IMD
Smart
City Index
2024

IMD / World Competitiveness Center

"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 shift[1]) 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 SCI[3]) 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, Tallinn[4], Riyadh and Melbourne.
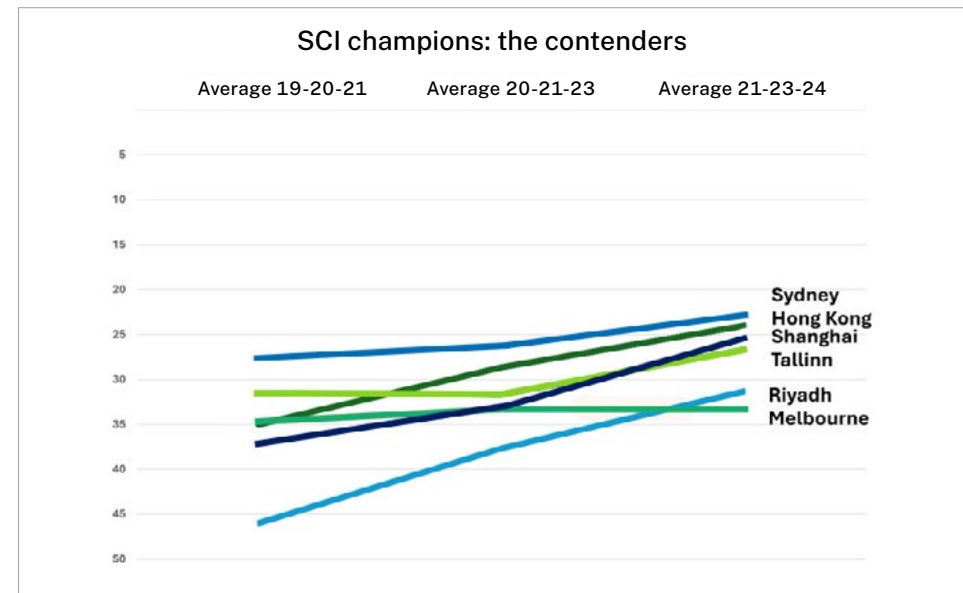
What do these champions have in common? With very few exceptions, cities in the top 20 are geographically located in areas where social and economic environments are relatively predictable, even against the overall climate of global uncertainties. They are also cities in which visible initiatives have 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.

SCI champions: the contenders

SCI champions: the super champions

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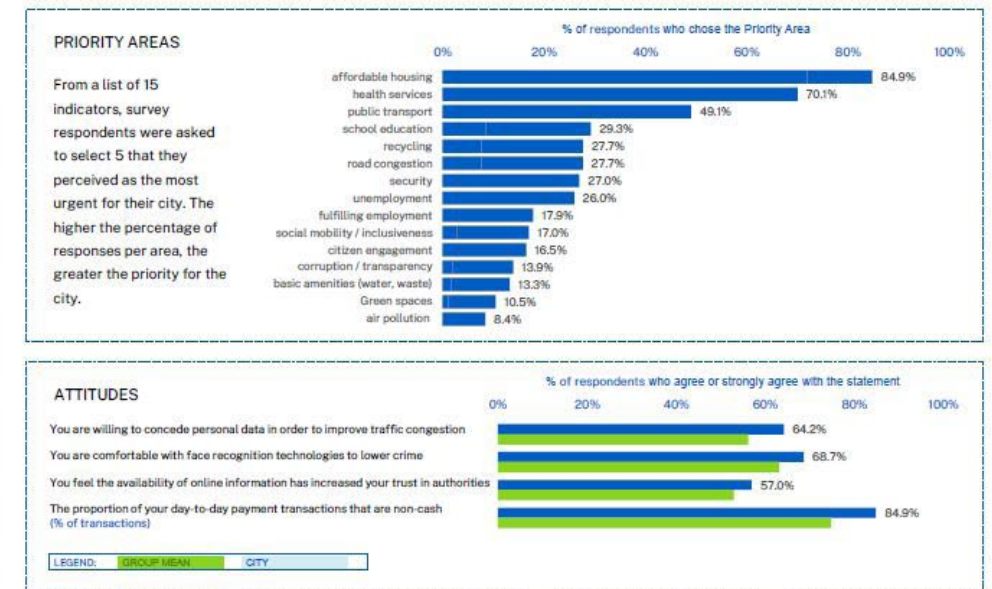
We would also like to encourage our readers to use and disseminate the infographics that have been produced for this edition of the SCI report.

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

IMD Smart City Index 2024
Table of Contents

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

Fabian Grimm
Research Specialist

Alice Tozer
Content Manager

IMD Smart City Index 2024

A Series of Tables Showcasing
the Results in Different Ways

IMD Smart City Index 2024: Results

In 2024 City Ranking Order with HDI Context and
2023 Ranking Comparison (2023 Methodology Applied)

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 with HDI Context and 2023 Ranking Comparison (2023 Methodology Applied)

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 with HDI Context and 2023 Ranking Comparison (2023 Methodology Applied)

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 with HDI Context and 2023 Ranking Comparison (2023 Methodology Applied)

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 with 2024 Deep Dive and 2023 Comparison (2023 Methodology Applied)

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 with 2024 Deep Dive and 2023 Comparison (2023 Methodology Applied)

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 with 2024 Deep Dive and 2023 Comparison (2023 Methodology Applied)

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 with 2024 Deep Dive and 2023 Comparison (2023 Methodology Applied)

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 (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
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 (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
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 (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
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 (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
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 (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
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

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

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

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

% of respondents who chose the Priority Area

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	%
affordable housing	72.3%
unemployment	50.8%
fulfilling employment	47.4%
road congestion	33.8%
health services	30.2%
air pollution	27.4%
school education	25.9%
Green spaces	25.8%
public transport	25.6%
basic amenities (water, waste)	23.4%
recycling	22.7%
security	18.4%
citizen engagement	17.1%
social mobility / inclusiveness	16.5%
corruption / transparency	10.0%
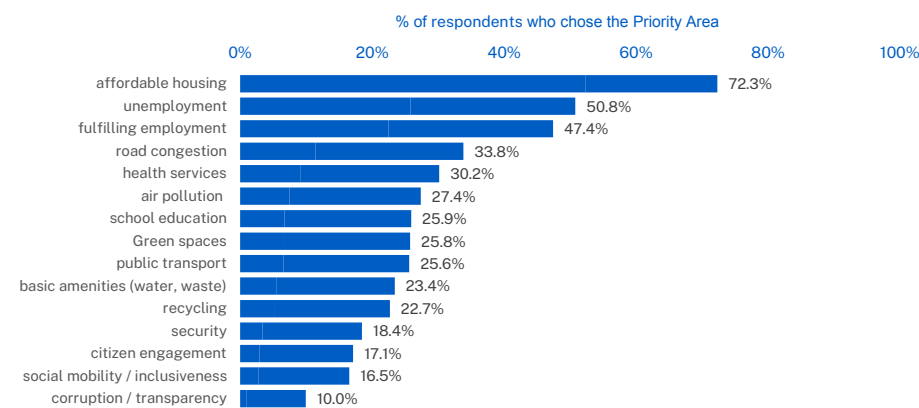
IMD Smart City Index 2024
A User's Guide

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.

ATTITUDES

% of respondents who agree or strongly agree with the statement

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

You are willing to concede personal data in order to improve traffic congestion — 70.0%

You are comfortable with face recognition technologies to lower crime — 92.8%

You feel the availability of online information has increased your trust in authorities — 92.7%

The proportion of your day-to-day payment transactions that are non-cash (% of transactions) — 67.6%

LEGEND: GROUP MEAN | CITY

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.

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES
Score: 0 20 40 60 80 100

Health & Safety
- Basic sanitation meets the needs of the poorest areas — 86.9
- Recycling services are satisfactory — 87.6
- Public safety is not a problem — 65.9
- Air pollution is not a problem — 51.2
- Medical services provision is satisfactory — 86.8
- Finding housing with rent equal to 30% or less of a monthly salary is not a problem — 49.6

Mobility
- Traffic congestion is not a problem — 52.9
- Public transport is satisfactory — 83.8

Activities
- Green spaces are satisfactory — 84.7
- Cultural activities (shows, bars, and museums) are satisfactory — 85.3

Opportunities (Work & School)
- Employment finding services are readily available — 61.8
- Most children have access to a good school — 74.9
- Lifelong learning opportunities are provided by local institutions — 73.9
- Businesses are creating new jobs — 65.4
- Minorities feel welcome — 81.9

Governance
- Information on local government decisions are easily accessible — 84.1
- Corruption of city officials is not an issue of concern — 63.7
- Residents contribute to decision making of local government — 68.5
- Residents provide feedback on local government projects — 72.4

TECHNOLOGIES
Score: 0 20 40 60 80 100

Health & Safety
- Online reporting of city maintenance problems provides a speedy solution — 80.9
- A website or App allows residents to easily give away unwanted items — 75.8
- Free public wifi has improved access to city services — 74.0
- CCTV cameras has made residents feel safer — 87.4
- A website or App allows residents to effectively monitor air pollution — 60.5
- Arranging medical appointments online has improved access — 86.7

Mobility
- Car-sharing Apps have reduced congestion — 68.7
- Apps that direct you to an available parking space have reduced journey time — 71.5
- Bicycle hiring has reduced congestion — 66.3
- Online scheduling and ticket sales has made public transport easier to use — 80.1
- The city provides information on traffic congestion through mobile phones — 80.1

Activities
- Online purchasing of tickets to shows and museums has made it easier to attend — 88.7

Opportunities (Work & School)
- Online access to job listings has made it easier to find work — 77.5
- IT skills are taught well in schools — 77.7
- Online services provided by the city has made it easier to start a new business — 76.6
- The current internet speed and reliability meet connectivity needs — 86.4

Governance
- Online public access to city finances has reduced corruption — 71.9
- Online voting has increased participation — 70.8
- An online platform where residents can propose ideas has improved city life — 78.0
- Processing Identification Documents online has reduced waiting times — 84.4

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

% of respondents who chose the Priority Area

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.

affordable housing	72.3%
unemployment	50.8%
fulfilling employment	47.4%
road congestion	33.8%
health services	30.2%
air pollution	27.4%
school education	25.9%
Green spaces	25.8%
public transport	25.6%
basic amenities (water, waste)	23.4%
recycling	22.7%
security	18.4%
citizen engagement	17.1%
social mobility / inclusiveness	16.5%
corruption / transparency	10.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	70.0%
You are comfortable with face recognition technologies to lower crime	92.8%
You feel the availability of online information has increased your trust in authorities	92.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	67.6%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	86.9
Recycling services are satisfactory	87.6
Public safety is not a problem	65.9
Air pollution is not a problem	51.2
Medical services provision is satisfactory	86.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	49.6

Mobility

Traffic congestion is not a problem	52.9
Public transport is satisfactory	83.8

Activities

Green spaces are satisfactory	84.7
Cultural activities (shows, bars, and museums) are satisfactory	85.3

Opportunities (Work & School)

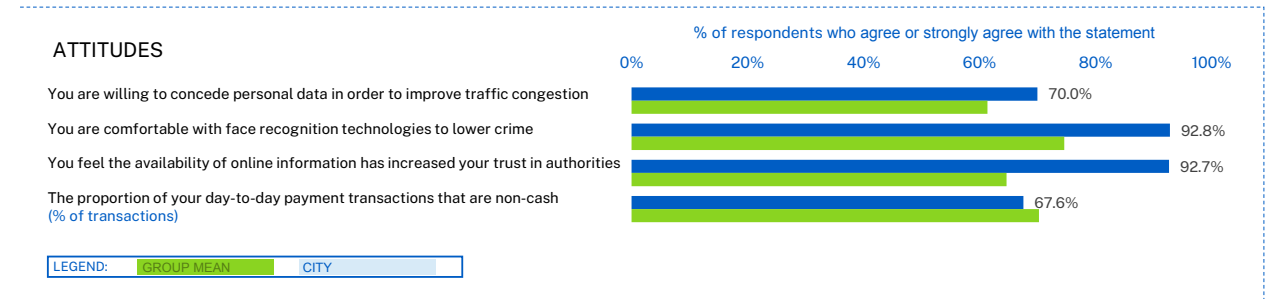|	
Employment finding services are readily available	61.8
Most children have access to a good school	74.9
Lifelong learning opportunities are provided by local institutions	73.9
Businesses are creating new jobs	65.4
Minorities feel welcome	81.9

Governance

Information on local government decisions are easily accessible	84.1
Corruption of city officials is not an issue of concern	63.7
Residents contribute to decision making of local government	68.5
Residents provide feedback on local government projects	72.4

TECHNOLOGIES

Score

Health & Safety

Online reporting of city maintenance problems provides a speedy solution	80.9
A website or App allows residents to easily give away unwanted items	75.8
Free public wifi has improved access to city services	74.0
CCTV cameras has made residents feel safer	87.4
A website or App allows residents to effectively monitor air pollution	60.5
Arranging medical appointments online has improved access	86.7

Mobility

Car-sharing Apps have reduced congestion	68.7
Apps that direct you to an available parking space have reduced journey time	71.5
Bicycle hiring has reduced congestion	66.3
Online scheduling and ticket sales has made public transport easier to use	80.1
The city provides information on traffic congestion through mobile phones	80.1

Activities

Online purchasing of tickets to shows and museums has made it easier to attend	88.7

Opportunities (Work & School)

Online access to job listings has made it easier to find work	77.5
IT skills are taught well in schools	77.7
Online services provided by the city has made it easier to start a new business	76.6
The current internet speed and reliability meet connectivity needs	86.4

Governance

Online public access to city finances has reduced corruption	71.9
Online voting has increased participation	70.8
An online platform where residents can propose ideas has improved city life	78.0
Processing Identification Documents online has reduced waiting times	84.4

Abuja

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

% of respondents who chose the Priority Area

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	%
security	77.9%
affordable housing	71.3%
unemployment	65.3%
corruption / transparency	58.1%
health services	49.4%
basic amenities (water, waste)	39.8%
fulfilling employment	28.8%
school education	20.0%
road congestion	19.0%
public transport	15.5%
citizen engagement	15.0%
recycling	10.5%
social mobility / inclusiveness	7.5%
air pollution	6.9%
Green spaces	5.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	76.8%
You are comfortable with face recognition technologies to lower crime	86.7%
You feel the availability of online information has increased your trust in authorities	60.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	64.5%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	46.5
Recycling services are satisfactory	44.0
Public safety is not a problem	33.4
Air pollution is not a problem	37.5
Medical services provision is satisfactory	50.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	21.0

Mobility

	Score
Traffic congestion is not a problem	41.5
Public transport is satisfactory	50.2

Activities

	Score
Green spaces are satisfactory	61.4
Cultural activities (shows, bars, and museums) are satisfactory	73.6

Opportunities (Work & School)

	Score
Employment finding services are readily available	37.1
Most children have access to a good school	51.9
Lifelong learning opportunities are provided by local institutions	46.4
Businesses are creating new jobs	66.5
Minorities feel welcome	51.8

Governance

	Score
Information on local government decisions are easily accessible	42.0
Corruption of city officials is not an issue of concern	15.1
Residents contribute to decision making of local government	26.8
Residents provide feedback on local government projects	35.2

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	39.0
A website or App allows residents to easily give away unwanted items	34.4
Free public wifi has improved access to city services	28.5
CCTV cameras has made residents feel safer	38.8
A website or App allows residents to effectively monitor air pollution	22.8
Arranging medical appointments online has improved access	51.7

Mobility

	Score
Car-sharing Apps have reduced congestion	54.0
Apps that direct you to an available parking space have reduced journey time	35.6
Bicycle hiring has reduced congestion	24.9
Online scheduling and ticket sales has made public transport easier to use	57.0
The city provides information on traffic congestion through mobile phones	41.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	66.5

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	64.6
IT skills are taught well in schools	52.3
Online services provided by the city has made it easier to start a new business	53.7
The current internet speed and reliability meet connectivity needs	60.9

Governance

	Score
Online public access to city finances has reduced corruption	26.1
Online voting has increased participation	28.0
An online platform where residents can propose ideas has improved city life	34.3
Processing Identification Documents online has reduced waiting times	57.3

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

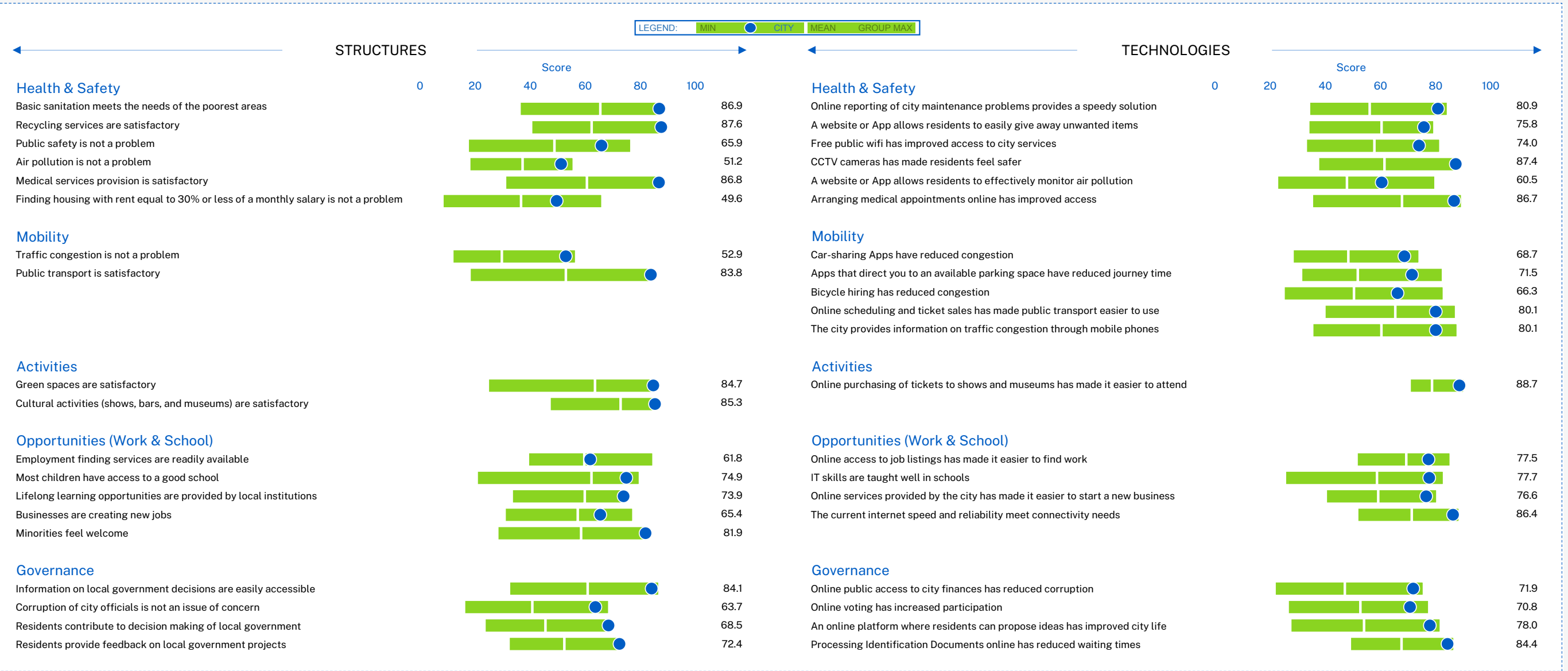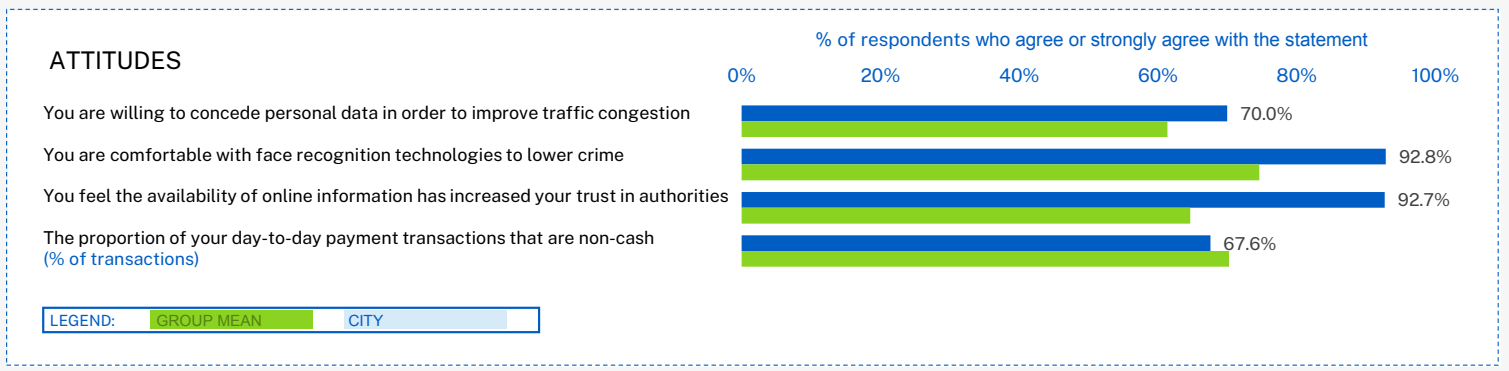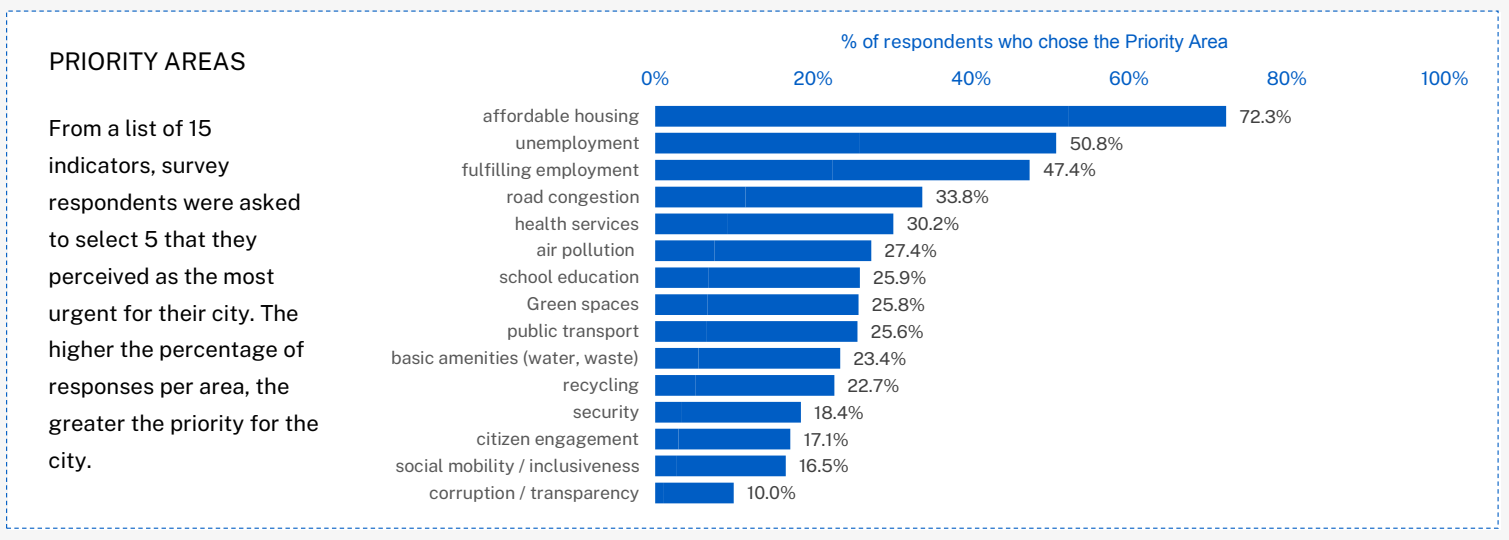Population 2,610,000
(UN World Urbanization Prospects)

HDI 0.707
(Global Data Lab)

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.

% of respondents who chose the Priority Area

Priority Area	%
unemployment	71.6%
affordable housing	61.0%
basic amenities (water, waste)	53.5%
corruption / transparency	52.5%
health services	52.5%
security	38.5%
fulfilling employment	33.7%
road congestion	33.4%
air pollution	25.9%
school education	24.0%
recycling	18.7%
public transport	12.3%
citizen engagement	6.0%
social mobility / inclusiveness	6.0%
Green spaces	4.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	% (CITY)
You are willing to concede personal data in order to improve traffic congestion	72.2%
You are comfortable with face recognition technologies to lower crime	83.6%
You feel the availability of online information has increased your trust in authorities	48.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	56.2%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN / CITY / MEAN / GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	39.3
Recycling services are satisfactory	39.5
Public safety is not a problem	41.8
Air pollution is not a problem	22.3
Medical services provision is satisfactory	49.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	24.2

Mobility
	Score
Traffic congestion is not a problem	19.1
Public transport is satisfactory	42.7

Activities
	Score
Green spaces are satisfactory	42.8
Cultural activities (shows, bars, and museums) are satisfactory	67.9

Opportunities (Work & School)
	Score
Employment finding services are readily available	30.9
Most children have access to a good school	48.2
Lifelong learning opportunities are provided by local institutions	36.2
Businesses are creating new jobs	42.6
Minorities feel welcome	48.6

Governance
	Score
Information on local government decisions are easily accessible	41.5
Corruption of city officials is not an issue of concern	16.1
Residents contribute to decision making of local government	32.6
Residents provide feedback on local government projects	42.0

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	33.5
A website or App allows residents to easily give away unwanted items	25.4
Free public wifi has improved access to city services	18.9
CCTV cameras has made residents feel safer	50.3
A website or App allows residents to effectively monitor air pollution	15.8
Arranging medical appointments online has improved access	45.3

Mobility
	Score
Car-sharing Apps have reduced congestion	48.4
Apps that direct you to an available parking space have reduced journey time	26.5
Bicycle hiring has reduced congestion	20.0
Online scheduling and ticket sales has made public transport easier to use	48.5
The city provides information on traffic congestion through mobile phones	27.2

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	65.4

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	53.7
IT skills are taught well in schools	52.4
Online services provided by the city has made it easier to start a new business	48.9
The current internet speed and reliability meet connectivity needs	51.8

Governance
	Score
Online public access to city finances has reduced corruption	19.7
Online voting has increased participation	19.4
An online platform where residents can propose ideas has improved city life	31.3
Processing Identification Documents online has reduced waiting times	55.7

Al-Khobar

BACKGROUND INFORMATION

City

Population	410,000
(Census)	
HDI	0.862
(Global Data Lab)	

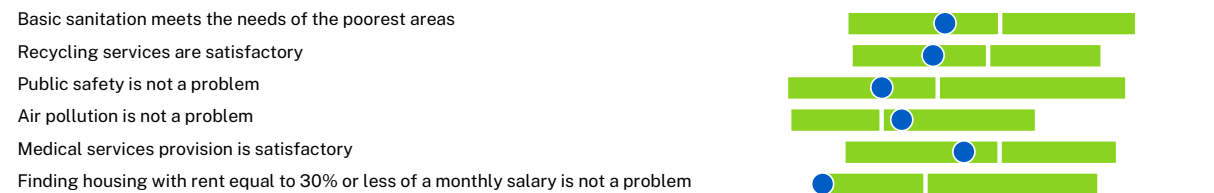Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

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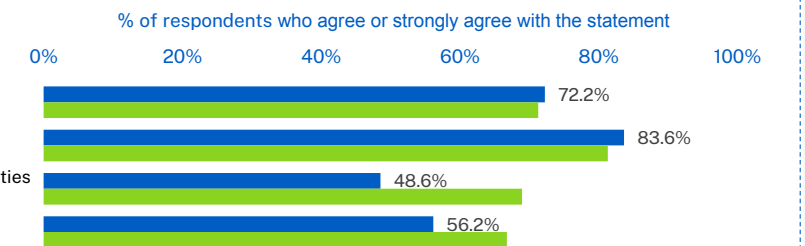
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.

Priority Area	%
affordable housing	57.1%
road congestion	53.1%
public transport	40.8%
health services	38.8%
Green spaces	36.7%
citizen engagement	32.7%
fulfilling employment	32.7%
recycling	30.6%
unemployment	30.6%
basic amenities (water, waste)	26.5%
air pollution	18.4%
school education	14.3%
corruption / transparency	12.2%
social mobility / inclusiveness	12.2%
security	12.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	City
You are willing to concede personal data in order to improve traffic congestion	63.3%
You are comfortable with face recognition technologies to lower crime	81.6%
You feel the availability of online information has increased your trust in authorities	81.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	83.7%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	67.7
Recycling services are satisfactory	45.9
Public safety is not a problem	54.1
Air pollution is not a problem	45.6
Medical services provision is satisfactory	76.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	54.4

Mobility
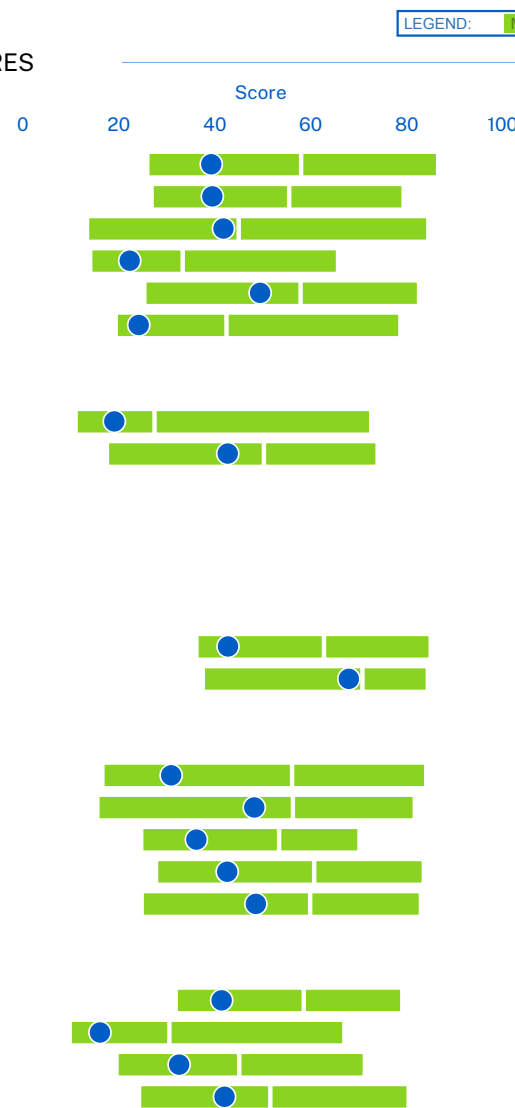|	Score
Traffic congestion is not a problem	33.7
Public transport is satisfactory	35.0

Activities
	Score
Green spaces are satisfactory	49.7
Cultural activities (shows, bars, and museums) are satisfactory	47.3

Opportunities (Work & School)
	Score
Employment finding services are readily available	43.2
Most children have access to a good school	69.4
Lifelong learning opportunities are provided by local institutions	58.8
Businesses are creating new jobs	57.1
Minorities feel welcome	70.4

Governance
	Score
Information on local government decisions are easily accessible	66.3
Corruption of city officials is not an issue of concern	52.4
Residents contribute to decision making of local government	51.7
Residents provide feedback on local government projects	51.0

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	67.0
A website or App allows residents to easily give away unwanted items	66.3
Free public wifi has improved access to city services	40.5
CCTV cameras has made residents feel safer	59.2
A website or App allows residents to effectively monitor air pollution	34.7
Arranging medical appointments online has improved access	87.4

Mobility
	Score
Car-sharing Apps have reduced congestion	43.9
Apps that direct you to an available parking space have reduced journey time	47.3
Bicycle hiring has reduced congestion	25.5
Online scheduling and ticket sales has made public transport easier to use	55.8
The city provides information on traffic congestion through mobile phones	40.8

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	73.5

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	66.0
IT skills are taught well in schools	55.4
Online services provided by the city has made it easier to start a new business	59.5
The current internet speed and reliability meet connectivity needs	63.3

Governance
	Score
Online public access to city finances has reduced corruption	54.1
Online voting has increased participation	56.5
An online platform where residents can propose ideas has improved city life	53.1
Processing Identification Documents online has reduced waiting times	83.3

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)

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.

