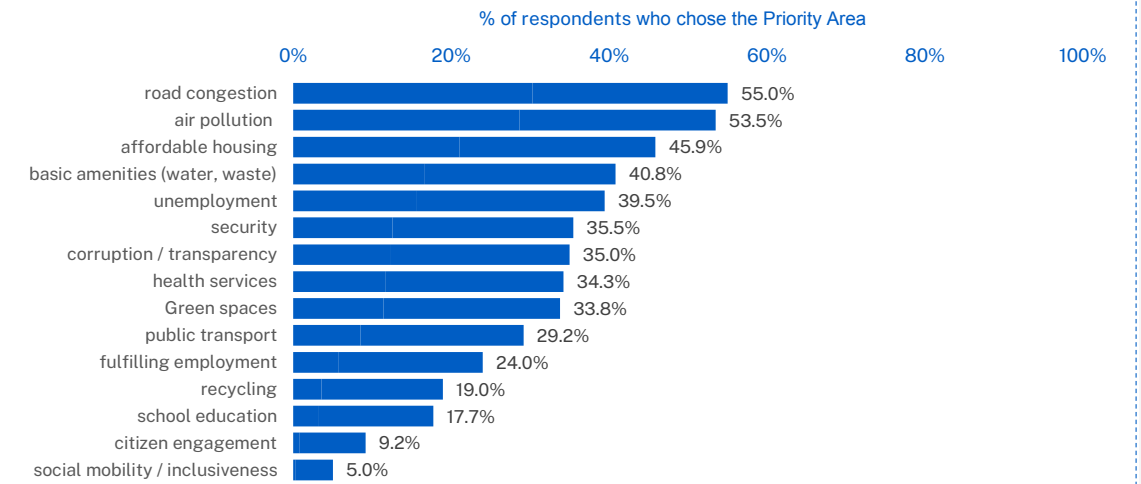
Country

Vietnam

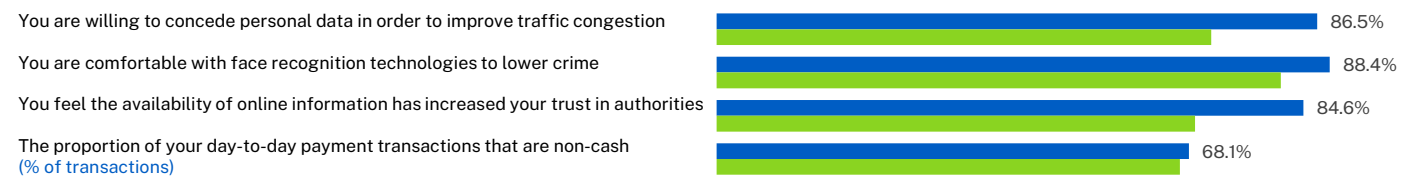
	2019	2020	2021	2022	1 yr change
HDI	0.717	0.726	0.718	0.726	+0.008
Life expectancy at birth	74.1	75.4	73.6	74.6	+1.0
Expected years of schooling	13.0	13.1	13.1	13.1	+0.0
Mean years of schooling	8.4	8.5	8.5	8.5	+0.0
GNI per capita (PPP \$)	9,734	10,005	10,085	10,814	+729

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

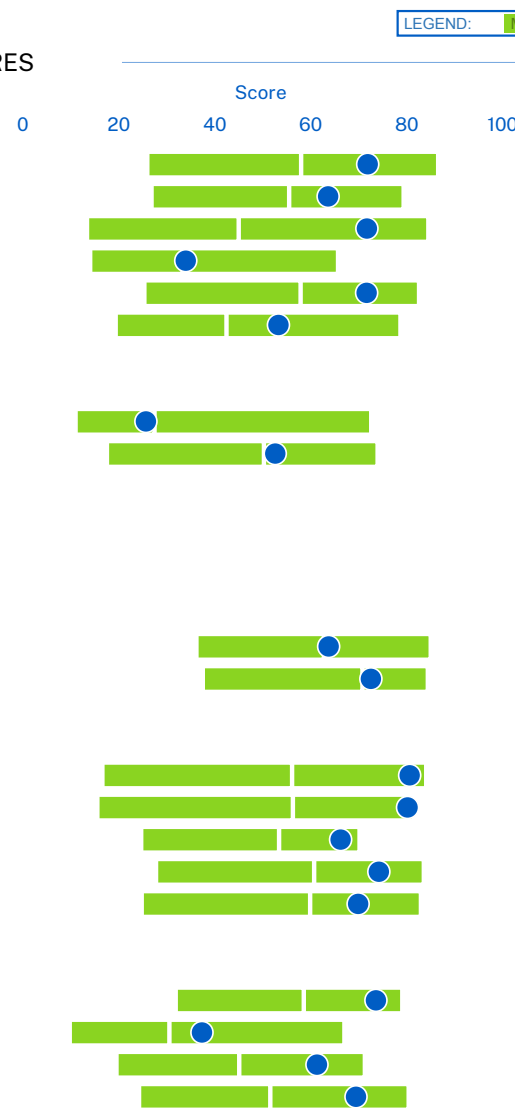
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

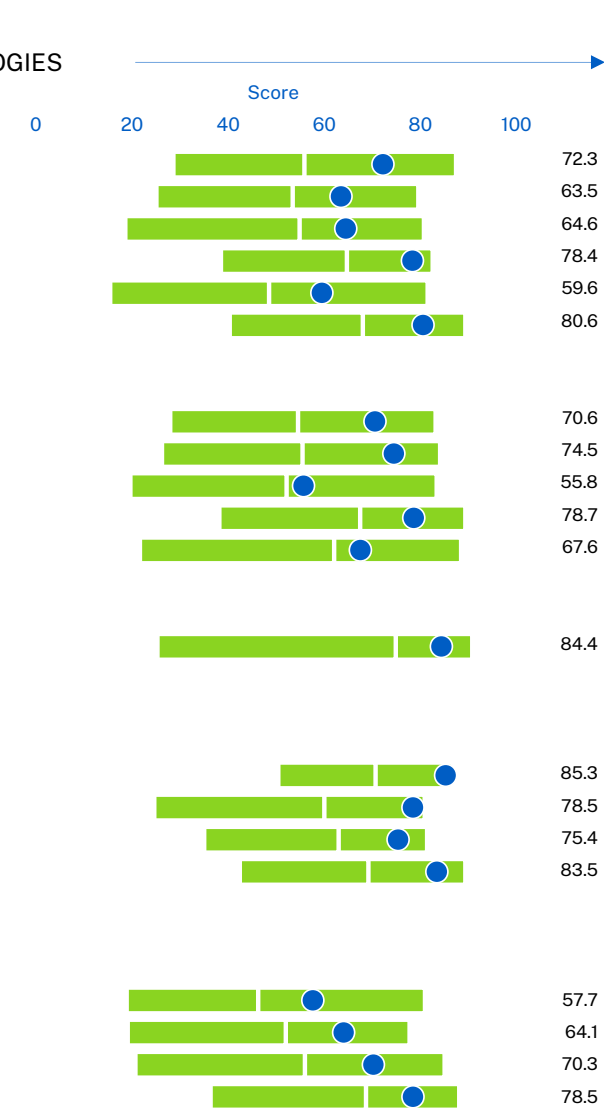
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Hong Kong

SMART CITY RANKING
20
 Out of 142

▼

19 in 2023
 Out of 141

SMART CITY RATING
A
 AA in 2023

FACTOR RATINGS
BBB
 STRUCTURES

TECHNOLOGIES
AAA

GROUP
1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

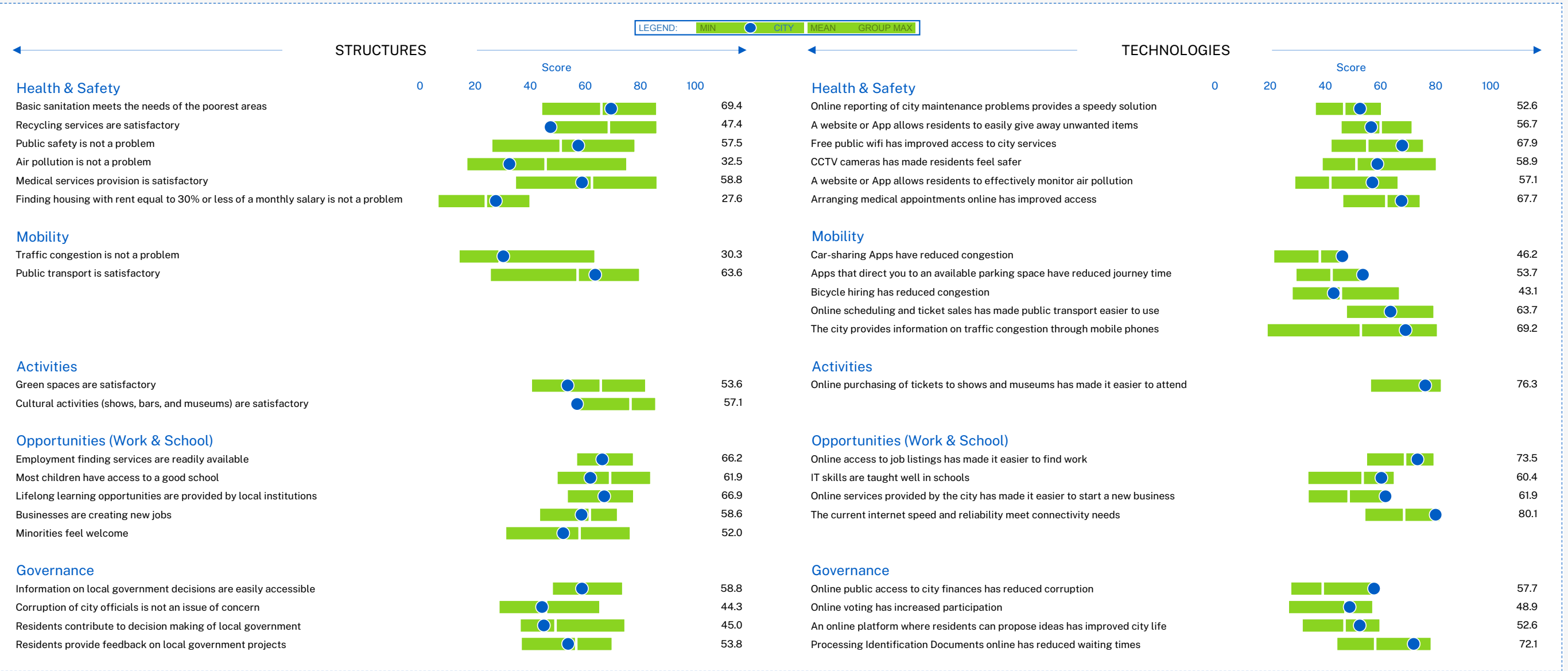
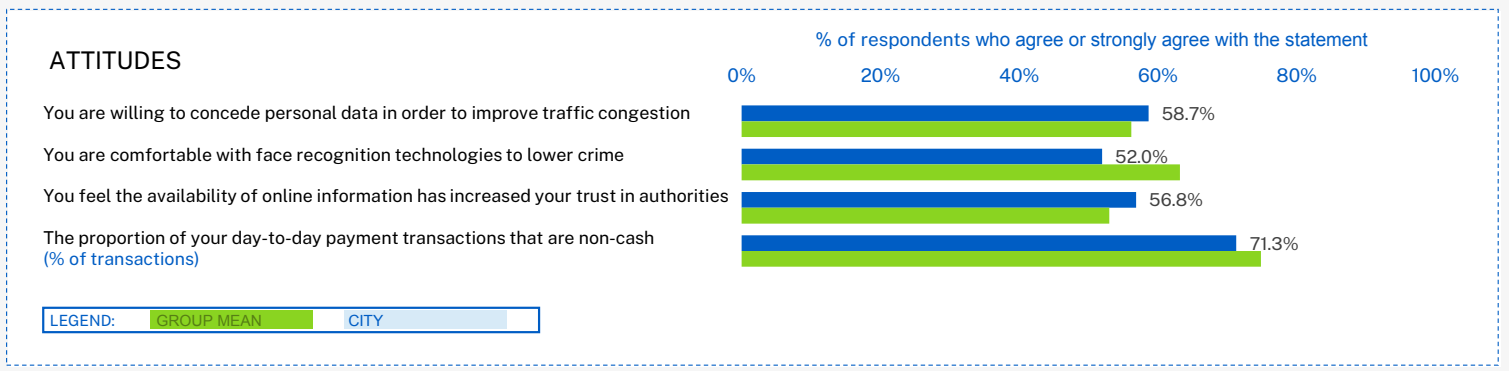
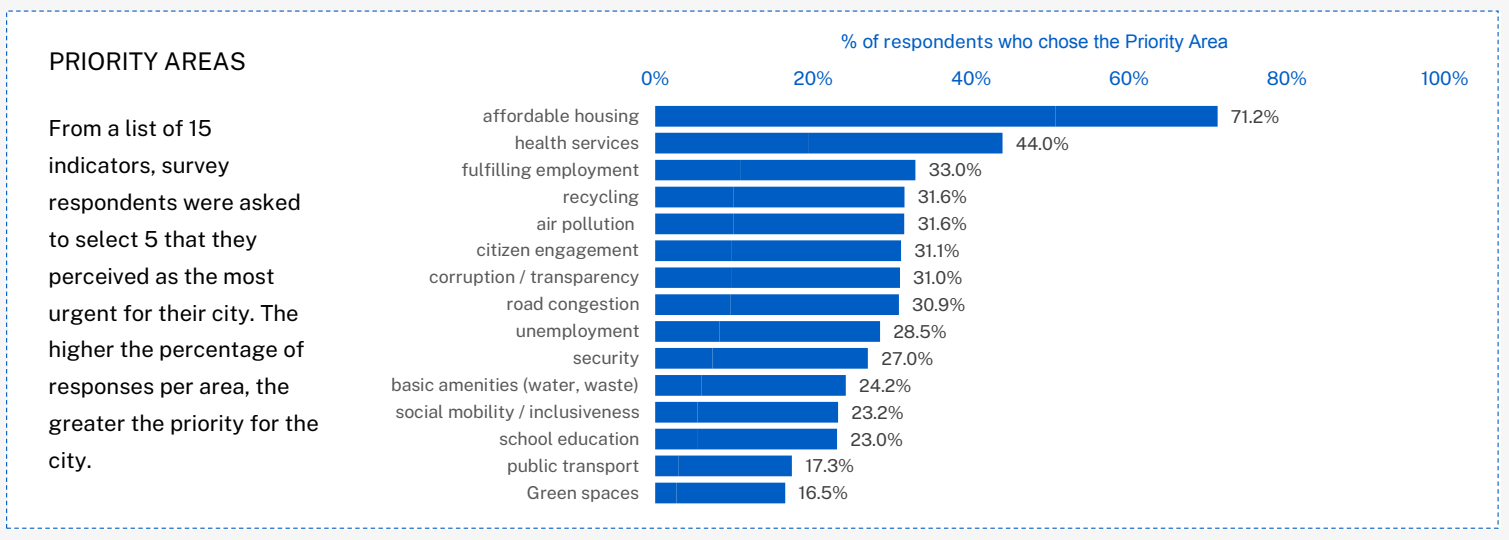
Population 7,550,000
 (UN World Urbanization Prospects)

HDI 0.949
 (Global Data Lab)



Country
 Hong Kong

	2019	2020	2021	2022	1 yr change
HDI	0.953	0.955	0.959	0.956	-0.003
Life expectancy at birth	85.3	85.2	85.5	84.3	-1.2
Expected years of schooling	17.3	17.8	17.7	17.8	+0.1
Mean years of schooling	12.2	12.3	12.3	12.3	+0.0
GNI per capita (PPP \$)	63,277	59,537	64,151	62,486	-1,665



Hyderabad

SMART CITY RANKING

111

Out of 142



116 in 2023
Out of 141

SMART CITY RATING

CC

CC in 2023

FACTOR RATINGS

CC

STRUCTURES

CC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 10,000,000
(UN World Urbanization Prospects)

HDI 0.647
(Global Data Lab)



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

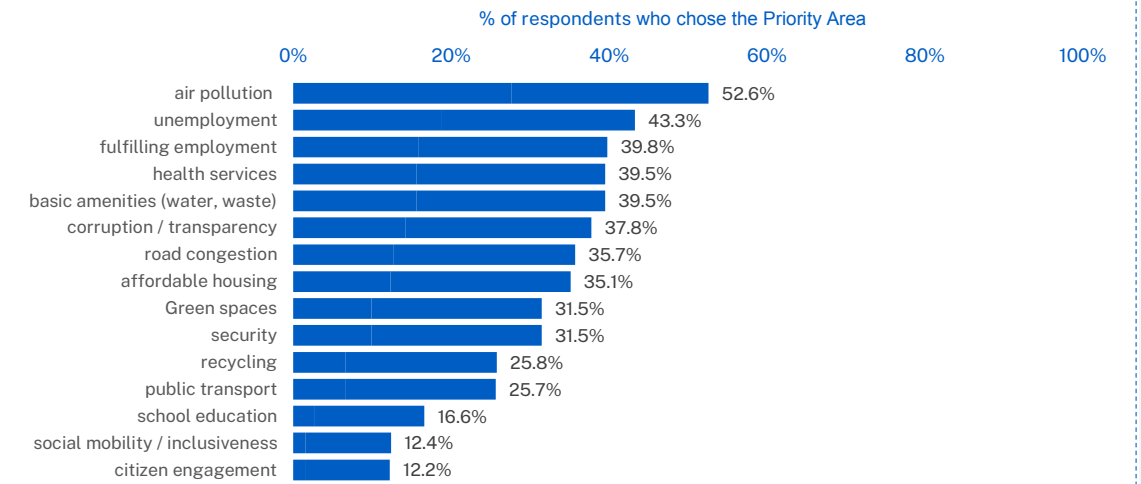
Country

India

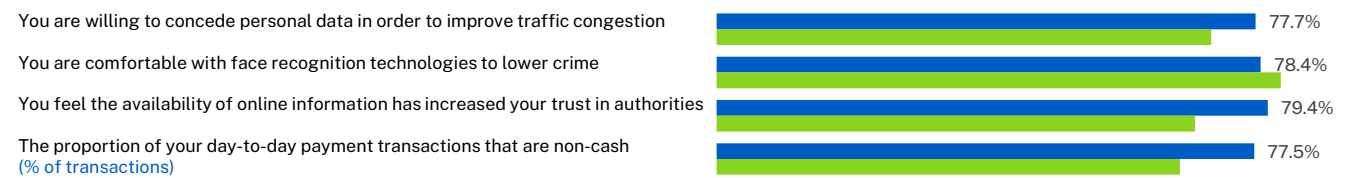
	2019	2020	2021	2022	1 yr change
HDI	0.638	0.638	0.633	0.644	+0.011
Life expectancy at birth	70.9	70.2	67.2	67.7	+0.5
Expected years of schooling	11.4	11.7	12.0	12.6	+0.6
Mean years of schooling	6.3	6.5	6.5	6.6	+0.0
GNI per capita (PPP \$)	6,554	6,090	6,542	6,951	+408

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

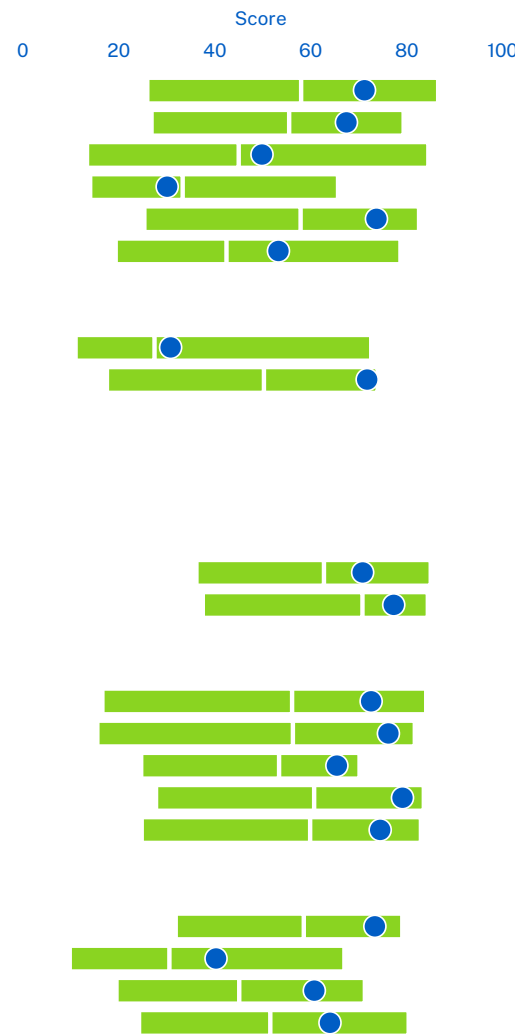
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

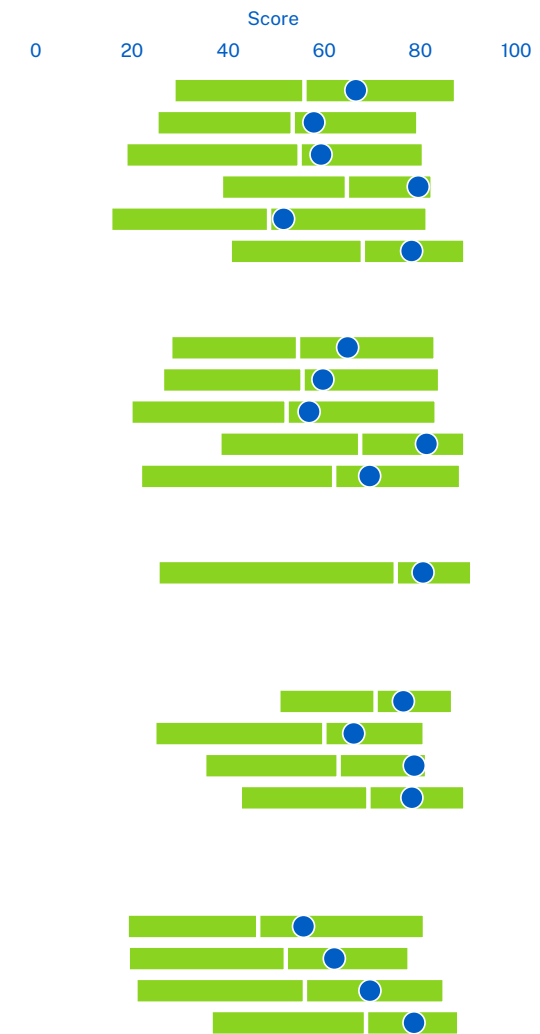
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Islamabad

SMART CITY RANKING

116

Out of 142

▲

120 in 2023
Out of 141

SMART CITY RATING

CC

CC in 2023

FACTOR RATINGS

CC

STRUCTURES

CC

TECHNOLOGIES

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,010,000
(UN Data)

HDI 0.659
(Global Data Lab)



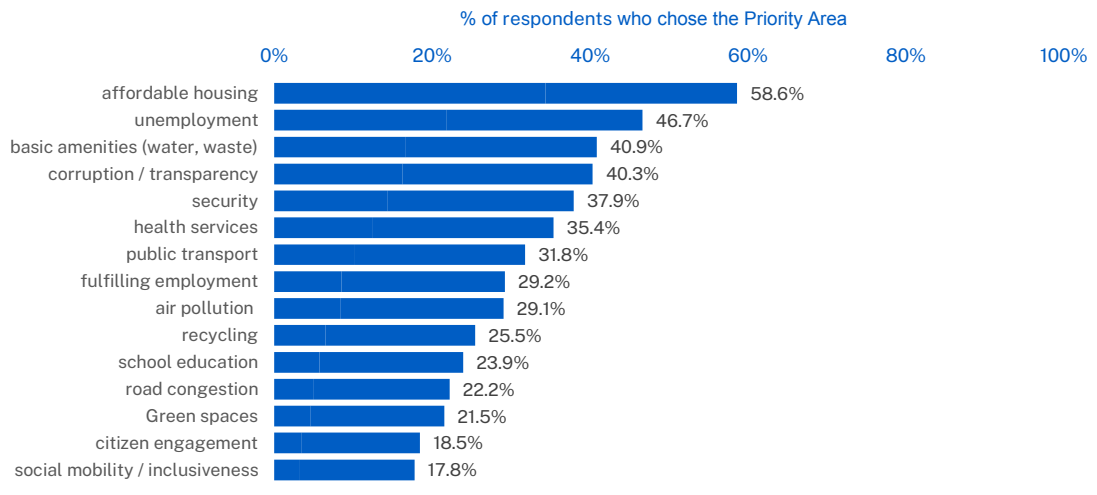
Country

Pakistan

	2019	2020	2021	2022	1 yr change
HDI	0.537	0.536	0.537	0.540	+0.003
Life expectancy at birth	66.8	66.3	66.1	66.4	+0.3
Expected years of schooling	7.6	7.9	7.9	7.9	+0.0
Mean years of schooling	4.5	4.4	4.4	4.4	+0.0
GNI per capita (PPP \$)	5,067	4,912	5,165	5,374	+209

PRIORITY AREAS

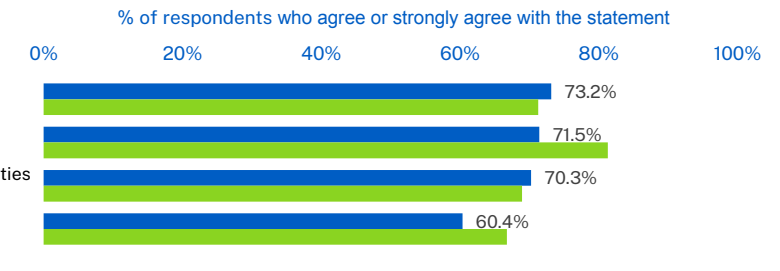
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	58.6%
unemployment	46.7%
basic amenities (water, waste)	40.9%
corruption / transparency	40.3%
security	37.9%
health services	35.4%
public transport	31.8%
fulfilling employment	29.2%
air pollution	29.1%
recycling	25.5%
school education	23.9%
road congestion	22.2%
Green spaces	21.5%
citizen engagement	18.5%
social mobility / inclusiveness	17.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	73.2%
You are comfortable with face recognition technologies to lower crime	71.5%
You feel the availability of online information has increased your trust in authorities	70.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	60.4%

LEGEND: ■ GROUP MEAN ■ CITY

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 61.1
- Recycling services are satisfactory: 57.8
- Public safety is not a problem: 39.9
- Air pollution is not a problem: 40.5
- Medical services provision is satisfactory: 62.5
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 37.3

Mobility

- Traffic congestion is not a problem: 43.6
- Public transport is satisfactory: 62.6

Activities

- Green spaces are satisfactory: 79.1
- Cultural activities (shows, bars, and museums) are satisfactory: 74.1

Opportunities (Work & School)

- Employment finding services are readily available: 54.5
- Most children have access to a good school: 65.2
- Lifelong learning opportunities are provided by local institutions: 57.0
- Businesses are creating new jobs: 65.8
- Minorities feel welcome: 65.6

Governance

- Information on local government decisions are easily accessible: 58.1
- Corruption of city officials is not an issue of concern: 36.1
- Residents contribute to decision making of local government: 45.4
- Residents provide feedback on local government projects: 49.3

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 61.4
- A website or App allows residents to easily give away unwanted items: 51.4
- Free public wifi has improved access to city services: 49.0
- CCTV cameras has made residents feel safer: 71.5
- A website or App allows residents to effectively monitor air pollution: 52.9
- Arranging medical appointments online has improved access: 70.7

Mobility

- Car-sharing Apps have reduced congestion: 63.6
- Apps that direct you to an available parking space have reduced journey time: 60.2
- Bicycle hiring has reduced congestion: 51.7
- Online scheduling and ticket sales has made public transport easier to use: 75.4
- The city provides information on traffic congestion through mobile phones: 69.6

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 69.0

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 72.9
- IT skills are taught well in schools: 64.0
- Online services provided by the city has made it easier to start a new business: 65.6
- The current internet speed and reliability meet connectivity needs: 74.1

Governance

- Online public access to city finances has reduced corruption: 55.0
- Online voting has increased participation: 55.7
- An online platform where residents can propose ideas has improved city life: 61.7
- Processing Identification Documents online has reduced waiting times: 77.0

Istanbul

SMART CITY RANKING
110
Out of 142



107 in 2023
Out of 141

SMART CITY RATING
CC

CC

CC in 2023

FACTOR RATINGS

C

STRUCTURES

CC

TECHNOLOGIES

GROUP

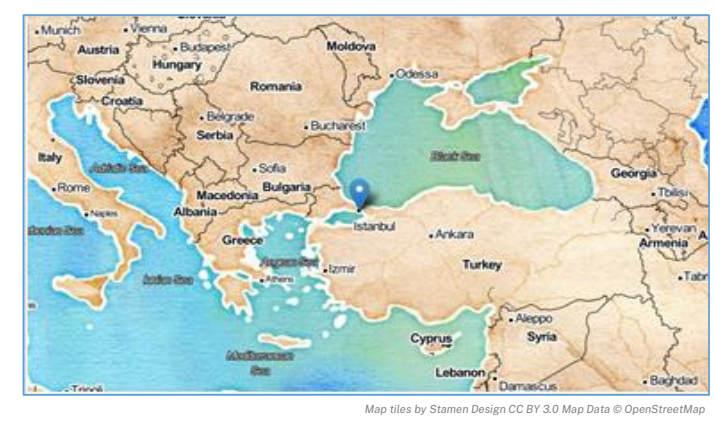
3

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 15,190,000
(UN World Urbanization Prospects)

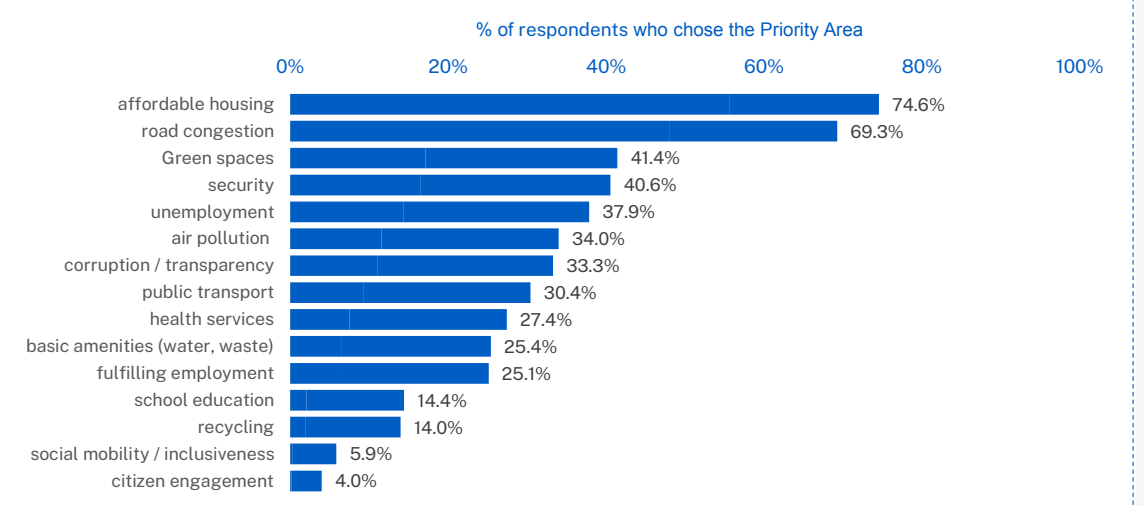
HDI 0.867
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Turkey	0.842	0.835	0.841	0.855	+0.014
HDI	0.842	0.835	0.841	0.855	+0.014
Life expectancy at birth	77.8	75.9	76.0	78.5	+2.4
Expected years of schooling	19.2	19.3	19.7	19.7	+0.0
Mean years of schooling	8.6	8.8	8.8	8.8	+0.0
GNI per capita (PPP \$)	27,950	28,381	31,310	32,834	+1,524

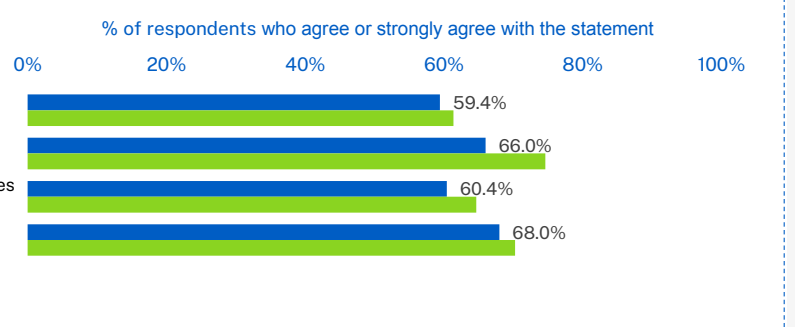
PRIORITY AREAS

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.

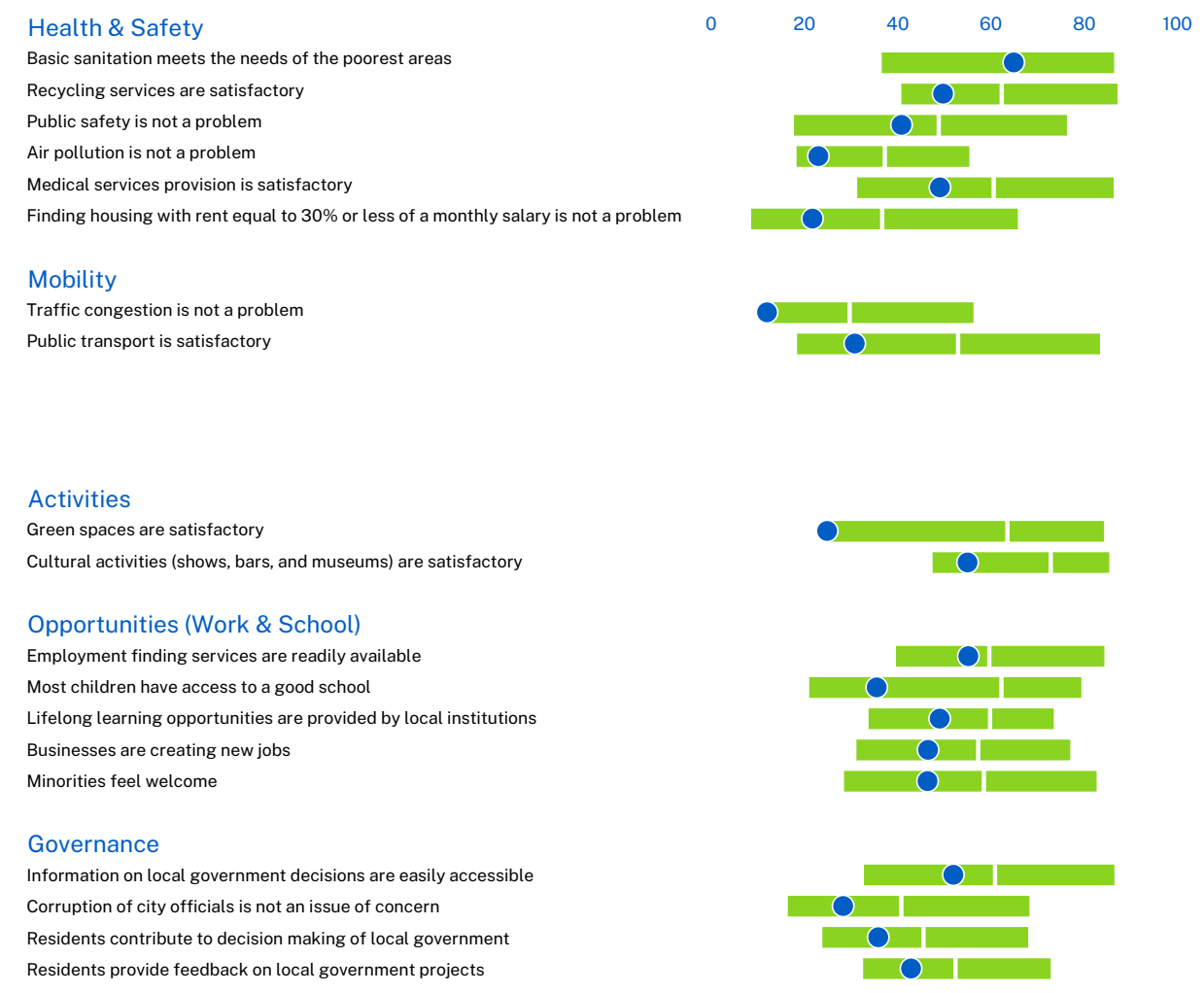


ATTITUDES

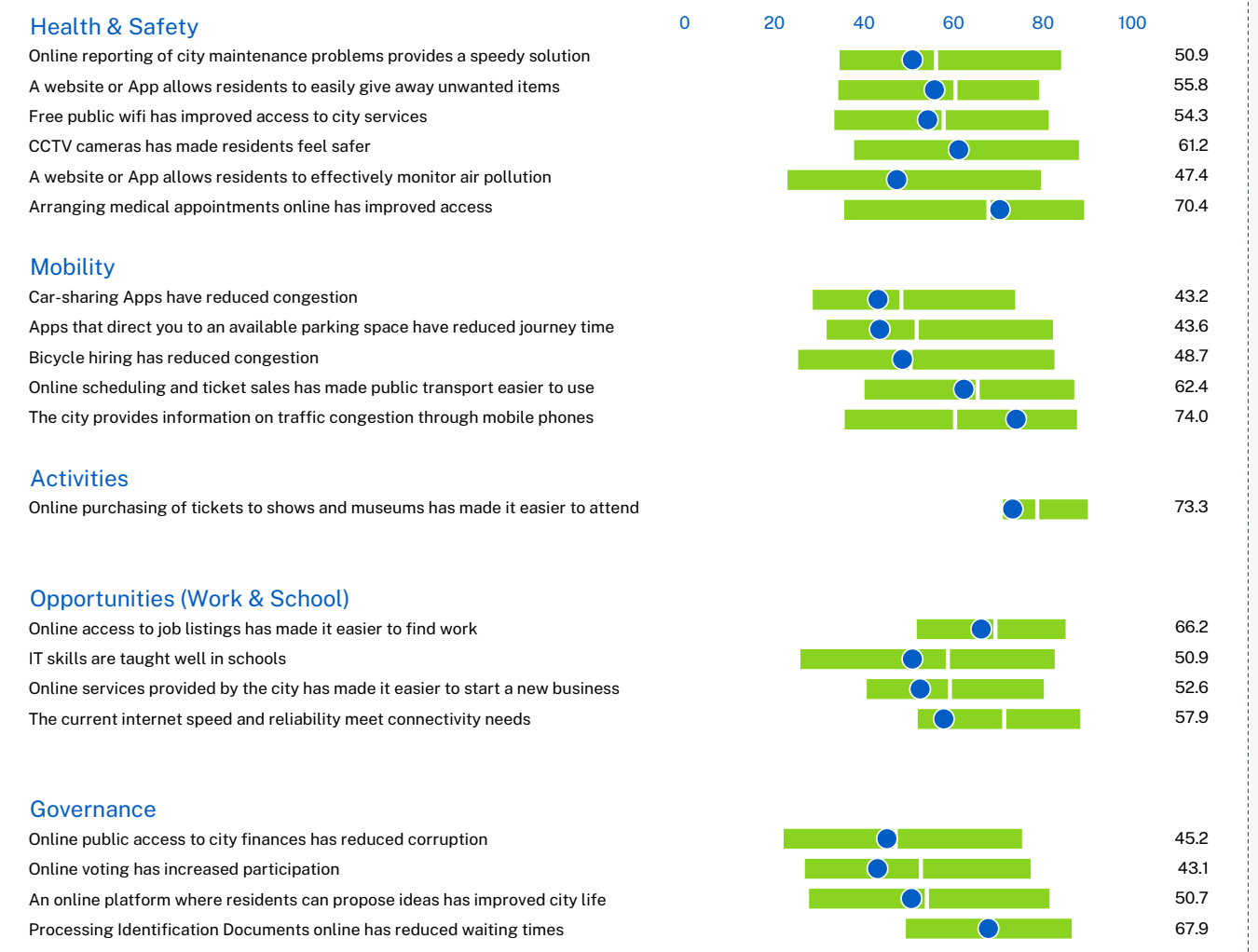
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Jakarta

SMART CITY RANKING
103
 Out of 142

▼

102 in 2023
 Out of 141

SMART CITY RATING
CC
 CC in 2023

FACTOR RATINGS
CC
 STRUCTURES

TECHNOLOGIES
CCC

GROUP
4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

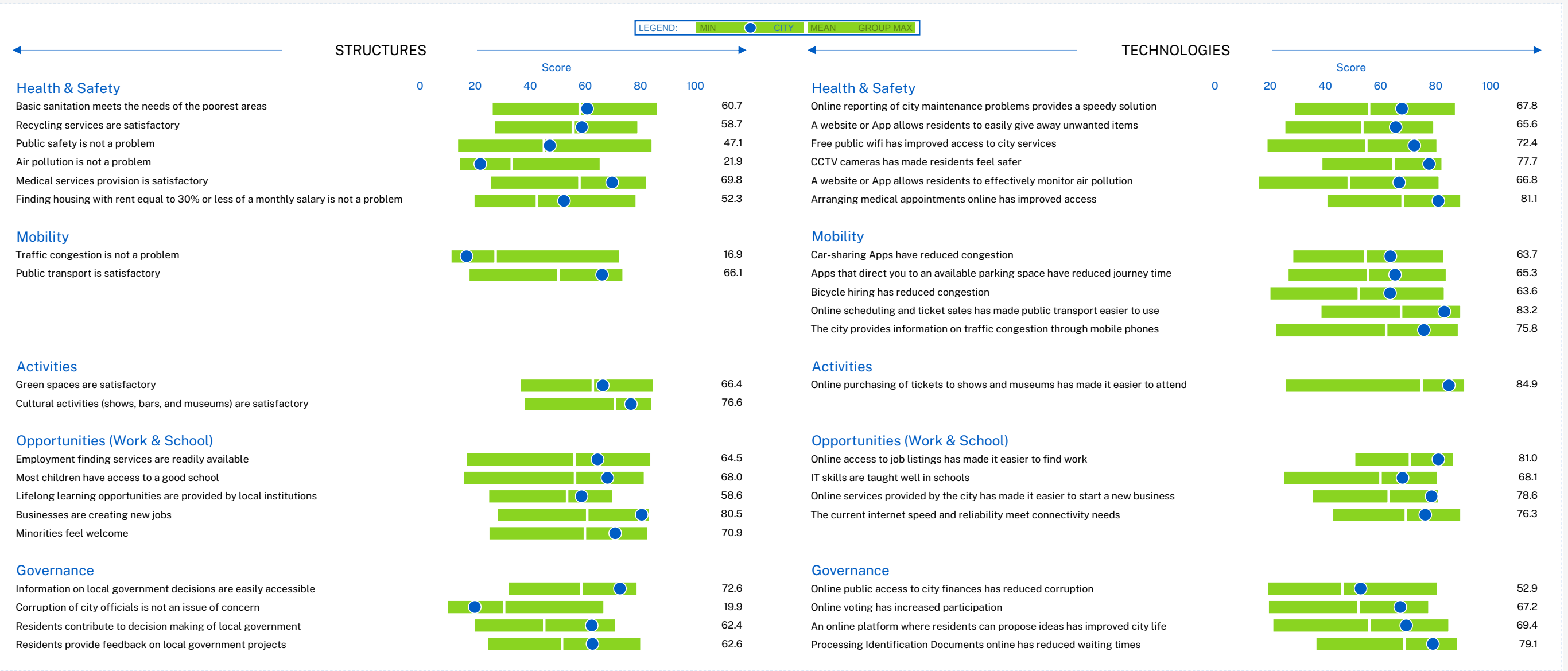
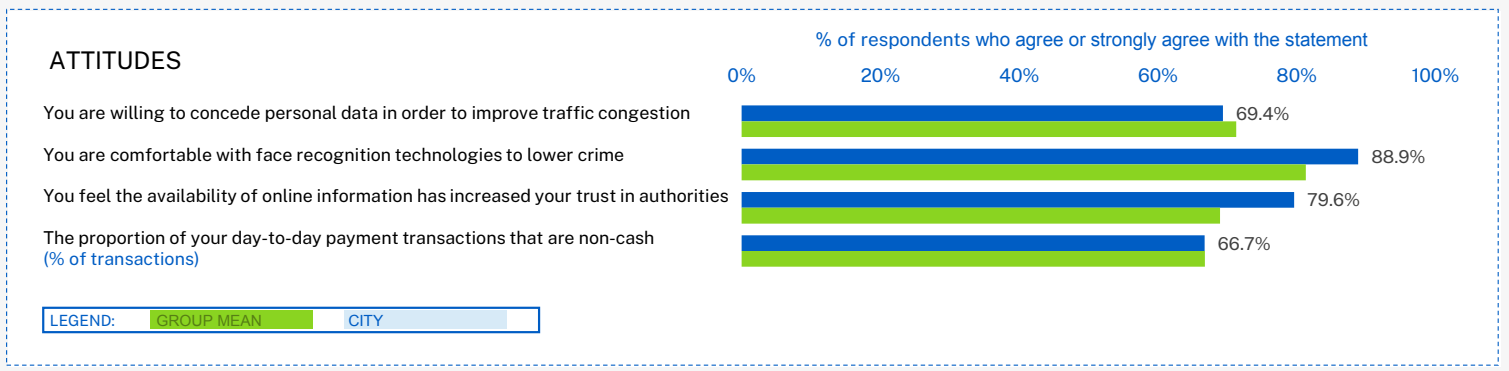
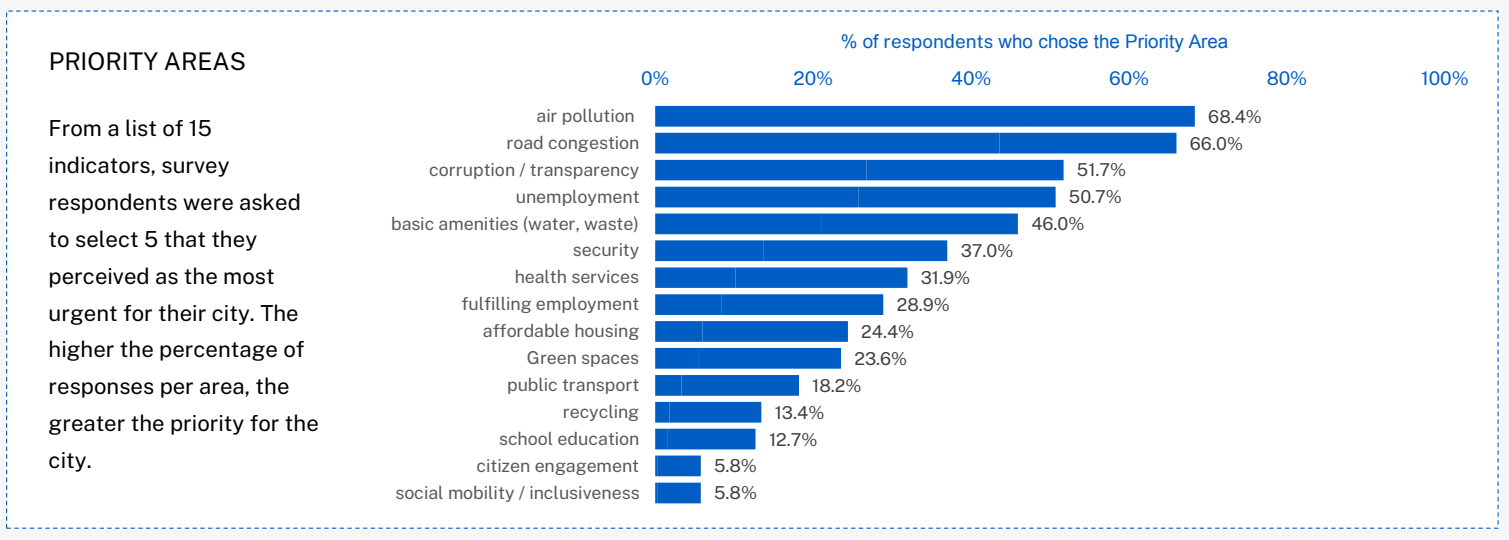
Population 10,770,000
 (UN World Urbanization Prospects)

HDI 0.759
 (Global Data Lab)



Country
 Indonesia

	2019	2020	2021	2022	1 yr change
HDI	0.718	0.712	0.707	0.713	+0.006
Life expectancy at birth	70.5	68.8	67.6	68.3	+0.7
Expected years of schooling	13.9	14.0	14.0	14.0	+0.0
Mean years of schooling	8.4	8.6	8.6	8.6	+0.0
GNI per capita (PPP \$)	11,498	11,206	11,531	12,046	+514



Jeddah

SMART CITY RANKING
55
Out of 142



56 in 2023
Out of 141

SMART CITY RATING
B



B in 2023

FACTOR RATINGS



STRUCTURES



TECHNOLOGIES

GROUP



All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 4,780,000
(UN World Urbanization Prospects)

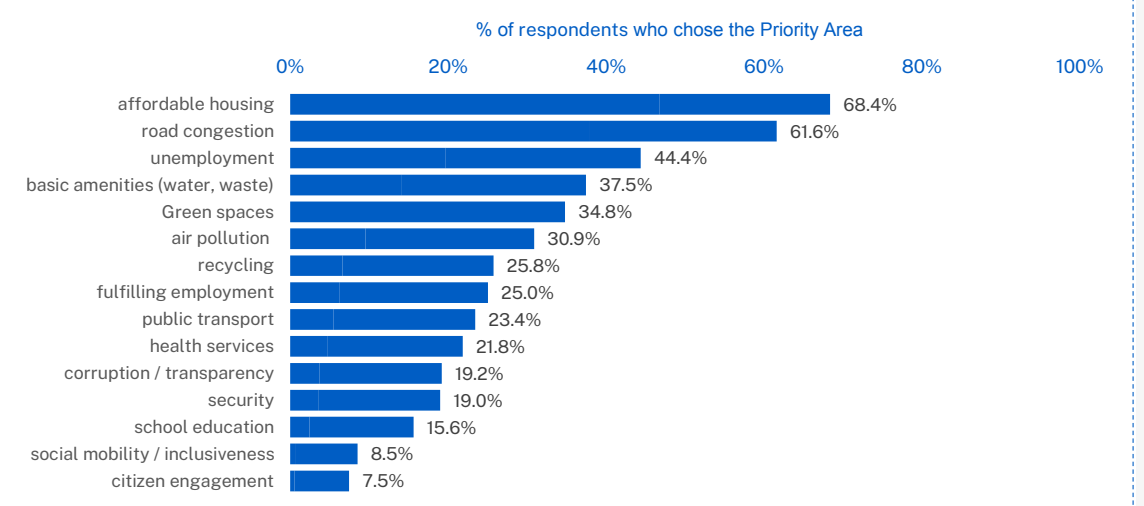
HDI 0.871
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Saudi Arabia					
HDI	0.862	0.861	0.867	0.875	+0.008
Life expectancy at birth	77.3	76.2	76.9	77.9	+1.0
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	10.9	11.3	11.3	11.3	+0.0
GNI per capita (PPP \$)	47,529	45,563	47,441	50,620	+3,179

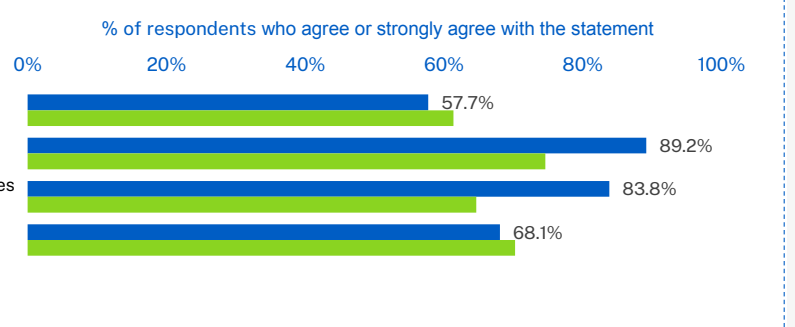
PRIORITY AREAS

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.

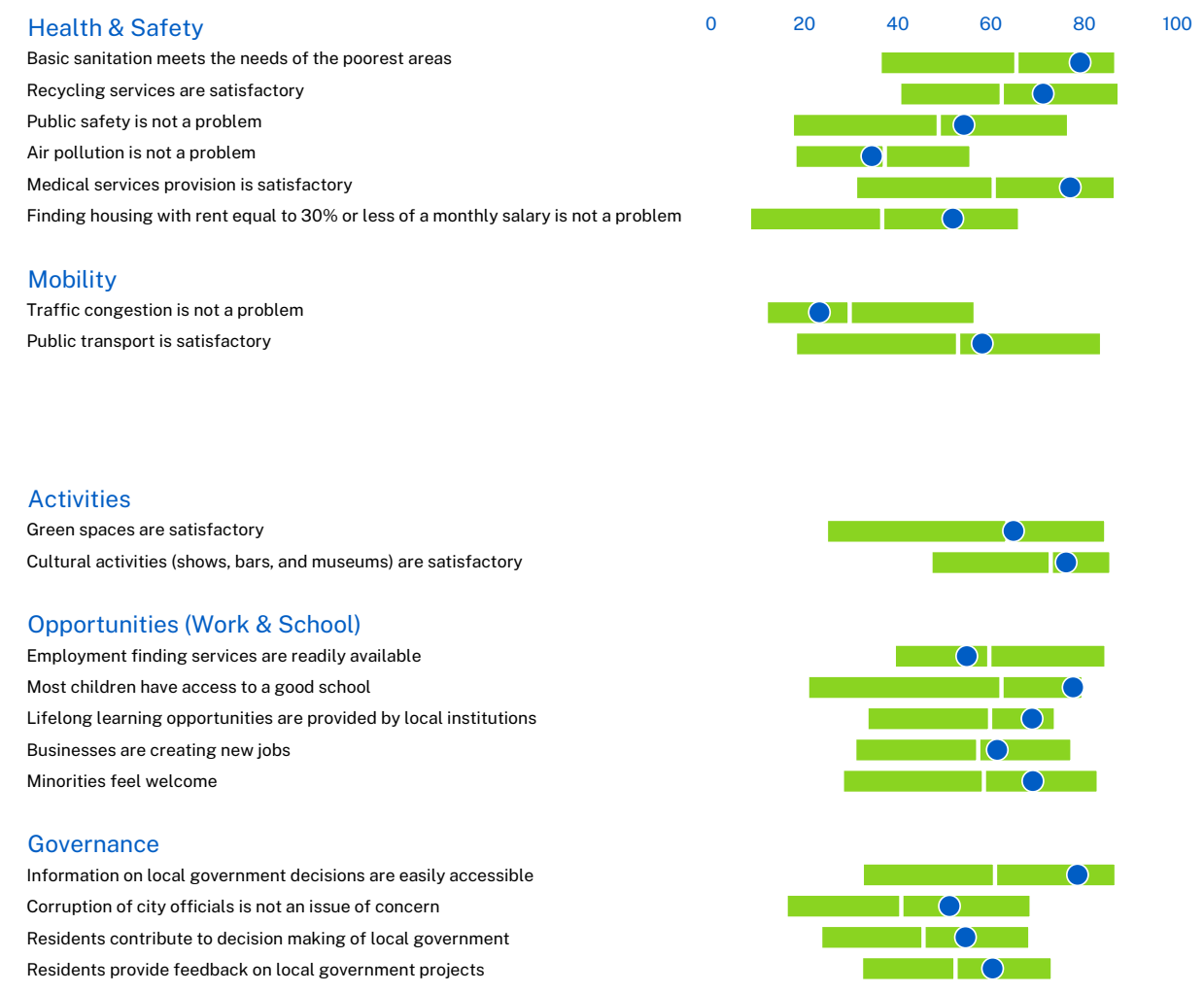


ATTITUDES

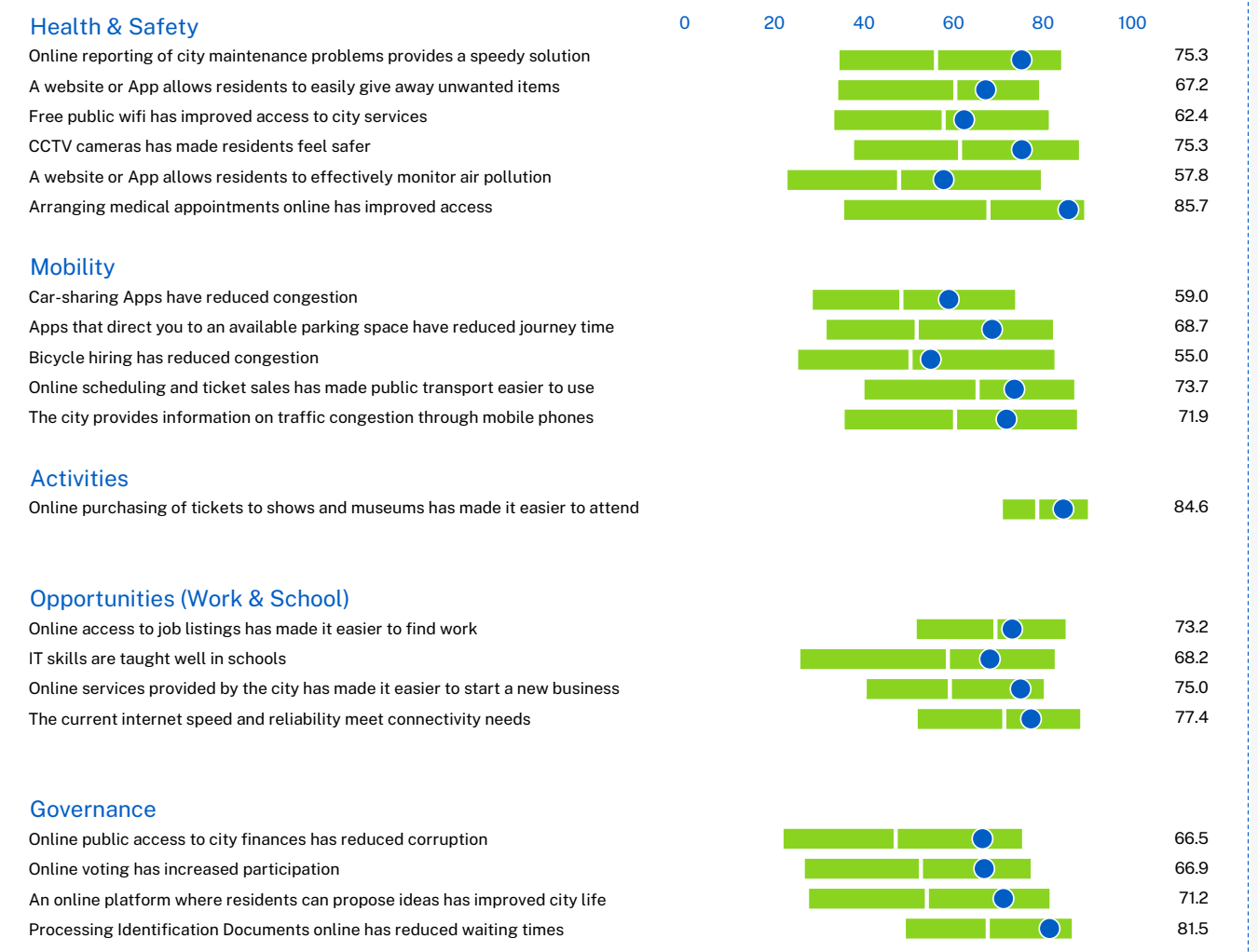
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



SMART CITY RANKING

79

Out of 142



81 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BBB

STRUCTURES

CCC

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 250,000
(Eurostat)

HDI 0.921
(Global Data Lab)



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

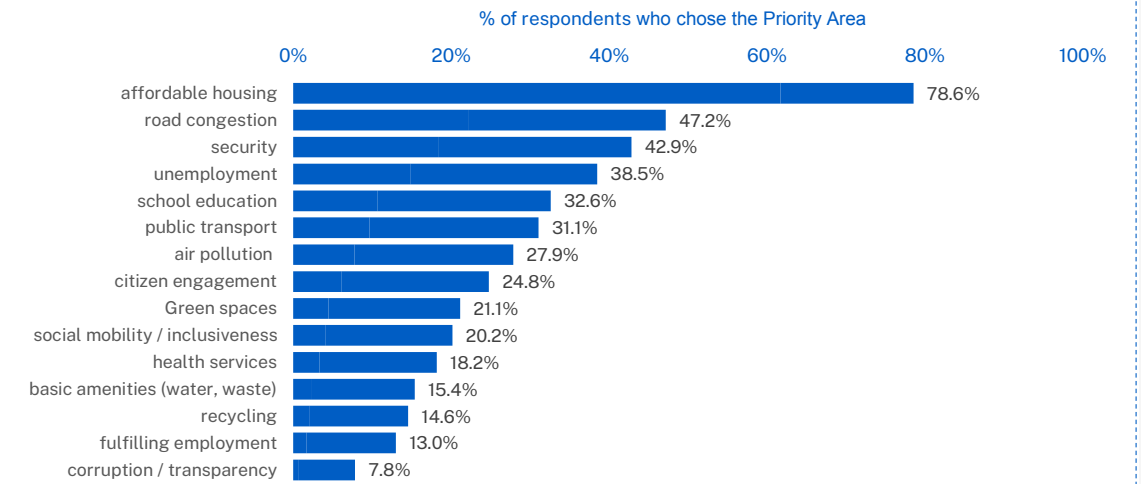
Country

Germany

	2019	2020	2021	2022	1 yr change
HDI	0.951	0.948	0.948	0.950	+0.002
Life expectancy at birth	81.6	81.1	80.6	81.0	+0.4
Expected years of schooling	17.2	17.2	17.3	17.3	+0.0
Mean years of schooling	14.2	14.3	14.3	14.3	+0.0
GNI per capita (PPP \$)	55,685	53,375	55,057	55,340	+284

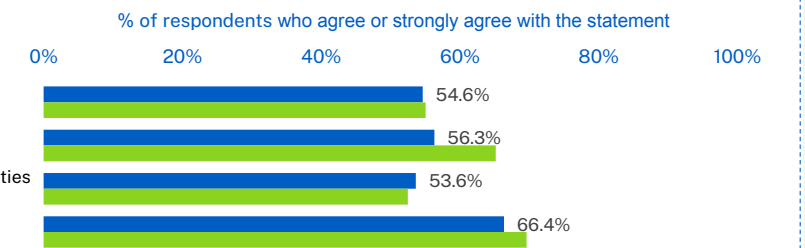
PRIORITY AREAS

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

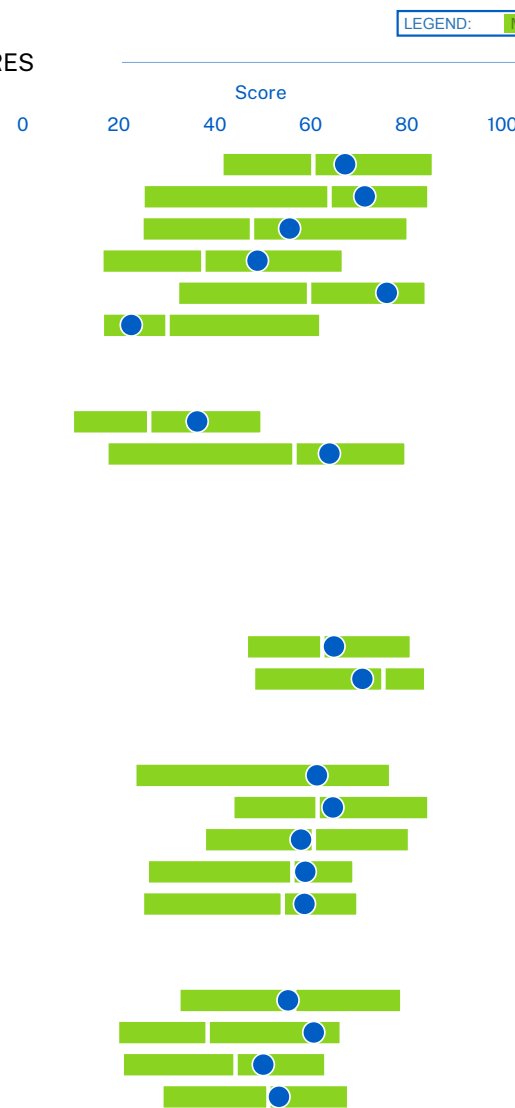
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

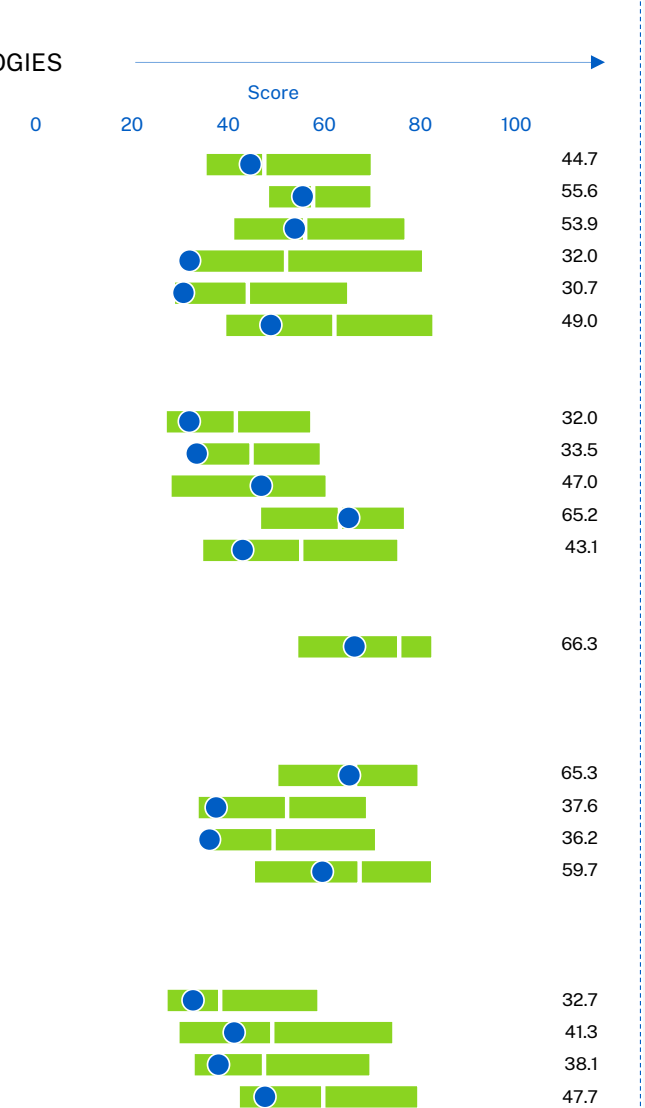
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Krakow

SMART CITY RANKING
76
 Out of 142

▲

79 in 2023
 Out of 141

SMART CITY RATING

CCC
 CCC in 2023

FACTOR RATINGS

CCC
 STRUCTURES

CC
 TECHNOLOGIES

GROUP
3

All ratings range from AAA to D

BACKGROUND INFORMATION

City
 Population 770,000
 (UN World Urbanization Prospects)

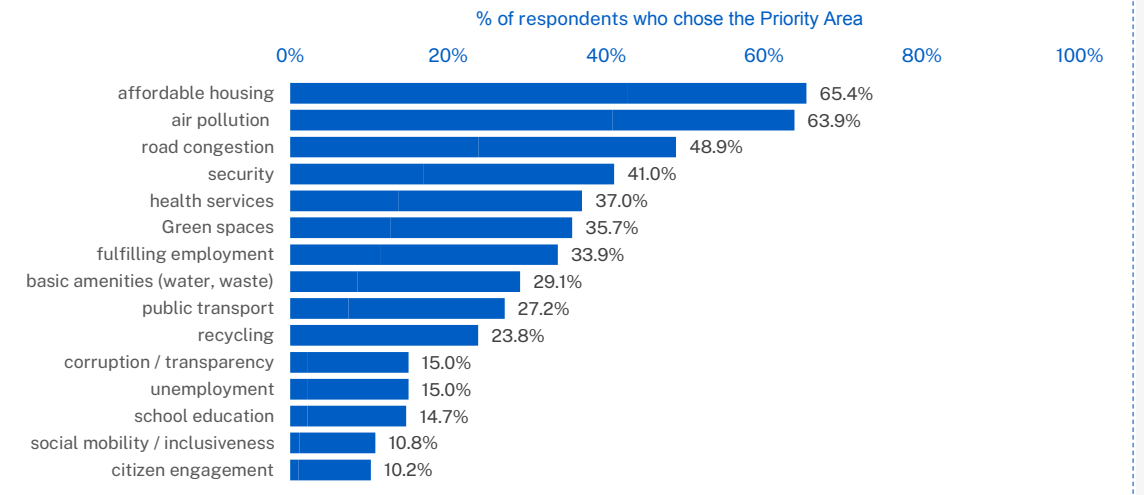
HDI 0.888
 (Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Poland					
HDI	0.880	0.874	0.876	0.881	+0.005
Life expectancy at birth	77.9	76.9	76.5	77.0	+0.5
Expected years of schooling	15.9	15.8	15.9	15.9	+0.0
Mean years of schooling	13.1	13.2	13.2	13.2	+0.0
GNI per capita (PPP \$)	31,772	31,293	33,264	35,151	+1,887

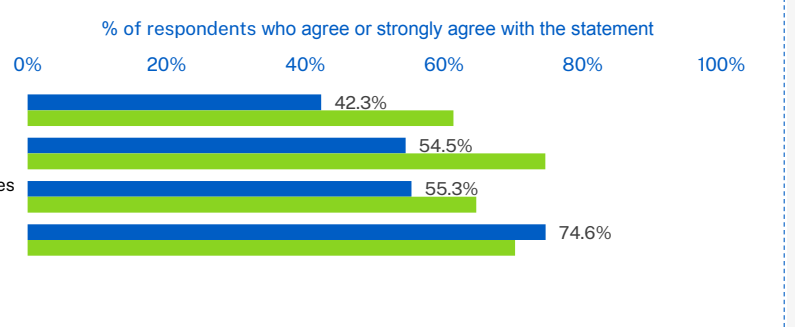
PRIORITY AREAS

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.

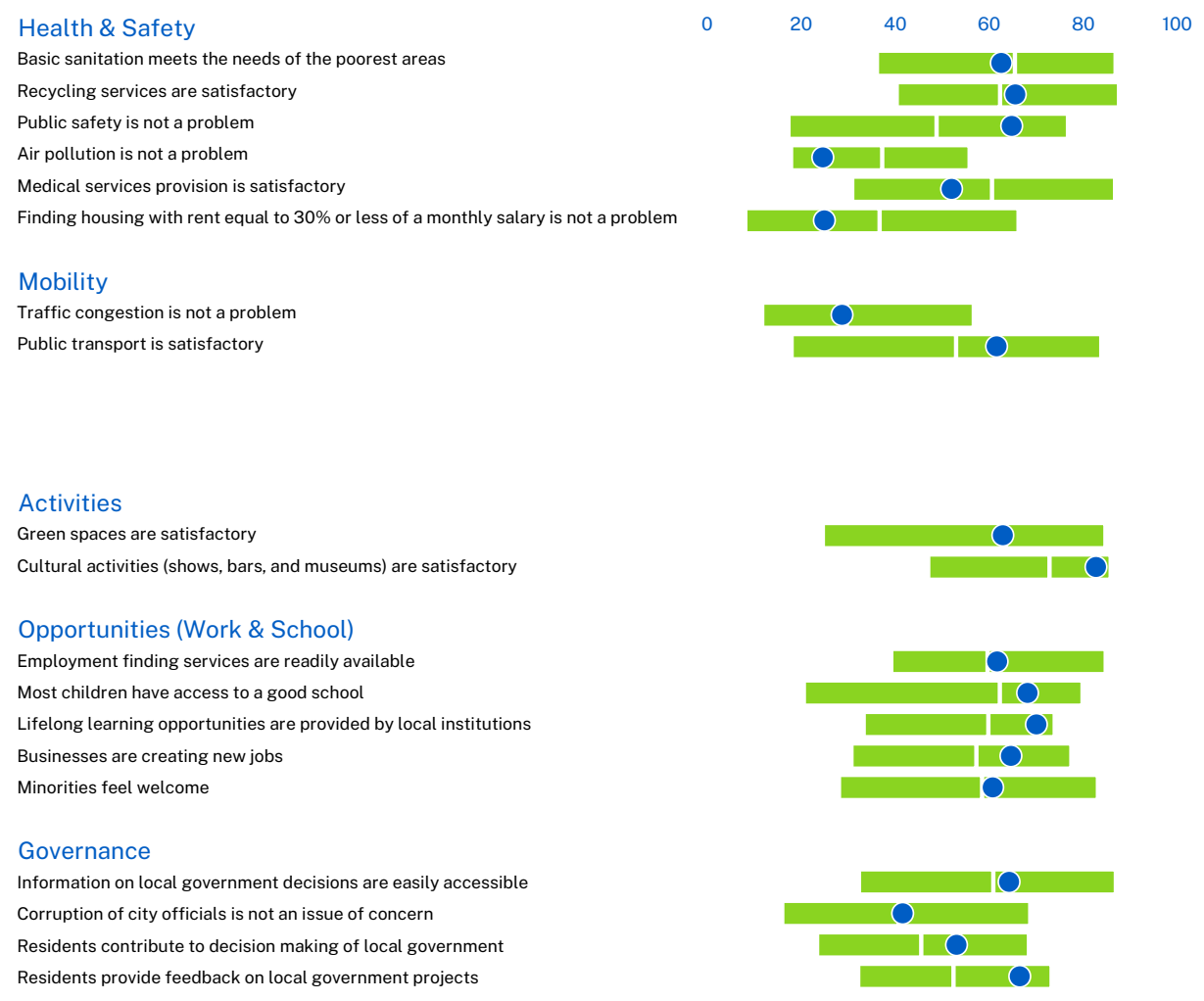


ATTITUDES

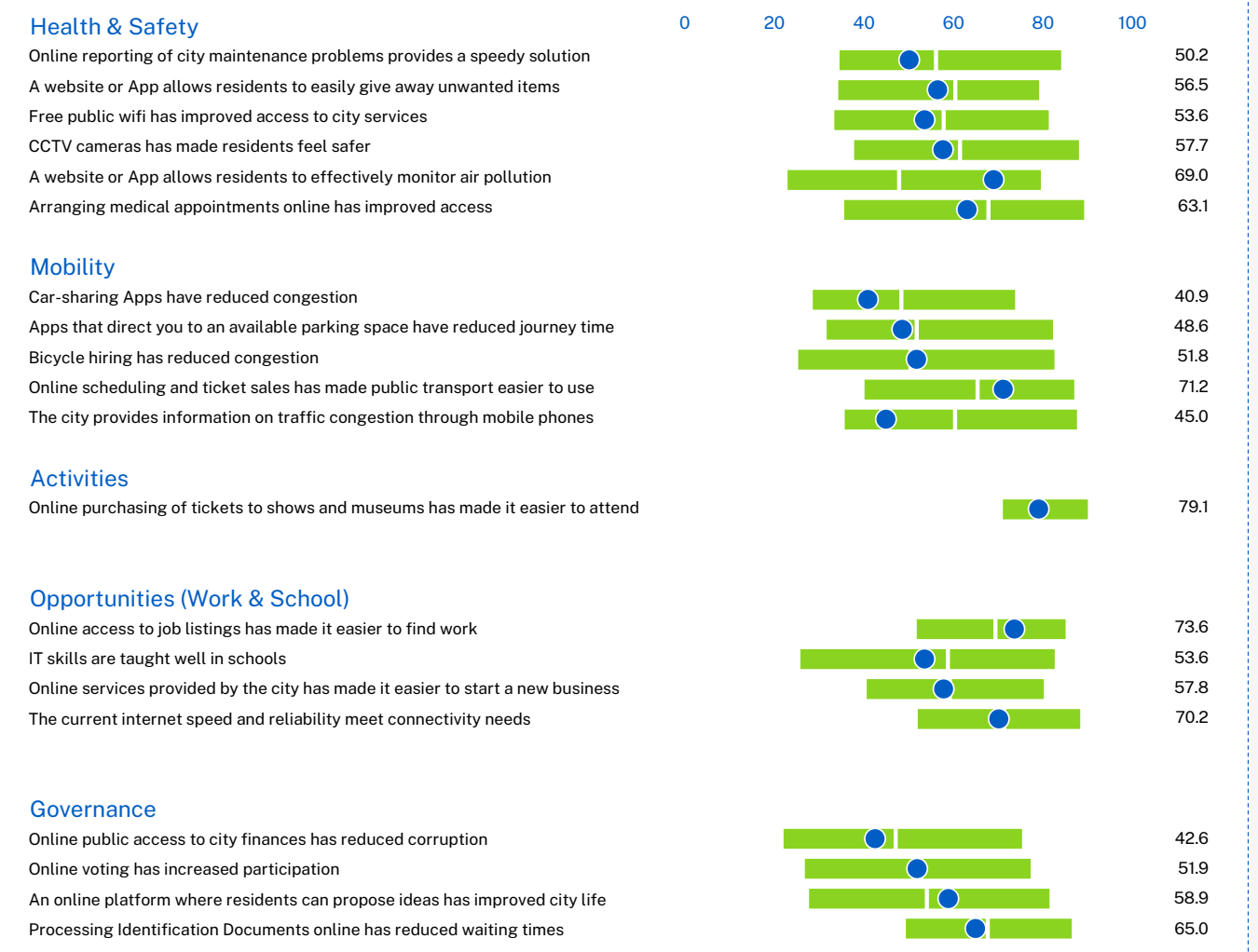
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Kuala Lumpur

SMART CITY RANKING

73

Out of 142



89 in 2023
Out of 141

SMART CITY RATING

B

CCC in 2023

FACTOR RATINGS

B

STRUCTURES

CCC

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,850,000
(UN Data)

HDI 0.858
(Global Data Lab)



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

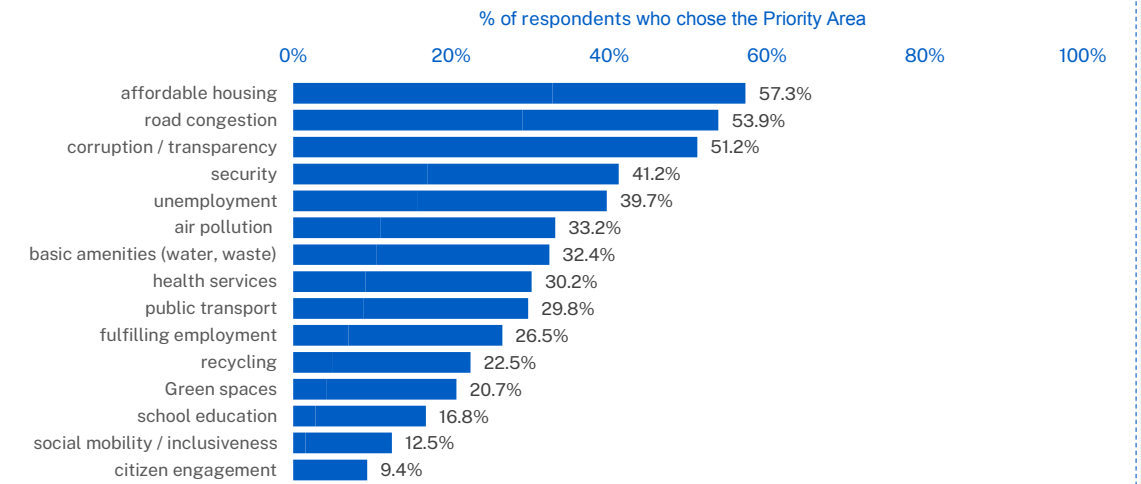
Country

Malaysia

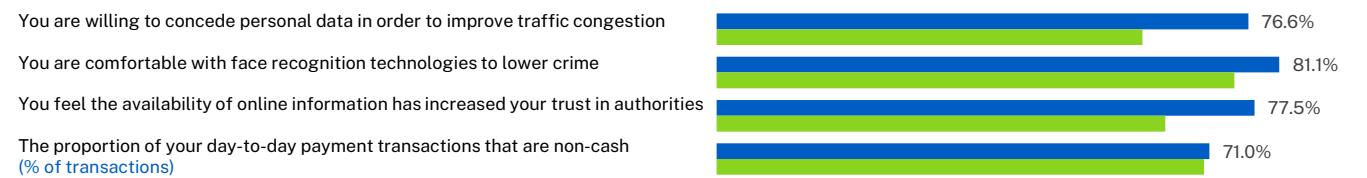
	2019	2020	2021	2022	1 yr change
HDI	0.805	0.802	0.798	0.807	+0.009
Life expectancy at birth	75.8	75.9	74.9	76.3	+1.4
Expected years of schooling	13.1	13.0	12.9	12.9	+0.0
Mean years of schooling	10.6	10.7	10.7	10.7	+0.0
GNI per capita (PPP \$)	26,951	25,314	25,619	27,295	+1,676

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

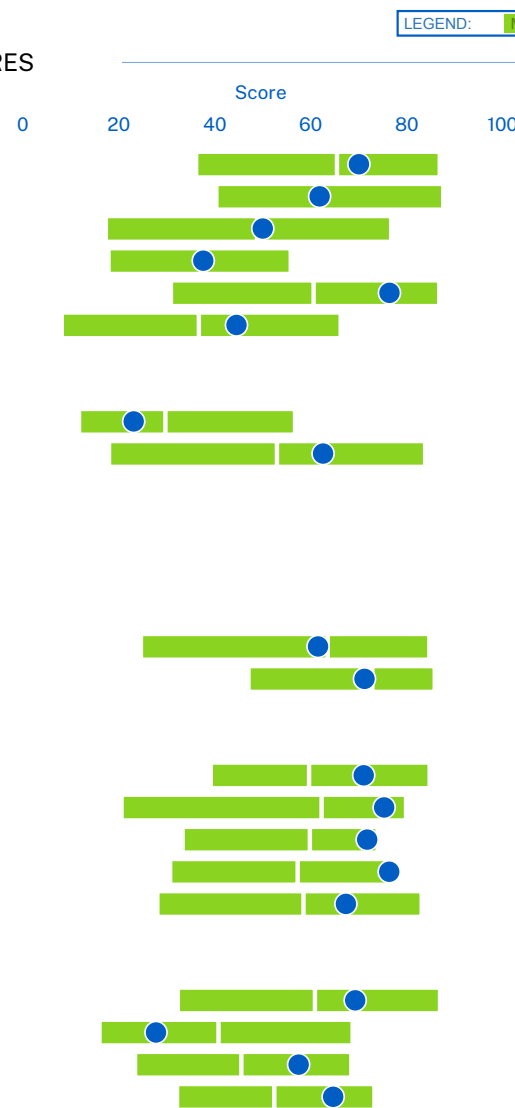
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

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

Opportunities (Work & School)

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

Governance

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



Lagos

SMART CITY RANKING

136

Out of 142

▼

132 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

D

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 14,370,000
(UN World Urbanization Prospects)

HDI 0.681
(Global Data Lab)



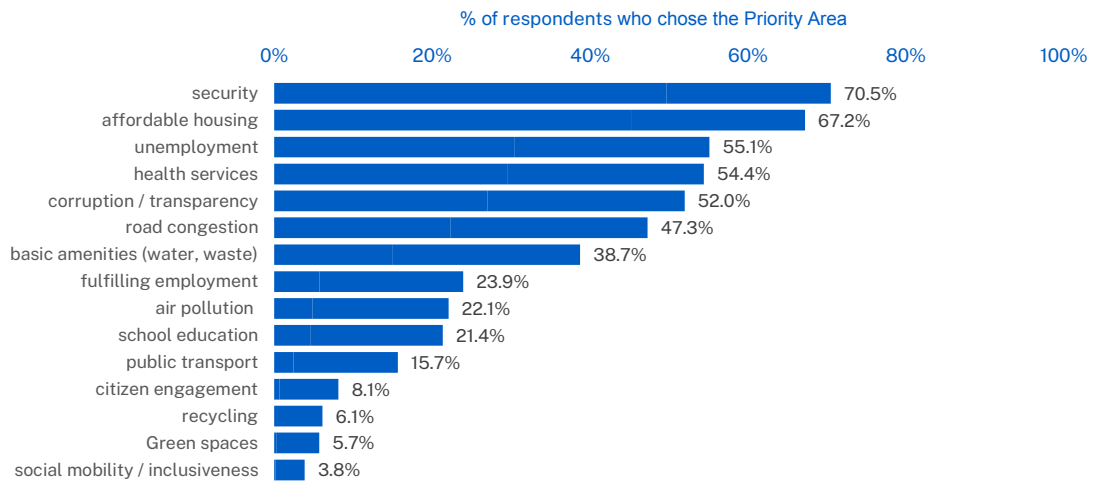
Country

Nigeria

	2019	2020	2021	2022	1 yr change
HDI	0.537	0.539	0.542	0.548	+0.006
Life expectancy at birth	52.9	52.9	52.7	53.6	+1.0
Expected years of schooling	10.1	10.3	10.5	10.5	+0.0
Mean years of schooling	7.2	7.4	7.6	7.6	+0.0
GNI per capita (PPP \$)	4,914	4,685	4,716	4,755	+39

PRIORITY AREAS

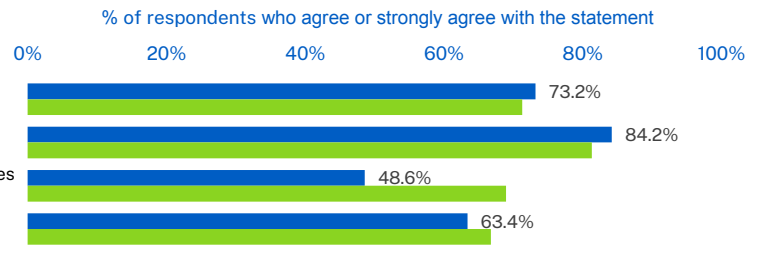
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
security	70.5%
affordable housing	67.2%
unemployment	55.1%
health services	54.4%
corruption / transparency	52.0%
road congestion	47.3%
basic amenities (water, waste)	38.7%
fulfilling employment	23.9%
air pollution	22.1%
school education	21.4%
public transport	15.7%
citizen engagement	8.1%
recycling	6.1%
Green spaces	5.7%
social mobility / inclusiveness	3.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	73.2%	68.0%
You are comfortable with face recognition technologies to lower crime	84.2%	78.0%
You feel the availability of online information has increased your trust in authorities	48.6%	55.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	63.4%	55.0%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 42.1
- Recycling services are satisfactory: 48.3
- Public safety is not a problem: 30.2
- Air pollution is not a problem: 18.8
- Medical services provision is satisfactory: 45.0
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 21.4

Mobility

- Traffic congestion is not a problem: 11.3
- Public transport is satisfactory: 30.7

Activities

- Green spaces are satisfactory: 43.3
- Cultural activities (shows, bars, and museums) are satisfactory: 70.8

Opportunities (Work & School)

- Employment finding services are readily available: 38.0
- Most children have access to a good school: 39.5
- Lifelong learning opportunities are provided by local institutions: 32.8
- Businesses are creating new jobs: 59.3
- Minorities feel welcome: 44.9

Governance

- Information on local government decisions are easily accessible: 39.7
- Corruption of city officials is not an issue of concern: 13.8
- Residents contribute to decision making of local government: 20.8
- Residents provide feedback on local government projects: 32.2

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 43.5
- A website or App allows residents to easily give away unwanted items: 40.0
- Free public wifi has improved access to city services: 32.9
- CCTV cameras has made residents feel safer: 44.0
- A website or App allows residents to effectively monitor air pollution: 23.2
- Arranging medical appointments online has improved access: 51.7

Mobility

- Car-sharing Apps have reduced congestion: 42.0
- Apps that direct you to an available parking space have reduced journey time: 36.8
- Bicycle hiring has reduced congestion: 24.3
- Online scheduling and ticket sales has made public transport easier to use: 57.0
- The city provides information on traffic congestion through mobile phones: 49.3

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 73.0

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 67.8
- IT skills are taught well in schools: 50.0
- Online services provided by the city has made it easier to start a new business: 51.5
- The current internet speed and reliability meet connectivity needs: 58.8

Governance

- Online public access to city finances has reduced corruption: 24.0
- Online voting has increased participation: 28.0
- An online platform where residents can propose ideas has improved city life: 37.3
- Processing Identification Documents online has reduced waiting times: 56.3

Lausanne

SMART CITY RANKING

7

Out of 142

5 in 2023
Out of 141

SMART CITY RATING

AA

AA in 2023

FACTOR RATINGS

AA

STRUCTURES

A

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 140,000
(Eurostat)

HDI 0.966
(Global Data Lab)

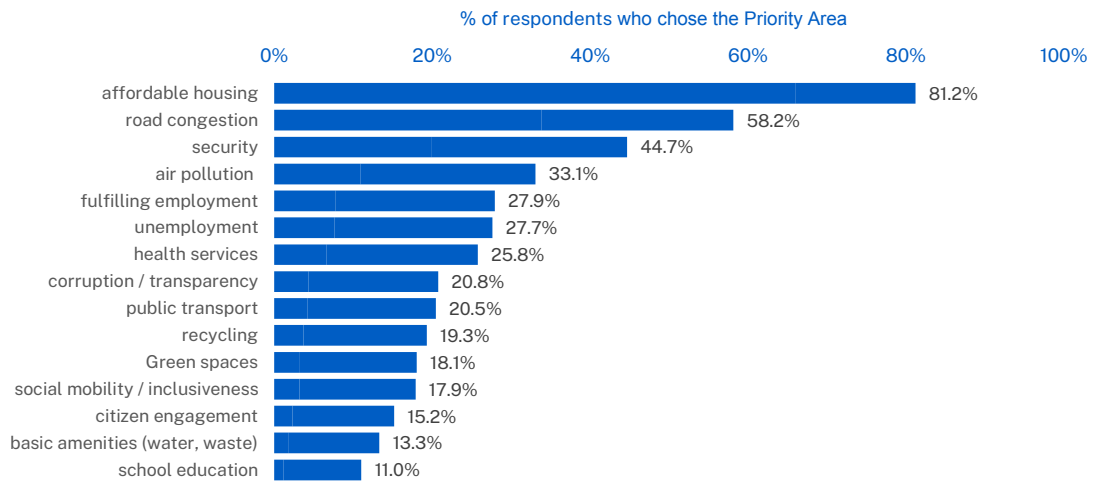


Country

Switzerland	2019	2020	2021	2022	1 yr change
HDI	0.960	0.957	0.965	0.967	+0.002
Life expectancy at birth	83.8	83.1	84.0	84.3	+0.3
Expected years of schooling	16.3	16.4	16.6	16.6	+0.0
Mean years of schooling	13.9	13.9	13.9	13.9	+0.0
GNI per capita (PPP \$)	67,531	66,267	68,550	69,433	+882

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.



Priority Area	% of respondents
affordable housing	81.2%
road congestion	58.2%
security	44.7%
air pollution	33.1%
fulfilling employment	27.9%
unemployment	27.7%
health services	25.8%
corruption / transparency	20.8%
public transport	20.5%
recycling	19.3%
Green spaces	18.1%
social mobility / inclusiveness	17.9%
citizen engagement	15.2%
basic amenities (water, waste)	13.3%
school education	11.0%

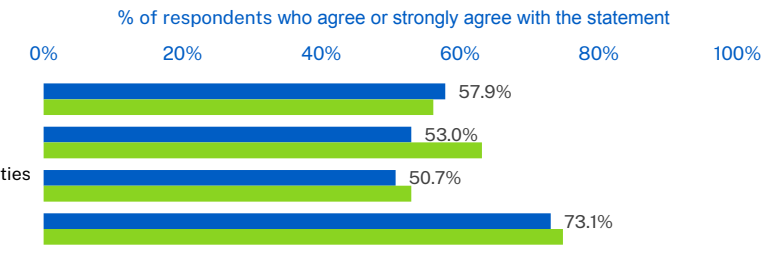
ATTITUDES

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

You are comfortable with face recognition technologies to lower crime

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

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



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	57.9%	50%
You are comfortable with face recognition technologies to lower crime	53.0%	45%
You feel the availability of online information has increased your trust in authorities	50.7%	40%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.1%	60%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 68.1
- Recycling services are satisfactory: 74.0
- Public safety is not a problem: 61.0
- Air pollution is not a problem: 50.7
- Medical services provision is satisfactory: 76.0
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 31.6

Mobility

- Traffic congestion is not a problem: 28.7
- Public transport is satisfactory: 68.5

Activities

- Green spaces are satisfactory: 76.6
- Cultural activities (shows, bars, and museums) are satisfactory: 82.7

Opportunities (Work & School)

- Employment finding services are readily available: 69.9
- Most children have access to a good school: 83.0
- Lifelong learning opportunities are provided by local institutions: 73.4
- Businesses are creating new jobs: 60.9
- Minorities feel welcome: 61.7

Governance

- Information on local government decisions are easily accessible: 66.0
- Corruption of city officials is not an issue of concern: 54.2
- Residents contribute to decision making of local government: 63.9
- Residents provide feedback on local government projects: 64.7

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 49.6
- A website or App allows residents to easily give away unwanted items: 55.3
- Free public wifi has improved access to city services: 53.0
- CCTV cameras has made residents feel safer: 52.4
- A website or App allows residents to effectively monitor air pollution: 43.0
- Arranging medical appointments online has improved access: 63.2

Mobility

- Car-sharing Apps have reduced congestion: 40.5
- Apps that direct you to an available parking space have reduced journey time: 45.7
- Bicycle hiring has reduced congestion: 48.4
- Online scheduling and ticket sales has made public transport easier to use: 74.3
- The city provides information on traffic congestion through mobile phones: 48.4

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 77.9

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 65.1
- IT skills are taught well in schools: 65.3
- Online services provided by the city has made it easier to start a new business: 49.2
- The current internet speed and reliability meet connectivity needs: 70.9

Governance

- Online public access to city finances has reduced corruption: 41.6
- Online voting has increased participation: 49.9
- An online platform where residents can propose ideas has improved city life: 47.3
- Processing Identification Documents online has reduced waiting times: 61.0

Leeds

SMART CITY RANKING
72
 Out of 142

▲

76 in 2023
 Out of 141

SMART CITY RATING
CC
 CCC in 2023

FACTOR RATINGS

CCC
 STRUCTURES

CC
 TECHNOLOGIES

GROUP
3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

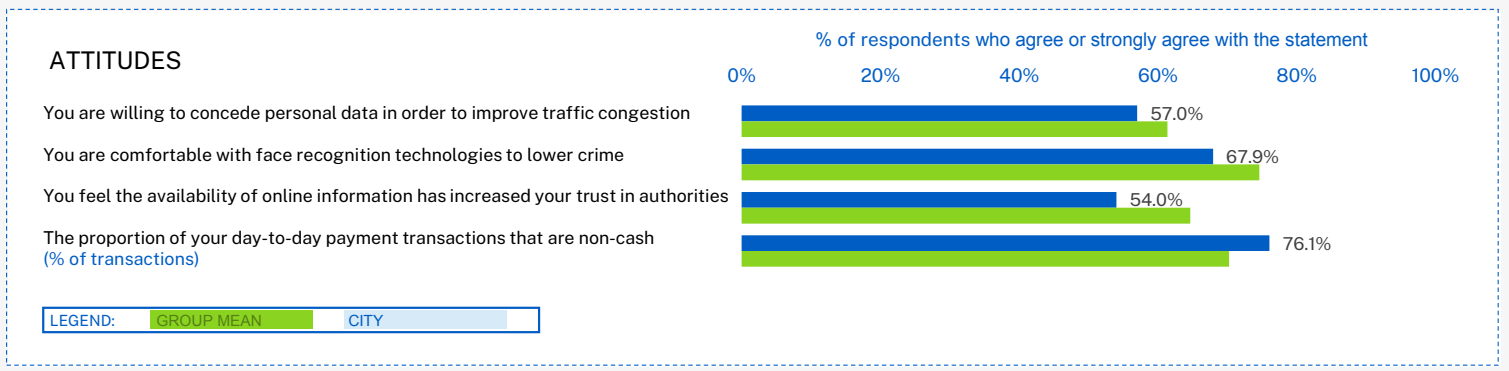
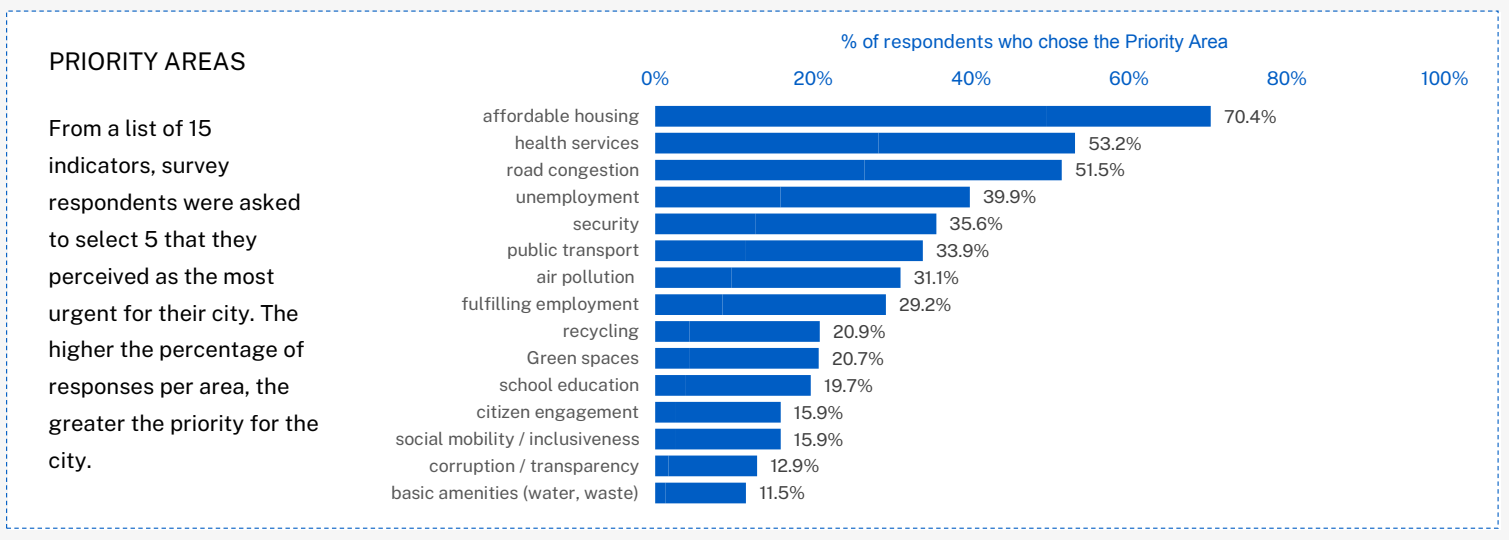
Population: 790,000 (Eurostat)

HDI: 0.908 (Global Data Lab)



Country
 United Kingdom

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	47,066	40,799	44,750	46,624	+1,874



Lille

SMART CITY RANKING

85

Out of 142



84 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CC

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 910,000
(Eurostat)

HDI 0.880
(Global Data Lab)



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

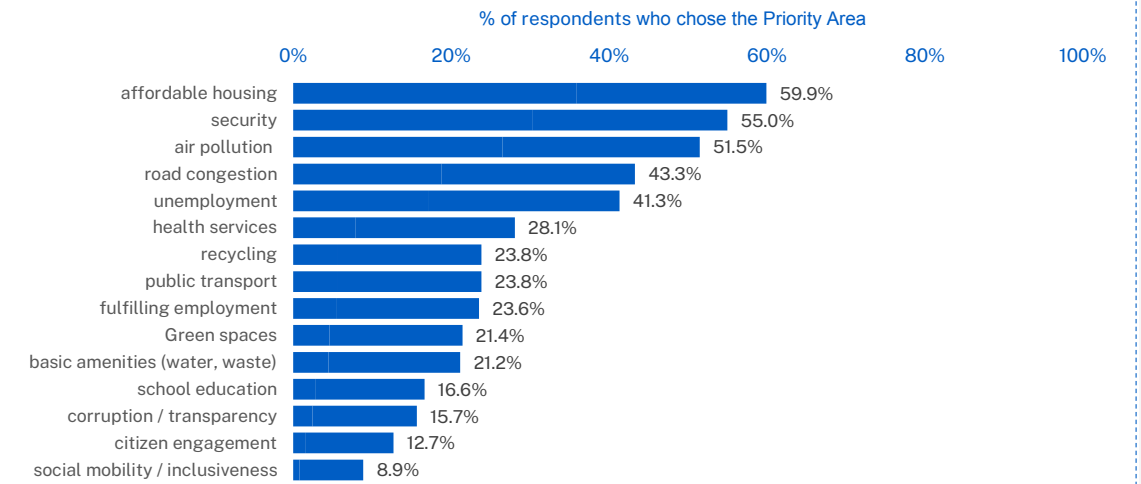
Country

France

	2019	2020	2021	2022	1 yr change
HDI	0.905	0.900	0.906	0.910	+0.004
Life expectancy at birth	82.7	82.2	82.5	83.2	+0.7
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	11.6	11.7	11.7	11.7	+0.0
GNI per capita (PPP \$)	46,907	42,891	46,322	47,379	+1,057

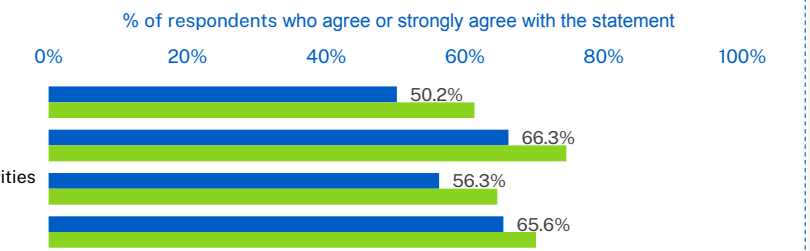
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

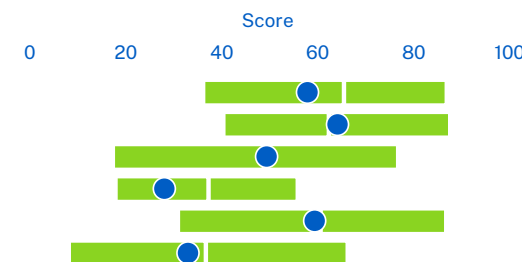


STRUCTURES

LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

Health & Safety

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



Mobility

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



Activities

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



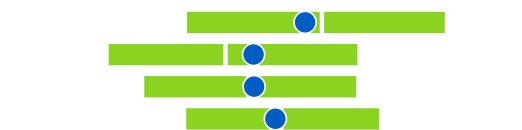
Opportunities (Work & School)

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



Governance

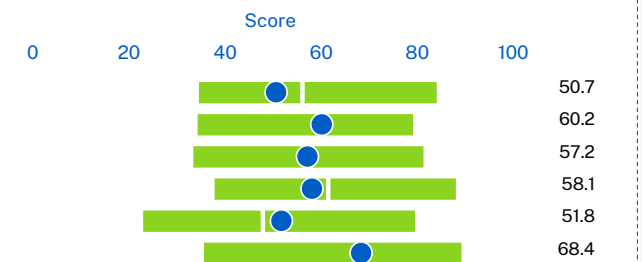
- Information on local government decisions are easily accessible
- Corruption of city officials is not an issue of concern
- Residents contribute to decision making of local government
- Residents provide feedback on local government projects



TECHNOLOGIES

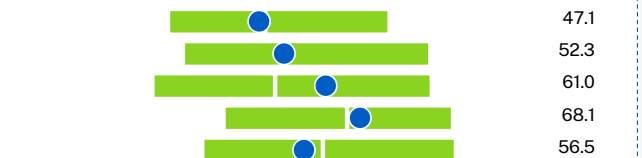
Health & Safety

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



Mobility

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



Activities

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



Opportunities (Work & School)

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



Governance

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



Lima

SMART CITY RANKING
134
 Out of 142

134 in 2023
 Out of 141

SMART CITY RATING
C
 C in 2023

FACTOR RATINGS

STRUCTURES
C

TECHNOLOGIES
C

GROUP
3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 9,560,000 (UN Data)

HDI: 0.820 (Global Data Lab)

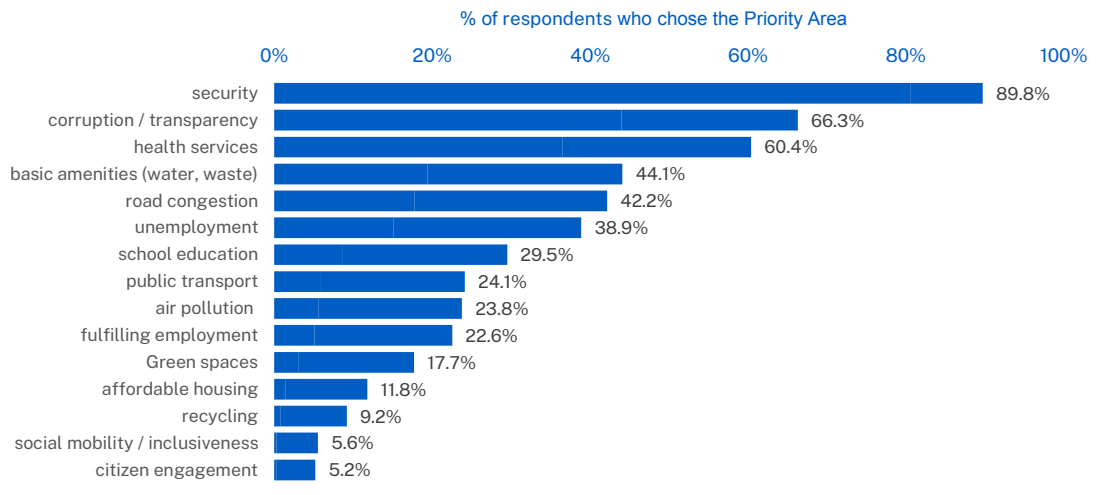


Country

	2019	2020	2021	2022	1 yr change
Peru					
HDI	0.774	0.758	0.755	0.762	+0.007
Life expectancy at birth	76.2	73.7	72.4	73.4	+1.0
Expected years of schooling	14.7	14.8	14.8	14.8	+0.0
Mean years of schooling	9.9	10.0	10.0	10.0	+0.0
GNI per capita (PPP \$)	12,279	10,894	11,510	11,916	+407

PRIORITY AREAS

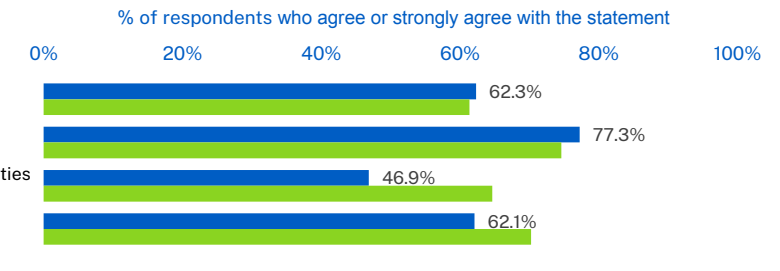
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
security	89.8%
corruption / transparency	66.3%
health services	60.4%
basic amenities (water, waste)	44.1%
road congestion	42.2%
unemployment	38.9%
school education	29.5%
public transport	24.1%
air pollution	23.8%
fulfilling employment	22.6%
Green spaces	17.7%
affordable housing	11.8%
recycling	9.2%
social mobility / inclusiveness	5.6%
citizen engagement	5.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	62.3%	58%
You are comfortable with face recognition technologies to lower crime	77.3%	70%
You feel the availability of online information has increased your trust in authorities	46.9%	55%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	62.1%	55%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 to 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 36.4
- Recycling services are satisfactory: 45.2
- Public safety is not a problem: 19.4
- Air pollution is not a problem: 22.6
- Medical services provision is satisfactory: 32.1
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 35.9

Mobility

- Traffic congestion is not a problem: 17.0
- Public transport is satisfactory: 23.4

Activities

- Green spaces are satisfactory: 57.0
- Cultural activities (shows, bars, and museums) are satisfactory: 63.7

Opportunities (Work & School)

- Employment finding services are readily available: 55.7
- Most children have access to a good school: 20.8
- Lifelong learning opportunities are provided by local institutions: 33.6
- Businesses are creating new jobs: 41.4
- Minorities feel welcome: 31.9

Governance

- Information on local government decisions are easily accessible: 32.6
- Corruption of city officials is not an issue of concern: 16.5
- Residents contribute to decision making of local government: 24.5
- Residents provide feedback on local government projects: 32.4

TECHNOLOGIES

Score: 0 to 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 41.8
- A website or App allows residents to easily give away unwanted items: 45.8
- Free public wifi has improved access to city services: 42.9
- CCTV cameras has made residents feel safer: 42.0
- A website or App allows residents to effectively monitor air pollution: 28.6
- Arranging medical appointments online has improved access: 50.5

Mobility

- Car-sharing Apps have reduced congestion: 34.9
- Apps that direct you to an available parking space have reduced journey time: 40.9
- Bicycle hiring has reduced congestion: 40.6
- Online scheduling and ticket sales has made public transport easier to use: 46.6
- The city provides information on traffic congestion through mobile phones: 50.8

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 75.8

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 62.1
- IT skills are taught well in schools: 41.9
- Online services provided by the city has made it easier to start a new business: 55.1
- The current internet speed and reliability meet connectivity needs: 61.1

Governance

- Online public access to city finances has reduced corruption: 23.8
- Online voting has increased participation: 33.3
- An online platform where residents can propose ideas has improved city life: 37.4
- Processing Identification Documents online has reduced waiting times: 61.0

Lisbon

SMART CITY RANKING
108
 Out of 142

▼

99 in 2023
 Out of 141

SMART CITY RATING
C
 CC in 2023

FACTOR RATINGS

CC
 STRUCTURES

CC
 TECHNOLOGIES

GROUP
3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 510,000 (Eurostat)

HDI: 0.900 (Global Data Lab)

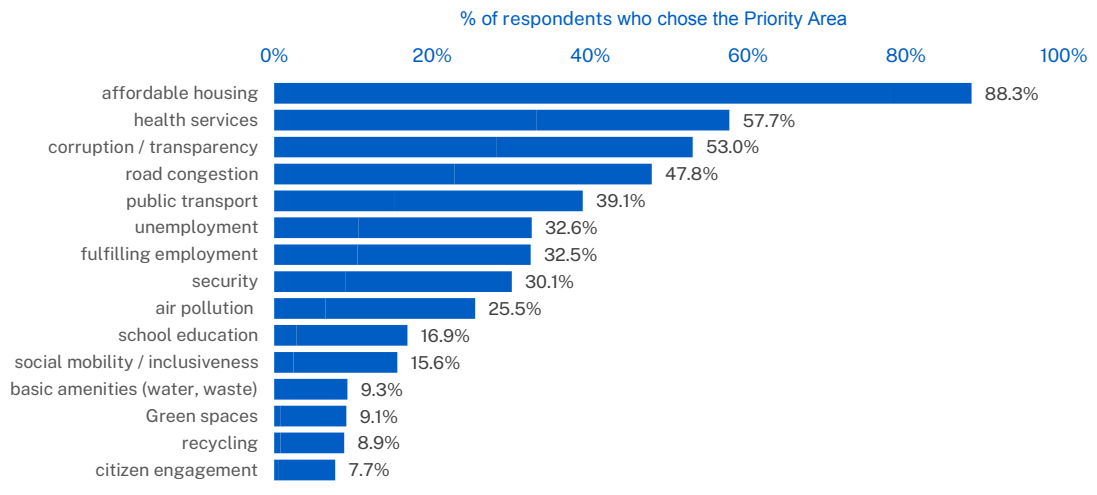


Country
 Portugal

	2019	2020	2021	2022	1 yr change
HDI	0.864	0.861	0.865	0.874	+0.009
Life expectancy at birth	81.7	81.1	81.0	82.2	+1.2
Expected years of schooling	16.6	16.7	16.8	16.8	+0.0
Mean years of schooling	9.3	9.6	9.6	9.6	+0.0
GNI per capita (PPP \$)	34,036	31,510	33,275	35,315	+2,040

PRIORITY AREAS

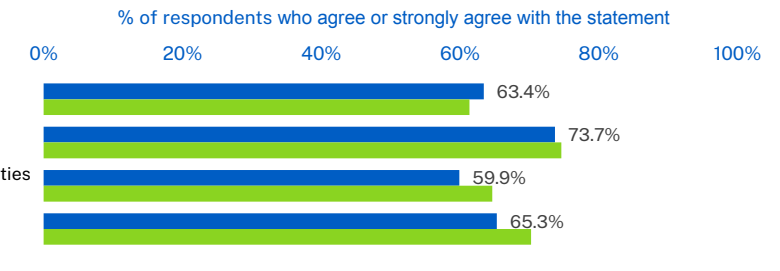
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	88.3%
health services	57.7%
corruption / transparency	53.0%
road congestion	47.8%
public transport	39.1%
unemployment	32.6%
fulfilling employment	32.5%
security	30.1%
air pollution	25.5%
school education	16.9%
social mobility / inclusiveness	15.6%
basic amenities (water, waste)	9.3%
Green spaces	9.1%
recycling	8.9%
citizen engagement	7.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	63.4%
You are comfortable with face recognition technologies to lower crime	73.7%
You feel the availability of online information has increased your trust in authorities	59.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	65.3%

LEGEND: GROUP MEAN (light green), CITY (dark green)

STRUCTURES

Score: 0 to 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 61.6
- Recycling services are satisfactory: 63.5
- Public safety is not a problem: 50.8
- Air pollution is not a problem: 31.8
- Medical services provision is satisfactory: 38.7
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 8.4

Mobility

- Traffic congestion is not a problem: 16.3
- Public transport is satisfactory: 35.8

Activities

- Green spaces are satisfactory: 63.0
- Cultural activities (shows, bars, and museums) are satisfactory: 74.8

Opportunities (Work & School)

- Employment finding services are readily available: 39.5
- Most children have access to a good school: 48.3
- Lifelong learning opportunities are provided by local institutions: 44.7
- Businesses are creating new jobs: 41.7
- Minorities feel welcome: 47.5

Governance

- Information on local government decisions are easily accessible: 45.4
- Corruption of city officials is not an issue of concern: 16.2
- Residents contribute to decision making of local government: 32.4
- Residents provide feedback on local government projects: 33.3

TECHNOLOGIES

Score: 0 to 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 41.5
- A website or App allows residents to easily give away unwanted items: 53.7
- Free public wifi has improved access to city services: 52.6
- CCTV cameras has made residents feel safer: 54.4
- A website or App allows residents to effectively monitor air pollution: 38.6
- Arranging medical appointments online has improved access: 57.6

Mobility

- Car-sharing Apps have reduced congestion: 35.3
- Apps that direct you to an available parking space have reduced journey time: 41.1
- Bicycle hiring has reduced congestion: 46.8
- Online scheduling and ticket sales has made public transport easier to use: 60.4
- The city provides information on traffic congestion through mobile phones: 46.2

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 81.3

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 70.5
- IT skills are taught well in schools: 52.6
- Online services provided by the city has made it easier to start a new business: 50.8
- The current internet speed and reliability meet connectivity needs: 66.7

Governance

- Online public access to city finances has reduced corruption: 27.7
- Online voting has increased participation: 39.1
- An online platform where residents can propose ideas has improved city life: 43.7
- Processing Identification Documents online has reduced waiting times: 65.5

Ljubljana

SMART CITY RANKING

32

Out of 142



47 in 2023
Out of 141

SMART CITY RATING

BBB

BBB in 2023

FACTOR RATINGS

BBB

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 290,000
(Eurostat)

HDI 0.953
(Global Data Lab)



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

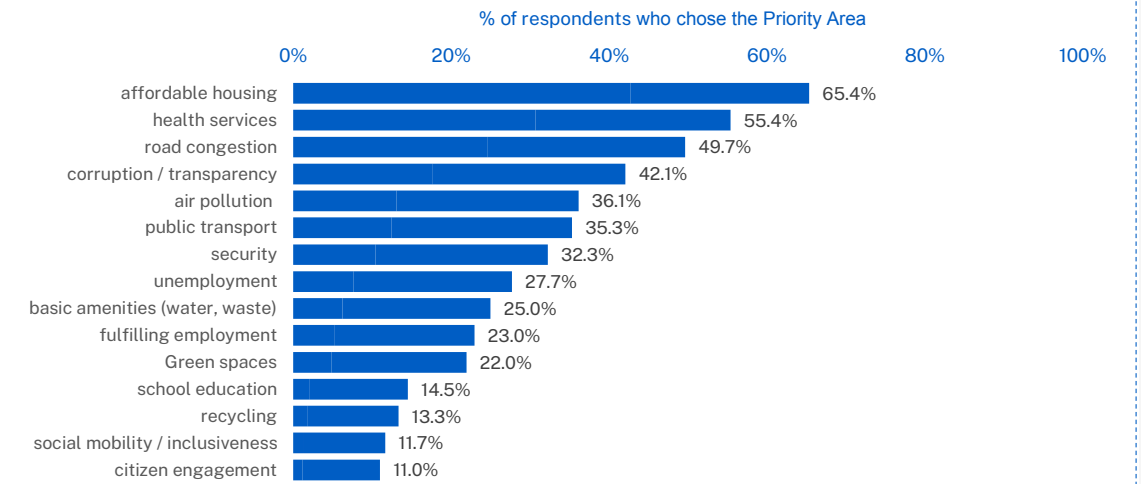
Country

Slovenia

	2019	2020	2021	2022	1 yr change
HDI	0.918	0.910	0.916	0.926	+0.010
Life expectancy at birth	81.6	80.4	80.7	82.1	+1.4
Expected years of schooling	17.3	17.3	17.4	17.4	+0.0
Mean years of schooling	12.8	12.9	12.9	12.9	+0.0
GNI per capita (PPP \$)	38,436	36,848	39,478	41,587	+2,109

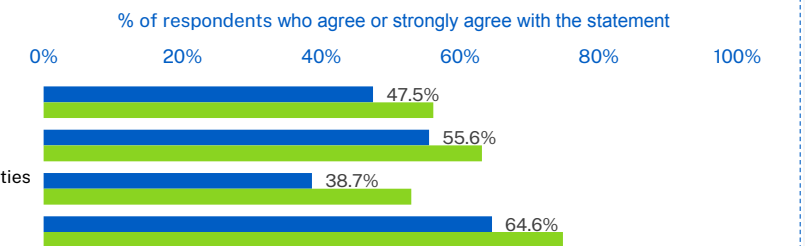
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

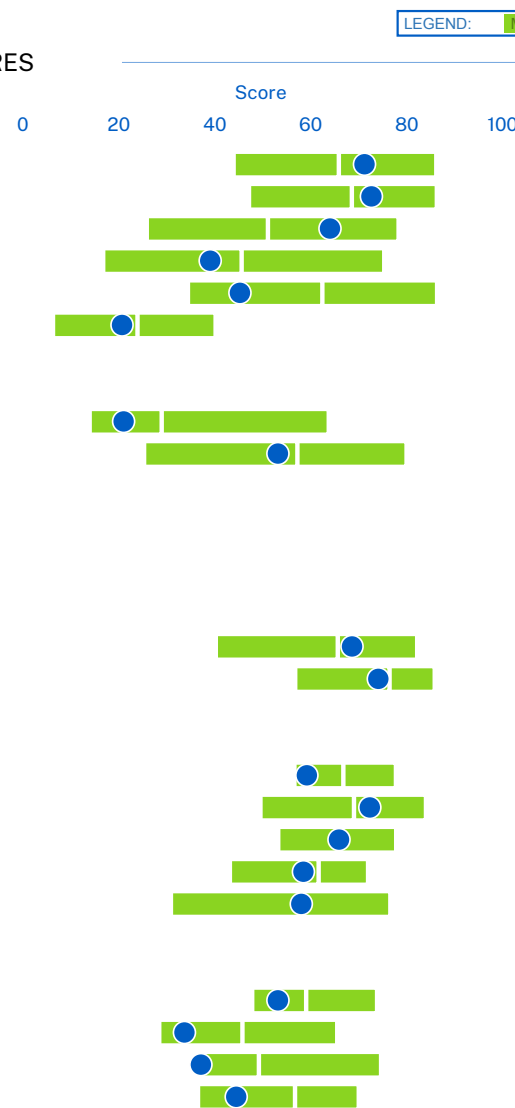
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

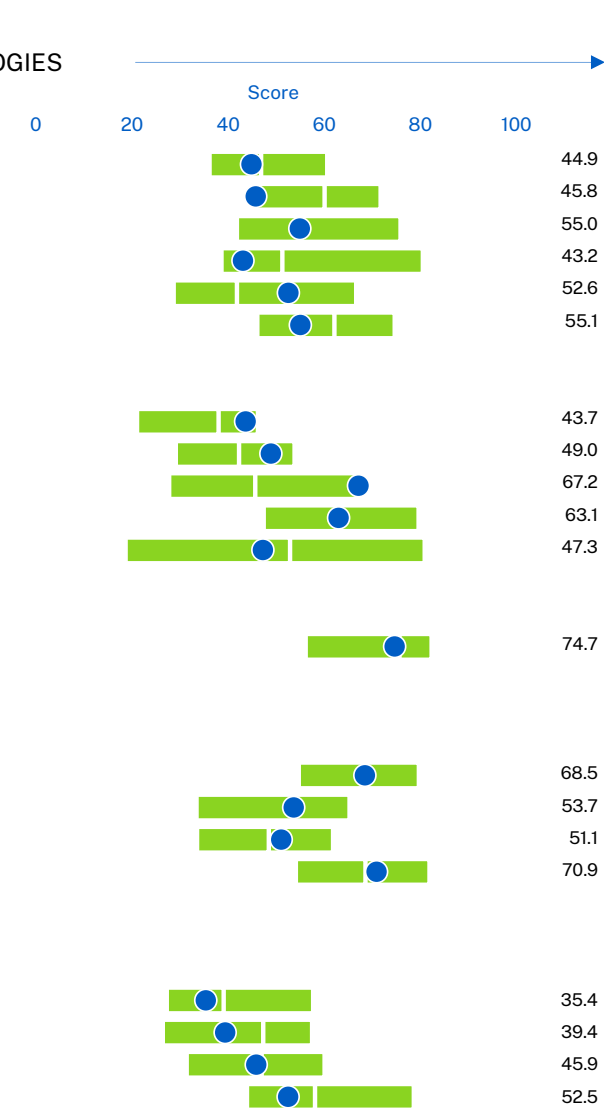
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



London

SMART CITY RANKING

8

Out of 142

6 in 2023
Out of 141

SMART CITY RATING

A

A in 2023

FACTOR RATINGS

BBB

STRUCTURES

AA

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 8,870,000
(Eurostat)

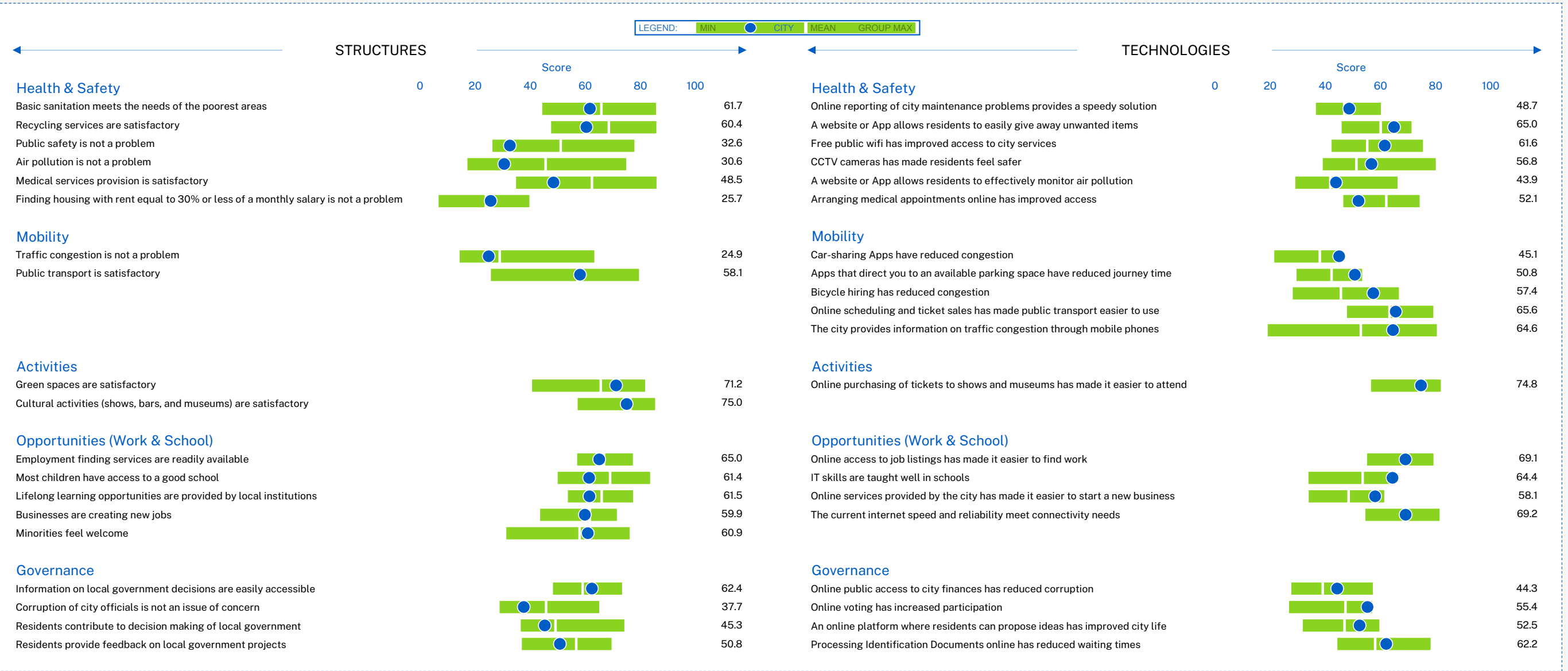
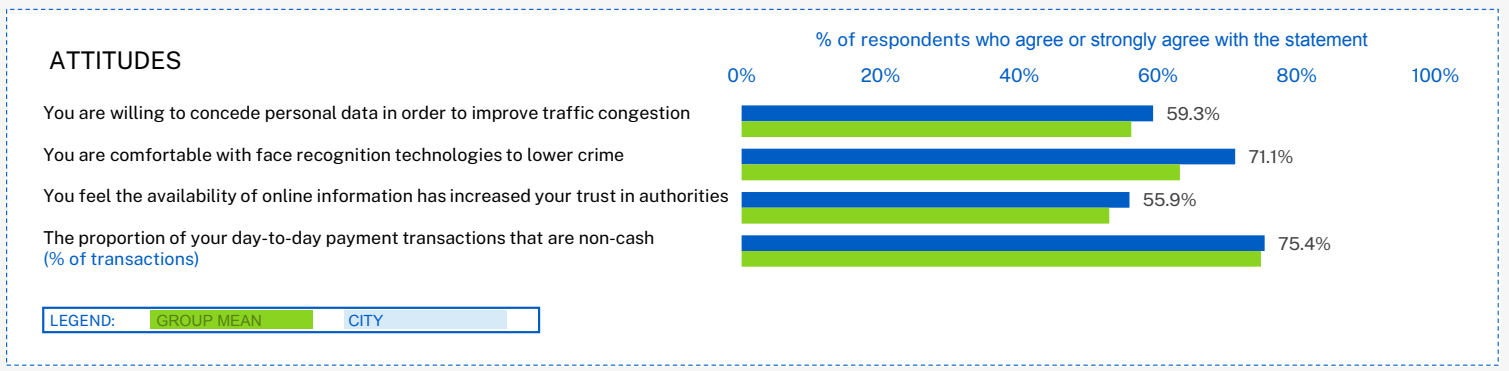
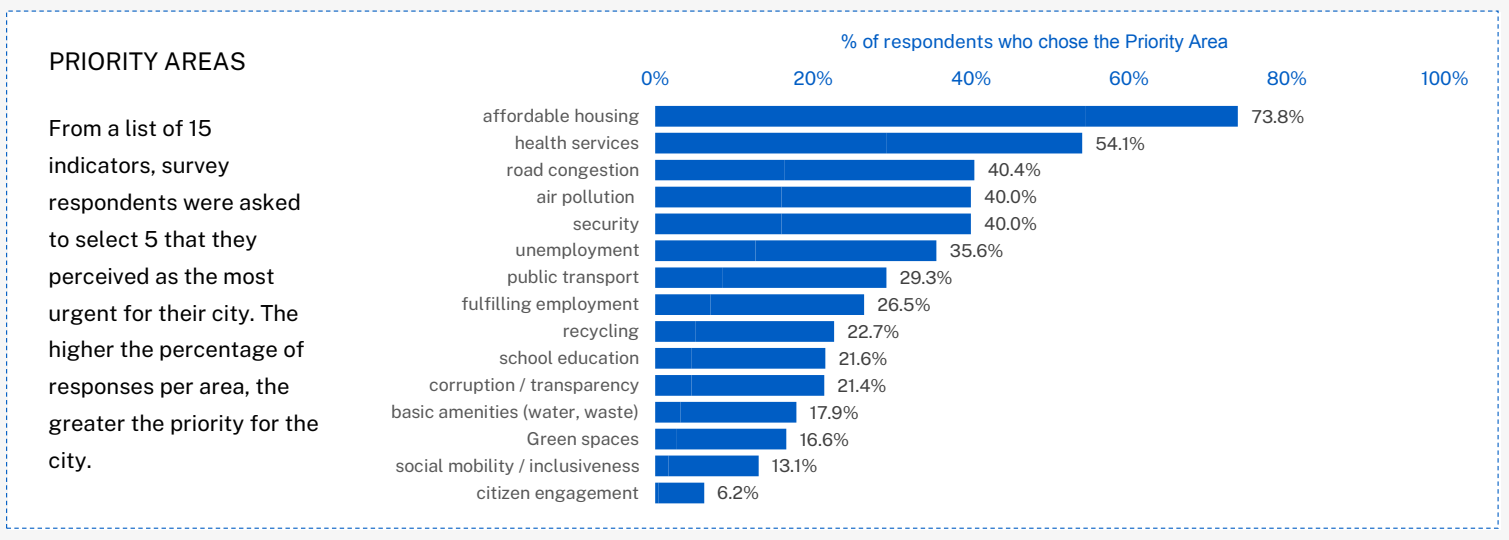
HDI 0.973
(Global Data Lab)



Country

United Kingdom

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	47,066	40,799	44,750	46,624	+1,874



Los Angeles

SMART CITY RANKING
68
 Out of 142

▼

50 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS

BB
 STRUCTURES

BB
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 3,900,000 (UN Data)

HDI: 0.931 (Global Data Lab)

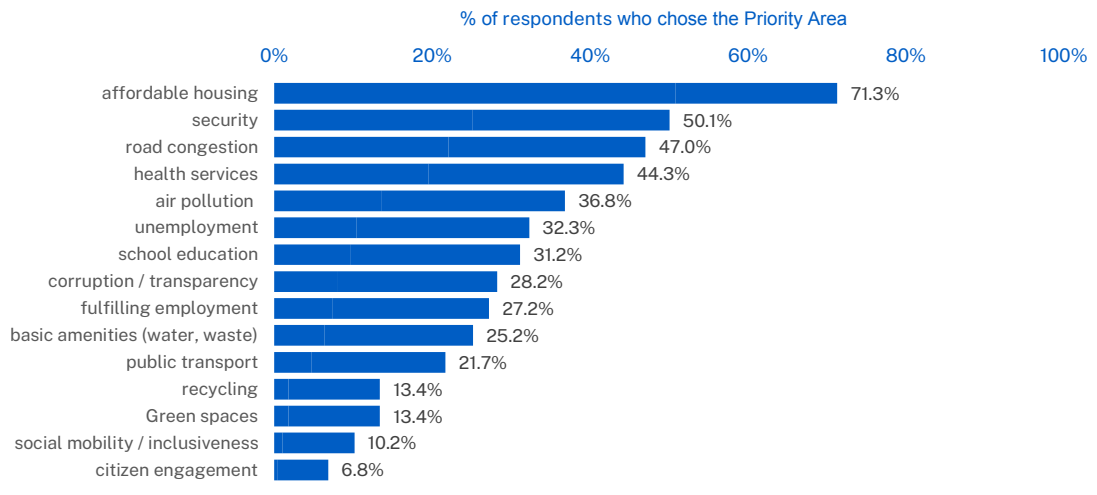


Country
USA

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081

PRIORITY AREAS

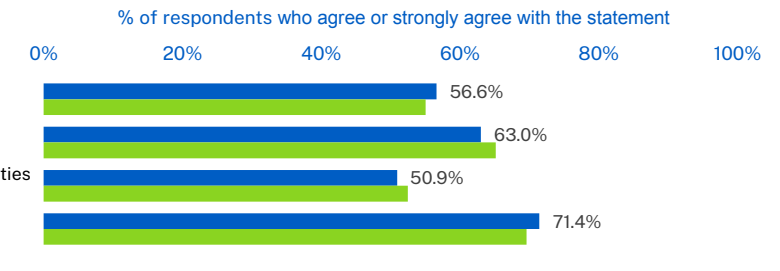
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	71.3%
security	50.1%
road congestion	47.0%
health services	44.3%
air pollution	36.8%
unemployment	32.3%
school education	31.2%
corruption / transparency	28.2%
fulfilling employment	27.2%
basic amenities (water, waste)	25.2%
public transport	21.7%
recycling	13.4%
Green spaces	13.4%
social mobility / inclusiveness	10.2%
citizen engagement	6.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	56.6%
You are comfortable with face recognition technologies to lower crime	63.0%
You feel the availability of online information has increased your trust in authorities (% of transactions)	50.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.4%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 50.4
- Recycling services are satisfactory: 62.7
- Public safety is not a problem: 32.7
- Air pollution is not a problem: 31.8
- Medical services provision is satisfactory: 50.4
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 28.6

Mobility

- Traffic congestion is not a problem: 22.5
- Public transport is satisfactory: 42.8

Activities

- Green spaces are satisfactory: 55.0
- Cultural activities (shows, bars, and museums) are satisfactory: 70.5

Opportunities (Work & School)

- Employment finding services are readily available: 57.6
- Most children have access to a good school: 50.0
- Lifelong learning opportunities are provided by local institutions: 53.9
- Businesses are creating new jobs: 57.5
- Minorities feel welcome: 51.1

Governance

- Information on local government decisions are easily accessible: 58.7
- Corruption of city officials is not an issue of concern: 33.8
- Residents contribute to decision making of local government: 49.6
- Residents provide feedback on local government projects: 55.3

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 46.8
- A website or App allows residents to easily give away unwanted items: 61.3
- Free public wifi has improved access to city services: 55.4
- CCTV cameras has made residents feel safer: 50.8
- A website or App allows residents to effectively monitor air pollution: 50.8
- Arranging medical appointments online has improved access: 64.4

Mobility

- Car-sharing Apps have reduced congestion: 49.3
- Apps that direct you to an available parking space have reduced journey time: 50.3
- Bicycle hiring has reduced congestion: 43.3
- Online scheduling and ticket sales has made public transport easier to use: 56.3
- The city provides information on traffic congestion through mobile phones: 63.9

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 72.5

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 62.7
- IT skills are taught well in schools: 48.4
- Online services provided by the city has made it easier to start a new business: 52.2
- The current internet speed and reliability meet connectivity needs: 63.7

Governance

- Online public access to city finances has reduced corruption: 43.4
- Online voting has increased participation: 59.0
- An online platform where residents can propose ideas has improved city life: 50.5
- Processing Identification Documents online has reduced waiting times: 65.9

Luxembourg

SMART CITY RANKING
27
 Out of 142

▲

45 in 2023
 Out of 141

SMART CITY RATING
BBB
 BB in 2023

FACTOR RATINGS
A

STRUCTURES
BB

TECHNOLOGIES
BB

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

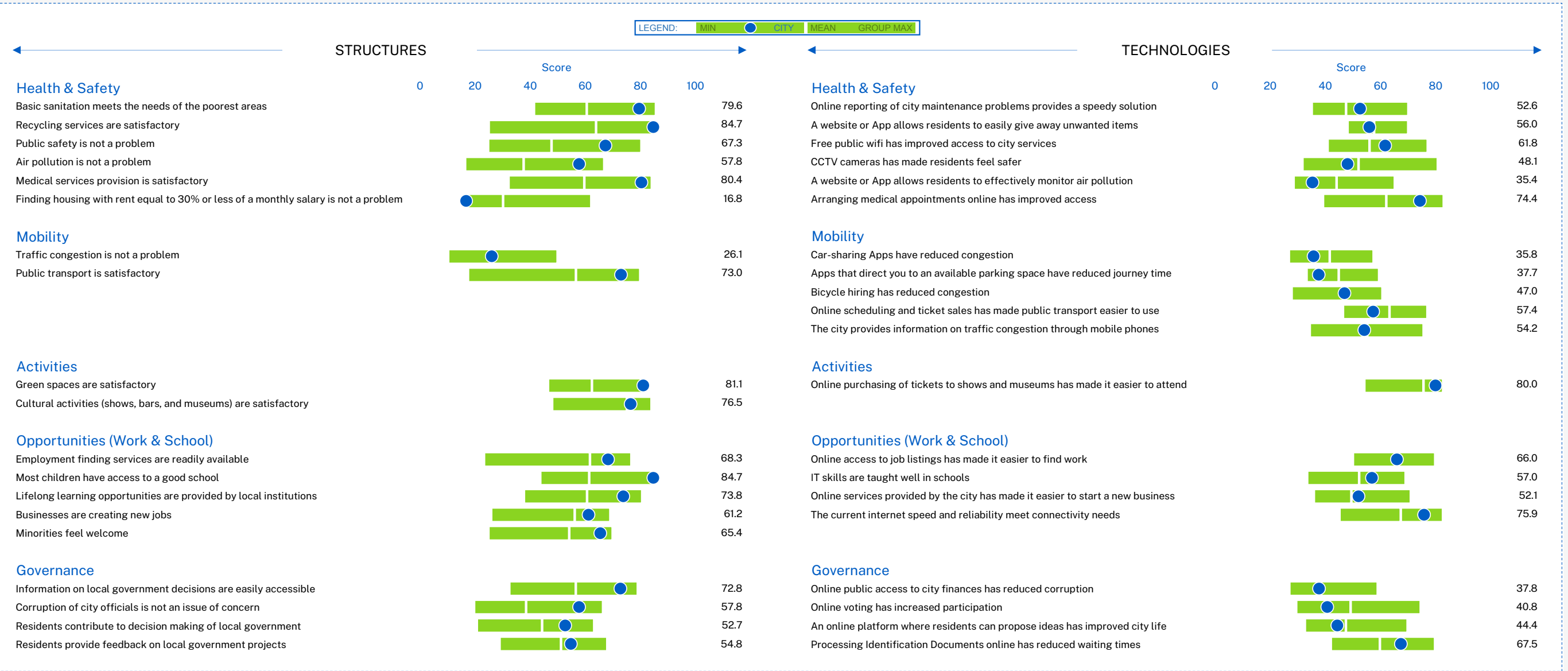
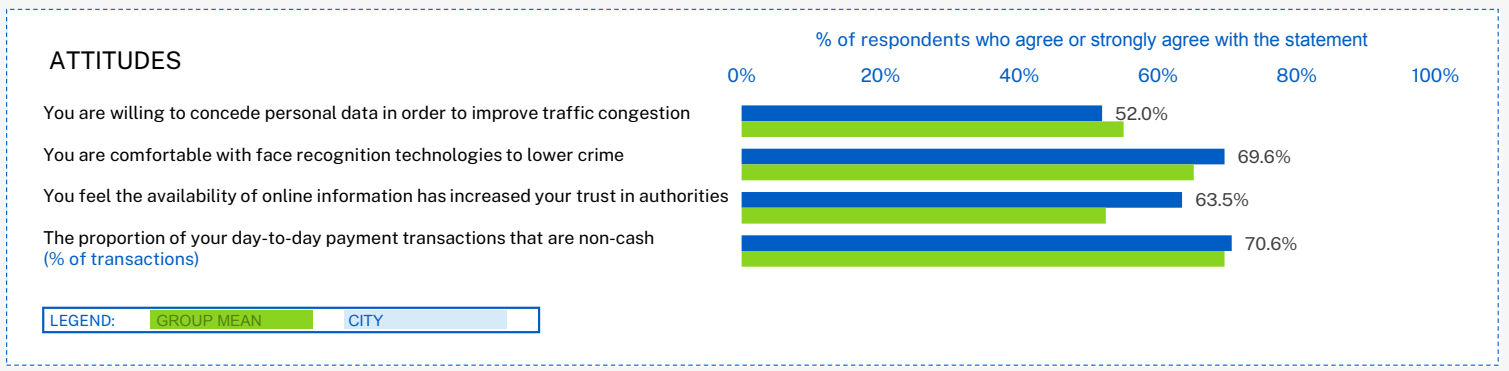
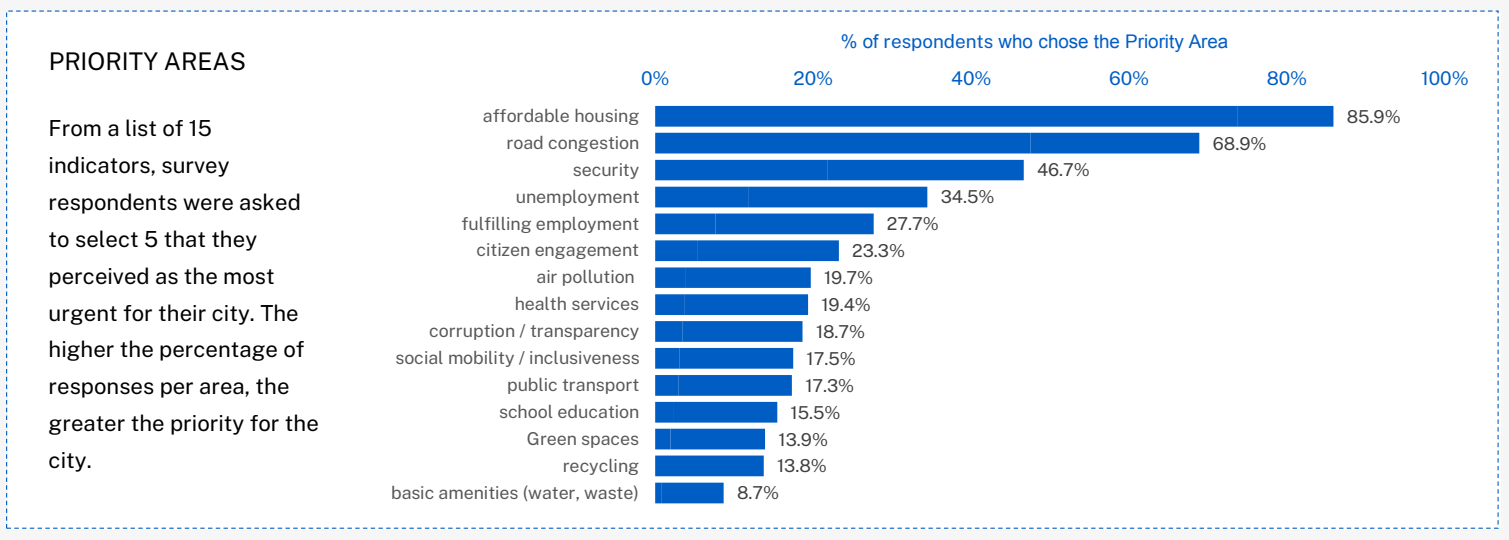
Population 120,000
 (Eurostat)

HDI 0.930
 (Global Data Lab)



Country
 Luxembourg

	2019	2020	2021	2022	1 yr change
HDI	0.925	0.921	0.927	0.927	+0.000
Life expectancy at birth	82.1	81.4	82.6	82.6	-0.0
Expected years of schooling	14.2	14.2	14.2	14.2	+0.0
Mean years of schooling	13.0	13.0	13.0	13.0	+0.0
GNI per capita (PPP \$)	77,423	76,504	78,651	78,554	-96



Lyon

SMART CITY RANKING

61

Out of 142



64 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BBB

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,080,000
(Eurostat)

HDI 0.914
(Global Data Lab)



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

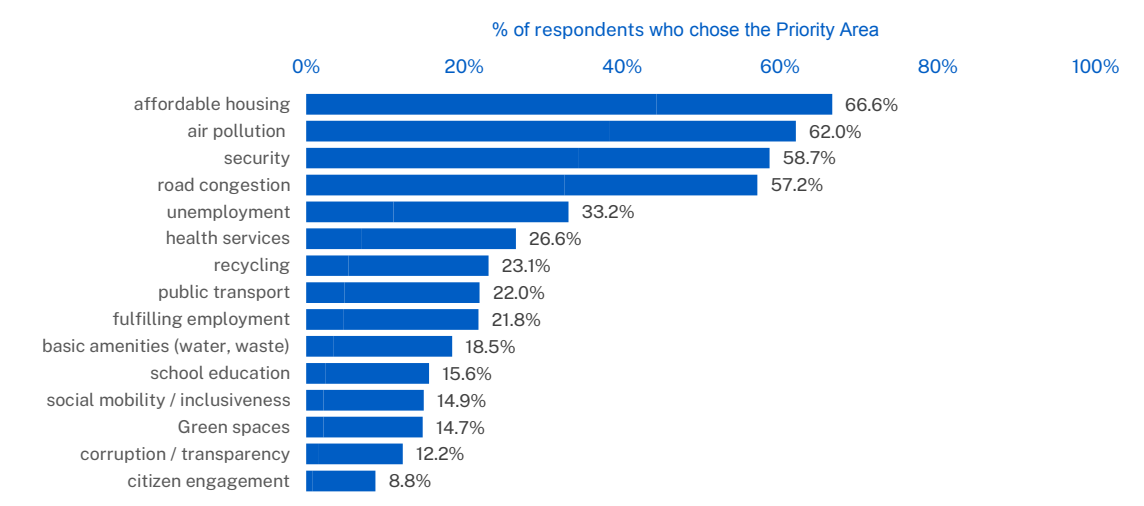
Country

France

	2019	2020	2021	2022	1 yr change
HDI	0.905	0.900	0.906	0.910	+0.004
Life expectancy at birth	82.7	82.2	82.5	83.2	+0.7
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	11.6	11.7	11.7	11.7	+0.0
GNI per capita (PPP \$)	46,907	42,891	46,322	47,379	+1,057

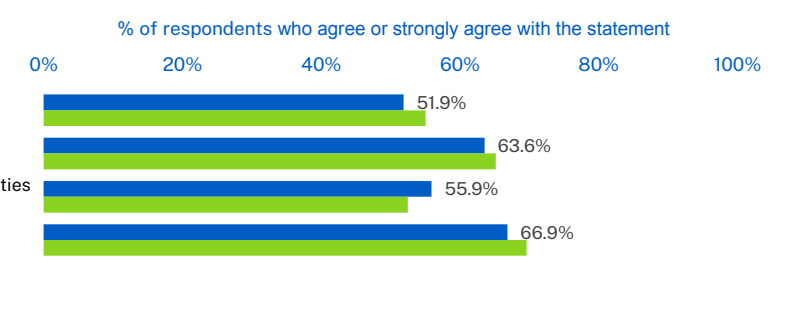
PRIORITY AREAS

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.