% of respondents who chose the Priority Area

Priority Area	%
unemployment	59.3%
affordable housing	49.4%
health services	49.4%
road congestion	40.7%
basic amenities (water, waste)	40.2%
corruption / transparency	33.7%
fulfilling employment	32.7%
security	29.5%
public transport	29.3%
air pollution	27.8%
Green spaces	26.6%
recycling	22.0%
school education	16.9%
citizen engagement	13.8%
social mobility / inclusiveness	7.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	61.0%
You are comfortable with face recognition technologies to lower crime	80.1%
You feel the availability of online information has increased your trust in authorities	73.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	51.6%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN / CITY / MEAN / GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	56.6
Recycling services are satisfactory	45.5
Public safety is not a problem	51.5
Air pollution is not a problem	32.1
Medical services provision is satisfactory	54.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	35.8

Mobility
	Score
Traffic congestion is not a problem	19.6
Public transport is satisfactory	40.5

Activities
	Score
Green spaces are satisfactory	55.1
Cultural activities (shows, bars, and museums) are satisfactory	53.6

Opportunities (Work & School)
	Score
Employment finding services are readily available	35.1
Most children have access to a good school	63.6
Lifelong learning opportunities are provided by local institutions	62.0
Businesses are creating new jobs	39.9
Minorities feel welcome	56.0

Governance
	Score
Information on local government decisions are easily accessible	52.5
Corruption of city officials is not an issue of concern	30.6
Residents contribute to decision making of local government	39.9
Residents provide feedback on local government projects	46.6

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	46.3
A website or App allows residents to easily give away unwanted items	42.2
Free public wifi has improved access to city services	41.4
CCTV cameras has made residents feel safer	60.3
A website or App allows residents to effectively monitor air pollution	38.2
Arranging medical appointments online has improved access	53.0

Mobility
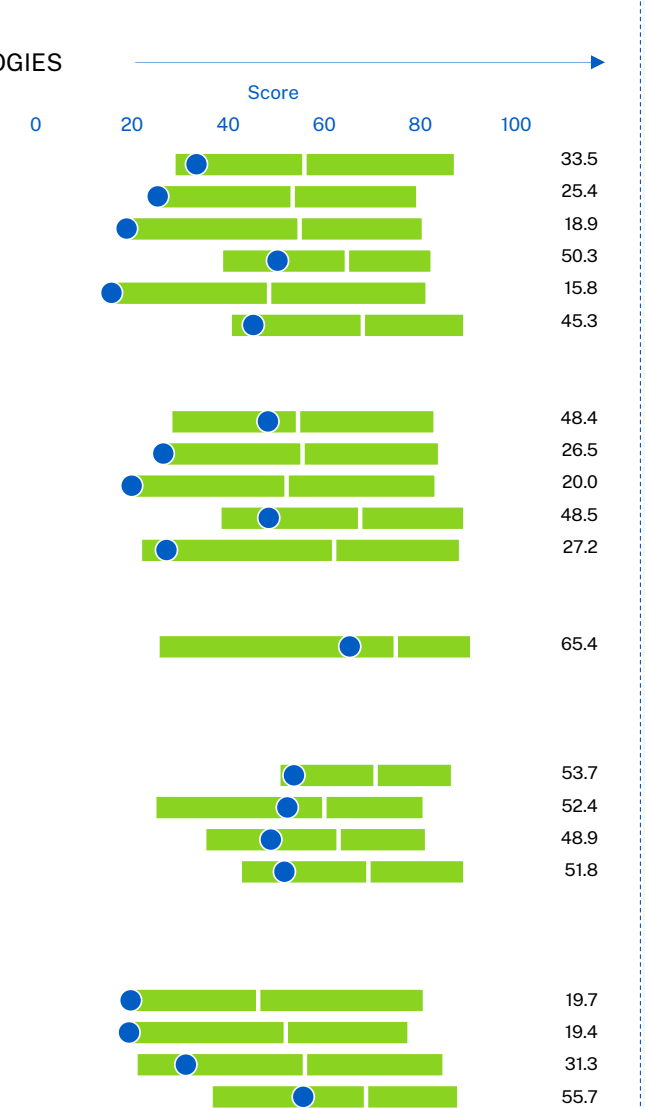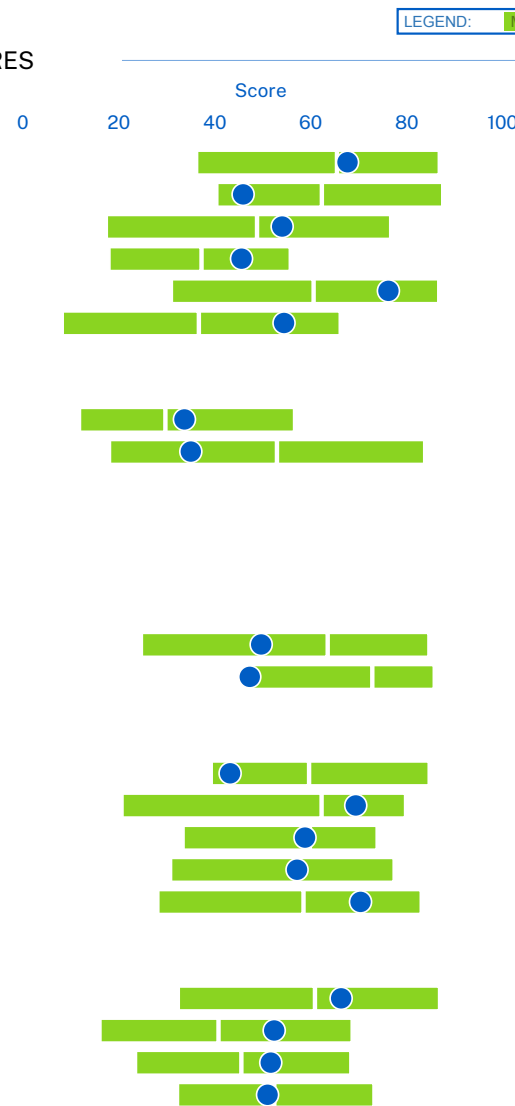|	Score
Car-sharing Apps have reduced congestion	50.5
Apps that direct you to an available parking space have reduced journey time	49.8
Bicycle hiring has reduced congestion	37.3
Online scheduling and ticket sales has made public transport easier to use	54.3
The city provides information on traffic congestion through mobile phones	44.2

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	51.6

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	56.7
IT skills are taught well in schools	58.7
Online services provided by the city has made it easier to start a new business	50.1
The current internet speed and reliability meet connectivity needs	54.9

Governance
	Score
Online public access to city finances has reduced corruption	38.2
Online voting has increased participation	40.1
An online platform where residents can propose ideas has improved city life	47.9
Processing Identification Documents online has reduced waiting times	65.9

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)	
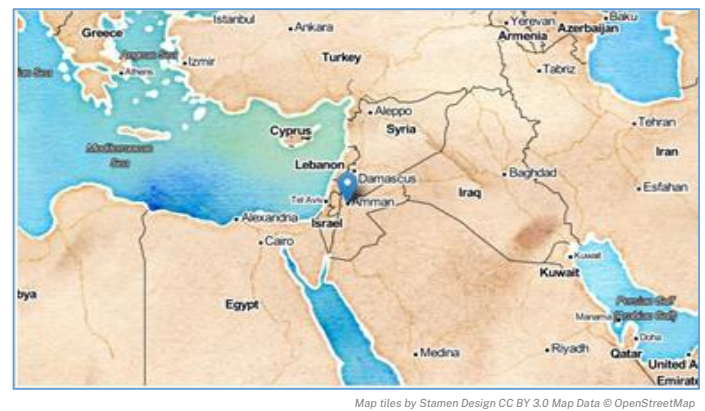
Country

Jordan	2019	2020	2021	2022	1 yr change
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.

% of respondents who chose the Priority Area

Priority Area	%
unemployment	66.2%
affordable housing	63.4%
road congestion	59.7%
corruption / transparency	48.0%
fulfilling employment	38.6%
Green spaces	32.7%
basic amenities (water, waste)	30.4%
health services	27.9%
public transport	25.5%
air pollution	24.3%
school education	16.2%
security	15.0%
recycling	13.7%
citizen engagement	8.2%
social mobility / inclusiveness	5.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	52.1%
You are comfortable with face recognition technologies to lower crime	82.9%
You feel the availability of online information has increased your trust in authorities	62.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	54.4%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	54.5
Recycling services are satisfactory	37.7
Public safety is not a problem	39.3
Air pollution is not a problem	33.4
Medical services provision is satisfactory	57.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	32.0

Mobility
	Score
Traffic congestion is not a problem	13.8
Public transport is satisfactory	39.2

Activities
	Score
Green spaces are satisfactory	37.6
Cultural activities (shows, bars, and museums) are satisfactory	54.2

Opportunities (Work & School)
	Score
Employment finding services are readily available	24.4
Most children have access to a good school	40.9
Lifelong learning opportunities are provided by local institutions	33.7
Businesses are creating new jobs	28.1
Minorities feel welcome	51.7

Governance
	Score
Information on local government decisions are easily accessible	57.9
Corruption of city officials is not an issue of concern	19.7
Residents contribute to decision making of local government	28.7
Residents provide feedback on local government projects	35.8

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	52.0
A website or App allows residents to easily give away unwanted items	47.9
Free public wifi has improved access to city services	45.2
CCTV cameras has made residents feel safer	63.6
A website or App allows residents to effectively monitor air pollution	33.3
Arranging medical appointments online has improved access	62.5

Mobility
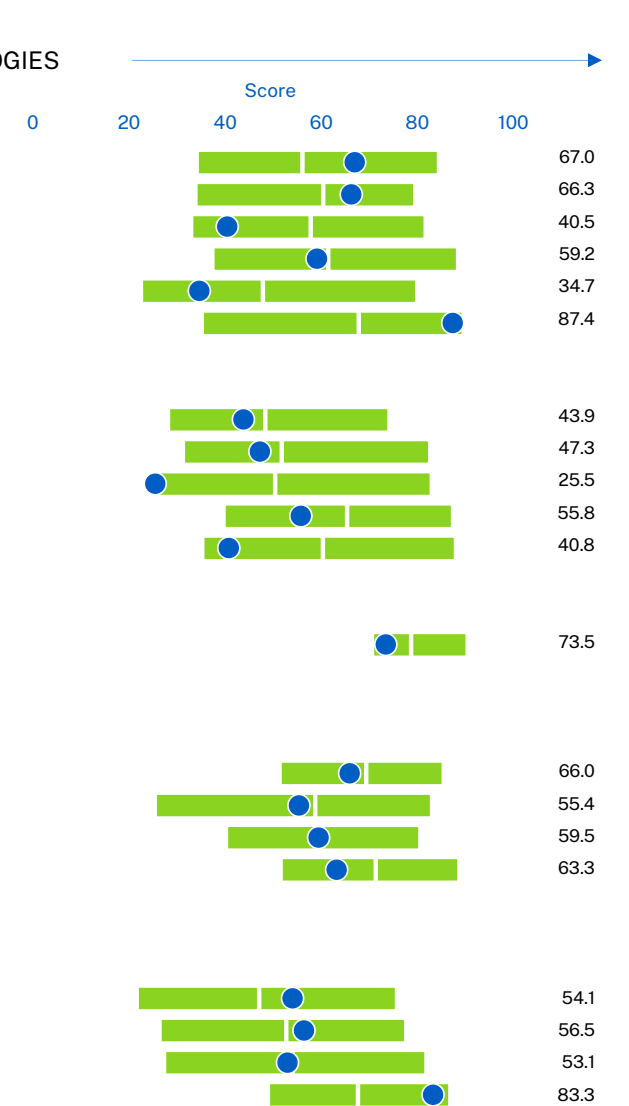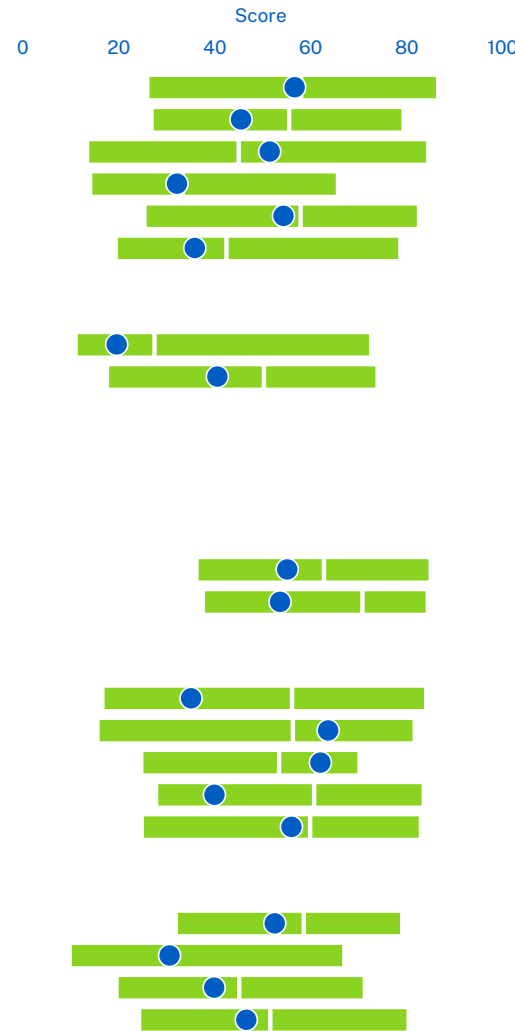|	Score
Car-sharing Apps have reduced congestion	45.7
Apps that direct you to an available parking space have reduced journey time	54.1
Bicycle hiring has reduced congestion	37.0
Online scheduling and ticket sales has made public transport easier to use	58.9
The city provides information on traffic congestion through mobile phones	55.0

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	59.3

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	58.1
IT skills are taught well in schools	47.5
Online services provided by the city has made it easier to start a new business	52.4
The current internet speed and reliability meet connectivity needs	65.4

Governance
	Score
Online public access to city finances has reduced corruption	38.4
Online voting has increased participation	46.3
An online platform where residents can propose ideas has improved city life	45.2
Processing Identification Documents online has reduced waiting times	66.5

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)	

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	74.2%
security	61.5%
health services	43.0%
public transport	35.3%
road congestion	32.8%
basic amenities (water, waste)	30.2%
Green spaces	29.1%
school education	28.1%
air pollution	26.2%
unemployment	23.5%
citizen engagement	21.1%
recycling	16.7%
social mobility / inclusiveness	16.7%
fulfilling employment	11.8%
corruption / transparency	9.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	55.7%
You are comfortable with face recognition technologies to lower crime	57.0%
You feel the availability of online information has increased your trust in authorities	58.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.5%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	54.6
Recycling services are satisfactory	59.6
Public safety is not a problem	43.2
Air pollution is not a problem	33.5
Medical services provision is satisfactory	71.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	19.7

Mobility

	Score
Traffic congestion is not a problem	25.5
Public transport is satisfactory	60.5

Activities

	Score
Green spaces are satisfactory	54.1
Cultural activities (shows, bars, and museums) are satisfactory	81.7

Opportunities (Work & School)

	Score
Employment finding services are readily available	71.2
Most children have access to a good school	71.2
Lifelong learning opportunities are provided by local institutions	62.1
Businesses are creating new jobs	65.3
Minorities feel welcome	57.9

Governance

	Score
Information on local government decisions are easily accessible	58.5
Corruption of city officials is not an issue of concern	47.2
Residents contribute to decision making of local government	50.9
Residents provide feedback on local government projects	57.1

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	45.0
A website or App allows residents to easily give away unwanted items	57.3
Free public wifi has improved access to city services	51.6
CCTV cameras has made residents feel safer	55.3
A website or App allows residents to effectively monitor air pollution	39.8
Arranging medical appointments online has improved access	66.9

Mobility

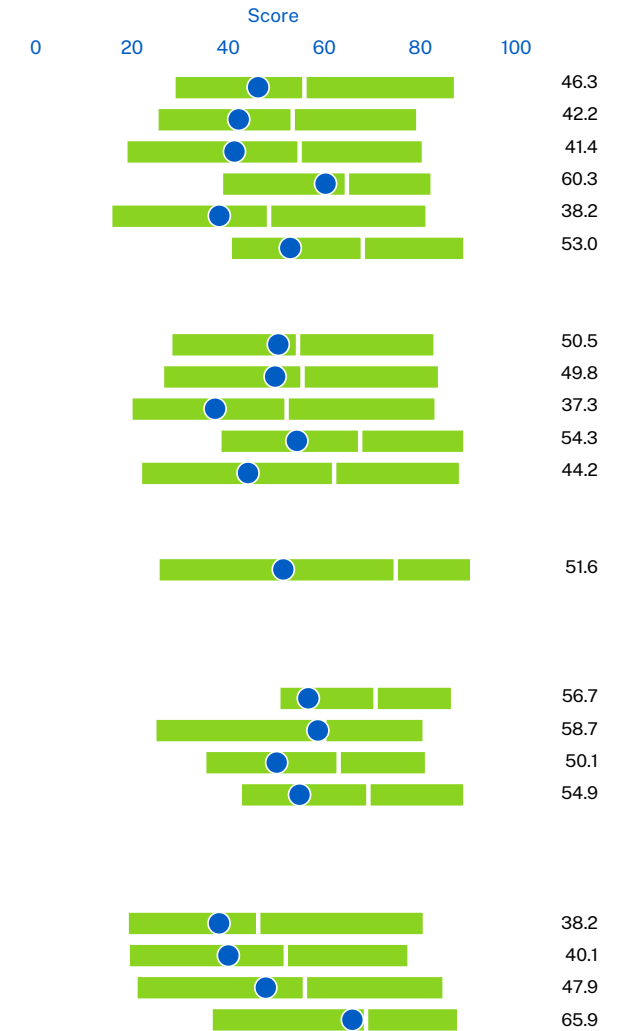|	Score
Car-sharing Apps have reduced congestion	41.5
Apps that direct you to an available parking space have reduced journey time	53.9
Bicycle hiring has reduced congestion	55.4
Online scheduling and ticket sales has made public transport easier to use	66.0
The city provides information on traffic congestion through mobile phones	54.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.7

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	72.4
IT skills are taught well in schools	52.2
Online services provided by the city has made it easier to start a new business	52.1
The current internet speed and reliability meet connectivity needs	67.4

Governance

	Score
Online public access to city finances has reduced corruption	42.4
Online voting has increased participation	52.9
An online platform where residents can propose ideas has improved city life	50.8
Processing Identification Documents online has reduced waiting times	58.9

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
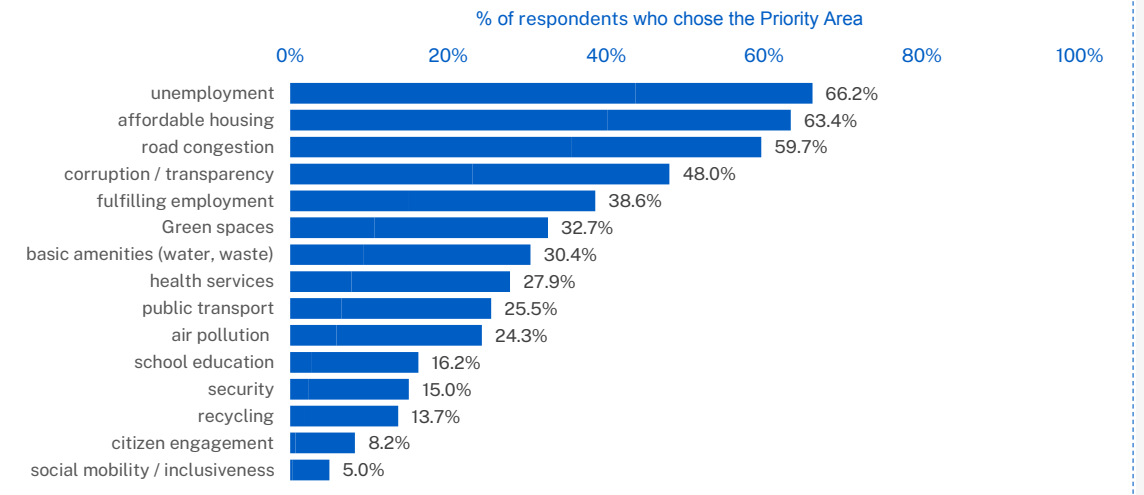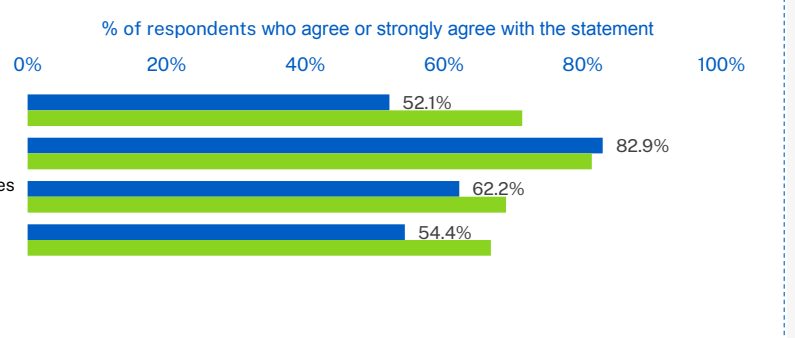
City

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

HDI   0.854
(Global Data Lab)

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

Country
Turkey

	2019	2020	2021	2022	1 yr change
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

% of respondents who chose the Priority Area

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	%
affordable housing	68.1%
unemployment	49.8%
road congestion	39.6%
Green spaces	39.4%
fulfilling employment	30.9%
health services	29.0%
basic amenities (water, waste)	28.7%
school education	27.8%
corruption / transparency	27.4%
air pollution	26.8%
public transport	25.6%
security	25.2%
recycling	20.4%
citizen engagement	7.7%
social mobility / inclusiveness	6.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement

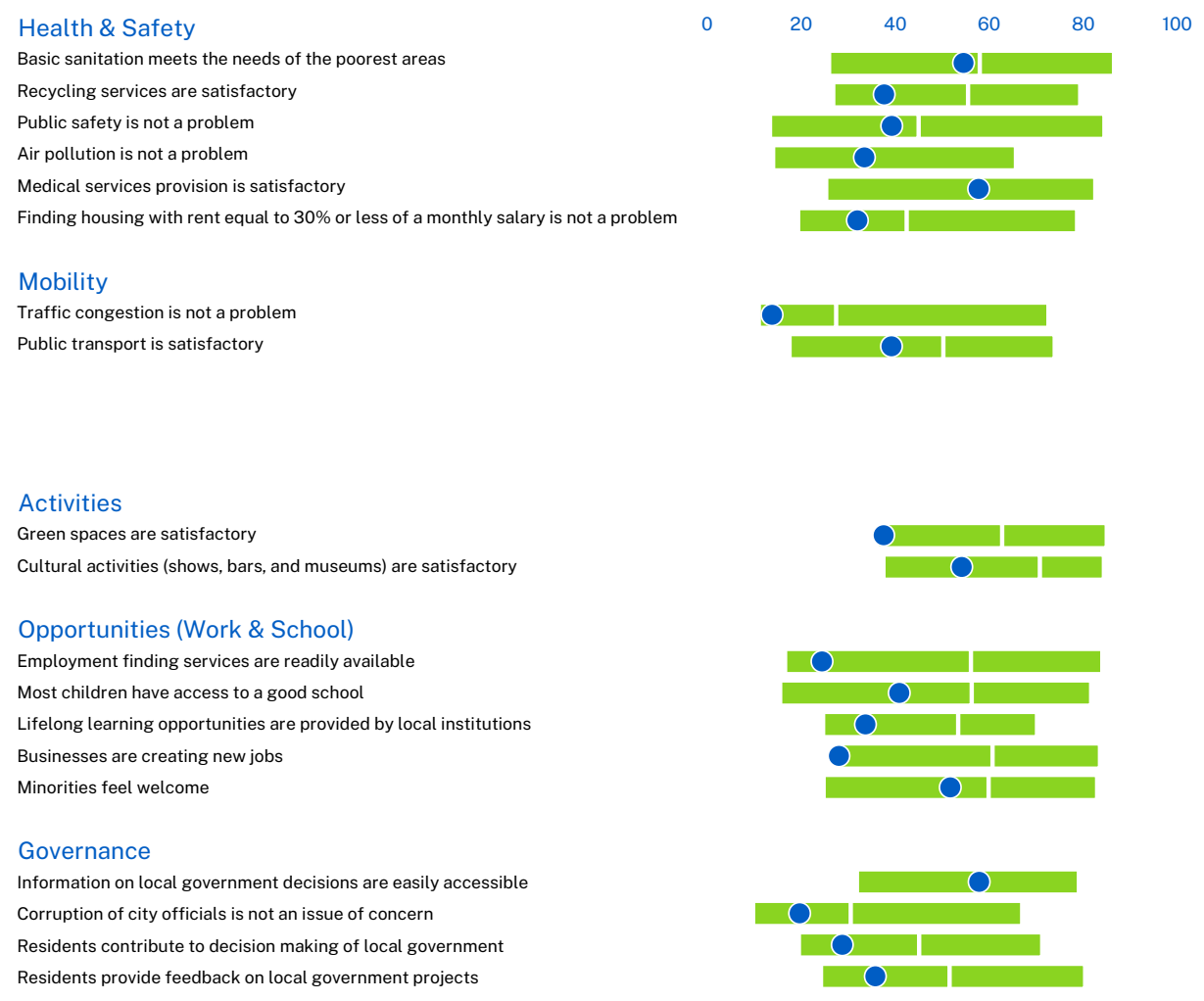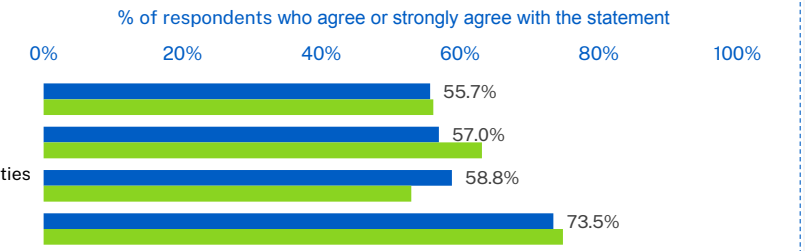| Statement	%
You are willing to concede personal data in order to improve traffic congestion	59.8%
You are comfortable with face recognition technologies to lower crime	71.3%
You feel the availability of online information has increased your trust in authorities	62.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.3%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	71.3
Recycling services are satisfactory	61.7
Public safety is not a problem	63.6
Air pollution is not a problem	41.1
Medical services provision is satisfactory	59.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	29.2

Mobility

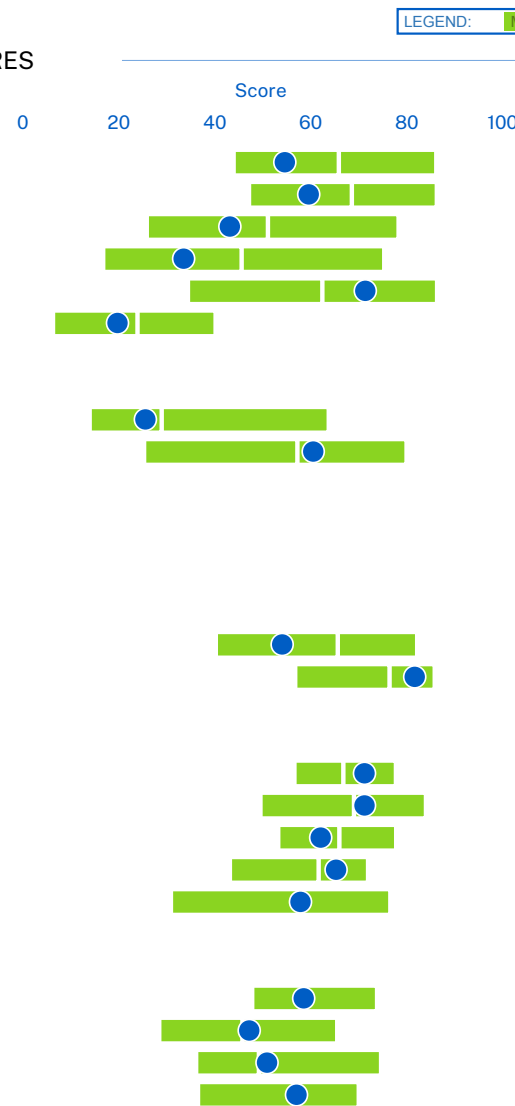|	Score
Traffic congestion is not a problem	32.8
Public transport is satisfactory	55.3

Activities

	Score
Green spaces are satisfactory	52.6
Cultural activities (shows, bars, and museums) are satisfactory	62.4

Opportunities (Work & School)

	Score
Employment finding services are readily available	60.1
Most children have access to a good school	50.9
Lifelong learning opportunities are provided by local institutions	60.3
Businesses are creating new jobs	53.7
Minorities feel welcome	51.9

Governance

	Score
Information on local government decisions are easily accessible	66.5
Corruption of city officials is not an issue of concern	38.6
Residents contribute to decision making of local government	53.3
Residents provide feedback on local government projects	57.6

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	59.5
A website or App allows residents to easily give away unwanted items	57.4
Free public wifi has improved access to city services	62.4
CCTV cameras has made residents feel safer	67.8
A website or App allows residents to effectively monitor air pollution	50.0
Arranging medical appointments online has improved access	70.9

Mobility

	Score
Car-sharing Apps have reduced congestion	41.7
Apps that direct you to an available parking space have reduced journey time	45.0
Bicycle hiring has reduced congestion	44.8
Online scheduling and ticket sales has made public transport easier to use	66.2
The city provides information on traffic congestion through mobile phones	75.2

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.1

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	70.8
IT skills are taught well in schools	58.5
Online services provided by the city has made it easier to start a new business	58.9
The current internet speed and reliability meet connectivity needs	68.9

Governance

	Score
Online public access to city finances has reduced corruption	54.0
Online voting has increased participation	45.3
An online platform where residents can propose ideas has improved city life	59.8
Processing Identification Documents online has reduced waiting times	68.5

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)	

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.

% of respondents who chose the Priority Area

Priority Area	%
security	59.0%
health services	52.9%
road congestion	47.6%
unemployment	46.3%
affordable housing	44.2%
corruption / transparency	31.9%
Green spaces	30.8%
air pollution	29.2%
basic amenities (water, waste)	28.8%
fulfilling employment	26.1%
school education	21.4%
public transport	20.6%
recycling	16.9%
citizen engagement	7.2%
social mobility / inclusiveness	7.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	54.7%
You are comfortable with face recognition technologies to lower crime	57.9%
You feel the availability of online information has increased your trust in authorities	49.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	66.5%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	51.1
Recycling services are satisfactory	41.0
Public safety is not a problem	24.8
Air pollution is not a problem	18.4
Medical services provision is satisfactory	33.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	18.0

Mobility
	Score
Traffic congestion is not a problem	13.2
Public transport is satisfactory	26.0

Activities
	Score
Green spaces are satisfactory	31.9
Cultural activities (shows, bars, and museums) are satisfactory	69.5

Opportunities (Work & School)
	Score
Employment finding services are readily available	40.1
Most children have access to a good school	39.2
Lifelong learning opportunities are provided by local institutions	39.4
Businesses are creating new jobs	39.4
Minorities feel welcome	35.9

Governance
	Score
Information on local government decisions are easily accessible	39.4
Corruption of city officials is not an issue of concern	22.8
Residents contribute to decision making of local government	23.7
Residents provide feedback on local government projects	39.4

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	46.2
A website or App allows residents to easily give away unwanted items	62.3
Free public wifi has improved access to city services	43.2
CCTV cameras has made residents feel safer	37.8
A website or App allows residents to effectively monitor air pollution	37.0
Arranging medical appointments online has improved access	64.0

Mobility
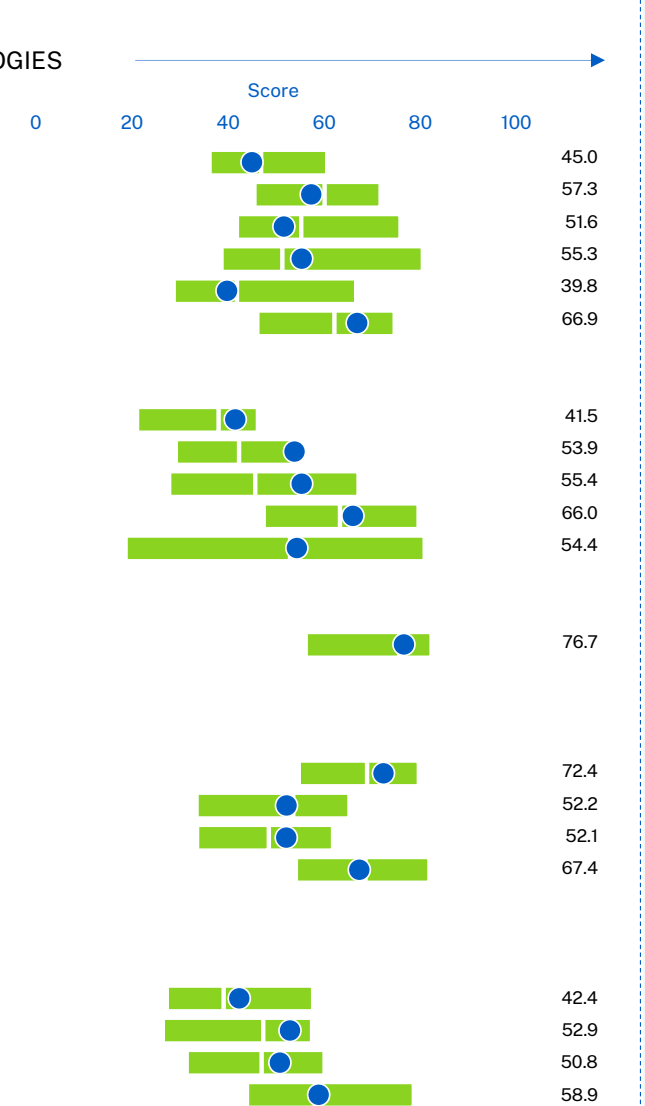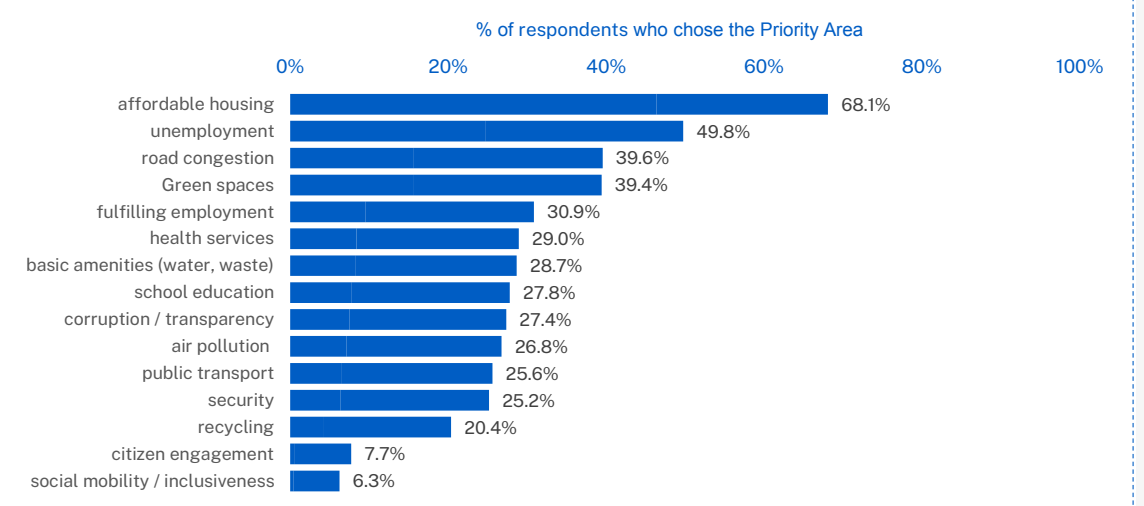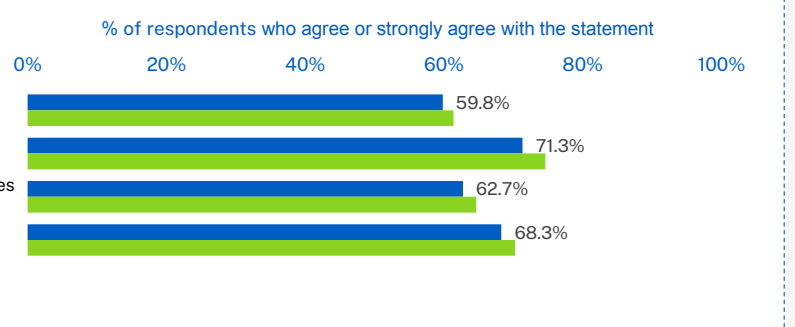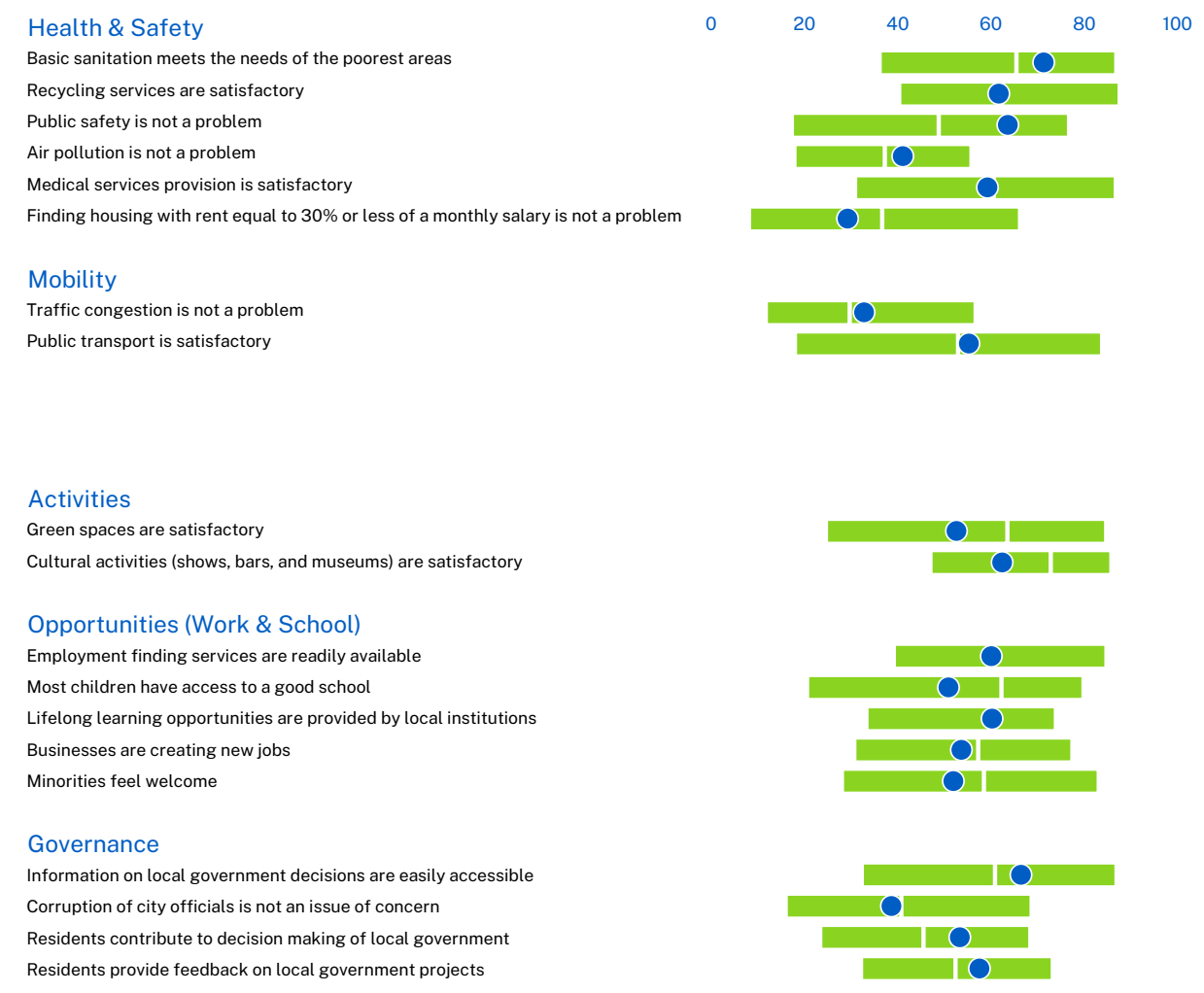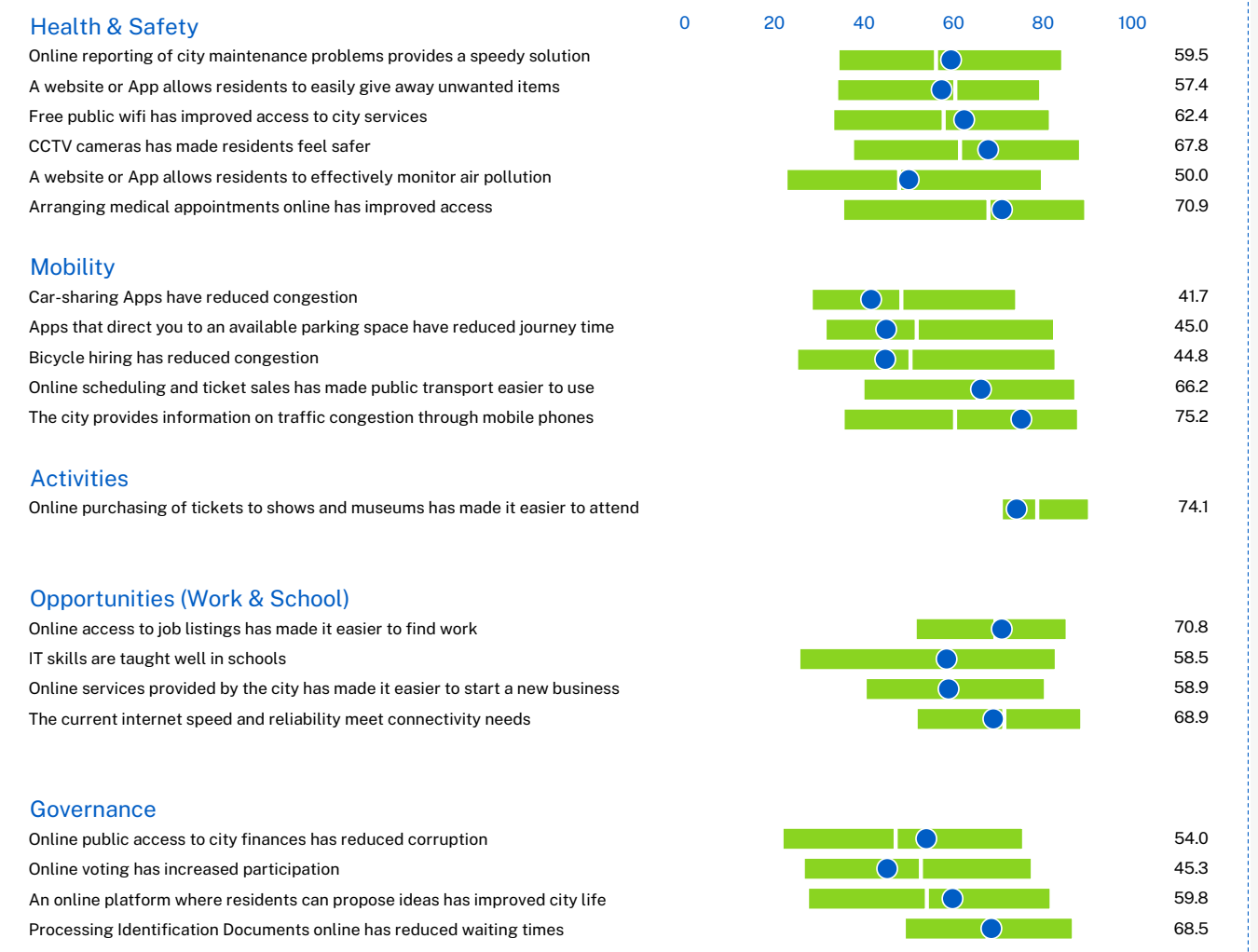|	Score
Car-sharing Apps have reduced congestion	35.7
Apps that direct you to an available parking space have reduced journey time	44.2
Bicycle hiring has reduced congestion	36.6
Online scheduling and ticket sales has made public transport easier to use	60.6
The city provides information on traffic congestion through mobile phones	54.4

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.8

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	66.0
IT skills are taught well in schools	44.2
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	51.9

Governance
	Score
Online public access to city finances has reduced corruption	31.8
Online voting has increased participation	41.0
An online platform where residents can propose ideas has improved city life	37.1
Processing Identification Documents online has reduced waiting times	73.1

Auckland

BACKGROUND INFORMATION

City

Population	1,610,000
(UN World Urbanization Prospects)	
HDI	0.951
(Global Data Lab)	

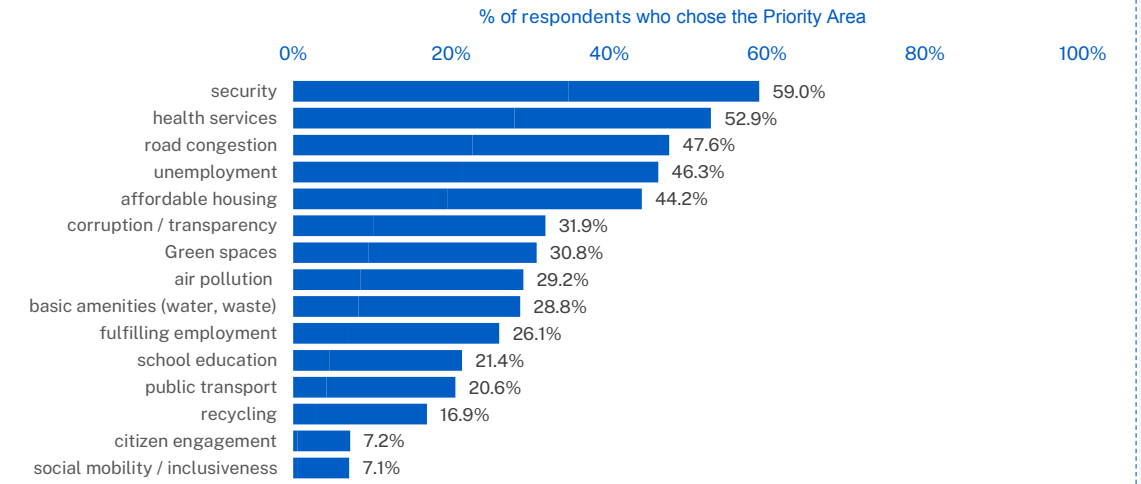Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

Country
New Zealand

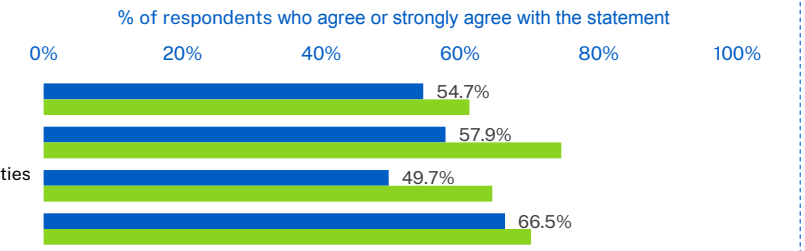|	2019	2020	2021	2022	1 yr change
HDI	0.937	0.935	0.936	0.939	+0.003
Life expectancy at birth	82.6	82.7	82.5	83.0	+0.6
Expected years of schooling	19.5	19.2	19.7	19.7	+0.0
Mean years of schooling	13.0	12.9	12.9	12.9	+0.0
GNI per capita (PPP $)	42,210	41,225	42,850	43,665	+816

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	84.5%
road congestion	64.4%
health services	52.9%
security	42.8%
unemployment	40.1%
public transport	38.7%
fulfilling employment	26.2%
school education	22.5%
basic amenities (water, waste)	19.7%
recycling	14.9%
corruption / transparency	14.6%
air pollution	13.5%
Green spaces	10.4%
social mobility / inclusiveness	9.0%
citizen engagement	8.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	67.1%
You are comfortable with face recognition technologies to lower crime	69.8%
You feel the availability of online information has increased your trust in authorities	57.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	78.4%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	66.2
Recycling services are satisfactory	72.4
Public safety is not a problem	44.2
Air pollution is not a problem	53.9
Medical services provision is satisfactory	54.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	19.9

Mobility

	Score
Traffic congestion is not a problem	14.7
Public transport is satisfactory	38.4

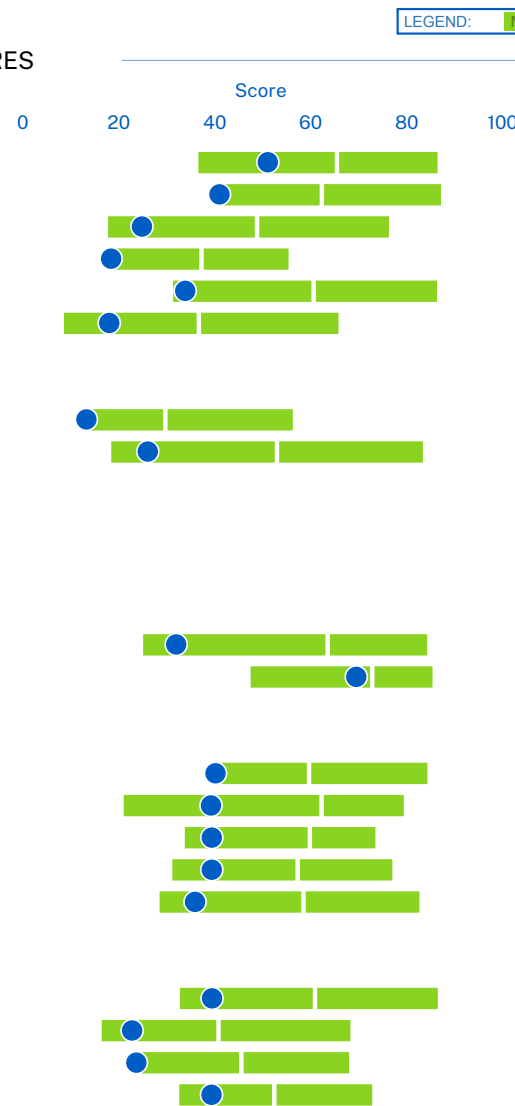### Activities

	Score
Green spaces are satisfactory	65.8
Cultural activities (shows, bars, and museums) are satisfactory	73.9

Opportunities (Work & School)

	Score
Employment finding services are readily available	65.1
Most children have access to a good school	68.5
Lifelong learning opportunities are provided by local institutions	63.8
Businesses are creating new jobs	56.0
Minorities feel welcome	56.9

Governance

	Score
Information on local government decisions are easily accessible	55.3
Corruption of city officials is not an issue of concern	50.3
Residents contribute to decision making of local government	48.6
Residents provide feedback on local government projects	59.0

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	46.6
A website or App allows residents to easily give away unwanted items	61.3
Free public wifi has improved access to city services	58.5
CCTV cameras has made residents feel safer	50.1
A website or App allows residents to effectively monitor air pollution	34.3
Arranging medical appointments online has improved access	64.5

Mobility

	Score
Car-sharing Apps have reduced congestion	40.1
Apps that direct you to an available parking space have reduced journey time	41.4
Bicycle hiring has reduced congestion	39.1
Online scheduling and ticket sales has made public transport easier to use	54.0
The city provides information on traffic congestion through mobile phones	53.3

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.9

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	74.9
IT skills are taught well in schools	52.6
Online services provided by the city has made it easier to start a new business	47.1
The current internet speed and reliability meet connectivity needs	71.1

Governance

	Score
Online public access to city finances has reduced corruption	37.7
Online voting has increased participation	53.9
An online platform where residents can propose ideas has improved city life	46.2
Processing Identification Documents online has reduced waiting times	60.8

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)	

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

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.

% of respondents who chose the Priority Area

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

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY | MEAN GROUP MAX

STRUCTURES

Score

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

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

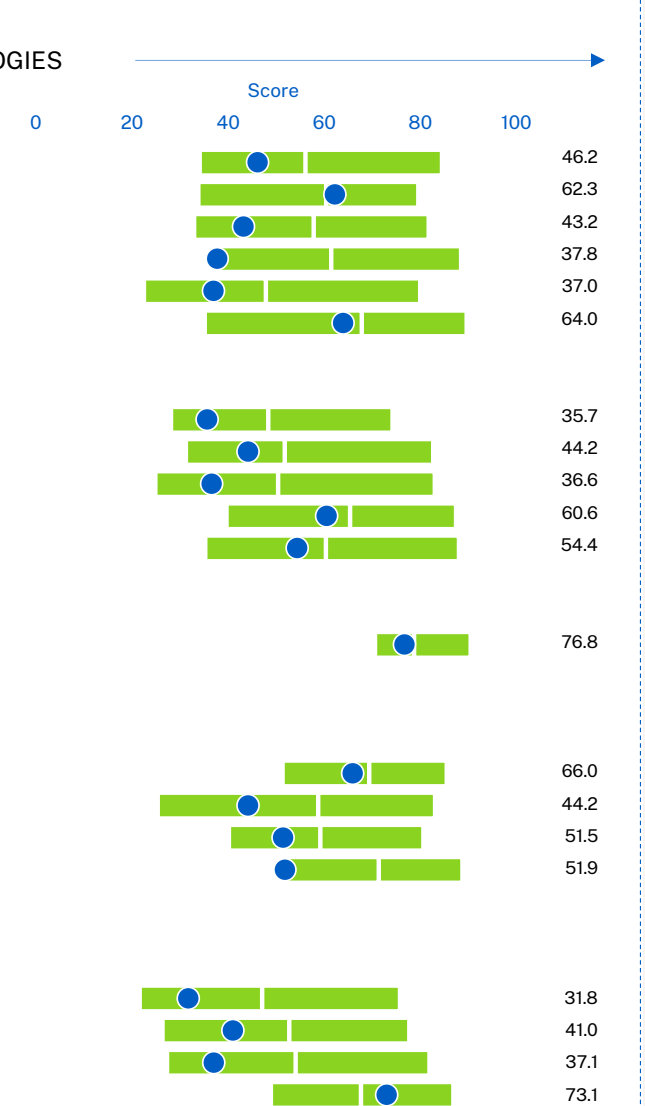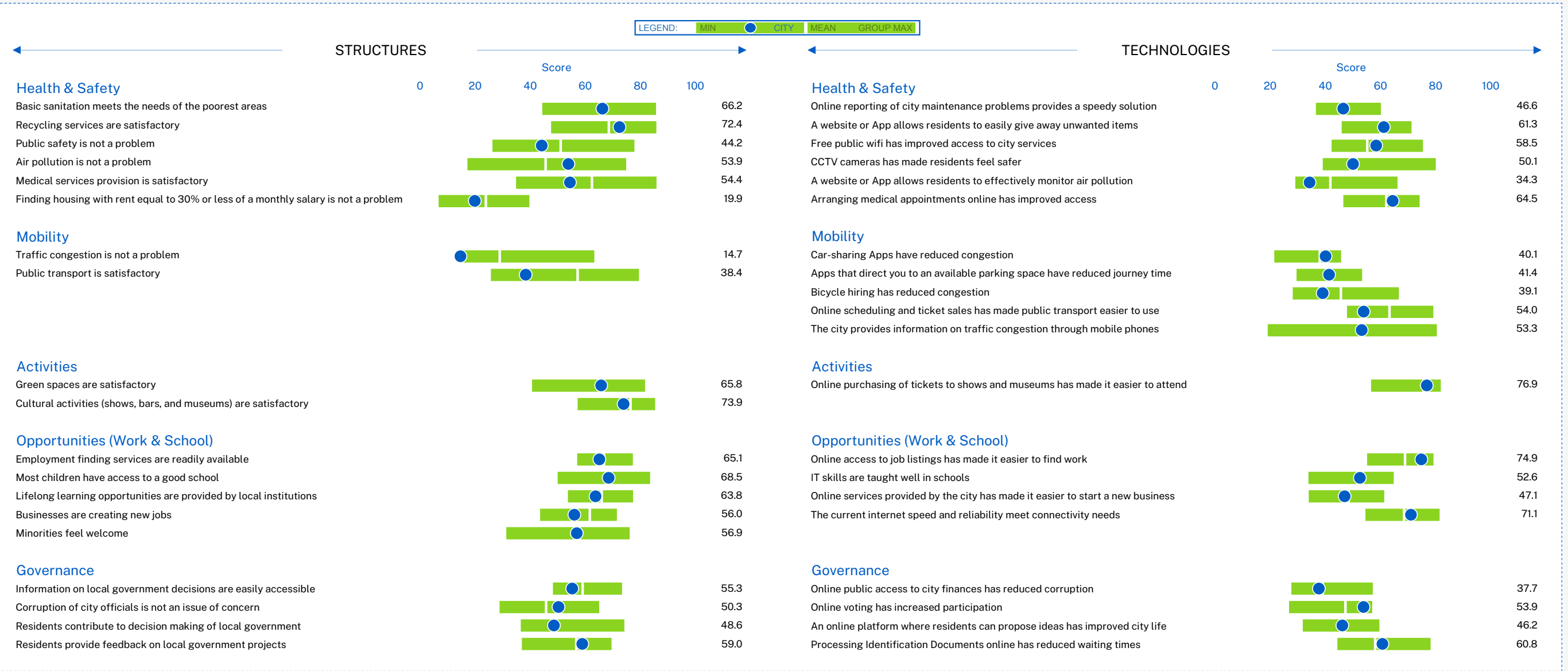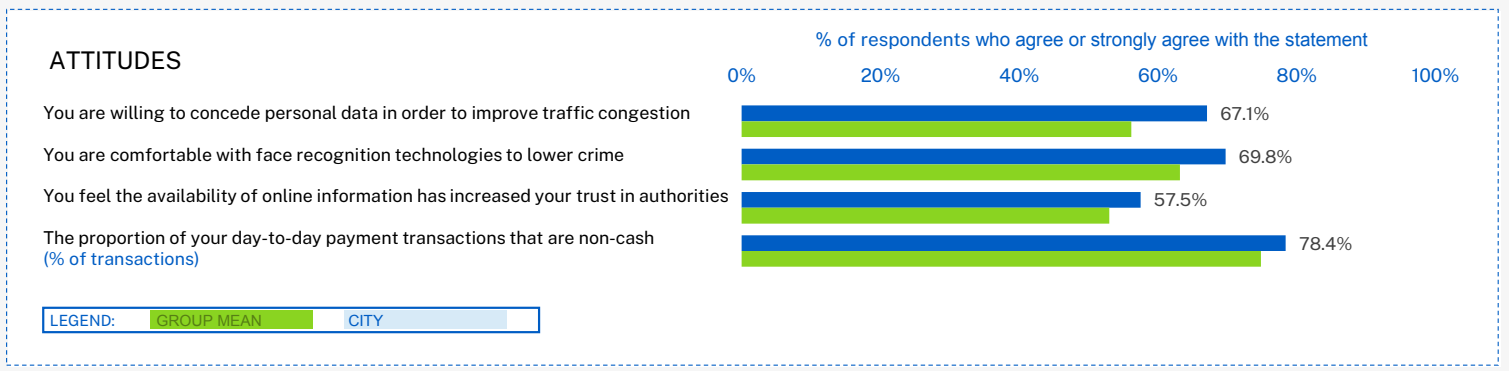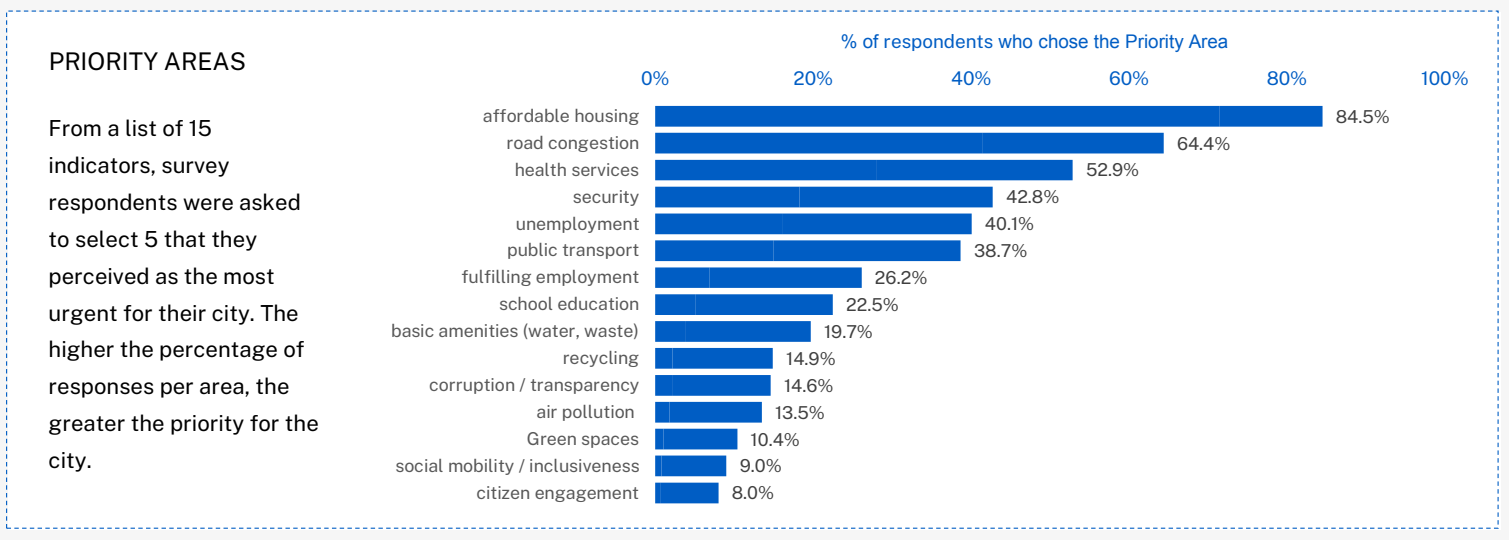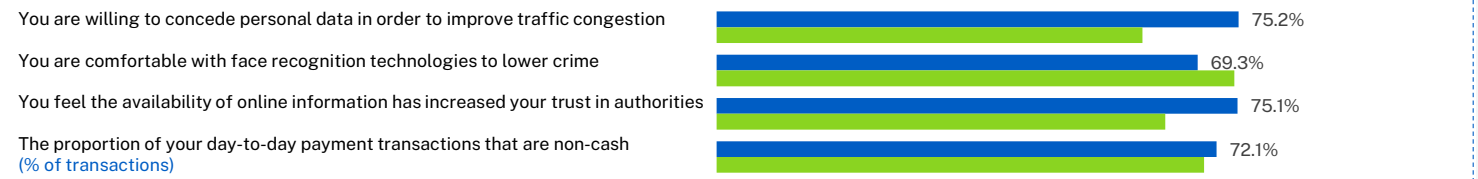|	
Car-sharing Apps have reduced congestion	61.8
Apps that direct you to an available parking space have reduced journey time	64.4
Bicycle hiring has reduced congestion	60.4
Online scheduling and ticket sales has made public transport easier to use	73.6
The city provides information on traffic congestion 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 (Eurostat)	1,640,000
HDI (Global Data Lab)	0.916

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	77.4%
security	61.9%
fulfilling employment	52.9%
health services	41.6%
unemployment	34.1%
air pollution	30.5%
road congestion	26.7%
corruption / transparency	23.3%
basic amenities (water, waste)	22.9%
school education	21.9%
Green spaces	20.5%
public transport	19.7%
recycling	15.9%
citizen engagement	12.1%
social mobility / inclusiveness	11.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	56.9%
You are comfortable with face recognition technologies to lower crime	70.9%
You feel the availability of online information has increased your trust in authorities	52.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	66.1%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	63.2
Recycling services are satisfactory	60.7
Public safety is not a problem	45.0
Air pollution is not a problem	26.3
Medical services provision is satisfactory	52.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	18.4

Mobility

	Score
Traffic congestion is not a problem	26.1
Public transport is satisfactory	59.3

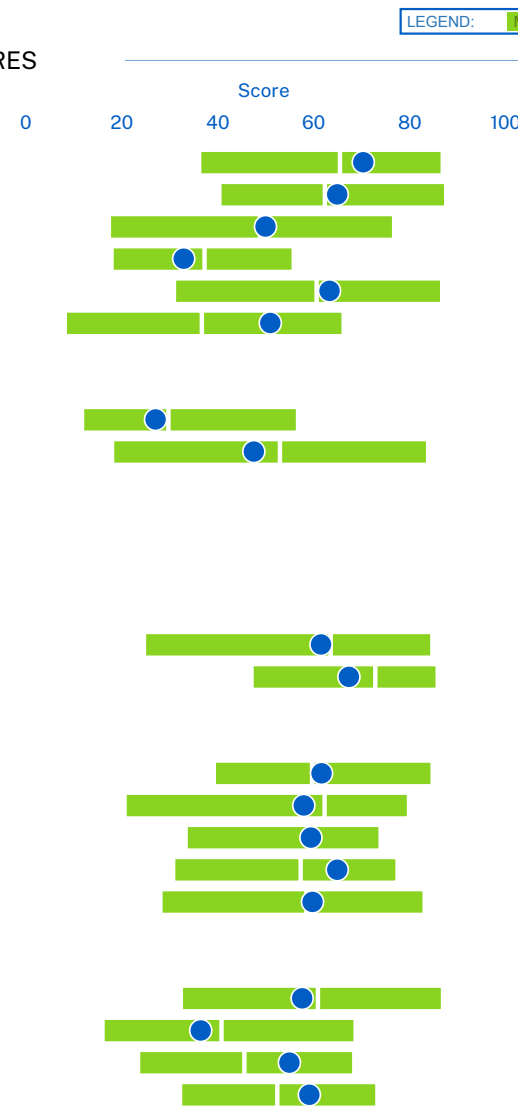### Activities

	Score
Green spaces are satisfactory	60.9
Cultural activities (shows, bars, and museums) are satisfactory	75.8

Opportunities (Work & School)

	Score
Employment finding services are readily available	73.8
Most children have access to a good school	57.9
Lifelong learning opportunities are provided by local institutions	62.6
Businesses are creating new jobs	46.8
Minorities feel welcome	54.5

Governance

	Score
Information on local government decisions are easily accessible	46.9
Corruption of city officials is not an issue of concern	32.7
Residents contribute to decision making of local government	35.4
Residents provide feedback on local government projects	41.8

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	49.1
A website or App allows residents to easily give away unwanted items	57.8
Free public wifi has improved access to city services	51.5
CCTV cameras has made residents feel safer	41.2
A website or App allows residents to effectively monitor air pollution	40.7
Arranging medical appointments online has improved access	66.8

Mobility

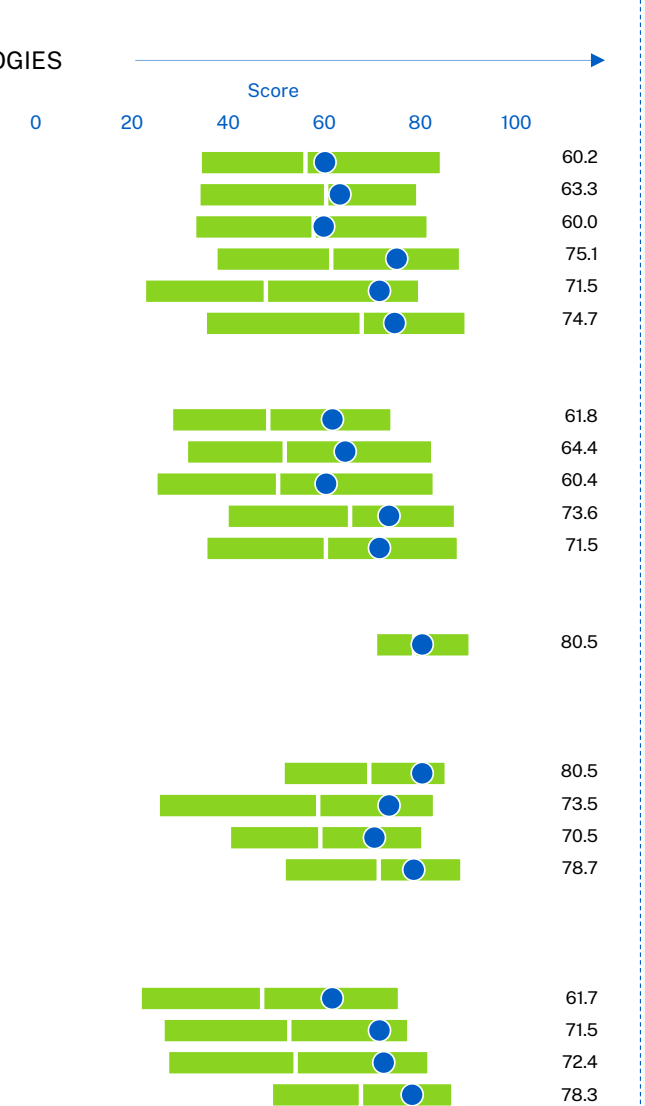|	Score
Car-sharing Apps have reduced congestion	45.9
Apps that direct you to an available parking space have reduced journey time	48.2
Bicycle hiring has reduced congestion	56.5
Online scheduling and ticket sales has made public transport easier to use	67.4
The city provides information on traffic congestion through mobile phones	61.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	79.0

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	64.2
IT skills are taught well in schools	56.4
Online services provided by the city has made it easier to start a new business	51.6
The current internet speed and reliability meet connectivity needs	71.1