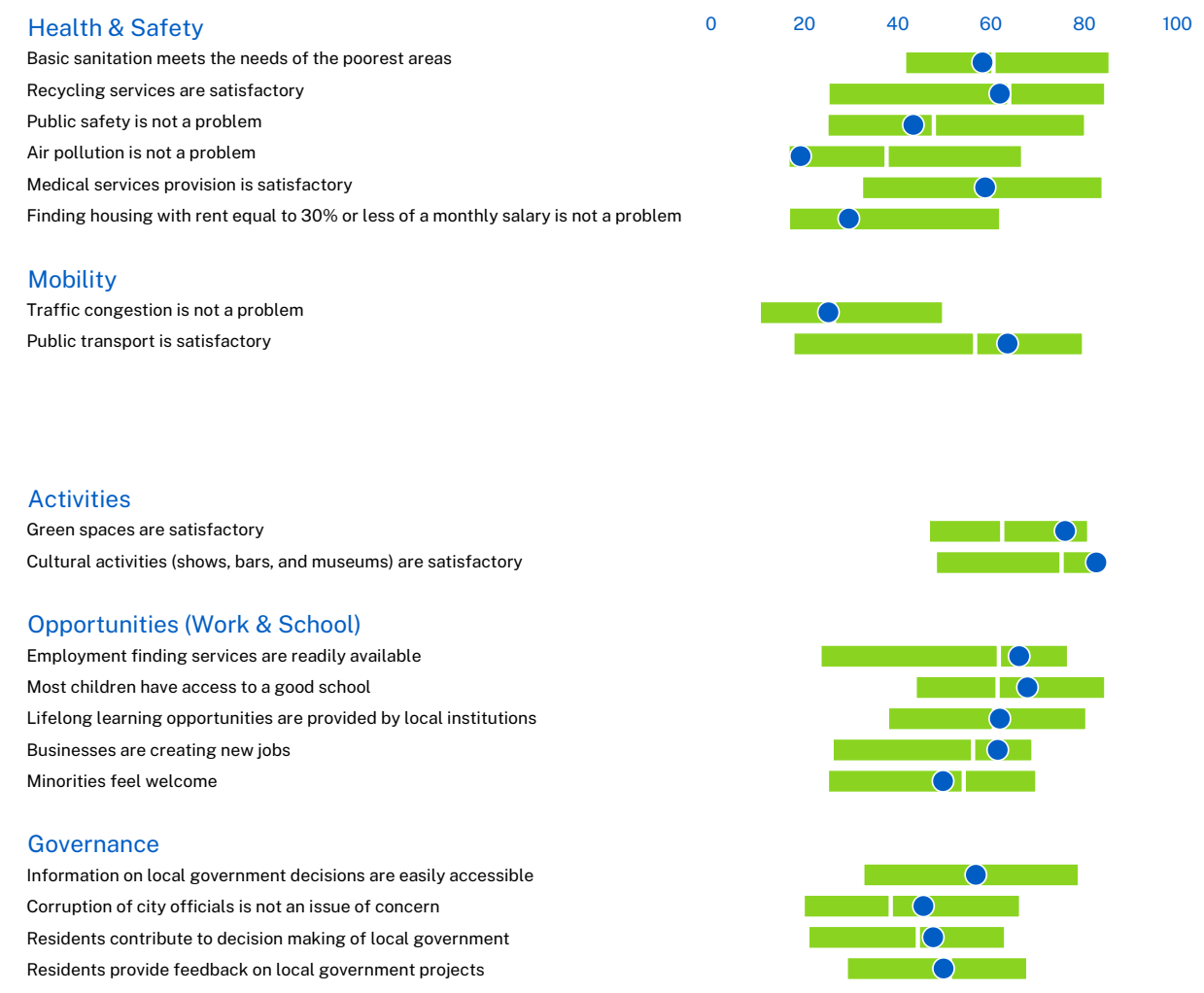


ATTITUDES

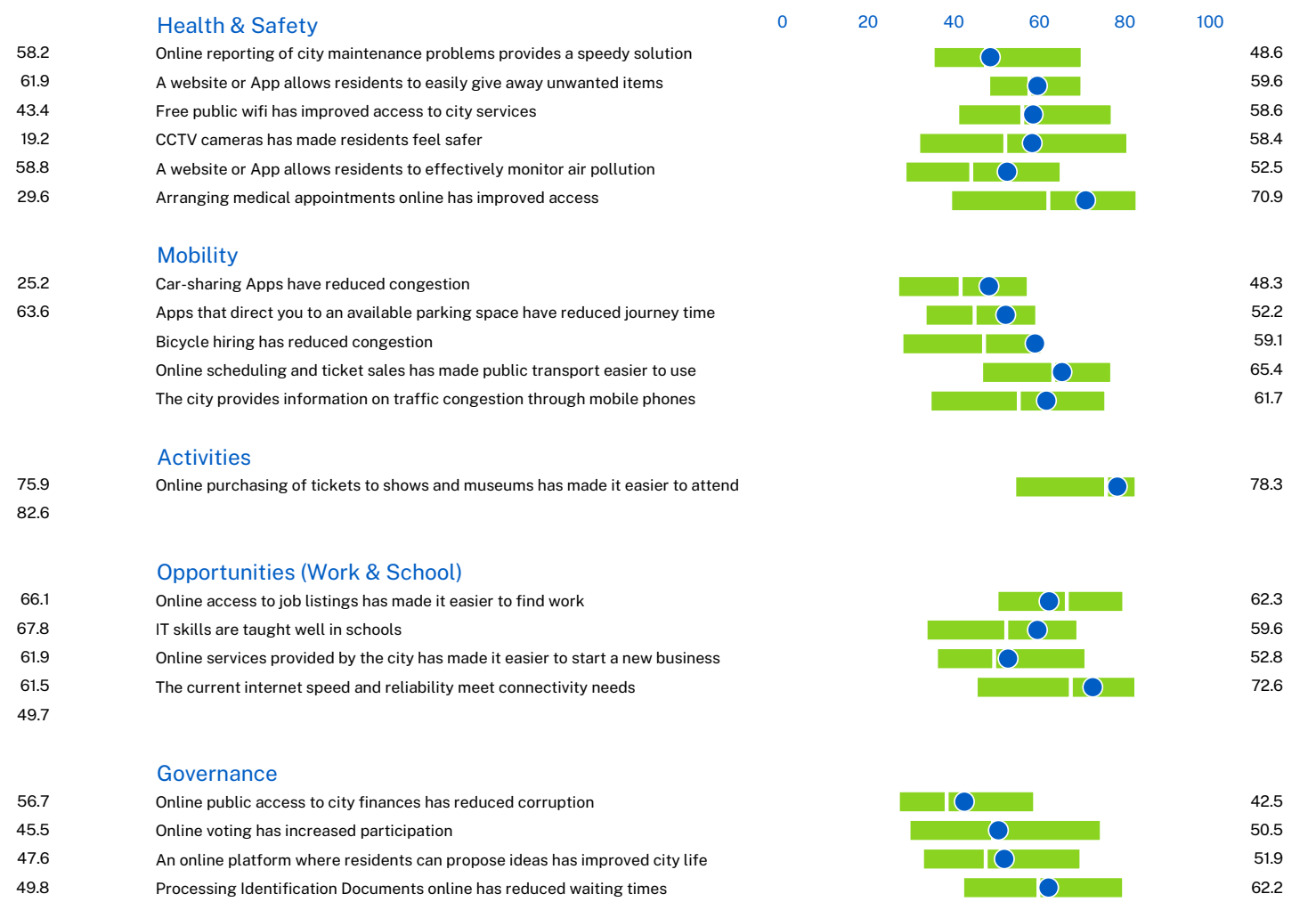
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Madrid

SMART CITY RANKING
35
 Out of 142

▲

37 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS
BB
 STRUCTURES

BBB
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

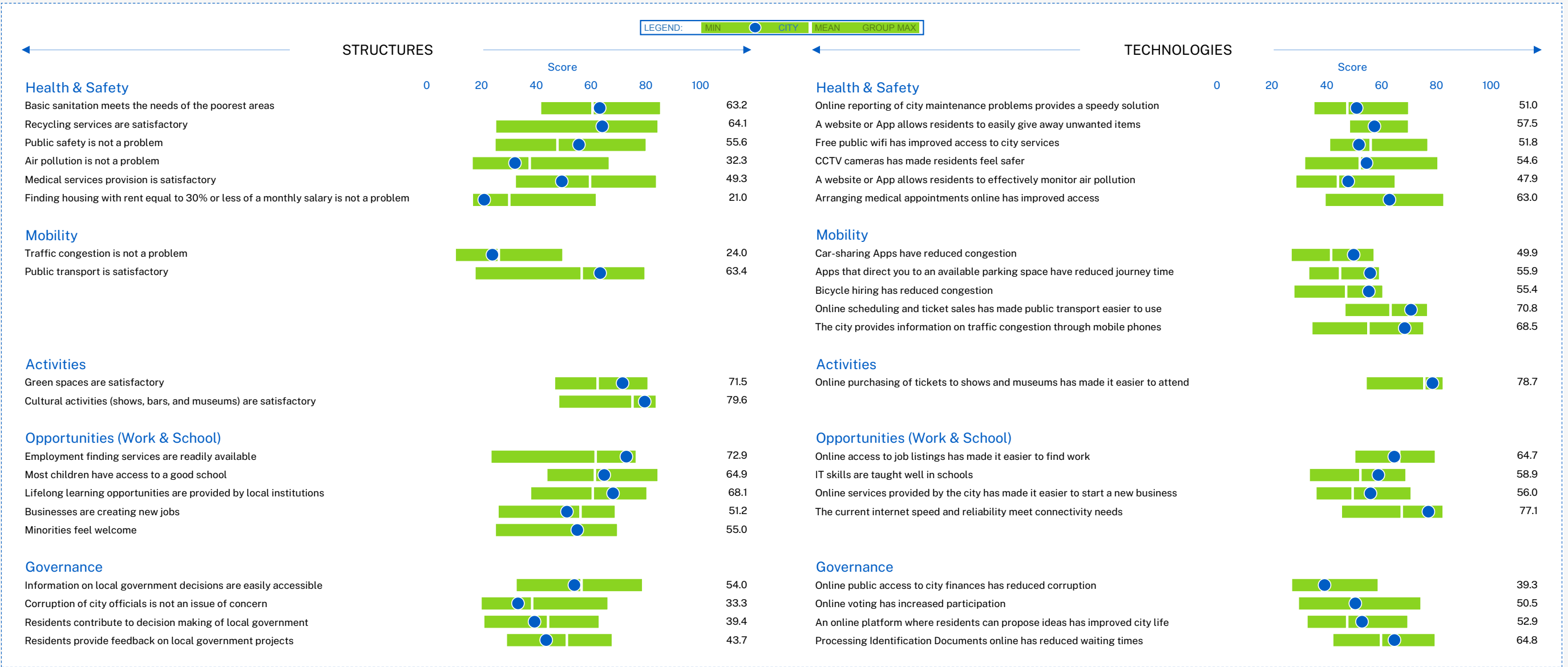
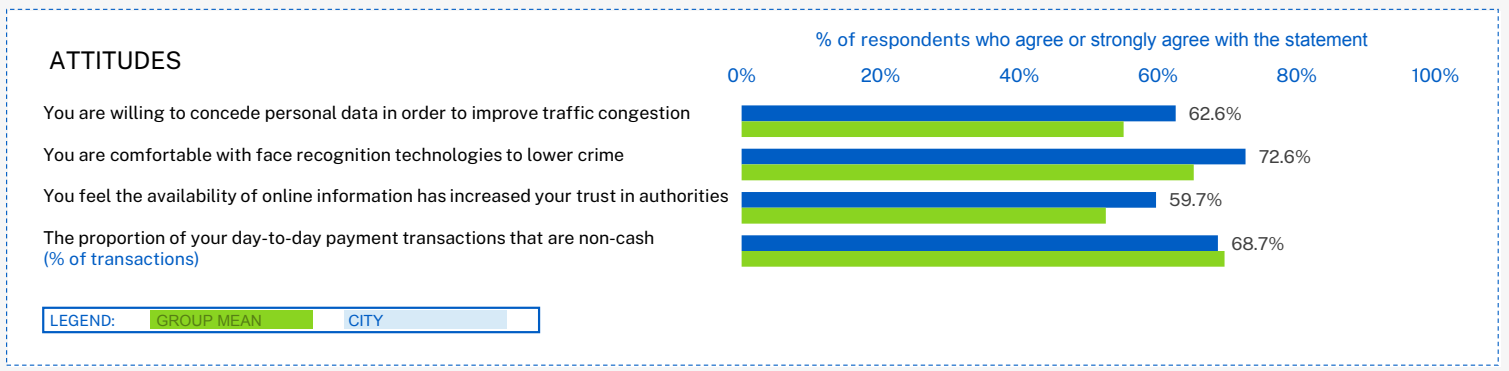
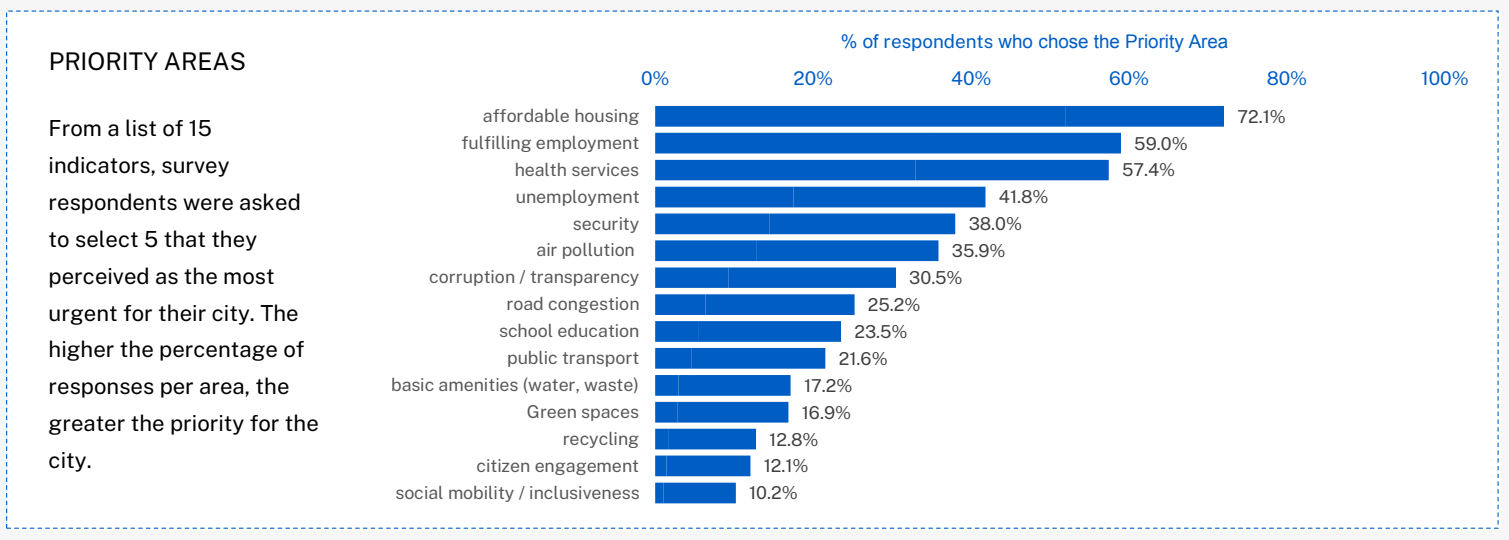
Population: 3,270,000 (Eurostat)

HDI: 0.940 (Global Data Lab)



Country
 Spain

	2019	2020	2021	2022	1 yr change
HDI	0.904	0.894	0.904	0.911	+0.007
Life expectancy at birth	83.5	82.3	83.0	83.9	+0.9
Expected years of schooling	17.5	17.5	17.8	17.8	+0.0
Mean years of schooling	10.4	10.6	10.6	10.6	+0.0
GNI per capita (PPP \$)	40,854	36,076	38,133	40,043	+1,911



Makassar

SMART CITY RANKING

115

Out of 142



114 in 2023
Out of 141

SMART CITY RATING

CC

CC in 2023

FACTOR RATINGS

CC

STRUCTURES

CC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,580,000
(UN World Urbanization Prospects)

HDI 0.699
(Global Data Lab)



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

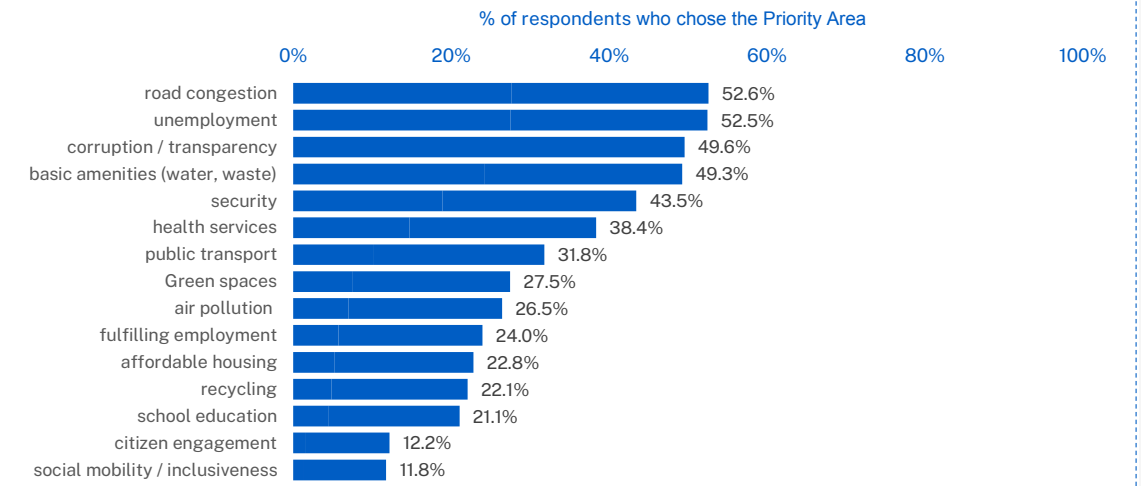
Country

Indonesia

	2019	2020	2021	2022	1 yr change
HDI	0.718	0.712	0.707	0.713	+0.006
Life expectancy at birth	70.5	68.8	67.6	68.3	+0.7
Expected years of schooling	13.9	14.0	14.0	14.0	+0.0
Mean years of schooling	8.4	8.6	8.6	8.6	+0.0
GNI per capita (PPP \$)	11,498	11,206	11,531	12,046	+514

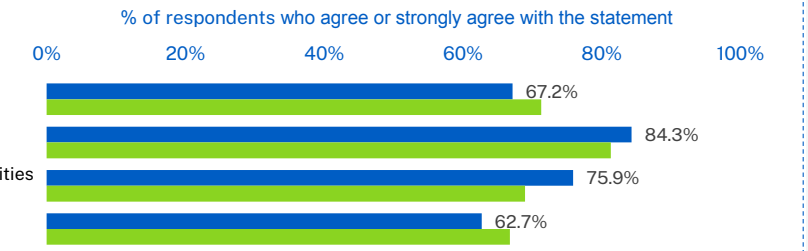
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

Traffic congestion is not a problem
 Public transport is satisfactory

Activities

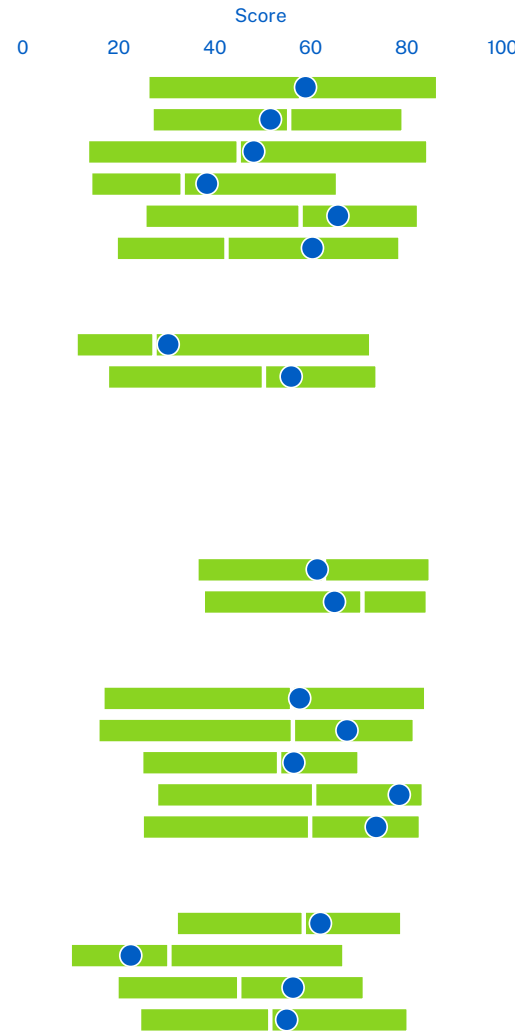
Green spaces are satisfactory
 Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

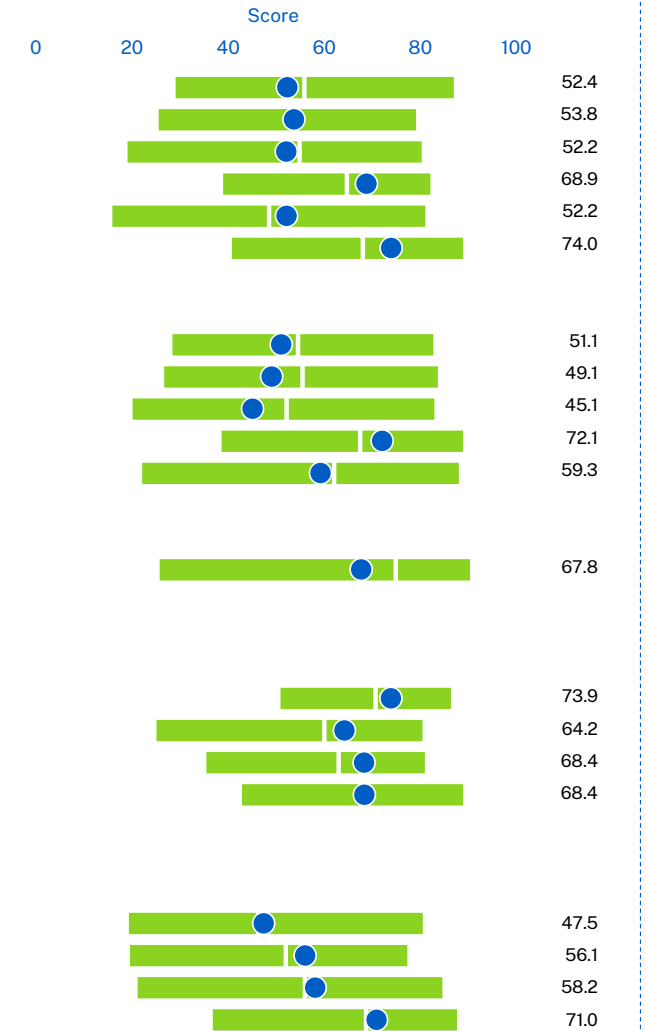
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Manchester

SMART CITY RANKING
71
Out of 142



73 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 550,000
(Eurostat)

HDI 0.915
(Global Data Lab)

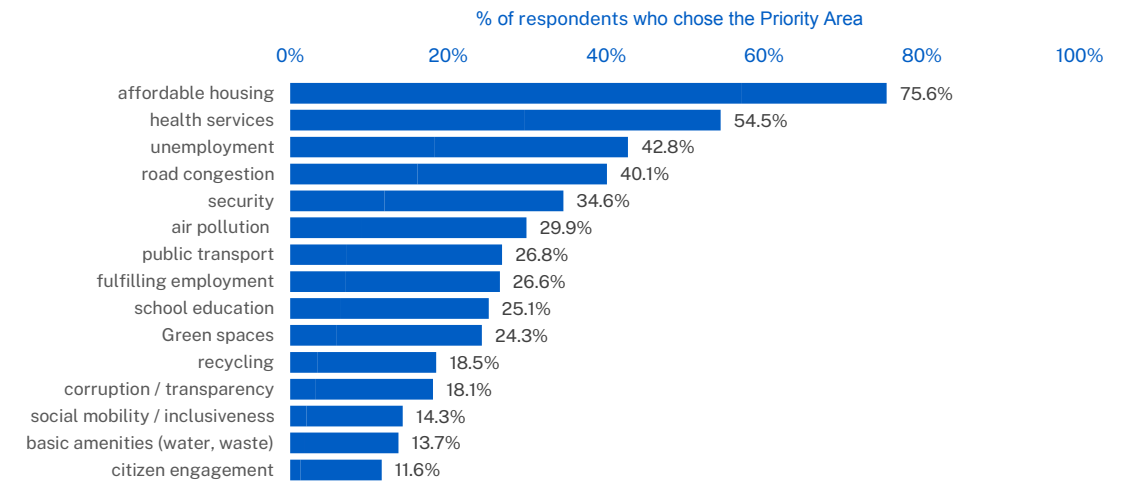


Country

United Kingdom	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	47,066	40,799	44,750	46,624	+1,874

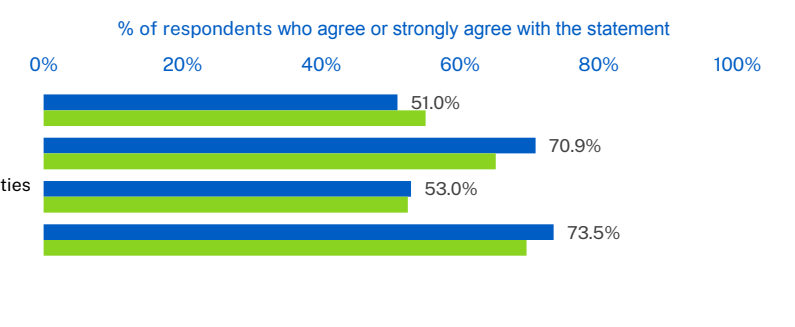
PRIORITY AREAS

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.

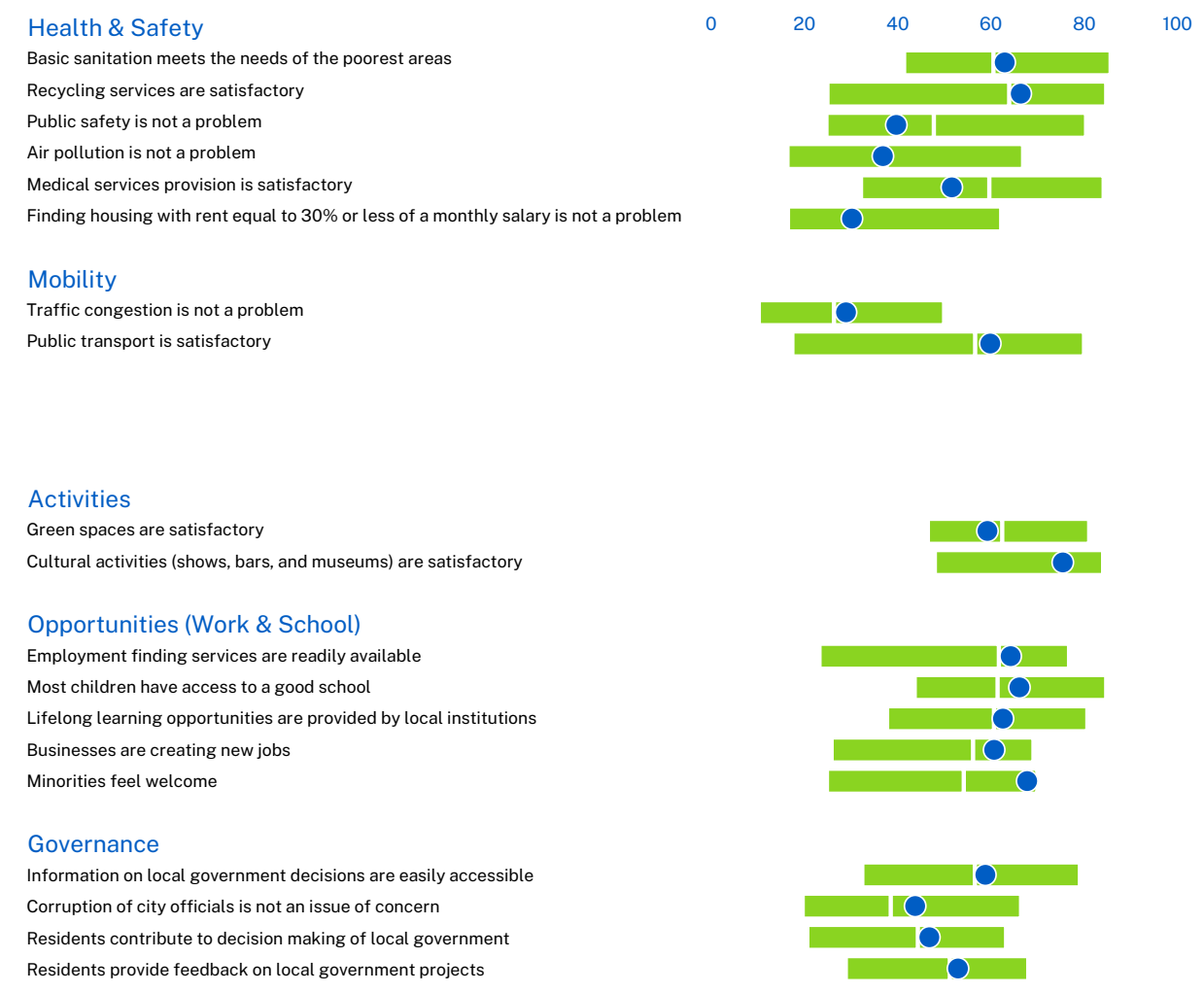


ATTITUDES

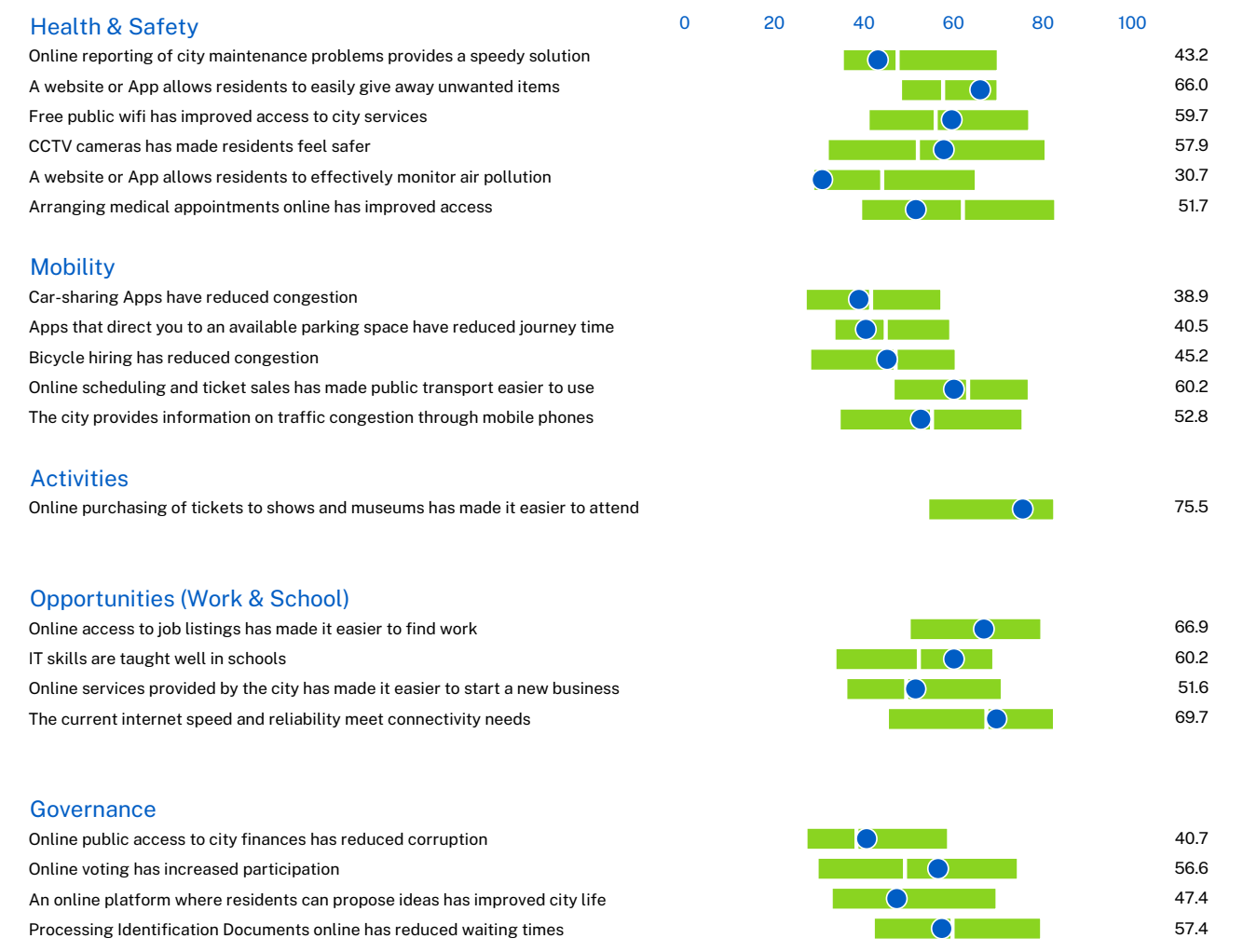
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Manila

SMART CITY RANKING
121
Out of 142



115 in 2023
Out of 141

SMART CITY RATING
C



C in 2023

FACTOR RATINGS



STRUCTURES



TECHNOLOGIES

GROUP



All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,850,000
(UN World Urbanization Prospects)

HDI 0.760
(Global Data Lab)



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

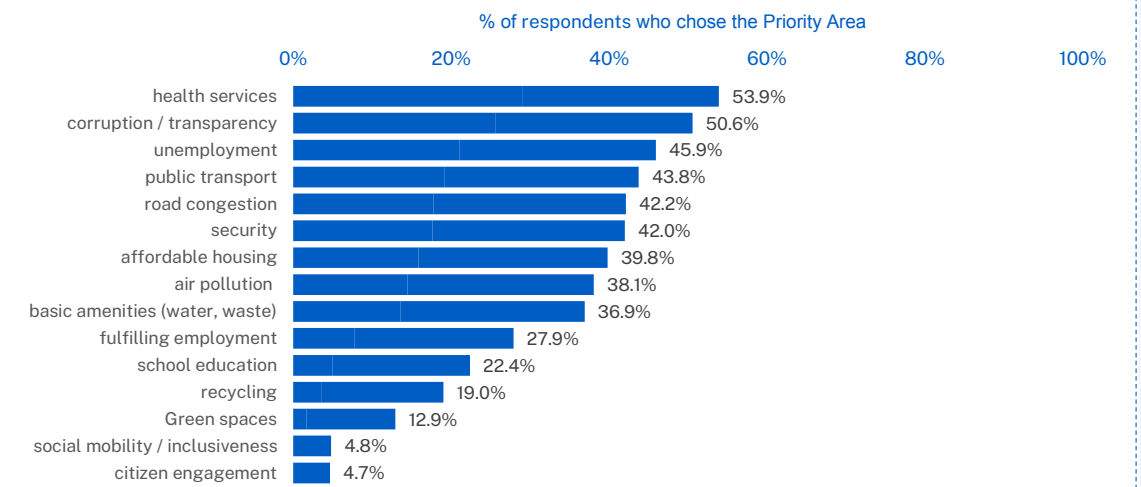
Country

Philippines

	2019	2020	2021	2022	1 yr change
HDI	0.714	0.705	0.692	0.710	+0.018
Life expectancy at birth	71.9	72.1	69.3	72.2	+2.9
Expected years of schooling	13.0	12.8	12.8	12.8	+0.0
Mean years of schooling	9.0	9.0	9.0	9.0	+0.0
GNI per capita (PPP \$)	9,590	8,355	8,369	9,059	+690

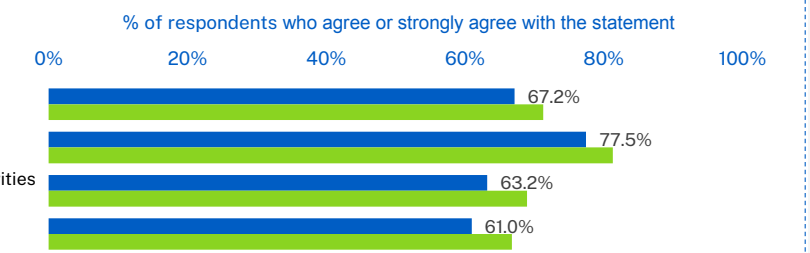
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

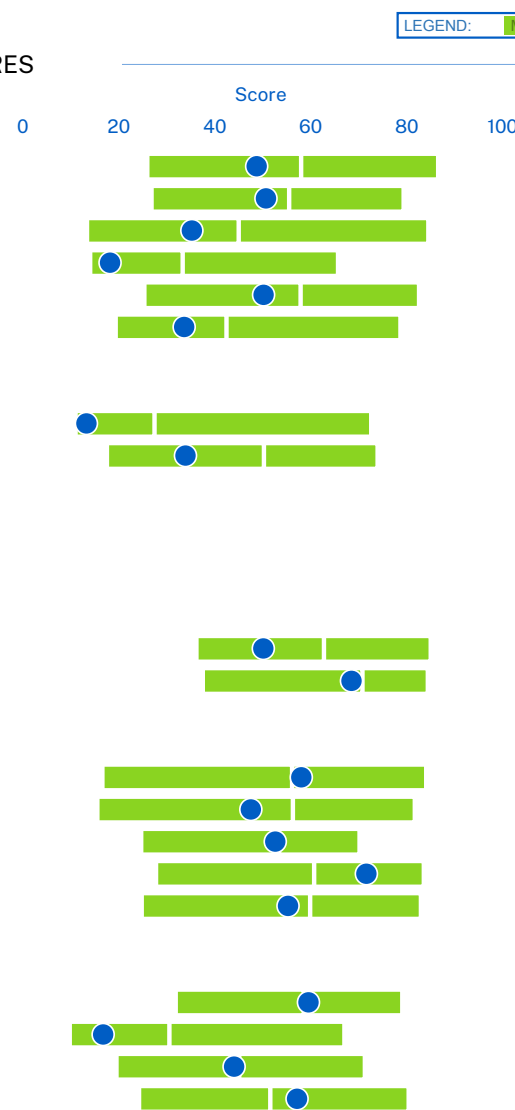
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

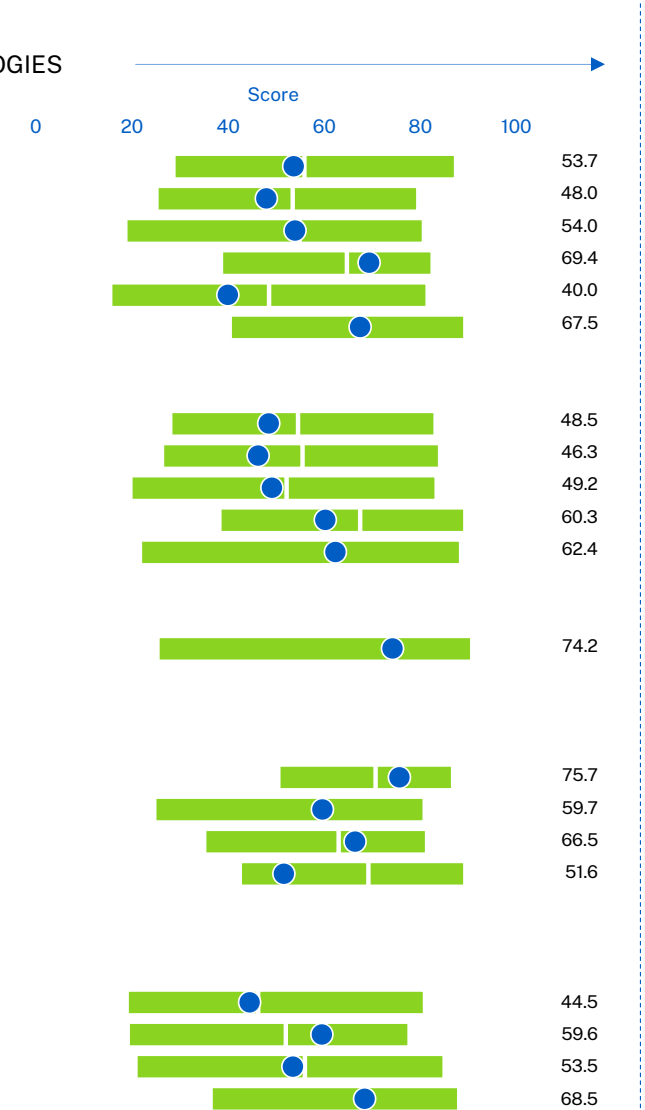
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Marseille

SMART CITY RANKING
104
Out of 142



101 in 2023
Out of 141

SMART CITY RATING

CC

CC in 2023

FACTOR RATINGS

CC

STRUCTURES

CC

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

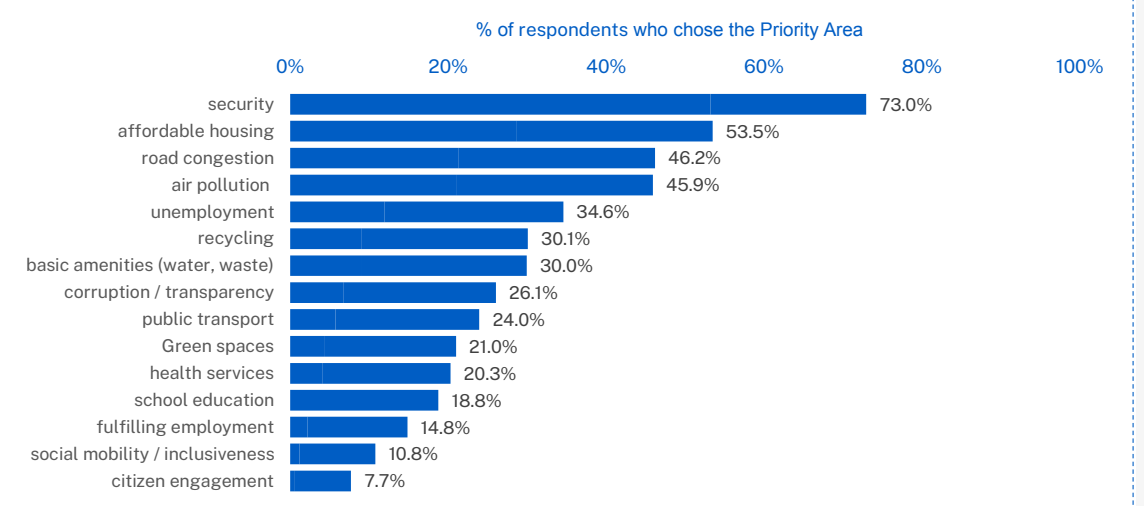
City
Population: 900,000 (Eurostat)
HDI: 0.899 (Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
France					
HDI	0.905	0.900	0.906	0.910	+0.004
Life expectancy at birth	82.7	82.2	82.5	83.2	+0.7
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	11.6	11.7	11.7	11.7	+0.0
GNI per capita (PPP \$)	46,907	42,891	46,322	47,379	+1,057

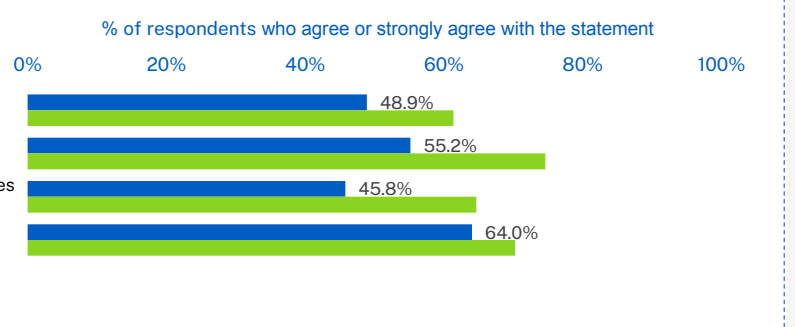
PRIORITY AREAS

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



Mecca

SMART CITY RANKING

52

Out of 142



52 in 2023
Out of 141

SMART CITY RATING

B

B in 2023

FACTOR RATINGS

B

STRUCTURES

B

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,110,000
(UN World Urbanization Prospects)

HDI 0.871
(Global Data Lab)

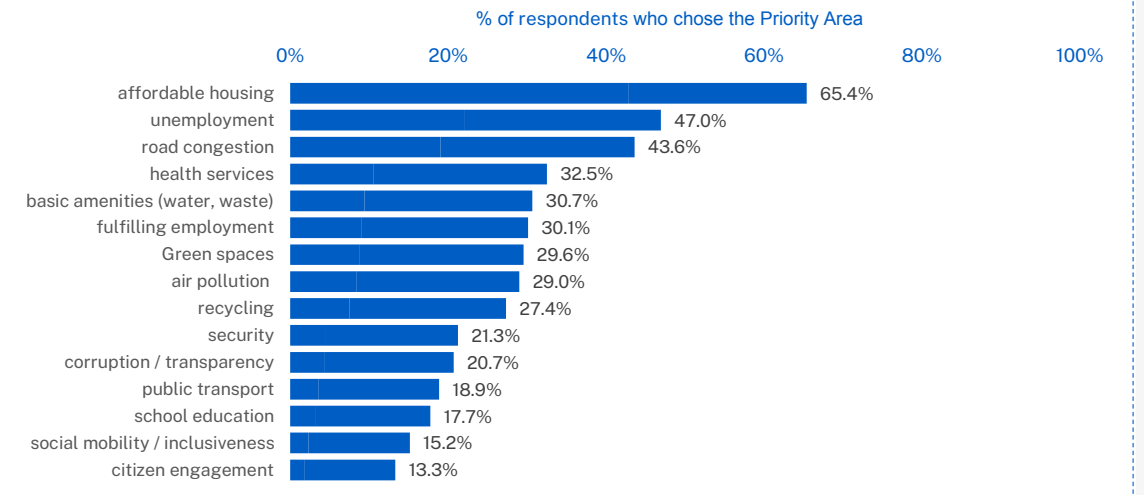


Country

Saudi Arabia	2019	2020	2021	2022	1 yr change
HDI	0.862	0.861	0.867	0.875	+0.008
Life expectancy at birth	77.3	76.2	76.9	77.9	+1.0
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	10.9	11.3	11.3	11.3	+0.0
GNI per capita (PPP \$)	47,529	45,563	47,441	50,620	+3,179

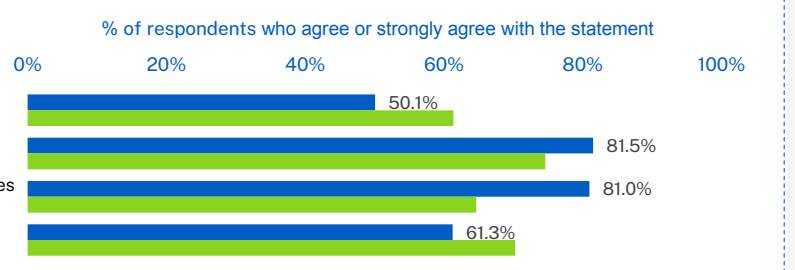
PRIORITY AREAS

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.

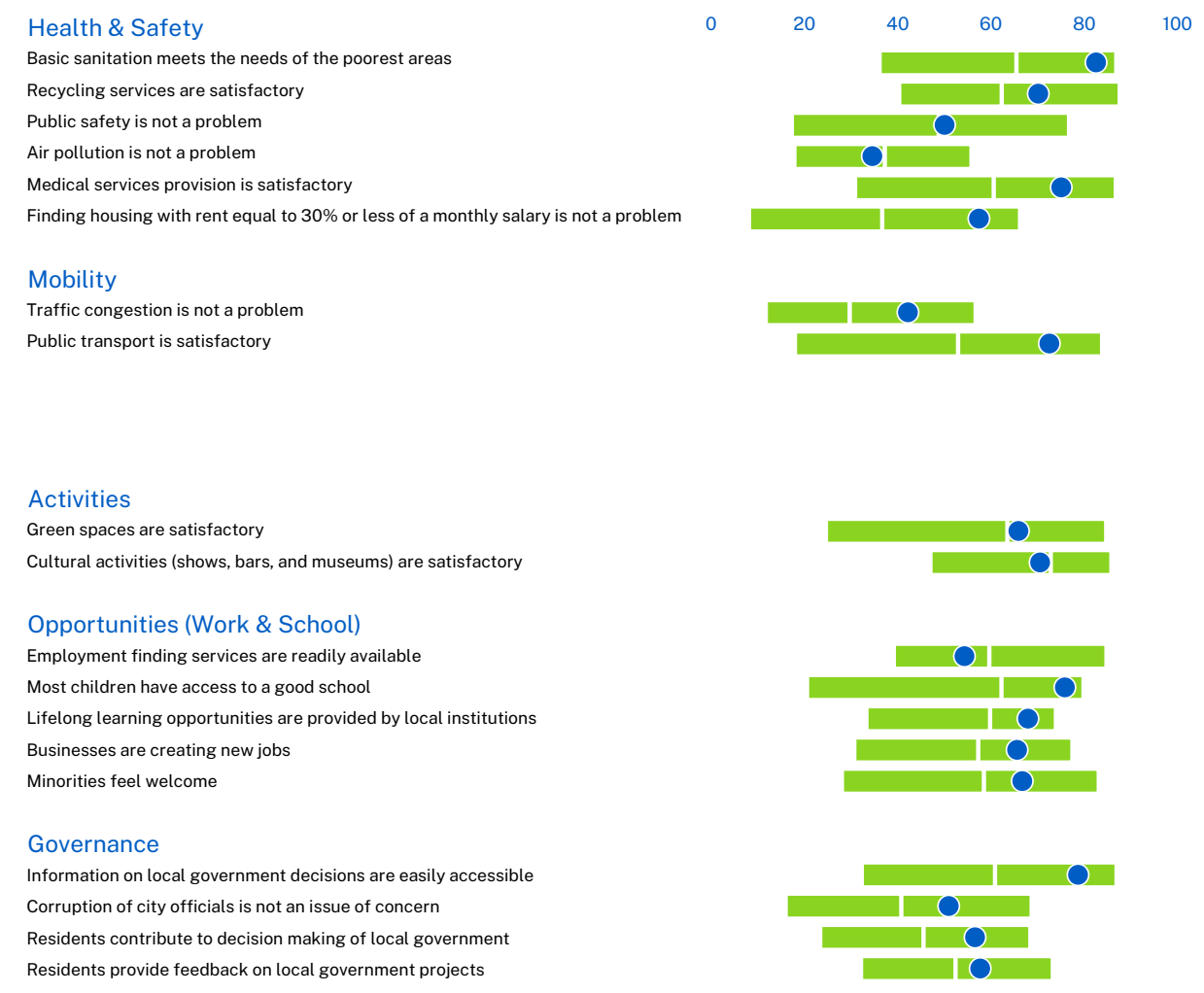


ATTITUDES

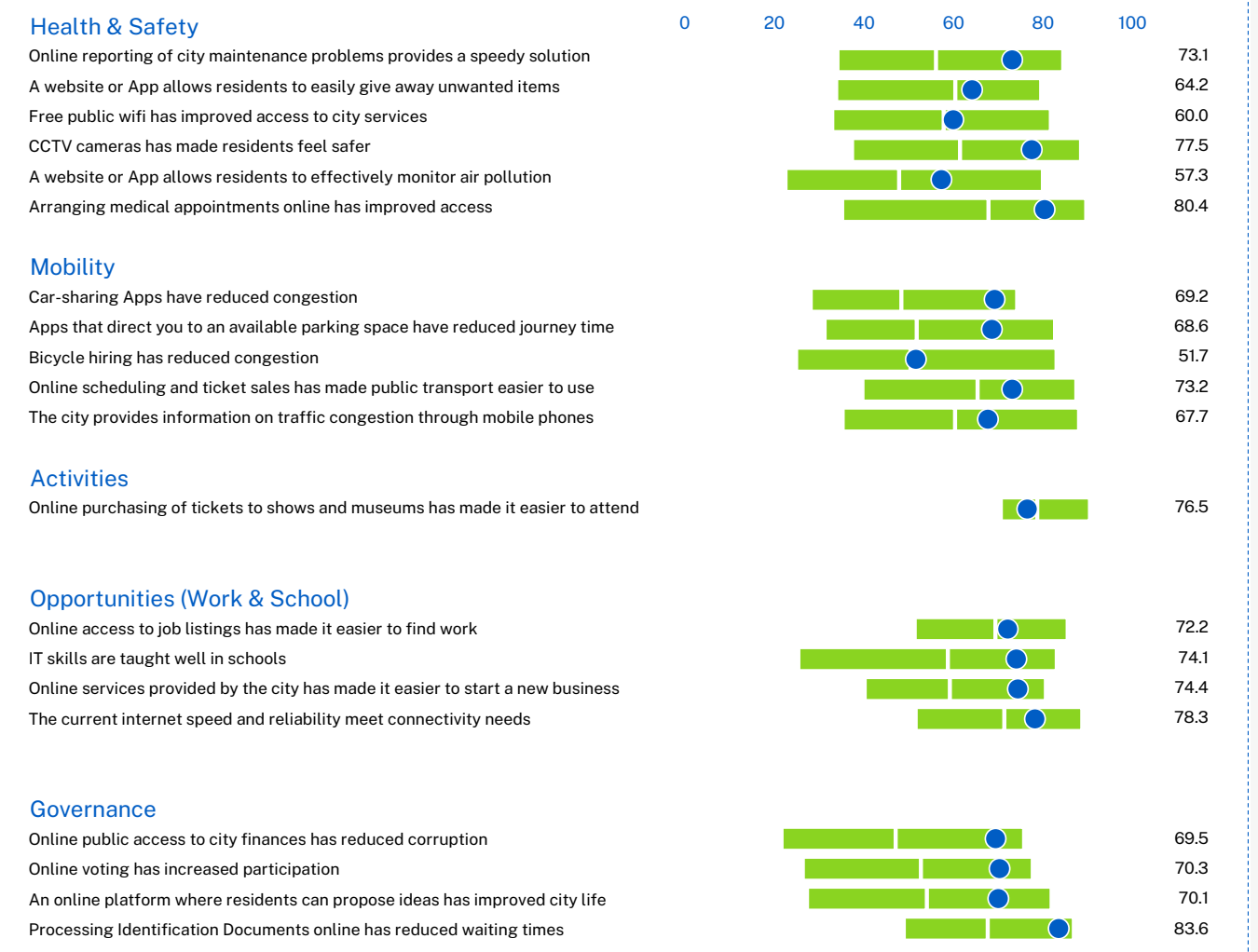
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Medan

SMART CITY RANKING

112

Out of 142

112 in 2023
Out of 141

SMART CITY RATING

CC

CC in 2023

FACTOR RATINGS

CC

STRUCTURES

CC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,340,000
(UN World Urbanization Prospects)

HDI 0.711
(Global Data Lab)



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

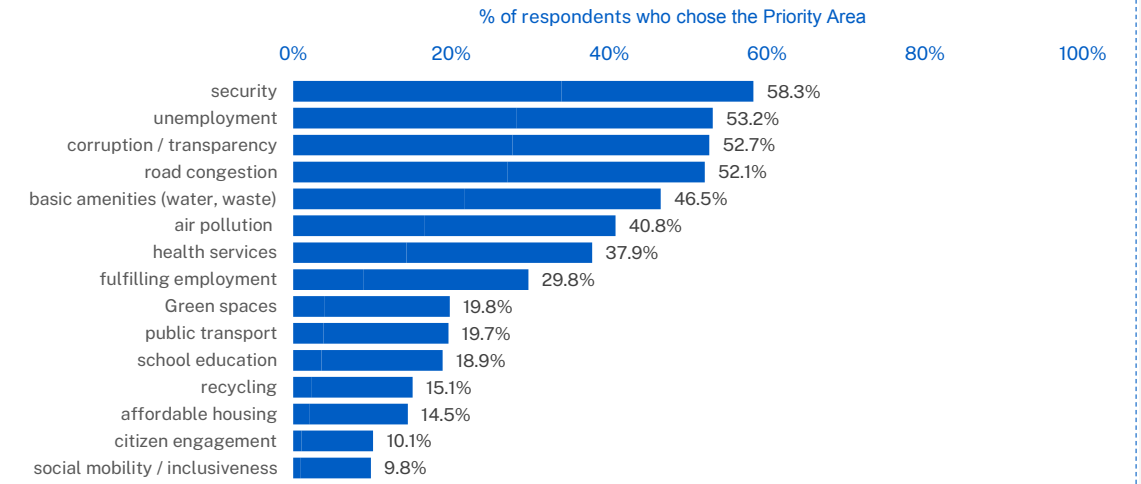
Country

Indonesia

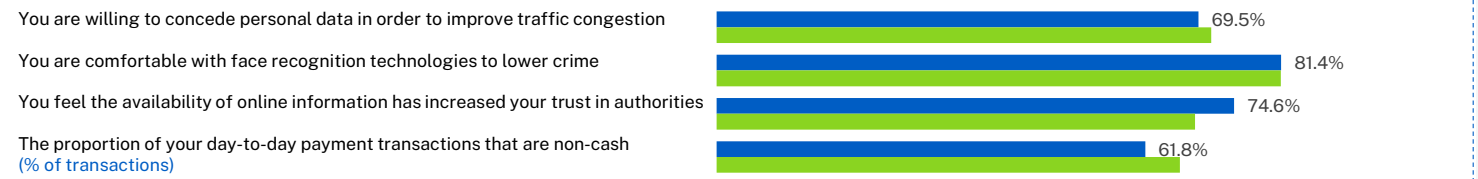
	2019	2020	2021	2022	1 yr change
HDI	0.718	0.712	0.707	0.713	+0.006
Life expectancy at birth	70.5	68.8	67.6	68.3	+0.7
Expected years of schooling	13.9	14.0	14.0	14.0	+0.0
Mean years of schooling	8.4	8.6	8.6	8.6	+0.0
GNI per capita (PPP \$)	11,498	11,206	11,531	12,046	+514

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

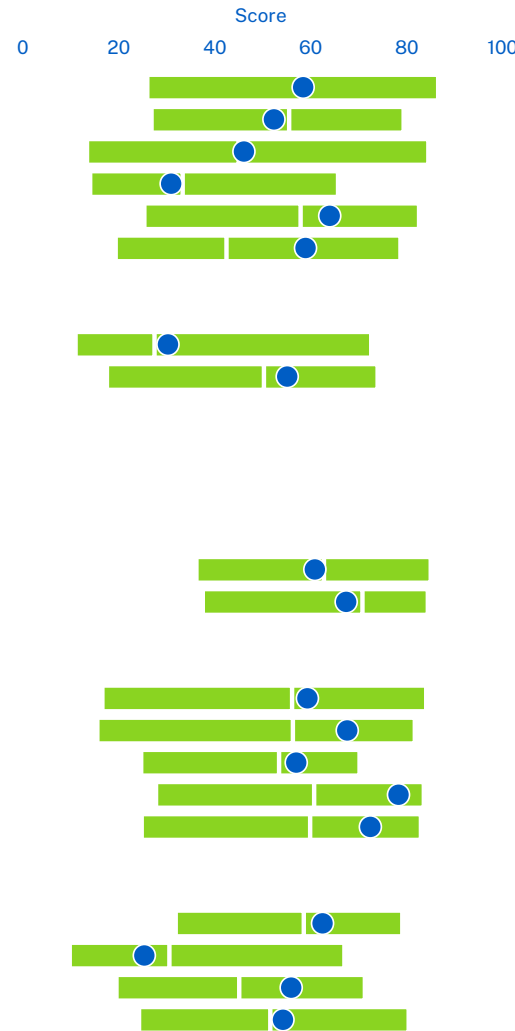
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

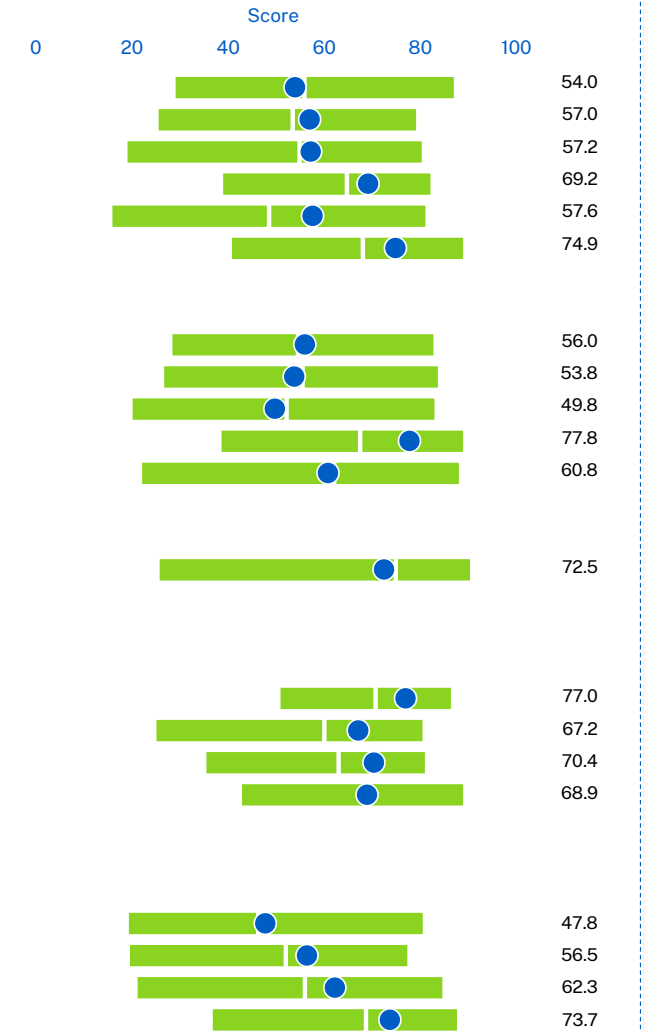
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Medellin

SMART CITY RANKING

119

Out of 142

▼

118 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

C

STRUCTURES

C

TECHNOLOGIES

C

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

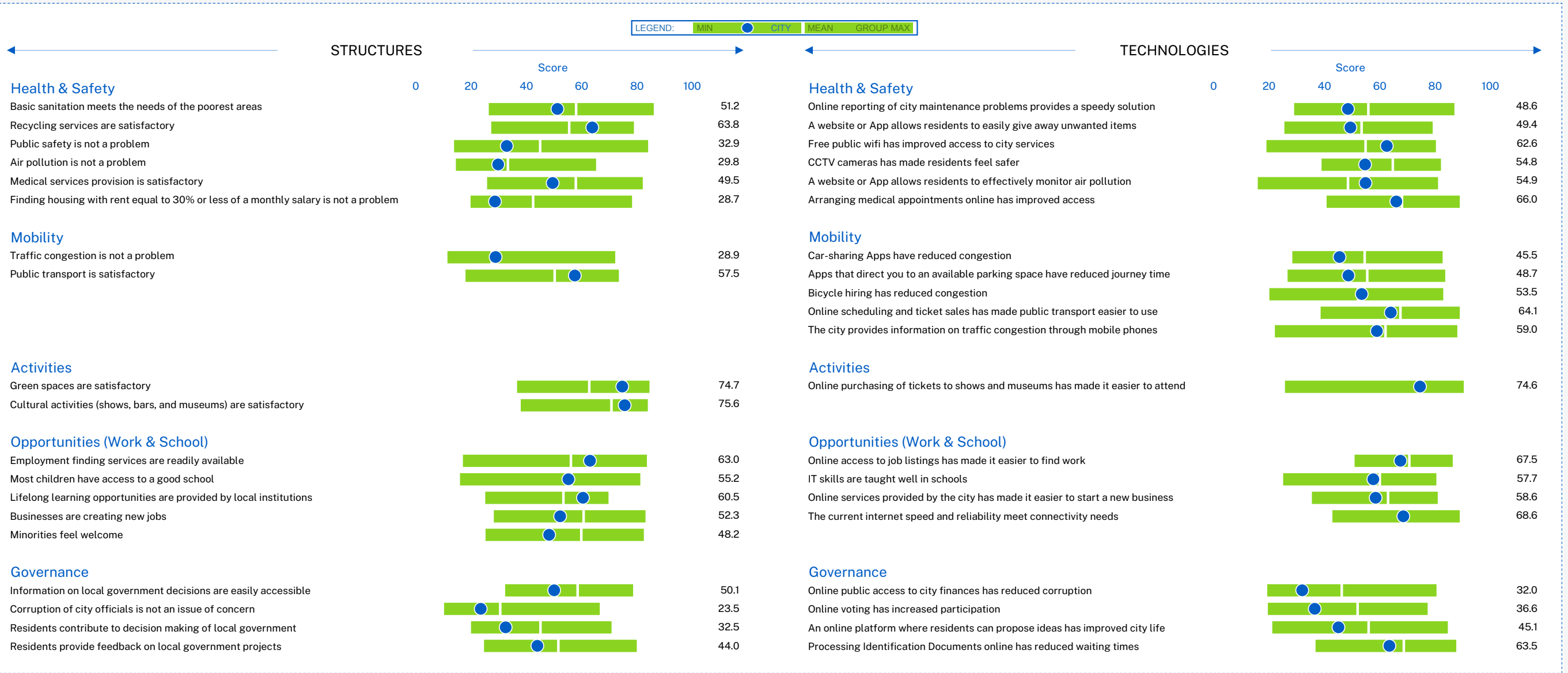
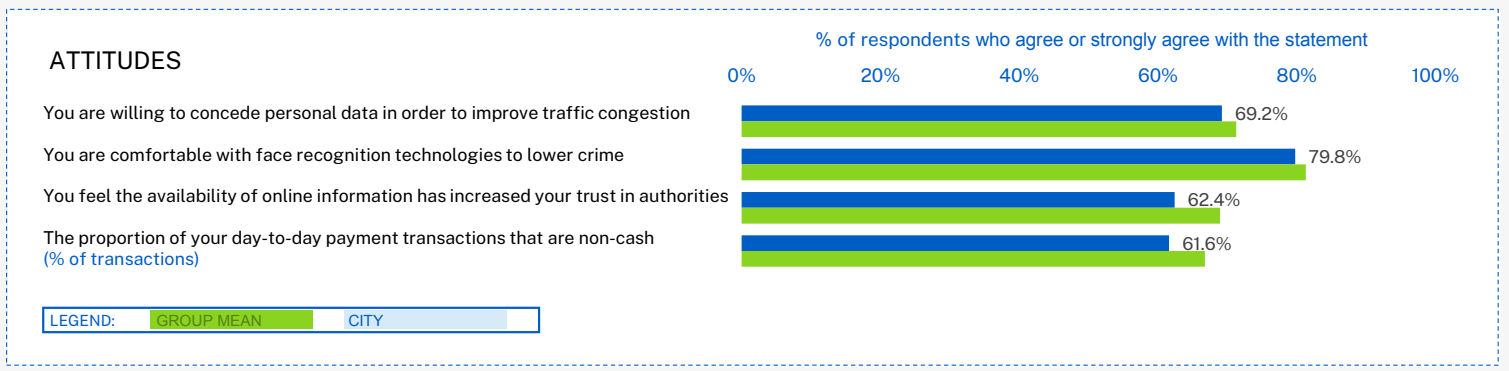
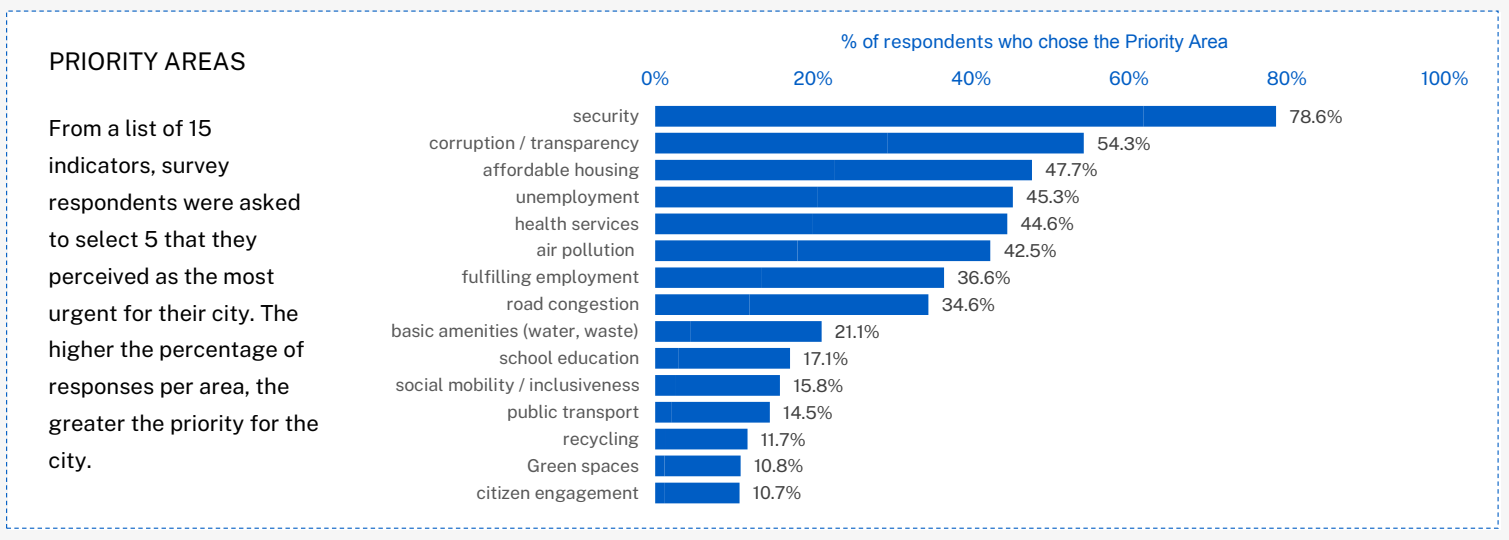
Population 2,370,000
(UN Data)

HDI 0.757
(Global Data Lab)



Country **Colombia**

	2019	2020	2021	2022	1 yr change
HDI	0.768	0.756	0.752	0.758	+0.006
Life expectancy at birth	76.8	74.8	72.8	73.7	+0.8
Expected years of schooling	14.5	14.4	14.4	14.4	+0.0
Mean years of schooling	8.6	8.9	8.9	8.9	+0.0
GNI per capita (PPP \$)	14,294	13,220	14,403	15,014	+611



Medina

SMART CITY RANKING
74
 Out of 142

SMART CITY RATING
CCC
 CCC in 2023

FACTOR RATINGS
B
 STRUCTURES


TECHNOLOGIES
CCC

GROUP
3

All ratings range from AAA to D

BACKGROUND INFORMATION

City
 Population: 150,000 (UN Data)
 HDI: 0.871 (Global Data Lab)

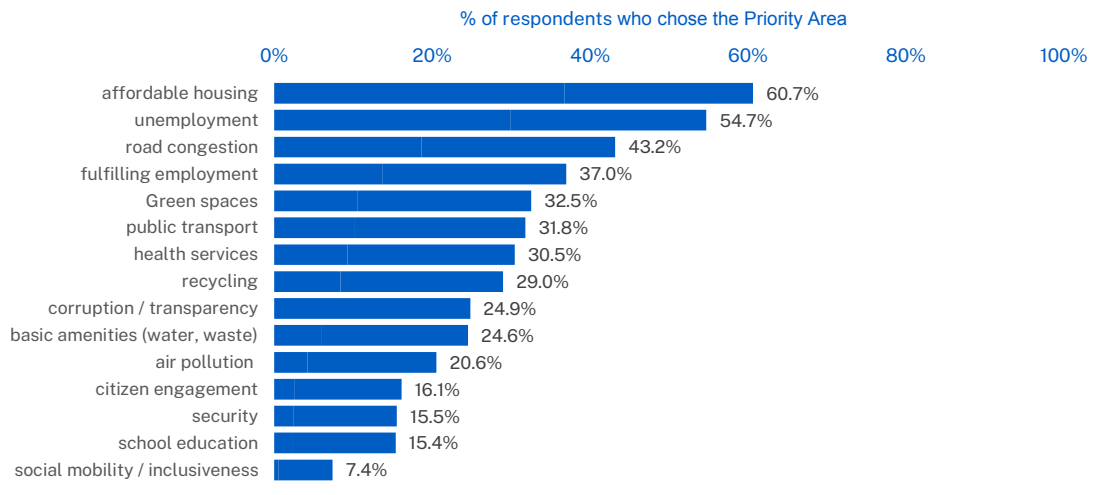


Country
 Saudi Arabia

	2019	2020	2021	2022	1 yr change
HDI	0.862	0.861	0.867	0.875	+0.008
Life expectancy at birth	77.3	76.2	76.9	77.9	+1.0
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	10.9	11.3	11.3	11.3	+0.0
GNI per capita (PPP \$)	47,529	45,563	47,441	50,620	+3,179

PRIORITY AREAS

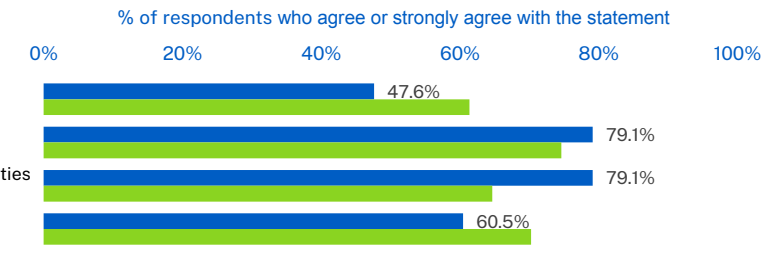
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	60.7%
unemployment	54.7%
road congestion	43.2%
fulfilling employment	37.0%
Green spaces	32.5%
public transport	31.8%
health services	30.5%
recycling	29.0%
corruption / transparency	24.9%
basic amenities (water, waste)	24.6%
air pollution	20.6%
citizen engagement	16.1%
security	15.5%
school education	15.4%
social mobility / inclusiveness	7.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	47.6%	60.0%
You are comfortable with face recognition technologies to lower crime	79.1%	75.0%
You feel the availability of online information has increased your trust in authorities	79.1%	75.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	60.5%	60.0%

LEGEND: ■ GROUP MEAN ■ CITY

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 76.1
- Recycling services are satisfactory: 64.2
- Public safety is not a problem: 49.7
- Air pollution is not a problem: 32.1
- Medical services provision is satisfactory: 73.2
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 49.0

Mobility

- Traffic congestion is not a problem: 37.4
- Public transport is satisfactory: 60.1

Activities

- Green spaces are satisfactory: 60.7
- Cultural activities (shows, bars, and museums) are satisfactory: 68.7

Opportunities (Work & School)

- Employment finding services are readily available: 43.2
- Most children have access to a good school: 74.1
- Lifelong learning opportunities are provided by local institutions: 63.5
- Businesses are creating new jobs: 51.3
- Minorities feel welcome: 64.6

Governance

- Information on local government decisions are easily accessible: 75.5
- Corruption of city officials is not an issue of concern: 46.6
- Residents contribute to decision making of local government: 53.3
- Residents provide feedback on local government projects: 57.6

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 66.7
- A website or App allows residents to easily give away unwanted items: 63.2
- Free public wifi has improved access to city services: 50.9
- CCTV cameras has made residents feel safer: 67.3
- A website or App allows residents to effectively monitor air pollution: 49.8
- Arranging medical appointments online has improved access: 77.0

Mobility

- Car-sharing Apps have reduced congestion: 55.3
- Apps that direct you to an available parking space have reduced journey time: 62.7
- Bicycle hiring has reduced congestion: 49.3
- Online scheduling and ticket sales has made public transport easier to use: 69.8
- The city provides information on traffic congestion through mobile phones: 56.6

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 70.9

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 61.4
- IT skills are taught well in schools: 63.4
- Online services provided by the city has made it easier to start a new business: 69.1
- The current internet speed and reliability meet connectivity needs: 71.0

Governance

- Online public access to city finances has reduced corruption: 59.1
- Online voting has increased participation: 60.4
- An online platform where residents can propose ideas has improved city life: 64.8
- Processing Identification Documents online has reduced waiting times: 77.0

LEGEND: ■ MIN ● CITY ■ MEAN ■ GROUP MAX

Melbourne

SMART CITY RANKING
33
 Out of 142

▼

31 in 2023
 Out of 141

SMART CITY RATING
A
 A in 2023

FACTOR RATINGS
BBB

STRUCTURES

A

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

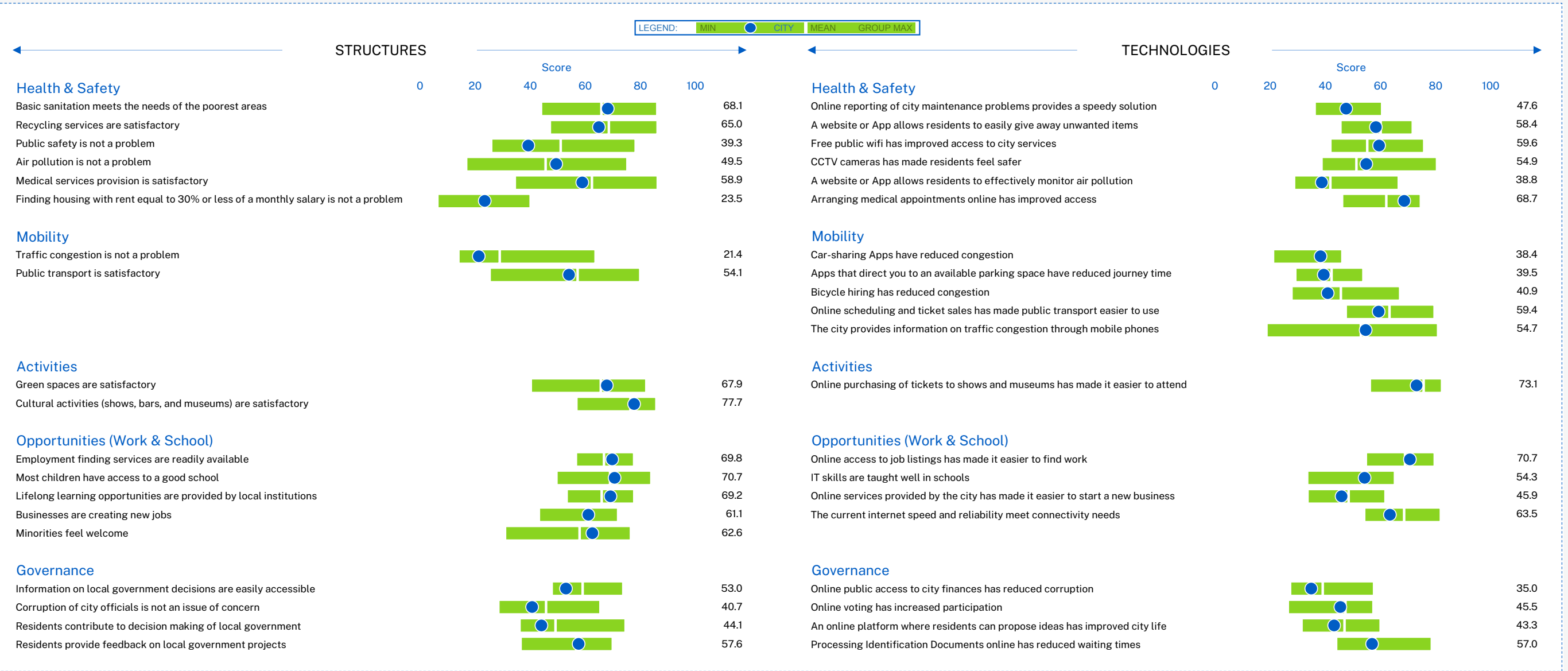
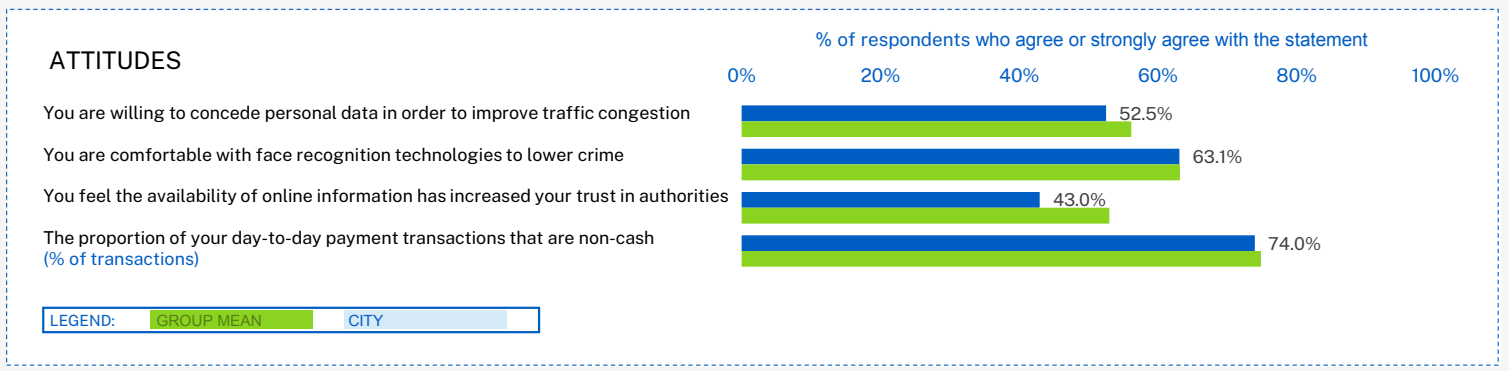
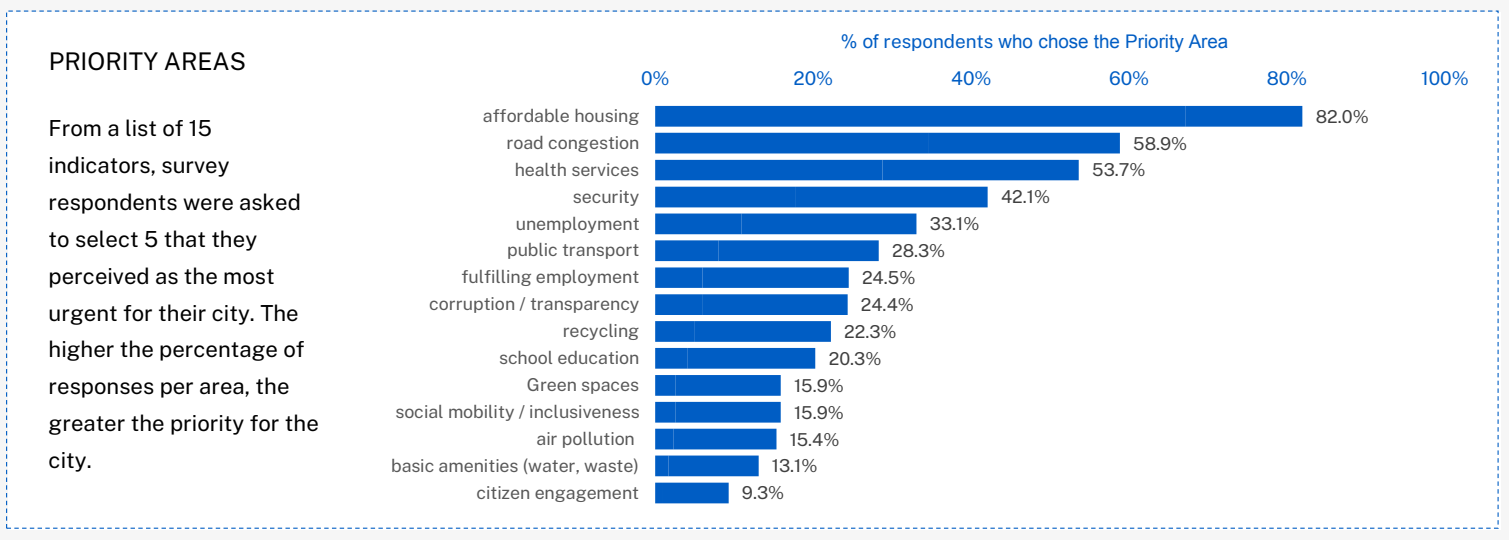
Population 4,200,000
 (UN Data)

HDI 0.948
 (Global Data Lab)



Country
 Australia

	2019	2020	2021	2022	1 yr change
HDI	0.941	0.948	0.949	0.946	-0.003
Life expectancy at birth	83.1	84.3	84.5	83.6	-0.9
Expected years of schooling	21.4	20.9	21.1	21.1	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	47,054	48,075	48,076	49,257	+1,181



Mexico City

SMART CITY RANKING
122
Out of 142



121 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

D

STRUCTURES

C

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 21,780,000
(UN World Urbanization Prospects)

HDI 0.815
(Global Data Lab)



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

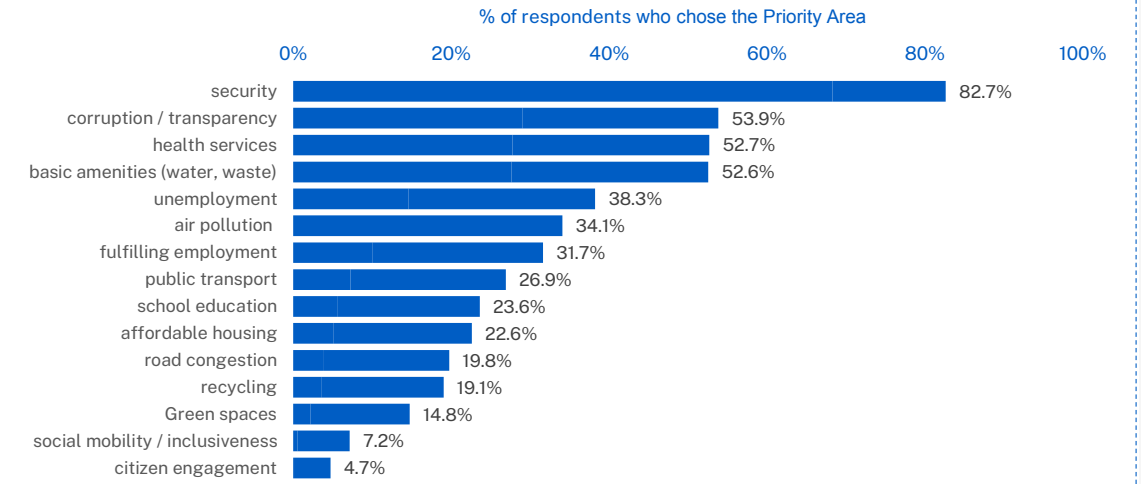
Country

Mexico

	2019	2020	2021	2022	1 yr change
HDI	0.781	0.757	0.757	0.781	+0.024
Life expectancy at birth	74.2	70.1	70.2	74.8	+4.6
Expected years of schooling	14.9	14.8	14.5	14.5	+0.0
Mean years of schooling	9.1	9.2	9.2	9.2	+0.0
GNI per capita (PPP \$)	19,471	17,721	18,582	19,138	+556

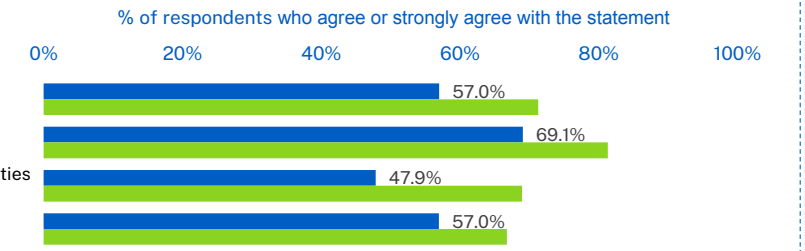
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

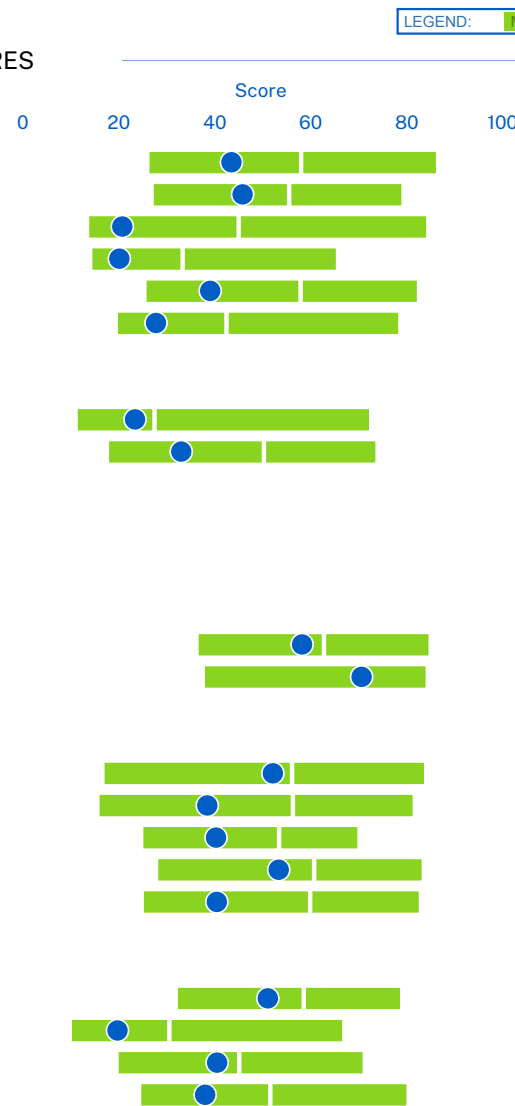
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

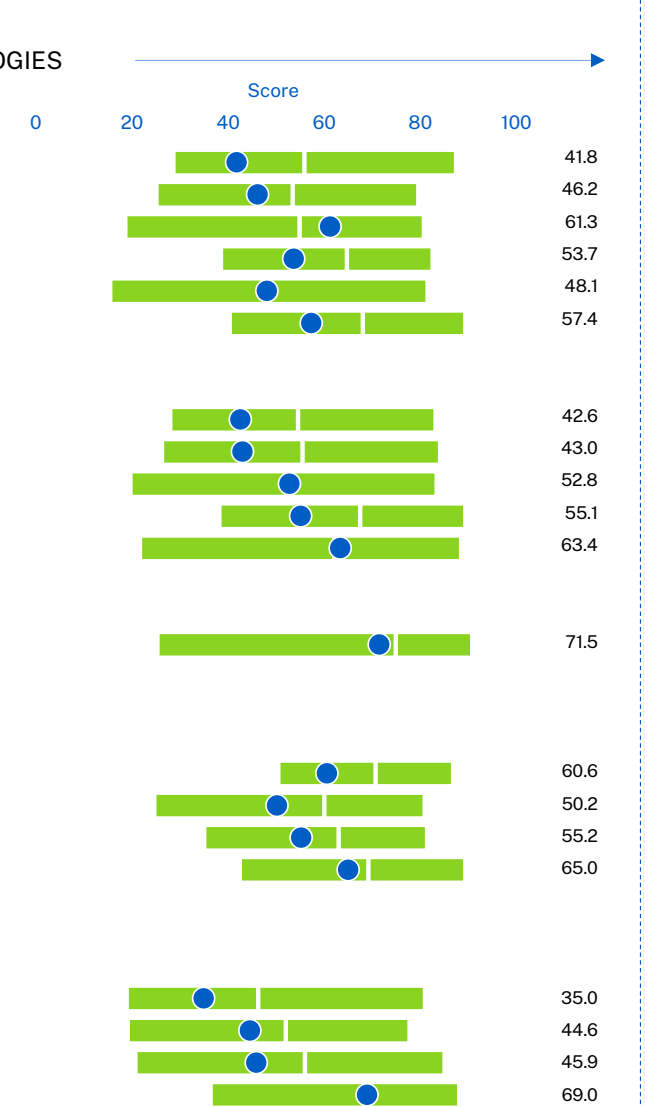
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Milan