Governance

	Score
Online public access to city finances has reduced corruption	37.7
Online voting has increased participation	50.8
An online platform where residents can propose ideas has improved city life	50.1
Processing Identification Documents online has reduced waiting times	59.2

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
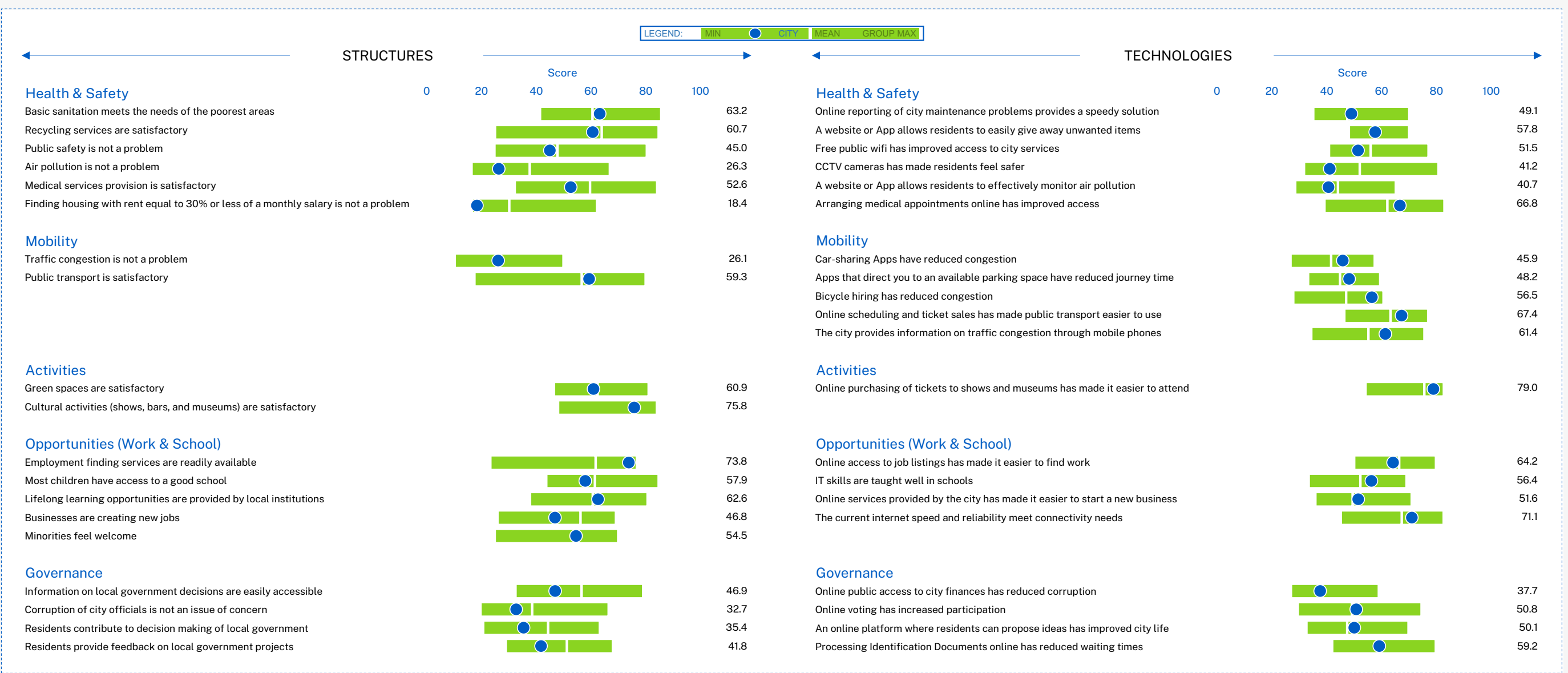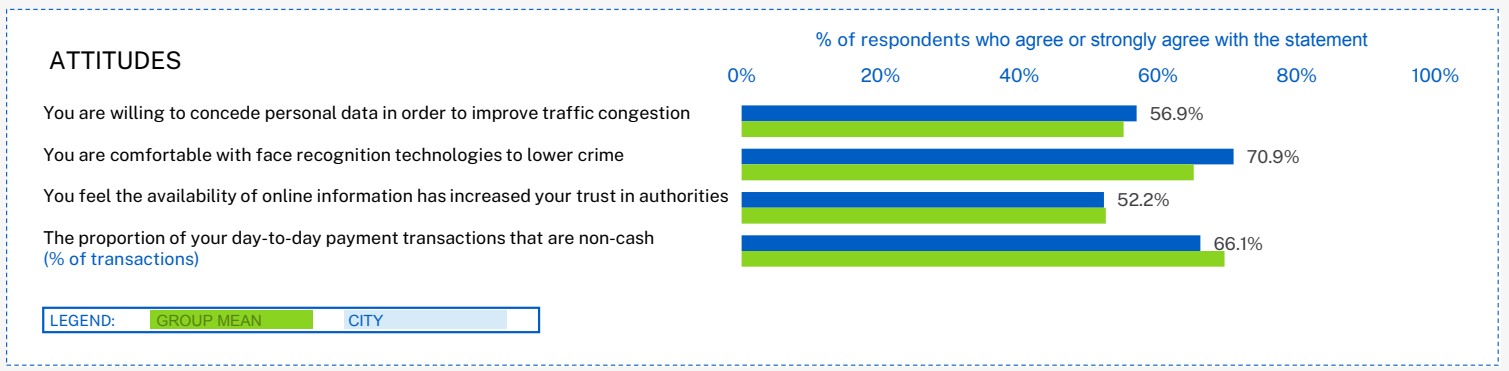from AAA to D

BACKGROUND INFORMATION

City
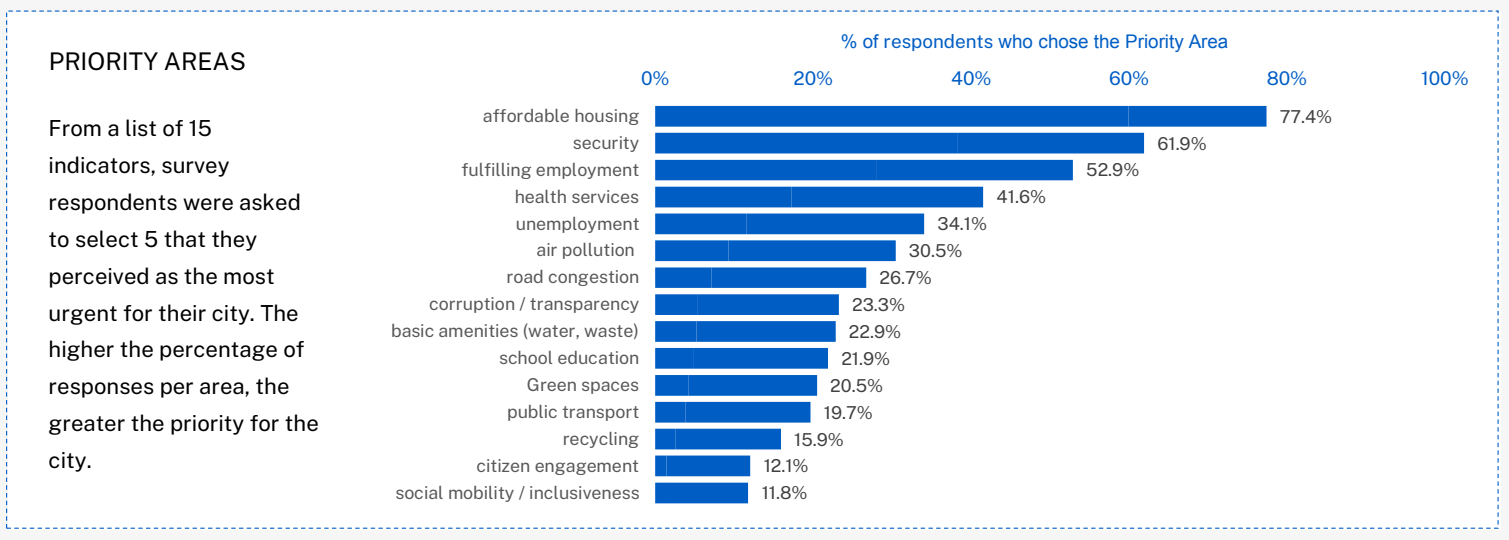
Population   20,460,000
(UN World Urbanization Prospects)
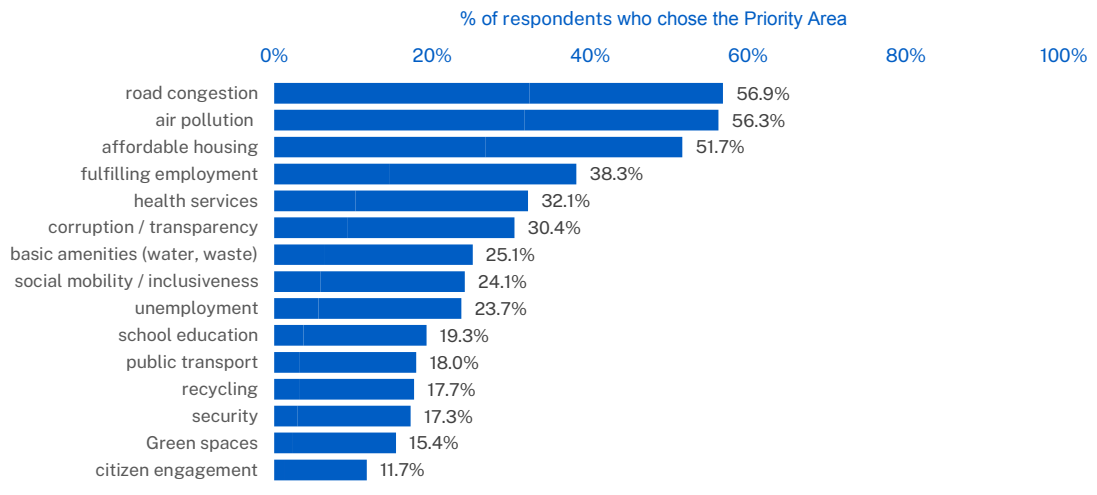
HDI   0.907
(Global Data Lab)

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
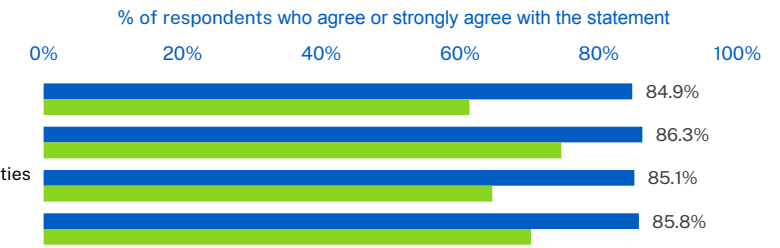
% of respondents who chose the Priority Area

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	%
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	%
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

LEGEND: MIN   CITY   MEAN   GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	34.3
Public transport is satisfactory	66.6

Activities
	Score
Green spaces are satisfactory	80.4
Cultural activities (shows, bars, and museums) are satisfactory	83.4

Opportunities (Work & School)
	Score
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
	Score
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

Score

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	88.4

Opportunities (Work & School)
	Score
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
	Score
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

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

% of respondents who chose the Priority Area

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

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	14.3
Public transport is satisfactory	27.2

Activities

	Score
Green spaces are satisfactory	36.5
Cultural activities (shows, bars, and museums) are satisfactory	58.2

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

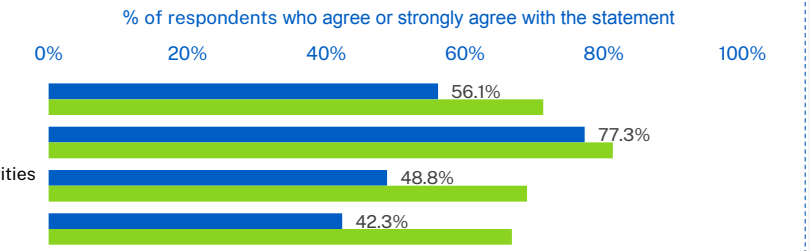|	Score
Car-sharing Apps have reduced congestion	34.1
Apps that direct you to an available parking space have reduced journey time	40.2
Bicycle hiring has reduced congestion	41.9
Online scheduling and ticket sales has made public transport easier to use	44.3
The city provides information on traffic congestion through mobile phones	51.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	60.7

Opportunities (Work & School)

	Score
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

	Score
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

C

TECHNOLOGIES

GROUP

3

All ratings range
from AAA to D

BACKGROUND INFORMATION

City

Population (Eurostat)	340,000
HDI (Global Data Lab)	0.896

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

% of respondents who chose the Priority Area

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	%
health services	80.4%
affordable housing	78.7%
unemployment	47.8%
security	36.3%
public transport	32.4%
road congestion	28.9%
school education	26.7%
fulfilling employment	23.3%
recycling	21.6%
corruption / transparency	19.6%
Green spaces	19.4%
social mobility / inclusiveness	15.0%
air pollution	14.7%
basic amenities (water, waste)	9.1%
citizen engagement	6.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement

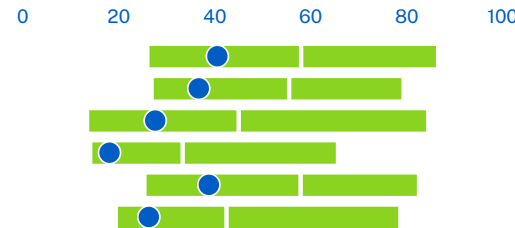| Statement	%
You are willing to concede personal data in order to improve traffic congestion	60.5%
You are comfortable with face recognition technologies to lower crime	72.5%
You feel the availability of online information has increased your trust in authorities	49.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	77.9%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN — CITY — MEAN — GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	60.4
Recycling services are satisfactory	61.9
Public safety is not a problem	44.2
Air pollution is not a problem	39.5
Medical services provision is satisfactory	39.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	23.7

Mobility

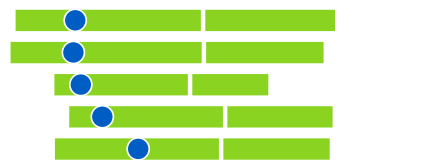|	Score
Traffic congestion is not a problem	30.0
Public transport is satisfactory	51.3

Activities

	Score
Green spaces are satisfactory	61.0
Cultural activities (shows, bars, and museums) are satisfactory	75.6

Opportunities (Work & School)

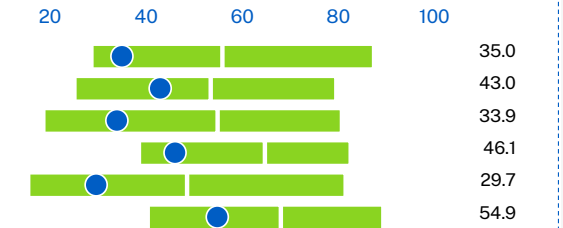|	Score
Employment finding services are readily available	69.8
Most children have access to a good school	74.8
Lifelong learning opportunities are provided by local institutions	65.5
Businesses are creating new jobs	62.3
Minorities feel welcome	50.4

Governance

	Score
Information on local government decisions are easily accessible	50.8
Corruption of city officials is not an issue of concern	37.8
Residents contribute to decision making of local government	37.5
Residents provide feedback on local government projects	47.1

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	34.4
A website or App allows residents to easily give away unwanted items	65.2
Free public wifi has improved access to city services	61.7
CCTV cameras has made residents feel safer	54.2
A website or App allows residents to effectively monitor air pollution	28.0
Arranging medical appointments online has improved access	37.2

Mobility

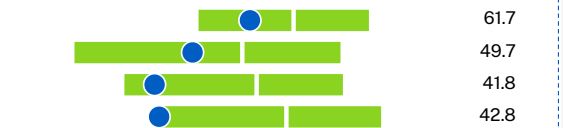|	Score
Car-sharing Apps have reduced congestion	29.5
Apps that direct you to an available parking space have reduced journey time	32.4
Bicycle hiring has reduced congestion	43.6
Online scheduling and ticket sales has made public transport easier to use	68.3
The city provides information on traffic congestion through mobile phones	44.7

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.3

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	73.4
IT skills are taught well in schools	64.5
Online services provided by the city has made it easier to start a new business	49.4
The current internet speed and reliability meet connectivity needs	66.9

Governance

	Score
Online public access to city finances has reduced corruption	33.5
Online voting has increased participation	39.1
An online platform where residents can propose ideas has improved city life	35.3
Processing Identification Documents online has reduced waiting times	52.5

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

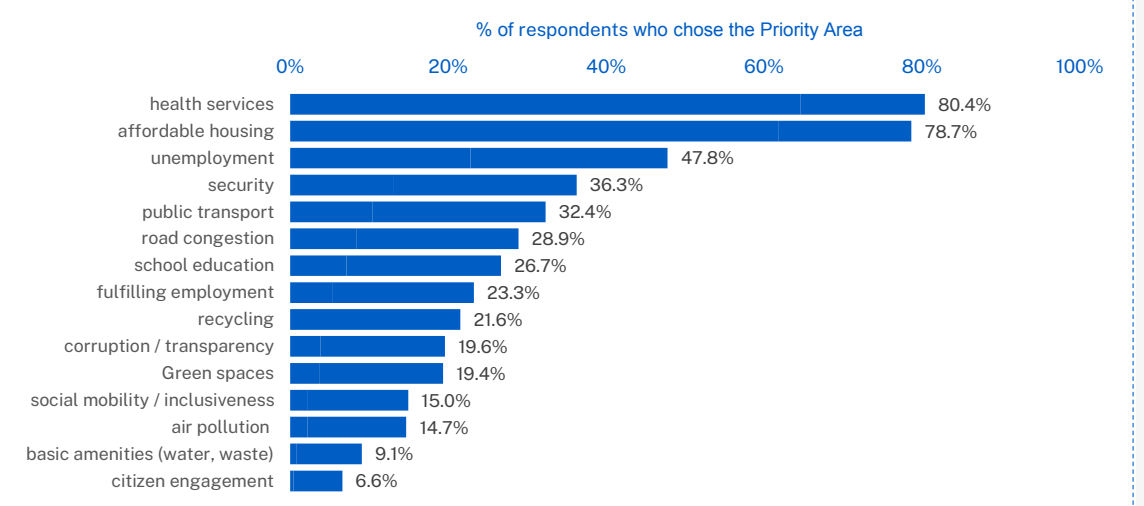**4**

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

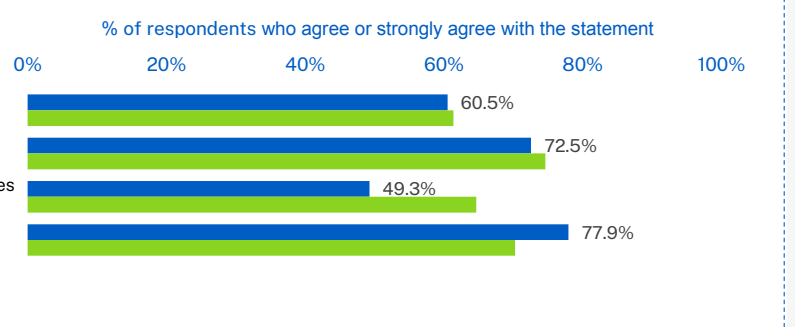| India	2019	2020	2021	2022	1 yr change
HDI	0.638	0.638	0.633	0.644	+0.011
Life expectancy at birth	70.9	70.2	67.2	67.7	+0.5
Expected years of schooling	11.4	11.7	12.0	12.6	+0.6
Mean years of schooling	6.3	6.5	6.5	6.6	+0.0
GNI per capita (PPP $)	6,554	6,090	6,542	6,951	+408

PRIORITY AREAS

% of respondents who chose the Priority Area

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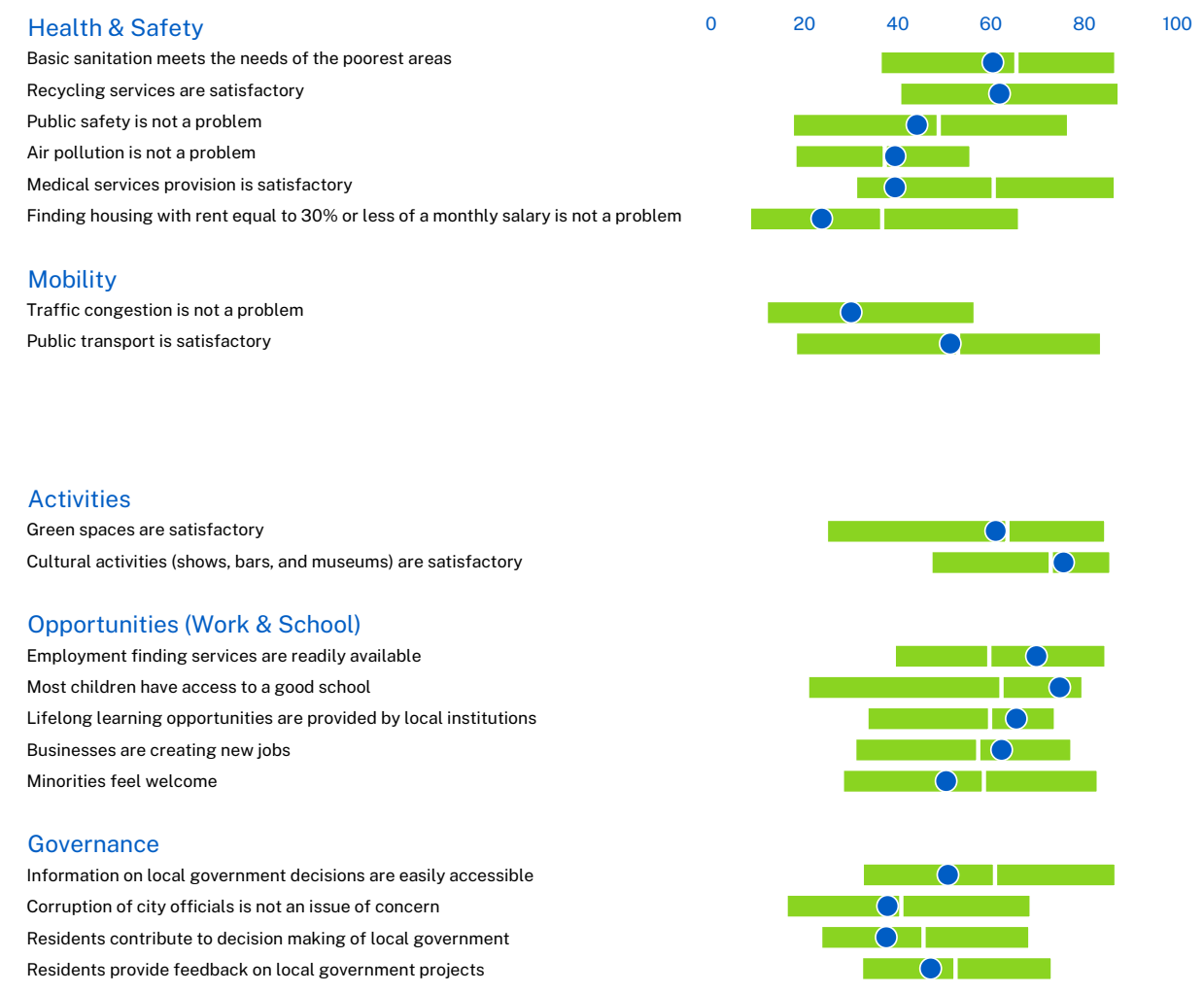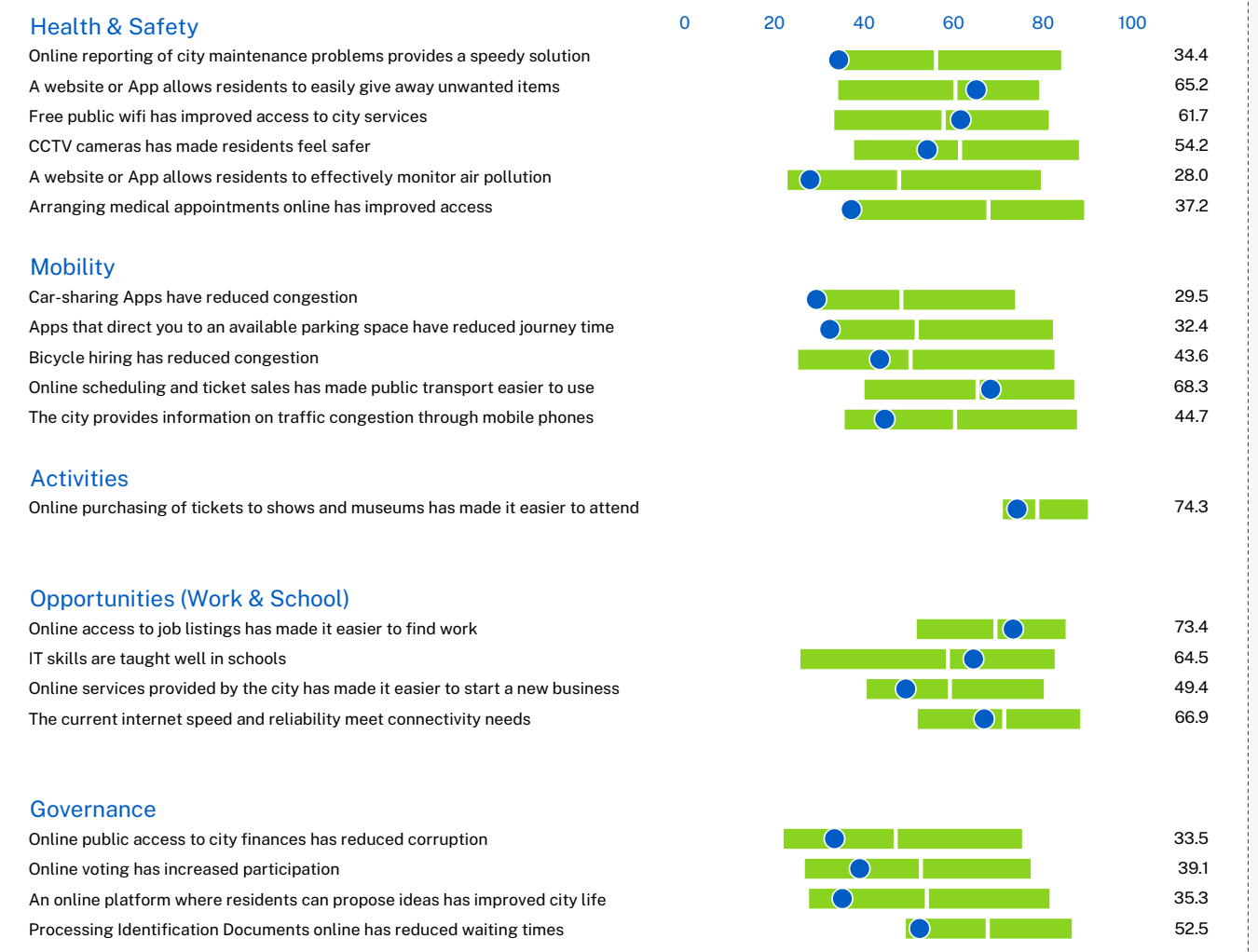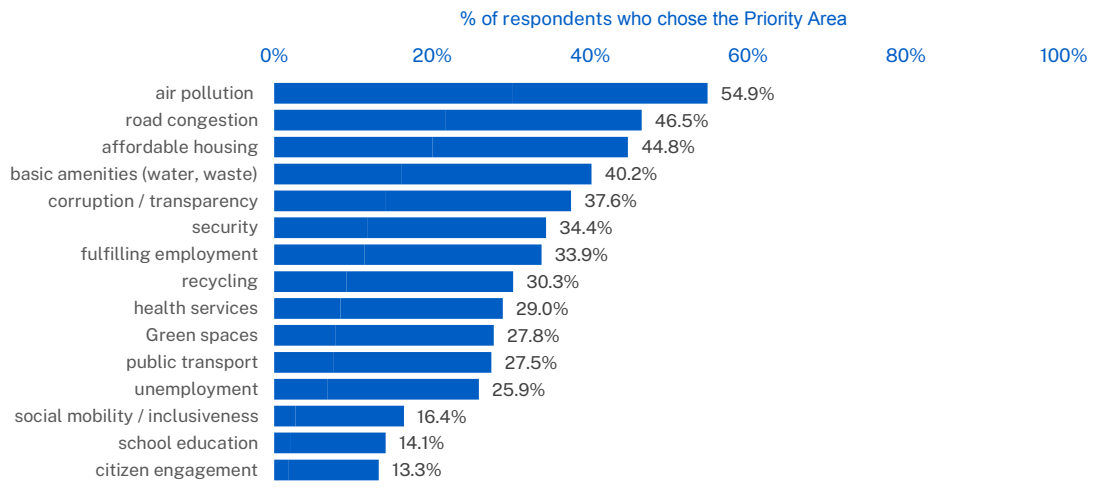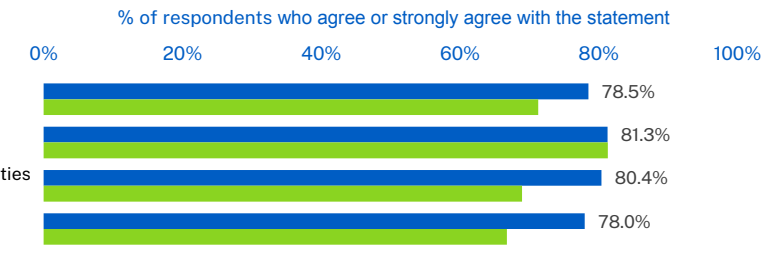
Priority Area	%
air pollution	54.9%
road congestion	46.5%
affordable housing	44.8%
basic amenities (water, waste)	40.2%
corruption / transparency	37.6%
security	34.4%
fulfilling employment	33.9%
recycling	30.3%
health services	29.0%
Green spaces	27.8%
public transport	27.5%
unemployment	25.9%
social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

ATTITUDES

% of respondents who agree or strongly agree with the statement

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

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	28.7
Public transport is satisfactory	70.6

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

	Score
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

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

Opportunities (Work & School)

	Score
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

	Score
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

BBB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population	3,670,000
(Eurostat)	
HDI	0.959
(Global Data Lab)	
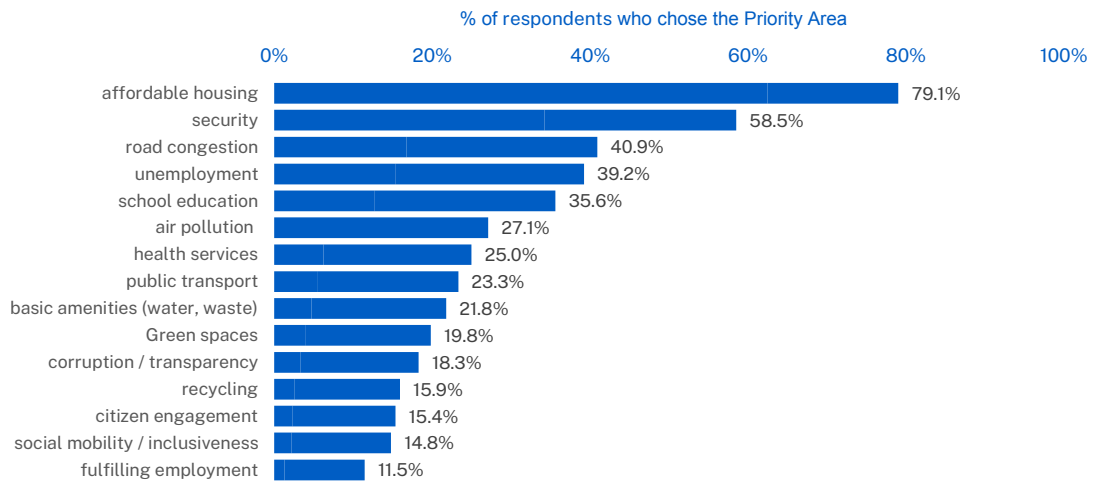
Country
Germany

	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.