SMART CITY RANKING

91

Out of 142



82 in 2023
Out of 141

SMART CITY RATING

B

BB in 2023

FACTOR RATINGS

B

STRUCTURES

B

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,410,000
(Eurostat)

HDI 0.915
(Global Data Lab)



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

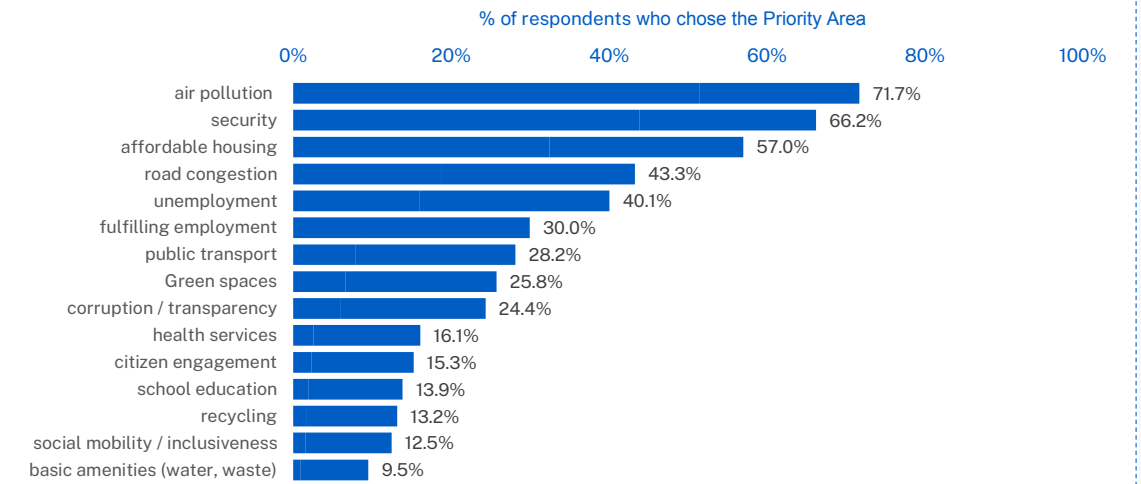
Country

Italy

	2019	2020	2021	2022	1 yr change
HDI	0.899	0.892	0.899	0.906	+0.007
Life expectancy at birth	83.6	82.4	82.9	84.1	+1.2
Expected years of schooling	16.4	16.5	16.7	16.7	+0.0
Mean years of schooling	10.7	10.7	10.7	10.7	+0.0
GNI per capita (PPP \$)	43,102	39,587	42,856	44,284	+1,428

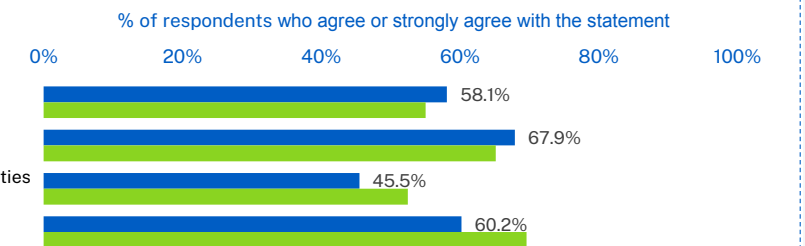
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

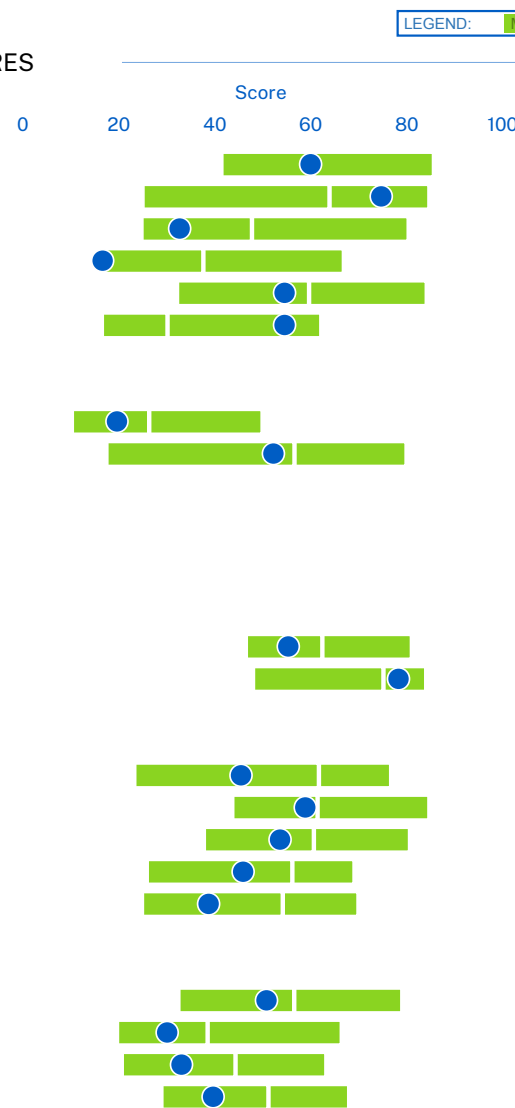
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

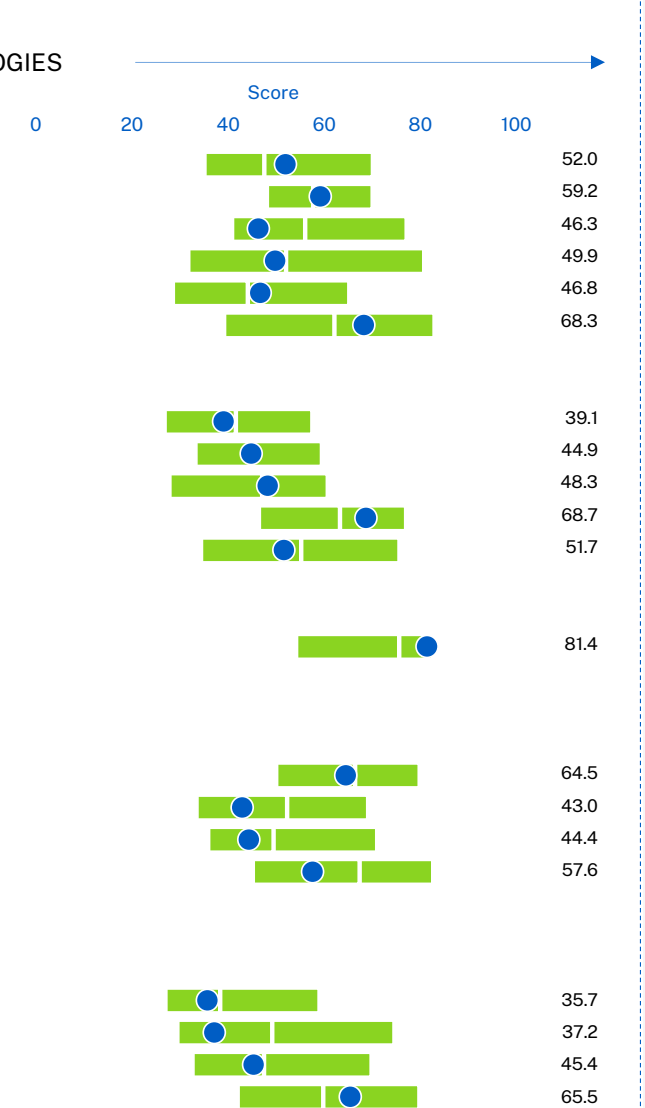
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Montreal

SMART CITY RANKING

80

Out of 142

▼

69 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

B

TECHNOLOGIES

GROUP

2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,700,000
(UN Data)

HDI 0.923
(Global Data Lab)

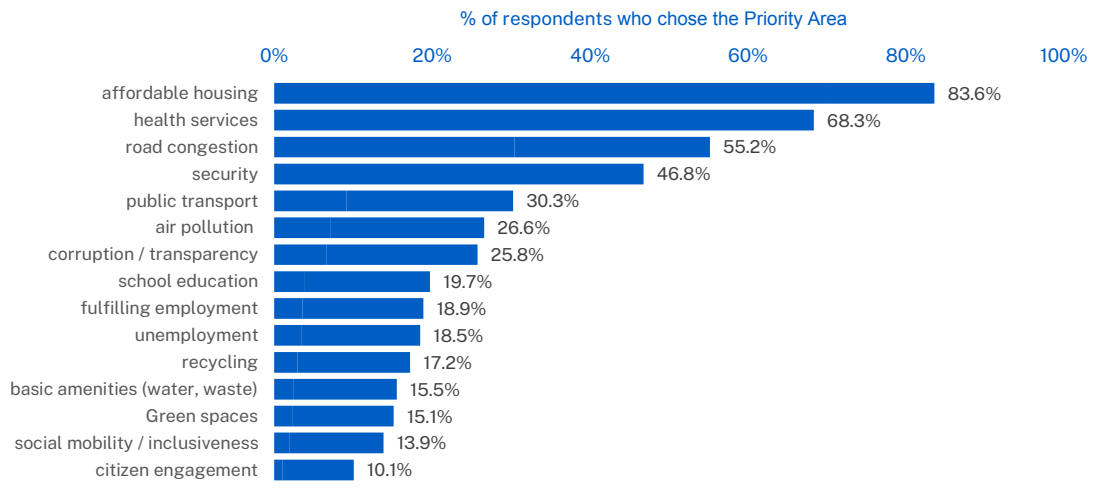


Country **Canada**

	2019	2020	2021	2022	1 yr change
HDI	0.932	0.928	0.934	0.935	+0.001
Life expectancy at birth	82.4	82.0	82.7	82.8	+0.2
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	13.8	13.9	13.9	13.9	+0.0
GNI per capita (PPP \$)	48,591	45,828	47,933	48,444	+512

PRIORITY AREAS

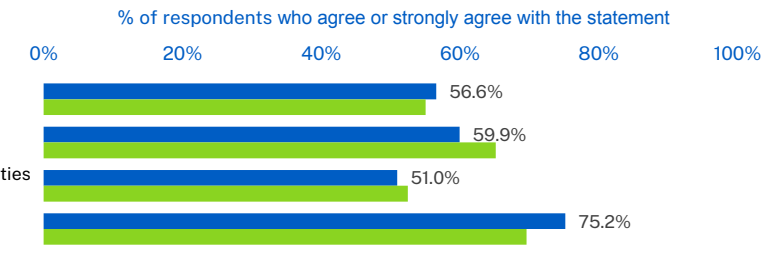
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	83.6%
health services	68.3%
road congestion	55.2%
security	46.8%
public transport	30.3%
air pollution	26.6%
corruption / transparency	25.8%
school education	19.7%
fulfilling employment	18.9%
unemployment	18.5%
recycling	17.2%
basic amenities (water, waste)	15.5%
Green spaces	15.1%
social mobility / inclusiveness	13.9%
citizen engagement	10.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	56.6%	~45%
You are comfortable with face recognition technologies to lower crime	59.9%	~45%
You feel the availability of online information has increased your trust in authorities	51.0%	~45%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.2%	~45%

LEGEND: ■ GROUP MEAN ■ CITY

STRUCTURES

Score: 0 20 40 60 80 100

LEGEND: ■ MIN ● CITY ■ MEAN ■ GROUP MAX

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 59.5
- Recycling services are satisfactory: 67.7
- Public safety is not a problem: 49.4
- Air pollution is not a problem: 37.7
- Medical services provision is satisfactory: 42.9
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 18.7

Mobility

- Traffic congestion is not a problem: 16.4
- Public transport is satisfactory: 58.3

Activities

- Green spaces are satisfactory: 70.8
- Cultural activities (shows, bars, and museums) are satisfactory: 80.6

Opportunities (Work & School)

- Employment finding services are readily available: 69.2
- Most children have access to a good school: 67.0
- Lifelong learning opportunities are provided by local institutions: 68.8
- Businesses are creating new jobs: 65.7
- Minorities feel welcome: 61.9

Governance

- Information on local government decisions are easily accessible: 58.1
- Corruption of city officials is not an issue of concern: 39.7
- Residents contribute to decision making of local government: 41.2
- Residents provide feedback on local government projects: 50.2

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 39.4
- A website or App allows residents to easily give away unwanted items: 52.2
- Free public wifi has improved access to city services: 51.4
- CCTV cameras has made residents feel safer: 45.3
- A website or App allows residents to effectively monitor air pollution: 38.7
- Arranging medical appointments online has improved access: 50.4

Mobility

- Car-sharing Apps have reduced congestion: 35.1
- Apps that direct you to an available parking space have reduced journey time: 35.5
- Bicycle hiring has reduced congestion: 44.5
- Online scheduling and ticket sales has made public transport easier to use: 53.8
- The city provides information on traffic congestion through mobile phones: 51.1

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 72.7

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 69.8
- IT skills are taught well in schools: 52.4
- Online services provided by the city has made it easier to start a new business: 47.4
- The current internet speed and reliability meet connectivity needs: 68.8

Governance

- Online public access to city finances has reduced corruption: 34.4
- Online voting has increased participation: 39.6
- An online platform where residents can propose ideas has improved city life: 44.7
- Processing Identification Documents online has reduced waiting times: 48.9

Mumbai

SMART CITY RANKING
107
Out of 142



109 in 2023
Out of 141

SMART CITY RATING

CC

CC in 2023

FACTOR RATINGS

CC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 20,410,000
(UN World Urbanization Prospects)

HDI 0.688
(Global Data Lab)



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

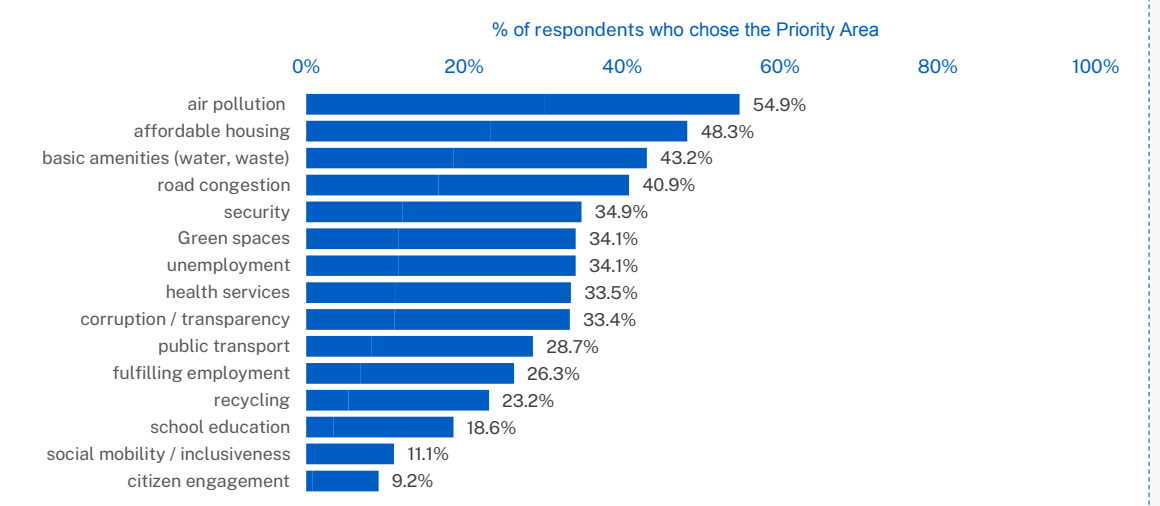
Country

India

	2019	2020	2021	2022	1 yr change
HDI	0.638	0.638	0.633	0.644	+0.011
Life expectancy at birth	70.9	70.2	67.2	67.7	+0.5
Expected years of schooling	11.4	11.7	12.0	12.6	+0.6
Mean years of schooling	6.3	6.5	6.5	6.6	+0.0
GNI per capita (PPP \$)	6,554	6,090	6,542	6,951	+408

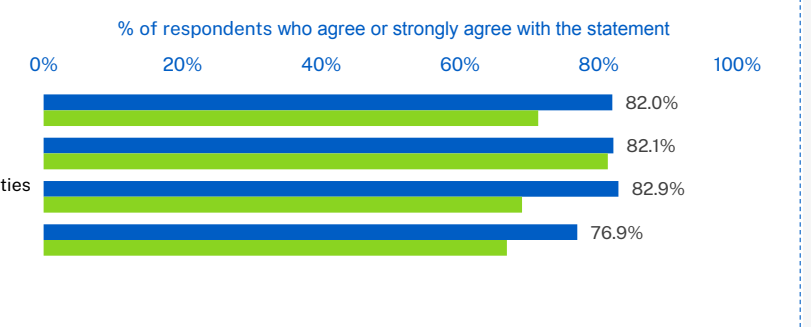
PRIORITY AREAS

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.



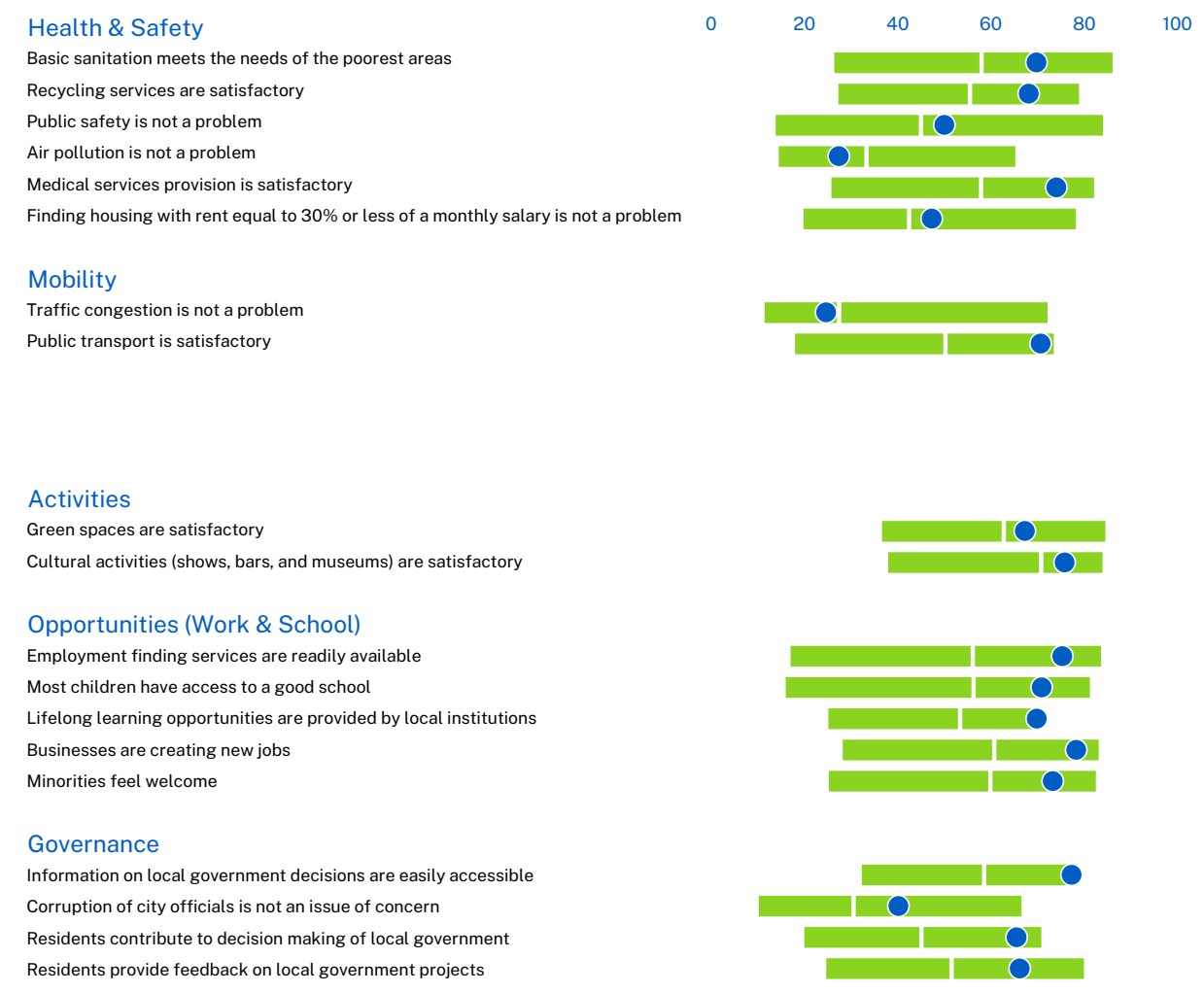
ATTITUDES

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

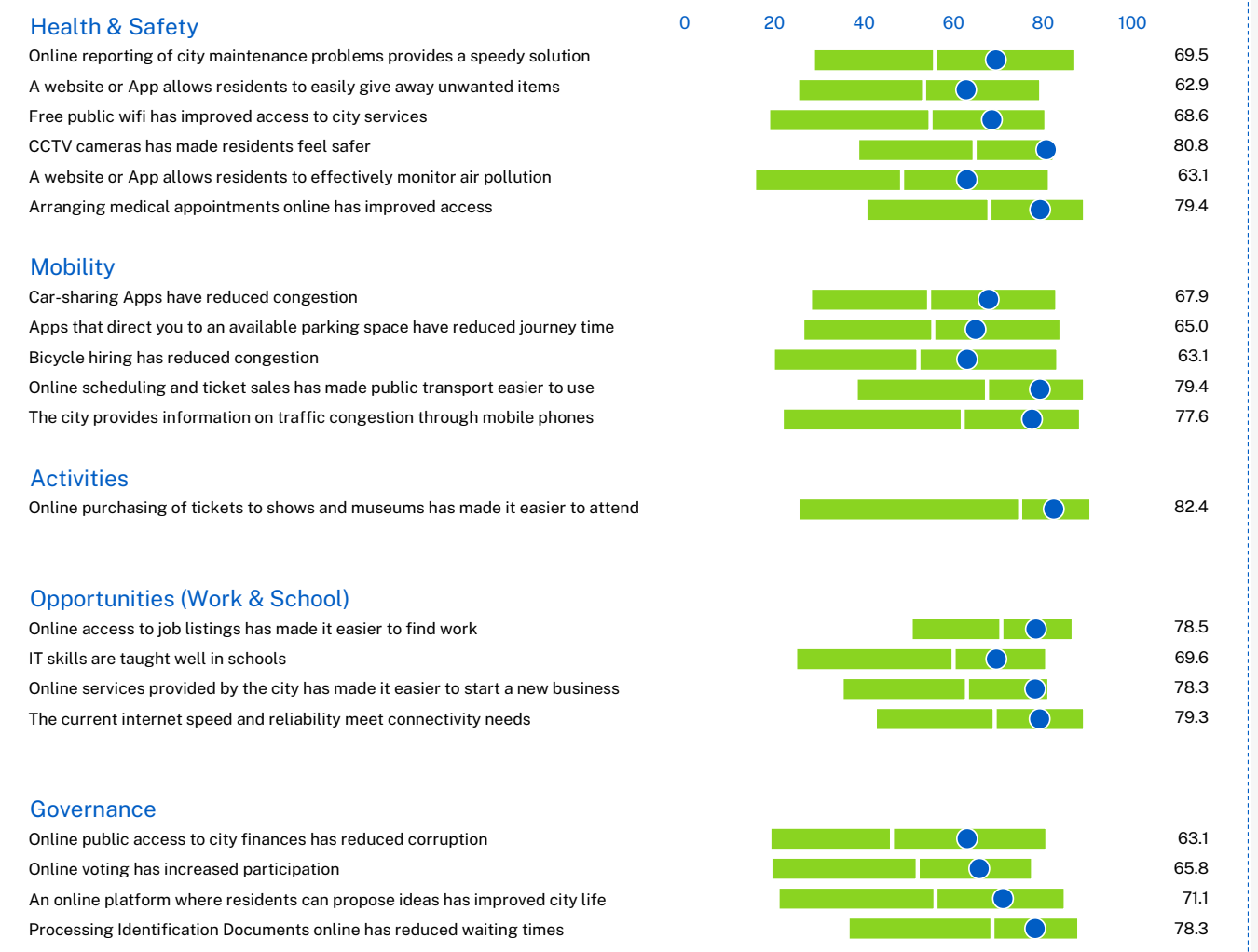


LEGEND: GROUP MEAN CITY

STRUCTURES



TECHNOLOGIES



Munich

SMART CITY RANKING
21
 Out of 142

▼

20 in 2023
 Out of 141

SMART CITY RATING
A
 AA in 2023

FACTOR RATINGS
A
 STRUCTURES

TECHNOLOGIES
A

GROUP
1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,540,000
 (UN World Urbanization Prospects)

HDI 0.950
 (Global Data Lab)

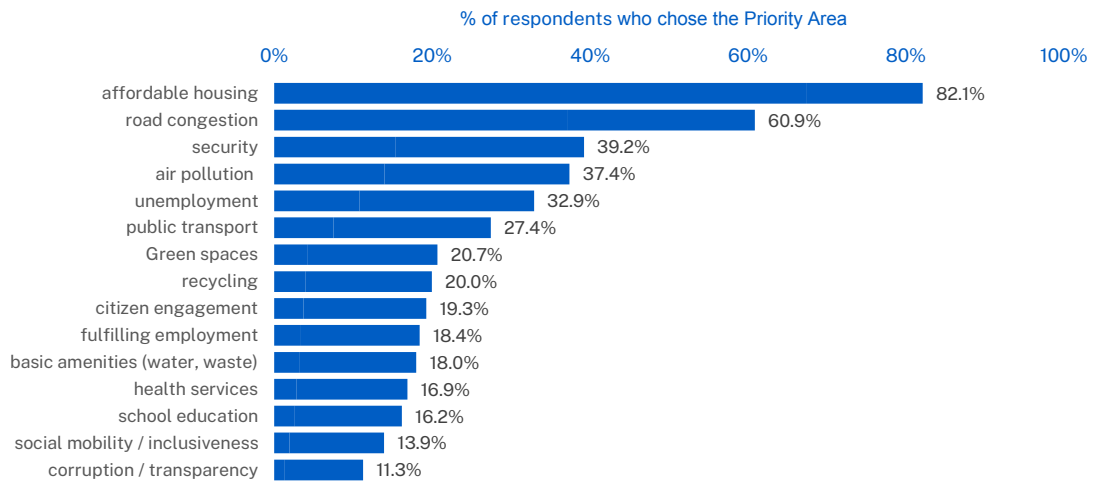


Country
 Germany

	2019	2020	2021	2022	1 yr change
HDI	0.951	0.948	0.948	0.950	+0.002
Life expectancy at birth	81.6	81.1	80.6	81.0	+0.4
Expected years of schooling	17.2	17.2	17.3	17.3	+0.0
Mean years of schooling	14.2	14.3	14.3	14.3	+0.0
GNI per capita (PPP \$)	55,685	53,375	55,057	55,340	+284

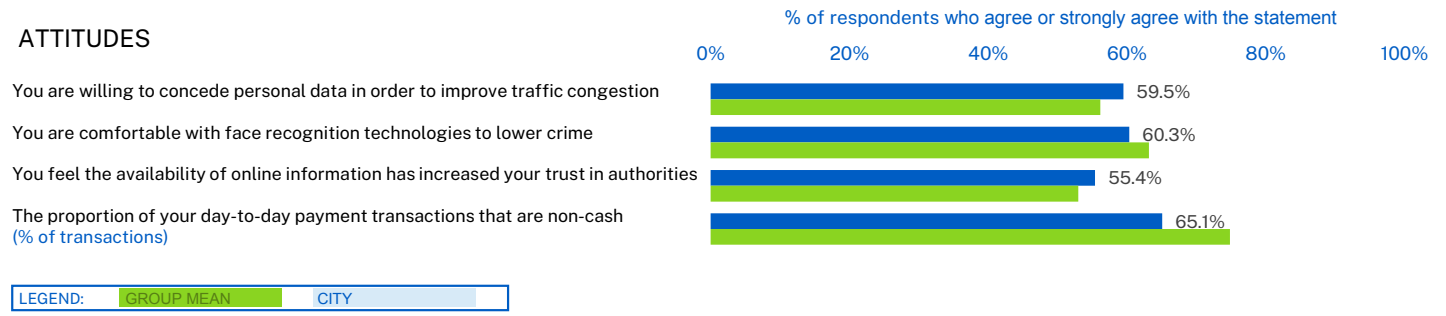
PRIORITY AREAS

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.




Priority Area	% of respondents
affordable housing	82.1%
road congestion	60.9%
security	39.2%
air pollution	37.4%
unemployment	32.9%
public transport	27.4%
Green spaces	20.7%
recycling	20.0%
citizen engagement	19.3%
fulfilling employment	18.4%
basic amenities (water, waste)	18.0%
health services	16.9%
school education	16.2%
social mobility / inclusiveness	13.9%
corruption / transparency	11.3%

ATTITUDES



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	59.5%	~50%
You are comfortable with face recognition technologies to lower crime	60.3%	~50%
You feel the availability of online information has increased your trust in authorities	55.4%	~50%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	65.1%	~50%

LEGEND: [GROUP MEAN] [CITY]



LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

Category	Factor	Score
HEALTH & SAFETY	Basic sanitation meets the needs of the poorest areas	71.9
	Recycling services are satisfactory	77.8
	Public safety is not a problem	58.0
	Air pollution is not a problem	43.6
	Medical services provision is satisfactory	74.6
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	21.6
MOBILITY	Traffic congestion is not a problem	30.1
	Public transport is satisfactory	64.4
	Car-sharing Apps have reduced congestion	41.8
	Apps that direct you to an available parking space have reduced journey time	43.5
ACTIVITIES	Green spaces are satisfactory	70.1
	Cultural activities (shows, bars, and museums) are satisfactory	83.8
	Online purchasing of tickets to shows and museums has made it easier to attend	79.7
OPPORTUNITIES (WORK & SCHOOL)	Employment finding services are readily available	63.4
	IT skills are taught well in schools	49.1
	Online services provided by the city has made it easier to start a new business	45.3
	The current internet speed and reliability meet connectivity needs	63.6
GOVERNANCE	Information on local government decisions are easily accessible	58.6
	Online voting has increased participation	51.9
	An online platform where residents can propose ideas has improved city life	47.8
	Processing Identification Documents online has reduced waiting times	50.9

Muscat

SMART CITY RANKING

88

Out of 142

▲

96 in 2023
Out of 141

SMART CITY RATING

B

B in 2023

FACTOR RATINGS

B

STRUCTURES

CCC

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,620,000
(UN World Urbanization Prospects)

HDI 0.816
(Global Data Lab)



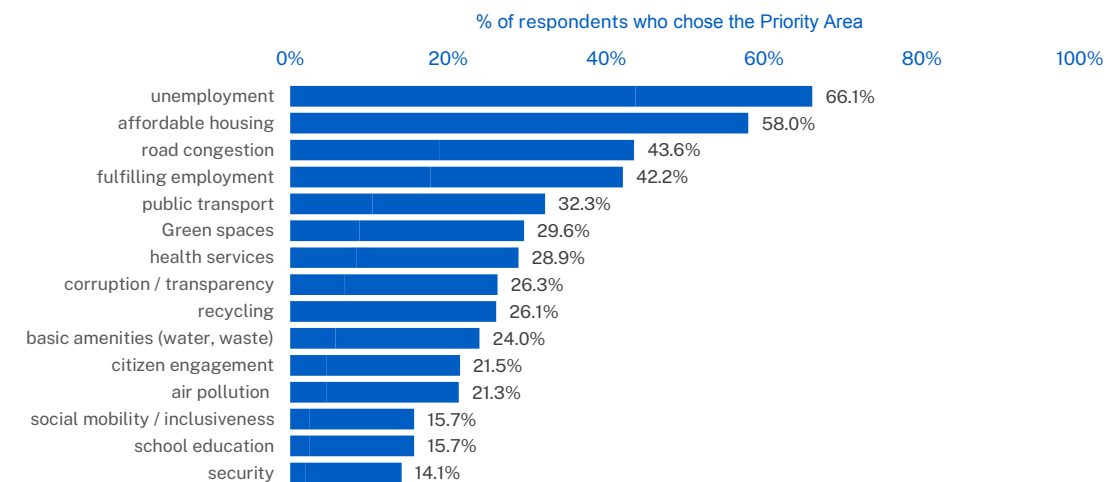
Country

Oman

	2019	2020	2021	2022	1 yr change
HDI	0.841	0.823	0.810	0.819	+0.009
Life expectancy at birth	78.0	74.8	72.5	73.9	+1.4
Expected years of schooling	14.0	13.2	13.0	13.0	+0.0
Mean years of schooling	11.4	11.9	11.9	11.9	+0.0
GNI per capita (PPP \$)	31,513	30,926	31,995	32,967	+972

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.



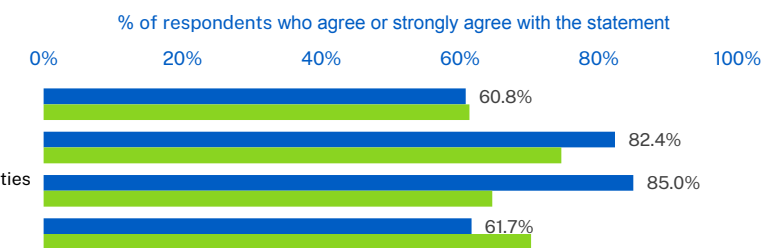
ATTITUDES

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

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

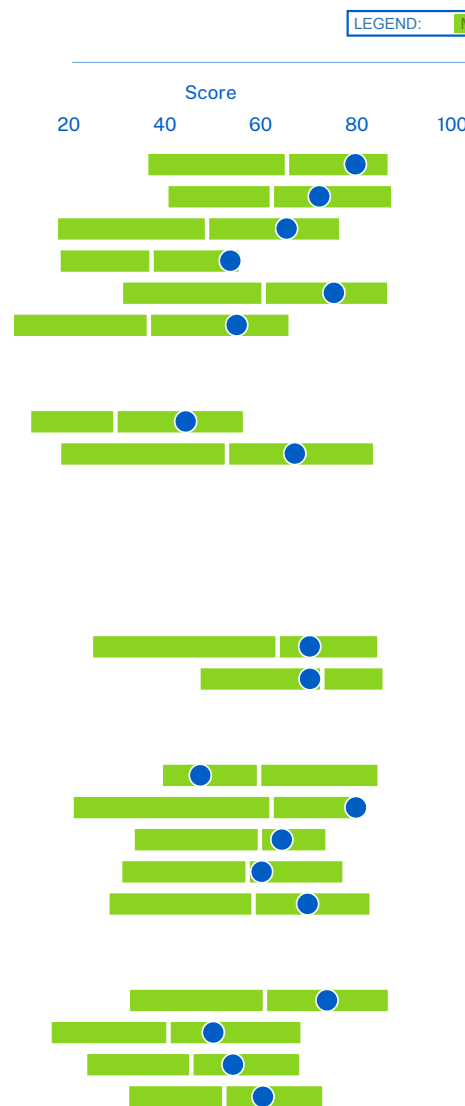
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

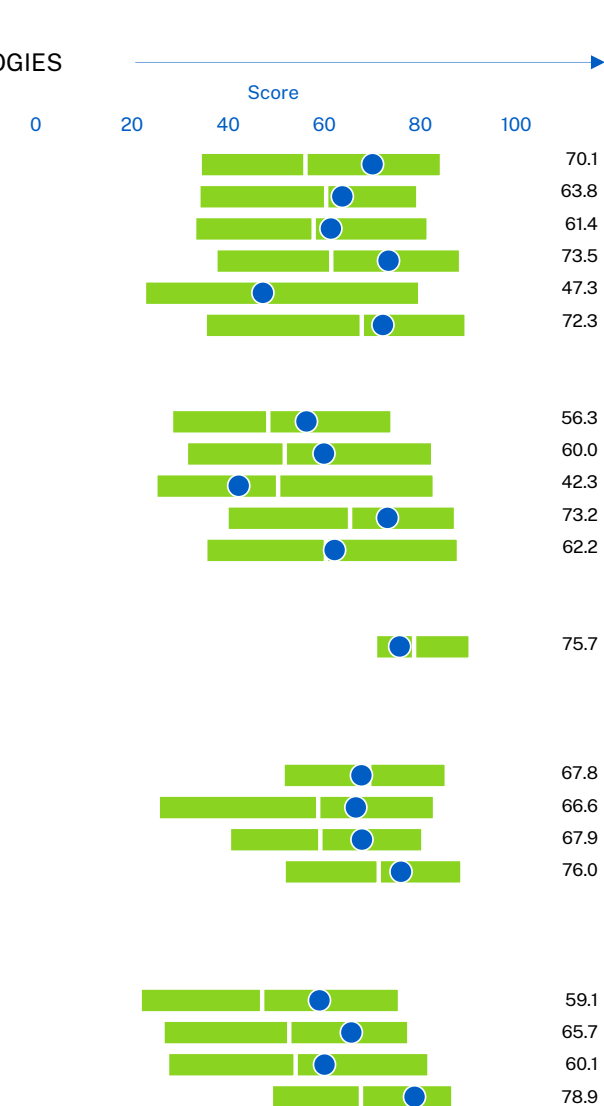
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Nairobi

SMART CITY RANKING

131

Out of 142

131 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

C

STRUCTURES

C

TECHNOLOGIES

C

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

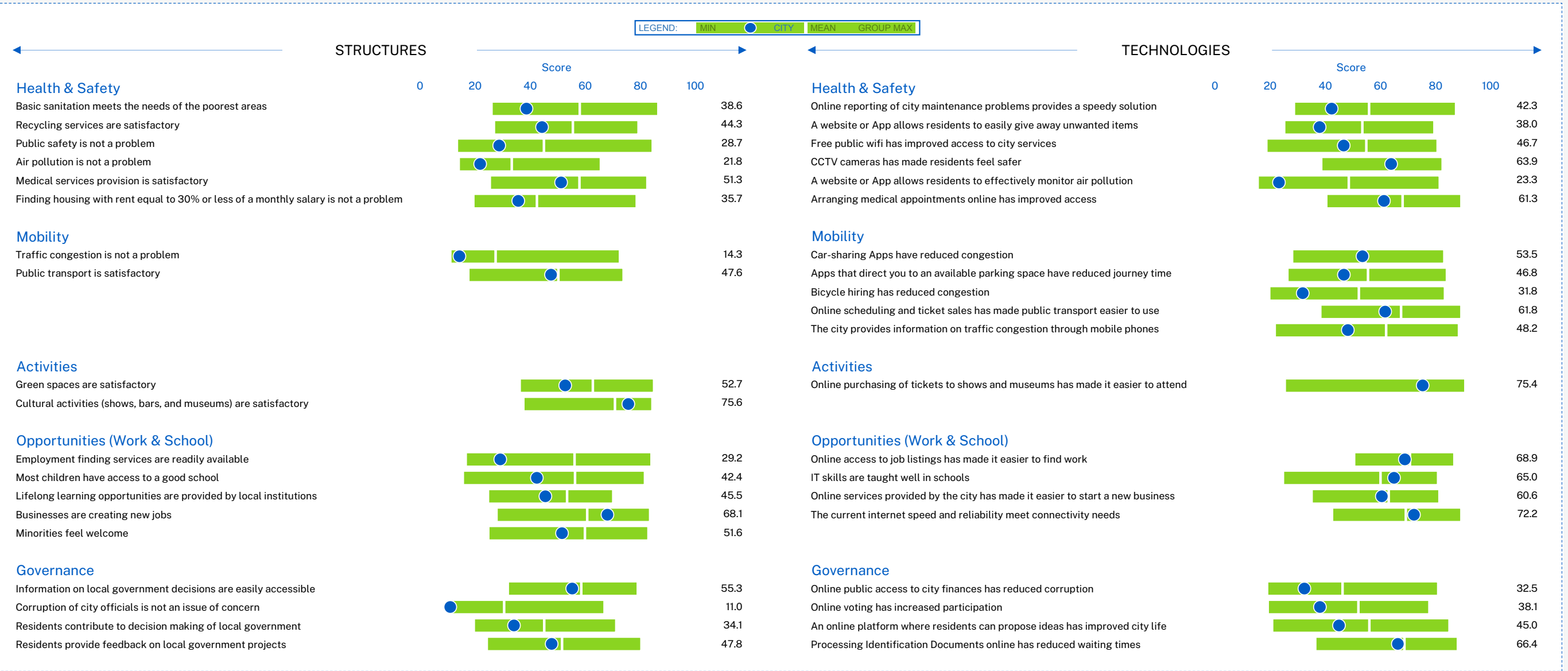
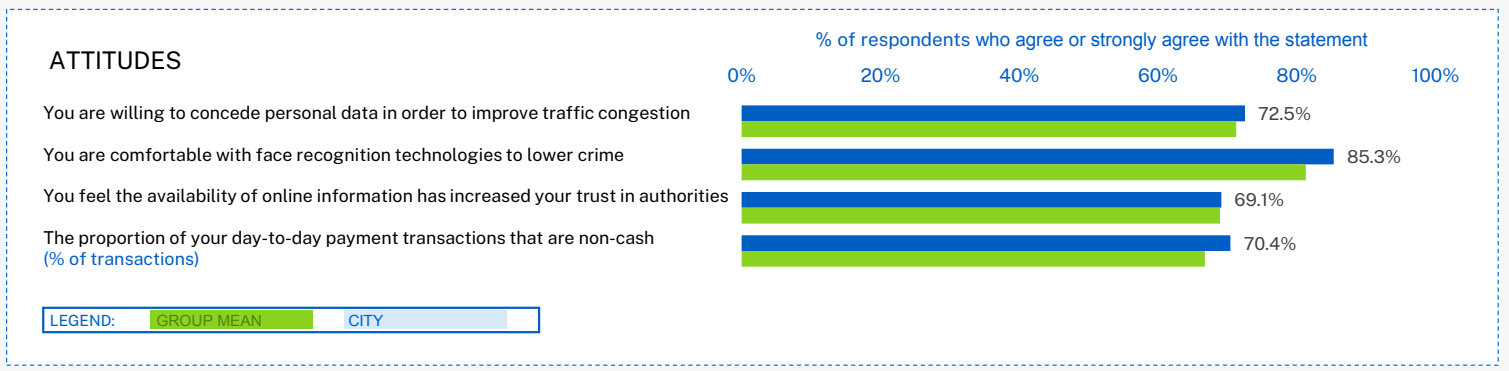
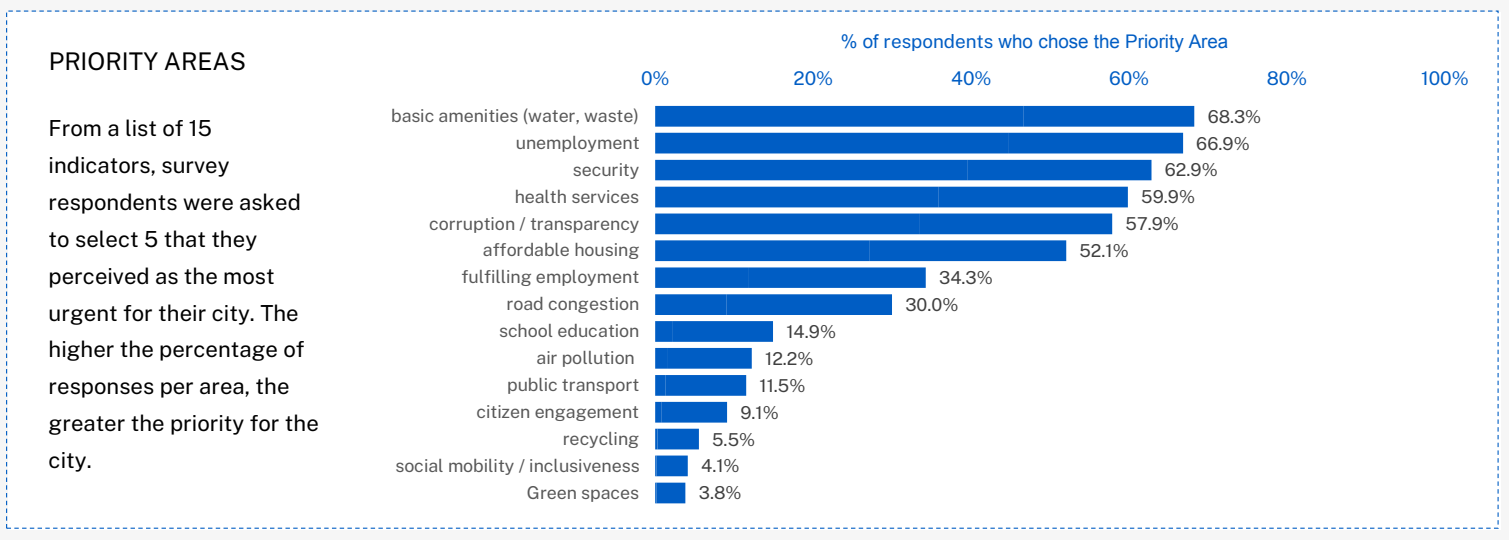
Population 4,730,000
(UN World Urbanization Prospects)

HDI 0.636
(Global Data Lab)



Country

Kenya	2019	2020	2021	2022	1 yr change
HDI	0.604	0.599	0.596	0.601	+0.005
Life expectancy at birth	62.9	62.7	61.4	62.1	+0.6
Expected years of schooling	11.3	11.4	11.4	11.4	+0.0
Mean years of schooling	8.0	7.7	7.7	7.7	+0.0
GNI per capita (PPP \$)	4,528	4,420	4,666	4,808	+142



Nanjing

SMART CITY RANKING

62

Out of 142



58 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 8,850,000
(UN World Urbanization Prospects)

HDI 0.810
(Global Data Lab)



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

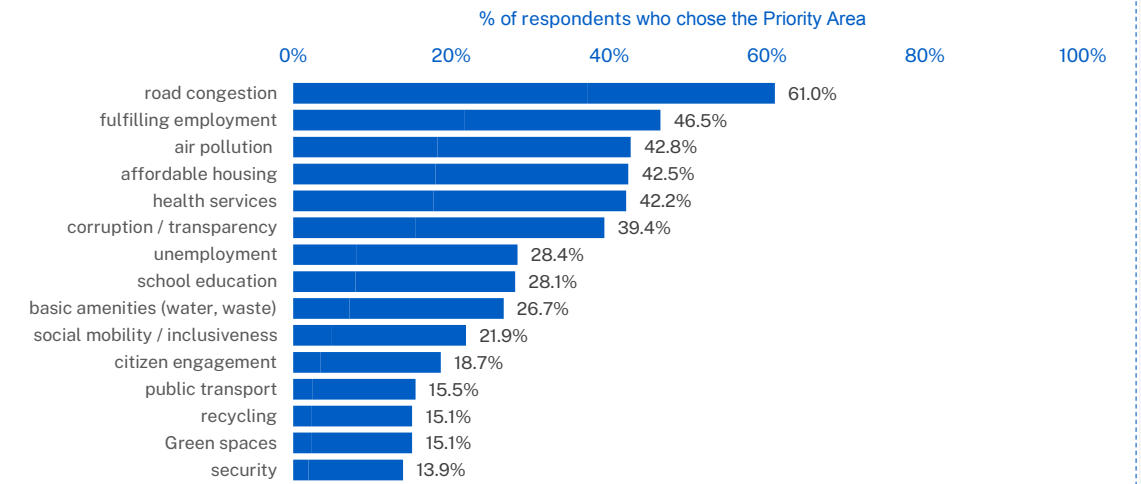
Country

China

	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

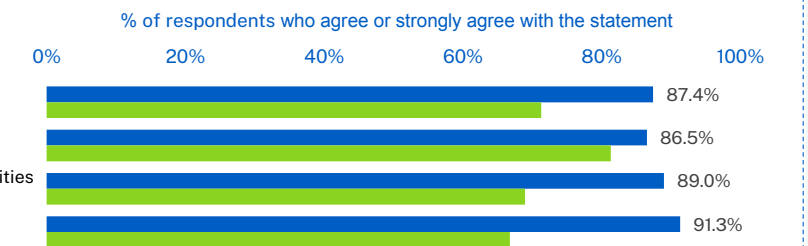
PRIORITY AREAS

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

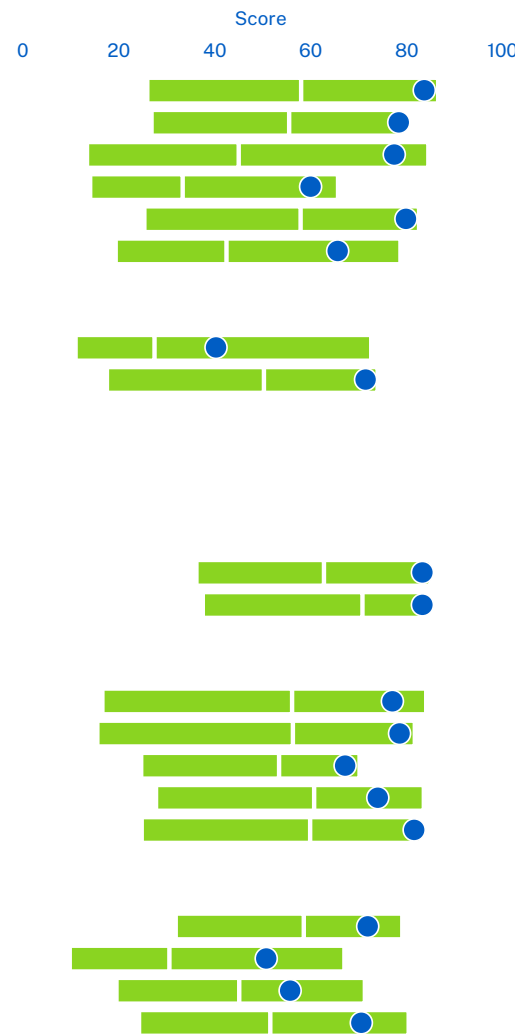
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

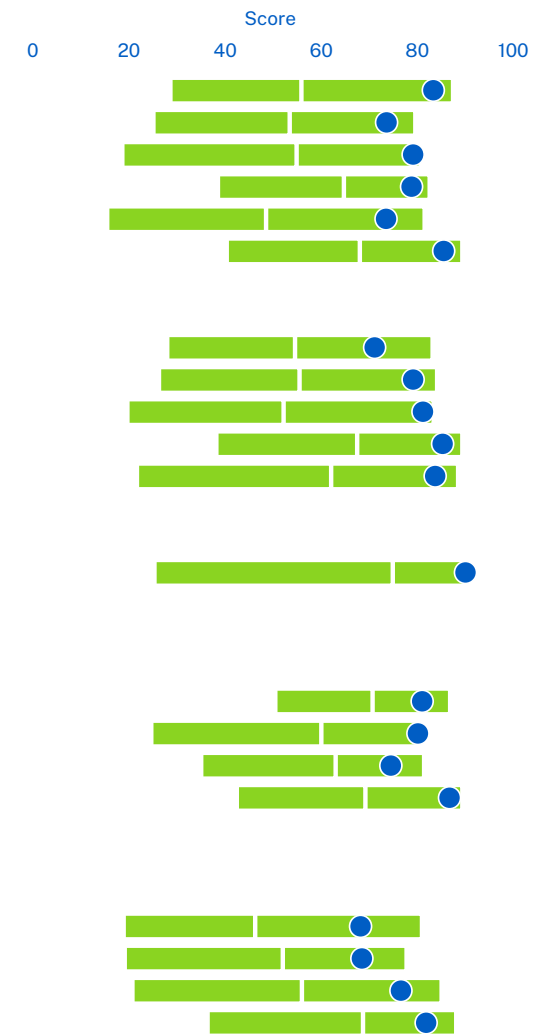
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



New York

SMART CITY RANKING
34
 Out of 142

▼

21 in 2023
 Out of 141

SMART CITY RATING
BB
 BBB in 2023

FACTOR RATINGS
BB
 STRUCTURES

TECHNOLOGIES
BB

GROUP
2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 8,800,000
 (UN Data)

HDI 0.938
 (Global Data Lab)



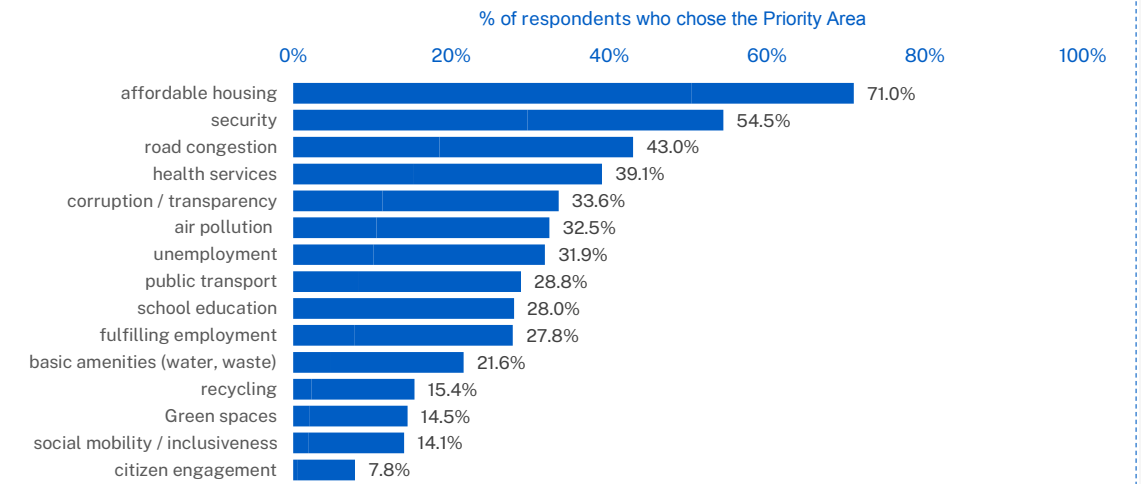
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

Country

USA	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081

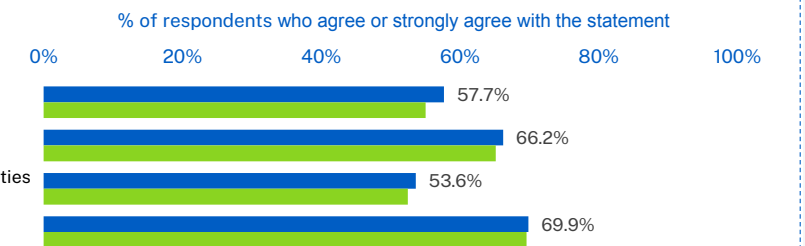
PRIORITY AREAS

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

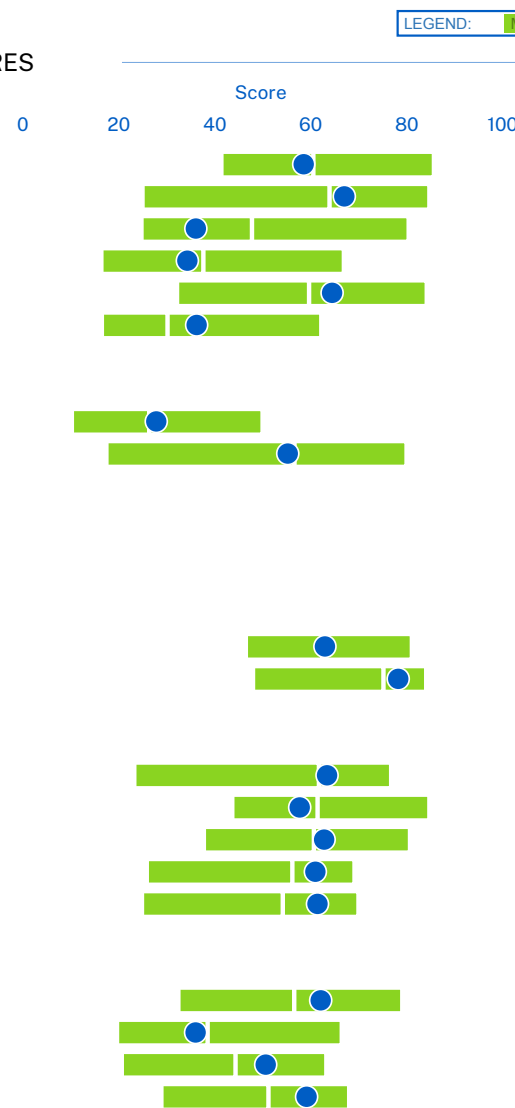
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

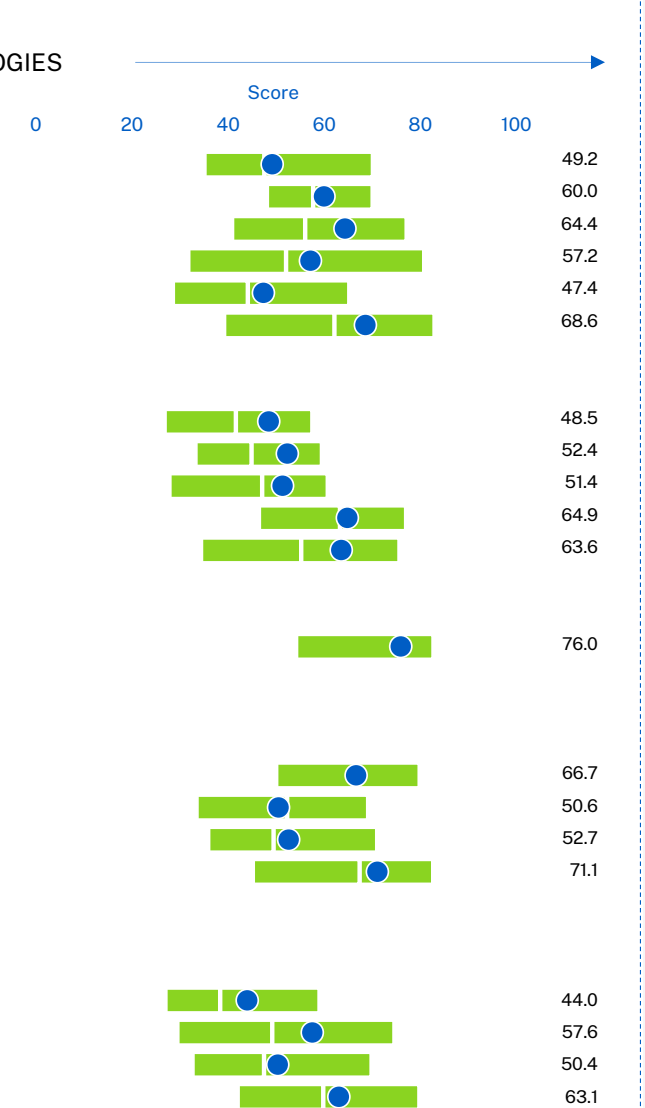
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Newcastle

SMART CITY RANKING
77
 Out of 142

77 in 2023
 Out of 141

SMART CITY RATING
CC
 CCC in 2023

FACTOR RATINGS
B

STRUCTURES
CC

TECHNOLOGIES
CC

GROUP
3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 300,000
 (Eurostat)

HDI 0.901
 (Global Data Lab)



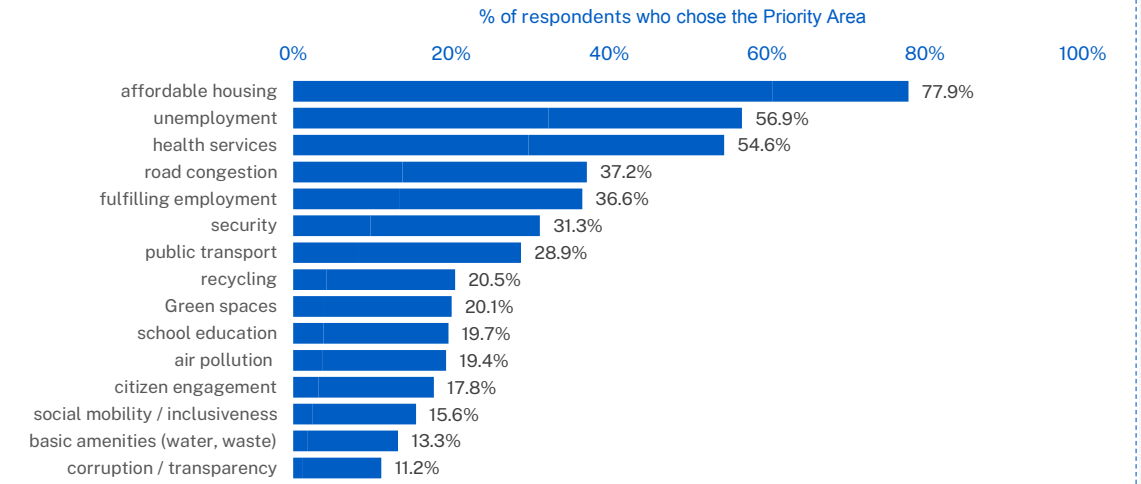
Country

United Kingdom

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	47,066	40,799	44,750	46,624	+1,874

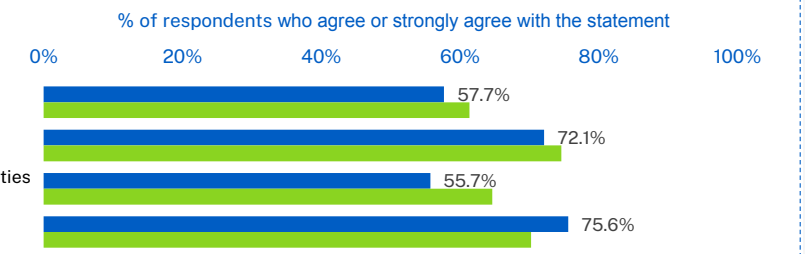
PRIORITY AREAS

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



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

Mobility

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

Activities

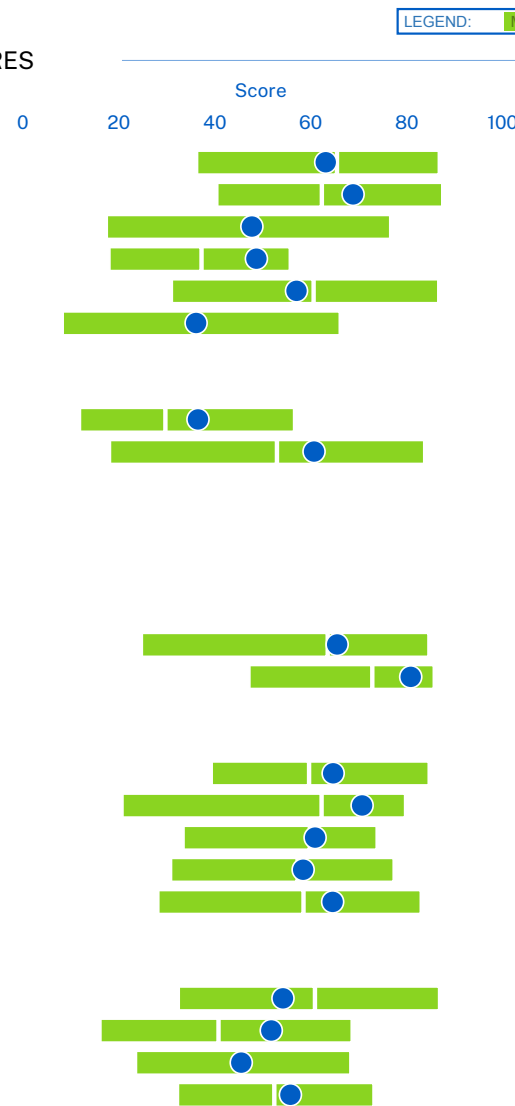
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

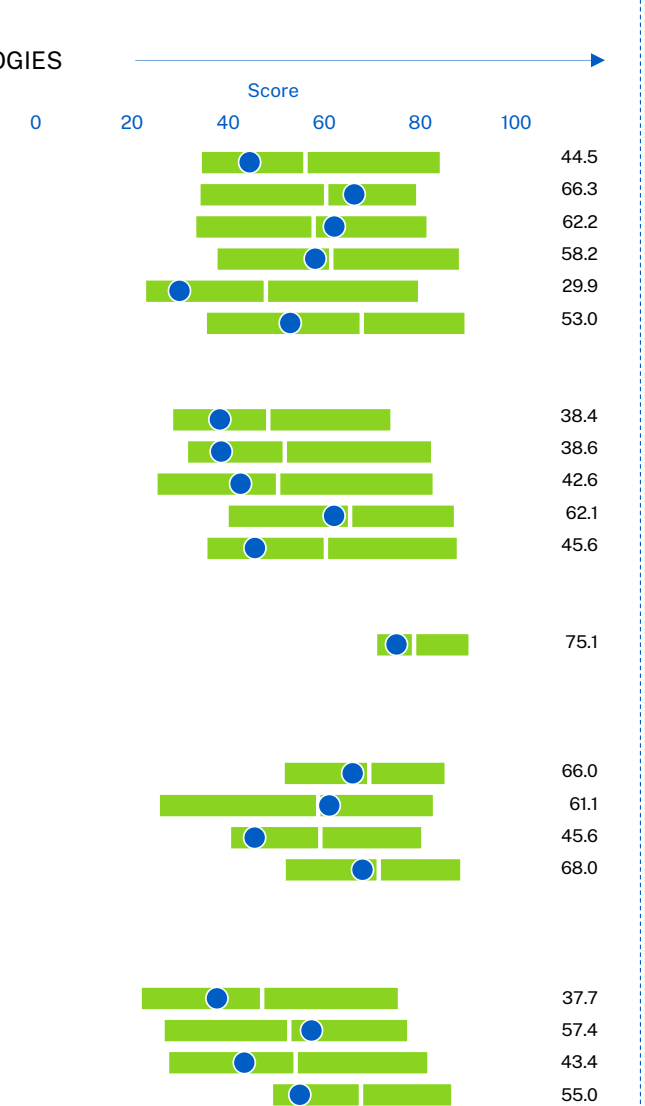
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Nicosia

SMART CITY RANKING
118
Out of 142



117 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

CC

STRUCTURES

C

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 900,000
(Eurostat)

HDI 0.896
(Global Data Lab)



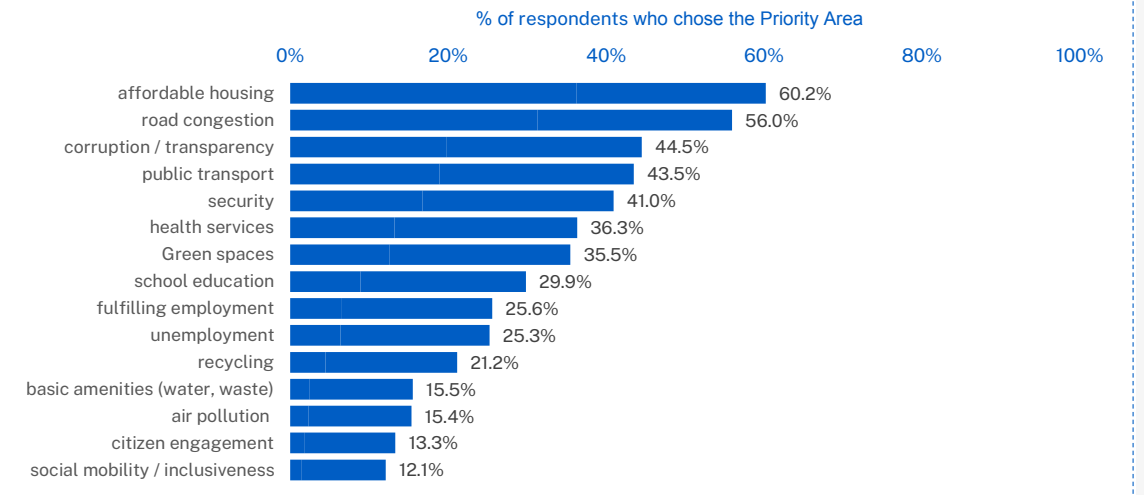
Country

Cyprus

	2019	2020	2021	2022	1 yr change
HDI	0.901	0.900	0.901	0.907	+0.006
Life expectancy at birth	81.4	81.4	81.2	81.9	+0.7
Expected years of schooling	16.0	16.2	16.2	16.2	+0.0
Mean years of schooling	12.4	12.4	12.4	12.4	+0.0
GNI per capita (PPP \$)	39,467	36,716	38,169	40,137	+1,968

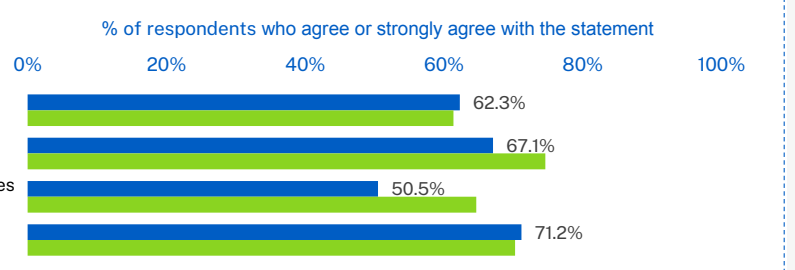
PRIORITY AREAS

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.



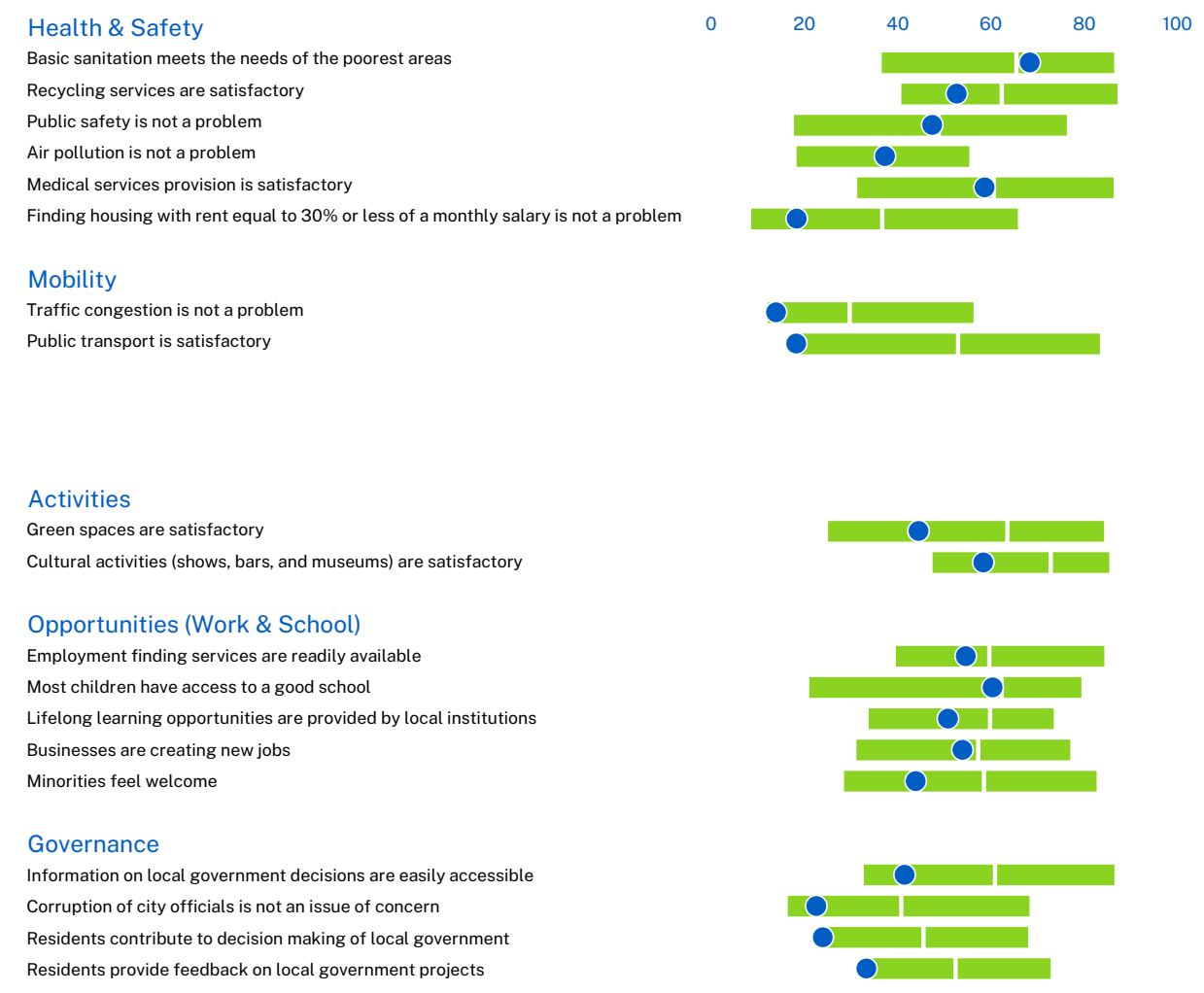
ATTITUDES

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



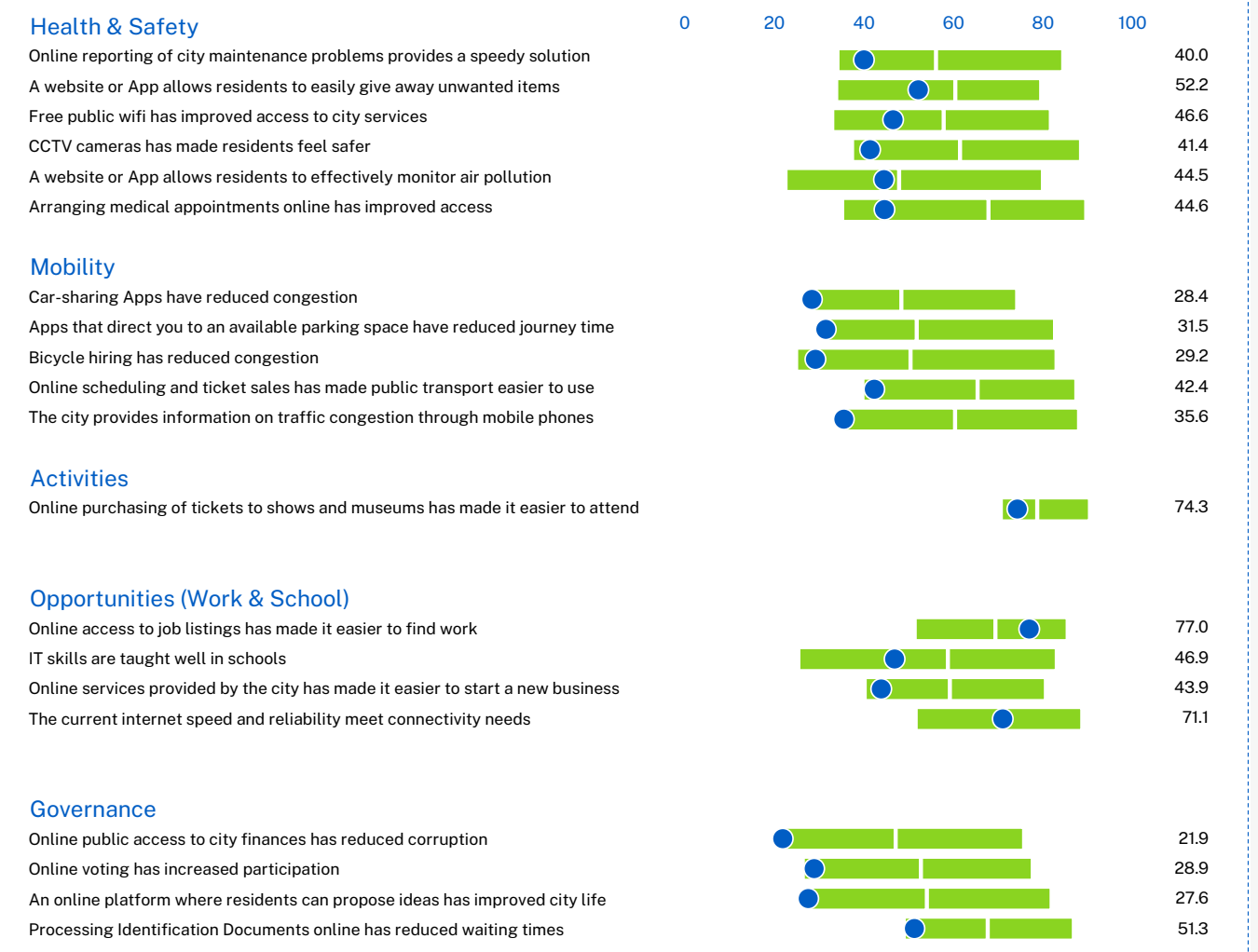
LEGEND: [GROUP MEAN] [CITY]

STRUCTURES



LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

TECHNOLOGIES



Osaka

SMART CITY RANKING

95

Out of 142



98 in 2023
Out of 141

SMART CITY RATING

B

B in 2023

FACTOR RATINGS

BB

STRUCTURES

CCC

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,750,000
(UN Data)

HDI 0.928
(Global Data Lab)



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

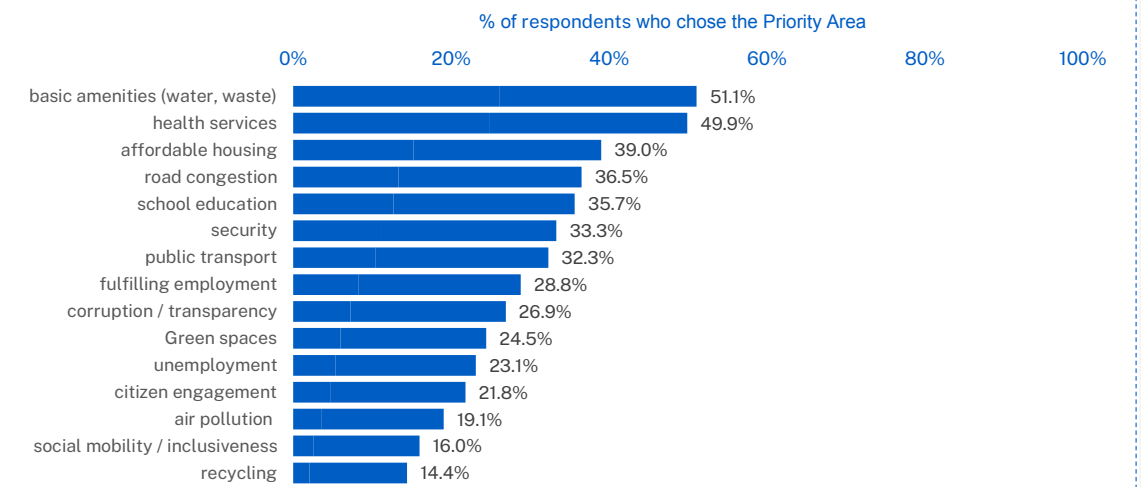
Country

Japan

	2019	2020	2021	2022	1 yr change
HDI	0.918	0.917	0.920	0.920	+0.000
Life expectancy at birth	84.4	84.7	84.8	84.8	+0.0
Expected years of schooling	15.4	15.5	15.5	15.5	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	43,276	41,446	43,008	43,644	+636

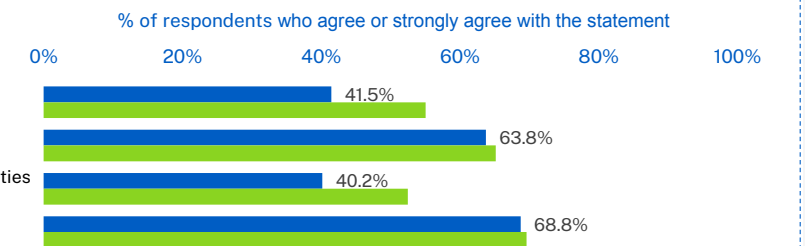
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

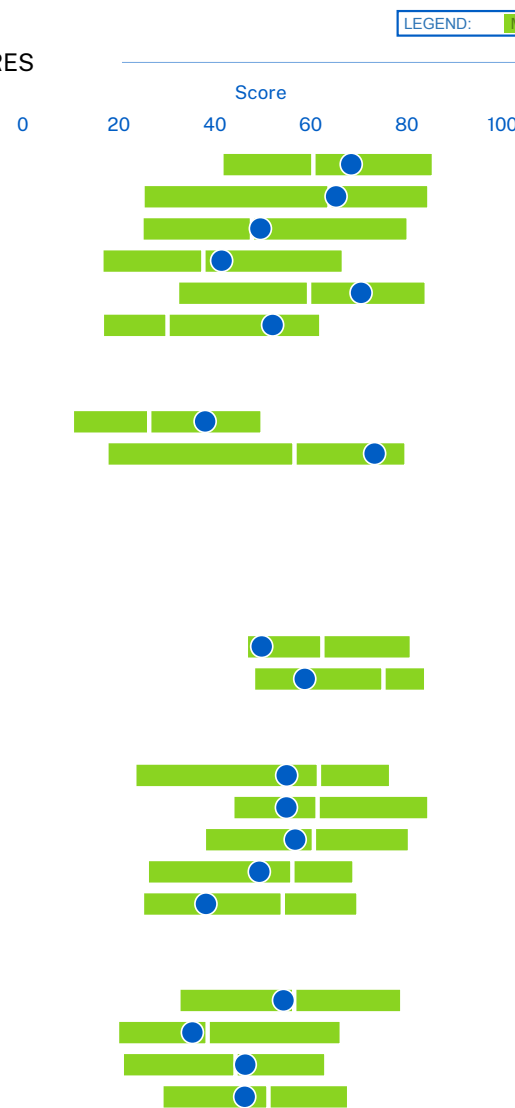
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

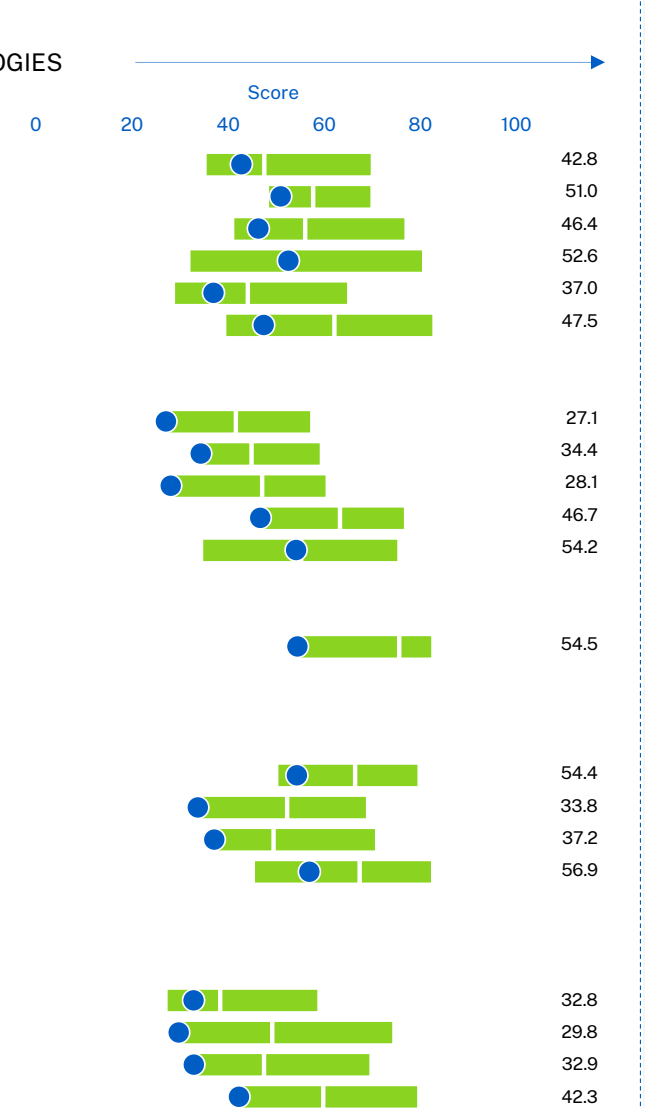
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Oslo

SMART CITY RANKING

2

Out of 142

2 in 2023
Out of 141

SMART CITY RATING

AA

AAA in 2023

FACTOR RATINGS

AA

STRUCTURES

A

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,040,000
(UN World Urbanization Prospects)

HDI 0.980
(Global Data Lab)



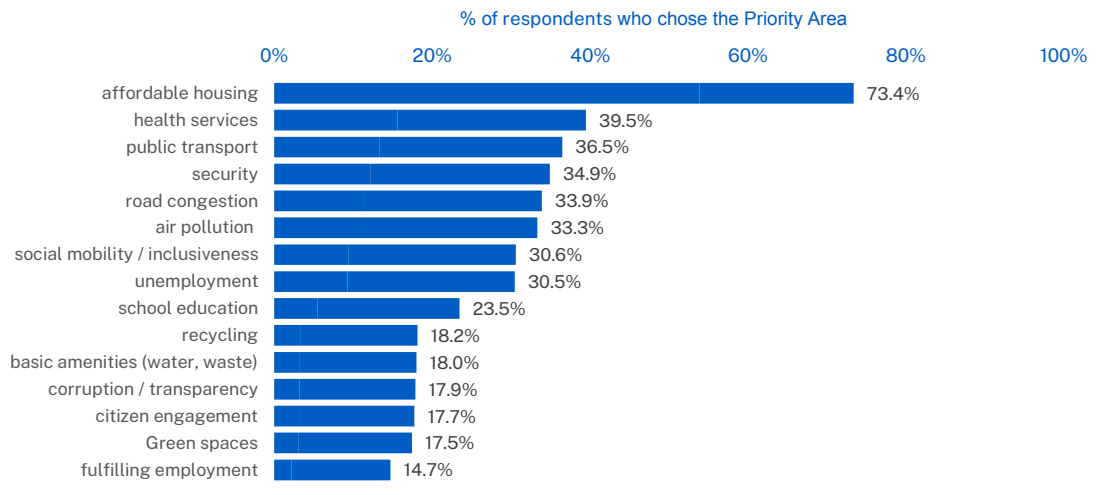
Country

Norway

	2019	2020	2021	2022	1 yr change
HDI	0.961	0.963	0.964	0.966	+0.002
Life expectancy at birth	83.0	83.2	83.2	83.4	+0.2
Expected years of schooling	18.2	18.3	18.6	18.6	+0.0
Mean years of schooling	13.0	13.1	13.1	13.1	+0.0
GNI per capita (PPP \$)	66,977	66,258	67,597	69,190	+1,593

PRIORITY AREAS

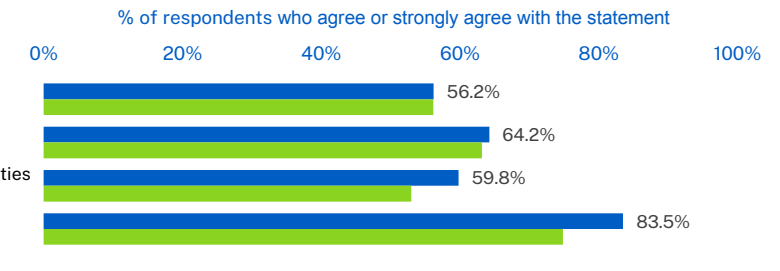
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	73.4%
health services	39.5%
public transport	36.5%
security	34.9%
road congestion	33.9%
air pollution	33.3%
social mobility / inclusiveness	30.6%
unemployment	30.5%
school education	23.5%
recycling	18.2%
basic amenities (water, waste)	18.0%
corruption / transparency	17.9%
citizen engagement	17.7%
Green spaces	17.5%
fulfilling employment	14.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	56.2%
You are comfortable with face recognition technologies to lower crime	64.2%
You feel the availability of online information has increased your trust in authorities	59.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	83.5%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 75.6
- Recycling services are satisfactory: 77.3
- Public safety is not a problem: 67.2
- Air pollution is not a problem: 59.0
- Medical services provision is satisfactory: 70.2
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 27.9

Mobility

- Traffic congestion is not a problem: 45.3
- Public transport is satisfactory: 62.8

Activities

- Green spaces are satisfactory: 77.1
- Cultural activities (shows, bars, and museums) are satisfactory: 81.5

Opportunities (Work & School)

- Employment finding services are readily available: 75.7
- Most children have access to a good school: 80.0
- Lifelong learning opportunities are provided by local institutions: 69.3
- Businesses are creating new jobs: 72.0
- Minorities feel welcome: 64.6

Governance

- Information on local government decisions are easily accessible: 64.4
- Corruption of city officials is not an issue of concern: 56.8
- Residents contribute to decision making of local government: 56.3
- Residents provide feedback on local government projects: 64.1

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 47.4
- A website or App allows residents to easily give away unwanted items: 71.8
- Free public wifi has improved access to city services: 44.3
- CCTV cameras has made residents feel safer: 46.3
- A website or App allows residents to effectively monitor air pollution: 42.7
- Arranging medical appointments online has improved access: 72.5

Mobility

- Car-sharing Apps have reduced congestion: 41.9
- Apps that direct you to an available parking space have reduced journey time: 39.6
- Bicycle hiring has reduced congestion: 52.2
- Online scheduling and ticket sales has made public transport easier to use: 78.0
- The city provides information on traffic congestion through mobile phones: 46.9

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 80.7

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 71.3
- IT skills are taught well in schools: 55.4
- Online services provided by the city has made it easier to start a new business: 46.5
- The current internet speed and reliability meet connectivity needs: 70.7

Governance

- Online public access to city finances has reduced corruption: 41.9
- Online voting has increased participation: 45.8
- An online platform where residents can propose ideas has improved city life: 41.4
- Processing Identification Documents online has reduced waiting times: 51.0

Ottawa

SMART CITY RANKING

46

Out of 142

▼

40 in 2023
Out of 141

SMART CITY RATING

BBB

A in 2023

FACTOR RATINGS

A

STRUCTURES

BBB

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 930,000
(UN Data)

HDI 0.943
(Global Data Lab)

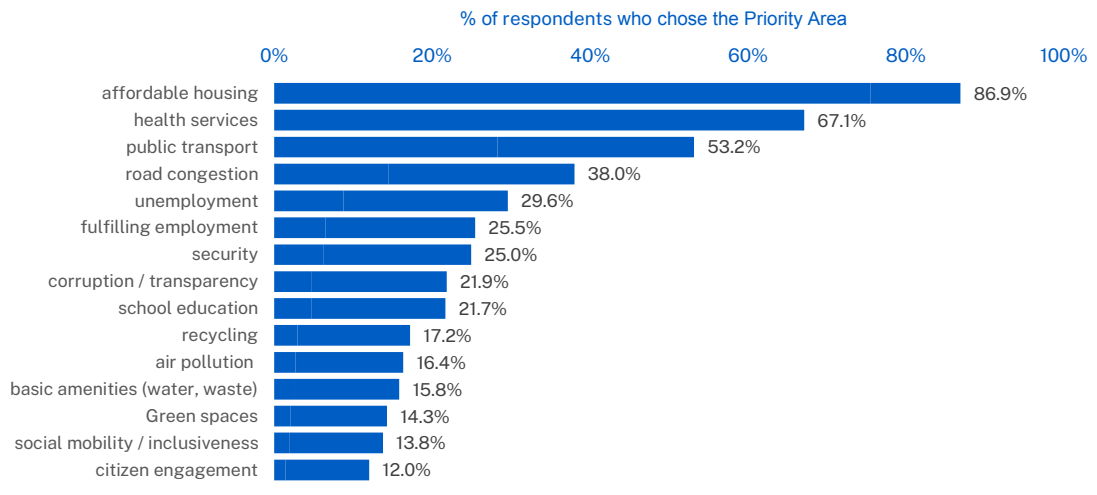


Country
Canada

	2019	2020	2021	2022	1 yr change
HDI	0.932	0.928	0.934	0.935	+0.001
Life expectancy at birth	82.4	82.0	82.7	82.8	+0.2
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	13.8	13.9	13.9	13.9	+0.0
GNI per capita (PPP \$)	48,591	45,828	47,933	48,444	+512

PRIORITY AREAS

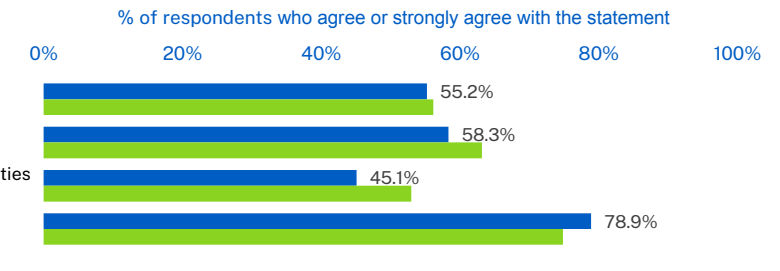
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	86.9%
health services	67.1%
public transport	53.2%
road congestion	38.0%
unemployment	29.6%
fulfilling employment	25.5%
security	25.0%
corruption / transparency	21.9%
school education	21.7%
recycling	17.2%
air pollution	16.4%
basic amenities (water, waste)	15.8%
Green spaces	14.3%
social mobility / inclusiveness	13.8%
citizen engagement	12.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	55.2%	45.1%
You are comfortable with face recognition technologies to lower crime	58.3%	45.1%
You feel the availability of online information has increased your trust in authorities	45.1%	45.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	78.9%	45.1%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 68.0
- Recycling services are satisfactory: 72.8
- Public safety is not a problem: 53.5
- Air pollution is not a problem: 56.1
- Medical services provision is satisfactory: 46.6
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 20.6

Mobility

- Traffic congestion is not a problem: 35.8
- Public transport is satisfactory: 38.7

Activities

- Green spaces are satisfactory: 74.4
- Cultural activities (shows, bars, and museums) are satisfactory: 77.3

Opportunities (Work & School)

- Employment finding services are readily available: 65.2
- Most children have access to a good school: 75.3
- Lifelong learning opportunities are provided by local institutions: 71.8
- Businesses are creating new jobs: 63.7
- Minorities feel welcome: 73.4

Governance

- Information on local government decisions are easily accessible: 63.4
- Corruption of city officials is not an issue of concern: 46.4
- Residents contribute to decision making of local government: 50.2
- Residents provide feedback on local government projects: 62.2

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 45.0
- A website or App allows residents to easily give away unwanted items: 57.5
- Free public wifi has improved access to city services: 48.6
- CCTV cameras has made residents feel safer: 41.9
- A website or App allows residents to effectively monitor air pollution: 35.5
- Arranging medical appointments online has improved access: 52.6

Mobility

- Car-sharing Apps have reduced congestion: 41.2
- Apps that direct you to an available parking space have reduced journey time: 32.6
- Bicycle hiring has reduced congestion: 36.3
- Online scheduling and ticket sales has made public transport easier to use: 49.5
- The city provides information on traffic congestion through mobile phones: 46.0

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 70.2

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 64.6
- IT skills are taught well in schools: 49.7
- Online services provided by the city has made it easier to start a new business: 48.5
- The current internet speed and reliability meet connectivity needs: 72.6

Governance

- Online public access to city finances has reduced corruption: 37.0
- Online voting has increased participation: 44.7
- An online platform where residents can propose ideas has improved city life: 38.7
- Processing Identification Documents online has reduced waiting times: 55.7

Paris

SMART CITY RANKING

49

Out of 142



46 in 2023
Out of 141

SMART CITY RATING

BBB

BBB in 2023

FACTOR RATINGS

BB

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,150,000
(UN Data)

HDI 0.949
(Global Data Lab)



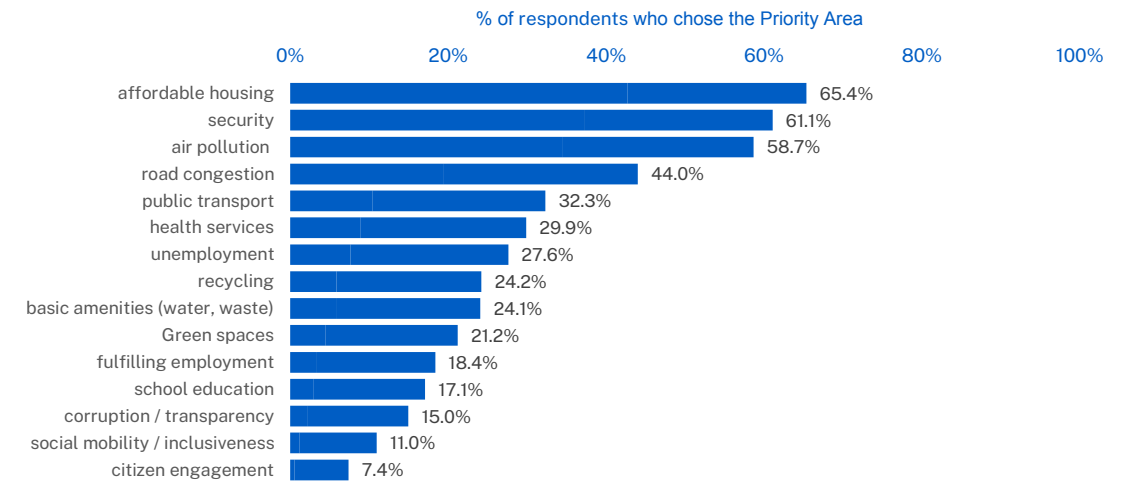
Country

France

	2019	2020	2021	2022	1 yr change
HDI	0.905	0.900	0.906	0.910	+0.004
Life expectancy at birth	82.7	82.2	82.5	83.2	+0.7
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	11.6	11.7	11.7	11.7	+0.0
GNI per capita (PPP \$)	46,907	42,891	46,322	47,379	+1,057

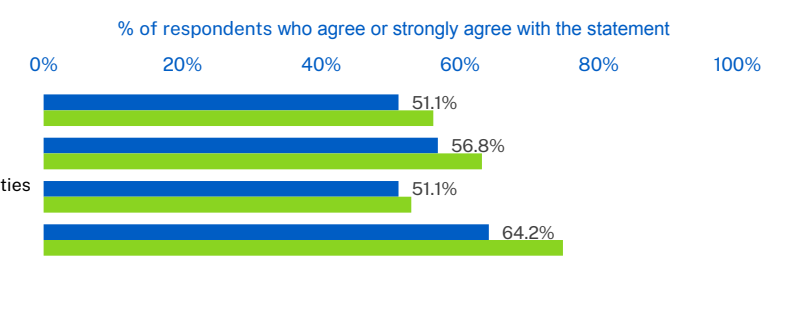
PRIORITY AREAS

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



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

Mobility

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

Activities

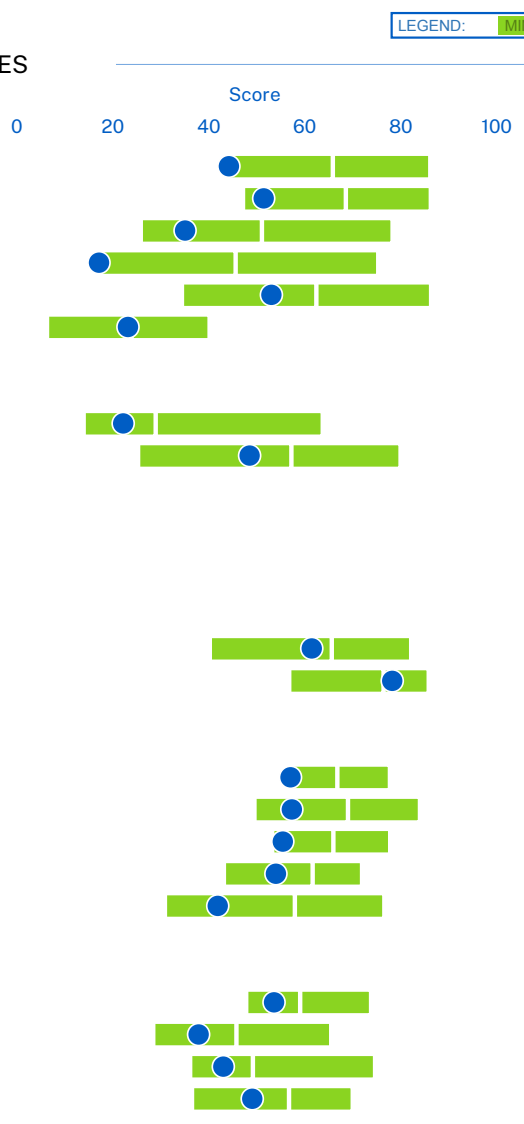
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

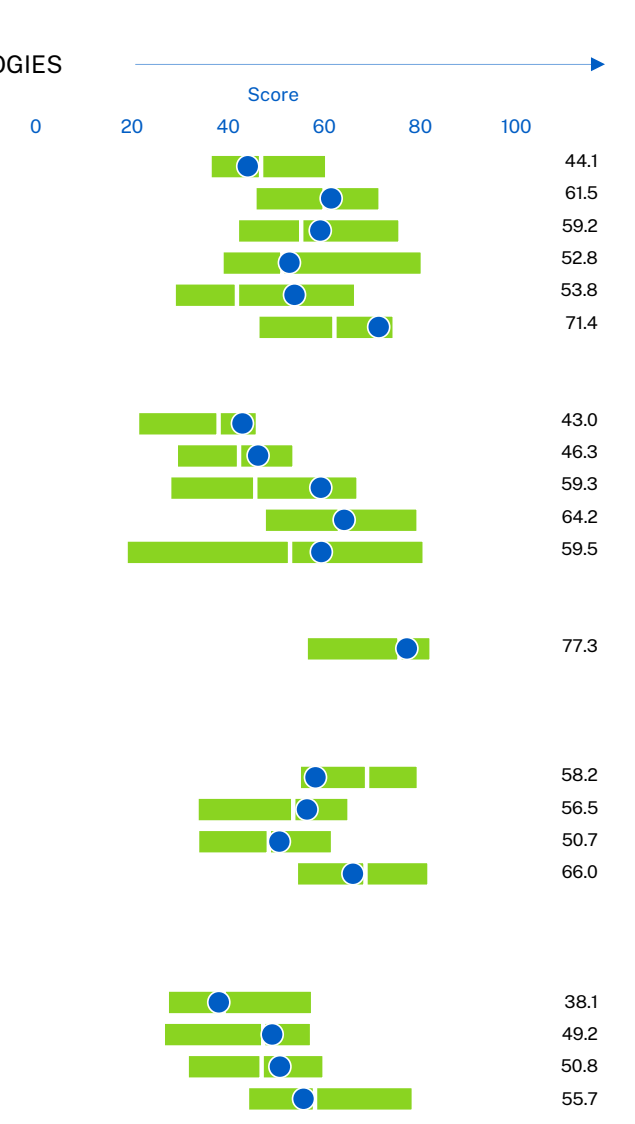
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Philadelphia

SMART CITY RANKING

90

Out of 142



92 in 2023
Out of 141

SMART CITY RATING

B

B in 2023

FACTOR RATINGS

B

STRUCTURES

B

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,600,000
(UN Data)

HDI 0.923
(Global Data Lab)



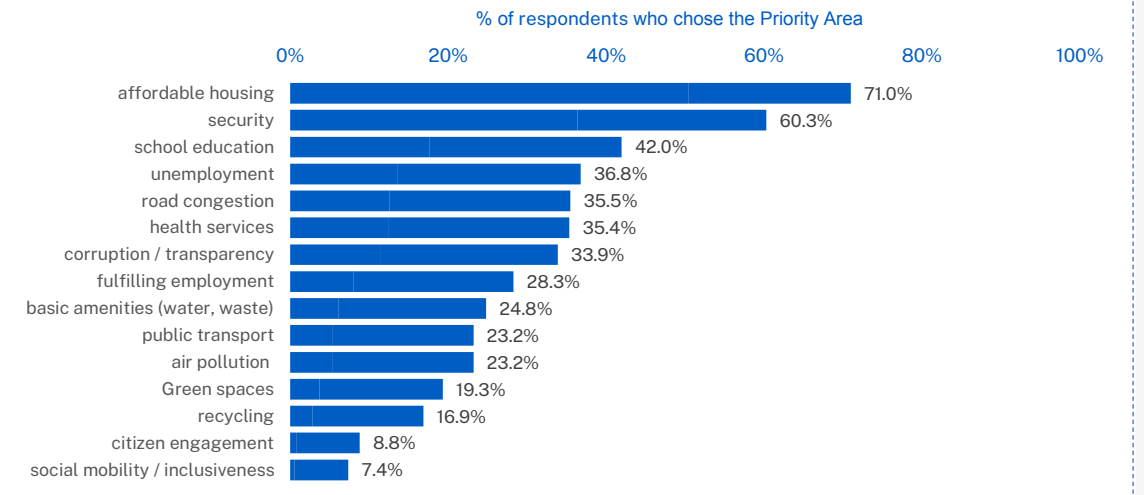
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

Country

USA	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081

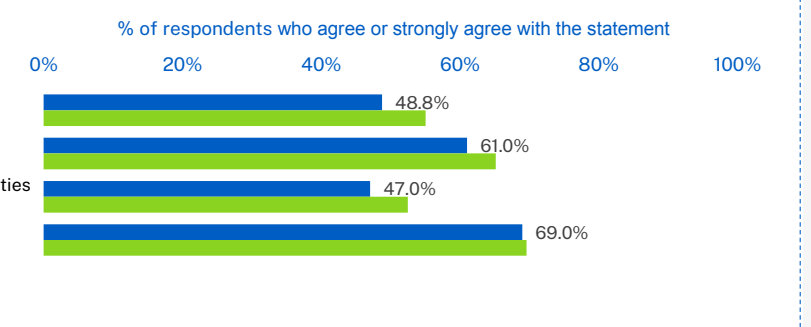
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]



Phoenix

SMART CITY RANKING
98
Out of 142



93 in 2023
Out of 141

SMART CITY RATING
CC

CC in 2023

FACTOR RATINGS

CCC
STRUCTURES

C
TECHNOLOGIES

GROUP
3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,610,000
(UN Data)

HDI 0.908
(Global Data Lab)



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

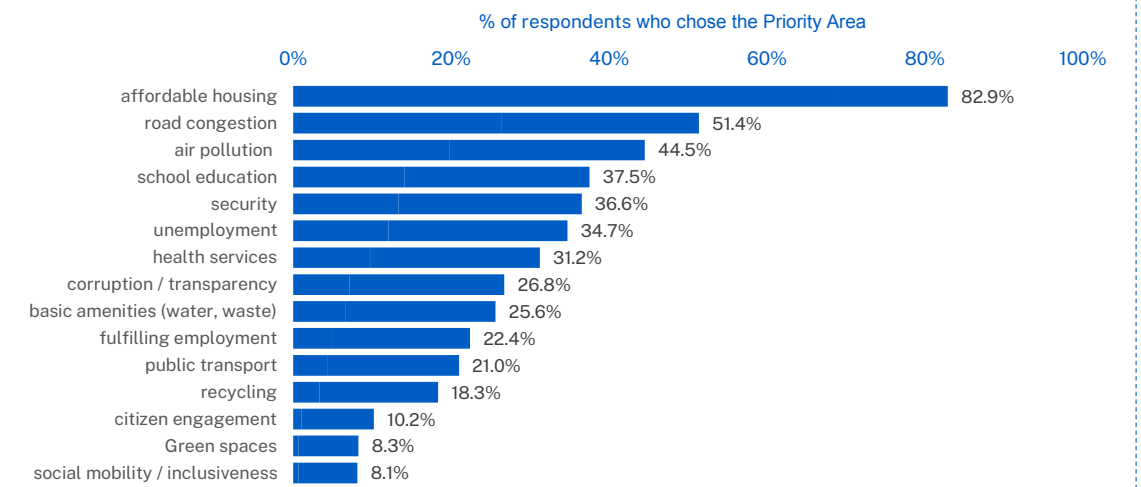
Country

USA

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081

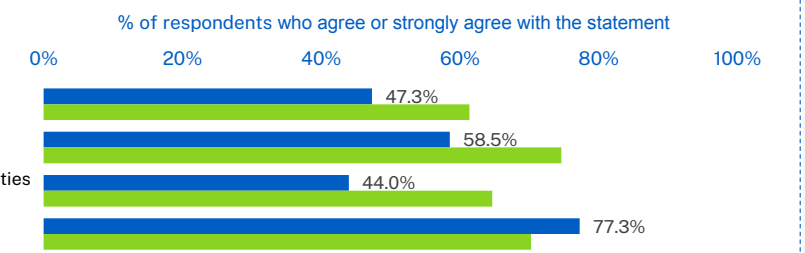
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

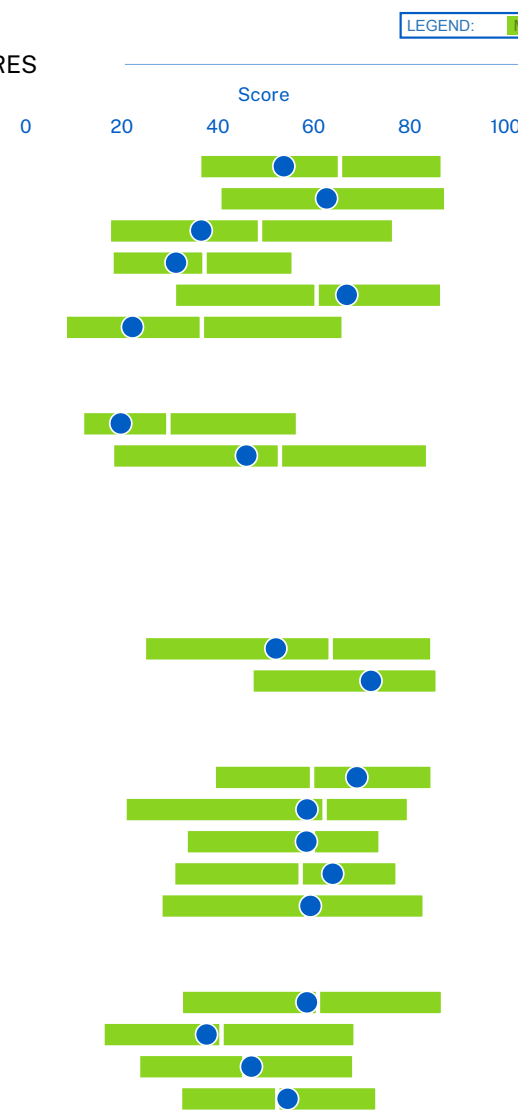
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

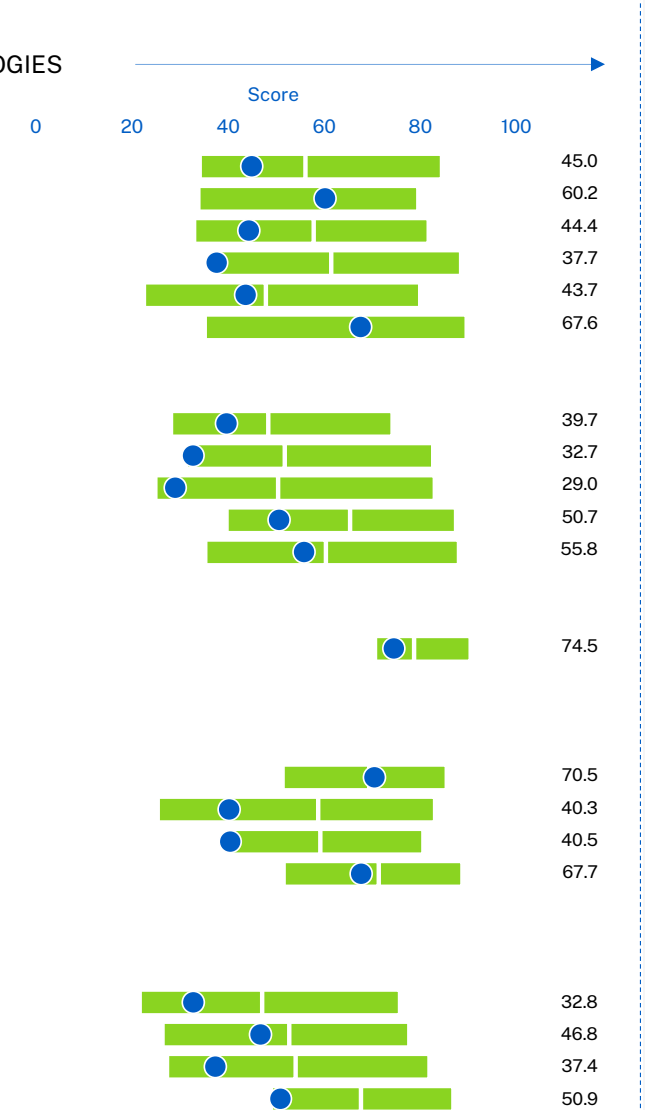
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Prague

SMART CITY RANKING

15

Out of 142



14 in 2023
Out of 141

SMART CITY RATING

A

AA in 2023

FACTOR RATINGS

A

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,320,000
(Eurostat)

HDI 0.960
(Global Data Lab)



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

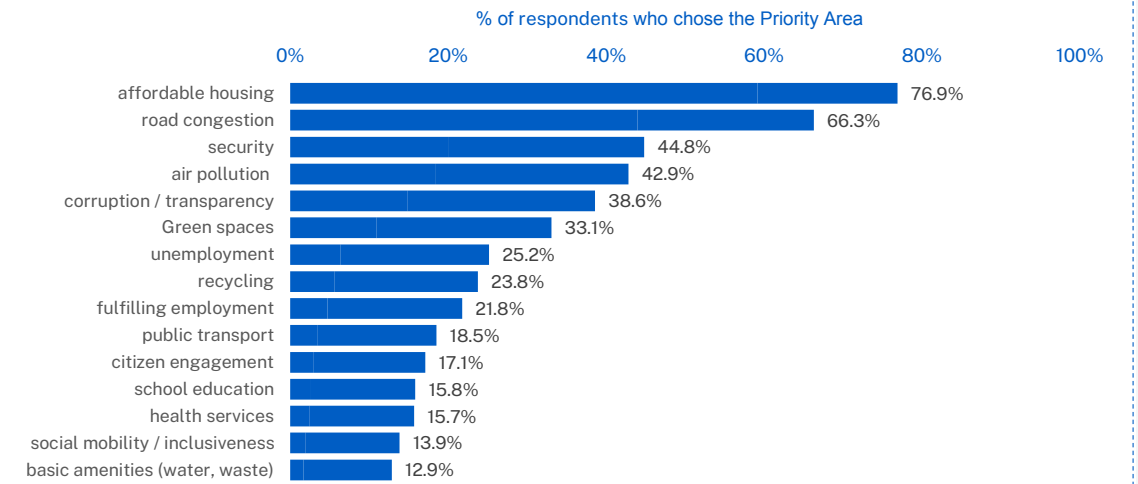
Country

Czech Rep.

	2019	2020	2021	2022	1 yr change
HDI	0.896	0.891	0.891	0.895	+0.004
Life expectancy at birth	79.2	78.6	77.7	78.1	+0.4
Expected years of schooling	16.1	16.1	16.3	16.3	+0.0
Mean years of schooling	12.9	12.9	12.9	12.9	+0.0
GNI per capita (PPP \$)	38,512	36,696	39,061	39,945	+884

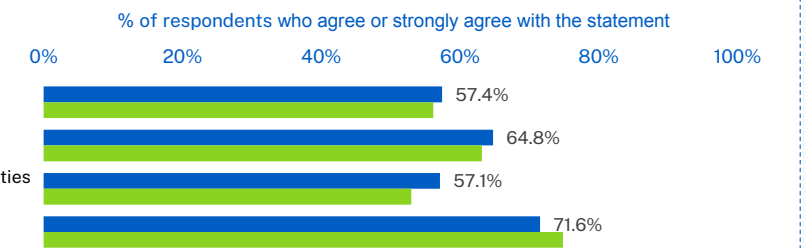
PRIORITY AREAS

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



LEGEND: GROUP MEAN CITY

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

Mobility

Traffic congestion is not a problem
 Public transport is satisfactory

Activities

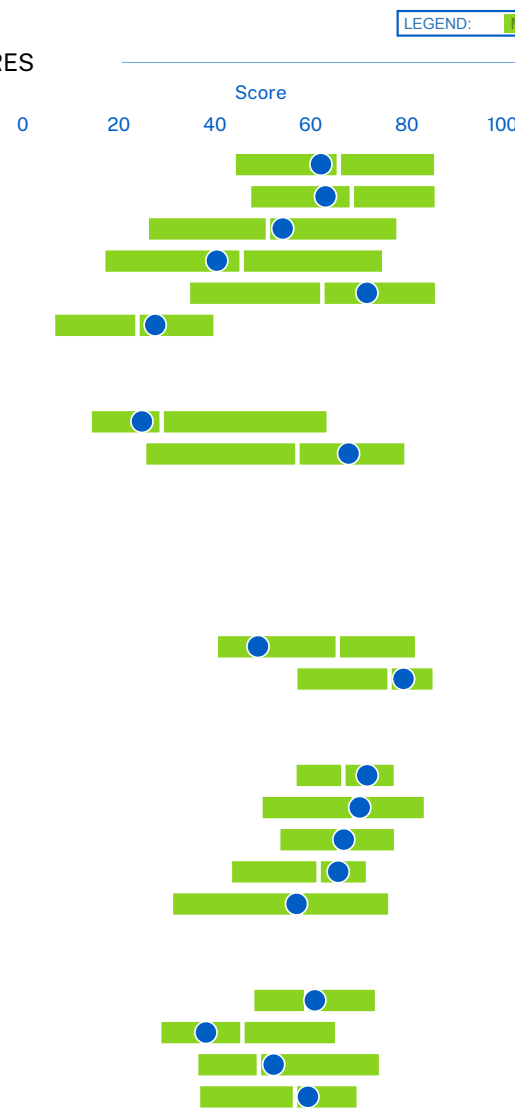
Green spaces are satisfactory
 Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

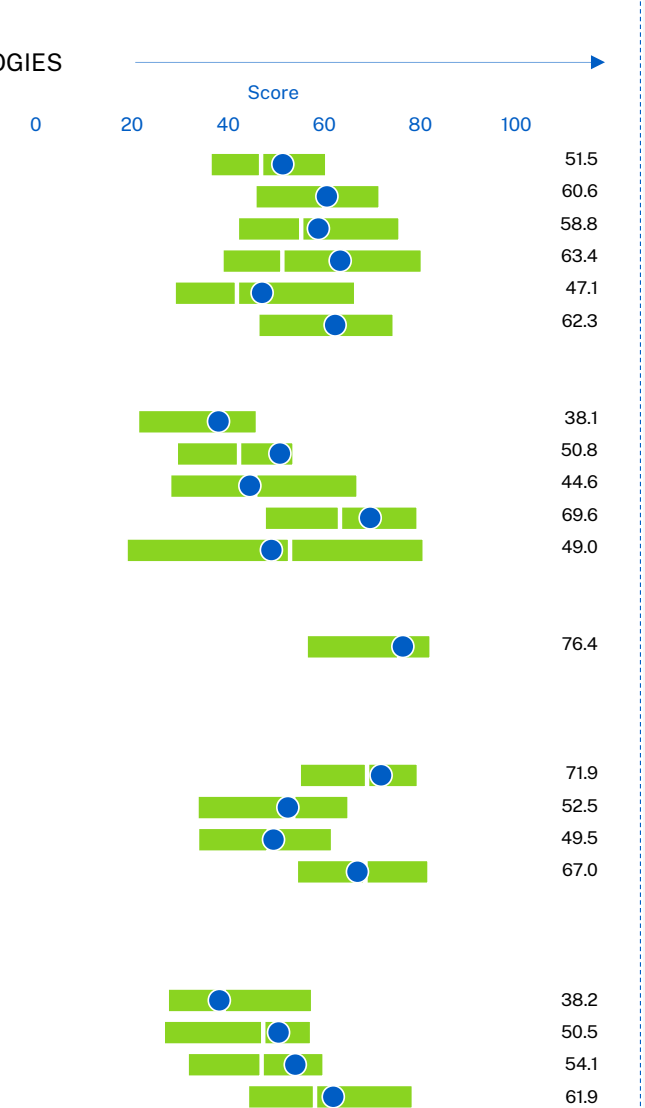
Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Rabat

SMART CITY RANKING

126

Out of 142

126 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

C

STRUCTURES

C

TECHNOLOGIES

C

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 190,000
(UN Data)

HDI 0.702
(Global Data Lab)

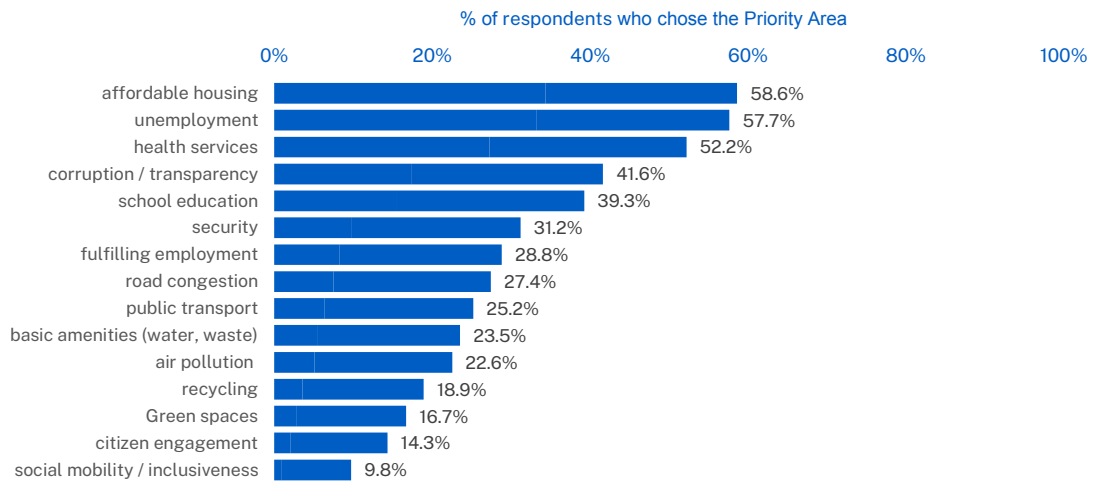


Country
Morocco

	2019	2020	2021	2022	1 yr change
HDI	0.684	0.683	0.688	0.698	+0.010
Life expectancy at birth	74.3	73.9	74.0	75.0	+0.9
Expected years of schooling	13.7	13.9	14.0	14.6	+0.6
Mean years of schooling	5.9	6.1	6.1	6.1	+0.0
GNI per capita (PPP \$)	8,093	7,474	7,948	7,955	+7

PRIORITY AREAS

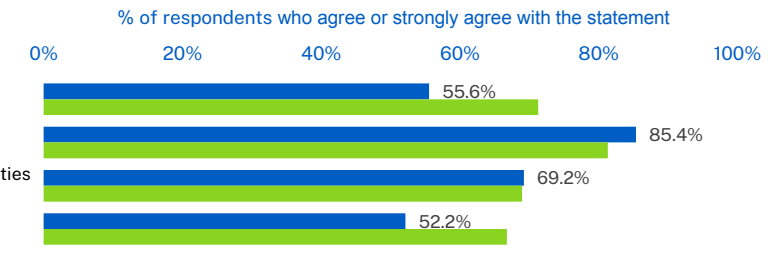
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	58.6%
unemployment	57.7%
health services	52.2%
corruption / transparency	41.6%
school education	39.3%
security	31.2%
fulfilling employment	28.8%
road congestion	27.4%
public transport	25.2%
basic amenities (water, waste)	23.5%
air pollution	22.6%
recycling	18.9%
Green spaces	16.7%
citizen engagement	14.3%
social mobility / inclusiveness	9.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	55.6%	69.2%
You are comfortable with face recognition technologies to lower crime	85.4%	69.2%
You feel the availability of online information has increased your trust in authorities	69.2%	69.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	52.2%	69.2%

LEGEND: ■ GROUP MEAN ■ CITY

STRUCTURES

Score: 0 to 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 53.5
- Recycling services are satisfactory: 51.4
- Public safety is not a problem: 46.3
- Air pollution is not a problem: 33.3
- Medical services provision is satisfactory: 46.8
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 40.1

Mobility

- Traffic congestion is not a problem: 34.1
- Public transport is satisfactory: 55.2

Activities

- Green spaces are satisfactory: 77.9
- Cultural activities (shows, bars, and museums) are satisfactory: 73.5

Opportunities (Work & School)

- Employment finding services are readily available: 40.5
- Most children have access to a good school: 46.3
- Lifelong learning opportunities are provided by local institutions: 49.9
- Businesses are creating new jobs: 44.5
- Minorities feel welcome: 61.8

Governance

- Information on local government decisions are easily accessible: 52.0
- Corruption of city officials is not an issue of concern: 30.2
- Residents contribute to decision making of local government: 34.7
- Residents provide feedback on local government projects: 42.7

TECHNOLOGIES

Score: 0 to 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 44.3
- A website or App allows residents to easily give away unwanted items: 39.5
- Free public wifi has improved access to city services: 46.4
- CCTV cameras has made residents feel safer: 60.9
- A website or App allows residents to effectively monitor air pollution: 34.8
- Arranging medical appointments online has improved access: 56.6

Mobility

- Car-sharing Apps have reduced congestion: 48.6
- Apps that direct you to an available parking space have reduced journey time: 48.6
- Bicycle hiring has reduced congestion: 40.0
- Online scheduling and ticket sales has made public transport easier to use: 67.8
- The city provides information on traffic congestion through mobile phones: 43.1

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 70.7

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 61.8
- IT skills are taught well in schools: 51.9
- Online services provided by the city has made it easier to start a new business: 53.8
- The current internet speed and reliability meet connectivity needs: 62.8

Governance

- Online public access to city finances has reduced corruption: 39.1
- Online voting has increased participation: 38.6
- An online platform where residents can propose ideas has improved city life: 43.5
- Processing Identification Documents online has reduced waiting times: 63.7

Reykjavik

SMART CITY RANKING
26
Out of 142

26 in 2023
Out of 141

SMART CITY RATING

BBB

BBB in 2023

FACTOR RATINGS

A

STRUCTURES

BBB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

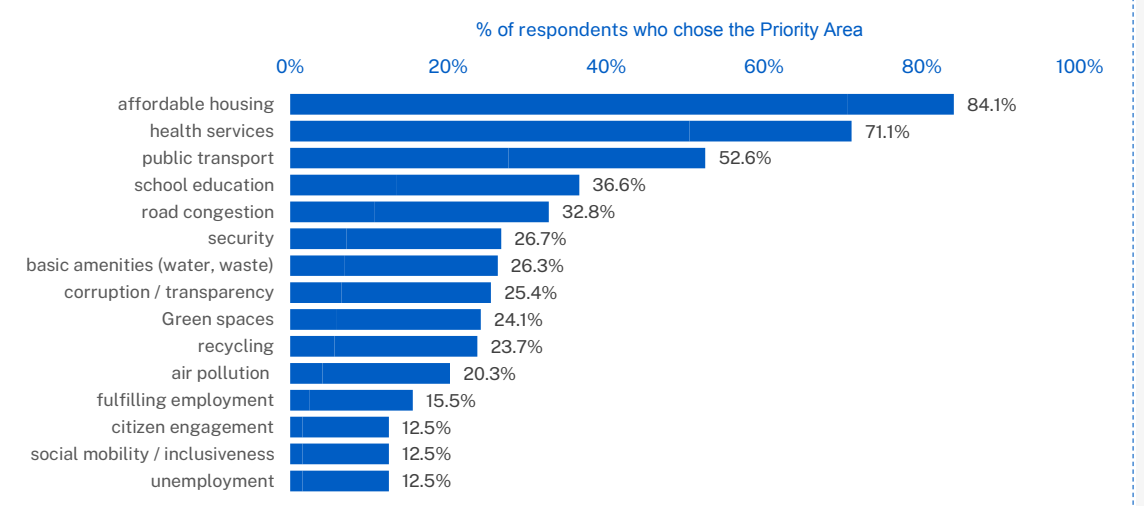
City
Population: 240,000 (Eurostat)
HDI: 0.959 (Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Iceland					
HDI	0.958	0.955	0.957	0.959	+0.002
Life expectancy at birth	82.4	82.6	82.7	82.8	+0.1
Expected years of schooling	18.2	18.2	19.1	19.1	+0.0
Mean years of schooling	13.7	13.8	13.8	13.8	+0.0
GNI per capita (PPP \$)	56,453	51,984	52,671	54,688	+2,017

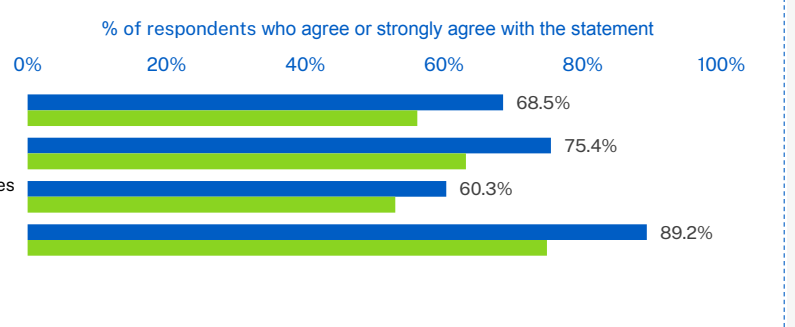
PRIORITY AREAS

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.

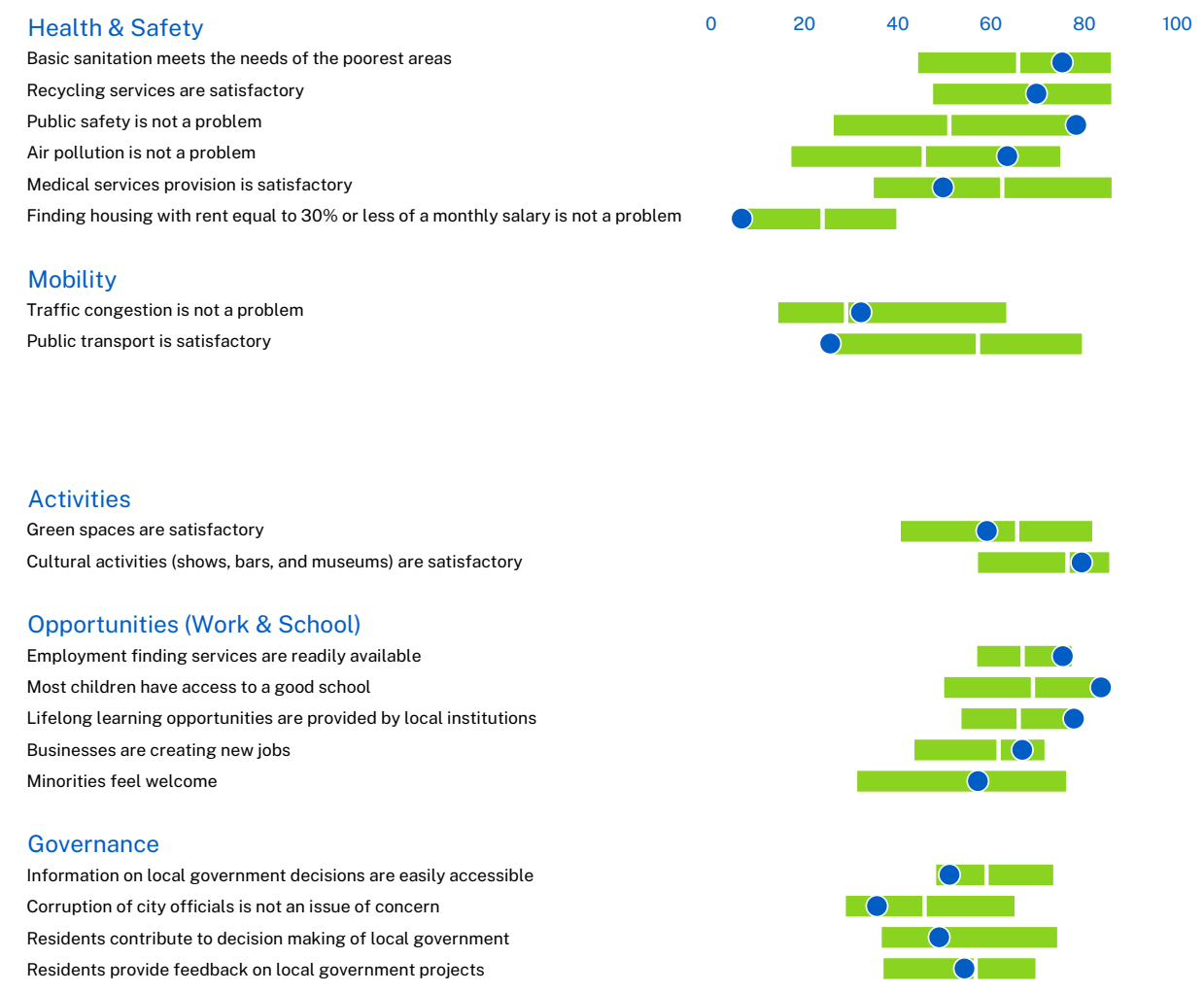


ATTITUDES

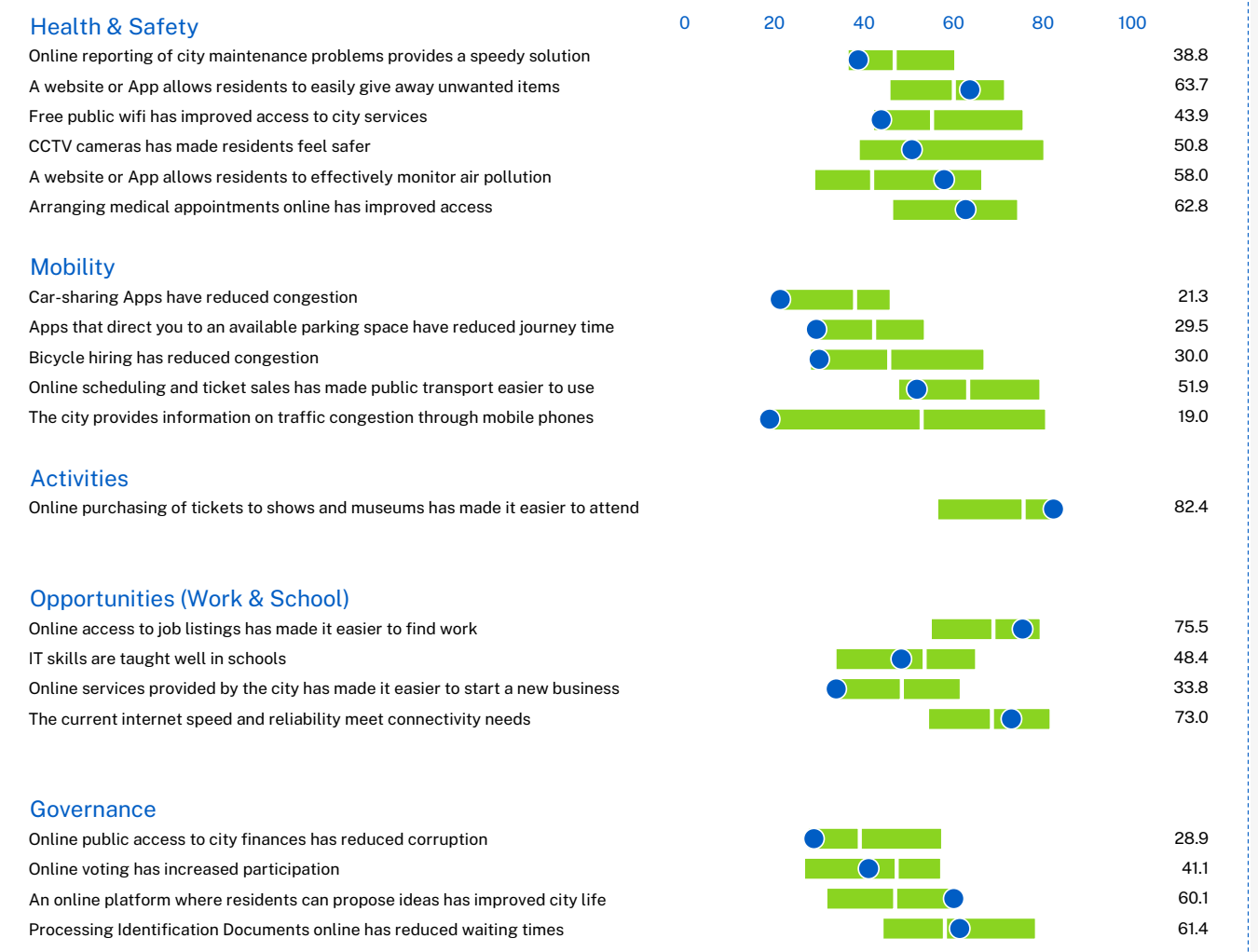
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Riga

SMART CITY RANKING
59
Out of 142



83 in 2023
Out of 141

SMART CITY RATING

BB

B in 2023

FACTOR RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 630,000
(Eurostat)

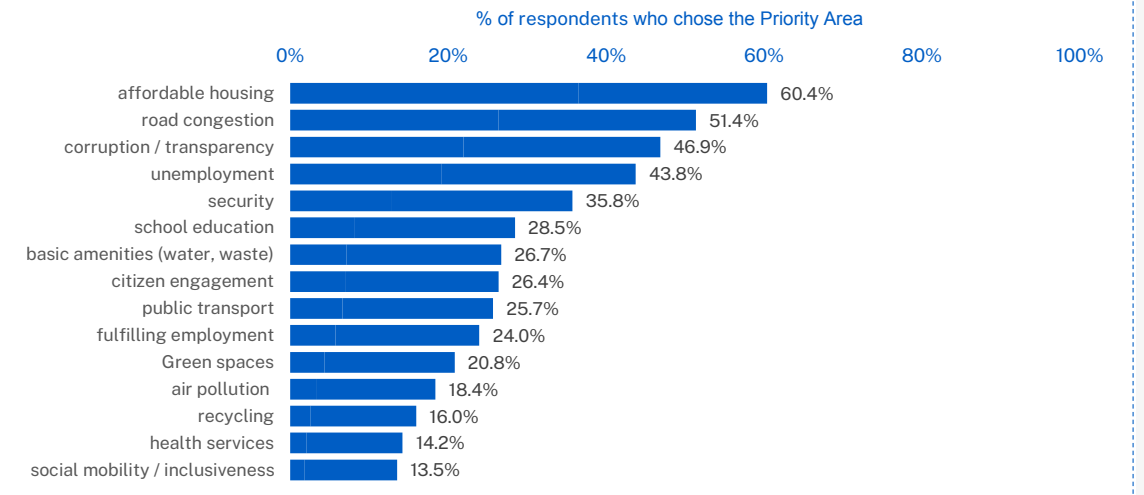
HDI 0.929
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Latvia					
HDI	0.873	0.873	0.865	0.879	+0.014
Life expectancy at birth	75.5	75.5	73.6	75.9	+2.3
Expected years of schooling	16.5	16.5	16.6	16.6	+0.0
Mean years of schooling	13.3	13.3	13.3	13.3	+0.0
GNI per capita (PPP \$)	30,570	30,562	31,443	32,083	+640

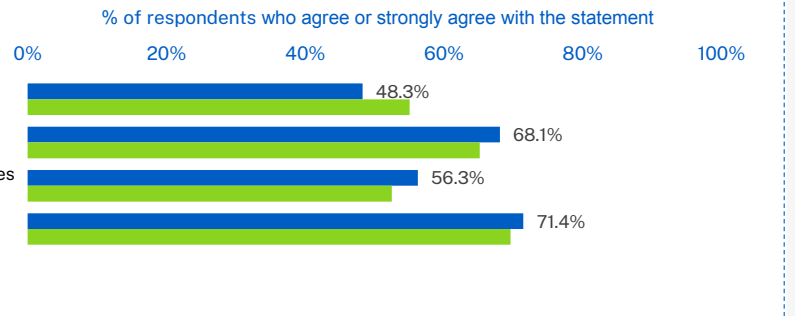
PRIORITY AREAS

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.

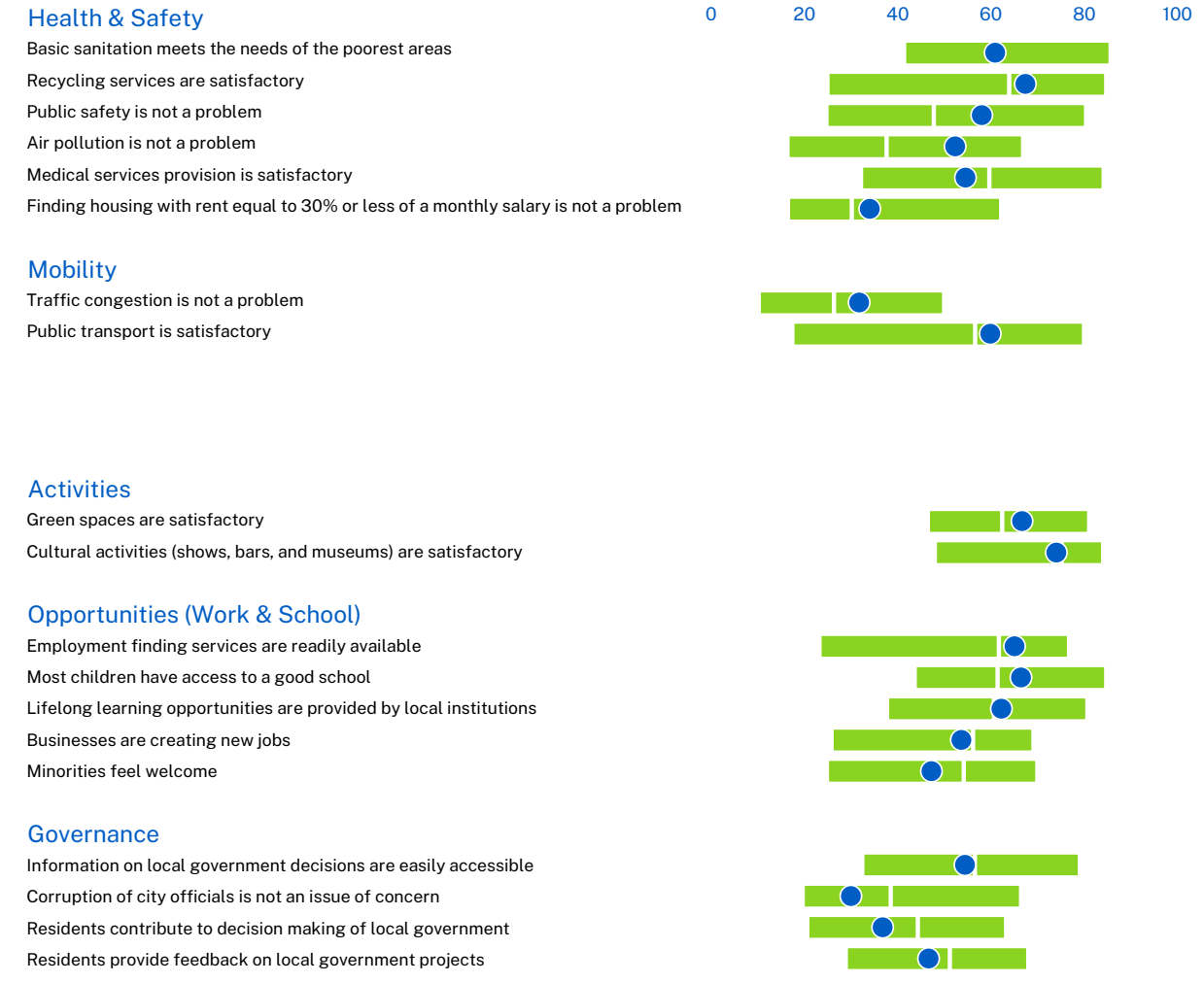


ATTITUDES

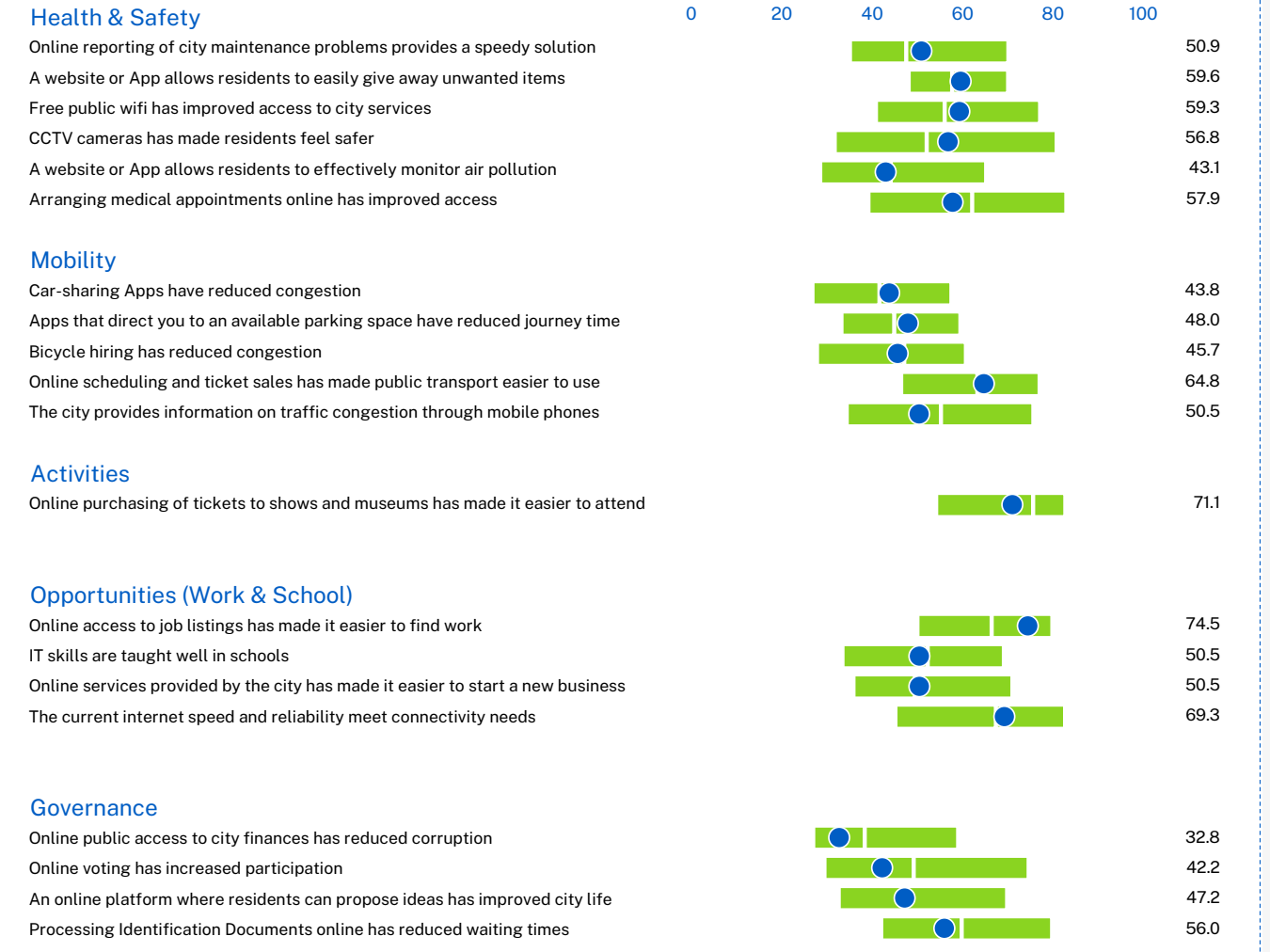
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Rio de Janeiro

SMART CITY RANKING

139

Out of 142



136 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 13,460,000
(UN World Urbanization Prospects)

HDI 0.783
(Global Data Lab)



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

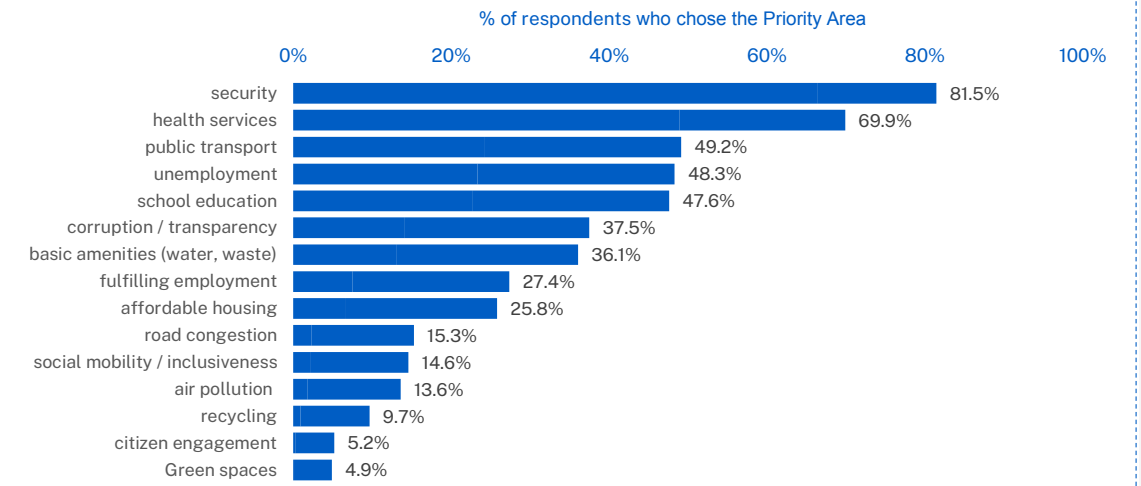
Country

Brazil

	2019	2020	2021	2022	1 yr change
HDI	0.764	0.758	0.756	0.760	+0.004
Life expectancy at birth	75.3	74.0	72.8	73.4	+0.7
Expected years of schooling	15.4	15.4	15.6	15.6	+0.0
Mean years of schooling	8.1	8.3	8.3	8.3	+0.0
GNI per capita (PPP \$)	14,291	13,815	14,342	14,616	+274

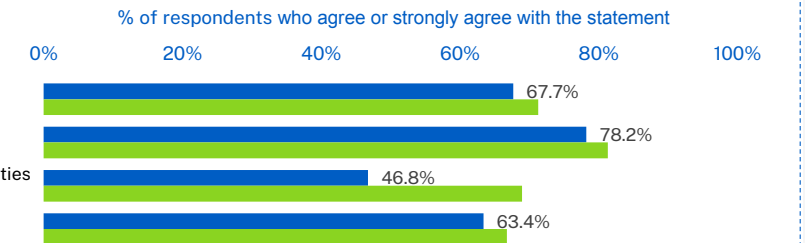
PRIORITY AREAS

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

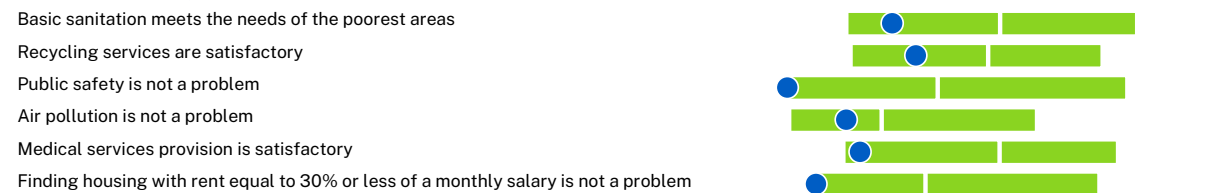
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



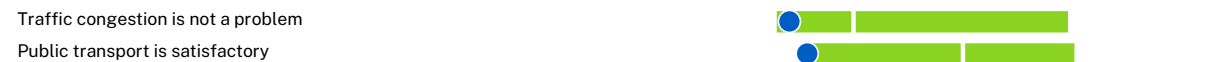
LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety



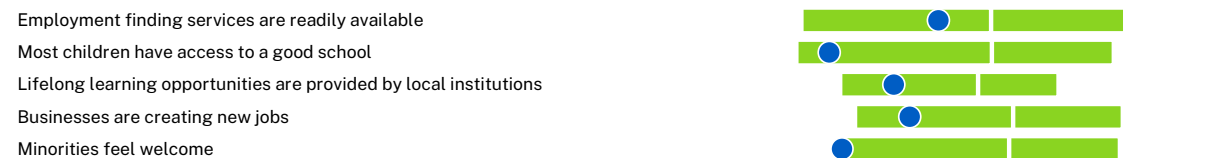
Mobility



Activities



Opportunities (Work & School)

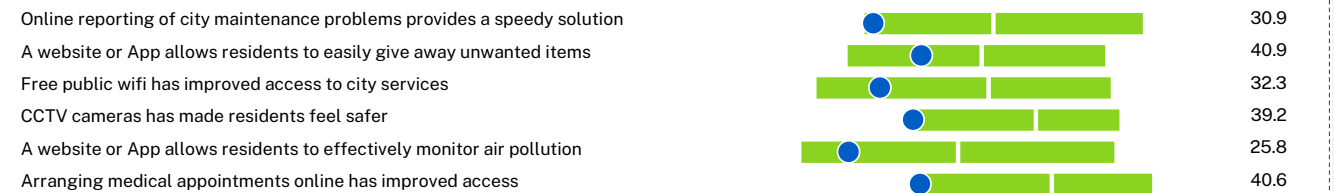


Governance

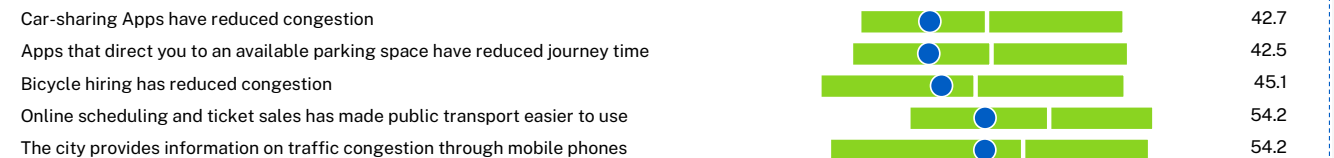


TECHNOLOGIES

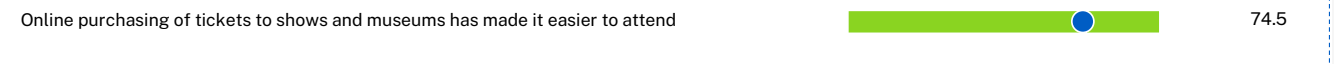
Health & Safety



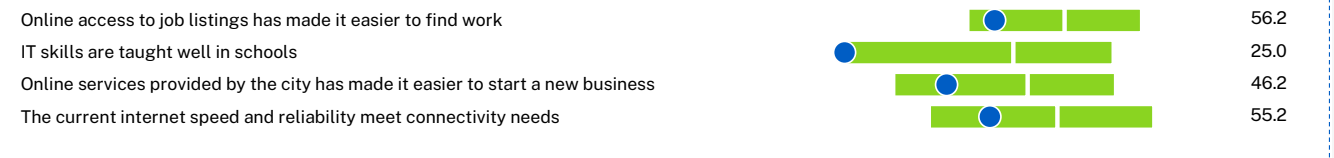
Mobility



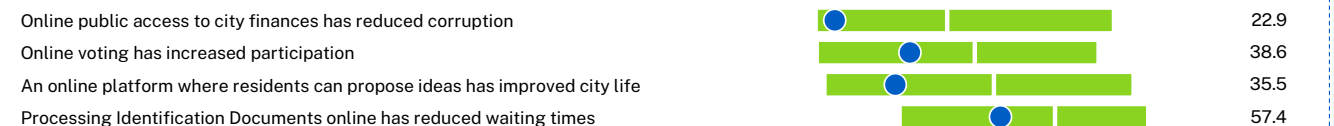
Activities



Opportunities (Work & School)



Governance



Riyadh

SMART CITY RANKING
25
Out of 142



30 in 2023
Out of 141

SMART CITY RATING

B

BB in 2023

FACTOR RATINGS

B

STRUCTURES

B

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 7,230,000
(UN World Urbanization Prospects)

HDI 0.900
(Global Data Lab)

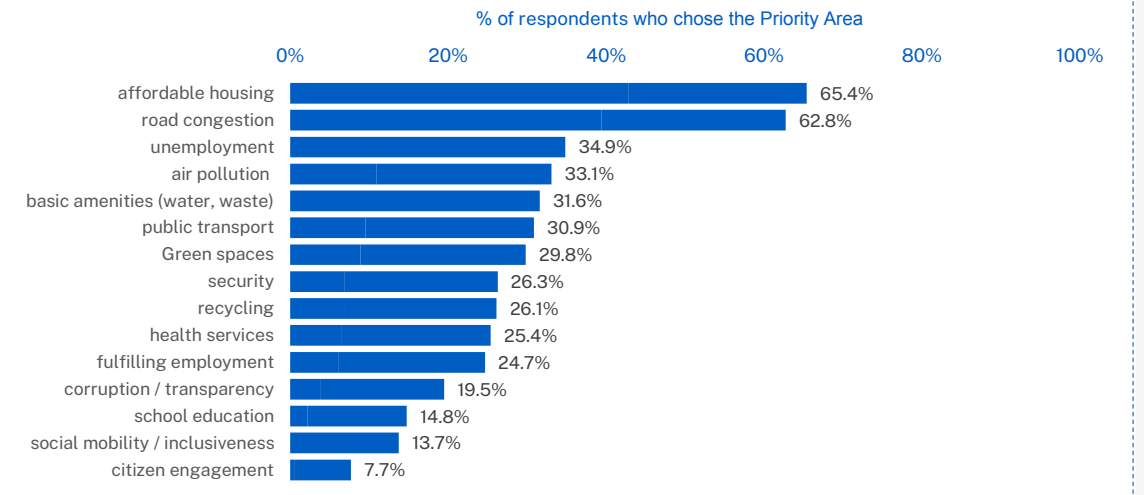


Country

Saudi Arabia	2019	2020	2021	2022	1 yr change
HDI	0.862	0.861	0.867	0.875	+0.008
Life expectancy at birth	77.3	76.2	76.9	77.9	+1.0
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	10.9	11.3	11.3	11.3	+0.0
GNI per capita (PPP \$)	47,529	45,563	47,441	50,620	+3,179

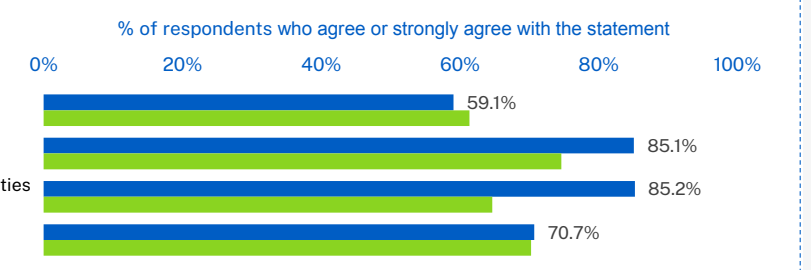
PRIORITY AREAS

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.