% of respondents who chose the Priority Area

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

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	63.8%
You feel the availability of online information has increased your trust in authorities	48.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	64.3%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score 0 20 40 60 80 100

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 20 40 60 80 100

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 *(Eurostat)*	350,000
HDI *(Global Data Lab)*	0.932

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

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.
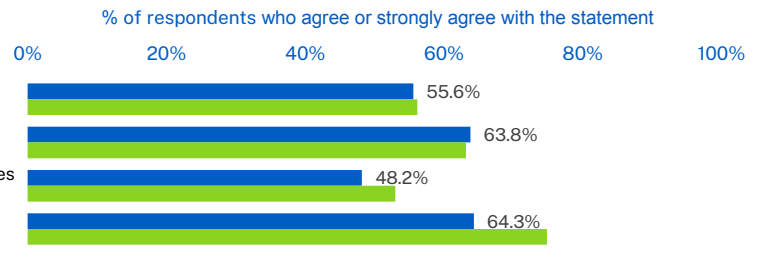
% of respondents who chose the Priority Area

Area	%
affordable housing	72.1%
fulfilling employment	67.9%
unemployment	47.9%
security	46.6%
health services	45.5%
citizen engagement	23.1%
corruption / transparency	22.0%
school education	21.7%
public transport	18.9%
road congestion	18.5%
Green spaces	17.7%
social mobility / inclusiveness	16.3%
recycling	13.1%
air pollution	13.1%
basic amenities (water, waste)	12.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	57.3%
You are comfortable with face recognition technologies to lower crime	66.8%
You feel the availability of online information has increased your trust in authorities	57.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	63.7%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY — MEAN — GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	70.9
Recycling services are satisfactory	75.2
Public safety is not a problem	55.9
Air pollution is not a problem	44.8
Medical services provision is satisfactory	61.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	23.1

Mobility
	Score
Traffic congestion is not a problem	43.0
Public transport is satisfactory	80.0

Activities
	Score
Green spaces are satisfactory	80.6
Cultural activities (shows, bars, and museums) are satisfactory	84.1

Opportunities (Work & School)
	Score
Employment finding services are readily available	75.5
Most children have access to a good school	72.6
Lifelong learning opportunities are provided by local institutions	75.5
Businesses are creating new jobs	52.9
Minorities feel welcome	63.3

Governance
	Score
Information on local government decisions are easily accessible	59.3
Corruption of city officials is not an issue of concern	46.7
Residents contribute to decision making of local government	49.4
Residents provide feedback on local government projects	54.1

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	52.6
A website or App allows residents to easily give away unwanted items	54.2
Free public wifi has improved access to city services	56.9
CCTV cameras has made residents feel safer	46.2
A website or App allows residents to effectively monitor air pollution	40.5
Arranging medical appointments online has improved access	64.1

Mobility
	Score
Car-sharing Apps have reduced congestion	45.0
Apps that direct you to an available parking space have reduced journey time	44.4
Bicycle hiring has reduced congestion	57.4
Online scheduling and ticket sales has made public transport easier to use	69.3
The city provides information on traffic congestion through mobile phones	59.3

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	79.7

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	64.2
IT skills are taught well in schools	58.1
Online services provided by the city has made it easier to start a new business	47.5
The current internet speed and reliability meet connectivity needs	76.0

Governance
	Score
Online public access to city finances has reduced corruption	38.6
Online voting has increased participation	45.1
An online platform where residents can propose ideas has improved city life	52.8
Processing Identification Documents online has reduced waiting times	64.2

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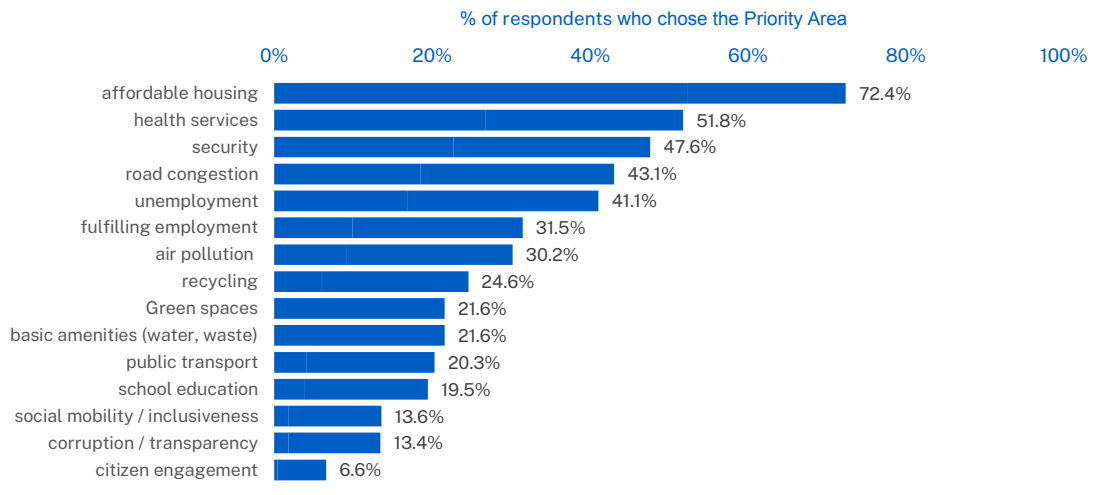
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

% of respondents who chose the Priority Area

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	%
affordable housing	72.4%
health services	51.8%
security	47.6%
road congestion	43.1%
unemployment	41.1%
fulfilling employment	31.5%
air pollution	30.2%
recycling	24.6%
Green spaces	21.6%
basic amenities (water, waste)	21.6%
public transport	20.3%
school education	19.5%
social mobility / inclusiveness	13.6%
corruption / transparency	13.4%
citizen engagement	6.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	58.5%
You are comfortable with face recognition technologies to lower crime	71.0%
You feel the availability of online information has increased your trust in authorities	51.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.1%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	55.4
Recycling services are satisfactory	61.9
Public safety is not a problem	34.3
Air pollution is not a problem	34.2
Medical services provision is satisfactory	51.1
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	32.1

Mobility

	Score
Traffic congestion is not a problem	27.5
Public transport is satisfactory	48.9

Activities

	Score
Green spaces are satisfactory	57.8
Cultural activities (shows, bars, and museums) are satisfactory	71.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	59.2
Most children have access to a good school	57.2
Lifelong learning opportunities are provided by local institutions	54.4
Businesses are creating new jobs	57.1
Minorities feel welcome	61.6

Governance

	Score
Information on local government decisions are easily accessible	54.8
Corruption of city officials is not an issue of concern	40.6
Residents contribute to decision making of local government	44.4
Residents provide feedback on local government projects	51.6

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	43.3
A website or App allows residents to easily give away unwanted items	60.3
Free public wifi has improved access to city services	58.2
CCTV cameras has made residents feel safer	57.8
A website or App allows residents to effectively monitor air pollution	37.9
Arranging medical appointments online has improved access	50.1

Mobility

	Score
Car-sharing Apps have reduced congestion	41.9
Apps that direct you to an available parking space have reduced journey time	46.8
Bicycle hiring has reduced congestion	50.5
Online scheduling and ticket sales has made public transport easier to use	60.3
The city provides information on traffic congestion through mobile phones	51.2

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	72.3

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	64.5
IT skills are taught well in schools	60.0
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	62.9

Governance

	Score
Online public access to city finances has reduced corruption	45.0
Online voting has increased participation	56.9
An online platform where residents can propose ideas has improved city life	45.1
Processing Identification Documents online has reduced waiting times	55.4

Bogota

SMART CITY RANKING

127

Out of 142

▲

129 in 2023
Out of 141

SMART CITY RATING

D

D in 2023

FACTOR RATINGS

D

STRUCTURES

D

TECHNOLOGIES

GROUP

4
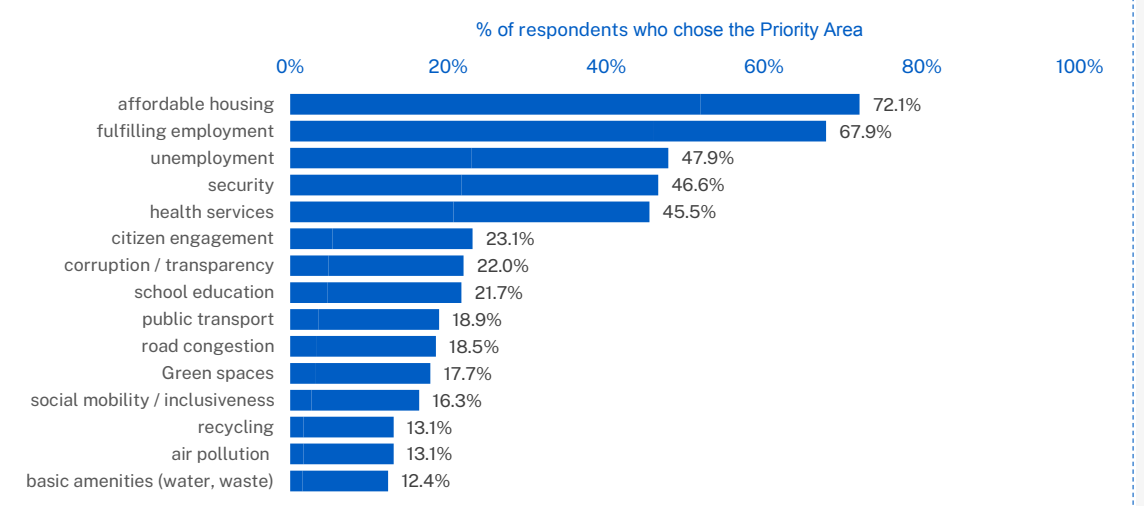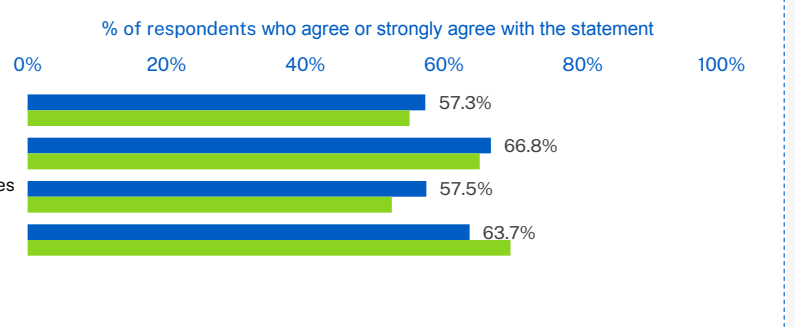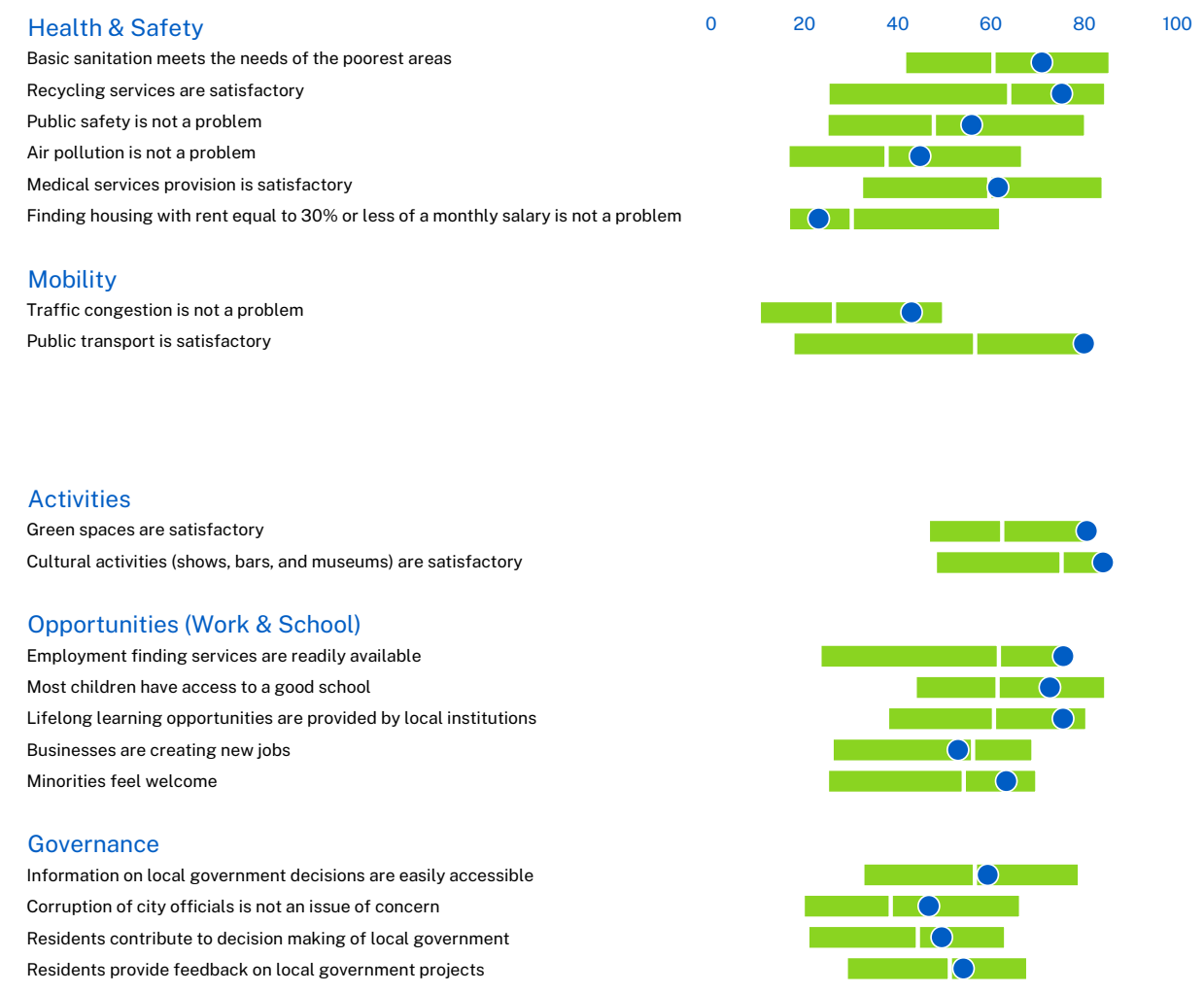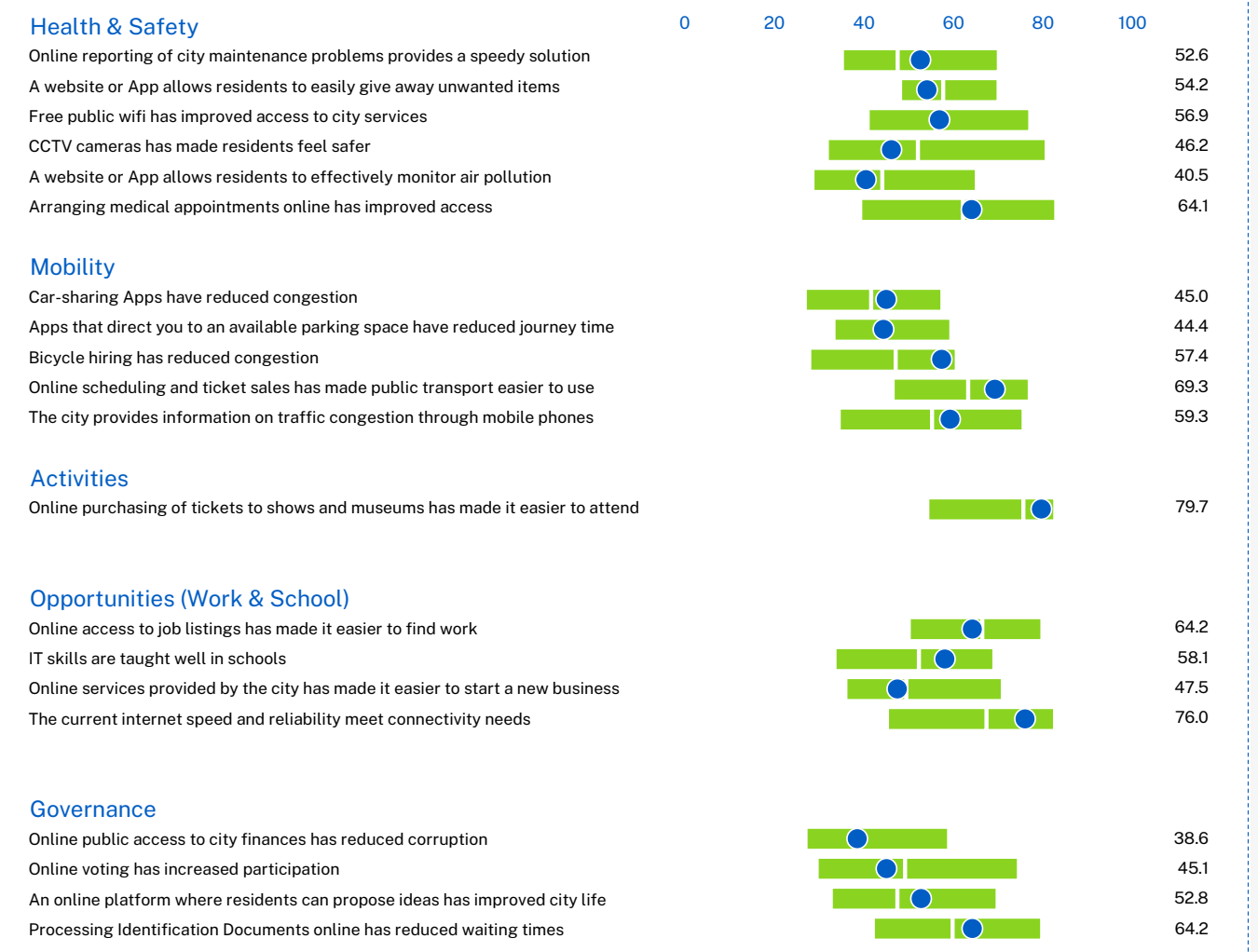
All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population	7,180,000
(UN Data)	
HDI	0.797
(Global Data Lab)	
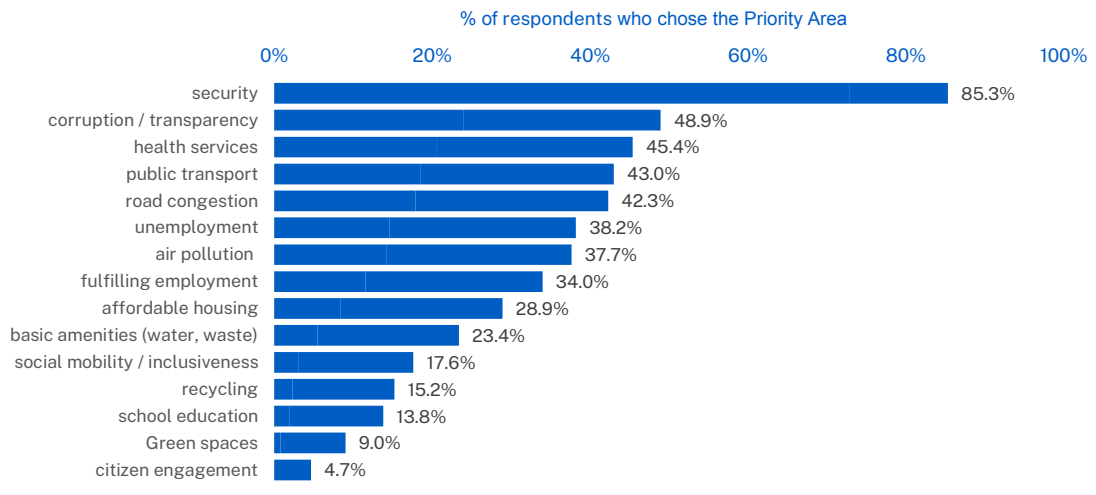
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

Country
Colombia

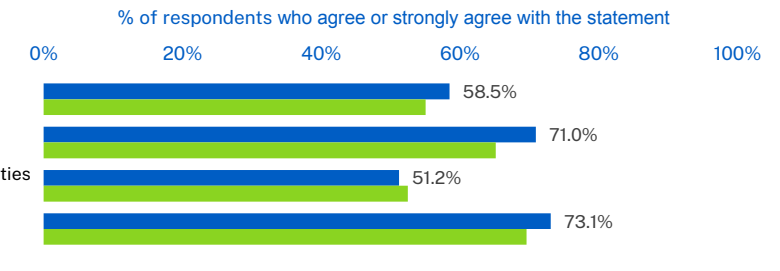|	2019	2020	2021	2022	1 yr change
HDI	0.768	0.756	0.752	0.758	+0.006
Life expectancy at birth	76.8	74.8	72.8	73.7	+0.8
Expected years of schooling	14.5	14.4	14.4	14.4	+0.0
Mean years of schooling	8.6	8.9	8.9	8.9	+0.0
GNI per capita (PPP $)	14,294	13,220	14,403	15,014	+611

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.

% of respondents who chose the Priority Area

Priority Area	%
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

% of respondents who agree or strongly agree with the statement

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

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY   MEAN   GROUP MAX

STRUCTURES

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

TECHNOLOGIES

Score

Health & Safety

Online reporting of city maintenance problems provides a speedy solution	38.3
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

Mobility

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	60.4
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

BACKGROUND INFORMATION

City

Population   400,000
(Eurostat)

HDI   0.924
(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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	60.0%
security	58.4%
air pollution	57.0%
road congestion	53.9%
fulfilling employment	40.4%
unemployment	35.4%
public transport	28.1%
recycling	21.3%
social mobility / inclusiveness	17.7%
Green spaces	17.5%
health services	17.4%
corruption / transparency	16.0%
basic amenities (water, waste)	15.6%
citizen engagement	15.0%
school education	12.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	58.6%
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	48.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	61.3%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN   ● CITY   MEAN   GROUP MAX

STRUCTURES
Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	64.9
Recycling services are satisfactory	64.0
Public safety is not a problem	35.6
Air pollution is not a problem	22.1
Medical services provision is satisfactory	64.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	62.2

Mobility

	Score
Traffic congestion is not a problem	22.7
Public transport is satisfactory	52.9

Activities

	Score
Green spaces are satisfactory	66.3
Cultural activities (shows, bars, and museums) are satisfactory	75.8

Opportunities (Work & School)

	Score
Employment finding services are readily available	38.9
Most children have access to a good school	62.7
Lifelong learning opportunities are provided by local institutions	58.8
Businesses are creating new jobs	45.9
Minorities feel welcome	51.9

Governance

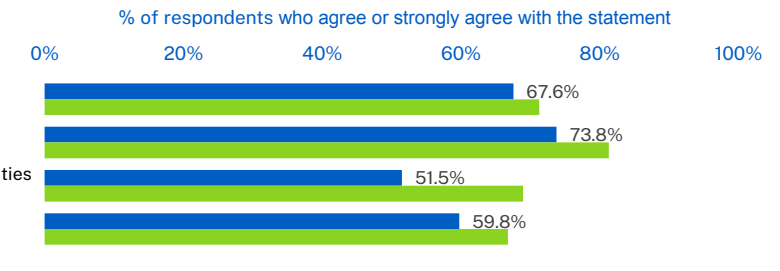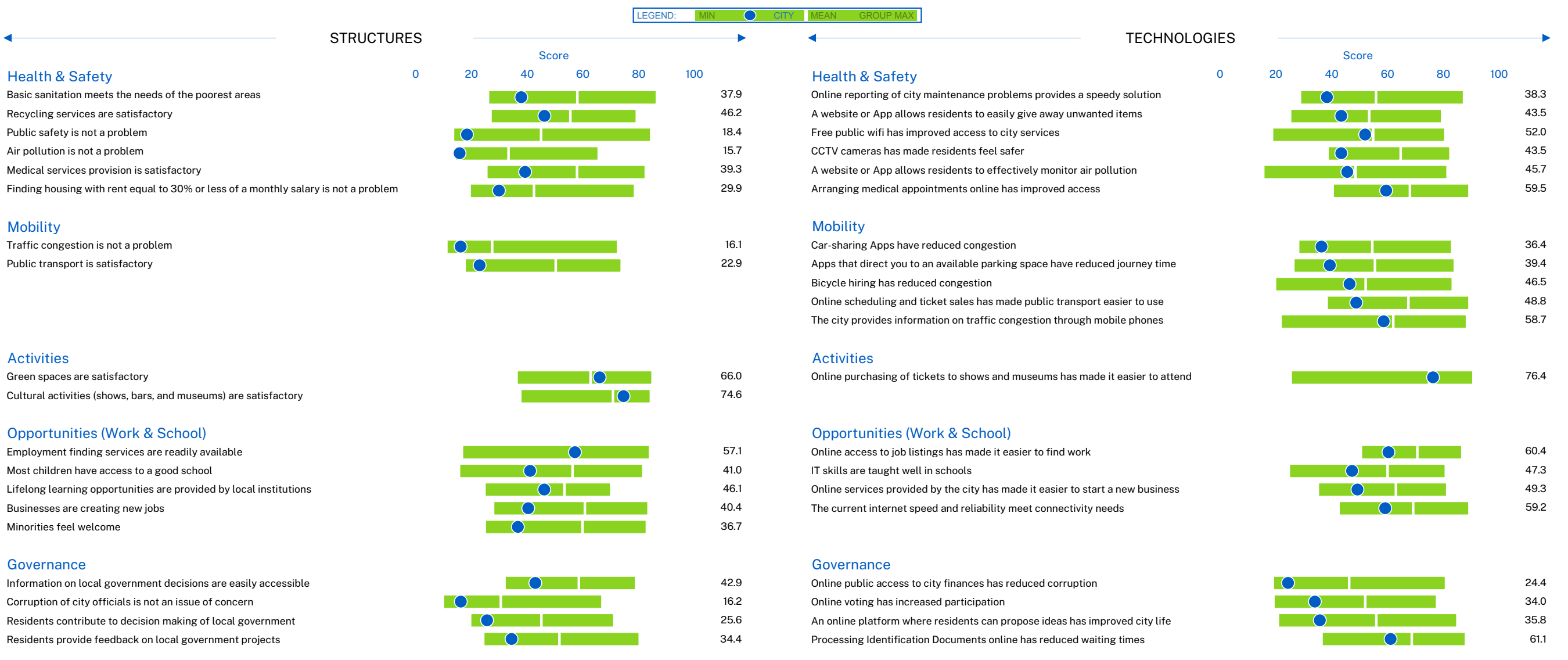|	Score
Information on local government decisions are easily accessible	53.0
Corruption of city officials is not an issue of concern	40.6
Residents contribute to decision making of local government	39.0
Residents provide feedback on local government projects	47.8

TECHNOLOGIES
Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	50.5
A website or App allows residents to easily give away unwanted items	54.5
Free public wifi has improved access to city services	49.2
CCTV cameras has made residents feel safer	50.8
A website or App allows residents to effectively monitor air pollution	47.0
Arranging medical appointments online has improved access	71.4

Mobility

	Score
Car-sharing Apps have reduced congestion	34.1
Apps that direct you to an available parking space have reduced journey time	38.9
Bicycle hiring has reduced congestion	46.6
Online scheduling and ticket sales has made public transport easier to use	65.4
The city provides information on traffic congestion through mobile phones	46.1

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	82.6

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	64.4
IT skills are taught well in schools	45.6
Online services provided by the city has made it easier to start a new business	45.2
The current internet speed and reliability meet connectivity needs	55.3

Governance

	Score
Online public access to city finances has reduced corruption	39.9
Online voting has increased participation	40.6
An online platform where residents can propose ideas has improved city life	45.3
Processing Identification Documents online has reduced waiting times	59.1

Bordeaux

BACKGROUND INFORMATION

City

Population 650,000
(Eurostat)

HDI 0.900
(Global Data Lab)
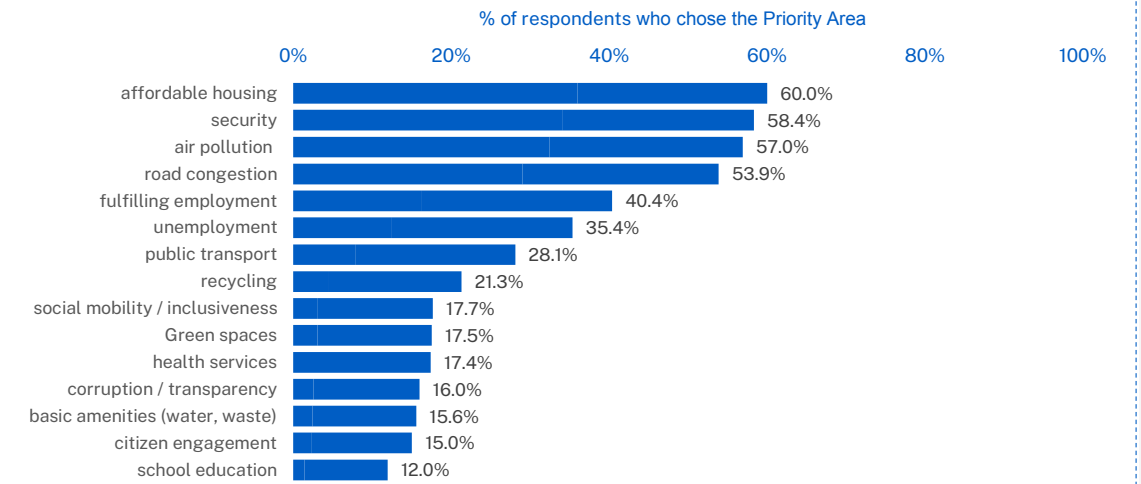
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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.

% of respondents who chose the Priority Area

Priority Area	%
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

% of respondents who agree or strongly agree with the statement

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

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	24.4
Public transport is satisfactory	63.2

Activities
	Score
Green spaces are satisfactory	82.4
Cultural activities (shows, bars, and museums) are satisfactory	85.5

Opportunities (Work & School)
	Score
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
	Score
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

Score

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	77.6

Opportunities (Work & School)
	Score
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
	Score
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

BACKGROUND INFORMATION

City

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

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

Country

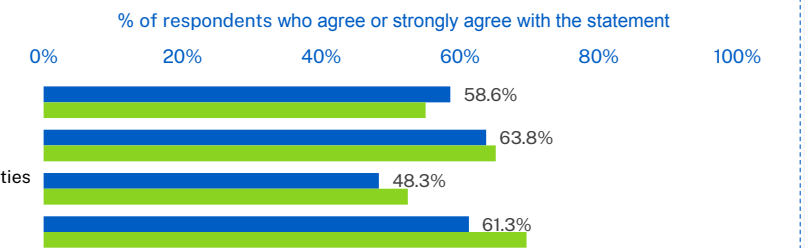| USA	2019	2020	2021	2022	1 yr change
HDI	0.933	0.923	0.921	0.927	+0.006
Life expectancy at birth	79.1	77.4	77.2	78.2	+1.0
Expected years of schooling	16.6	16.6	16.4	16.4	+0.0
Mean years of schooling	13.6	13.7	13.6	13.6	+0.0
GNI per capita (PPP $)	63,654	61,077	64,484	65,565	+1,081

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
affordable housing	81.8%
road congestion	59.0%
public transport	44.3%
security	43.9%
unemployment	30.6%
school education	30.5%
health services	28.4%
fulfilling employment	25.5%
corruption / transparency	25.4%
air pollution	21.9%
basic amenities (water, waste)	16.1%
social mobility / inclusiveness	14.5%
recycling	14.0%
Green spaces	13.3%
citizen engagement	9.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	47.0%
You are comfortable with face recognition technologies to lower crime	55.1%
You feel the availability of online information has increased your trust in authorities	45.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.7%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	57.3
Recycling services are satisfactory	66.7
Public safety is not a problem	40.7
Air pollution is not a problem	45.7
Medical services provision is satisfactory	72.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	26.4

Mobility

	Score
Traffic congestion is not a problem	17.9
Public transport is satisfactory	40.6

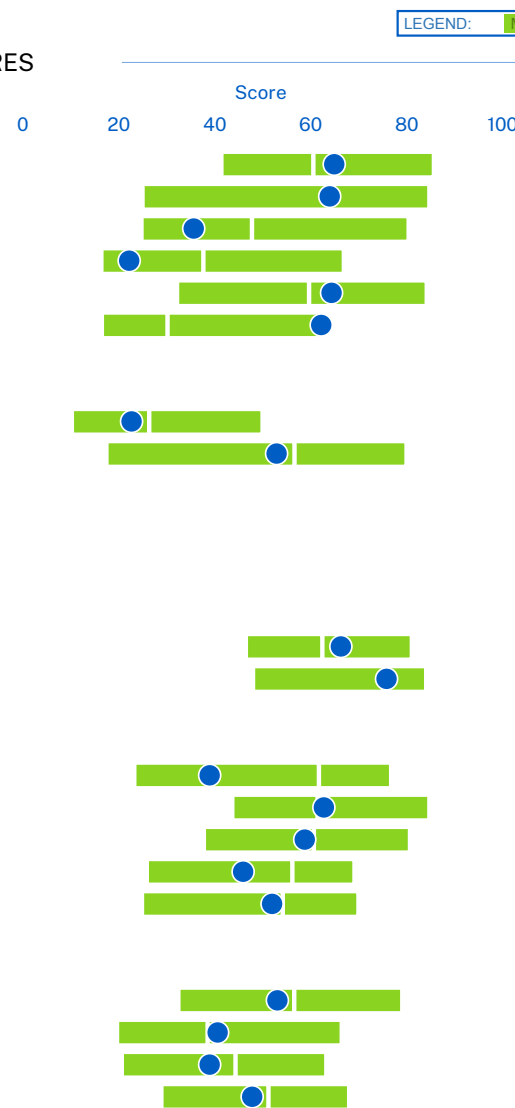### Activities

	Score
Green spaces are satisfactory	67.5
Cultural activities (shows, bars, and museums) are satisfactory	81.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	67.7
Most children have access to a good school	58.5
Lifelong learning opportunities are provided by local institutions	66.9
Businesses are creating new jobs	67.3
Minorities feel welcome	61.5

Governance

	Score
Information on local government decisions are easily accessible	67.7
Corruption of city officials is not an issue of concern	40.0
Residents contribute to decision making of local government	51.7
Residents provide feedback on local government projects	63.7

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	40.6
A website or App allows residents to easily give away unwanted items	57.7
Free public wifi has improved access to city services	52.1
CCTV cameras has made residents feel safer	45.7
A website or App allows residents to effectively monitor air pollution	34.4
Arranging medical appointments online has improved access	62.8

Mobility

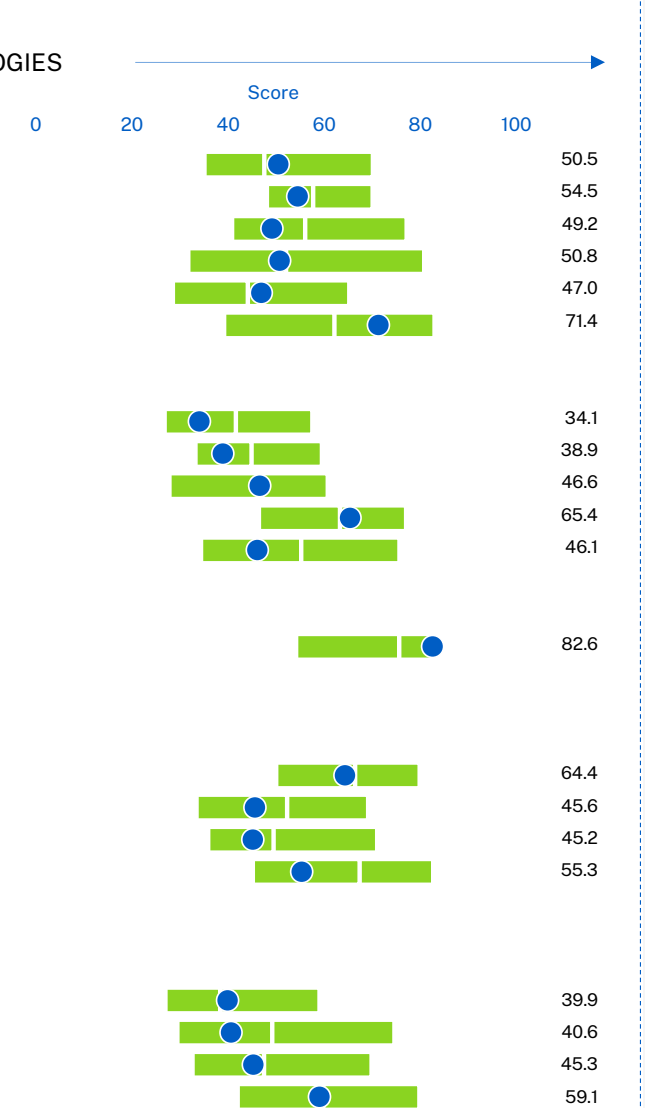|	Score
Car-sharing Apps have reduced congestion	40.0
Apps that direct you to an available parking space have reduced journey time	44.7
Bicycle hiring has reduced congestion	43.0
Online scheduling and ticket sales has made public transport easier to use	54.3
The city provides information on traffic congestion through mobile phones	55.1

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.3

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	68.5
IT skills are taught well in schools	51.5
Online services provided by the city has made it easier to start a new business	48.0
The current internet speed and reliability meet connectivity needs	65.4

Governance

	Score
Online public access to city finances has reduced corruption	37.6
Online voting has increased participation	52.0
An online platform where residents can propose ideas has improved city life	44.3
Processing Identification Documents online has reduced waiting times	54.0

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)

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.

% of respondents who chose the Priority Area

Priority Area	%
health services	79.0%
security	72.6%
public transport	59.0%
unemployment	46.3%
school education	44.8%
corruption / transparency	29.7%
affordable housing	26.2%
fulfilling employment	26.0%
road congestion	21.7%
social mobility / inclusiveness	21.5%
basic amenities (water, waste)	19.0%
recycling	10.9%
Green spaces	10.6%
air pollution	9.1%
citizen engagement	6.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	67.7%
You are comfortable with face recognition technologies to lower crime	76.6%
You feel the availability of online information has increased your trust in authorities	47.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	67.3%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN / CITY / MEAN / GROUP MAX

STRUCTURES
Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	49.1
Recycling services are satisfactory	54.2
Public safety is not a problem	30.9
Air pollution is not a problem	40.2
Medical services provision is satisfactory	31.1
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	20.9

Mobility
	Score
Traffic congestion is not a problem	25.8
Public transport is satisfactory	22.7

Activities
	Score
Green spaces are satisfactory	74.7
Cultural activities (shows, bars, and museums) are satisfactory	69.7

Opportunities (Work & School)
	Score
Employment finding services are readily available	49.8
Most children have access to a good school	43.1
Lifelong learning opportunities are provided by local institutions	51.7
Businesses are creating new jobs	46.0
Minorities feel welcome	28.3

Governance
	Score
Information on local government decisions are easily accessible	43.3
Corruption of city officials is not an issue of concern	20.6
Residents contribute to decision making of local government	25.4
Residents provide feedback on local government projects	32.4

TECHNOLOGIES
Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	35.0
A website or App allows residents to easily give away unwanted items	35.8
Free public wifi has improved access to city services	33.2
CCTV cameras has made residents feel safer	42.9
A website or App allows residents to effectively monitor air pollution	22.8
Arranging medical appointments online has improved access	35.5

Mobility
	Score
Car-sharing Apps have reduced congestion	38.5
Apps that direct you to an available parking space have reduced journey time	40.1
Bicycle hiring has reduced congestion	37.5
Online scheduling and ticket sales has made public transport easier to use	46.4
The city provides information on traffic congestion through mobile phones	47.9

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.3

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	56.7
IT skills are taught well in schools	25.7
Online services provided by the city has made it easier to start a new business	49.5
The current internet speed and reliability meet connectivity needs	58.5

Governance
	Score
Online public access to city finances has reduced corruption	26.0
Online voting has increased participation	42.8
An online platform where residents can propose ideas has improved city life	38.6
Processing Identification Documents online has reduced waiting times	58.4

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
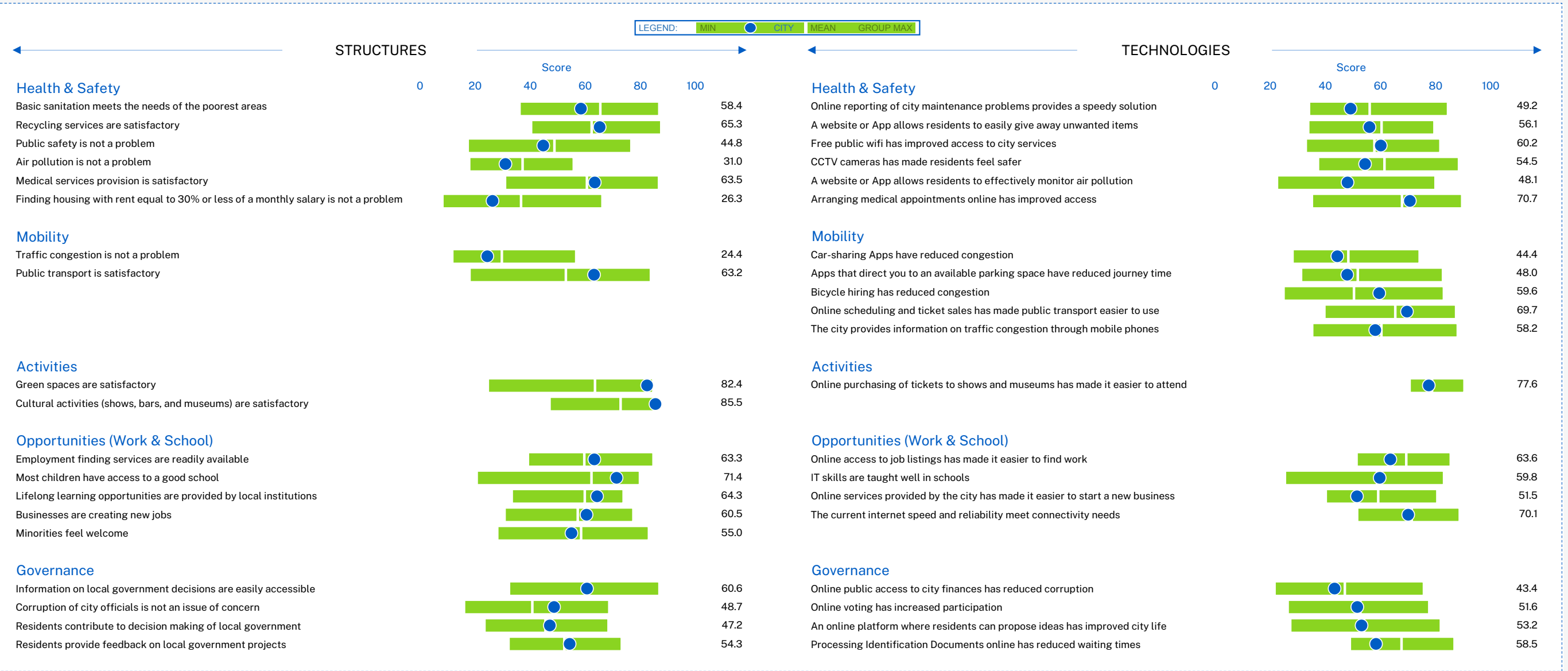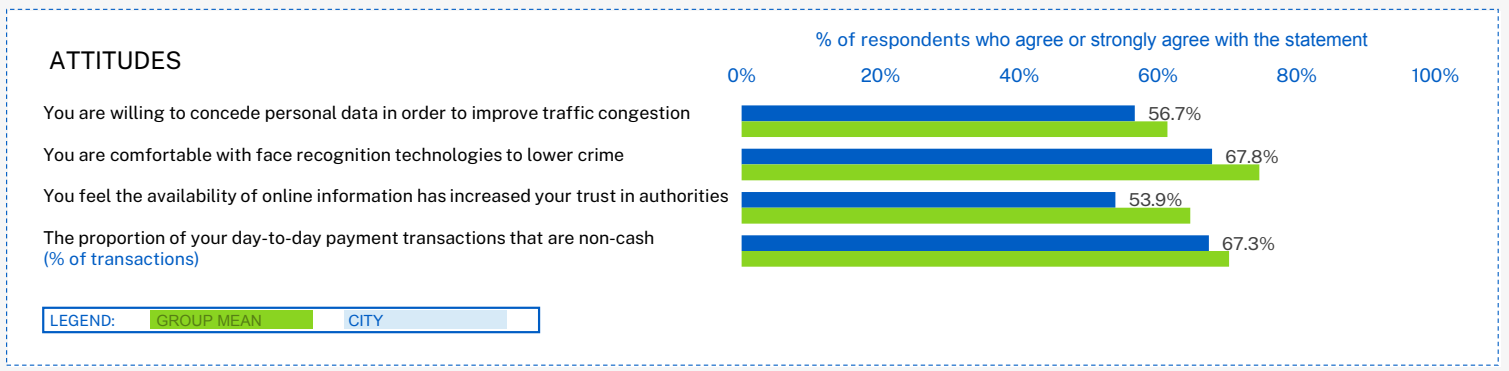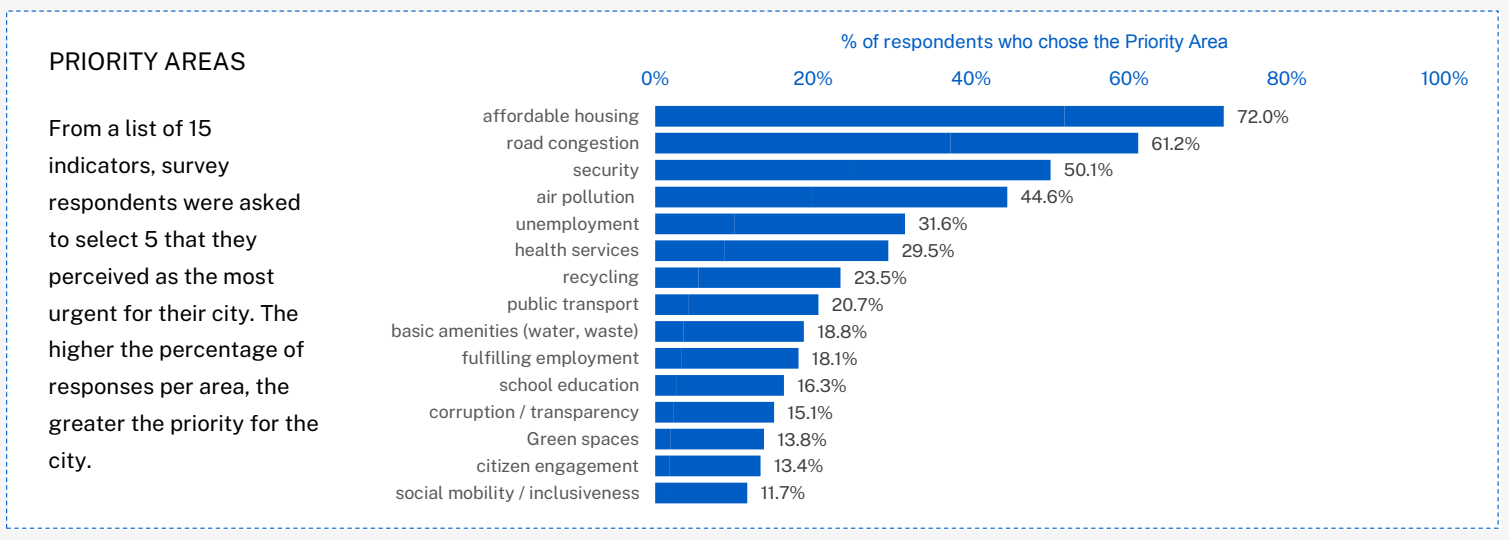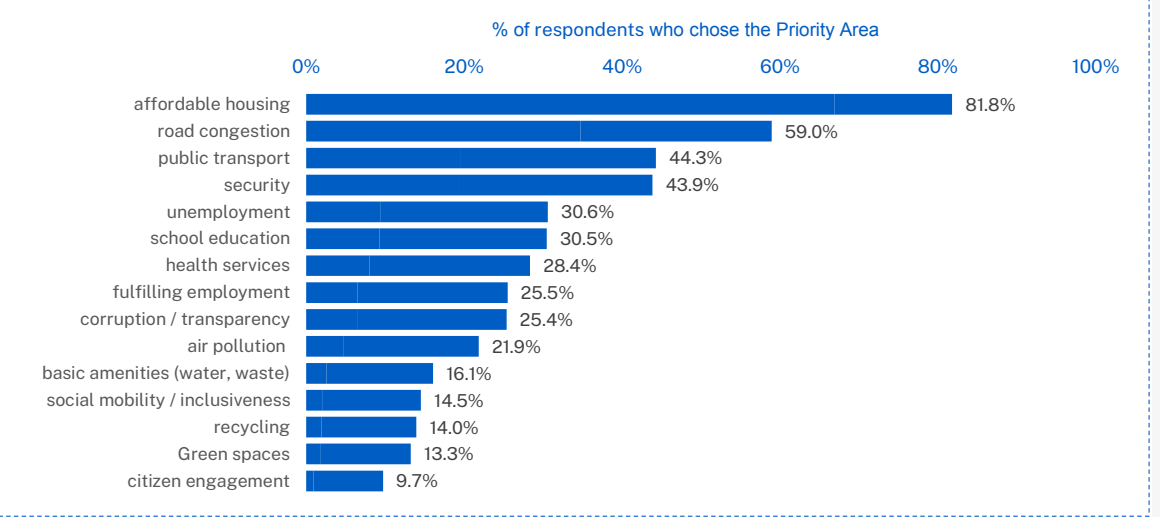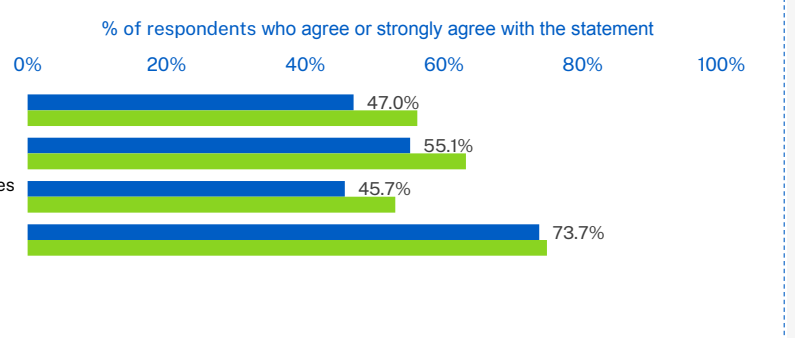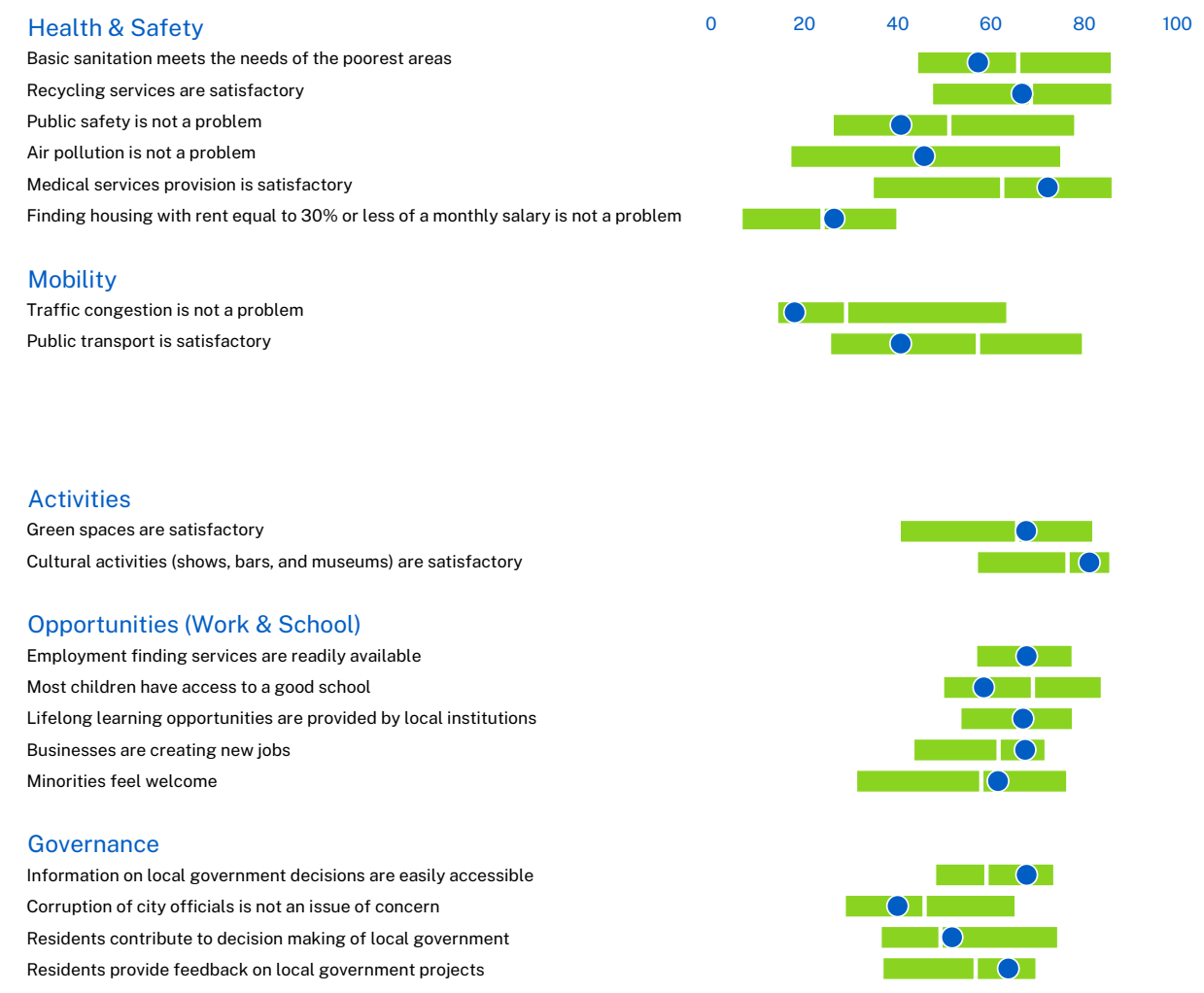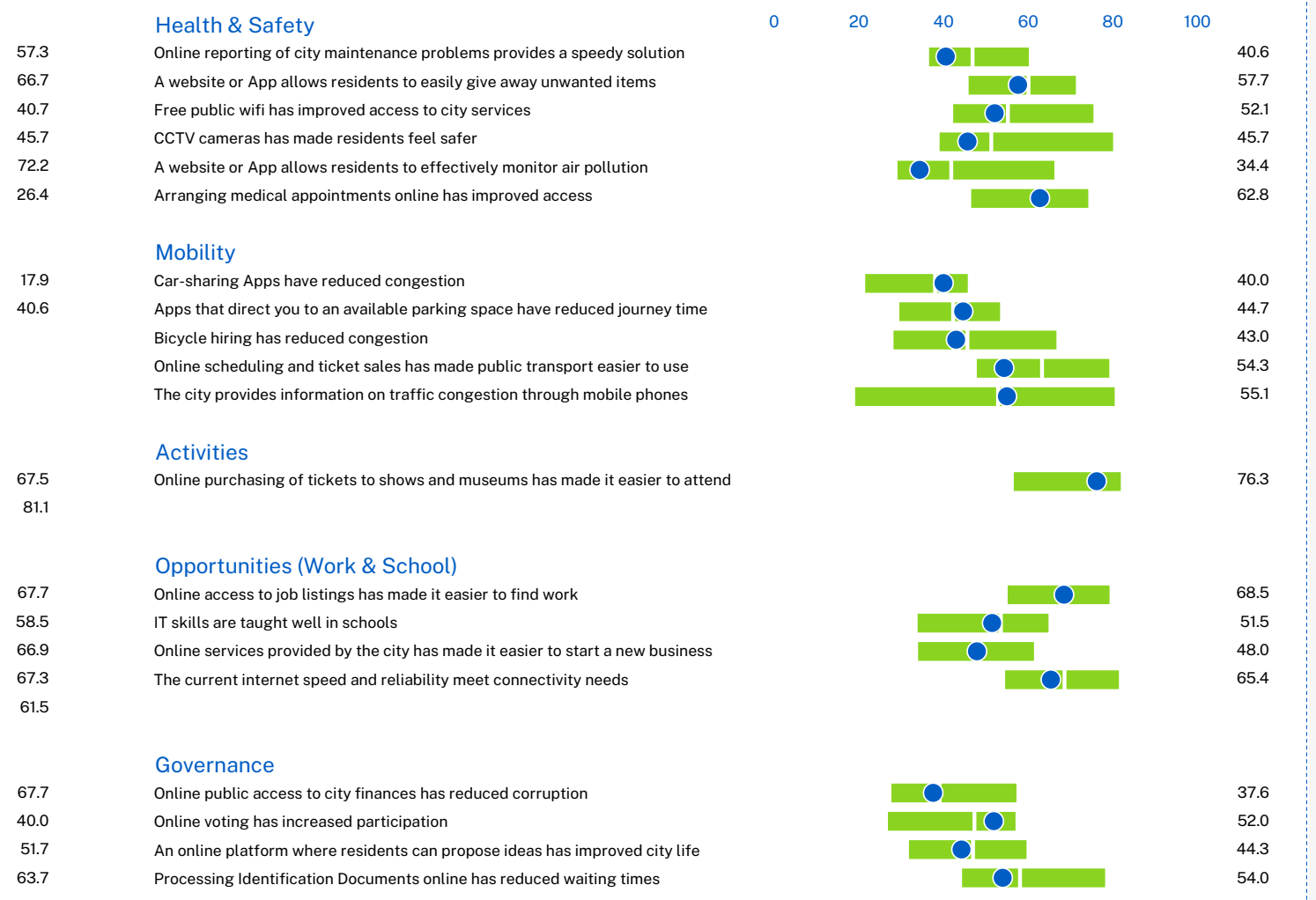
Population	440,000
(Eurostat)	
HDI	0.944
(Global Data Lab)	

Country
Slovakia

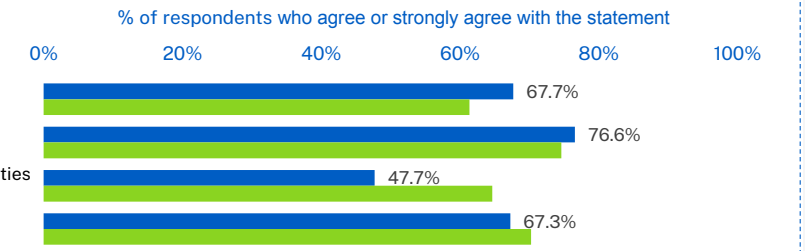|	2019	2020	2021	2022	1 yr change
HDI	0.863	0.860	0.852	0.855	+0.003
Life expectancy at birth	77.7	77.0	74.9	75.3	+0.4
Expected years of schooling	14.5	14.6	14.7	14.7	+0.0
Mean years of schooling	12.9	13.0	13.0	13.0	+0.0
GNI per capita (PPP $)	31,292	30,589	31,553	32,171	+618

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	67.0%
health services	55.4%
road congestion	44.8%
security	42.0%
Green spaces	41.6%
corruption / transparency	31.4%
public transport	28.5%
air pollution	25.9%
school education	25.6%
recycling	22.1%
fulfilling employment	21.0%
basic amenities (water, waste)	18.6%
unemployment	17.9%
citizen engagement	11.0%
social mobility / inclusiveness	10.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	61.4%
You are comfortable with face recognition technologies to lower crime	72.0%
You feel the availability of online information has increased your trust in authorities	54.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.4%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	56.0
Recycling services are satisfactory	57.3
Public safety is not a problem	55.6
Air pollution is not a problem	38.9
Medical services provision is satisfactory	44.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	29.3

Mobility
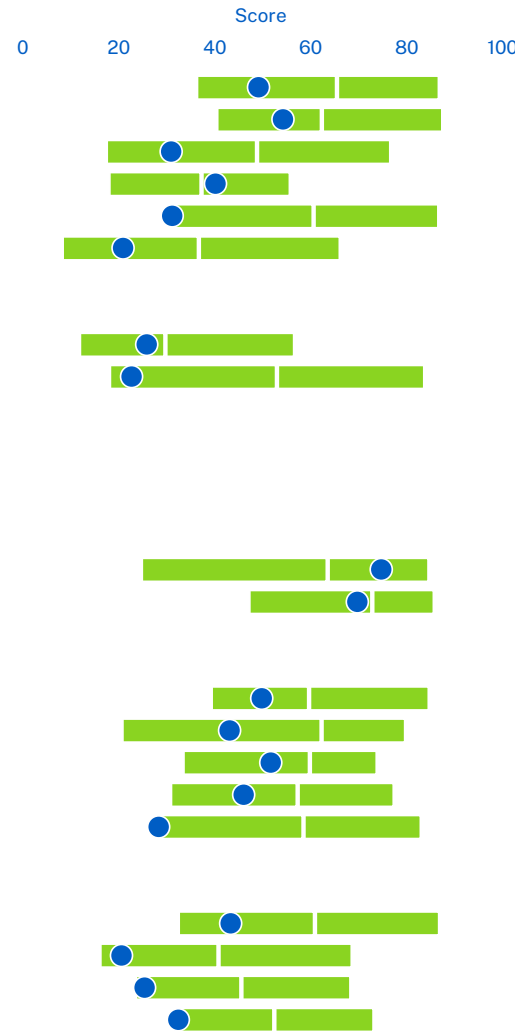|	Score
Traffic congestion is not a problem	28.5
Public transport is satisfactory	48.8

Activities
	Score
Green spaces are satisfactory	41.6
Cultural activities (shows, bars, and museums) are satisfactory	66.1

Opportunities (Work & School)
	Score
Employment finding services are readily available	63.9
Most children have access to a good school	62.9
Lifelong learning opportunities are provided by local institutions	61.6
Businesses are creating new jobs	63.1
Minorities feel welcome	48.4

Governance
	Score
Information on local government decisions are easily accessible	59.7
Corruption of city officials is not an issue of concern	35.5
Residents contribute to decision making of local government	45.2
Residents provide feedback on local government projects	50.2

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	45.8
A website or App allows residents to easily give away unwanted items	54.2
Free public wifi has improved access to city services	57.7
CCTV cameras has made residents feel safer	54.3
A website or App allows residents to effectively monitor air pollution	43.6
Arranging medical appointments online has improved access	61.3

Mobility
	Score
Car-sharing Apps have reduced congestion	39.9
Apps that direct you to an available parking space have reduced journey time	44.1
Bicycle hiring has reduced congestion	51.1
Online scheduling and ticket sales has made public transport easier to use	67.7
The city provides information on traffic congestion through mobile phones	45.2

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.6

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	68.4
IT skills are taught well in schools	53.5
Online services provided by the city has made it easier to start a new business	44.0
The current internet speed and reliability meet connectivity needs	67.8

Governance
	Score
Online public access to city finances has reduced corruption	37.3
Online voting has increased participation	45.8
An online platform where residents can propose ideas has improved city life	45.8
Processing Identification Documents online has reduced waiting times	55.7

Brisbane

SMART CITY RANKING

30

Out of 142

▼

24 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	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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	84.7%
road congestion	59.6%
health services	52.7%
security	43.2%
unemployment	41.1%
public transport	33.0%
fulfilling employment	29.2%
school education	19.5%
basic amenities (water, waste)	18.6%
recycling	18.3%
corruption / transparency	18.0%
social mobility / inclusiveness	15.4%
air pollution	14.3%
Green spaces	11.3%
citizen engagement	9.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	57.1%
You are comfortable with face recognition technologies to lower crime	69.3%
You feel the availability of online information has increased your trust in authorities	51.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	76.5%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	70.9
Recycling services are satisfactory	72.4
Public safety is not a problem	46.1
Air pollution is not a problem	53.5
Medical services provision is satisfactory	63.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	21.0

Mobility

	Score
Traffic congestion is not a problem	22.9
Public transport is satisfactory	55.1

Activities

	Score
Green spaces are satisfactory	66.5
Cultural activities (shows, bars, and museums) are satisfactory	76.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	68.7
Most children have access to a good school	74.5
Lifelong learning opportunities are provided by local institutions	68.5
Businesses are creating new jobs	61.0
Minorities feel welcome	63.3

Governance

	Score
Information on local government decisions are easily accessible	57.1
Corruption of city officials is not an issue of concern	45.6
Residents contribute to decision making of local government	49.2
Residents provide feedback on local government projects	62.5

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	52.0
A website or App allows residents to easily give away unwanted items	60.0
Free public wifi has improved access to city services	62.7
CCTV cameras has made residents feel safer	57.7
A website or App allows residents to effectively monitor air pollution	32.9
Arranging medical appointments online has improved access	72.9

Mobility

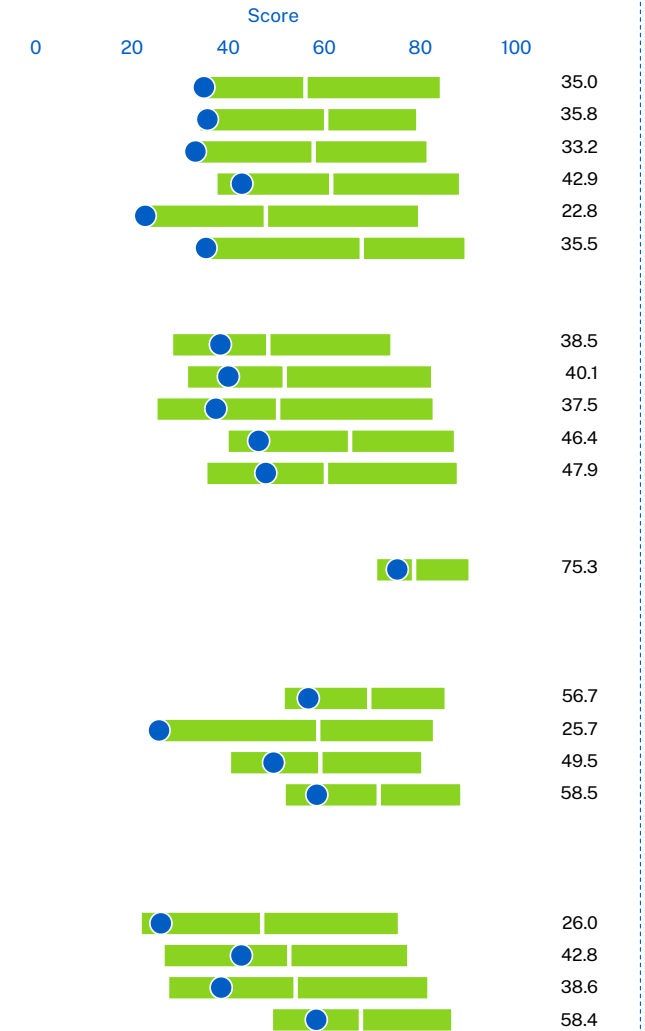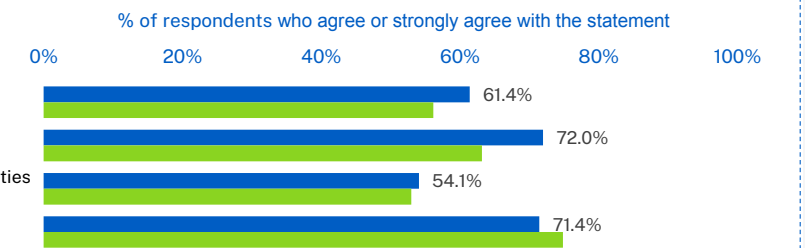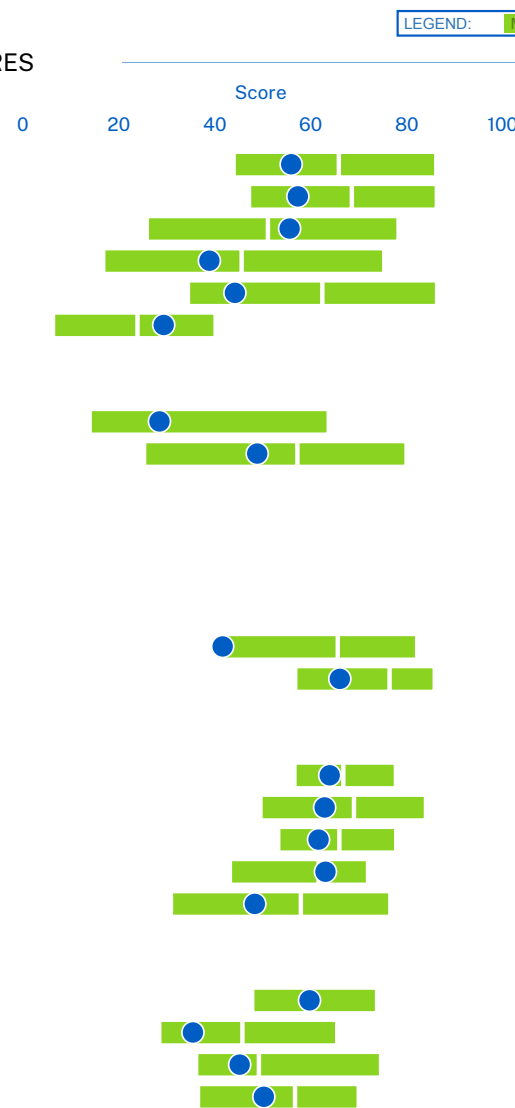|	Score
Car-sharing Apps have reduced congestion	35.6
Apps that direct you to an available parking space have reduced journey time	39.8
Bicycle hiring has reduced congestion	42.8
Online scheduling and ticket sales has made public transport easier to use	59.8
The city provides information on traffic congestion through mobile phones	56.2

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	73.5

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	70.4
IT skills are taught well in schools	54.5
Online services provided by the city has made it easier to start a new business	48.2
The current internet speed and reliability meet connectivity needs	62.4

Governance

	Score
Online public access to city finances has reduced corruption	36.9
Online voting has increased participation	47.7
An online platform where residents can propose ideas has improved city life	45.0
Processing Identification Documents online has reduced waiting times	61.9

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 *(Eurostat)*	1,230,000
HDI *(Global Data Lab)*	0.953

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

% of respondents who chose the Priority Area

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

LEGEND: GROUP MEAN — CITY

LEGEND: MIN — CITY — MEAN — GROUP MAX

STRUCTURES

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	28.2
Public transport is satisfactory	53.7

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

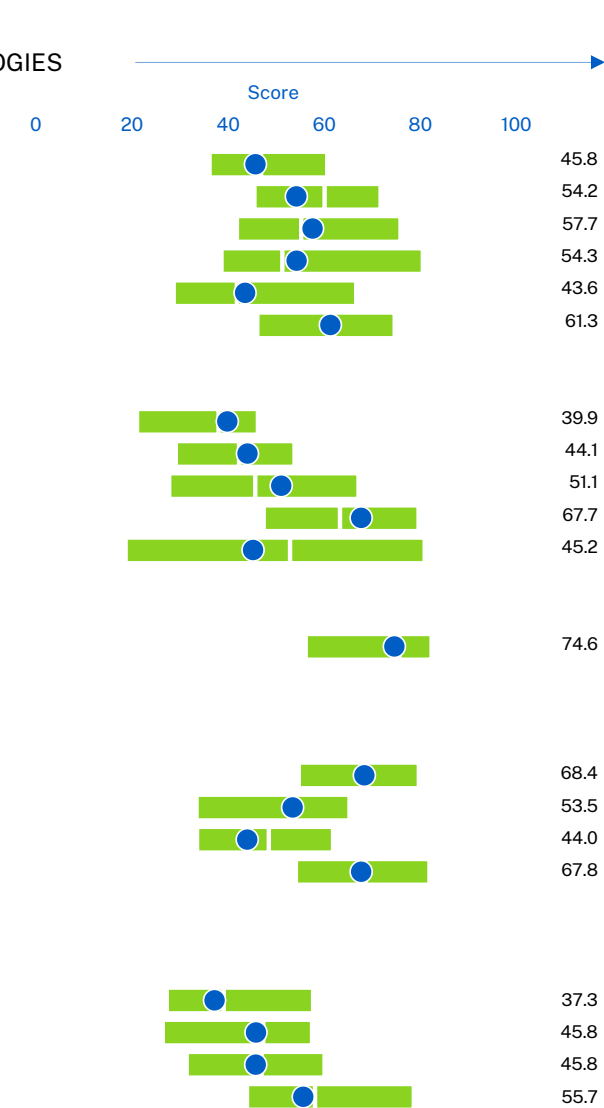|	Score
Car-sharing Apps have reduced congestion	37.8
Apps that direct you to an available parking space have reduced journey time	43.5
Bicycle hiring has reduced congestion	50.6
Online scheduling and ticket sales has made public transport easier to use	61.3
The city provides information on traffic congestion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

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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
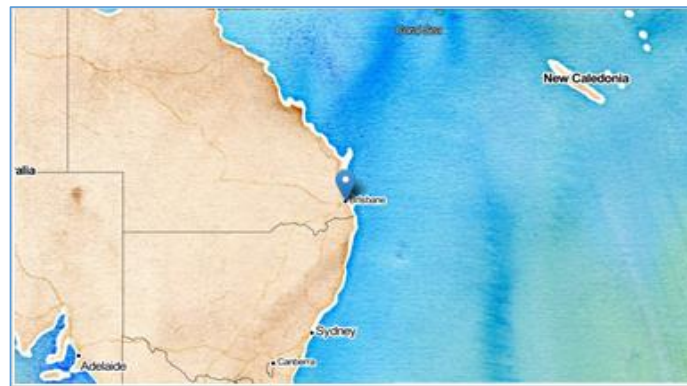
B

STRUCTURES

B

TECHNOLOGIES

GROUP

2

All ratings range
from AAA to D

BACKGROUND INFORMATION

City

Population	1,820,000
(UN Data)	
HDI	0.926
(Global Data Lab)	

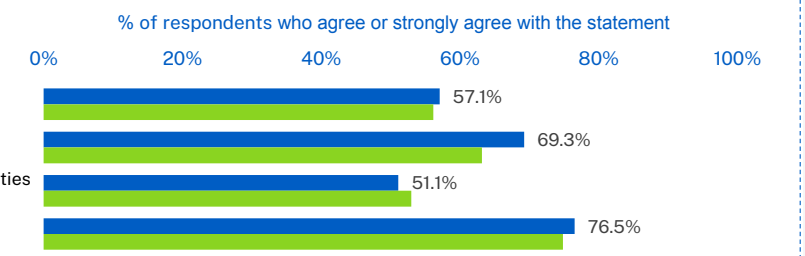Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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.