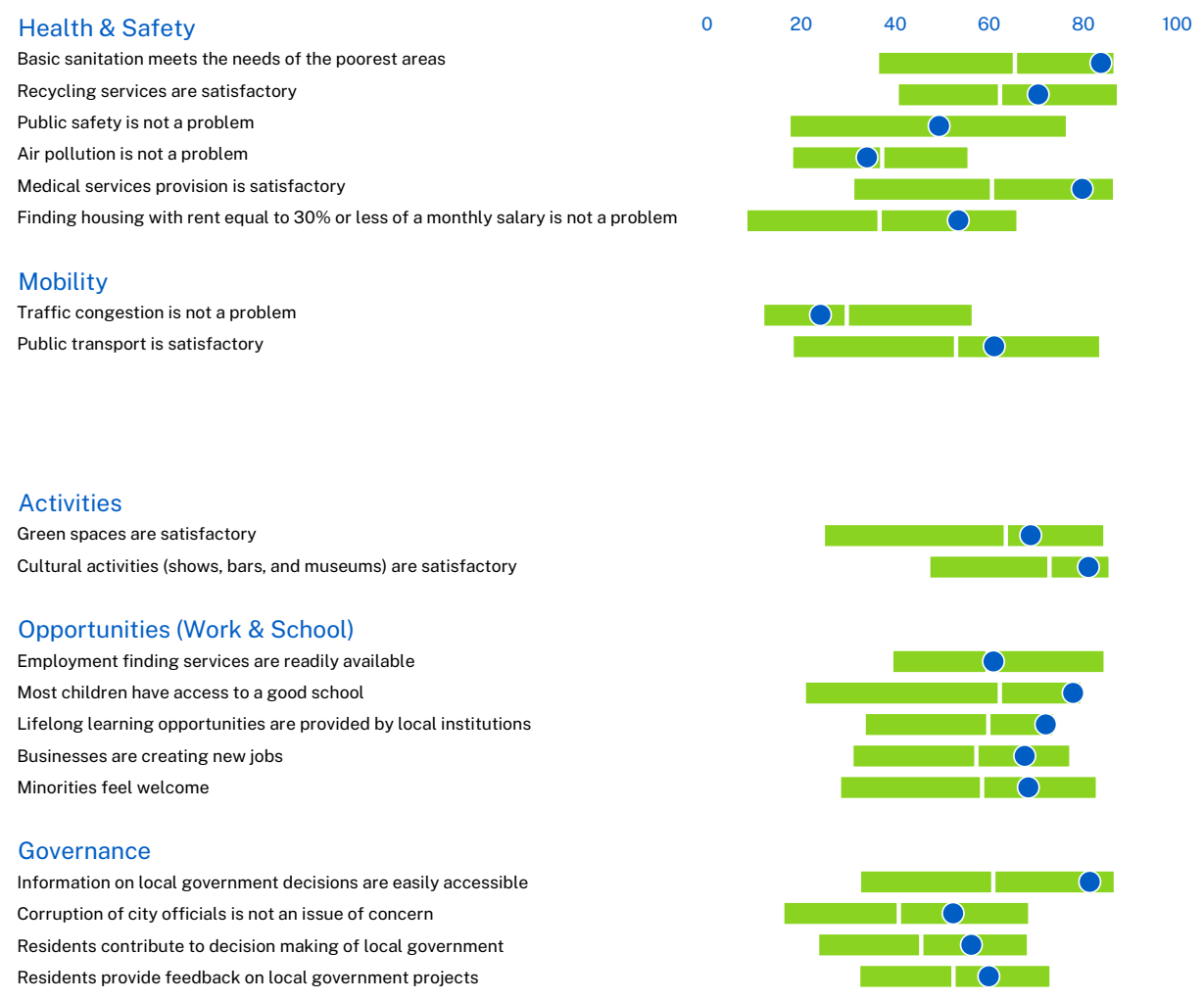
ATTITUDES

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



LEGEND: [GROUP MEAN] [CITY]

STRUCTURES



TECHNOLOGIES



Rome

SMART CITY RANKING
133
 Out of 142

▼

122 in 2023
 Out of 141

SMART CITY RATING
CCC
 CCC in 2023

FACTOR RATINGS
CCC
 STRUCTURES

CCC
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 2,810,000 (Eurostat)

HDI: 0.917 (Global Data Lab)

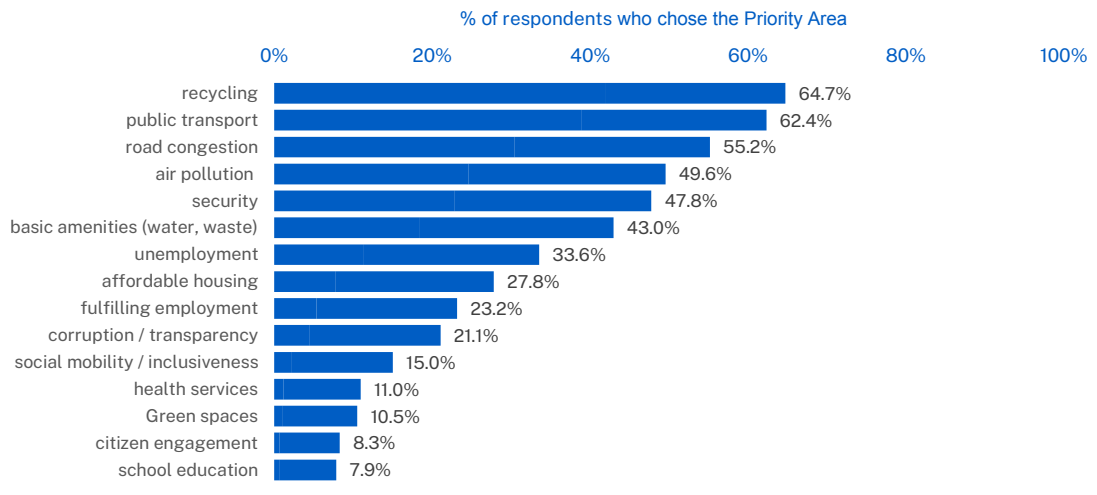


Country

	2019	2020	2021	2022	1 yr change
Italy					
HDI	0.899	0.892	0.899	0.906	+0.007
Life expectancy at birth	83.6	82.4	82.9	84.1	+1.2
Expected years of schooling	16.4	16.5	16.7	16.7	+0.0
Mean years of schooling	10.7	10.7	10.7	10.7	+0.0
GNI per capita (PPP \$)	43,102	39,587	42,856	44,284	+1,428

PRIORITY AREAS

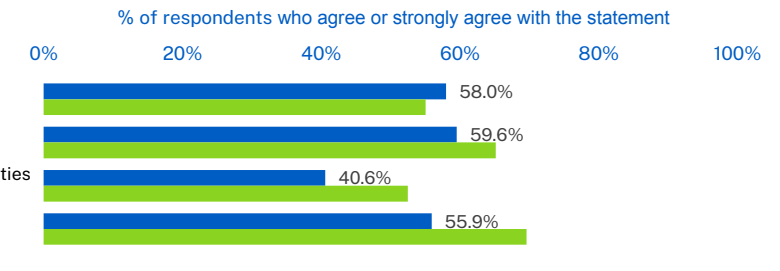
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
recycling	64.7%
public transport	62.4%
road congestion	55.2%
air pollution	49.6%
security	47.8%
basic amenities (water, waste)	43.0%
unemployment	33.6%
affordable housing	27.8%
fulfilling employment	23.2%
corruption / transparency	21.1%
social mobility / inclusiveness	15.0%
health services	11.0%
Green spaces	10.5%
citizen engagement	8.3%
school education	7.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City %	Group Mean %
You are willing to concede personal data in order to improve traffic congestion	58.0%	48.0%
You are comfortable with face recognition technologies to lower crime	59.6%	50.0%
You feel the availability of online information has increased your trust in authorities	40.6%	45.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	55.9%	50.0%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 to 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 41.6
- Recycling services are satisfactory: 25.2
- Public safety is not a problem: 28.7
- Air pollution is not a problem: 21.3
- Medical services provision is satisfactory: 39.6
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 37.8

Mobility

- Traffic congestion is not a problem: 11.8
- Public transport is satisfactory: 17.7

Activities

- Green spaces are satisfactory: 52.5
- Cultural activities (shows, bars, and museums) are satisfactory: 71.0

Opportunities (Work & School)

- Employment finding services are readily available: 23.5
- Most children have access to a good school: 48.7
- Lifelong learning opportunities are provided by local institutions: 38.0
- Businesses are creating new jobs: 26.1
- Minorities feel welcome: 25.8

Governance

- Information on local government decisions are easily accessible: 32.7
- Corruption of city officials is not an issue of concern: 19.9
- Residents contribute to decision making of local government: 20.9
- Residents provide feedback on local government projects: 29.1

TECHNOLOGIES

Score: 0 to 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 37.2
- A website or App allows residents to easily give away unwanted items: 49.2
- Free public wifi has improved access to city services: 41.1
- CCTV cameras has made residents feel safer: 46.3
- A website or App allows residents to effectively monitor air pollution: 34.2
- Arranging medical appointments online has improved access: 56.4

Mobility

- Car-sharing Apps have reduced congestion: 32.4
- Apps that direct you to an available parking space have reduced journey time: 35.0
- Bicycle hiring has reduced congestion: 35.1
- Online scheduling and ticket sales has made public transport easier to use: 57.1
- The city provides information on traffic congestion through mobile phones: 44.5

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 77.1

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 50.3
- IT skills are taught well in schools: 34.0
- Online services provided by the city has made it easier to start a new business: 36.5
- The current internet speed and reliability meet connectivity needs: 45.5

Governance

- Online public access to city finances has reduced corruption: 27.3
- Online voting has increased participation: 29.9
- An online platform where residents can propose ideas has improved city life: 33.0
- Processing Identification Documents online has reduced waiting times: 50.3

Rotterdam

SMART CITY RANKING

41

Out of 142

41 in 2023
Out of 141

SMART CITY RATING

A

A in 2023

FACTOR RATINGS

BBB

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 620,000
(Eurostat)

HDI 0.941
(Global Data Lab)



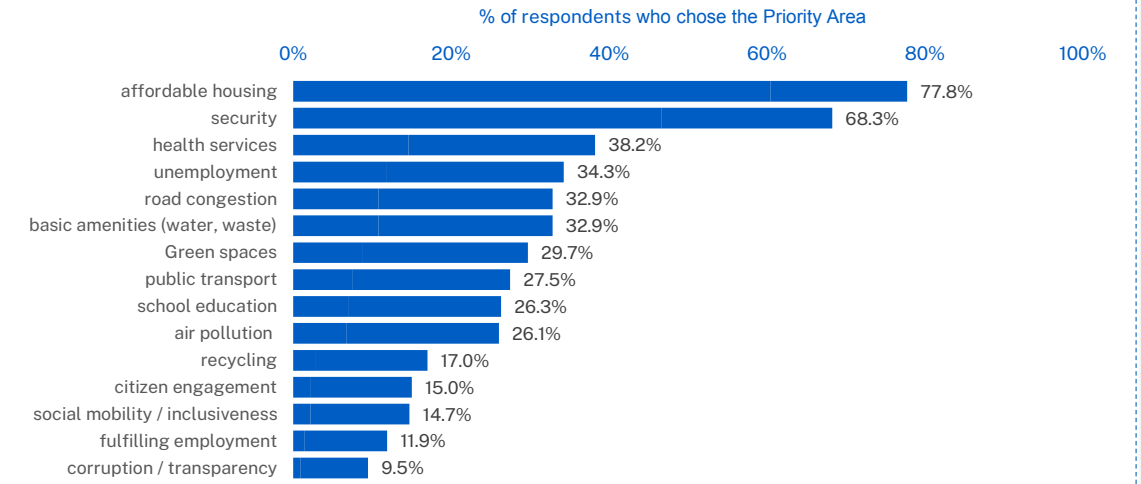
Country

Netherlands

	2019	2020	2021	2022	1 yr change
HDI	0.941	0.938	0.941	0.946	+0.005
Life expectancy at birth	82.0	81.6	81.7	82.5	+0.8
Expected years of schooling	18.4	18.4	18.6	18.6	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	55,628	52,500	55,355	57,278	+1,923

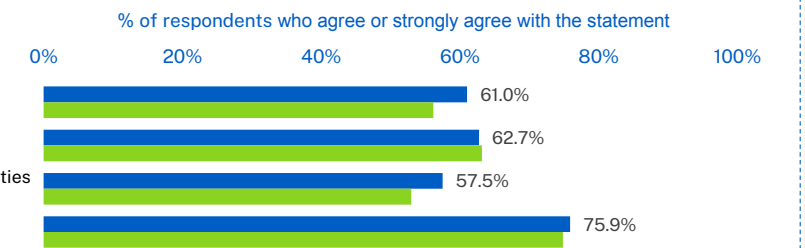
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

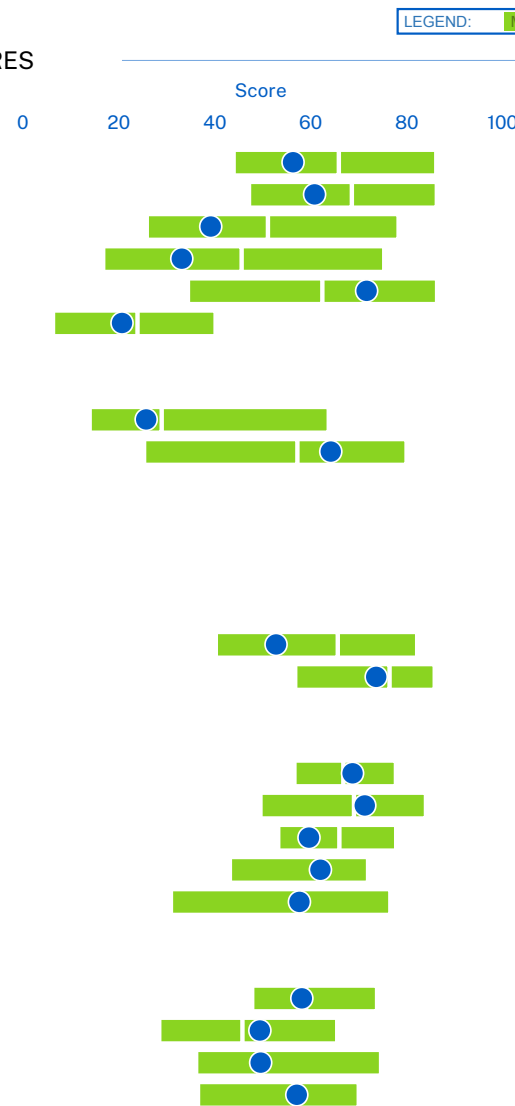
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

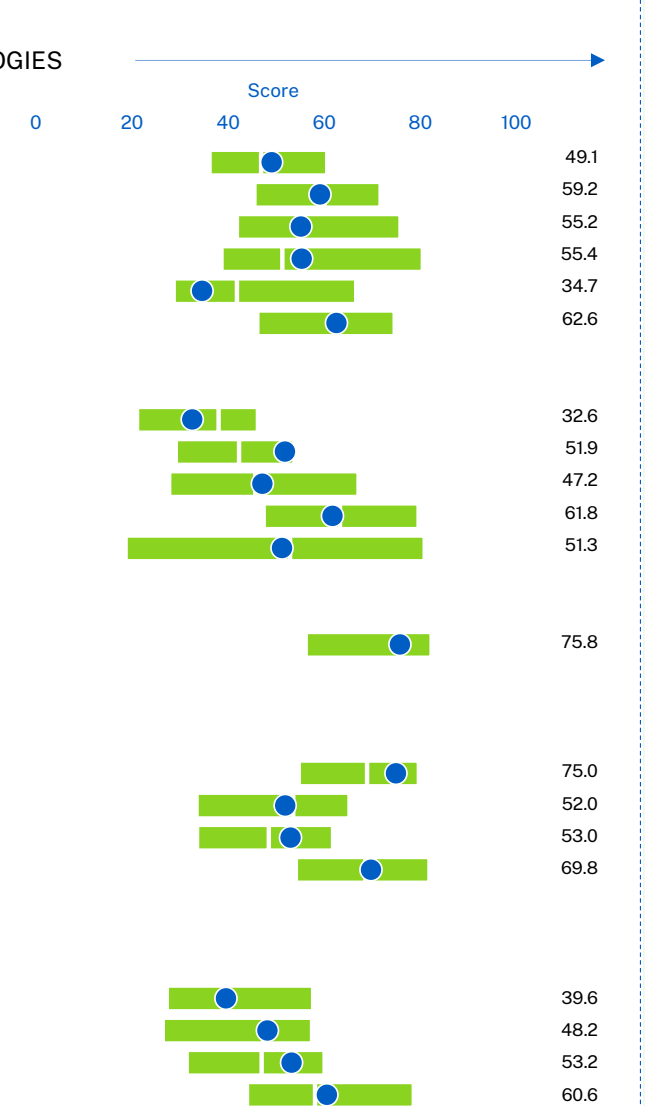
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



San Francisco

SMART CITY RANKING
75
 Out of 142

▼

68 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS

BB
 STRUCTURES

B
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

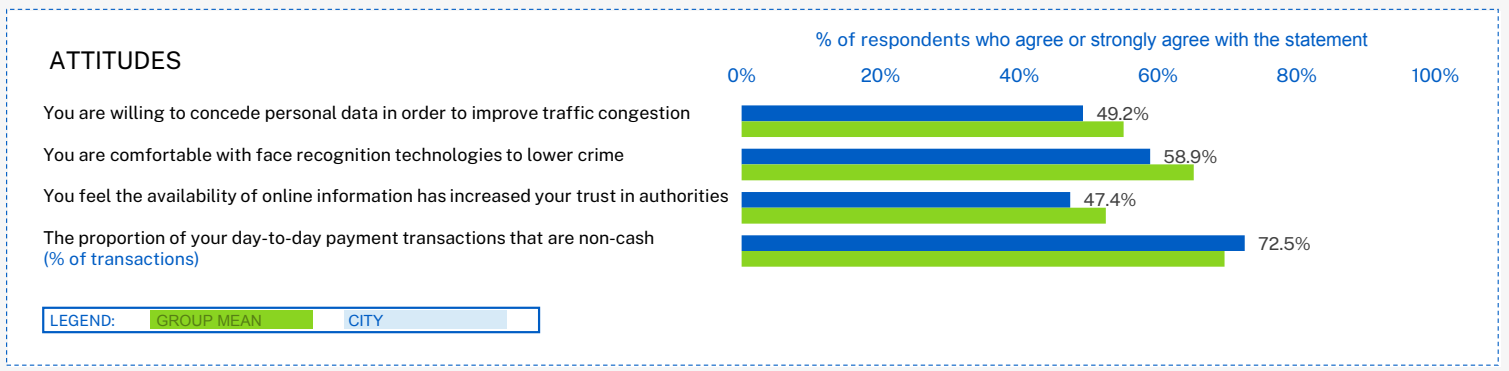
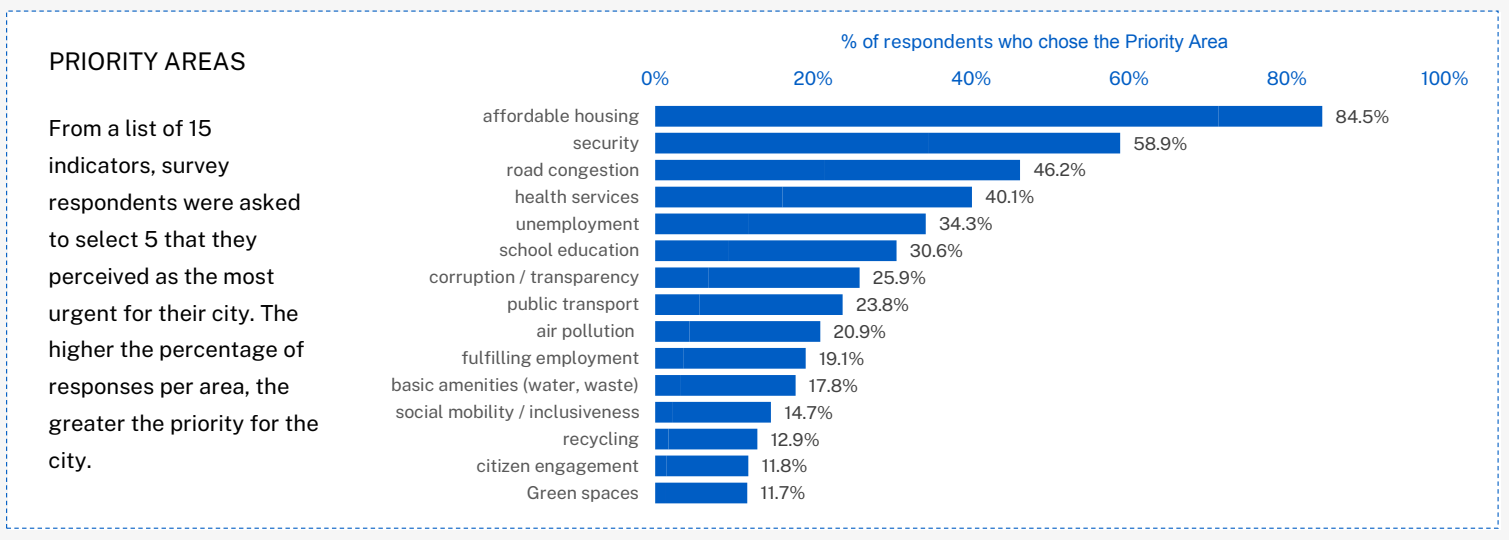
Population: 870,000 (UN Data)

HDI: 0.931 (Global Data Lab)



Country
 USA

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081



San José

SMART CITY RANKING

125

Out of 142

▲

127 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

CC

STRUCTURES

C

TECHNOLOGIES

GROUP

3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 350,000
(UN Data)

HDI 0.826
(Global Data Lab)

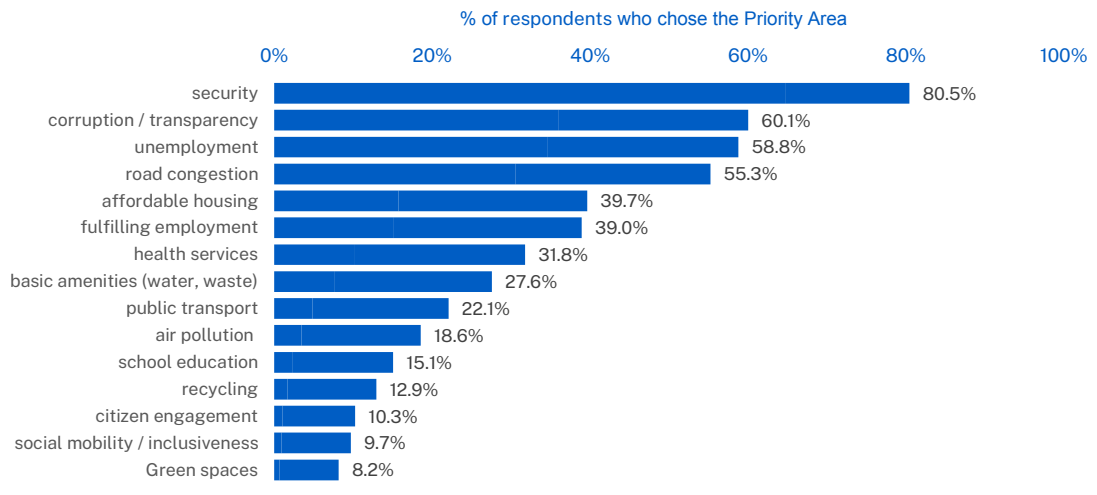


Country

Costa Rica	2019	2020	2021	2022	1 yr change
HDI	0.811	0.811	0.804	0.806	+0.002
Life expectancy at birth	79.4	79.3	77.0	77.3	+0.3
Expected years of schooling	15.8	16.1	16.1	16.1	+0.0
Mean years of schooling	8.8	8.8	8.8	8.8	+0.0
GNI per capita (PPP \$)	19,585	18,632	19,913	20,248	+335

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.



Priority Area	% of respondents
security	80.5%
corruption / transparency	60.1%
unemployment	58.8%
road congestion	55.3%
affordable housing	39.7%
fulfilling employment	39.0%
health services	31.8%
basic amenities (water, waste)	27.6%
public transport	22.1%
air pollution	18.6%
school education	15.1%
recycling	12.9%
citizen engagement	10.3%
social mobility / inclusiveness	9.7%
Green spaces	8.2%

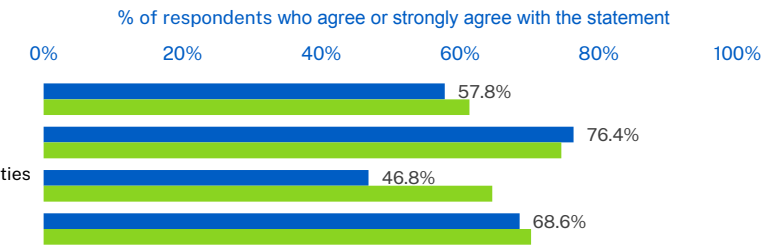
ATTITUDES

You are willing to concede personal data in order to improve traffic congestion: 57.8%

You are comfortable with face recognition technologies to lower crime: 76.4%

You feel the availability of online information has increased your trust in authorities: 46.8%

The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 68.6%



LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 51.6
- Recycling services are satisfactory: 54.9
- Public safety is not a problem: 29.6
- Air pollution is not a problem: 40.6
- Medical services provision is satisfactory: 59.8
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 32.8

Mobility

- Traffic congestion is not a problem: 18.2
- Public transport is satisfactory: 34.5

Activities

- Green spaces are satisfactory: 66.5
- Cultural activities (shows, bars, and museums) are satisfactory: 72.3

Opportunities (Work & School)

- Employment finding services are readily available: 56.2
- Most children have access to a good school: 54.0
- Lifelong learning opportunities are provided by local institutions: 56.8
- Businesses are creating new jobs: 46.1
- Minorities feel welcome: 42.7

Governance

- Information on local government decisions are easily accessible: 45.0
- Corruption of city officials is not an issue of concern: 21.8
- Residents contribute to decision making of local government: 29.5
- Residents provide feedback on local government projects: 34.3

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 36.0
- A website or App allows residents to easily give away unwanted items: 34.2
- Free public wifi has improved access to city services: 52.3
- CCTV cameras has made residents feel safer: 50.7
- A website or App allows residents to effectively monitor air pollution: 27.3
- Arranging medical appointments online has improved access: 54.9

Mobility

- Car-sharing Apps have reduced congestion: 34.2
- Apps that direct you to an available parking space have reduced journey time: 38.3
- Bicycle hiring has reduced congestion: 25.2
- Online scheduling and ticket sales has made public transport easier to use: 40.0
- The city provides information on traffic congestion through mobile phones: 45.8

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 75.4

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 59.2
- IT skills are taught well in schools: 40.3
- Online services provided by the city has made it easier to start a new business: 42.9
- The current internet speed and reliability meet connectivity needs: 66.3

Governance

- Online public access to city finances has reduced corruption: 25.6
- Online voting has increased participation: 26.7
- An online platform where residents can propose ideas has improved city life: 30.8
- Processing Identification Documents online has reduced waiting times: 51.8

SMART CITY RANKING

141

Out of 142

▼

140 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 3,180,000
(UN World Urbanization Prospects)

HDI 0.521
(Global Data Lab)



Country

Yemen

	2019	2020	2021	2022	1 yr change
HDI	0.430	0.430	0.425	0.424	-0.001
Life expectancy at birth	65.1	64.7	63.8	63.7	-0.0
Expected years of schooling	7.9	7.9	7.9	7.9	+0.0
Mean years of schooling	2.7	2.8	2.8	2.8	+0.0
GNI per capita (PPP \$)	1,165	1,152	1,112	1,106	-6

PRIORITY AREAS

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

Priority Area	% of respondents
unemployment	66.8%
health services	63.2%
school education	59.6%
affordable housing	50.1%
corruption / transparency	47.2%
security	36.8%
basic amenities (water, waste)	35.9%
fulfilling employment	28.9%
road congestion	28.5%
air pollution	17.6%
public transport	13.3%
Green spaces	11.1%
recycling	9.7%
citizen engagement	8.8%
social mobility / inclusiveness	3.8%

ATTITUDES

You are willing to concede personal data in order to improve traffic congestion: 39.0%

You are comfortable with face recognition technologies to lower crime: 80.8%

You feel the availability of online information has increased your trust in authorities: 53.5%

The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 39.6%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 44.7
- Recycling services are satisfactory: 36.7
- Public safety is not a problem: 34.1
- Air pollution is not a problem: 14.3
- Medical services provision is satisfactory: 30.5
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 28.5

Mobility

- Traffic congestion is not a problem: 17.4
- Public transport is satisfactory: 39.6

Activities

- Green spaces are satisfactory: 37.8
- Cultural activities (shows, bars, and museums) are satisfactory: 37.8

Opportunities (Work & School)

- Employment finding services are readily available: 16.9
- Most children have access to a good school: 33.3
- Lifelong learning opportunities are provided by local institutions: 24.9
- Businesses are creating new jobs: 29.3
- Minorities feel welcome: 47.0

Governance

- Information on local government decisions are easily accessible: 32.1
- Corruption of city officials is not an issue of concern: 19.8
- Residents contribute to decision making of local government: 26.4
- Residents provide feedback on local government projects: 30.9

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 30.3
- A website or App allows residents to easily give away unwanted items: 34.6
- Free public wifi has improved access to city services: 38.8
- CCTV cameras has made residents feel safer: 71.5
- A website or App allows residents to effectively monitor air pollution: 33.3
- Arranging medical appointments online has improved access: 48.4

Mobility

- Car-sharing Apps have reduced congestion: 31.8
- Apps that direct you to an available parking space have reduced journey time: 39.0
- Bicycle hiring has reduced congestion: 49.1
- Online scheduling and ticket sales has made public transport easier to use: 48.4
- The city provides information on traffic congestion through mobile phones: 22.0

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 25.6

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 50.7
- IT skills are taught well in schools: 33.8
- Online services provided by the city has made it easier to start a new business: 42.4
- The current internet speed and reliability meet connectivity needs: 50.0

Governance

- Online public access to city finances has reduced corruption: 28.6
- Online voting has increased participation: 36.1
- An online platform where residents can propose ideas has improved city life: 35.3
- Processing Identification Documents online has reduced waiting times: 36.7

Santiago

SMART CITY RANKING

117

Out of 142



119 in 2023
Out of 141

SMART CITY RATING

C

C in 2023

FACTOR RATINGS

C

STRUCTURES

C

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 5,270,000
(UN World Urbanization Prospects)

HDI 0.886
(Global Data Lab)



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

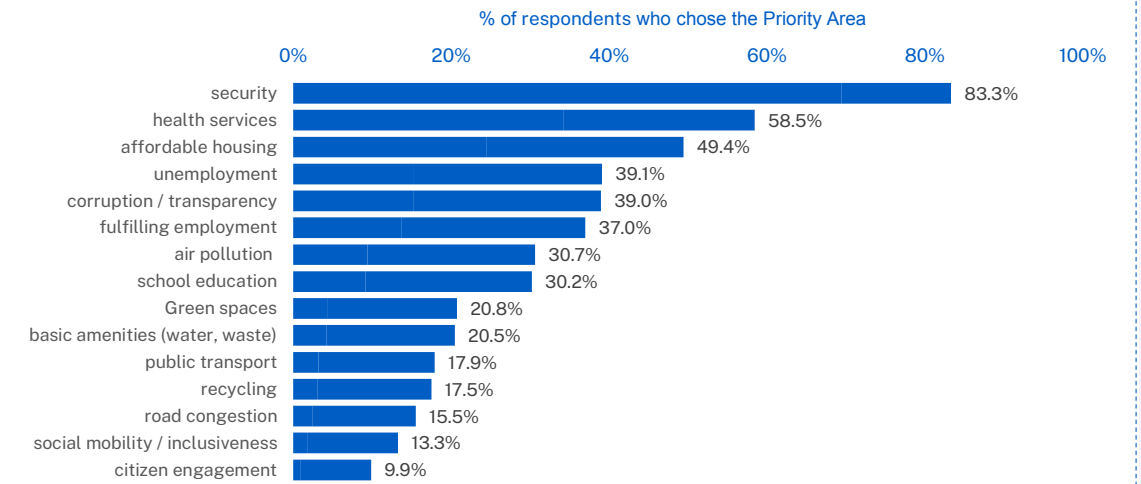
Country

Chile

	2019	2020	2021	2022	1 yr change
HDI	0.859	0.849	0.856	0.860	+0.004
Life expectancy at birth	80.3	79.4	78.9	79.5	+0.6
Expected years of schooling	16.6	16.3	16.8	16.8	+0.0
Mean years of schooling	10.9	11.1	11.1	11.1	+0.0
GNI per capita (PPP \$)	23,893	21,509	23,853	24,431	+578

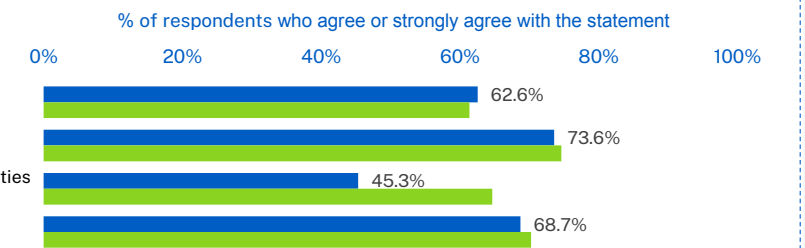
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

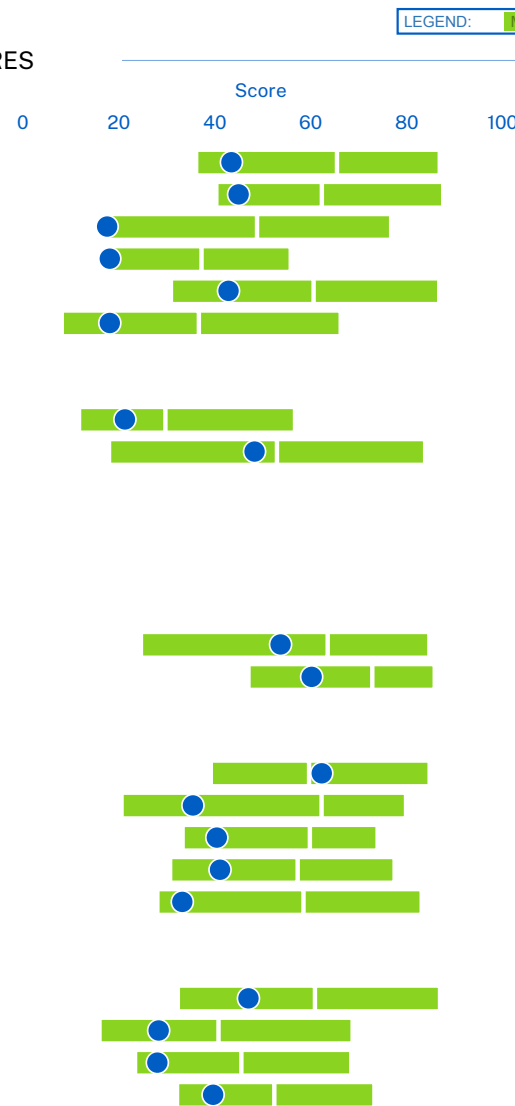
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

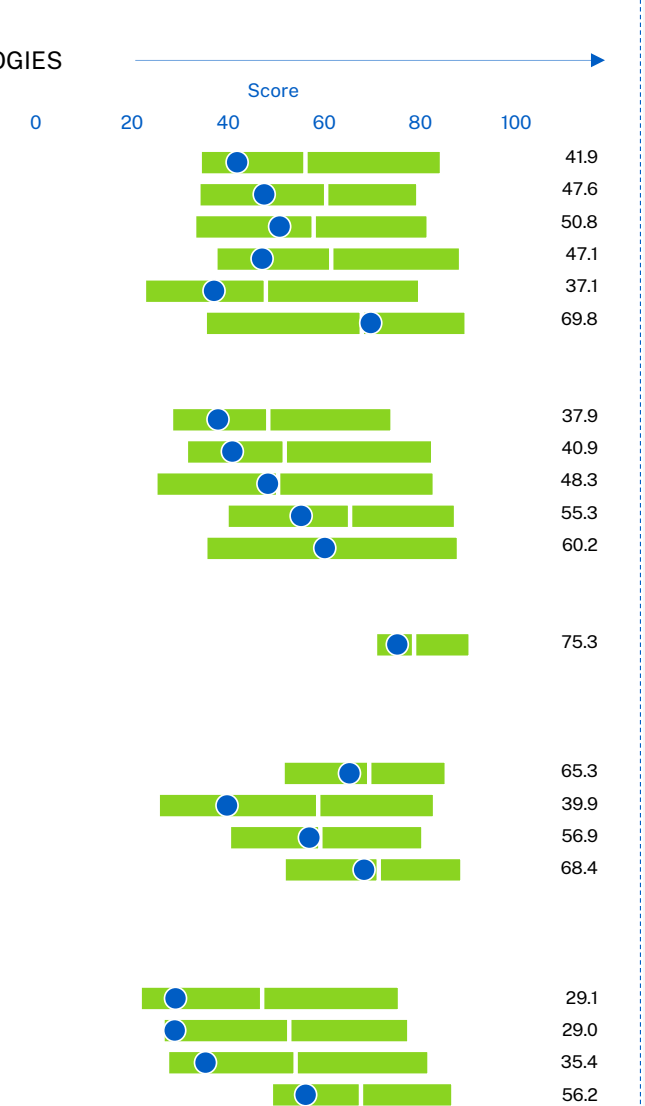
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Sao Paulo

SMART CITY RANKING

132

Out of 142

▼

130 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

C

TECHNOLOGIES

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 22,040,000
(UN World Urbanization Prospects)

HDI 0.780
(Global Data Lab)

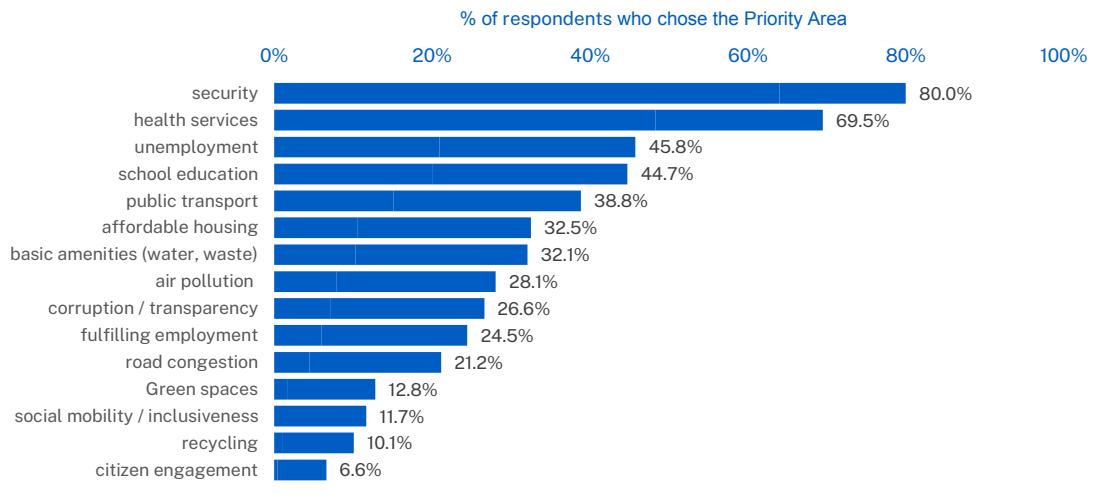


Country

	2019	2020	2021	2022	1 yr change
Brazil					
HDI	0.764	0.758	0.756	0.760	+0.004
Life expectancy at birth	75.3	74.0	72.8	73.4	+0.7
Expected years of schooling	15.4	15.4	15.6	15.6	+0.0
Mean years of schooling	8.1	8.3	8.3	8.3	+0.0
GNI per capita (PPP \$)	14,291	13,815	14,342	14,616	+274

PRIORITY AREAS

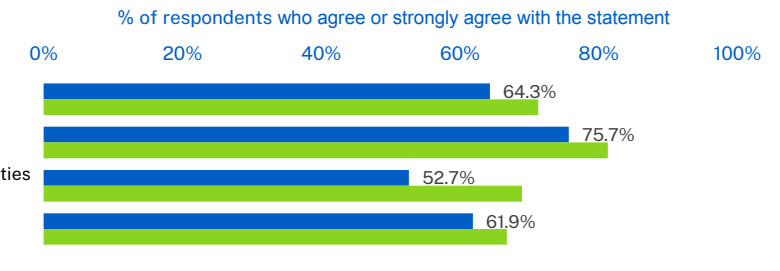
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
security	80.0%
health services	69.5%
unemployment	45.8%
school education	44.7%
public transport	38.8%
affordable housing	32.5%
basic amenities (water, waste)	32.1%
air pollution	28.1%
corruption / transparency	26.6%
fulfilling employment	24.5%
road congestion	21.2%
Green spaces	12.8%
social mobility / inclusiveness	11.7%
recycling	10.1%
citizen engagement	6.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	64.3%	61.9%
You are comfortable with face recognition technologies to lower crime	75.7%	61.9%
You feel the availability of online information has increased your trust in authorities	52.7%	61.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	61.9%	61.9%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 38.7
- Recycling services are satisfactory: 49.6
- Public safety is not a problem: 17.7
- Air pollution is not a problem: 19.9
- Medical services provision is satisfactory: 33.0
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 21.1

Mobility

- Traffic congestion is not a problem: 13.9
- Public transport is satisfactory: 26.8

Activities

- Green spaces are satisfactory: 51.6
- Cultural activities (shows, bars, and museums) are satisfactory: 69.1

Opportunities (Work & School)

- Employment finding services are readily available: 54.1
- Most children have access to a good school: 30.9
- Lifelong learning opportunities are provided by local institutions: 44.7
- Businesses are creating new jobs: 45.8
- Minorities feel welcome: 28.0

Governance

- Information on local government decisions are easily accessible: 40.8
- Corruption of city officials is not an issue of concern: 19.4
- Residents contribute to decision making of local government: 27.1
- Residents provide feedback on local government projects: 32.6

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 35.8
- A website or App allows residents to easily give away unwanted items: 45.5
- Free public wifi has improved access to city services: 45.2
- CCTV cameras has made residents feel safer: 45.7
- A website or App allows residents to effectively monitor air pollution: 36.4
- Arranging medical appointments online has improved access: 51.2

Mobility

- Car-sharing Apps have reduced congestion: 42.8
- Apps that direct you to an available parking space have reduced journey time: 49.9
- Bicycle hiring has reduced congestion: 43.0
- Online scheduling and ticket sales has made public transport easier to use: 59.7
- The city provides information on traffic congestion through mobile phones: 61.7

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 77.2

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 63.2
- IT skills are taught well in schools: 30.5
- Online services provided by the city has made it easier to start a new business: 55.2
- The current internet speed and reliability meet connectivity needs: 56.7

Governance

- Online public access to city finances has reduced corruption: 28.9
- Online voting has increased participation: 44.8
- An online platform where residents can propose ideas has improved city life: 43.5
- Processing Identification Documents online has reduced waiting times: 65.2

Seattle

SMART CITY RANKING
63
 Out of 142

▼

55 in 2023
 Out of 141

SMART CITY RATING
BB
 BB in 2023

FACTOR RATINGS

BB
 STRUCTURES

B
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 740,000
 (UN Data)

HDI: 0.940
 (Global Data Lab)

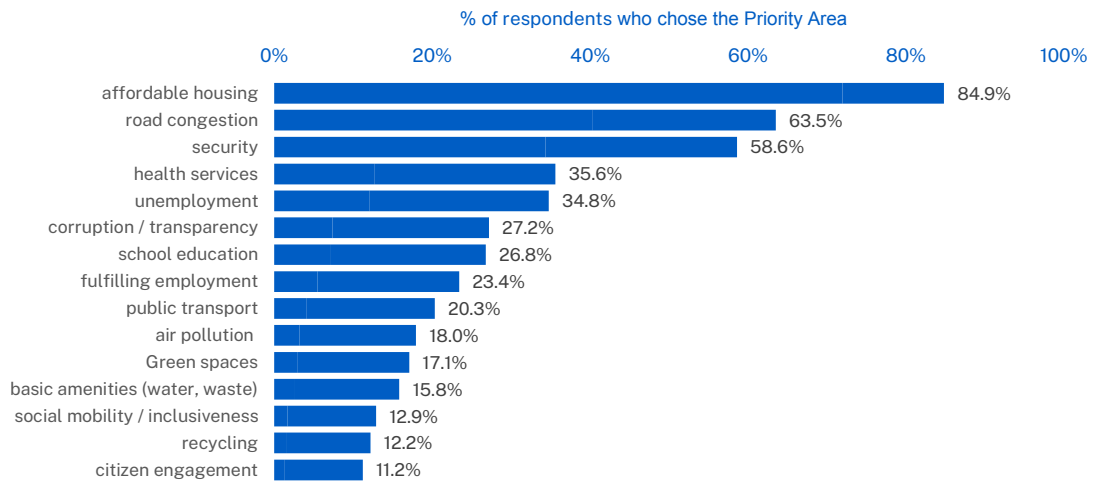


Country
 USA

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081

PRIORITY AREAS

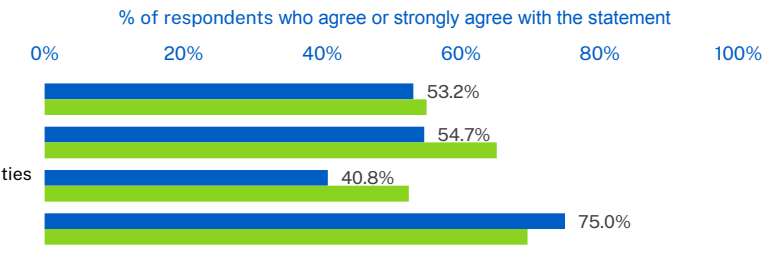
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	84.9%
road congestion	63.5%
security	58.6%
health services	35.6%
unemployment	34.8%
corruption / transparency	27.2%
school education	26.8%
fulfilling employment	23.4%
public transport	20.3%
air pollution	18.0%
Green spaces	17.1%
basic amenities (water, waste)	15.8%
social mobility / inclusiveness	12.9%
recycling	12.2%
citizen engagement	11.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City Score	Group Mean
You are willing to concede personal data in order to improve traffic congestion	53.2%	~45%
You are comfortable with face recognition technologies to lower crime	54.7%	~45%
You feel the availability of online information has increased your trust in authorities	40.8%	~45%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.0%	~45%

LEGEND: [GROUP MEAN] [CITY]



Category	Indicator	Score
Health & Safety	Basic sanitation meets the needs of the poorest areas	41.7
	Recycling services are satisfactory	69.1
	Public safety is not a problem	25.0
	Air pollution is not a problem	44.5
	Medical services provision is satisfactory	61.2
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	20.2
Mobility	Traffic congestion is not a problem	15.6
	Public transport is satisfactory	55.9
Activities	Green spaces are satisfactory	62.3
	Cultural activities (shows, bars, and museums) are satisfactory	76.7
Opportunities (Work & School)	Employment finding services are readily available	66.0
	Most children have access to a good school	61.1
	Lifelong learning opportunities are provided by local institutions	61.2
	Businesses are creating new jobs	62.2
	Minorities feel welcome	64.9
Governance	Information on local government decisions are easily accessible	62.2
	Corruption of city officials is not an issue of concern	39.4
	Residents contribute to decision making of local government	47.3
	Residents provide feedback on local government projects	57.7
	Technologies	Online reporting of city maintenance problems provides a speedy solution
A website or App allows residents to easily give away unwanted items		64.1
Free public wifi has improved access to city services		47.4
CCTV cameras has made residents feel safer		37.7
A website or App allows residents to effectively monitor air pollution		44.0
Arranging medical appointments online has improved access		65.9
Mobility		Car-sharing Apps have reduced congestion
	Apps that direct you to an available parking space have reduced journey time	37.3
	Bicycle hiring has reduced congestion	38.8
Activities	Online scheduling and ticket sales has made public transport easier to use	53.0
	The city provides information on traffic congestion through mobile phones	58.4
Opportunities (Work & School)	Online purchasing of tickets to shows and museums has made it easier to attend	71.7
	Governance	Online access to job listings has made it easier to find work
IT skills are taught well in schools		48.6
Online services provided by the city has made it easier to start a new business		40.8
Technologies	The current internet speed and reliability meet connectivity needs	66.5
	Online public access to city finances has reduced corruption	34.2
	Online voting has increased participation	50.3
Activities	An online platform where residents can propose ideas has improved city life	41.4
	Processing Identification Documents online has reduced waiting times	51.3

Seoul

SMART CITY RANKING
17
 Out of 142

▼

16 in 2023
 Out of 141

SMART CITY RATING
AA
 AA in 2023

FACTOR RATINGS
BBB
 STRUCTURES

TECHNOLOGIES
AAA

GROUP
1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 9,960,000
 (UN World Urbanization Prospects)

HDI 0.952
 (Global Data Lab)

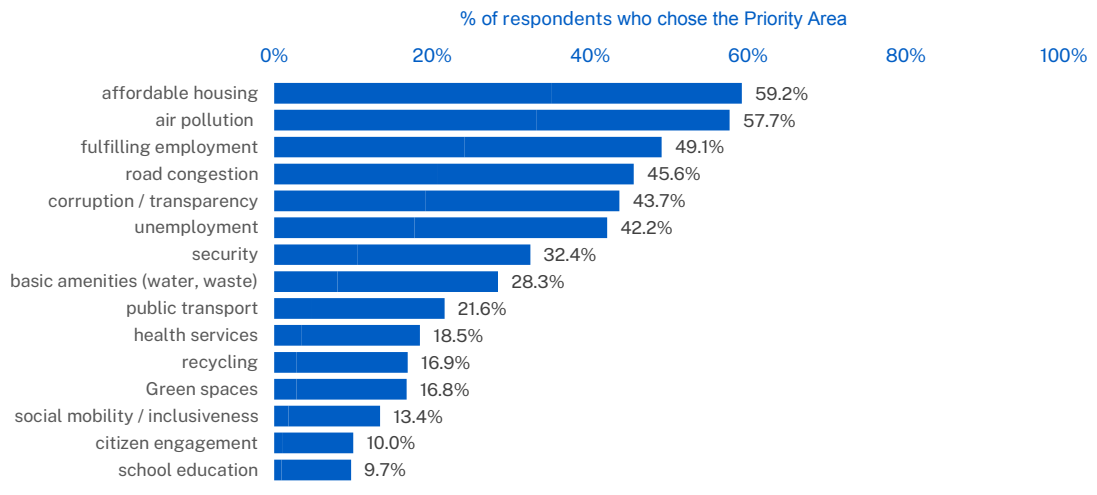


Country
 Korea, South

	2019	2020	2021	2022	1 yr change
HDI	0.922	0.922	0.926	0.929	+0.003
Life expectancy at birth	83.7	83.6	83.7	84.0	+0.3
Expected years of schooling	16.4	16.4	16.5	16.5	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	43,117	42,757	44,710	46,026	+1,317

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.



Priority Area	% of respondents
affordable housing	59.2%
air pollution	57.7%
fulfilling employment	49.1%
road congestion	45.6%
corruption / transparency	43.7%
unemployment	42.2%
security	32.4%
basic amenities (water, waste)	28.3%
public transport	21.6%
health services	18.5%
recycling	16.9%
Green spaces	16.8%
social mobility / inclusiveness	13.4%
citizen engagement	10.0%
school education	9.7%

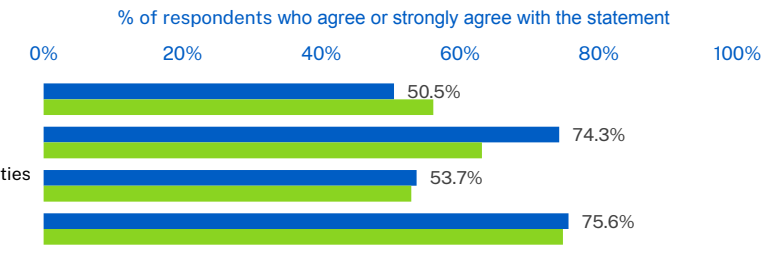
ATTITUDES

You are willing to concede personal data in order to improve traffic congestion: 50.5%

You are comfortable with face recognition technologies to lower crime: 74.3%

You feel the availability of online information has increased your trust in authorities: 53.7%

The proportion of your day-to-day payment transactions that are non-cash (% of transactions): 75.6%



LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 75.4
- Recycling services are satisfactory: 69.4
- Public safety is not a problem: 65.7
- Air pollution is not a problem: 17.0
- Medical services provision is satisfactory: 73.3
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 30.4

Mobility

- Traffic congestion is not a problem: 20.5
- Public transport is satisfactory: 72.7

Activities

- Green spaces are satisfactory: 54.7
- Cultural activities (shows, bars, and museums) are satisfactory: 68.1

Opportunities (Work & School)

- Employment finding services are readily available: 61.6
- Most children have access to a good school: 54.0
- Lifelong learning opportunities are provided by local institutions: 62.5
- Businesses are creating new jobs: 43.4
- Minorities feel welcome: 31.1

Governance

- Information on local government decisions are easily accessible: 64.2
- Corruption of city officials is not an issue of concern: 28.7
- Residents contribute to decision making of local government: 50.4
- Residents provide feedback on local government projects: 49.7

LEGEND: MIN CITY MEAN GROUP MAX

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 59.1
- A website or App allows residents to easily give away unwanted items: 68.6
- Free public wifi has improved access to city services: 75.9
- CCTV cameras has made residents feel safer: 80.6
- A website or App allows residents to effectively monitor air pollution: 66.7
- Arranging medical appointments online has improved access: 74.7

Mobility

- Car-sharing Apps have reduced congestion: 43.4
- Apps that direct you to an available parking space have reduced journey time: 50.1
- Bicycle hiring has reduced congestion: 46.1
- Online scheduling and ticket sales has made public transport easier to use: 72.8
- The city provides information on traffic congestion through mobile phones: 81.0

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 79.7

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 67.2
- IT skills are taught well in schools: 63.0
- Online services provided by the city has made it easier to start a new business: 54.9
- The current internet speed and reliability meet connectivity needs: 79.8

Governance

- Online public access to city finances has reduced corruption: 44.2
- Online voting has increased participation: 57.5
- An online platform where residents can propose ideas has improved city life: 56.7
- Processing Identification Documents online has reduced waiting times: 78.7

Shanghai

SMART CITY RANKING
19
Out of 142

▲
25 in 2023
Out of 141

SMART CITY RATING
BB

BB in 2023

FACTOR RATINGS

BB
STRUCTURES

BB
TECHNOLOGIES

GROUP
3

All ratings range from AAA to D

BACKGROUND INFORMATION

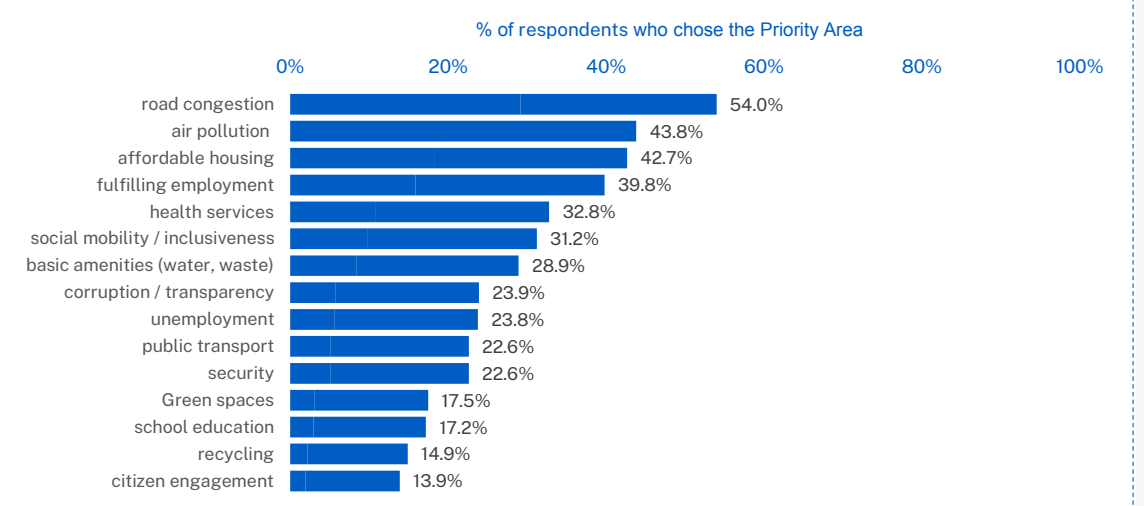
City
Population 27,060,000
(UN World Urbanization Prospects)
HDI 0.880
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
China					
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

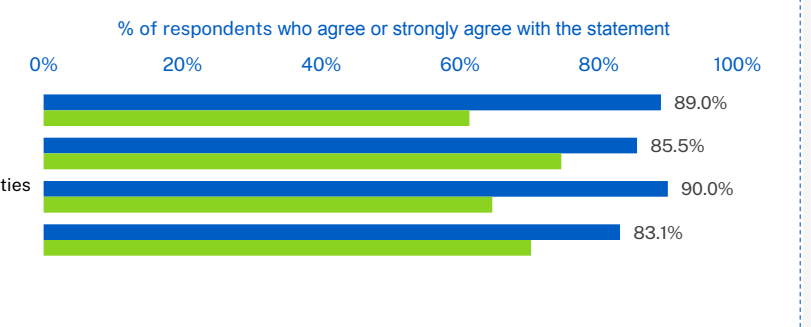
PRIORITY AREAS

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.

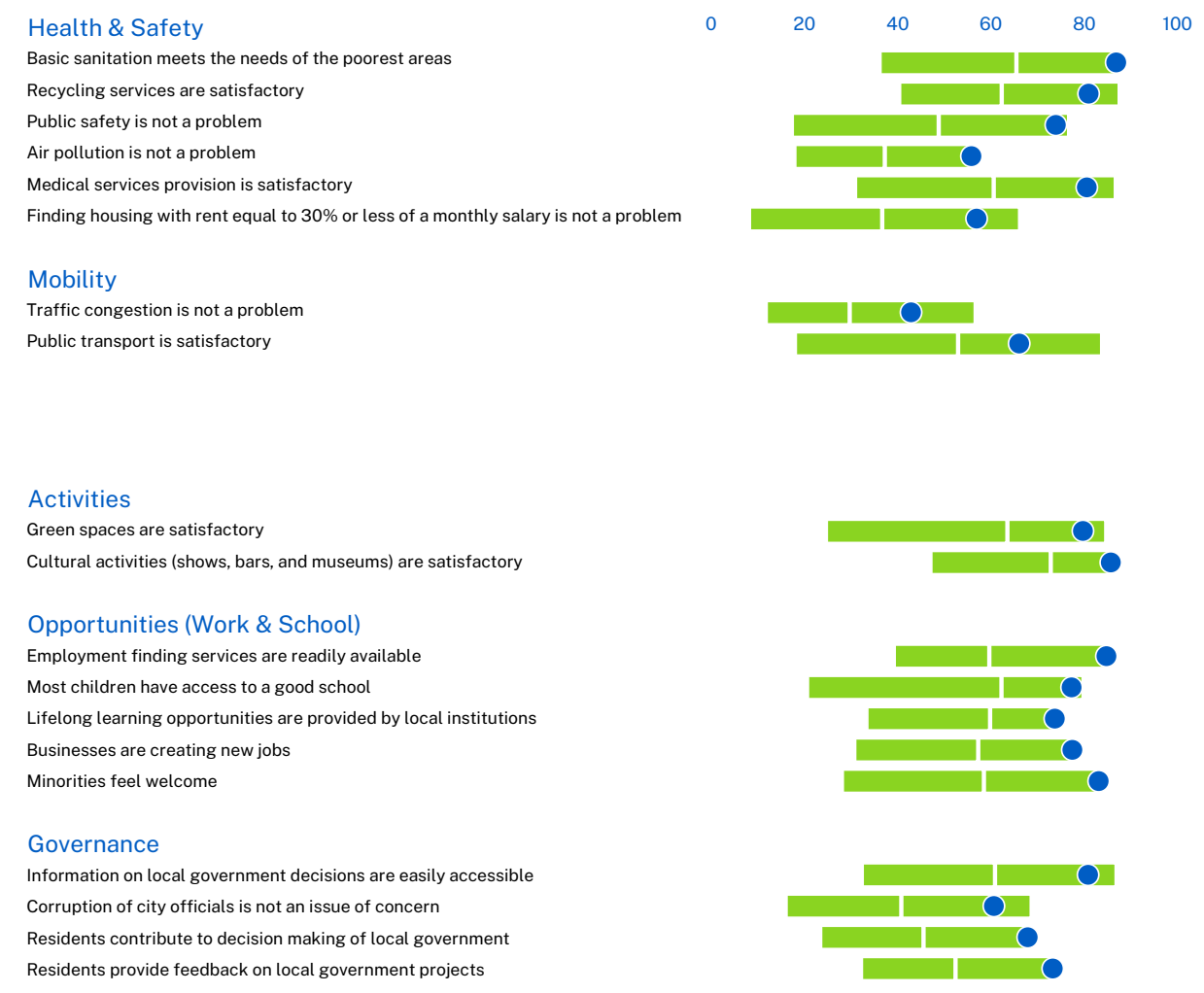


ATTITUDES

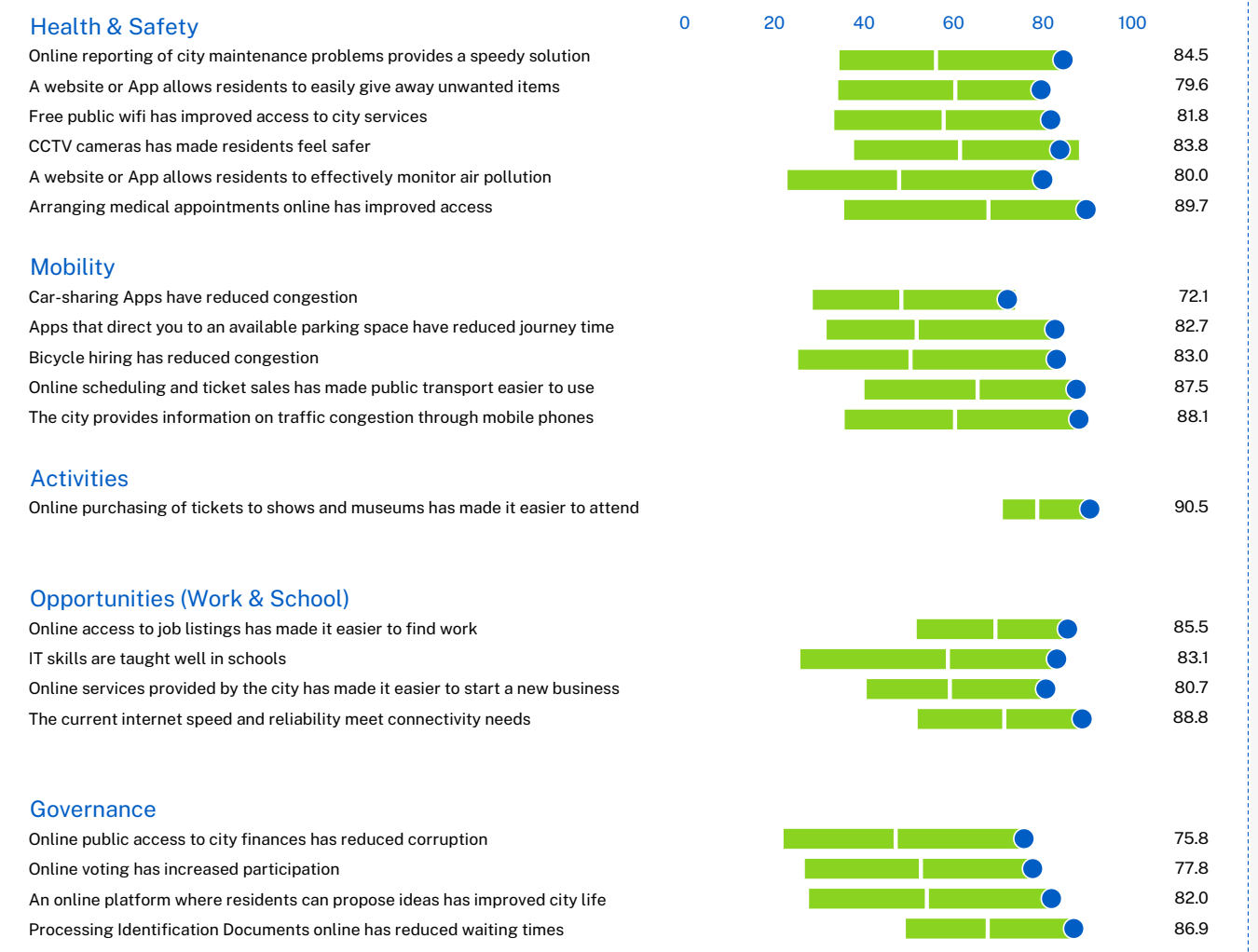
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Shenzhen

SMART CITY RANKING

60

Out of 142

▲

66 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 12,360,000
(UN World Urbanization Prospects)

HDI 0.799
(Global Data Lab)

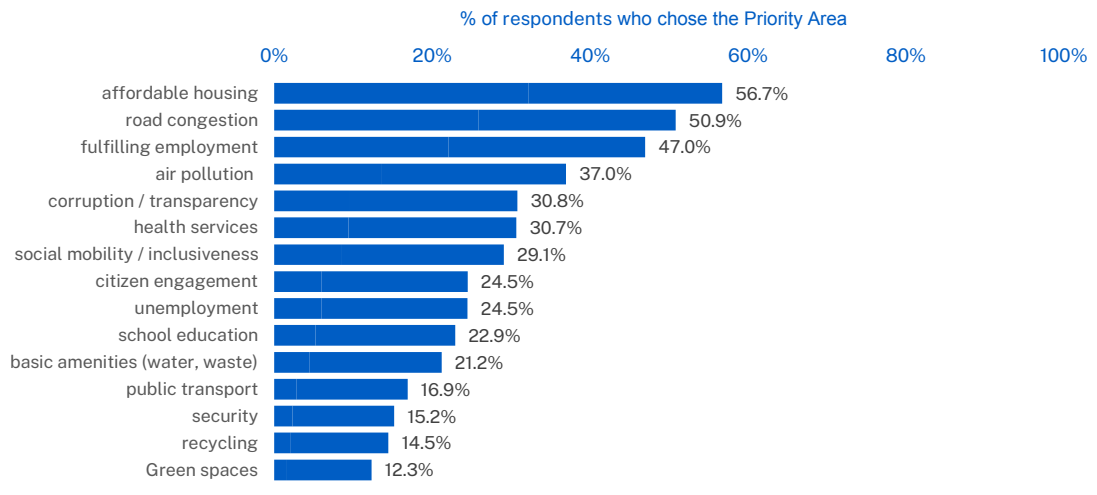


Country

China	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

PRIORITY AREAS

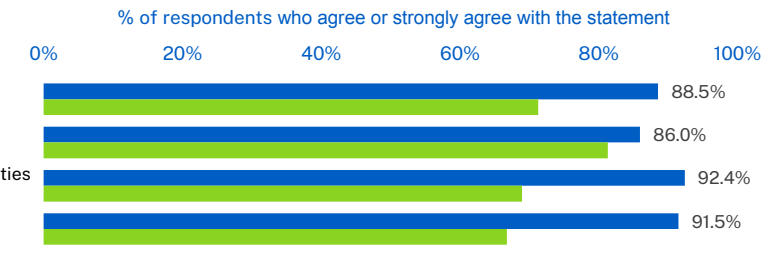
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	56.7%
road congestion	50.9%
fulfilling employment	47.0%
air pollution	37.0%
corruption / transparency	30.8%
health services	30.7%
social mobility / inclusiveness	29.1%
citizen engagement	24.5%
unemployment	24.5%
school education	22.9%
basic amenities (water, waste)	21.2%
public transport	16.9%
security	15.2%
recycling	14.5%
Green spaces	12.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	88.5%
You are comfortable with face recognition technologies to lower crime	86.0%
You feel the availability of online information has increased your trust in authorities	92.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	91.5%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 to 100

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 86.6
- Recycling services are satisfactory: 79.3
- Public safety is not a problem: 76.0
- Air pollution is not a problem: 64.0
- Medical services provision is satisfactory: 80.4
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 63.4

Mobility

- Traffic congestion is not a problem: 45.2
- Public transport is satisfactory: 73.9

Activities

- Green spaces are satisfactory: 84.0
- Cultural activities (shows, bars, and museums) are satisfactory: 84.4

Opportunities (Work & School)

- Employment finding services are readily available: 84.0
- Most children have access to a good school: 74.3
- Lifelong learning opportunities are provided by local institutions: 69.7
- Businesses are creating new jobs: 79.6
- Minorities feel welcome: 81.7

Governance

- Information on local government decisions are easily accessible: 77.1
- Corruption of city officials is not an issue of concern: 57.6
- Residents contribute to decision making of local government: 60.8
- Residents provide feedback on local government projects: 74.1

TECHNOLOGIES

Score: 0 to 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 83.9
- A website or App allows residents to easily give away unwanted items: 79.6
- Free public wifi has improved access to city services: 80.7
- CCTV cameras has made residents feel safer: 82.6
- A website or App allows residents to effectively monitor air pollution: 76.5
- Arranging medical appointments online has improved access: 89.4

Mobility

- Car-sharing Apps have reduced congestion: 68.4
- Apps that direct you to an available parking space have reduced journey time: 84.1
- Bicycle hiring has reduced congestion: 81.2
- Online scheduling and ticket sales has made public transport easier to use: 89.4
- The city provides information on traffic congestion through mobile phones: 88.5

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 90.9

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 86.9
- IT skills are taught well in schools: 80.3
- Online services provided by the city has made it easier to start a new business: 81.5
- The current internet speed and reliability meet connectivity needs: 88.9

Governance

- Online public access to city finances has reduced corruption: 72.5
- Online voting has increased participation: 72.5
- An online platform where residents can propose ideas has improved city life: 82.5
- Processing Identification Documents online has reduced waiting times: 84.5

Singapore

SMART CITY RANKING
5
 Out of 142

SMART CITY RATING
A
 A in 2023

FACTOR RATINGS
A
 STRUCTURES

TECHNOLOGIES
A

GROUP
2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 5,940,000
 (UN World Urbanization Prospects)

HDI 0.939
 (Global Data Lab)



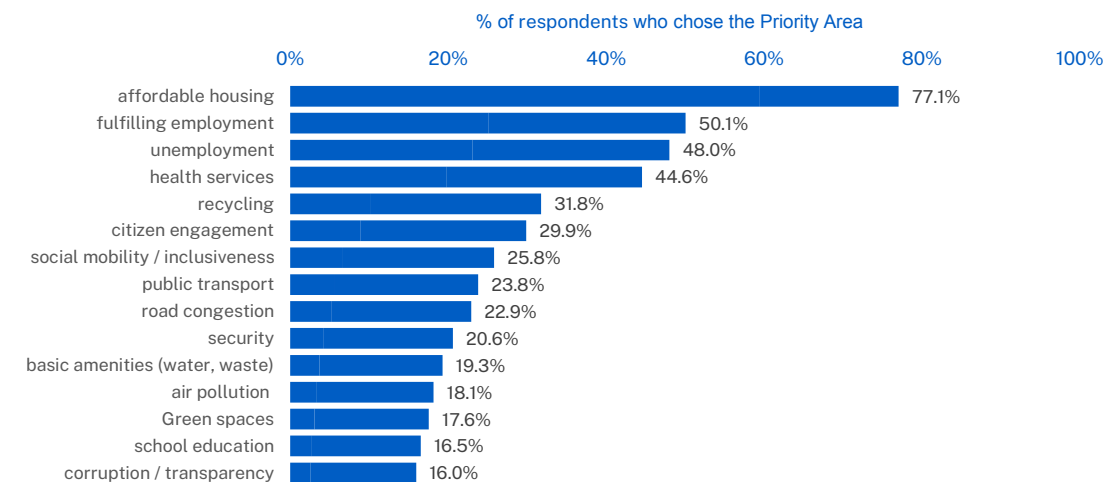
Country

Singapore

	2019	2020	2021	2022	1 yr change
HDI	0.945	0.942	0.942	0.949	+0.007
Life expectancy at birth	83.8	82.9	82.8	84.1	+1.4
Expected years of schooling	16.7	16.8	16.9	16.9	+0.0
Mean years of schooling	11.9	11.9	11.9	11.9	+0.0
GNI per capita (PPP \$)	86,456	81,431	88,519	88,761	+242

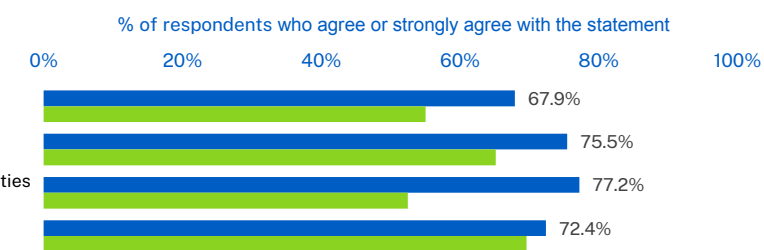
PRIORITY AREAS

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



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

Mobility

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

Activities

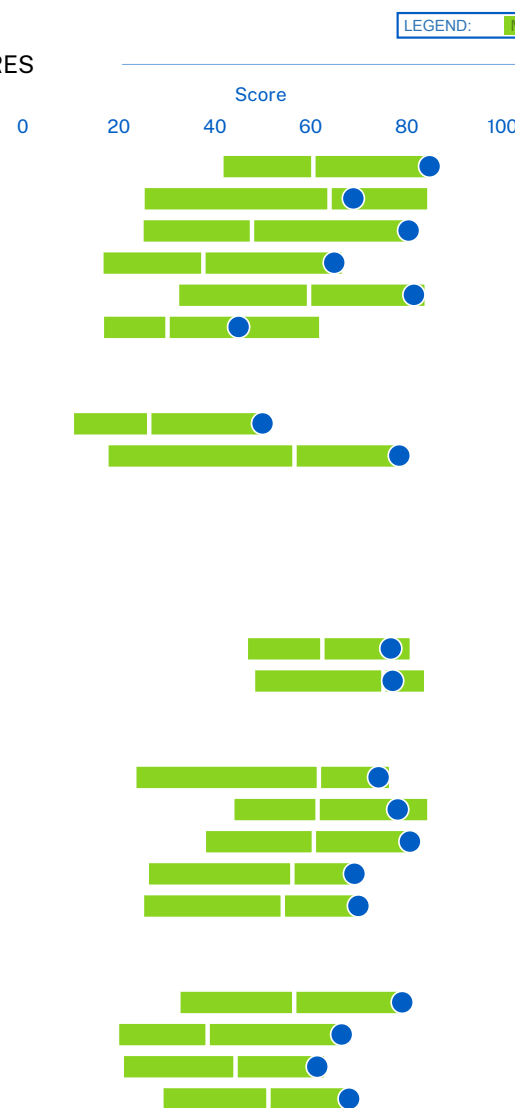
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

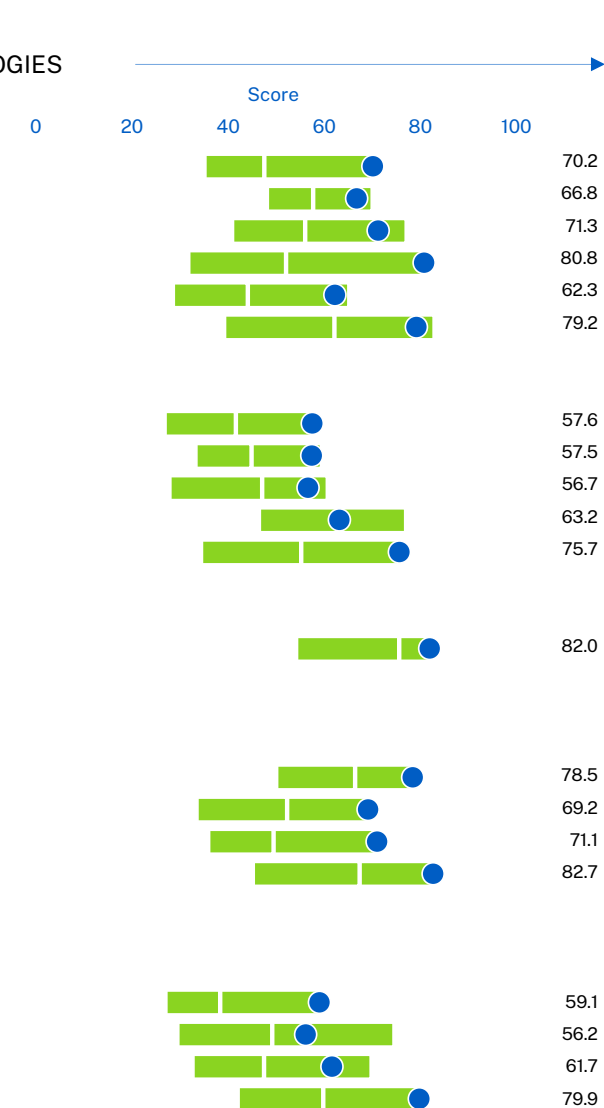
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Sofia

SMART CITY RANKING

113

Out of 142

▼

111 in 2023
Out of 141

SMART CITY RATING

C

CC in 2023

FACTOR RATINGS

CC

STRUCTURES

CC

TECHNOLOGIES

GROUP

3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 1,240,000 (Eurostat)

HDI: 0.856 (Global Data Lab)

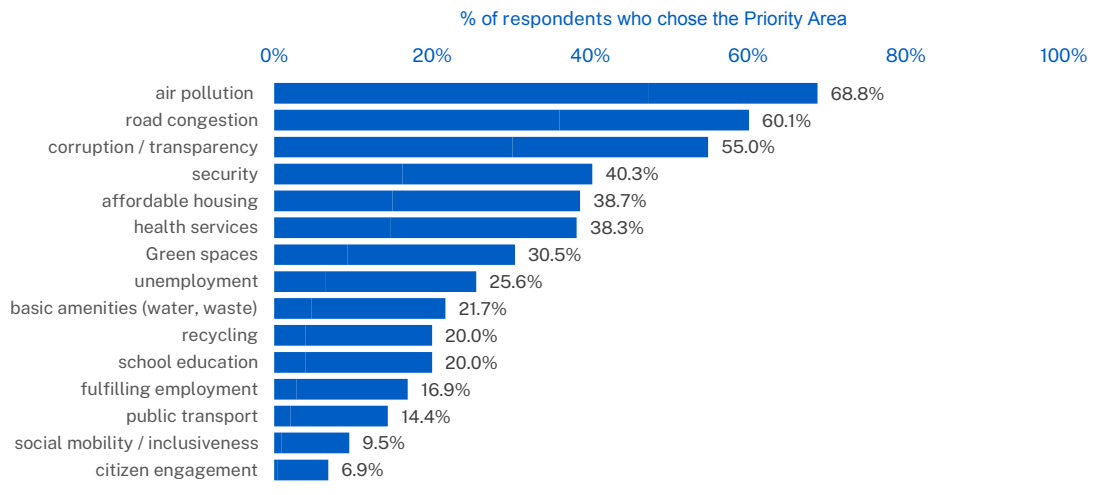


Country

	2019	2020	2021	2022	1 yr change
Bulgaria					
HDI	0.813	0.802	0.796	0.799	+0.003
Life expectancy at birth	75.1	73.6	71.8	71.5	-0.3
Expected years of schooling	14.3	14.0	13.9	13.9	+0.0
Mean years of schooling	11.4	11.4	11.4	11.4	+0.0
GNI per capita (PPP \$)	22,591	21,653	23,725	25,921	+2,196

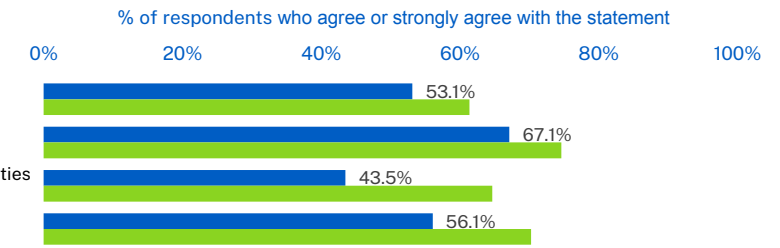
PRIORITY AREAS

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

% of respondents who agree or strongly agree with the statement



LEGEND: [GROUP MEAN] [CITY]

	STRUCTURES	SCORE	TECHNOLOGIES	SCORE
Health & Safety				
Basic sanitation meets the needs of the poorest areas		53.1	Online reporting of city maintenance problems provides a speedy solution	42.1
Recycling services are satisfactory		46.5	A website or App allows residents to easily give away unwanted items	49.6
Public safety is not a problem		40.7	Free public wifi has improved access to city services	52.9
Air pollution is not a problem		23.4	CCTV cameras has made residents feel safer	48.5
Medical services provision is satisfactory		45.9	A website or App allows residents to effectively monitor air pollution	49.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem		31.7	Arranging medical appointments online has improved access	58.6
Mobility				
Traffic congestion is not a problem		20.3	Car-sharing Apps have reduced congestion	39.0
Public transport is satisfactory		50.7	Apps that direct you to an available parking space have reduced journey time	46.3
			Bicycle hiring has reduced congestion	42.5
			Online scheduling and ticket sales has made public transport easier to use	57.6
			The city provides information on traffic congestion through mobile phones	52.8
Activities				
Green spaces are satisfactory		43.9	Online purchasing of tickets to shows and museums has made it easier to attend	73.3
Cultural activities (shows, bars, and museums) are satisfactory		68.9		
Opportunities (Work & School)				
Employment finding services are readily available		66.7	Online access to job listings has made it easier to find work	66.6
Most children have access to a good school		53.1	IT skills are taught well in schools	51.1
Lifelong learning opportunities are provided by local institutions		48.5	Online services provided by the city has made it easier to start a new business	51.1
Businesses are creating new jobs		55.2	The current internet speed and reliability meet connectivity needs	70.4
Minorities feel welcome		44.0		
Governance				
Information on local government decisions are easily accessible		44.0	Online public access to city finances has reduced corruption	27.3
Corruption of city officials is not an issue of concern		21.6	Online voting has increased participation	36.7
Residents contribute to decision making of local government		30.2	An online platform where residents can propose ideas has improved city life	41.8
Residents provide feedback on local government projects		36.4	Processing Identification Documents online has reduced waiting times	54.0

Stockholm

SMART CITY RANKING

11

Out of 142

▼

10 in 2023
Out of 141

SMART CITY RATING

A

A in 2023

FACTOR RATINGS

A

STRUCTURES

A

TECHNOLOGIES

GROUP

1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 950,000
(Eurostat)

HDI 0.972
(Global Data Lab)

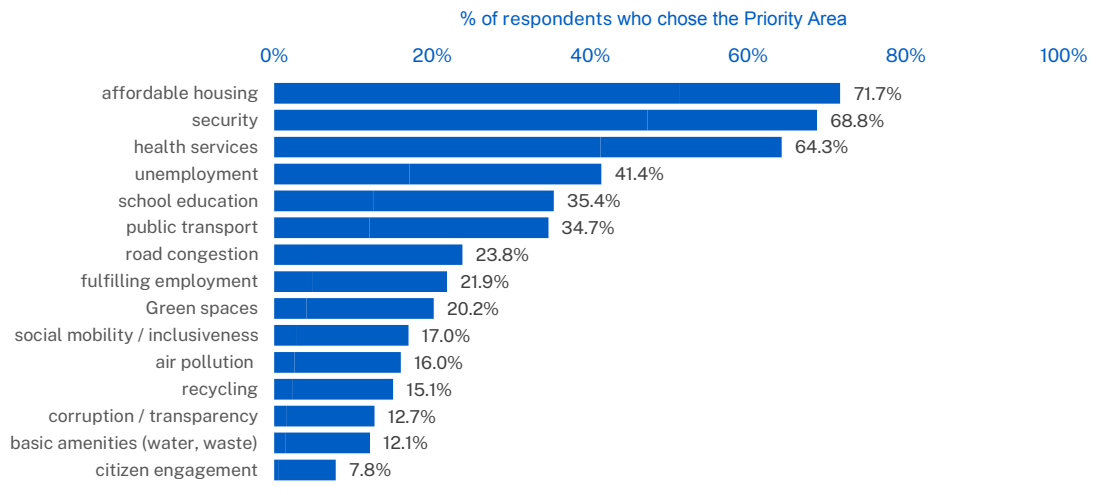


Country **Sweden**

	2019	2020	2021	2022	1 yr change
HDI	0.947	0.944	0.949	0.952	+0.003
Life expectancy at birth	83.1	82.4	83.0	83.5	+0.5
Expected years of schooling	18.5	18.7	19.0	19.0	+0.0
Mean years of schooling	12.6	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	54,441	53,195	55,908	56,996	+1,088

PRIORITY AREAS

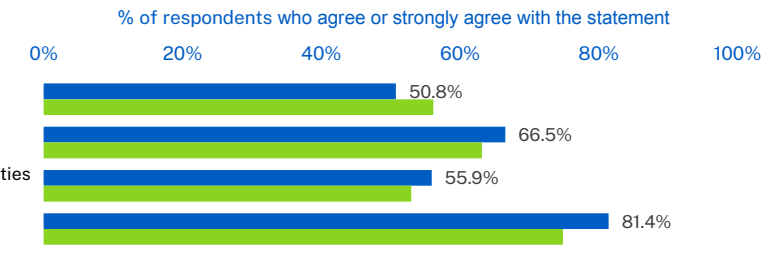
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	71.7%
security	68.8%
health services	64.3%
unemployment	41.4%
school education	35.4%
public transport	34.7%
road congestion	23.8%
fulfilling employment	21.9%
Green spaces	20.2%
social mobility / inclusiveness	17.0%
air pollution	16.0%
recycling	15.1%
corruption / transparency	12.7%
basic amenities (water, waste)	12.1%
citizen engagement	7.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	50.8%	50.8%
You are comfortable with face recognition technologies to lower crime	66.5%	66.5%
You feel the availability of online information has increased your trust in authorities	55.9%	55.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	81.4%	81.4%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Score: 0 20 40 60 80 100

LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 63.8
- Recycling services are satisfactory: 71.4
- Public safety is not a problem: 41.1
- Air pollution is not a problem: 50.8
- Medical services provision is satisfactory: 58.8
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 26.2

Mobility

- Traffic congestion is not a problem: 27.4
- Public transport is satisfactory: 53.5

Activities

- Green spaces are satisfactory: 73.3
- Cultural activities (shows, bars, and museums) are satisfactory: 78.7

Opportunities (Work & School)

- Employment finding services are readily available: 69.2
- Most children have access to a good school: 70.7
- Lifelong learning opportunities are provided by local institutions: 66.8
- Businesses are creating new jobs: 65.6
- Minorities feel welcome: 53.8

Governance

- Information on local government decisions are easily accessible: 65.9
- Corruption of city officials is not an issue of concern: 50.6
- Residents contribute to decision making of local government: 48.7
- Residents provide feedback on local government projects: 54.0

TECHNOLOGIES

Score: 0 20 40 60 80 100

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 47.7
- A website or App allows residents to easily give away unwanted items: 60.9
- Free public wifi has improved access to city services: 54.6
- CCTV cameras has made residents feel safer: 51.7
- A website or App allows residents to effectively monitor air pollution: 37.9
- Arranging medical appointments online has improved access: 57.8

Mobility

- Car-sharing Apps have reduced congestion: 33.5
- Apps that direct you to an available parking space have reduced journey time: 40.2
- Bicycle hiring has reduced congestion: 38.9
- Online scheduling and ticket sales has made public transport easier to use: 69.6
- The city provides information on traffic congestion through mobile phones: 56.0

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 74.3

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 64.6
- IT skills are taught well in schools: 50.4
- Online services provided by the city has made it easier to start a new business: 49.2
- The current internet speed and reliability meet connectivity needs: 66.6

Governance

- Online public access to city finances has reduced corruption: 38.4
- Online voting has increased participation: 43.4
- An online platform where residents can propose ideas has improved city life: 48.0
- Processing Identification Documents online has reduced waiting times: 48.7

Sydney

SMART CITY RANKING

22

Out of 142



18 in 2023
Out of 141

SMART CITY RATING

A

AA in 2023

FACTOR RATINGS

BBB

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 4,930,000
(UN World Urbanization Prospects)

HDI 0.952
(Global Data Lab)



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

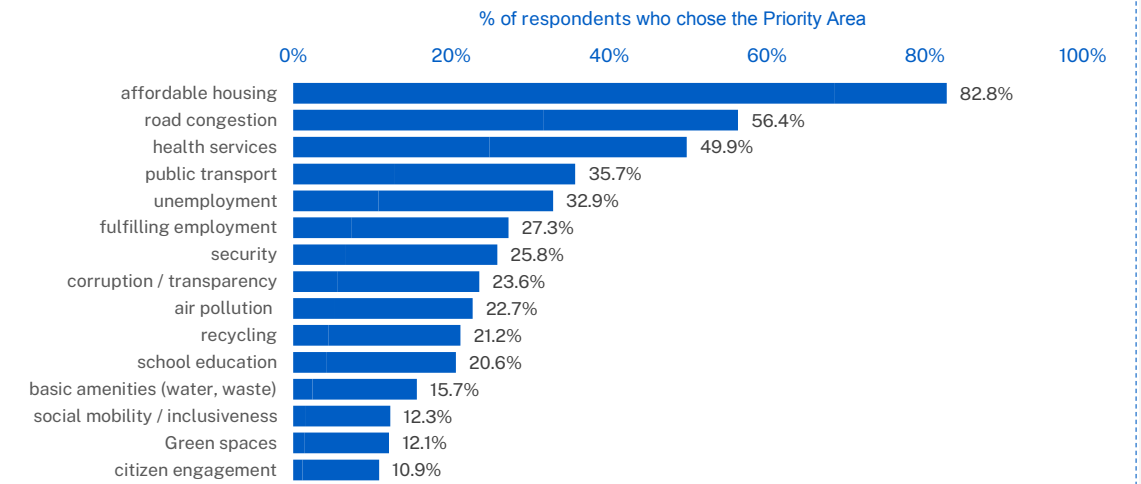
Country

Australia

	2019	2020	2021	2022	1 yr change
HDI	0.941	0.948	0.949	0.946	-0.003
Life expectancy at birth	83.1	84.3	84.5	83.6	-0.9
Expected years of schooling	21.4	20.9	21.1	21.1	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	47,054	48,075	48,076	49,257	+1,181

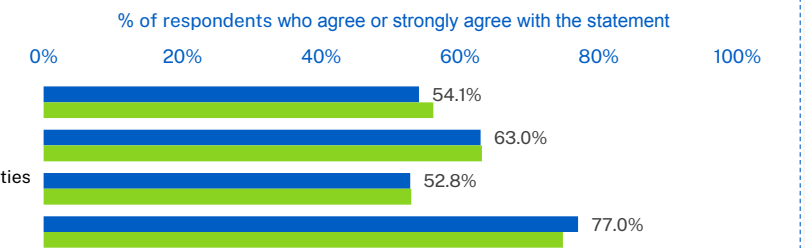
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

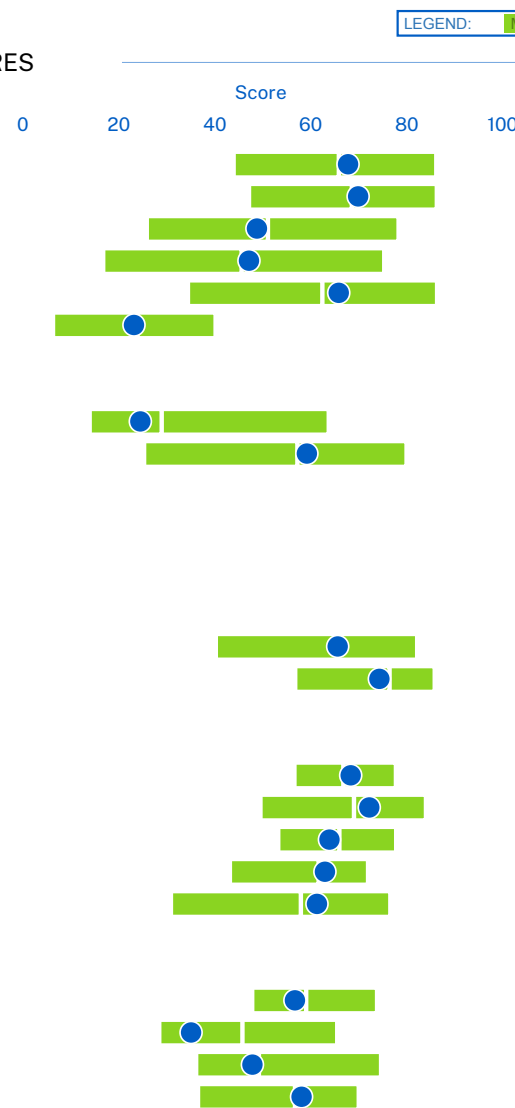
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

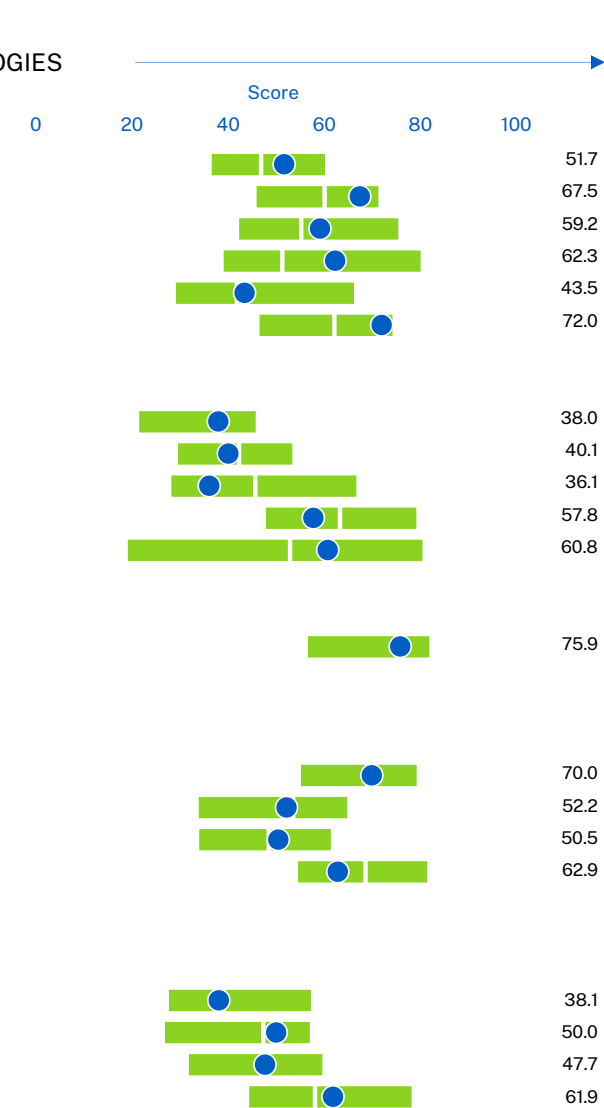
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Taipei City

SMART CITY RANKING

16

Out of 142



29 in 2023
Out of 141

SMART CITY RATING

A

A in 2023

FACTOR RATINGS

BBB

STRUCTURES

A

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,720,000
(UN World Urbanization Prospects)

HDI 0.916



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

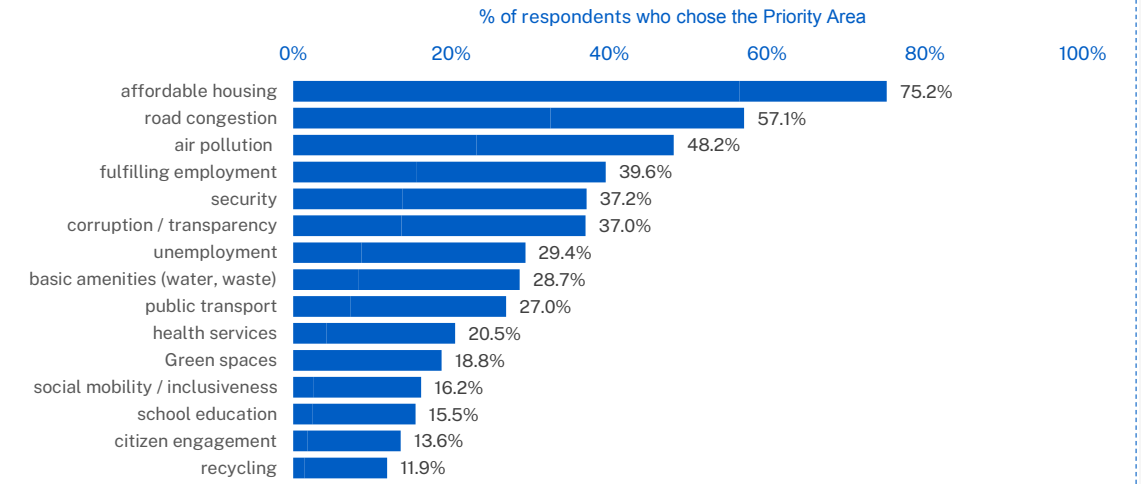
Country

Taiwan

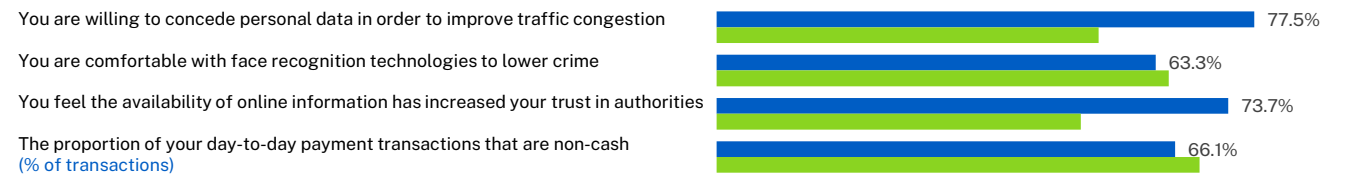
	2019	2020	2021	2022	1 yr change
HDI	0.916		0.926		N/A
Life expectancy at birth	80.9	81.3	80.9	79.8	-1.1
Expected years of schooling	16.5			16.9	N/A
Mean years of schooling	13.0				N/A
GNI per capita (PPP \$)	42,404	41,946	44,057		N/A

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

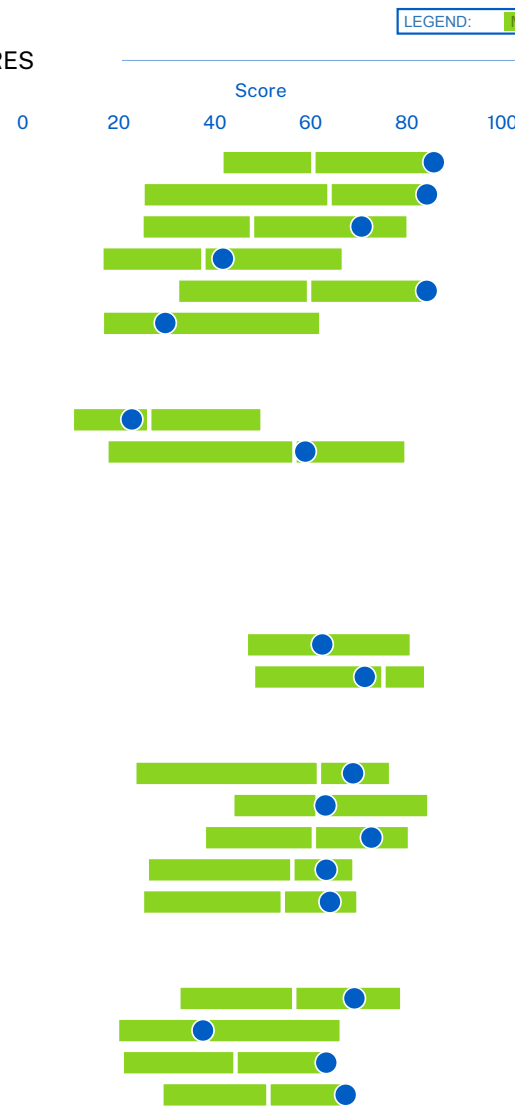
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

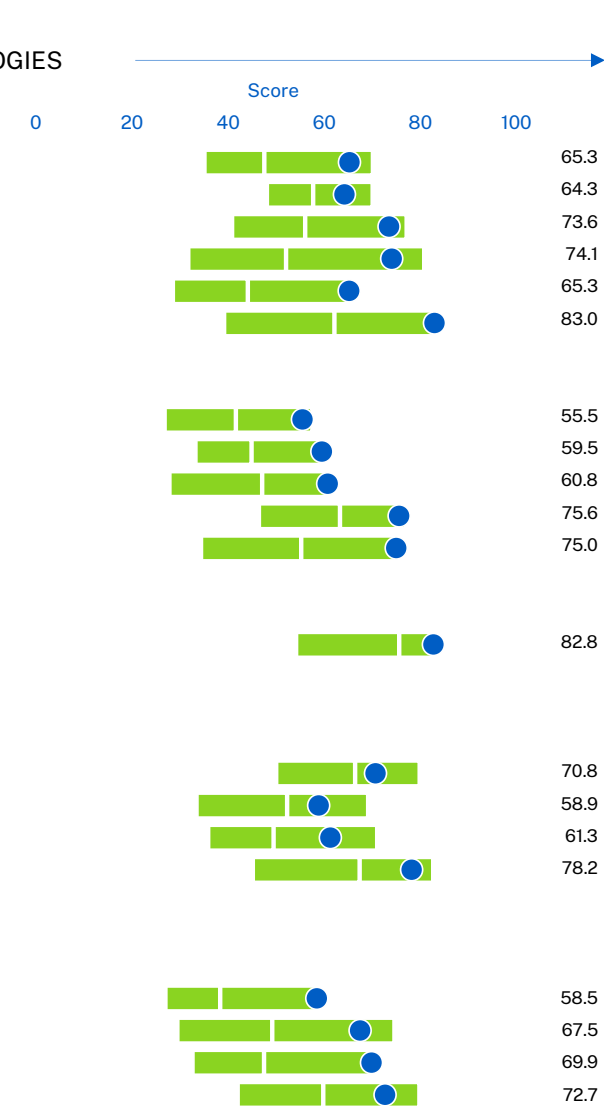
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Tallinn

SMART CITY RANKING
24
Out of 142



32 in 2023
Out of 141

SMART CITY RATING

BBB

BBB in 2023

FACTOR RATINGS

BBB

STRUCTURES

BBB

TECHNOLOGIES

GROUP

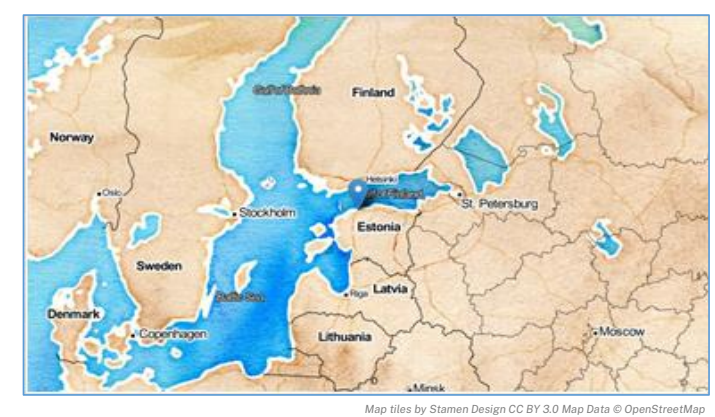
2

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 440,000
(Eurostat)

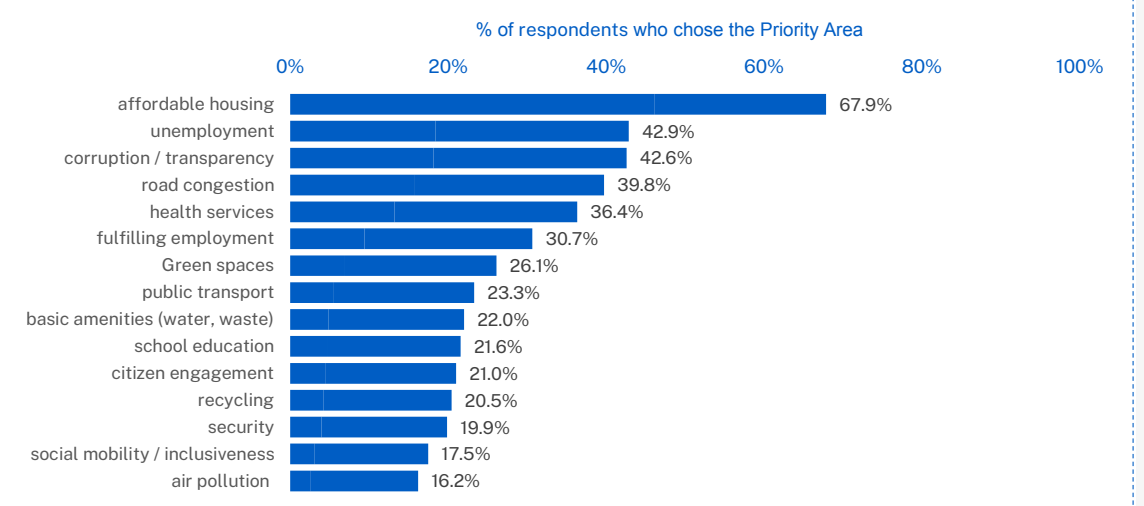
HDI 0.932
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Estonia					
HDI	0.893	0.891	0.890	0.899	+0.009
Life expectancy at birth	78.7	78.3	77.1	79.2	+2.0
Expected years of schooling	15.7	15.8	15.9	15.9	+0.0
Mean years of schooling	13.6	13.5	13.5	13.5	+0.0
GNI per capita (PPP \$)	35,472	35,481	38,027	37,152	-876

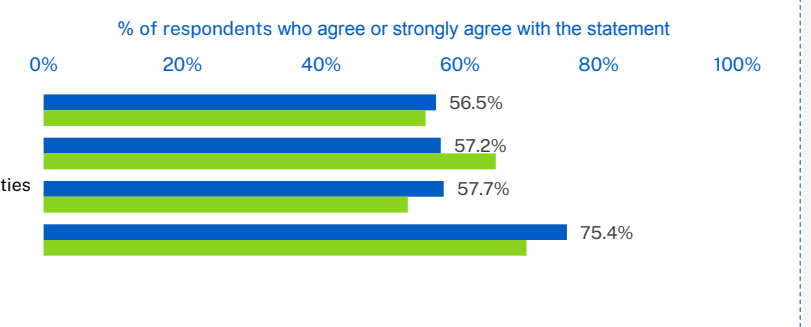
PRIORITY AREAS

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.

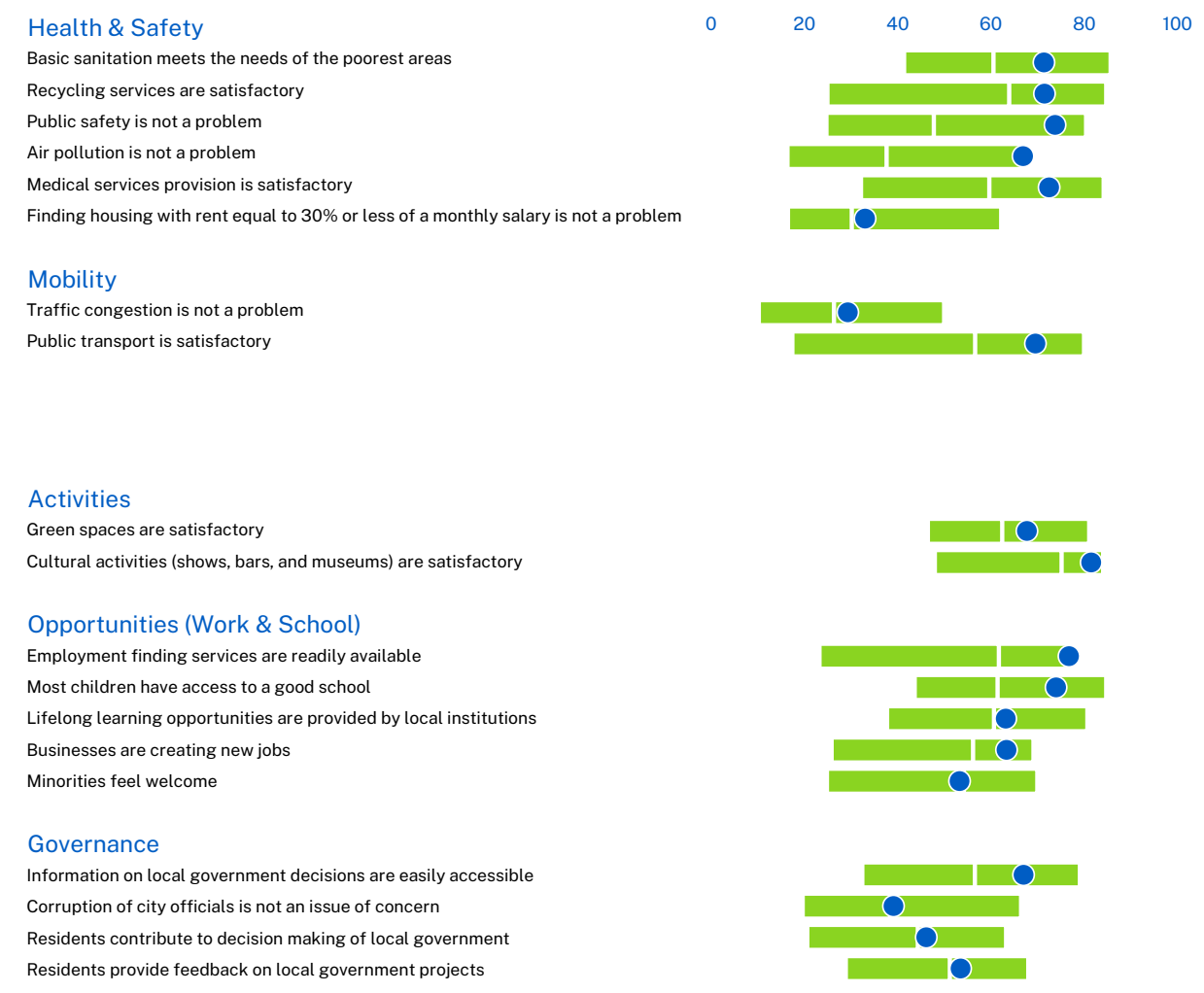


ATTITUDES

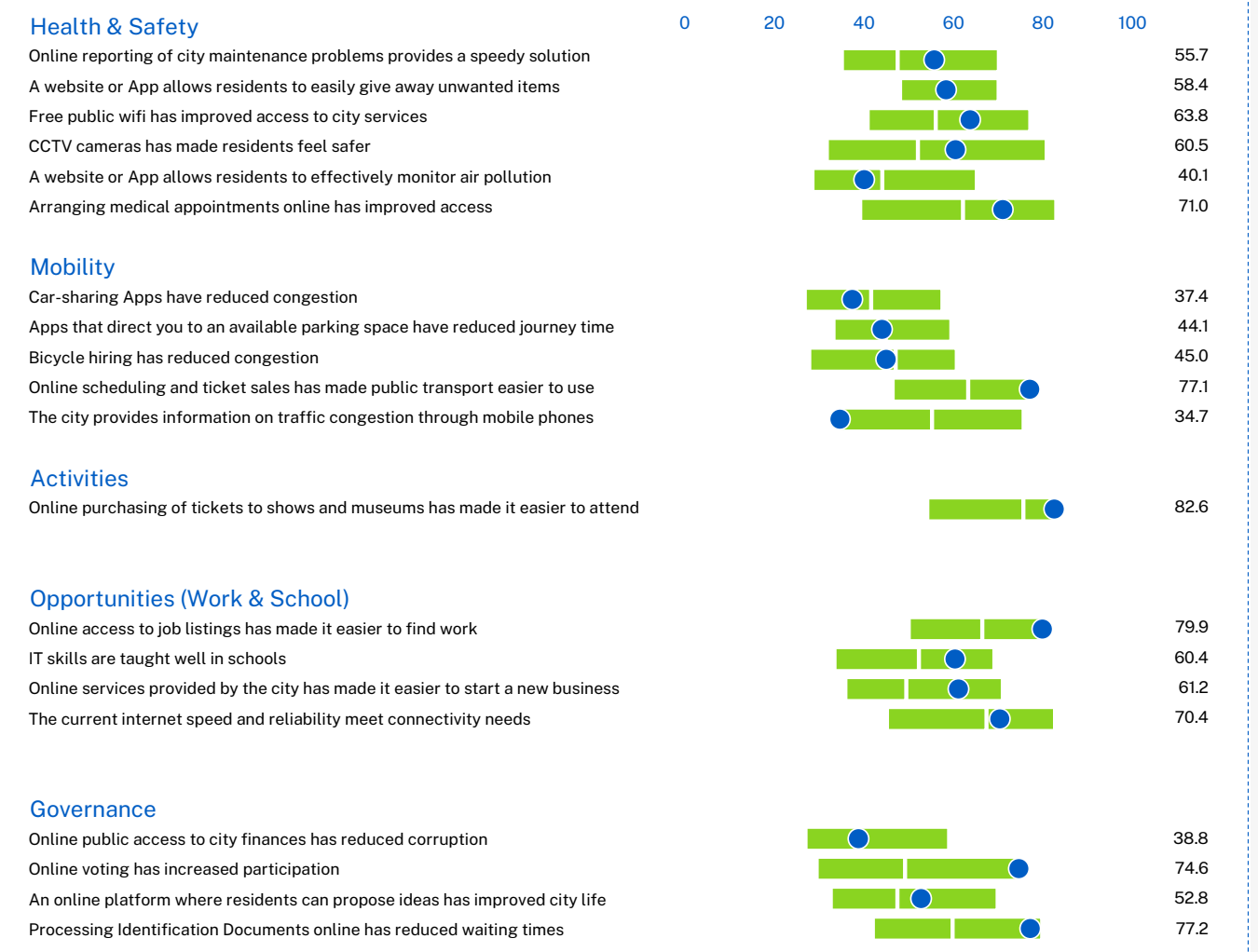
You are willing to concede personal data in order to improve traffic congestion
 You are comfortable with face recognition technologies to lower crime
 You feel the availability of online information has increased your trust in authorities
 The proportion of your day-to-day payment transactions that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



STRUCTURES



TECHNOLOGIES



Tel Aviv

SMART CITY RANKING
94
 Out of 142

▼

91 in 2023
 Out of 141

SMART CITY RATING
B
 B in 2023

FACTOR RATINGS
B
 STRUCTURES


B
 TECHNOLOGIES

GROUP
2

All ratings range from AAA to D

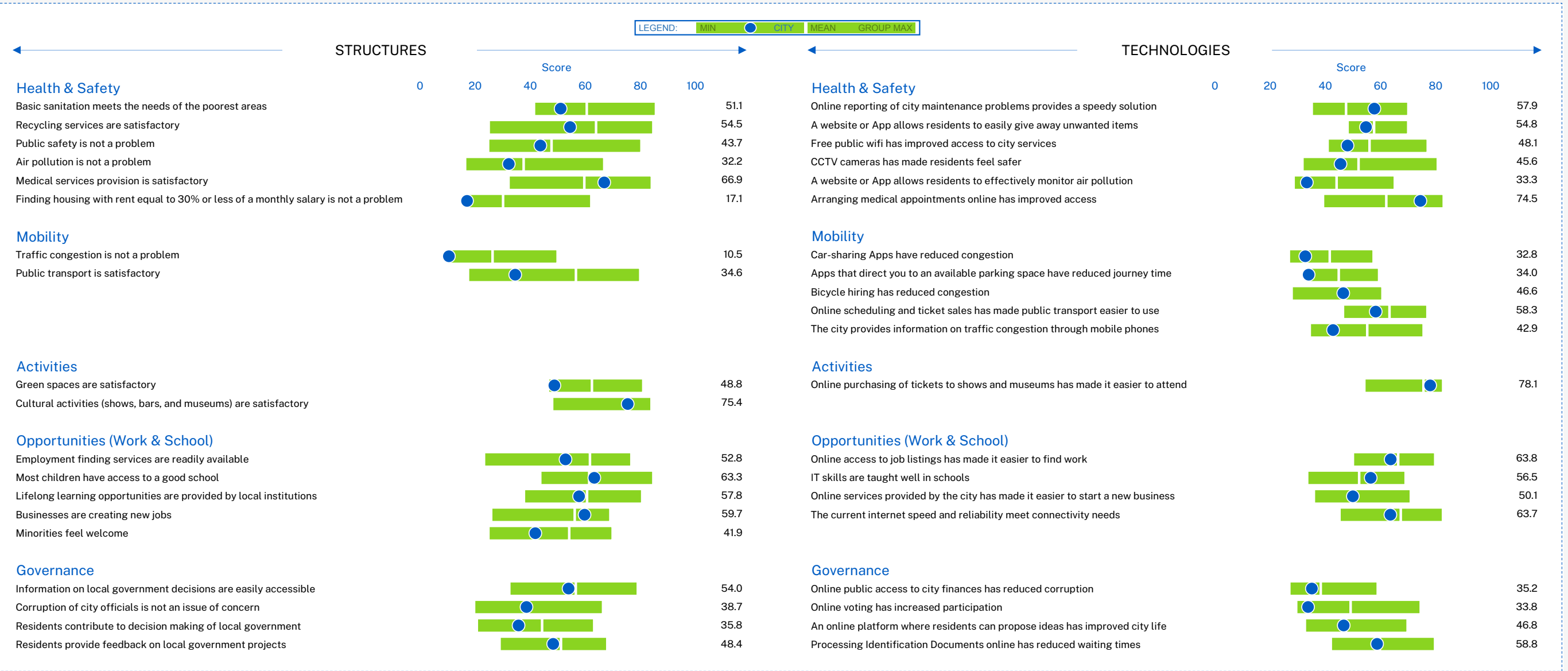
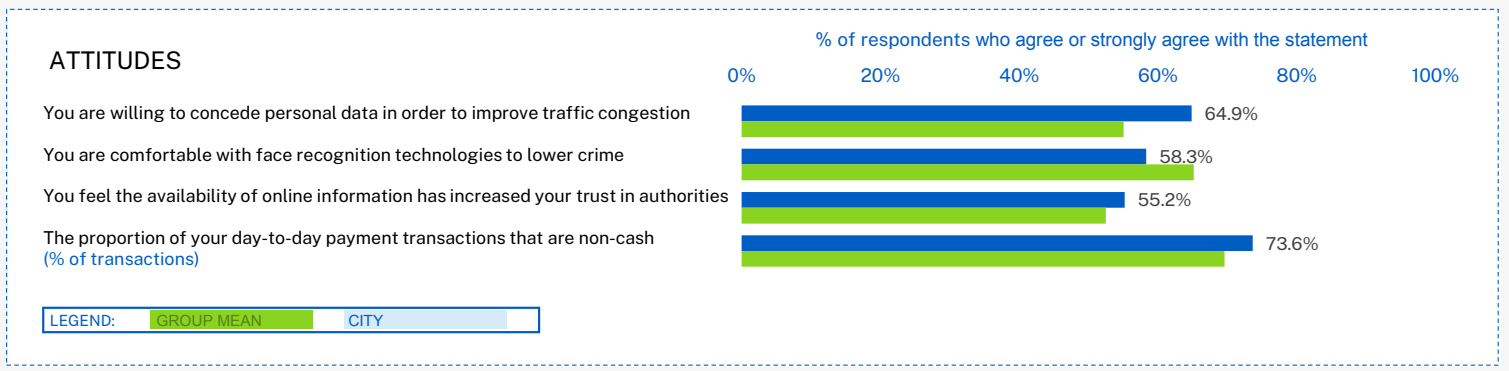
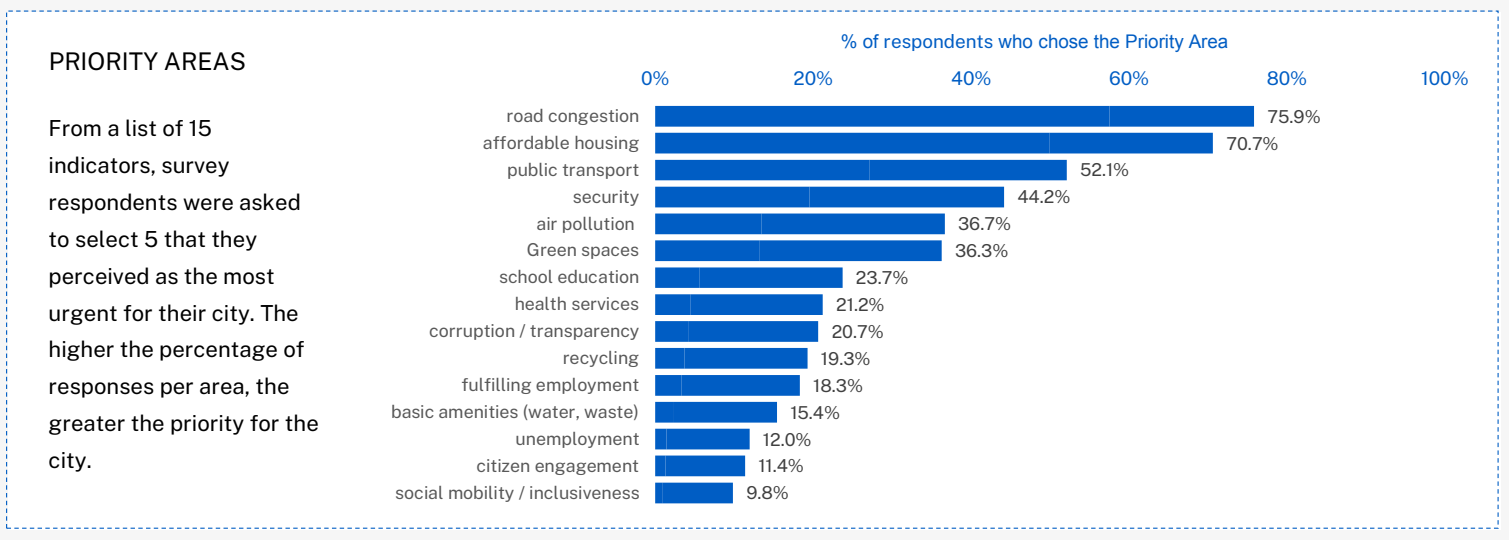
BACKGROUND INFORMATION

City
 Population: 460,000 (UN Data)
 HDI: 0.919 (Global Data Lab)



Country
 Israel

	2019	2020	2021	2022	1 yr change
HDI	0.909	0.906	0.911	0.915	+0.004
Life expectancy at birth	82.8	82.4	82.3	82.6	+0.3
Expected years of schooling	14.8	14.8	15.0	15.0	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	40,920	39,324	41,754	43,588	+1,834



The Hague

SMART CITY RANKING

42

Out of 142



43 in 2023
Out of 141

SMART CITY RATING

A

A in 2023

FACTOR RATINGS

BBB

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 770,000
(Eurostat)

HDI 0.941
(Global Data Lab)



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

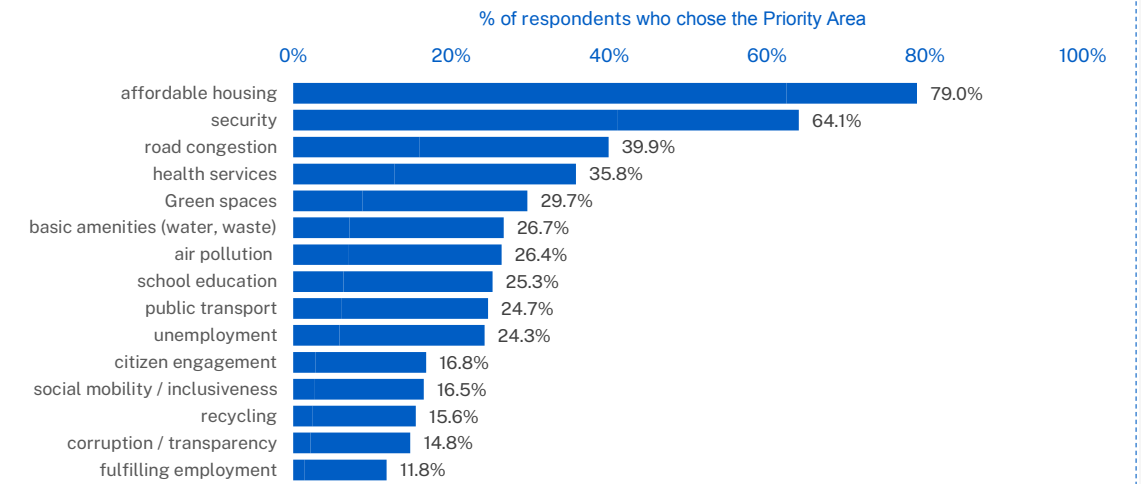
Country

Netherlands

	2019	2020	2021	2022	1 yr change
HDI	0.941	0.938	0.941	0.946	+0.005
Life expectancy at birth	82.0	81.6	81.7	82.5	+0.8
Expected years of schooling	18.4	18.4	18.6	18.6	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	55,628	52,500	55,355	57,278	+1,923

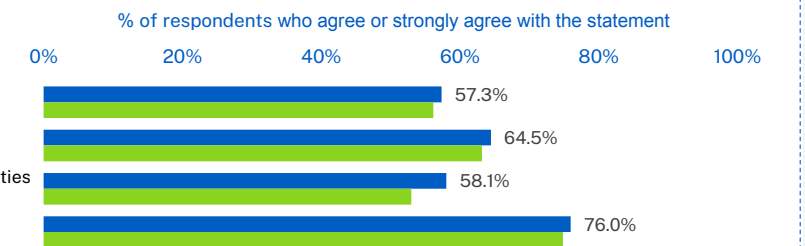
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

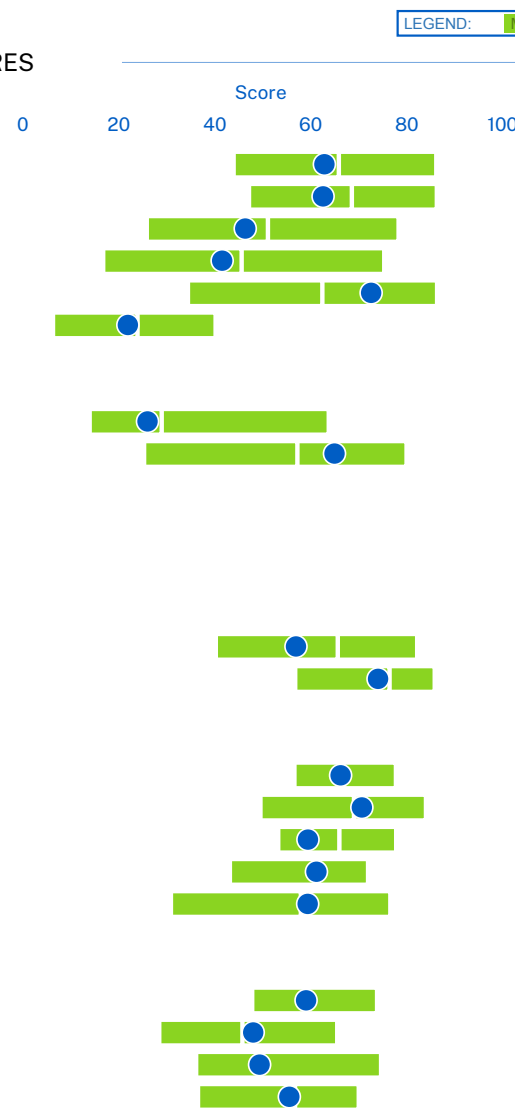
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

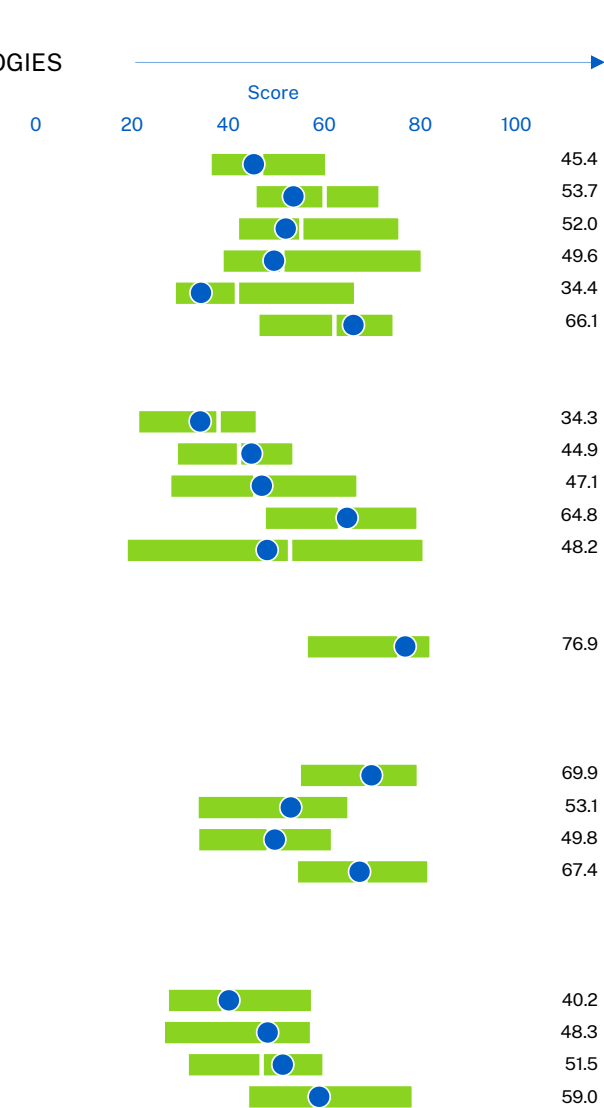
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Tianjin

SMART CITY RANKING

54

Out of 142

▲

67 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 13,590,000
(UN World Urbanization Prospects)

HDI 0.844
(Global Data Lab)

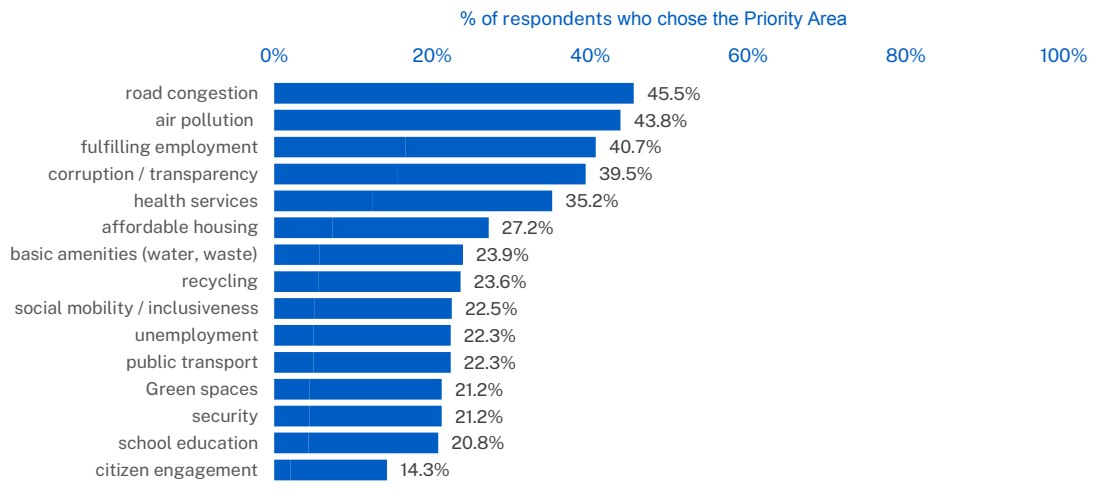


Country

China	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

PRIORITY AREAS

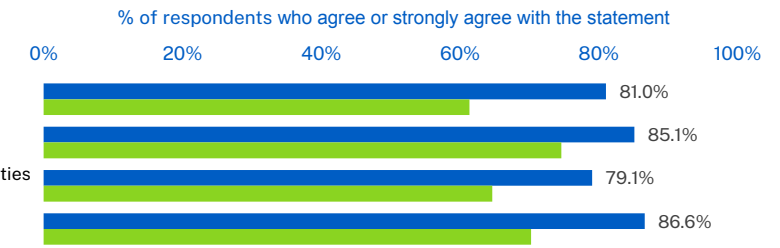
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
road congestion	45.5%
air pollution	43.8%
fulfilling employment	40.7%
corruption / transparency	39.5%
health services	35.2%
affordable housing	27.2%
basic amenities (water, waste)	23.9%
recycling	23.6%
social mobility / inclusiveness	22.5%
unemployment	22.3%
public transport	22.3%
Green spaces	21.2%
security	21.2%
school education	20.8%
citizen engagement	14.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	% of respondents
You are willing to concede personal data in order to improve traffic congestion	81.0%
You are comfortable with face recognition technologies to lower crime	85.1%
You feel the availability of online information has increased your trust in authorities	79.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	86.6%

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 77.9
- Recycling services are satisfactory: 66.6
- Public safety is not a problem: 73.5
- Air pollution is not a problem: 55.6
- Medical services provision is satisfactory: 70.2
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 66.2

Mobility

- Traffic congestion is not a problem: 53.2
- Public transport is satisfactory: 62.8

Activities

- Green spaces are satisfactory: 75.8
- Cultural activities (shows, bars, and museums) are satisfactory: 73.1

Opportunities (Work & School)

- Employment finding services are readily available: 72.9
- Most children have access to a good school: 71.9
- Lifelong learning opportunities are provided by local institutions: 61.9
- Businesses are creating new jobs: 67.5
- Minorities feel welcome: 80.1

Governance

- Information on local government decisions are easily accessible: 66.9
- Corruption of city officials is not an issue of concern: 51.0
- Residents contribute to decision making of local government: 54.6
- Residents provide feedback on local government projects: 64.3

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 81.6
- A website or App allows residents to easily give away unwanted items: 71.7
- Free public wifi has improved access to city services: 75.0
- CCTV cameras has made residents feel safer: 75.5
- A website or App allows residents to effectively monitor air pollution: 71.4
- Arranging medical appointments online has improved access: 86.4

Mobility

- Car-sharing Apps have reduced congestion: 74.3
- Apps that direct you to an available parking space have reduced journey time: 75.8
- Bicycle hiring has reduced congestion: 76.1
- Online scheduling and ticket sales has made public transport easier to use: 82.6
- The city provides information on traffic congestion through mobile phones: 82.4

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 88.6

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 78.3
- IT skills are taught well in schools: 72.4
- Online services provided by the city has made it easier to start a new business: 70.3
- The current internet speed and reliability meet connectivity needs: 83.5

Governance

- Online public access to city finances has reduced corruption: 67.5
- Online voting has increased participation: 68.2
- An online platform where residents can propose ideas has improved city life: 70.9
- Processing Identification Documents online has reduced waiting times: 76.4

Tokyo

SMART CITY RANKING
86
Out of 142



72 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 9,730,000
(UN Data)

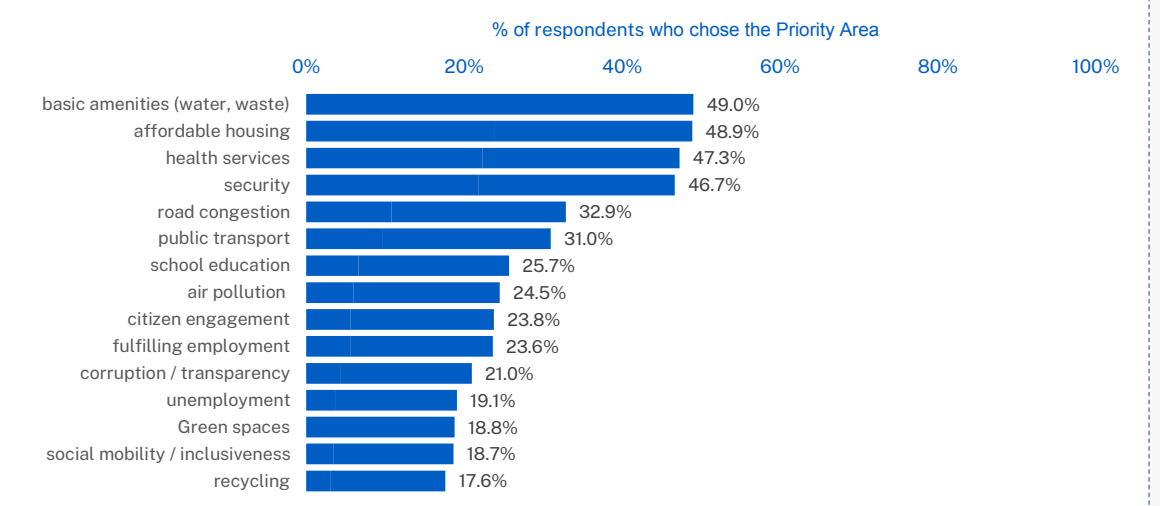
HDI 0.951
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Japan					
HDI	0.918	0.917	0.920	0.920	+0.000
Life expectancy at birth	84.4	84.7	84.8	84.8	+0.0
Expected years of schooling	15.4	15.5	15.5	15.5	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	43,276	41,446	43,008	43,644	+636

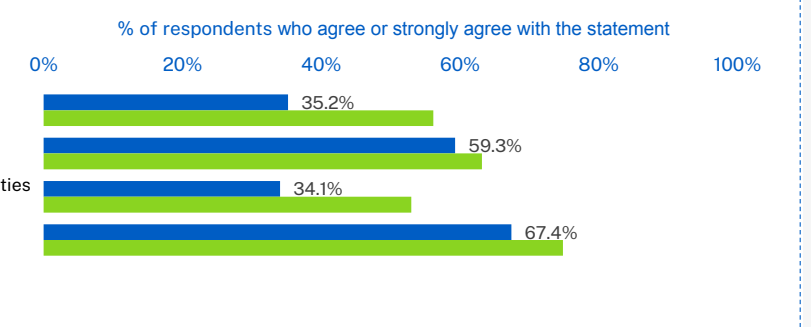
PRIORITY AREAS

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.

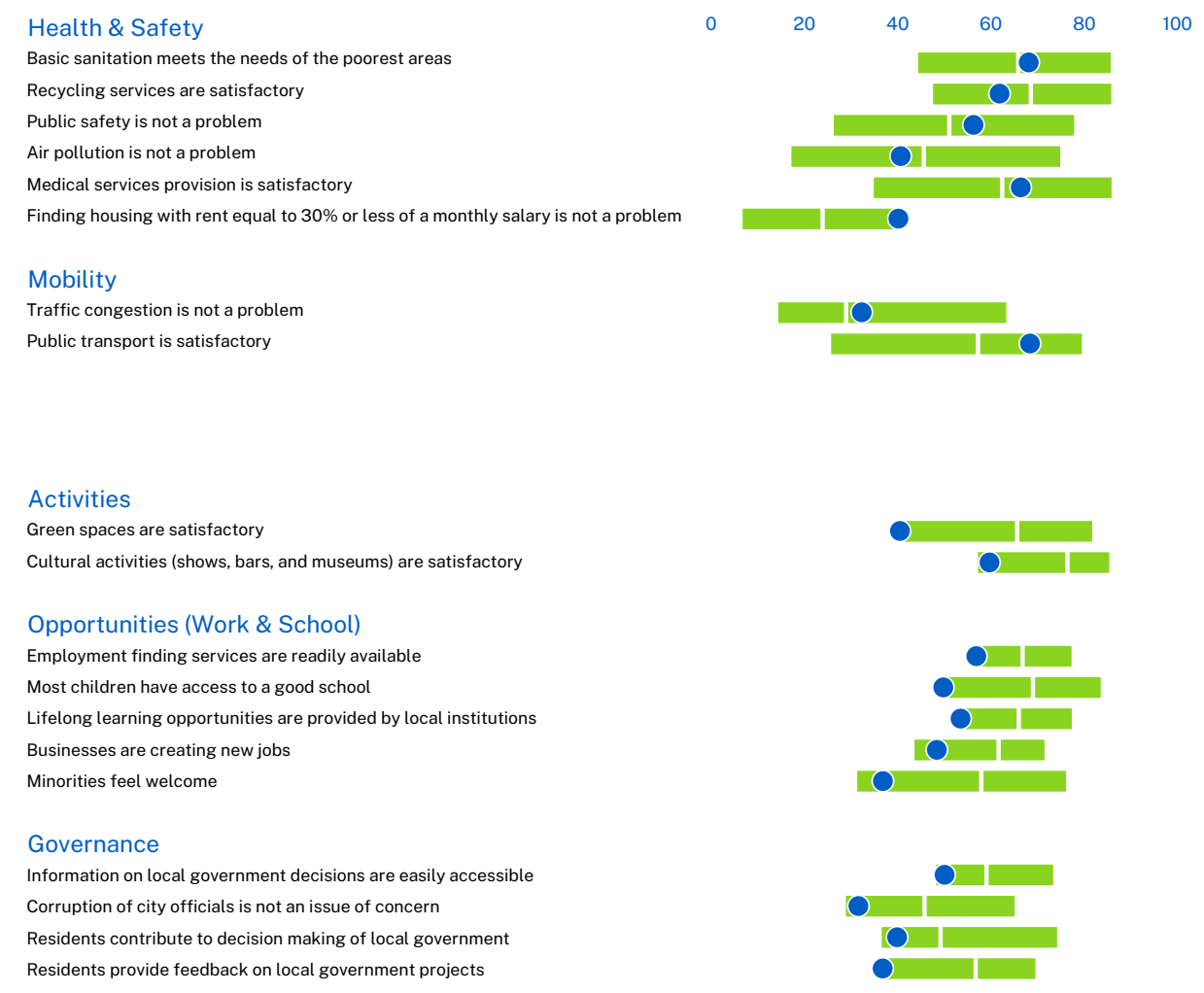


ATTITUDES

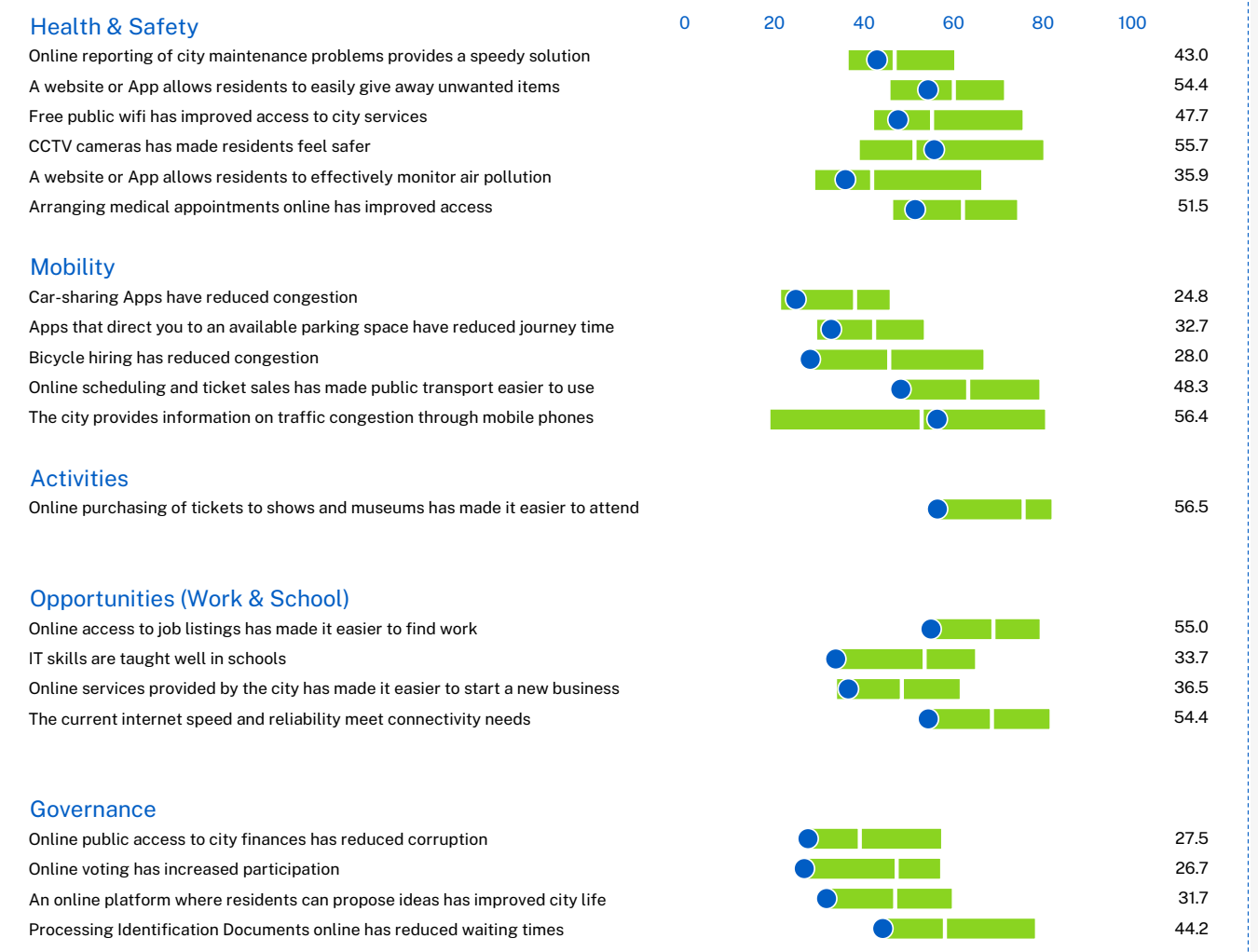
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Toronto

SMART CITY RANKING
51
 Out of 142

▼

48 in 2023
 Out of 141

SMART CITY RATING
BBB
 BBB in 2023

FACTOR RATINGS
BBB
 STRUCTURES

A
 TECHNOLOGIES

GROUP
1


All ratings range from AAA to D

BACKGROUND INFORMATION

City

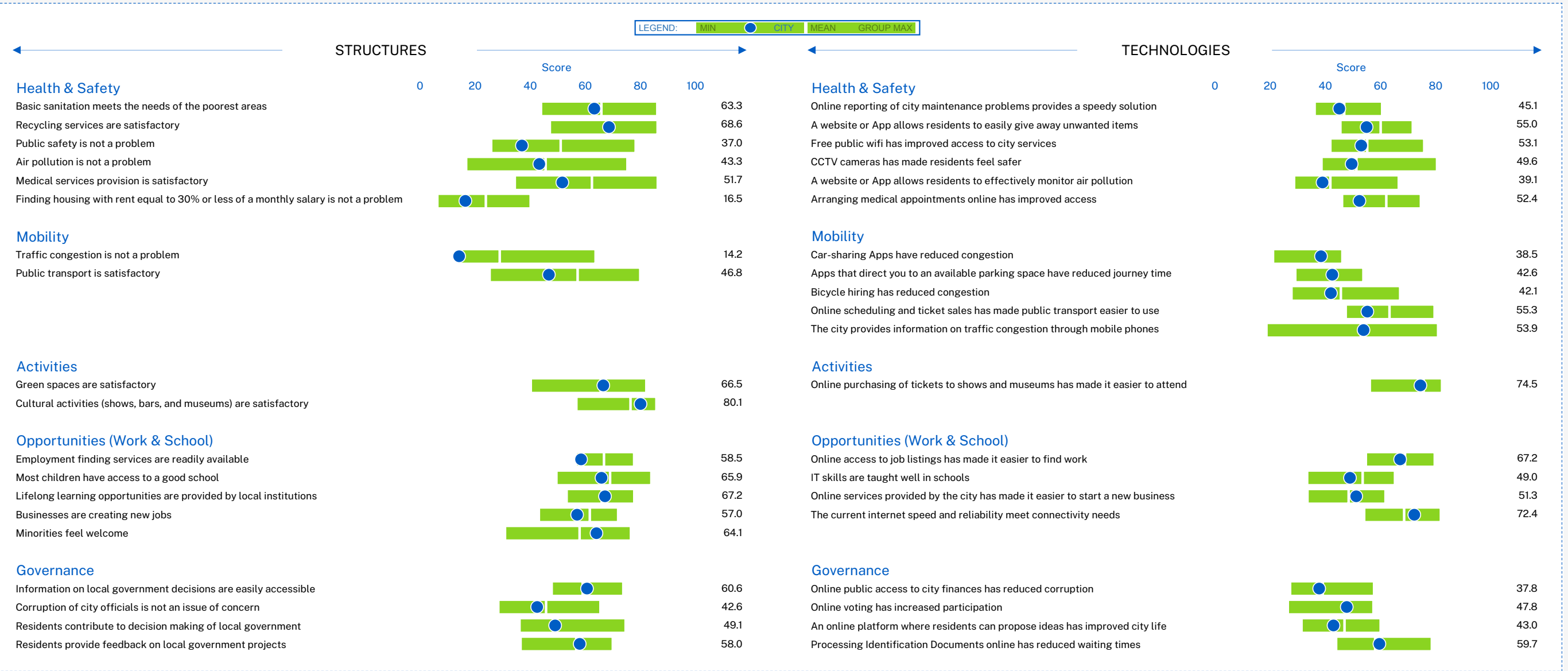
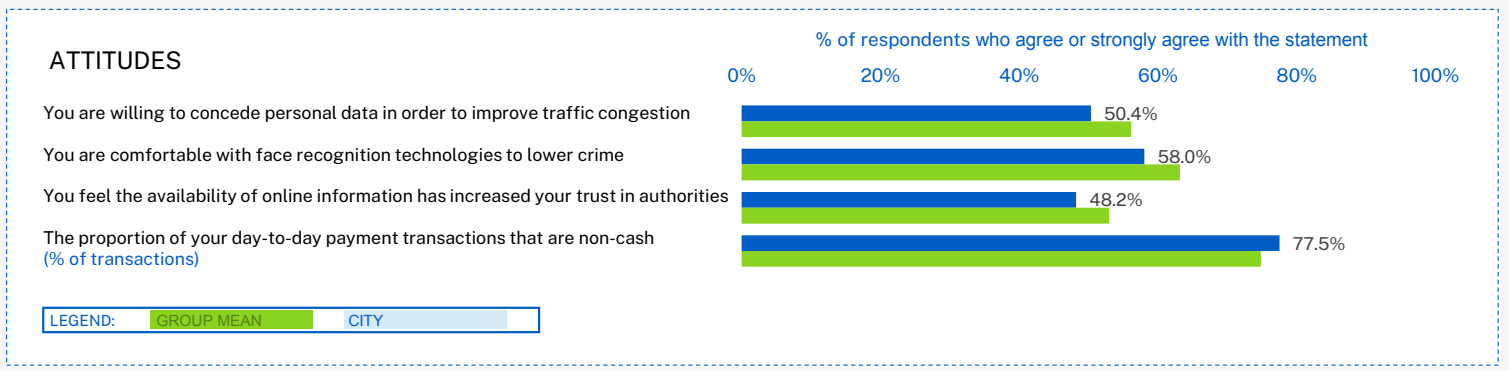
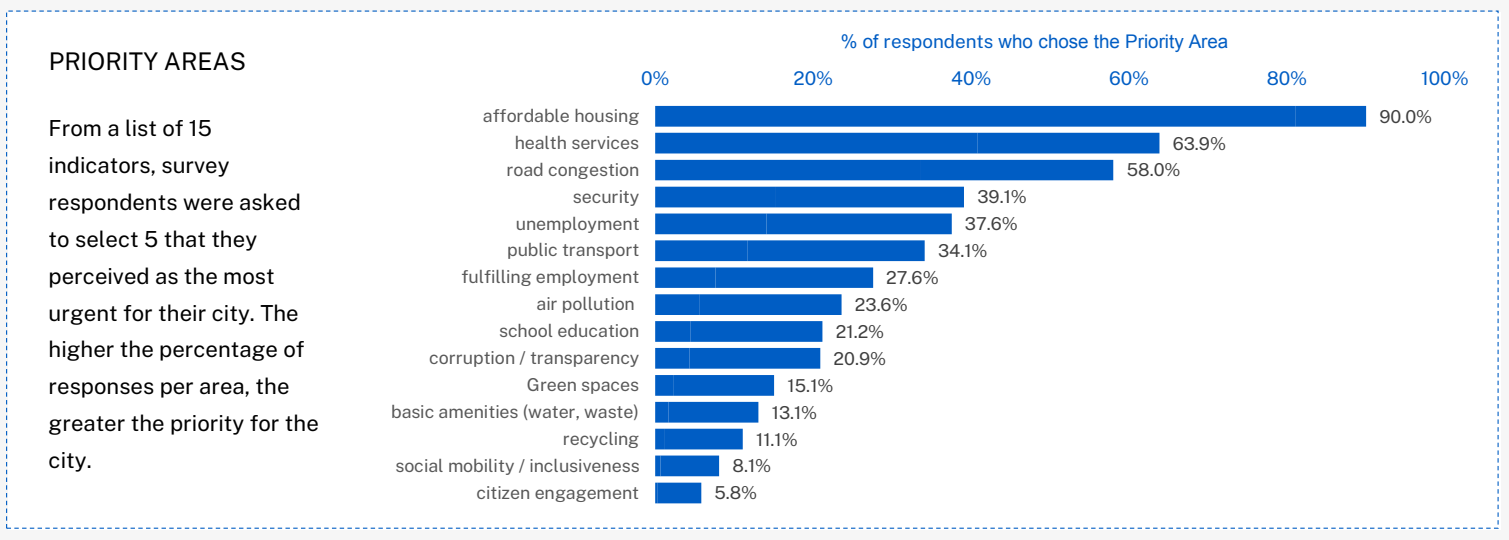
Population 2,930,000
 (UN World Urbanization Prospects)

HDI 0.943
 (Global Data Lab)



Country
 Canada

	2019	2020	2021	2022	1 yr change
HDI	0.932	0.928	0.934	0.935	+0.001
Life expectancy at birth	82.4	82.0	82.7	82.8	+0.2
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	13.8	13.9	13.9	13.9	+0.0
GNI per capita (PPP \$)	48,591	45,828	47,933	48,444	+512



Tunis

SMART CITY RANKING

137

Out of 142

137 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 2,440,000
(UN World Urbanization Prospects)

HDI 0.775
(Global Data Lab)



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

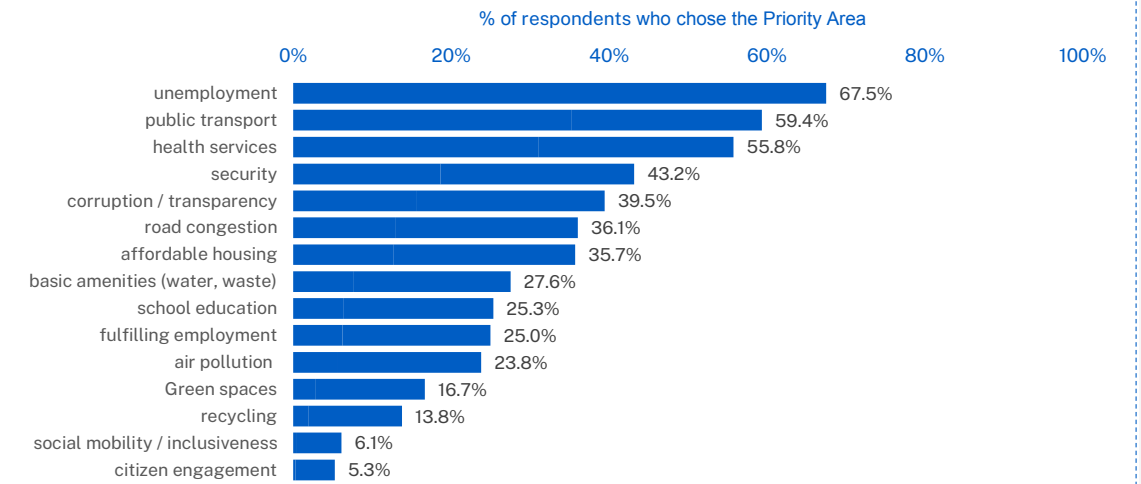
Country

Tunisia

	2019	2020	2021	2022	1 yr change
HDI	0.740	0.734	0.729	0.732	+0.003
Life expectancy at birth	76.0	75.3	73.8	74.3	+0.5
Expected years of schooling	14.6	14.6	14.6	14.6	+0.0
Mean years of schooling	7.8	8.0	8.0	8.0	+0.0
GNI per capita (PPP \$)	10,821	9,710	10,123	10,297	+174

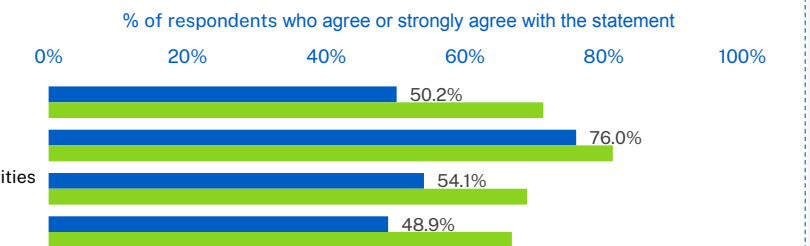
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

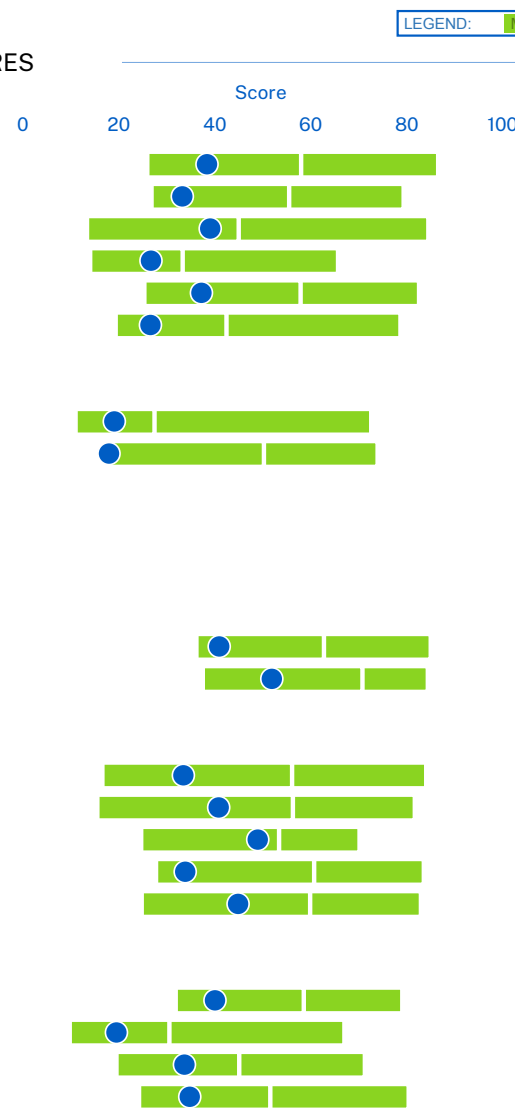
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

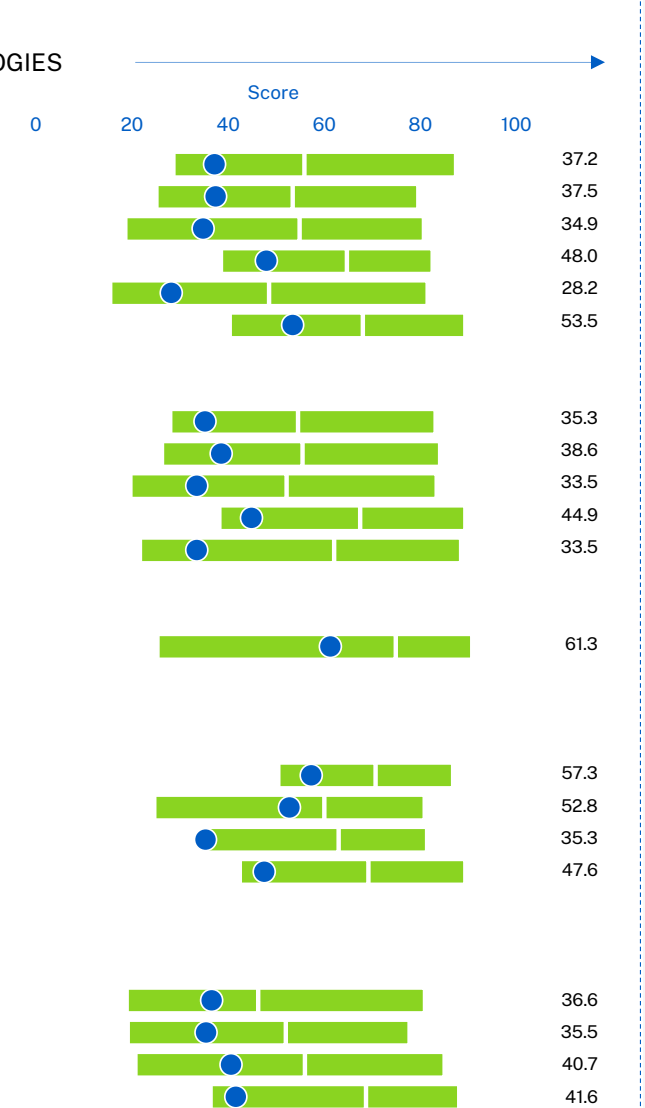
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Vancouver

SMART CITY RANKING

43

Out of 142

▼

42 in 2023
Out of 141

SMART CITY RATING

BBB

A in 2023

FACTOR RATINGS

BBB

STRUCTURES

BBB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 670,000
(UN World Urbanization Prospects)

HDI 0.944
(Global Data Lab)



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

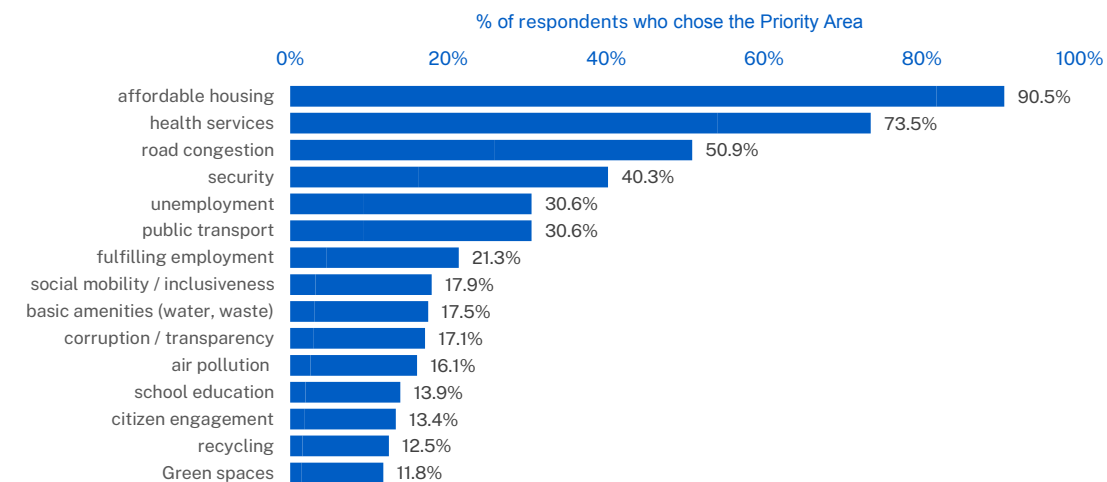
Country

Canada

	2019	2020	2021	2022	1 yr change
HDI	0.932	0.928	0.934	0.935	+0.001
Life expectancy at birth	82.4	82.0	82.7	82.8	+0.2
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	13.8	13.9	13.9	13.9	+0.0
GNI per capita (PPP \$)	48,591	45,828	47,933	48,444	+512

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.