% of respondents who chose the Priority Area

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

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

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

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

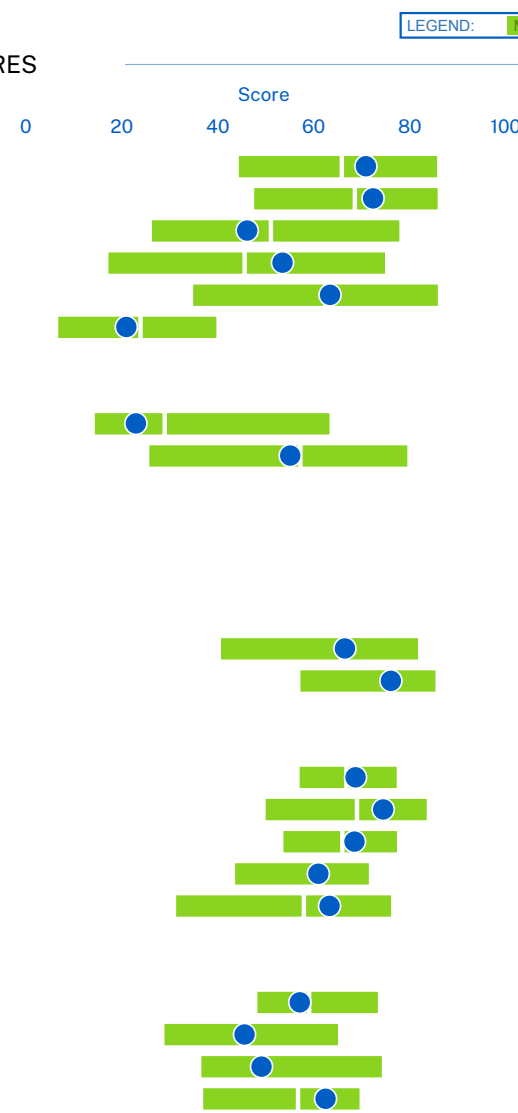|	
Traffic congestion is not a problem	16.2
Public transport is satisfactory	37.2

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

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

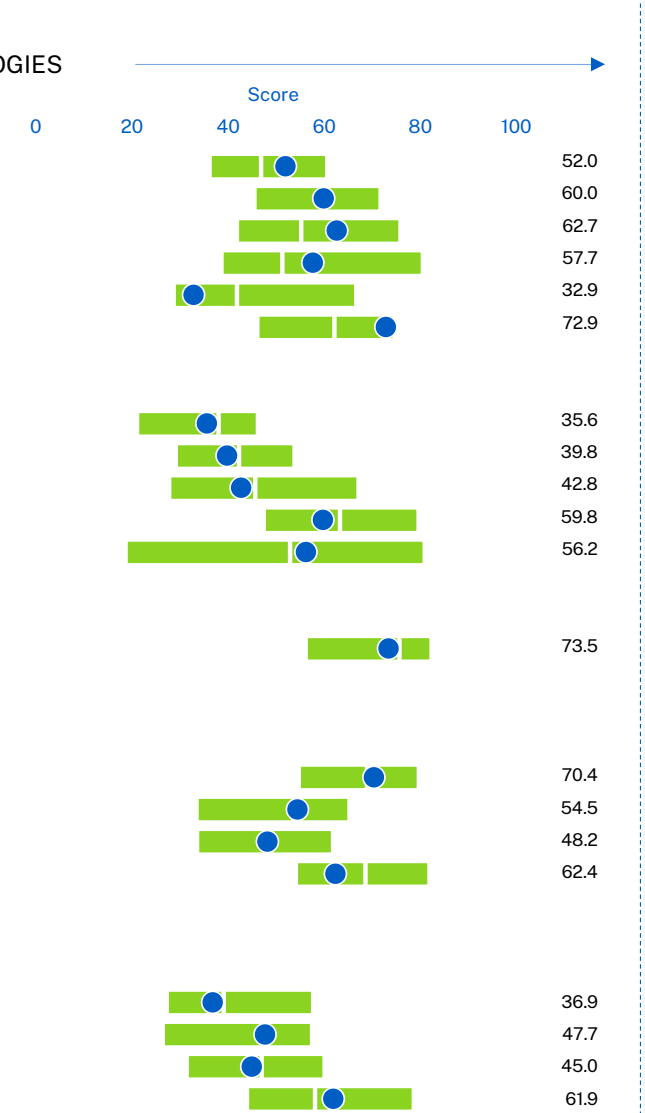|	
Car-sharing Apps have reduced congestion	41.5
Apps that direct you to an available parking space have reduced journey time	47.7
Bicycle hiring has reduced congestion	47.2
Online scheduling and ticket sales has made public transport easier to use	59.7
The city provides information on traffic congestion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

Budapest

BACKGROUND INFORMATION

City

Population	1,750,000
(Eurostat)	
HDI	0.922
(Global Data Lab)	

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

Country
Hungary

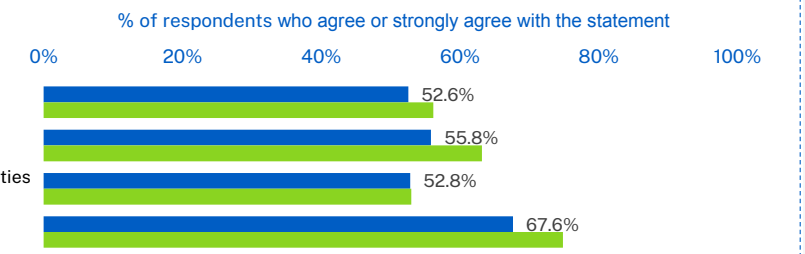|	2019	2020	2021	2022	1 yr change
HDI	0.854	0.849	0.846	0.851	+0.005
Life expectancy at birth	76.5	75.7	74.5	75.0	+0.4
Expected years of schooling	15.0	15.1	15.1	15.1	+0.0
Mean years of schooling	12.2	12.2	12.2	12.2	+0.0
GNI per capita (PPP $)	31,790	30,483	32,610	34,196	+1,586

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	67.6%
health services	63.2%
security	49.0%
fulfilling employment	44.3%
corruption / transparency	39.1%
air pollution	34.0%
road congestion	33.3%
Green spaces	26.8%
basic amenities (water, waste)	25.4%
unemployment	23.7%
school education	22.5%
public transport	17.8%
recycling	15.9%
social mobility / inclusiveness	10.9%
citizen engagement	7.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	48.3%
You are comfortable with face recognition technologies to lower crime	68.0%
You feel the availability of online information has increased your trust in authorities	54.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.3%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	45.1
Recycling services are satisfactory	53.7
Public safety is not a problem	46.2
Air pollution is not a problem	26.7
Medical services provision is satisfactory	32.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	19.0

Mobility

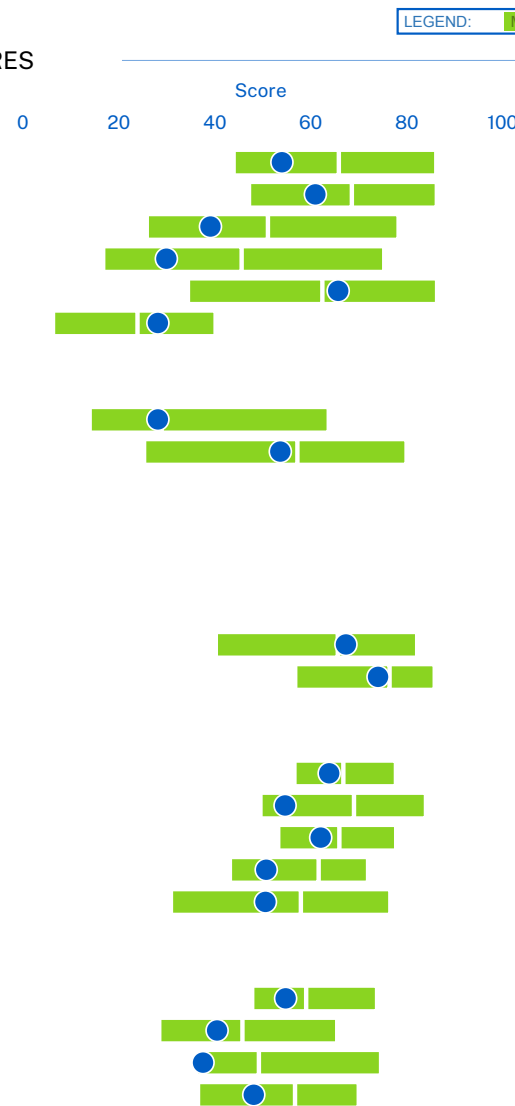|	Score
Traffic congestion is not a problem	25.9
Public transport is satisfactory	51.7

Activities

	Score
Green spaces are satisfactory	46.8
Cultural activities (shows, bars, and museums) are satisfactory	73.8

Opportunities (Work & School)

	Score
Employment finding services are readily available	61.3
Most children have access to a good school	53.9
Lifelong learning opportunities are provided by local institutions	60.0
Businesses are creating new jobs	63.6
Minorities feel welcome	35.3

Governance

	Score
Information on local government decisions are easily accessible	47.2
Corruption of city officials is not an issue of concern	32.3
Residents contribute to decision making of local government	38.0
Residents provide feedback on local government projects	45.6

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	38.2
A website or App allows residents to easily give away unwanted items	52.7
Free public wifi has improved access to city services	52.1
CCTV cameras has made residents feel safer	53.8
A website or App allows residents to effectively monitor air pollution	43.4
Arranging medical appointments online has improved access	47.9

Mobility

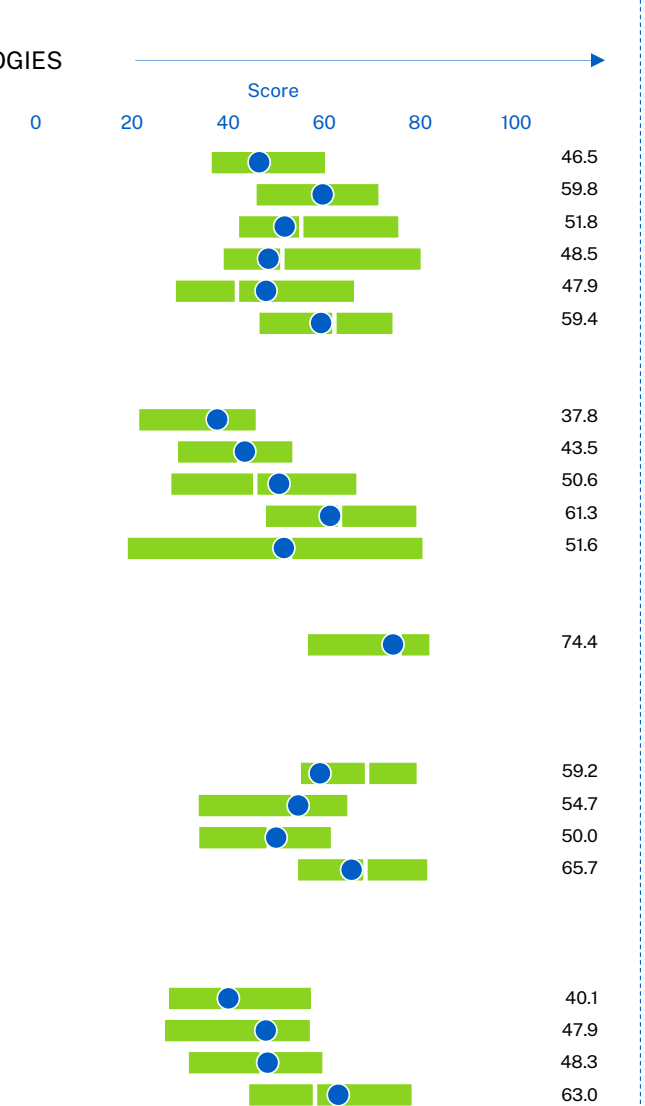|	Score
Car-sharing Apps have reduced congestion	39.6
Apps that direct you to an available parking space have reduced journey time	45.4
Bicycle hiring has reduced congestion	49.5
Online scheduling and ticket sales has made public transport easier to use	71.3
The city provides information on traffic congestion through mobile phones	57.8

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	79.1

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	72.0
IT skills are taught well in schools	54.1
Online services provided by the city has made it easier to start a new business	51.9
The current internet speed and reliability meet connectivity needs	66.8

Governance

	Score
Online public access to city finances has reduced corruption	33.0
Online voting has increased participation	53.6
An online platform where residents can propose ideas has improved city life	46.6
Processing Identification Documents online has reduced waiting times	67.2

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

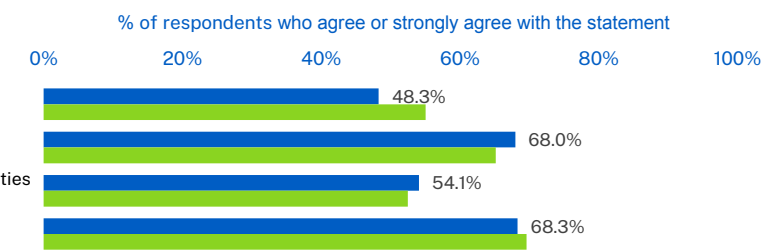|	2019	2020	2021	2022	1 yr change
HDI	0.853	0.841	0.844	0.849	+0.005
Life expectancy at birth	77.3	75.9	75.4	76.1	+0.7
Expected years of schooling	18.1	18.4	19.0	19.0	+0.0
Mean years of schooling	11.1	11.1	11.1	11.1	+0.0
GNI per capita (PPP $)	21,205	19,183	21,093	22,048	+954

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.

% of respondents who chose the Priority Area

Priority Area	%
security	77.7%
health services	54.6%
unemployment	54.5%
corruption / transparency	48.9%
affordable housing	44.3%
fulfilling employment	37.6%
school education	37.0%
basic amenities (water, waste)	29.2%
public transport	20.4%
road congestion	20.3%
air pollution	13.8%
social mobility / inclusiveness	11.9%
recycling	11.3%
Green spaces	7.7%
citizen engagement	7.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement

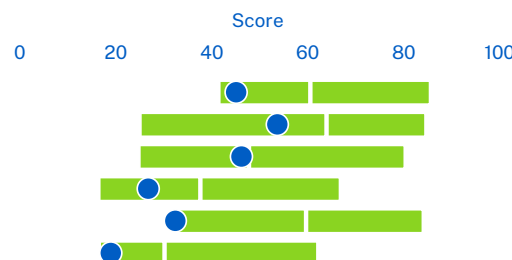| Statement	%
You are willing to concede personal data in order to improve traffic congestion	55.7%
You are comfortable with face recognition technologies to lower crime	76.5%
You feel the availability of online information has increased your trust in authorities	46.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	67.6%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES
Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	40.4
Recycling services are satisfactory	44.1
Public safety is not a problem	19.6
Air pollution is not a problem	28.5
Medical services provision is satisfactory	39.0
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	21.6

Mobility
	Score
Traffic congestion is not a problem	21.9
Public transport is satisfactory	44.5

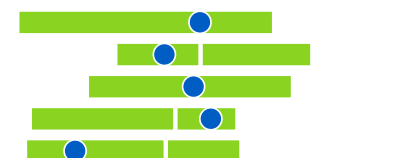### Activities
	Score
Green spaces are satisfactory	72.1
Cultural activities (shows, bars, and museums) are satisfactory	76.9

Opportunities (Work & School)
	Score
Employment finding services are readily available	45.8
Most children have access to a good school	32.0
Lifelong learning opportunities are provided by local institutions	48.5
Businesses are creating new jobs	31.0
Minorities feel welcome	41.2

Governance
	Score
Information on local government decisions are easily accessible	46.4
Corruption of city officials is not an issue of concern	19.6
Residents contribute to decision making of local government	29.5
Residents provide feedback on local government projects	43.9

TECHNOLOGIES
Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	43.2
A website or App allows residents to easily give away unwanted items	46.2
Free public wifi has improved access to city services	48.6
CCTV cameras has made residents feel safer	46.3
A website or App allows residents to effectively monitor air pollution	26.7
Arranging medical appointments online has improved access	54.5

Mobility
	Score
Car-sharing Apps have reduced congestion	39.0
Apps that direct you to an available parking space have reduced journey time	43.0
Bicycle hiring has reduced congestion	50.9
Online scheduling and ticket sales has made public transport easier to use	52.2
The city provides information on traffic congestion through mobile phones	63.8

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	77.3

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	56.5
IT skills are taught well in schools	37.6
Online services provided by the city has made it easier to start a new business	43.8
The current internet speed and reliability meet connectivity needs	61.1

Governance
	Score
Online public access to city finances has reduced corruption	29.4
Online voting has increased participation	33.1
An online platform where residents can propose ideas has improved city life	42.5
Processing Identification Documents online has reduced waiting times	61.5

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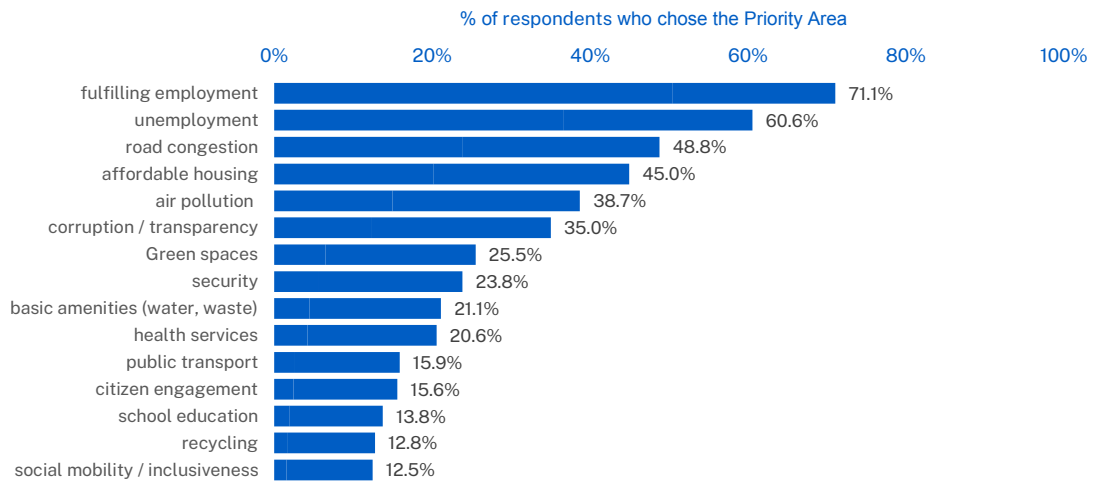
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

% of respondents who chose the Priority Area

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	%
fulfilling employment	71.1%
unemployment	60.6%
road congestion	48.8%
affordable housing	45.0%
air pollution	38.7%
corruption / transparency	35.0%
Green spaces	25.5%
security	23.8%
basic amenities (water, waste)	21.1%
health services	20.6%
public transport	15.9%
citizen engagement	15.6%
school education	13.8%
recycling	12.8%
social mobility / inclusiveness	12.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	52.9%
You are comfortable with face recognition technologies to lower crime	76.9%
You feel the availability of online information has increased your trust in authorities	52.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.7%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN   CITY   MEAN   GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	74.9
Recycling services are satisfactory	70.9
Public safety is not a problem	69.6
Air pollution is not a problem	27.0
Medical services provision is satisfactory	67.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	42.5

Mobility
	Score
Traffic congestion is not a problem	27.2
Public transport is satisfactory	66.3

Activities
	Score
Green spaces are satisfactory	53.4
Cultural activities (shows, bars, and museums) are satisfactory	48.3

Opportunities (Work & School)
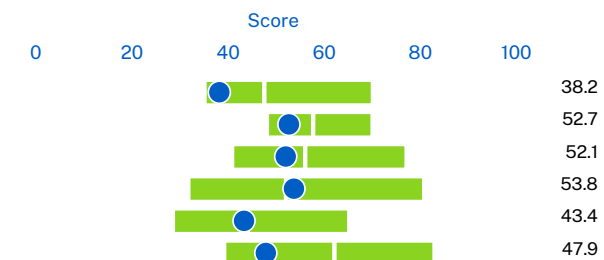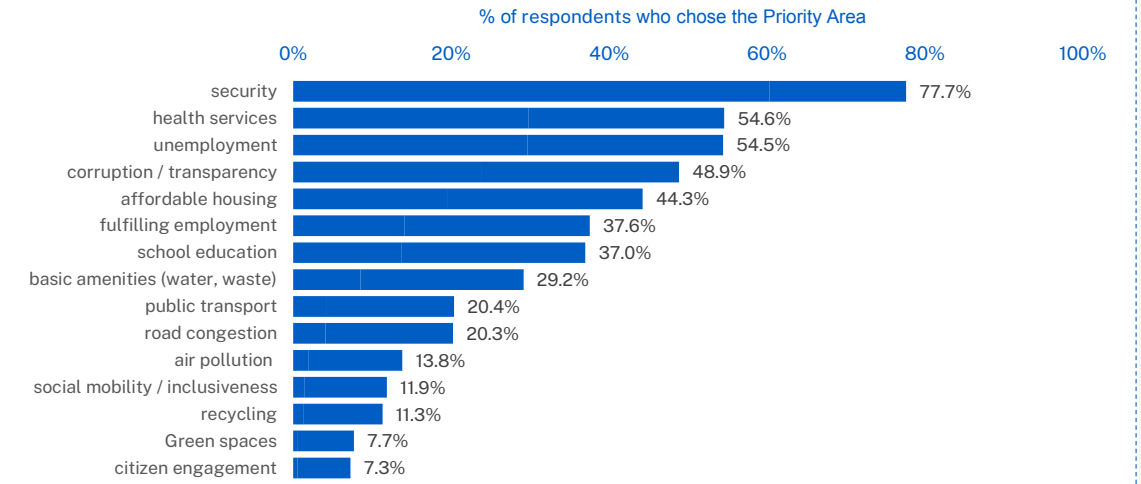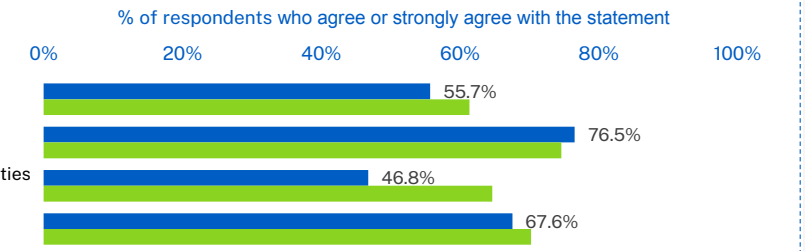|	Score
Employment finding services are readily available	57.3
Most children have access to a good school	59.2
Lifelong learning opportunities are provided by local institutions	63.6
Businesses are creating new jobs	31.7
Minorities feel welcome	25.1

Governance
	Score
Information on local government decisions are easily accessible	54.3
Corruption of city officials is not an issue of concern	27.8
Residents contribute to decision making of local government	45.5
Residents provide feedback on local government projects	44.6

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	53.5
A website or App allows residents to easily give away unwanted items	61.1
Free public wifi has improved access to city services	77.2
CCTV cameras has made residents feel safer	79.8
A website or App allows residents to effectively monitor air pollution	63.9
Arranging medical appointments online has improved access	67.9

Mobility
	Score
Car-sharing Apps have reduced congestion	38.5
Apps that direct you to an available parking space have reduced journey time	41.6
Bicycle hiring has reduced congestion	35.0
Online scheduling and ticket sales has made public transport easier to use	71.2
The city provides information on traffic congestion through mobile phones	72.8

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	72.7

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	63.0
IT skills are taught well in schools	60.9
Online services provided by the city has made it easier to start a new business	45.5
The current internet speed and reliability meet connectivity needs	77.9

Governance
	Score
Online public access to city finances has reduced corruption	38.7
Online voting has increased participation	47.4
An online platform where residents can propose ideas has improved city life	52.0
Processing Identification Documents online has reduced waiting times	76.0

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

CC

TECHNOLOGIES

GROUP

4

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population	9,540,000
(UN Data)	
HDI	0.779
(Global Data Lab)	

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

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

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
affordable housing	52.4%
health services	49.4%
unemployment	45.5%
corruption / transparency	41.6%
road congestion	39.1%
basic amenities (water, waste)	38.3%
air pollution	36.6%
school education	31.3%
security	26.6%
fulfilling employment	26.0%
public transport	25.6%
Green spaces	25.3%
recycling	22.5%
citizen engagement	9.0%
social mobility / inclusiveness	5.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	54.8%
You are comfortable with face recognition technologies to lower crime	80.3%
You feel the availability of online information has increased your trust in authorities	69.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	57.3%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	60.0
Recycling services are satisfactory	53.3
Public safety is not a problem	37.5
Air pollution is not a problem	19.0
Medical services provision is satisfactory	54.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	39.1

Mobility

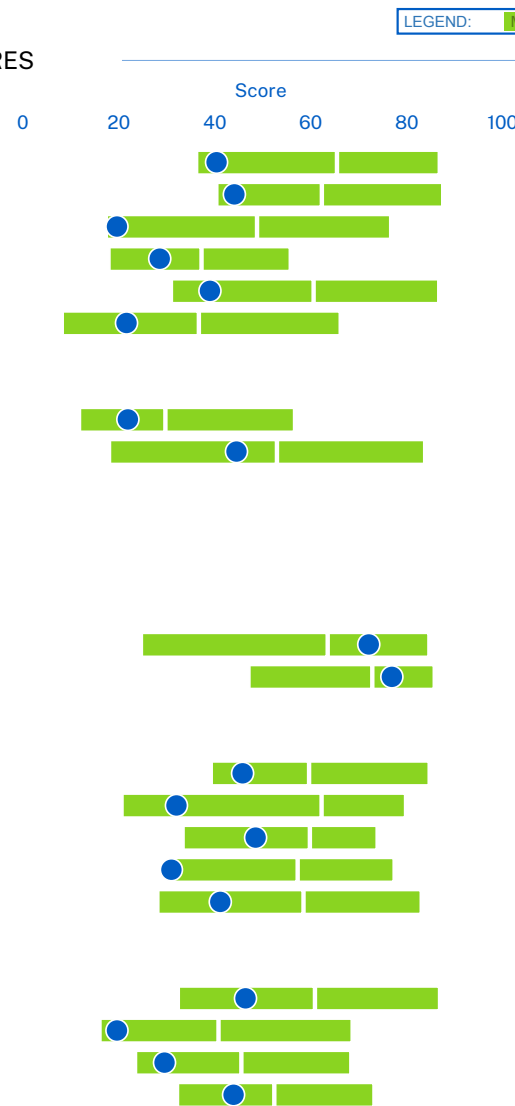|	Score
Traffic congestion is not a problem	20.6
Public transport is satisfactory	49.4

Activities

	Score
Green spaces are satisfactory	48.4
Cultural activities (shows, bars, and museums) are satisfactory	64.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	41.6
Most children have access to a good school	45.9
Lifelong learning opportunities are provided by local institutions	45.2
Businesses are creating new jobs	44.9
Minorities feel welcome	58.8

Governance

	Score
Information on local government decisions are easily accessible	59.2
Corruption of city officials is not an issue of concern	26.3
Residents contribute to decision making of local government	39.2
Residents provide feedback on local government projects	45.1

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	57.8
A website or App allows residents to easily give away unwanted items	56.8
Free public wifi has improved access to city services	48.8
CCTV cameras has made residents feel safer	71.5
A website or App allows residents to effectively monitor air pollution	41.3
Arranging medical appointments online has improved access	75.3

Mobility

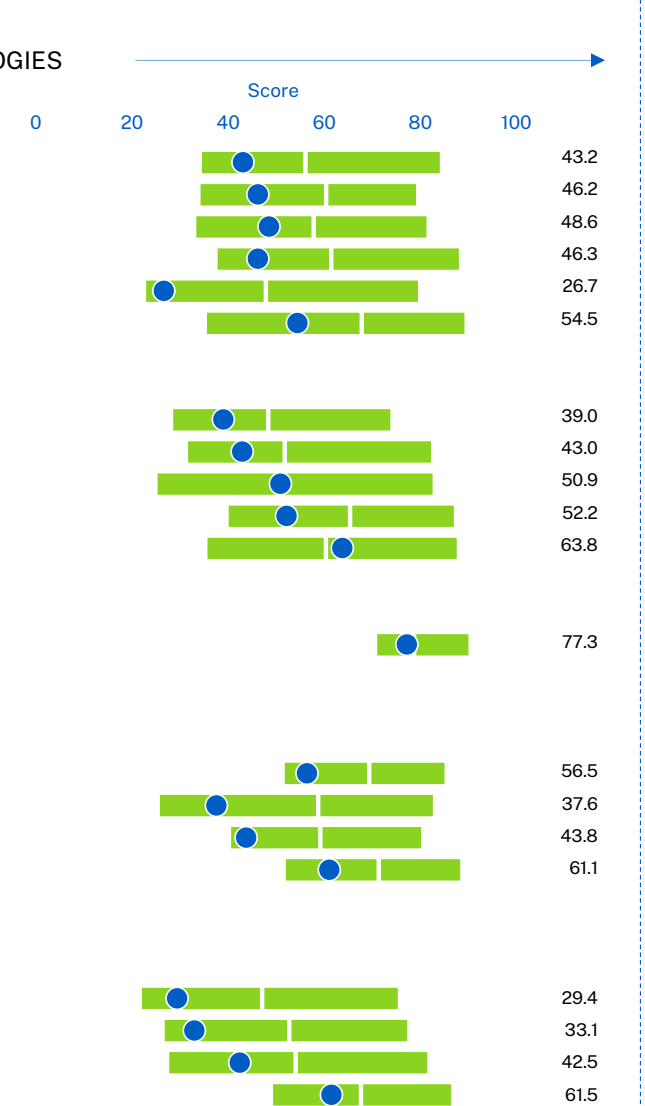|	Score
Car-sharing Apps have reduced congestion	58.9
Apps that direct you to an available parking space have reduced journey time	61.0
Bicycle hiring has reduced congestion	50.8
Online scheduling and ticket sales has made public transport easier to use	65.2
The city provides information on traffic congestion through mobile phones	63.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	78.1

Opportunities (Work & School)

	Score
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	61.3
The current internet speed and reliability meet connectivity needs	61.8

Governance

	Score
Online public access to city finances has reduced corruption	47.4
Online voting has increased participation	55.1
An online platform where residents can propose ideas has improved city life	57.0
Processing Identification Documents online has reduced waiting times	67.7

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
Australia

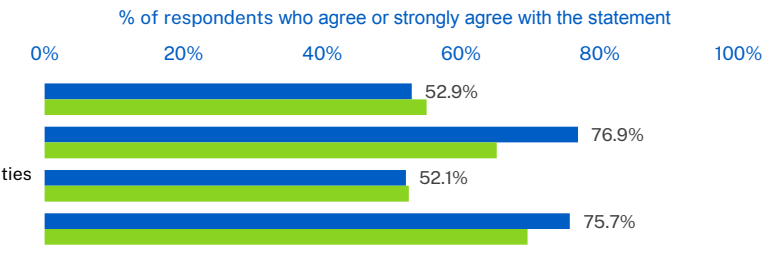|	2019	2020	2021	2022	1 yr change
HDI	0.941	0.948	0.949	0.946	-0.003
Life expectancy at birth	83.1	84.3	84.5	83.6	-0.9
Expected years of schooling	21.4	20.9	21.1	21.1	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP $)	47,054	48,075	48,076	49,257	+1,181

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.