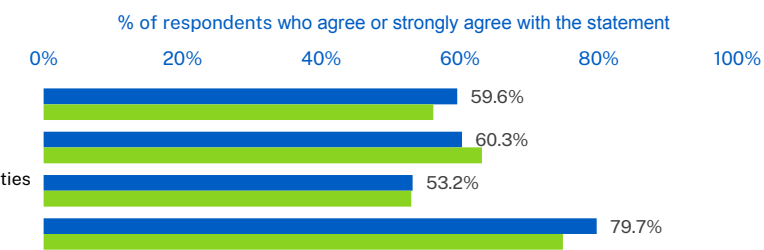
ATTITUDES

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

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

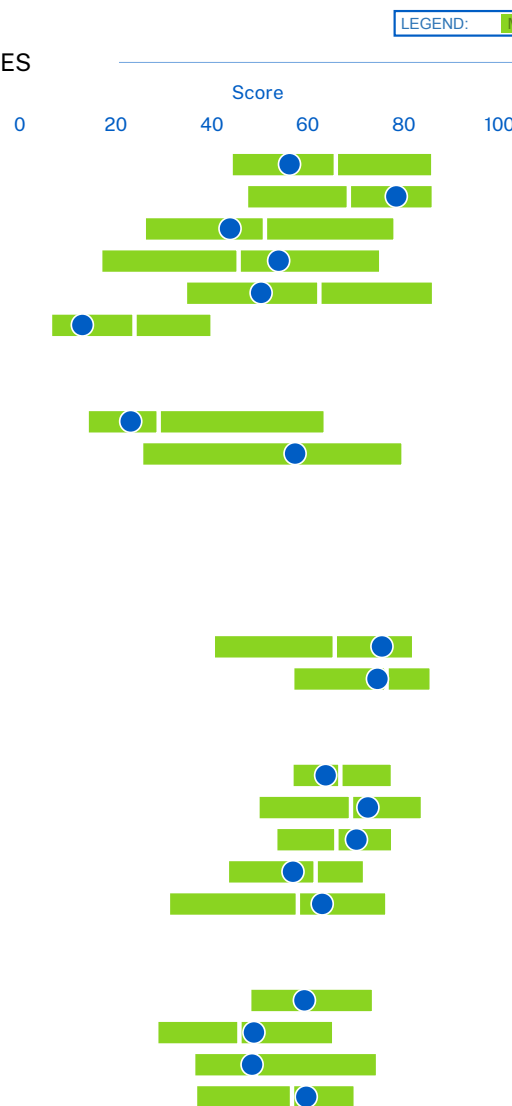
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

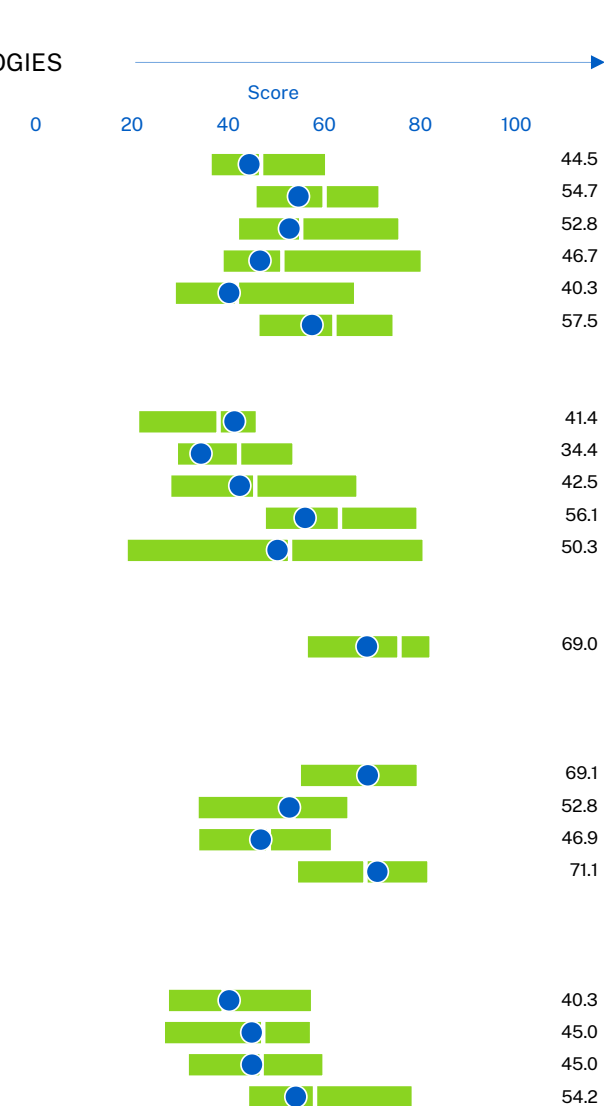
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Vienna

SMART CITY RANKING
23
Out of 142



28 in 2023
Out of 141

SMART CITY RATING

AA

AA in 2023

FACTOR RATINGS

AA

STRUCTURES

A

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City
Population 1,930,000
(UN World Urbanization Prospects)

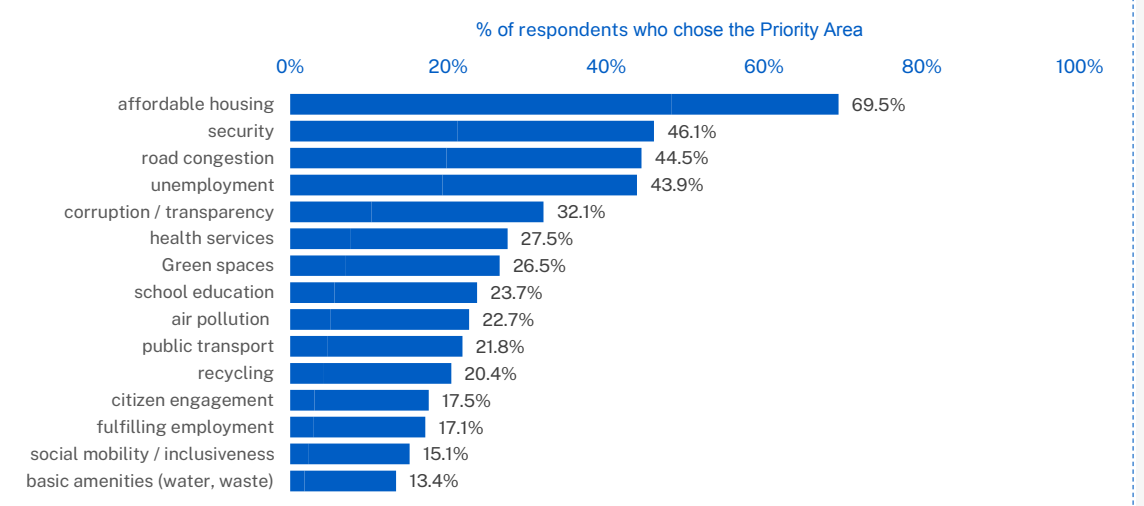
HDI 0.942
(Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Austria					
HDI	0.920	0.916	0.920	0.926	+0.006
Life expectancy at birth	81.9	81.5	81.6	82.4	+0.8
Expected years of schooling	16.1	16.1	16.4	16.4	+0.0
Mean years of schooling	12.3	12.3	12.3	12.3	+0.0
GNI per capita (PPP \$)	55,647	52,446	54,361	56,530	+2,169

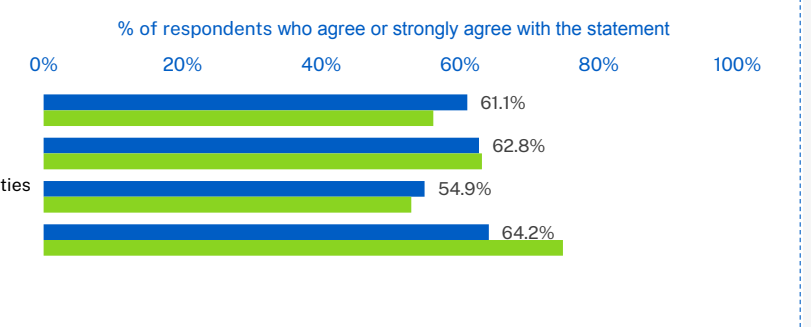
PRIORITY AREAS

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.

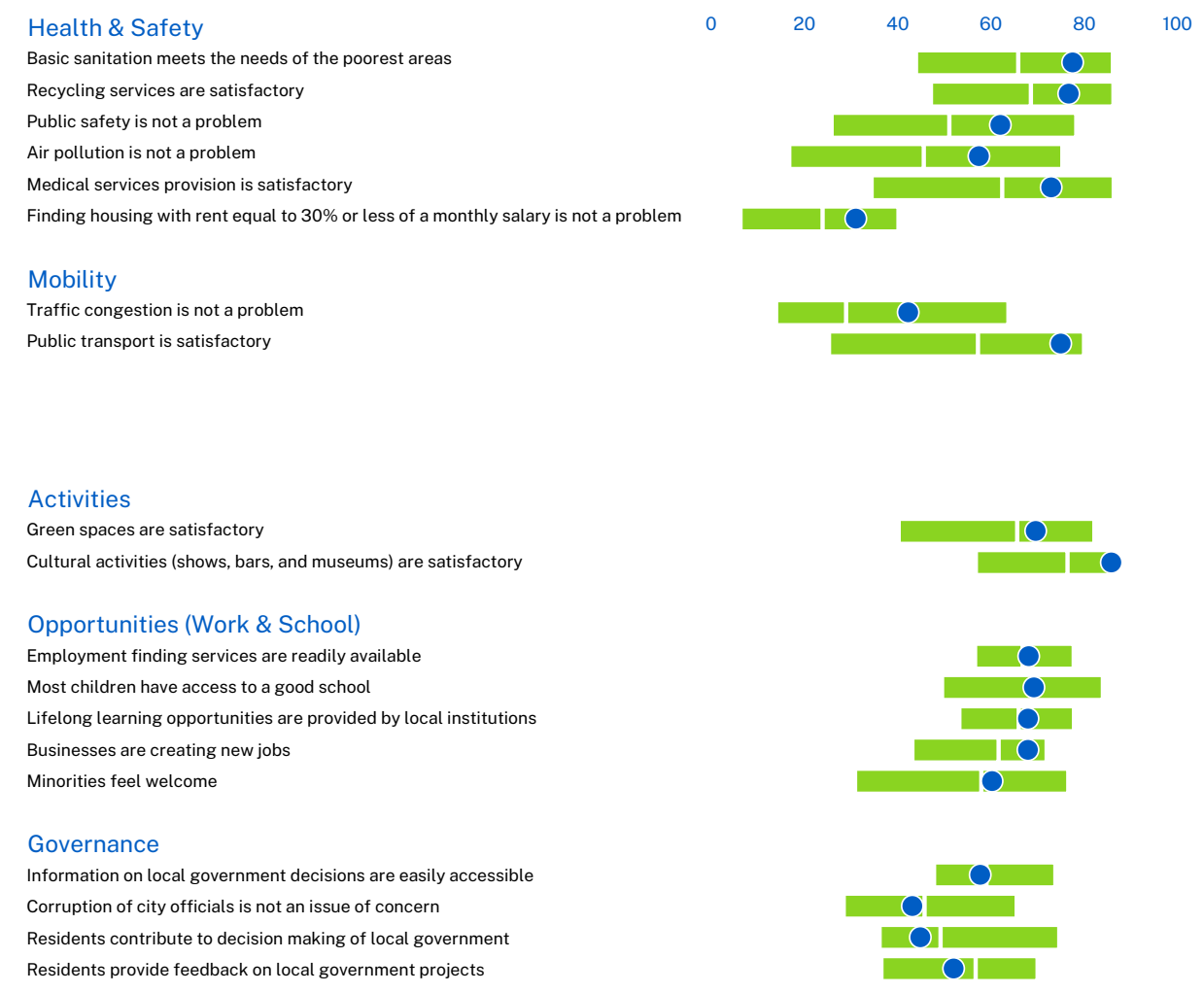


ATTITUDES

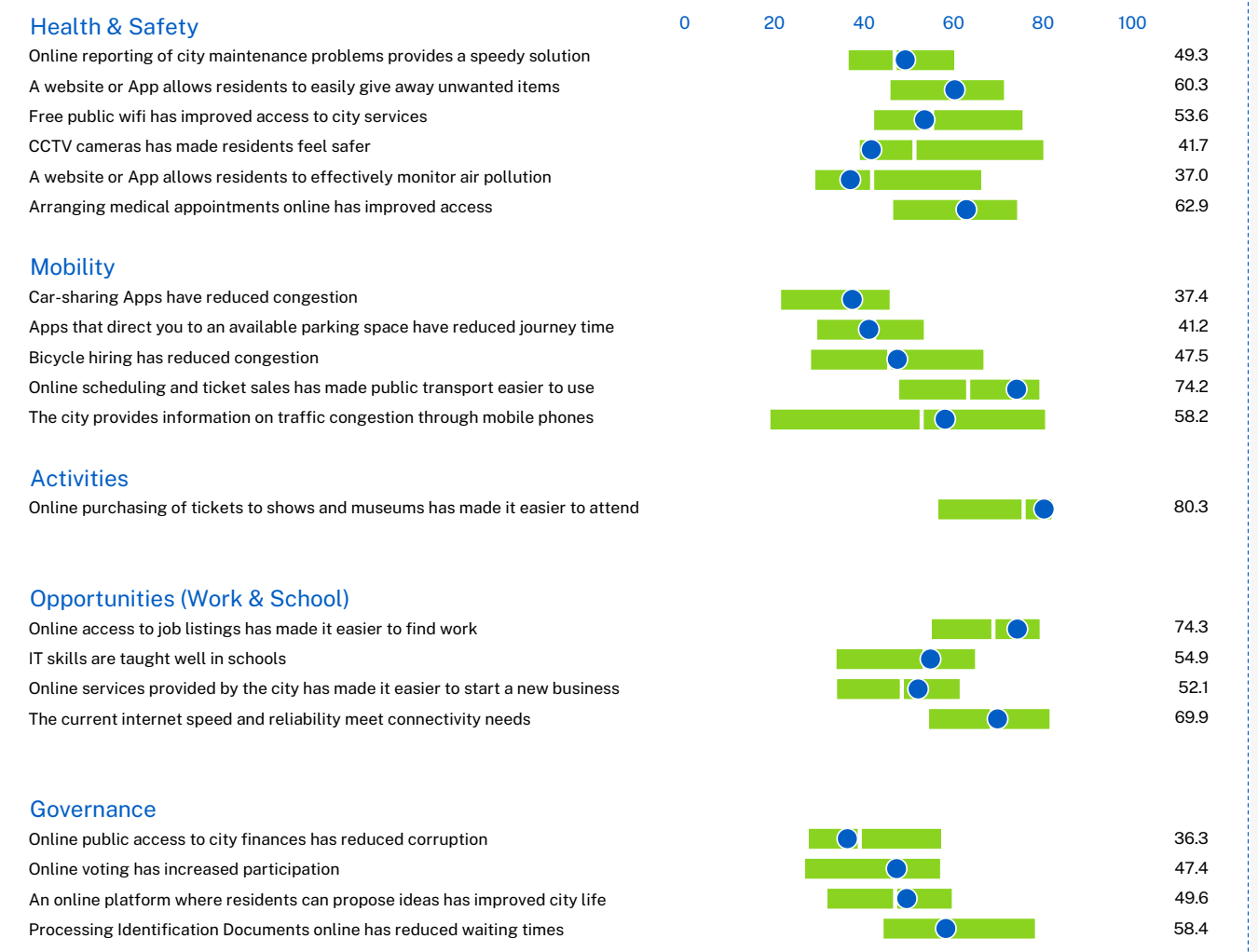
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Vilnius

SMART CITY RANKING
47
 Out of 142

▲

65 in 2023
 Out of 141

SMART CITY RATING
BBB
 BB in 2023

FACTOR RATINGS
BBB
 STRUCTURES

BBB
 TECHNOLOGIES

GROUP
2


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 550,000
 (Eurostat)

HDI 0.913
 (Global Data Lab)

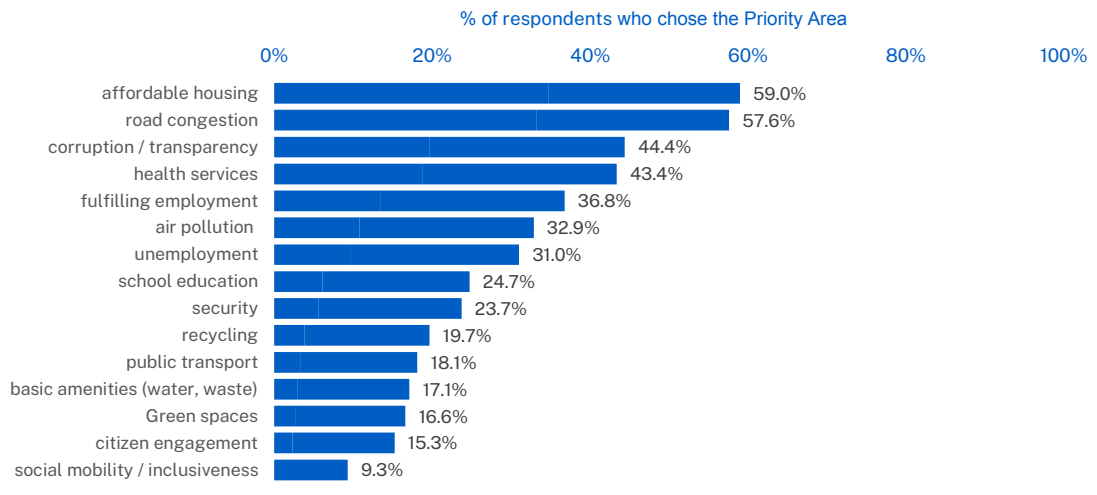


Country

	2019	2020	2021	2022	1 yr change
Lithuania					
HDI	0.886	0.880	0.875	0.879	+0.004
Life expectancy at birth	76.2	75.1	73.7	74.3	+0.6
Expected years of schooling	16.5	16.4	16.4	16.4	+0.0
Mean years of schooling	13.4	13.5	13.5	13.5	+0.0
GNI per capita (PPP \$)	35,897	36,103	37,854	38,131	+277

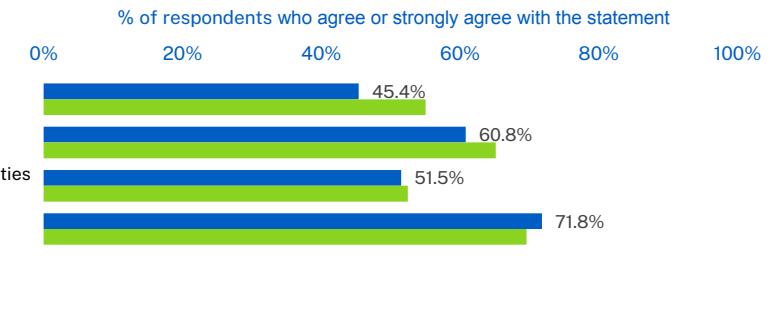
PRIORITY AREAS

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.



Priority Area	% of respondents
affordable housing	59.0%
road congestion	57.6%
corruption / transparency	44.4%
health services	43.4%
fulfilling employment	36.8%
air pollution	32.9%
unemployment	31.0%
school education	24.7%
security	23.7%
recycling	19.7%
public transport	18.1%
basic amenities (water, waste)	17.1%
Green spaces	16.6%
citizen engagement	15.3%
social mobility / inclusiveness	9.3%

ATTITUDES



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	45.4%	60.8%
You are comfortable with face recognition technologies to lower crime	60.8%	51.5%
You feel the availability of online information has increased your trust in authorities	51.5%	71.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.8%	-

LEGEND: [GROUP MEAN] [CITY]

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 72.2
- Recycling services are satisfactory: 75.8
- Public safety is not a problem: 65.6
- Air pollution is not a problem: 47.1
- Medical services provision is satisfactory: 63.7
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 31.6

Mobility

- Traffic congestion is not a problem: 29.0
- Public transport is satisfactory: 58.7

Activities

- Green spaces are satisfactory: 68.6
- Cultural activities (shows, bars, and museums) are satisfactory: 79.0

Opportunities (Work & School)

- Employment finding services are readily available: 70.5
- Most children have access to a good school: 60.1
- Lifelong learning opportunities are provided by local institutions: 61.6
- Businesses are creating new jobs: 65.8
- Minorities feel welcome: 52.0

Governance

- Information on local government decisions are easily accessible: 54.7
- Corruption of city officials is not an issue of concern: 34.1
- Residents contribute to decision making of local government: 41.9
- Residents provide feedback on local government projects: 56.4

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 54.1
- A website or App allows residents to easily give away unwanted items: 70.1
- Free public wifi has improved access to city services: 65.7
- CCTV cameras has made residents feel safer: 61.7
- A website or App allows residents to effectively monitor air pollution: 55.9
- Arranging medical appointments online has improved access: 63.4

Mobility

- Car-sharing Apps have reduced congestion: 43.3
- Apps that direct you to an available parking space have reduced journey time: 53.1
- Bicycle hiring has reduced congestion: 48.0
- Online scheduling and ticket sales has made public transport easier to use: 73.1
- The city provides information on traffic congestion through mobile phones: 58.7

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 76.6

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 74.6
- IT skills are taught well in schools: 65.4
- Online services provided by the city has made it easier to start a new business: 60.3
- The current internet speed and reliability meet connectivity needs: 76.6

Governance

- Online public access to city finances has reduced corruption: 41.4
- Online voting has increased participation: 49.8
- An online platform where residents can propose ideas has improved city life: 51.2
- Processing Identification Documents online has reduced waiting times: 65.8

LEGEND: [MIN] [CITY] [MEAN] [GROUP MAX]

Warsaw

SMART CITY RANKING

38

Out of 142



44 in 2023
Out of 141

SMART CITY RATING

BBB

BBB in 2023

FACTOR RATINGS

BBB

STRUCTURES

BBB

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,780,000
(UN World Urbanization Prospects)

HDI 0.926
(Global Data Lab)



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

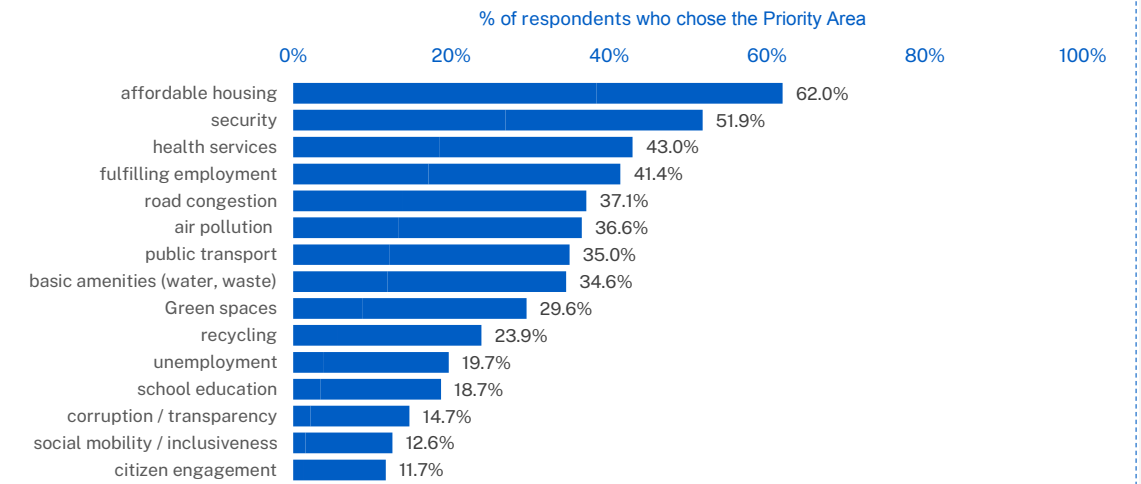
Country

Poland

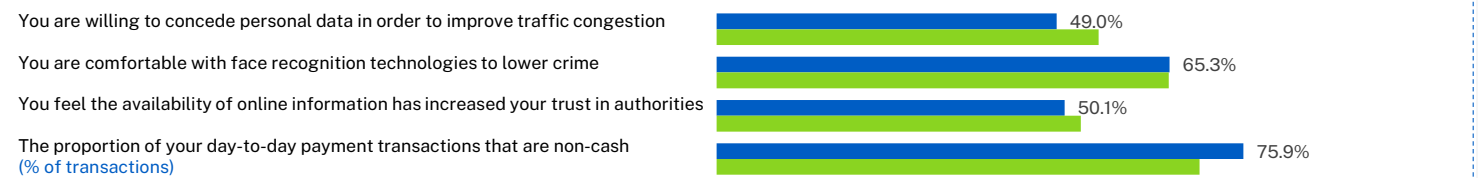
	2019	2020	2021	2022	1 yr change
HDI	0.880	0.874	0.876	0.881	+0.005
Life expectancy at birth	77.9	76.9	76.5	77.0	+0.5
Expected years of schooling	15.9	15.8	15.9	15.9	+0.0
Mean years of schooling	13.1	13.2	13.2	13.2	+0.0
GNI per capita (PPP \$)	31,772	31,293	33,264	35,151	+1,887

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

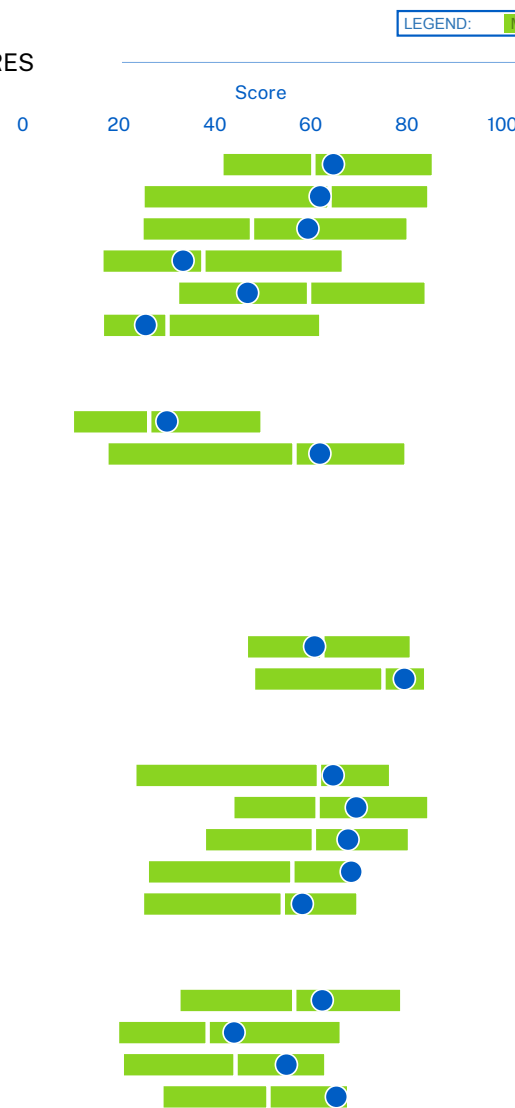
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

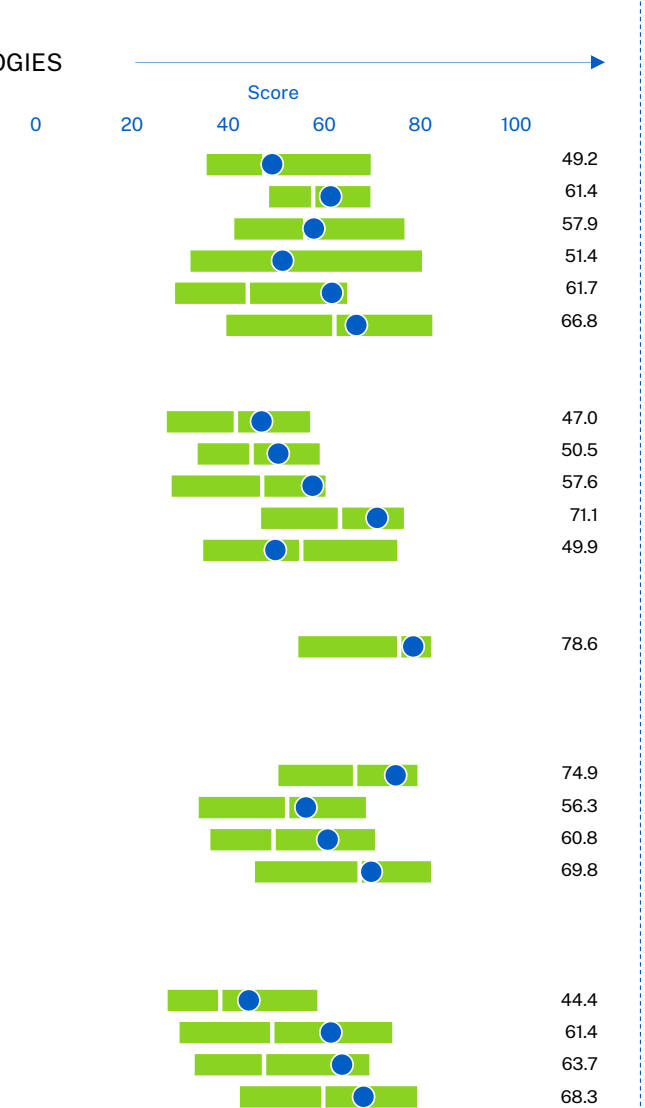
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Washington D.C.

SMART CITY RANKING

50

Out of 142



39 in 2023
Out of 141

SMART CITY RATING

BB

BB in 2023

FACTOR RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 690,000
(UN Data)

HDI 0.940
(Global Data Lab)



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

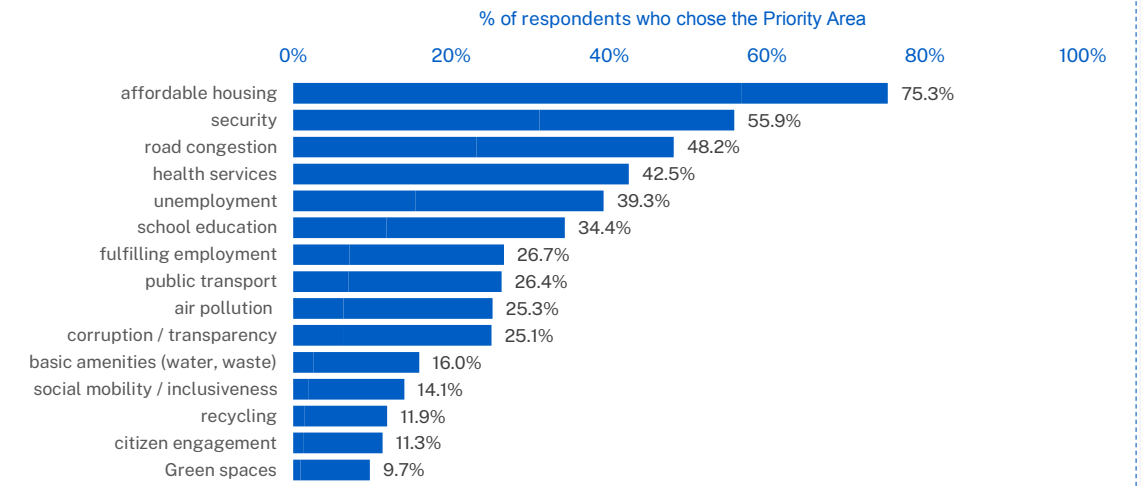
Country

USA

	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP \$)	63,654	61,077	64,484	65,565	+1,081

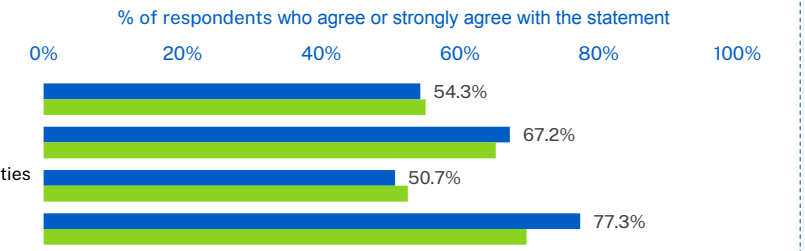
PRIORITY AREAS

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

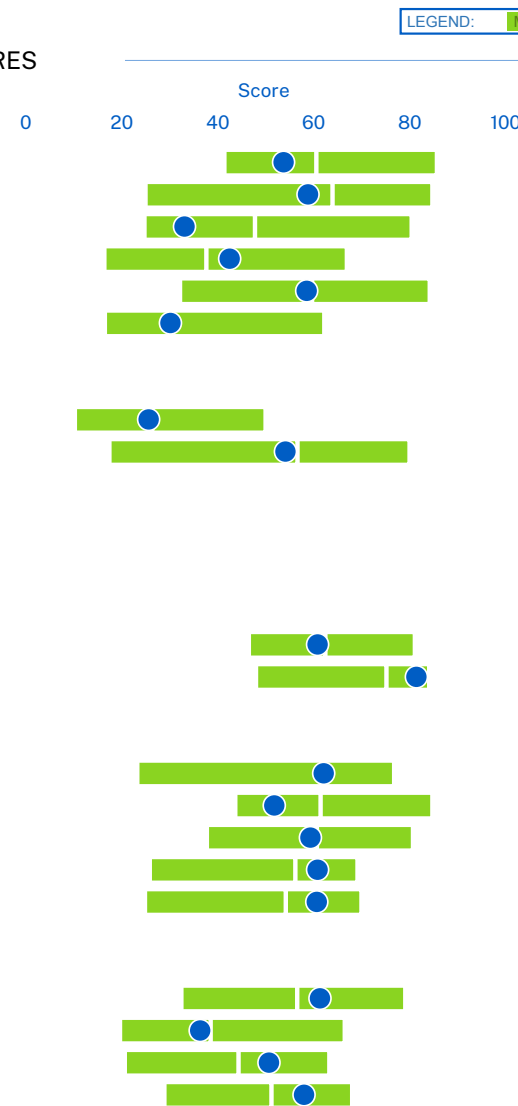
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

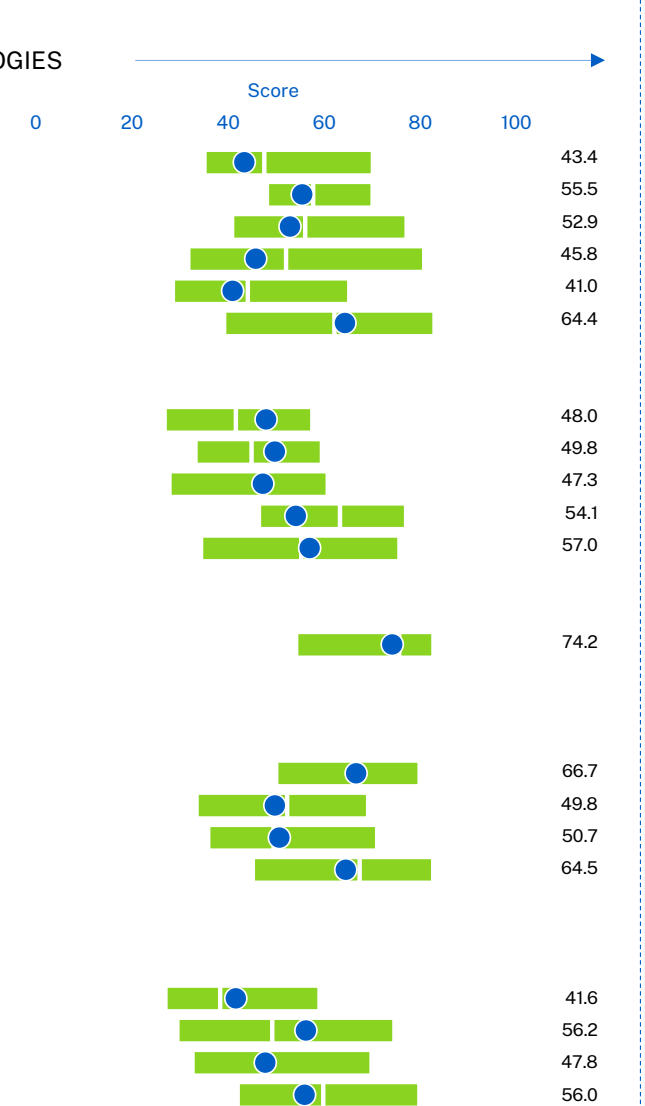
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Wellington

SMART CITY RANKING

28

Out of 142



23 in 2023
Out of 141

SMART CITY RATING

BBB

A in 2023

FACTOR RATINGS

A

STRUCTURES

BBB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 200,000
(UN Data)

HDI 0.958
(Global Data Lab)



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

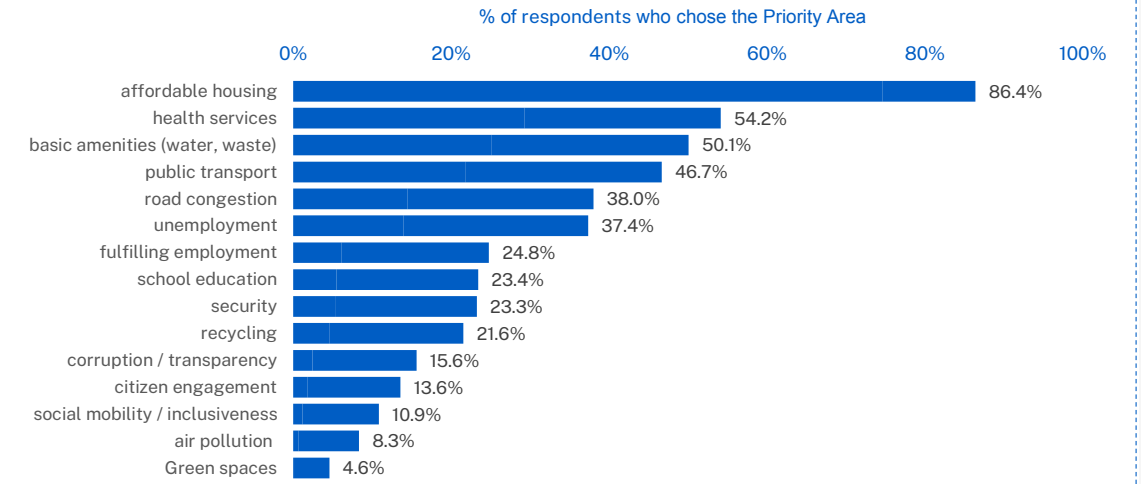
Country

New Zealand

	2019	2020	2021	2022	1 yr change
HDI	0.937	0.935	0.936	0.939	+0.003
Life expectancy at birth	82.6	82.7	82.5	83.0	+0.6
Expected years of schooling	19.5	19.2	19.7	19.7	+0.0
Mean years of schooling	13.0	12.9	12.9	12.9	+0.0
GNI per capita (PPP \$)	42,210	41,225	42,850	43,665	+816

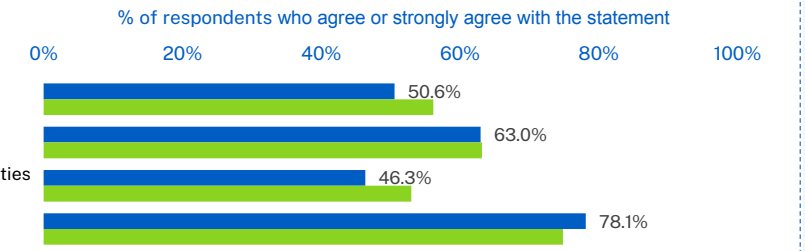
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

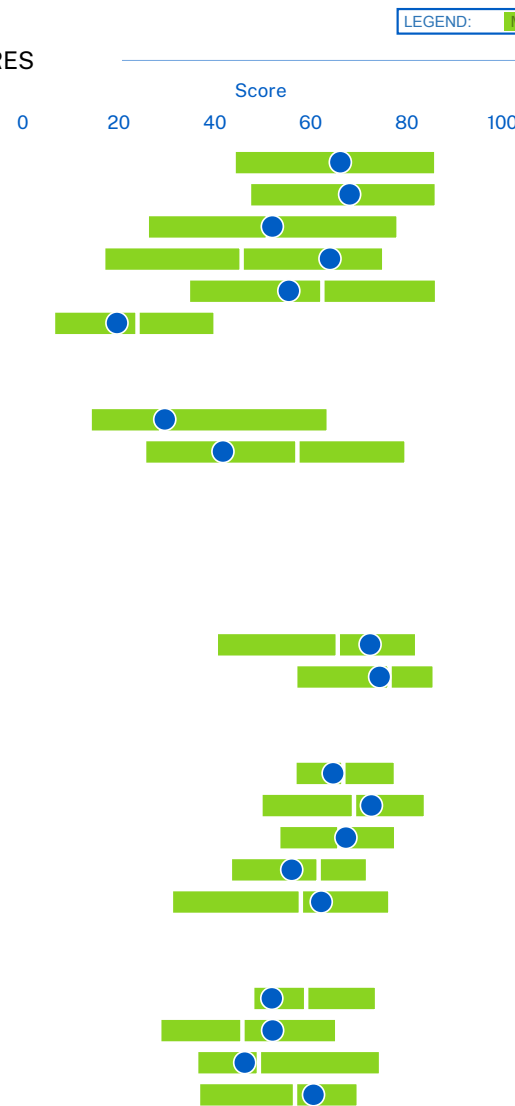
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

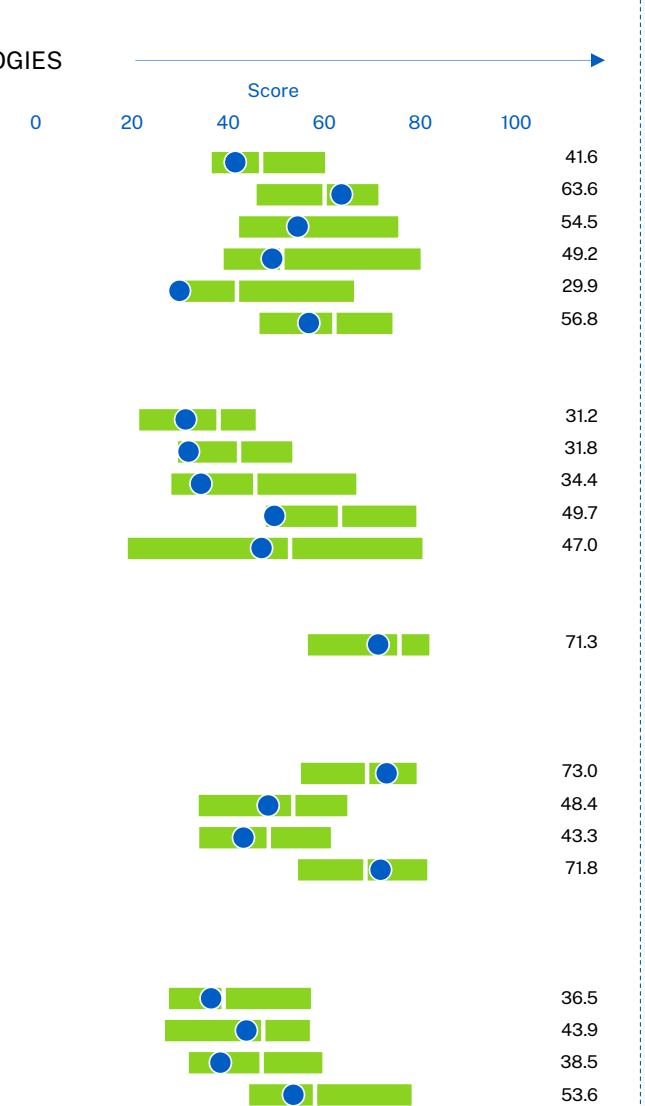
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Zagreb

SMART CITY RANKING
102
Out of 142



106 in 2023
Out of 141

SMART CITY RATING

B

CCC in 2023

FACTOR RATINGS

B

STRUCTURES

B

TECHNOLOGIES

GROUP

2

All ratings range from AAA to D

BACKGROUND INFORMATION

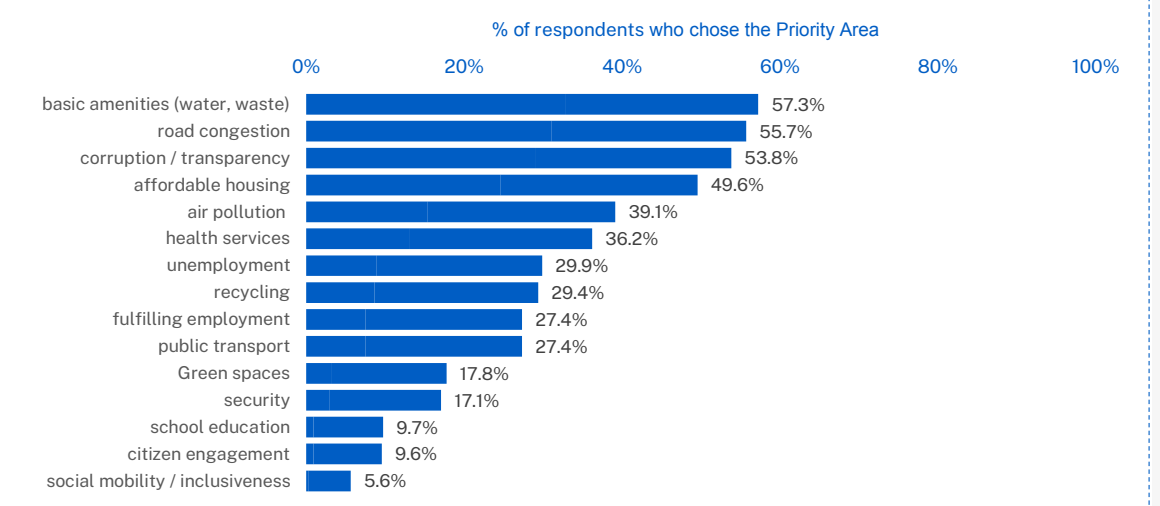
City
Population: 800,000 (Eurostat)
HDI: 0.916 (Global Data Lab)



Country	2019	2020	2021	2022	1 yr change
Croatia					
HDI	0.866	0.860	0.867	0.878	+0.011
Life expectancy at birth	78.7	78.0	77.6	79.2	+1.7
Expected years of schooling	15.5	15.5	15.6	15.6	+0.0
Mean years of schooling	12.2	12.3	12.3	12.3	+0.0
GNI per capita (PPP \$)	29,373	27,624	32,073	34,324	+2,251

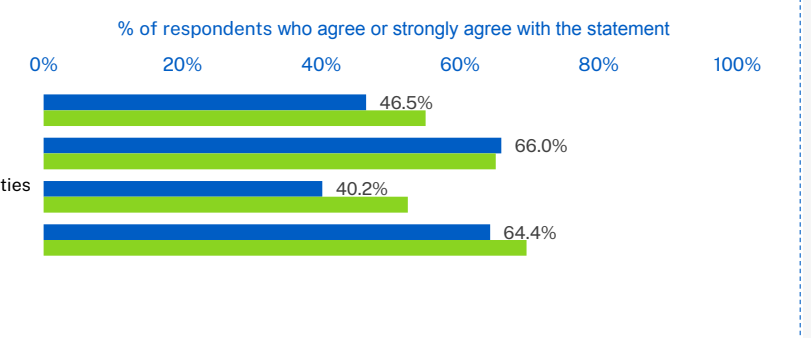
PRIORITY AREAS

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.

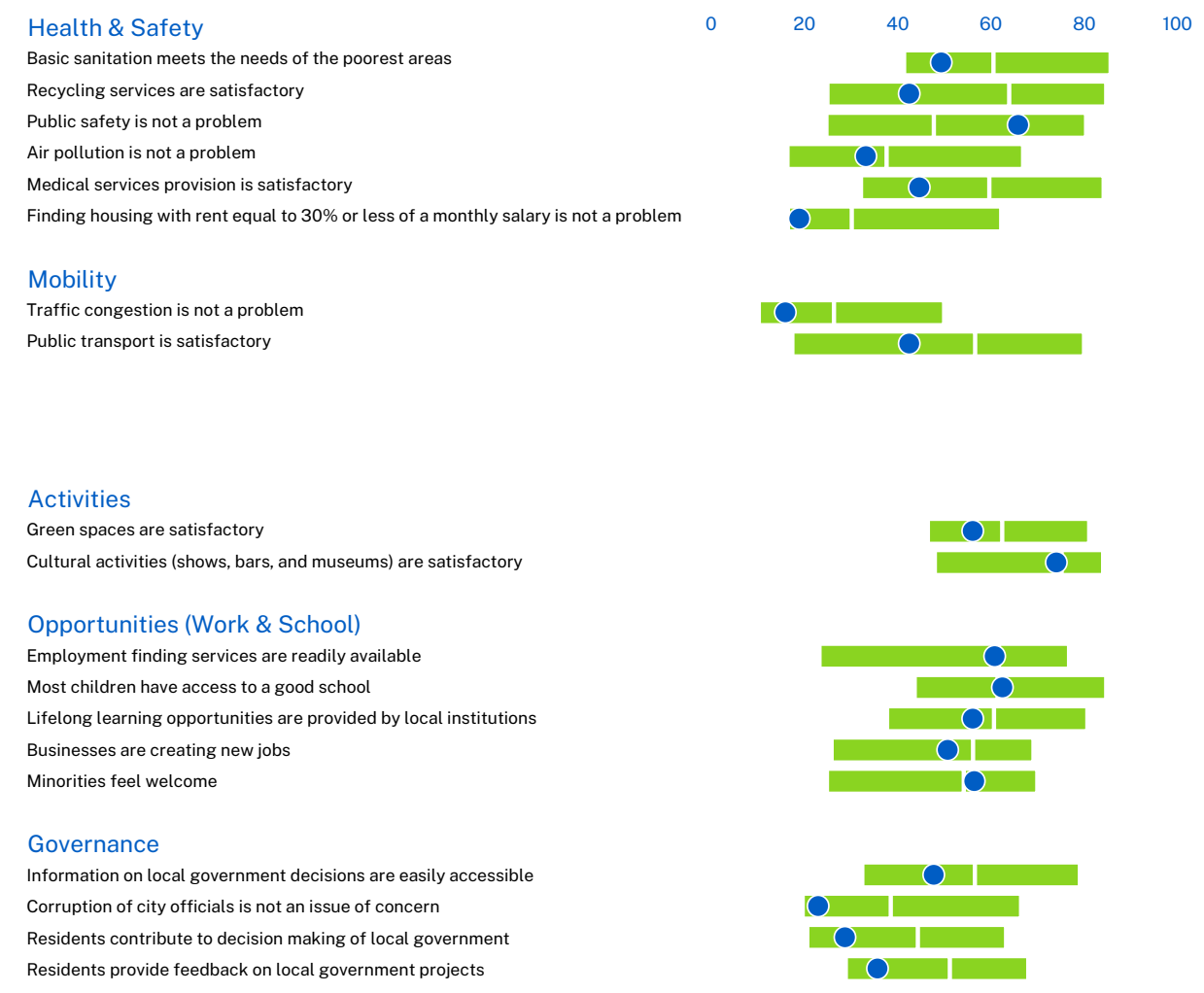


ATTITUDES

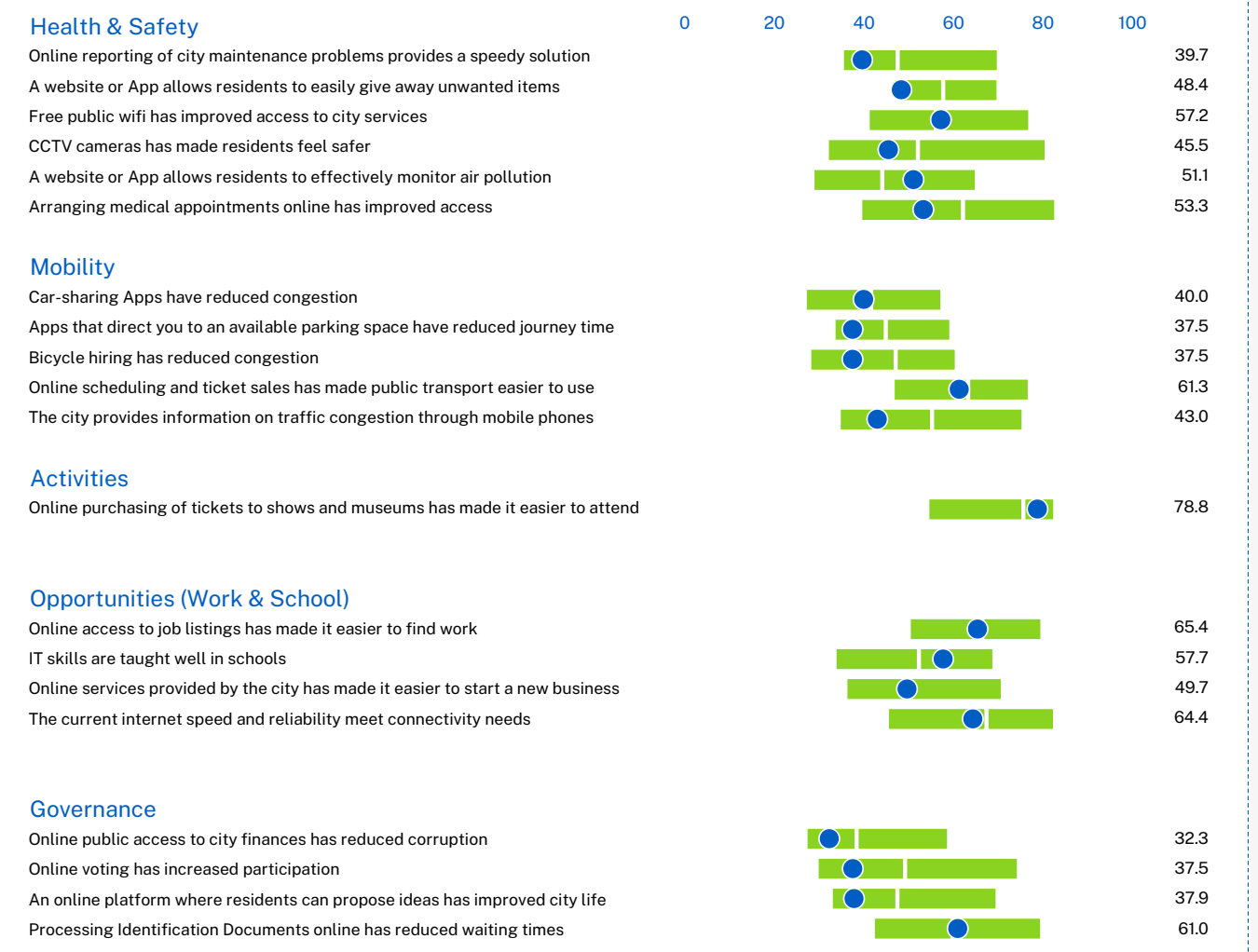
You are willing to concede personal data in order to improve traffic congestion
You are comfortable with face recognition technologies to lower crime
You feel the availability of online information has increased your trust in authorities
The proportion of your day-to-day payment transactions that are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



STRUCTURES



TECHNOLOGIES



Zaragoza

SMART CITY RANKING
57
 Out of 142

▼

54 in 2023
 Out of 141

SMART CITY RATING
CCC
 CCC in 2023

FACTOR RATINGS
B

STRUCTURES
CC

TECHNOLOGIES
CC

GROUP
3


All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population: 670,000 (Eurostat)

HDI: 0.912 (Global Data Lab)

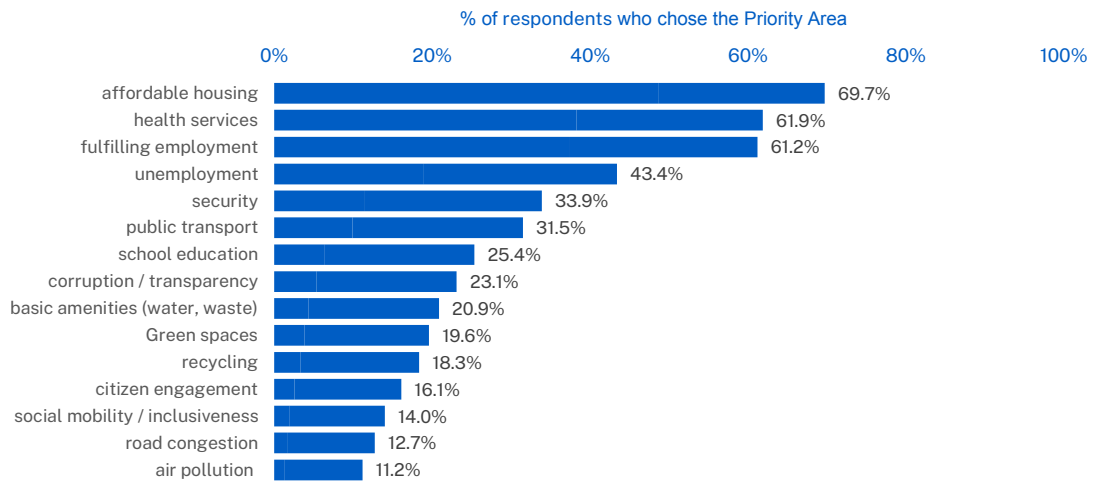


Country
 Spain

	2019	2020	2021	2022	1 yr change
HDI	0.904	0.894	0.904	0.911	+0.007
Life expectancy at birth	83.5	82.3	83.0	83.9	+0.9
Expected years of schooling	17.5	17.5	17.8	17.8	+0.0
Mean years of schooling	10.4	10.6	10.6	10.6	+0.0
GNI per capita (PPP \$)	40,854	36,076	38,133	40,043	+1,911

PRIORITY AREAS

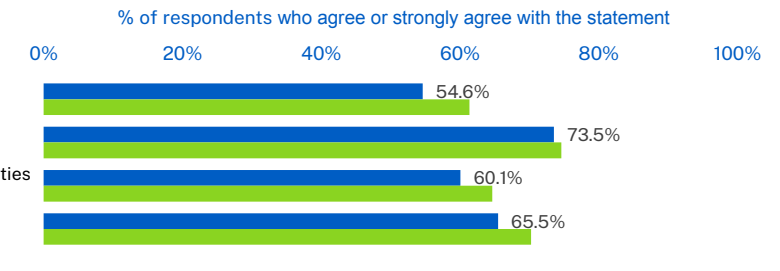
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.



Priority Area	% of respondents
affordable housing	69.7%
health services	61.9%
fulfilling employment	61.2%
unemployment	43.4%
security	33.9%
public transport	31.5%
school education	25.4%
corruption / transparency	23.1%
basic amenities (water, waste)	20.9%
Green spaces	19.6%
recycling	18.3%
citizen engagement	16.1%
social mobility / inclusiveness	14.0%
road congestion	12.7%
air pollution	11.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement



Statement	City (%)	Group Mean (%)
You are willing to concede personal data in order to improve traffic congestion	54.6%	60.0%
You are comfortable with face recognition technologies to lower crime	73.5%	60.0%
You feel the availability of online information has increased your trust in authorities	60.1%	60.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	65.5%	60.0%

LEGEND: ■ GROUP MEAN ■ CITY

STRUCTURES

Health & Safety

- Basic sanitation meets the needs of the poorest areas: 65.2
- Recycling services are satisfactory: 67.3
- Public safety is not a problem: 65.0
- Air pollution is not a problem: 52.4
- Medical services provision is satisfactory: 51.9
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem: 28.2

Mobility

- Traffic congestion is not a problem: 48.1
- Public transport is satisfactory: 62.5

Activities

- Green spaces are satisfactory: 76.7
- Cultural activities (shows, bars, and museums) are satisfactory: 77.5

Opportunities (Work & School)

- Employment finding services are readily available: 72.5
- Most children have access to a good school: 73.7
- Lifelong learning opportunities are provided by local institutions: 72.0
- Businesses are creating new jobs: 53.8
- Minorities feel welcome: 61.1

Governance

- Information on local government decisions are easily accessible: 58.6
- Corruption of city officials is not an issue of concern: 42.3
- Residents contribute to decision making of local government: 42.4
- Residents provide feedback on local government projects: 48.8

TECHNOLOGIES

Health & Safety

- Online reporting of city maintenance problems provides a speedy solution: 50.0
- A website or App allows residents to easily give away unwanted items: 59.8
- Free public wifi has improved access to city services: 49.7
- CCTV cameras has made residents feel safer: 49.0
- A website or App allows residents to effectively monitor air pollution: 49.2
- Arranging medical appointments online has improved access: 67.6

Mobility

- Car-sharing Apps have reduced congestion: 46.5
- Apps that direct you to an available parking space have reduced journey time: 44.3
- Bicycle hiring has reduced congestion: 60.1
- Online scheduling and ticket sales has made public transport easier to use: 66.1
- The city provides information on traffic congestion through mobile phones: 53.7

Activities

- Online purchasing of tickets to shows and museums has made it easier to attend: 81.9

Opportunities (Work & School)

- Online access to job listings has made it easier to find work: 66.8
- IT skills are taught well in schools: 57.1
- Online services provided by the city has made it easier to start a new business: 51.8
- The current internet speed and reliability meet connectivity needs: 75.6

Governance

- Online public access to city finances has reduced corruption: 40.5
- Online voting has increased participation: 46.6
- An online platform where residents can propose ideas has improved city life: 51.0
- Processing Identification Documents online has reduced waiting times: 60.4

LEGEND: ■ MIN ● CITY ■ MEAN ■ GROUP MAX

Zhuhai

SMART CITY RANKING

58

Out of 142



60 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 1,760,000
(UN World Urbanization Prospects)

HDI 0.799
(Global Data Lab)



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

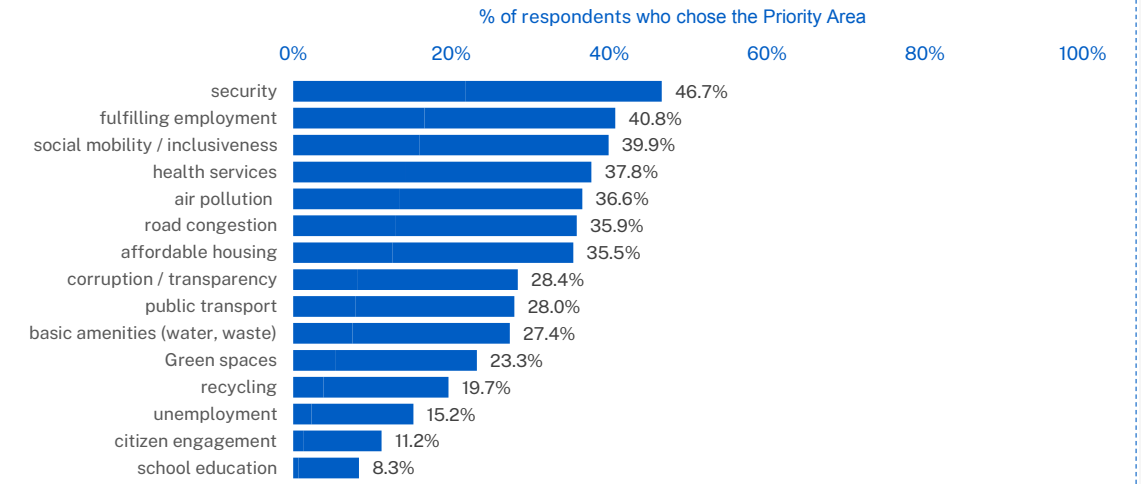
Country

China

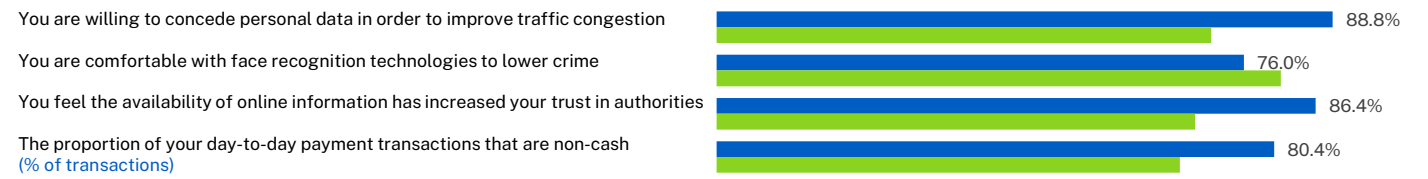
	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP \$)	15,934	16,168	17,499	18,025	+526

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



LEGEND: GROUP MEAN CITY

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

Mobility

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

Activities

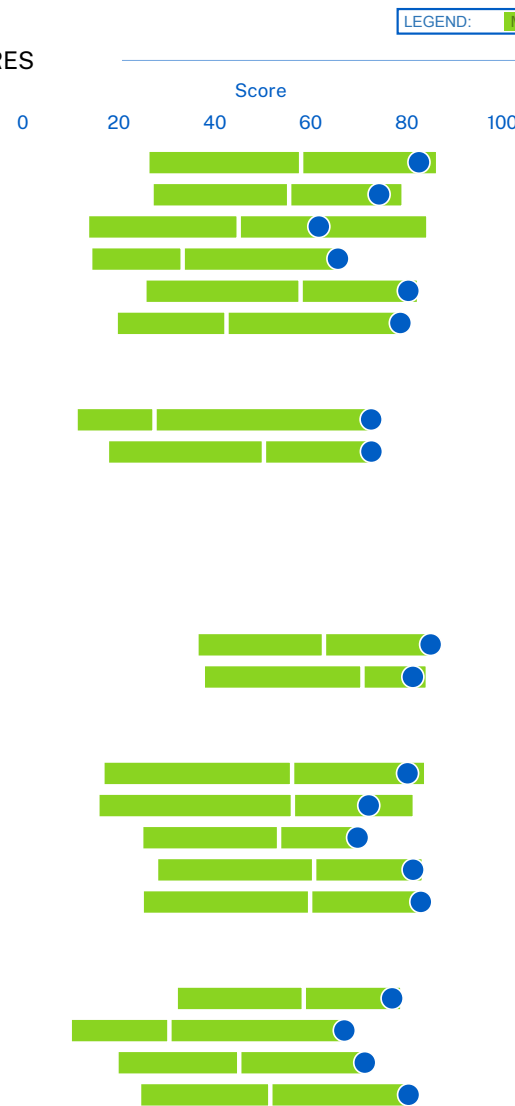
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

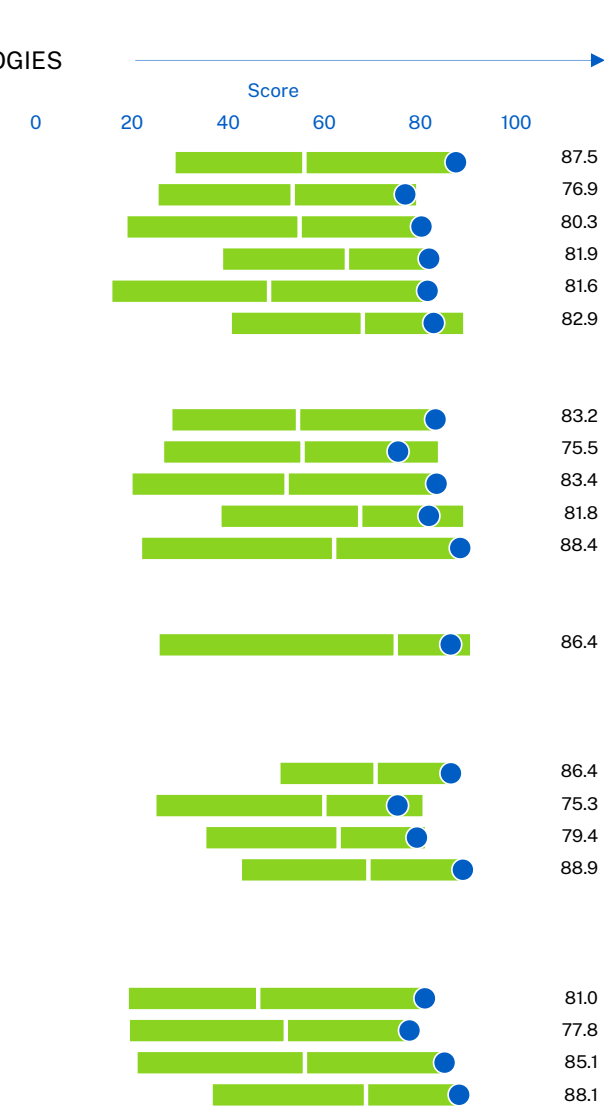
- Online purchasing of tickets to shows and museums has made it easier to attend

Opportunities (Work & School)

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

Governance

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



Zurich

SMART CITY RANKING

1

Out of 142



1 in 2023
Out of 141

SMART CITY RATING

AAA

AAA in 2023

FACTOR RATINGS

AAA

STRUCTURES

AA

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population 410,000
(Eurostat)

HDI 0.989
(Global Data Lab)



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

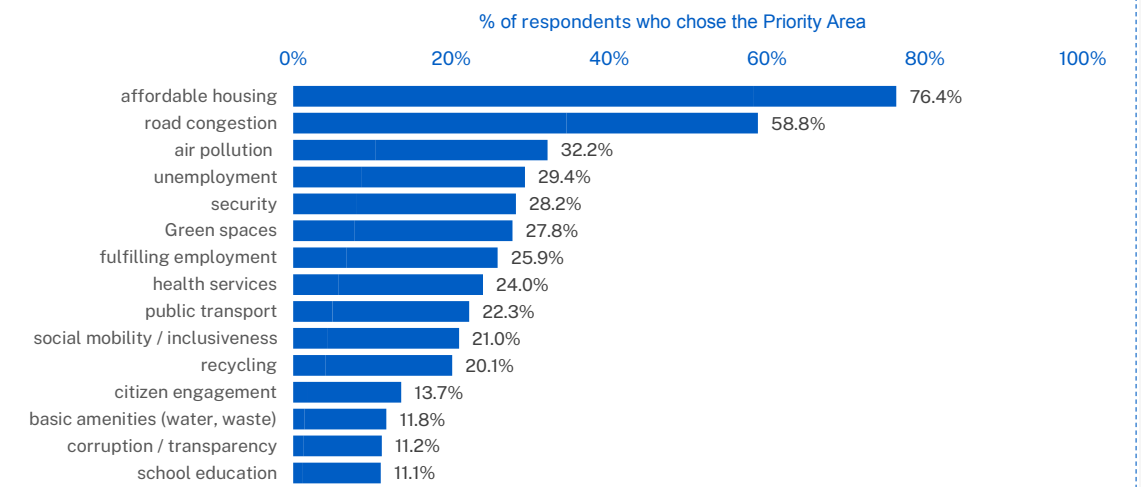
Country

Switzerland

	2019	2020	2021	2022	1 yr change
HDI	0.960	0.957	0.965	0.967	+0.002
Life expectancy at birth	83.8	83.1	84.0	84.3	+0.3
Expected years of schooling	16.3	16.4	16.6	16.6	+0.0
Mean years of schooling	13.9	13.9	13.9	13.9	+0.0
GNI per capita (PPP \$)	67,531	66,267	68,550	69,433	+882

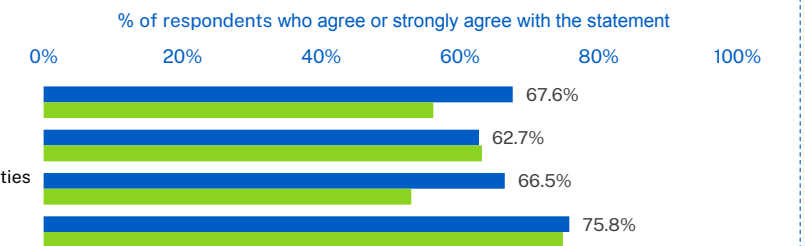
PRIORITY AREAS

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



LEGEND: [GROUP MEAN] [CITY]

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

Mobility

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

Activities

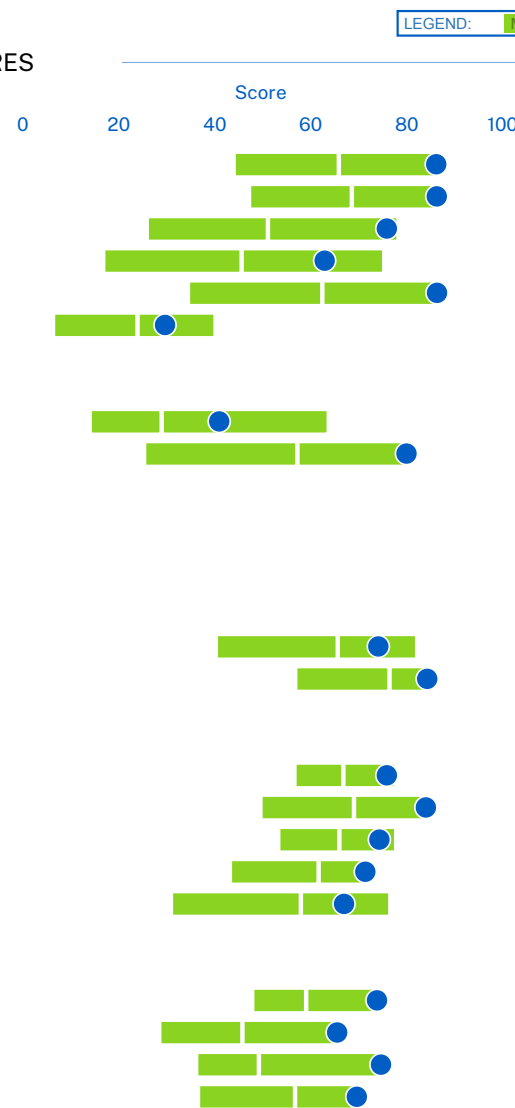
- Green spaces are satisfactory
- Cultural activities (shows, bars, and museums) are satisfactory

Opportunities (Work & School)

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

Governance

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



TECHNOLOGIES

Health & Safety

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

Mobility

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

Activities

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

Opportunities (Work & School)

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

Governance

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