% of respondents who chose the Priority Area

Priority Area	%
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

% of respondents who agree or strongly agree with the statement

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

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	63.8
Public transport is satisfactory	55.7

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

	Score
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

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

Opportunities (Work & School)

	Score
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

	Score
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)	

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

% of respondents who chose the Priority Area

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	%
unemployment	73.8%
affordable housing	67.0%
security	52.0%
corruption / transparency	45.5%
basic amenities (water, waste)	45.2%
health services	43.5%
fulfilling employment	38.6%
school education	30.1%
public transport	23.9%
road congestion	21.3%
recycling	14.4%
air pollution	11.5%
Green spaces	8.6%
citizen engagement	7.7%
social mobility / inclusiveness	6.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	68.9%
You are comfortable with face recognition technologies to lower crime	79.4%
You feel the availability of online information has increased your trust in authorities	51.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	69.3%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES
Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	39.6
Recycling services are satisfactory	50.5
Public safety is not a problem	19.8
Air pollution is not a problem	29.4
Medical services provision is satisfactory	46.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	22.5

Mobility

	Score
Traffic congestion is not a problem	25.4
Public transport is satisfactory	37.9

Activities

	Score
Green spaces are satisfactory	56.4
Cultural activities (shows, bars, and museums) are satisfactory	72.7

Opportunities (Work & School)

	Score
Employment finding services are readily available	40.4
Most children have access to a good school	41.5
Lifelong learning opportunities are provided by local institutions	42.7
Businesses are creating new jobs	43.2
Minorities feel welcome	42.2

Governance

	Score
Information on local government decisions are easily accessible	50.8
Corruption of city officials is not an issue of concern	19.9
Residents contribute to decision making of local government	32.0
Residents provide feedback on local government projects	42.0

TECHNOLOGIES
Score

Health & Safety

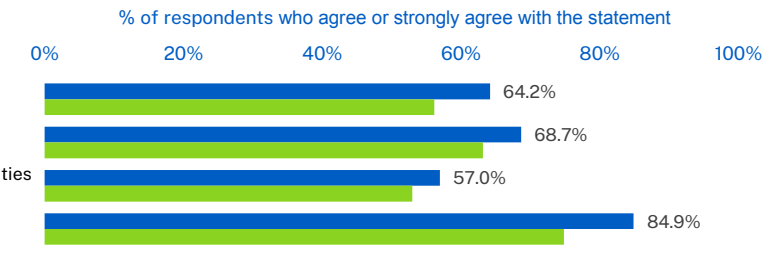|	Score
Online reporting of city maintenance problems provides a speedy solution	48.7
A website or App allows residents to easily give away unwanted items	49.5
Free public wifi has improved access to city services	53.0
CCTV cameras has made residents feel safer	46.5
A website or App allows residents to effectively monitor air pollution	27.9
Arranging medical appointments online has improved access	55.5

Mobility

	Score
Car-sharing Apps have reduced congestion	42.7
Apps that direct you to an available parking space have reduced journey time	36.1
Bicycle hiring has reduced congestion	32.4
Online scheduling and ticket sales has made public transport easier to use	53.7
The city provides information on traffic congestion through mobile phones	53.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	77.8

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	61.1
IT skills are taught well in schools	47.6
Online services provided by the city has made it easier to start a new business	48.1
The current internet speed and reliability meet connectivity needs	62.0

Governance

	Score
Online public access to city finances has reduced corruption	29.4
Online voting has increased participation	40.4
An online platform where residents can propose ideas has improved city life	42.9
Processing Identification Documents online has reduced waiting times	56.6

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)	

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

% of respondents who chose the Priority Area

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.
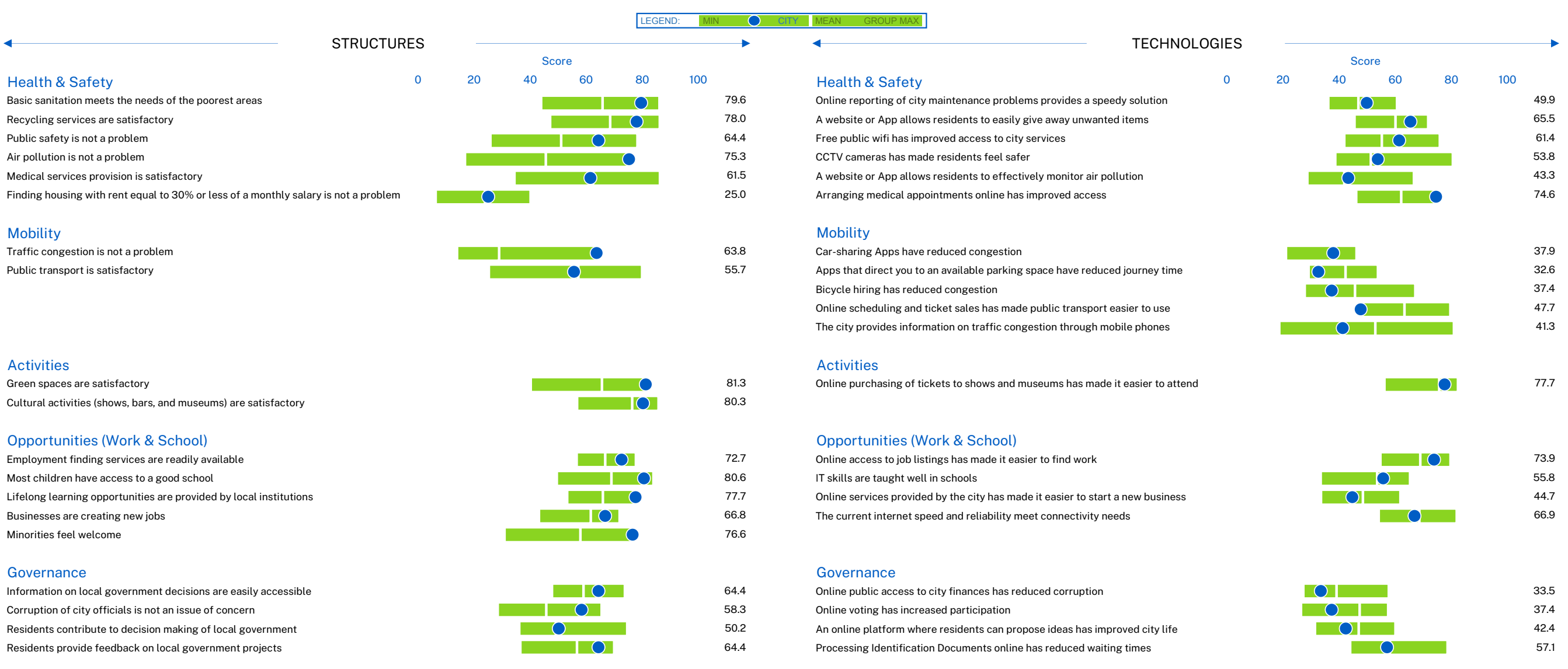
Priority Area	%
affordable housing	81.1%
health services	51.8%
unemployment	45.7%
public transport	40.6%
road congestion	36.0%
fulfilling employment	28.9%
security	28.3%
school education	28.2%
recycling	24.4%
air pollution	22.8%
Green spaces	15.4%
basic amenities (water, waste)	15.4%
social mobility / inclusiveness	15.0%
corruption / transparency	13.4%
citizen engagement	13.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	57.5%
You are comfortable with face recognition technologies to lower crime	68.3%
You feel the availability of online information has increased your trust in authorities	56.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.7%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES
Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	59.3
Recycling services are satisfactory	64.7
Public safety is not a problem	39.7
Air pollution is not a problem	37.4
Medical services provision is satisfactory	50.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	23.5

Mobility

	Score
Traffic congestion is not a problem	22.8
Public transport is satisfactory	47.7

Activities

	Score
Green spaces are satisfactory	67.7
Cultural activities (shows, bars, and museums) are satisfactory	77.2

Opportunities (Work & School)

	Score
Employment finding services are readily available	61.8
Most children have access to a good school	67.4
Lifelong learning opportunities are provided by local institutions	64.2
Businesses are creating new jobs	58.7
Minorities feel welcome	66.8

Governance

	Score
Information on local government decisions are easily accessible	58.2
Corruption of city officials is not an issue of concern	46.5
Residents contribute to decision making of local government	43.4
Residents provide feedback on local government projects	54.9

TECHNOLOGIES
Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	40.4
A website or App allows residents to easily give away unwanted items	63.5
Free public wifi has improved access to city services	60.4
CCTV cameras has made residents feel safer	56.8
A website or App allows residents to effectively monitor air pollution	30.6
Arranging medical appointments online has improved access	45.6

Mobility

	Score
Car-sharing Apps have reduced congestion	33.5
Apps that direct you to an available parking space have reduced journey time	33.0
Bicycle hiring has reduced congestion	44.8
Online scheduling and ticket sales has made public transport easier to use	62.2
The city provides information on traffic congestion through mobile phones	45.3

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.3

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	71.1
IT skills are taught well in schools	54.7
Online services provided by the city has made it easier to start a new business	47.5
The current internet speed and reliability meet connectivity needs	64.1

Governance

	Score
Online public access to city finances has reduced corruption	38.3
Online voting has increased participation	55.9
An online platform where residents can propose ideas has improved city life	42.3
Processing Identification Documents online has reduced waiting times	49.2

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

% of respondents who chose the Priority Area

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	%
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	%
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

LEGEND: MIN ● CITY | MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	41.3
Public transport is satisfactory	67.3

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Score

Health & Safety

	Score
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

	Score
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

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

Opportunities (Work & School)

	Score
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

	Score
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)	

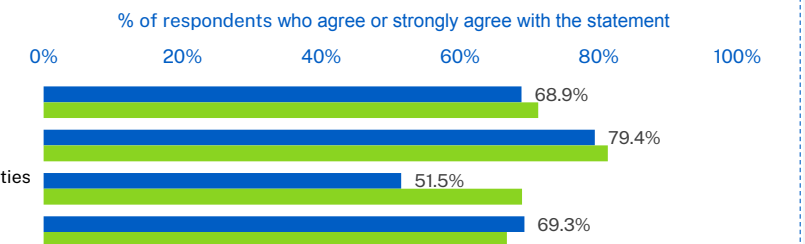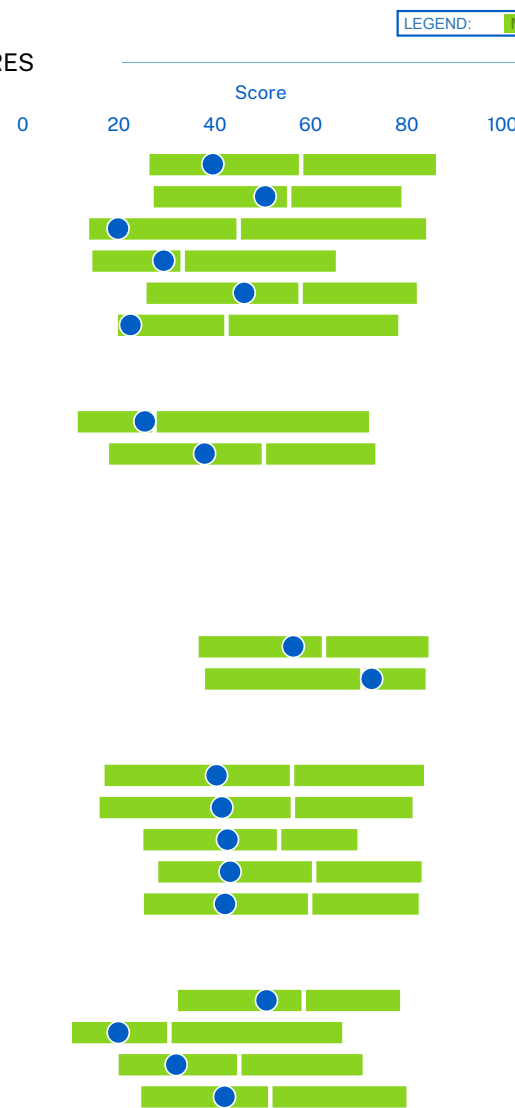Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

% of respondents who chose the Priority Area

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.

affordable housing	70.3%
security	62.9%
health services	43.2%
corruption / transparency	41.9%
unemployment	38.8%
school education	37.4%
road congestion	35.0%
fulfilling employment	29.9%
public transport	21.7%
air pollution	19.6%
basic amenities (water, waste)	16.7%
citizen engagement	12.2%
social mobility / inclusiveness	11.8%
Green spaces	11.2%
recycling	9.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	51.9%
You are comfortable with face recognition technologies to lower crime	62.5%
You feel the availability of online information has increased your trust in authorities	48.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	74.7%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	54.3
Recycling services are satisfactory	61.7
Public safety is not a problem	26.5
Air pollution is not a problem	34.0
Medical services provision is satisfactory	58.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	35.4

Mobility

Traffic congestion is not a problem	24.3
Public transport is satisfactory	51.8

Activities

Green spaces are satisfactory	61.7
Cultural activities (shows, bars, and museums) are satisfactory	77.8

Opportunities (Work & School)

Employment finding services are readily available	64.0
Most children have access to a good school	49.8
Lifelong learning opportunities are provided by local institutions	53.4
Businesses are creating new jobs	61.9
Minorities feel welcome	59.1

Governance

Information on local government decisions are easily accessible	58.8
Corruption of city officials is not an issue of concern	26.5
Residents contribute to decision making of local government	45.6
Residents provide feedback on local government projects	54.8

TECHNOLOGIES

Score

Health & Safety

Online reporting of city maintenance problems provides a speedy solution	44.1
A website or App allows residents to easily give away unwanted items	54.2
Free public wifi has improved access to city services	54.9
CCTV cameras has made residents feel safer	48.5
A website or App allows residents to effectively monitor air pollution	40.4
Arranging medical appointments online has improved access	65.5

Mobility

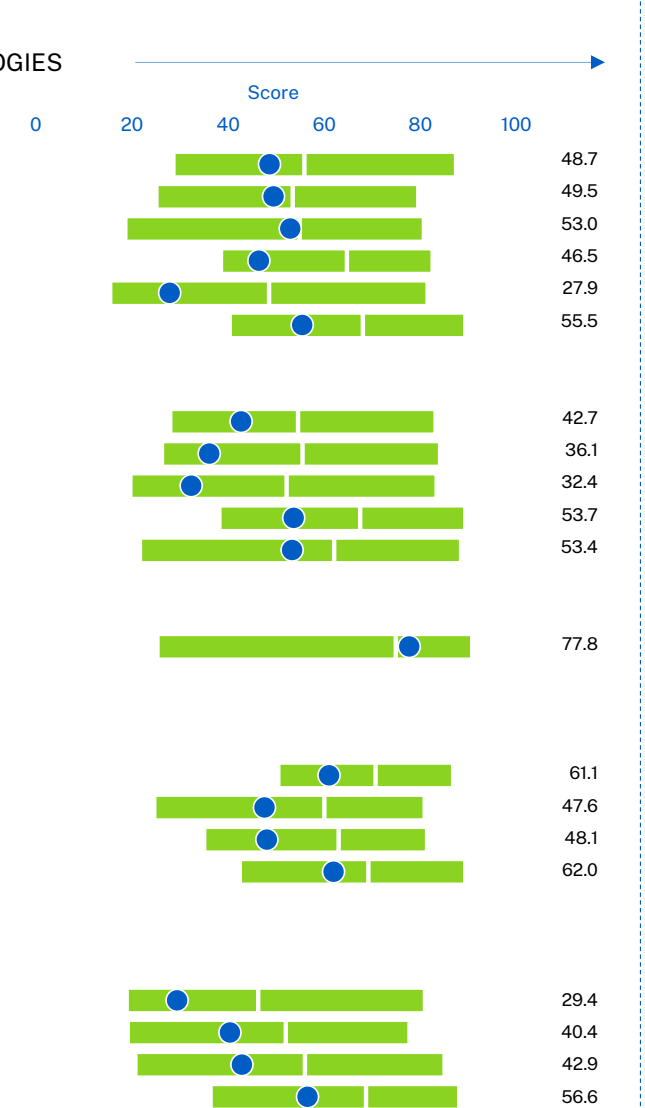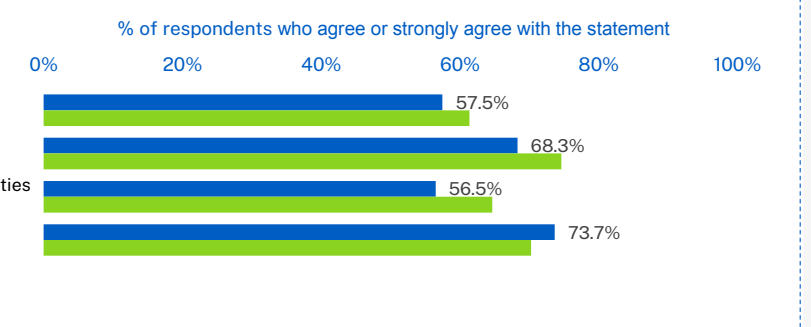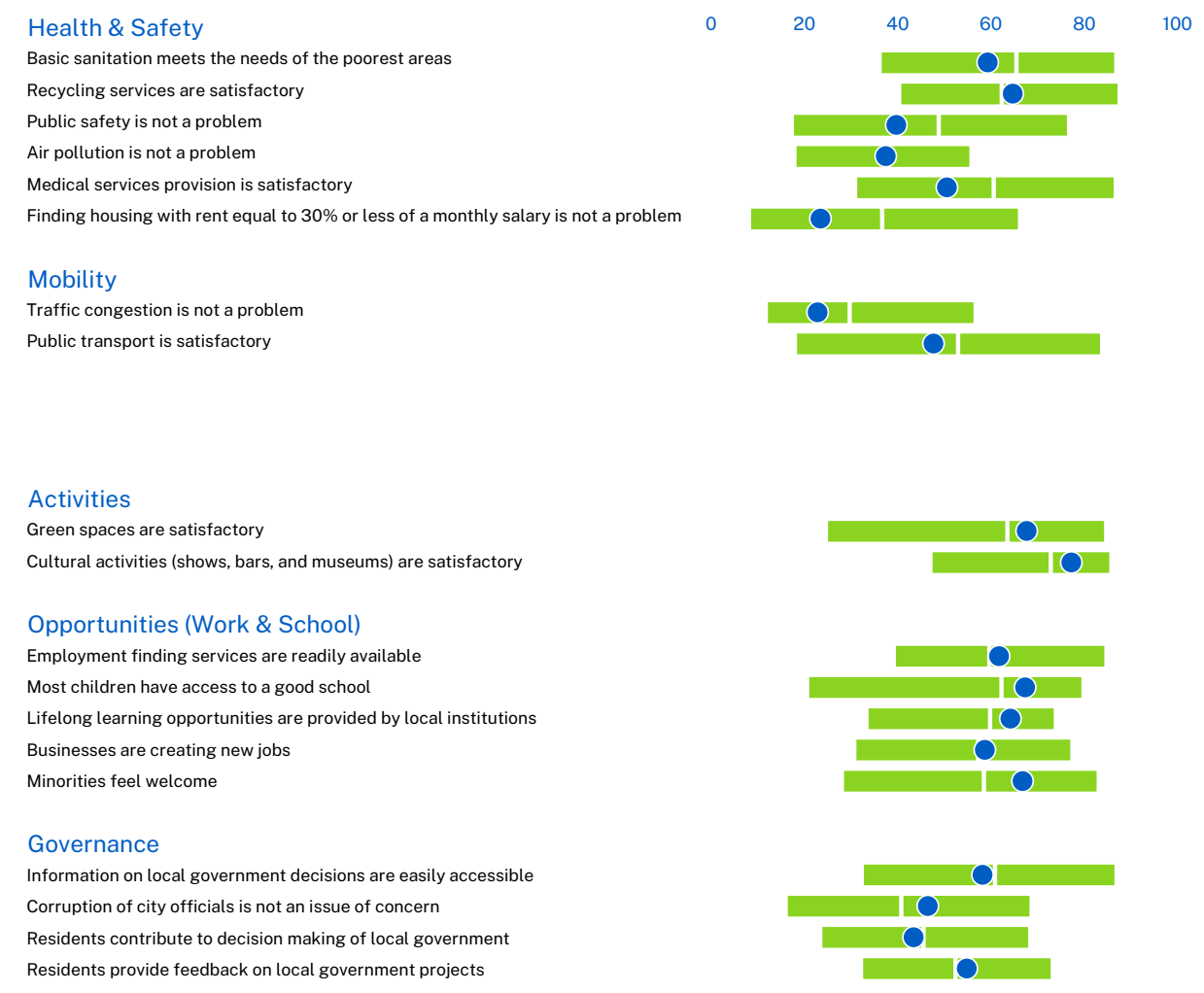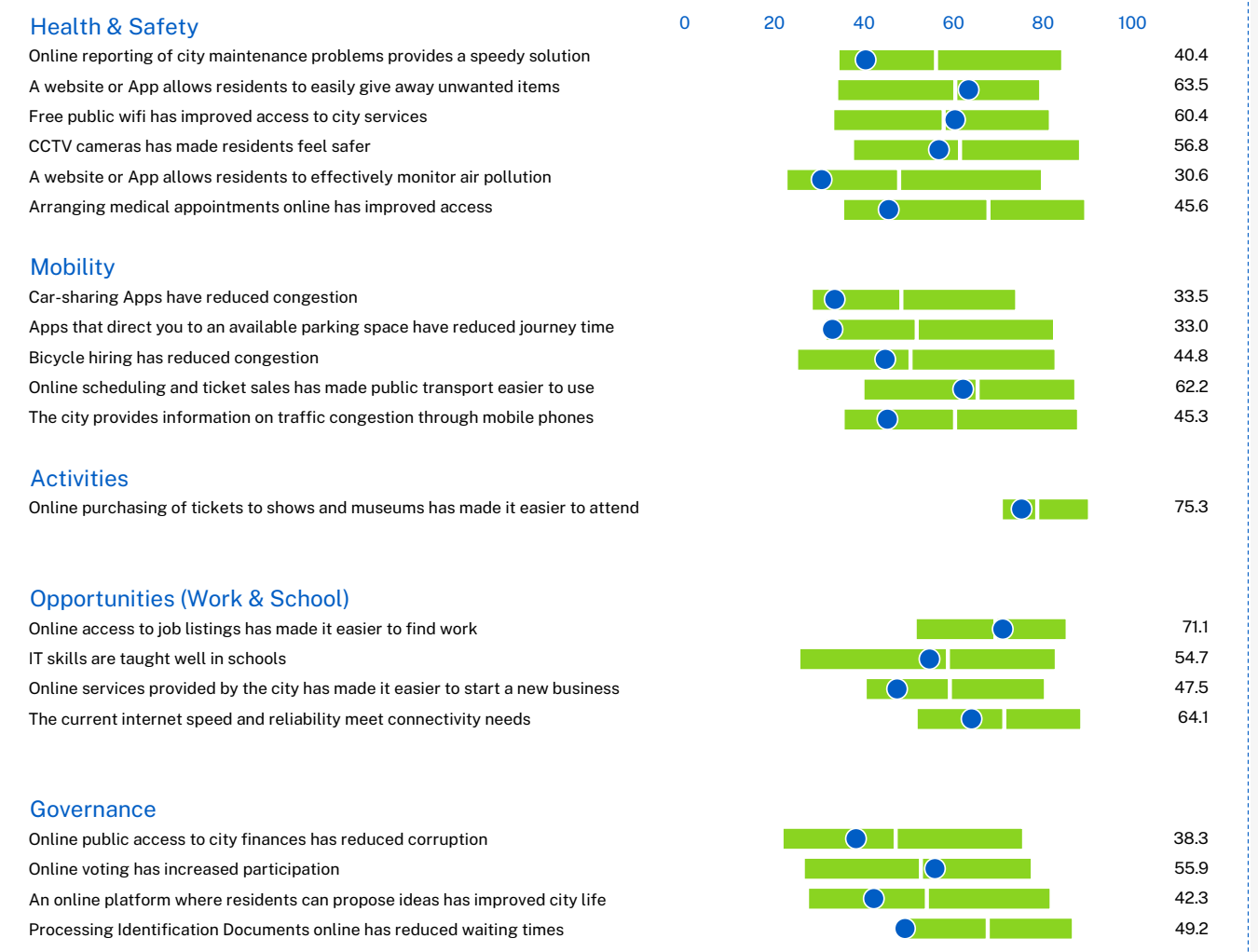|	
Car-sharing Apps have reduced congestion	44.7
Apps that direct you to an available parking space have reduced journey time	53.3
Bicycle hiring has reduced congestion	46.3
Online scheduling and ticket sales has made public transport easier to use	60.6
The city provides information on traffic congestion through mobile phones	63.4

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	65.6
IT skills are taught well in schools	49.6
Online services provided by the city has made it easier to start a new business	48.7
The current internet speed and reliability meet connectivity needs	66.0

Governance

Online public access to city finances has reduced corruption	34.9
Online voting has increased participation	57.9
An online platform where residents can propose ideas has improved city life	49.5
Processing Identification Documents online has reduced waiting times	59.1

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)

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

% of respondents who chose the Priority Area

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	%
road congestion	55.4%
fulfilling employment	49.3%
affordable housing	41.4%
air pollution	35.2%
corruption / transparency	33.0%
health services	32.0%
unemployment	28.5%
social mobility / inclusiveness	27.0%
basic amenities (water, waste)	26.6%
school education	24.4%
recycling	22.8%
Green spaces	20.1%
citizen engagement	17.6%
public transport	16.3%
security	14.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	87.8%
You are comfortable with face recognition technologies to lower crime	88.8%
You feel the availability of online information has increased your trust in authorities	90.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	85.2%

LEGEND: GROUP MEAN · CITY

LEGEND: MIN · CITY · MEAN · GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	82.9
Recycling services are satisfactory	74.6
Public safety is not a problem	73.3
Air pollution is not a problem	61.0
Medical services provision is satisfactory	77.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	68.4

Mobility

	Score
Traffic congestion is not a problem	40.8
Public transport is satisfactory	69.3

Activities

	Score
Green spaces are satisfactory	81.6
Cultural activities (shows, bars, and museums) are satisfactory	79.2

Opportunities (Work & School)

	Score
Employment finding services are readily available	76.9
Most children have access to a good school	74.5
Lifelong learning opportunities are provided by local institutions	65.1
Businesses are creating new jobs	72.3
Minorities feel welcome	82.4

Governance

	Score
Information on local government decisions are easily accessible	74.8
Corruption of city officials is not an issue of concern	58.1
Residents contribute to decision making of local government	59.3
Residents provide feedback on local government projects	68.5

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	78.0
A website or App allows residents to easily give away unwanted items	71.5
Free public wifi has improved access to city services	76.4
CCTV cameras has made residents feel safer	80.2
A website or App allows residents to effectively monitor air pollution	73.1
Arranging medical appointments online has improved access	87.5

Mobility

	Score
Car-sharing Apps have reduced congestion	62.2
Apps that direct you to an available parking space have reduced journey time	78.4
Bicycle hiring has reduced congestion	72.4
Online scheduling and ticket sales has made public transport easier to use	87.3
The city provides information on traffic congestion through mobile phones	83.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	88.3

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	80.7
IT skills are taught well in schools	75.0
Online services provided by the city has made it easier to start a new business	73.6
The current internet speed and reliability meet connectivity needs	87.2

Governance

	Score
Online public access to city finances has reduced corruption	70.4
Online voting has increased participation	72.0
An online platform where residents can propose ideas has improved city life	78.4
Processing Identification Documents online has reduced waiting times	78.5

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)
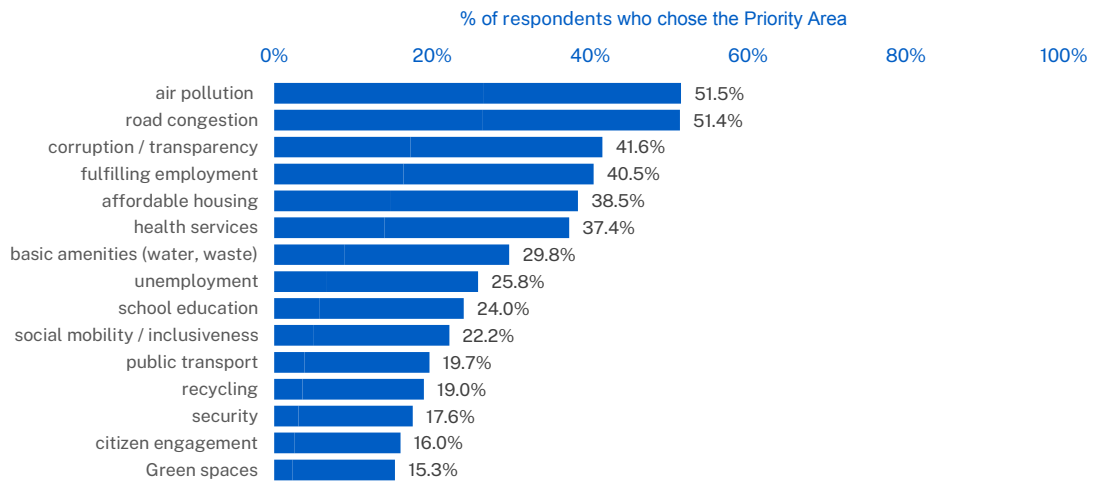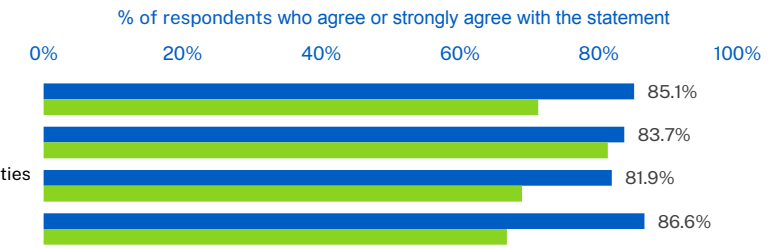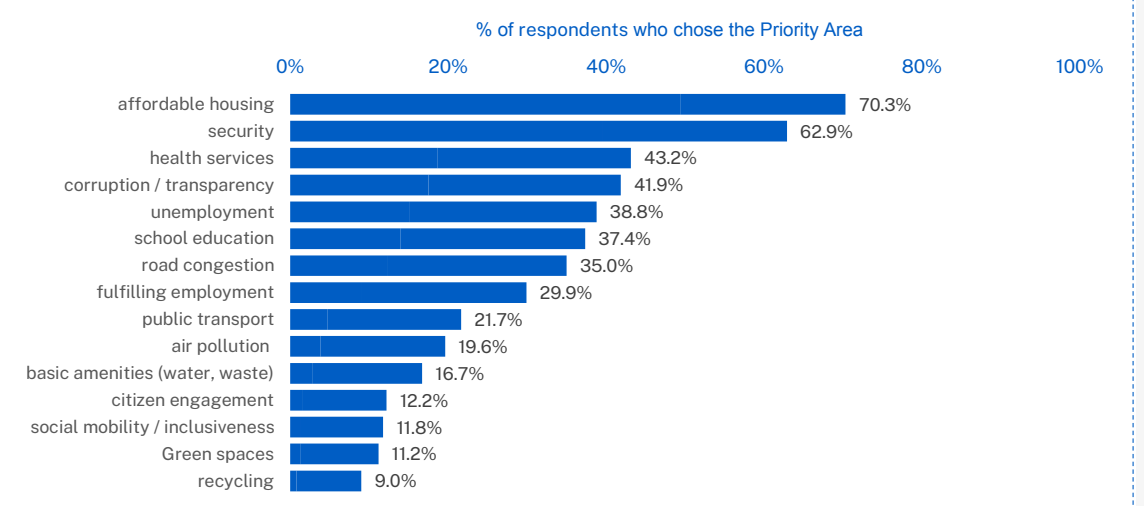
HDI   0.967
(Global Data Lab)

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

Country
Denmark

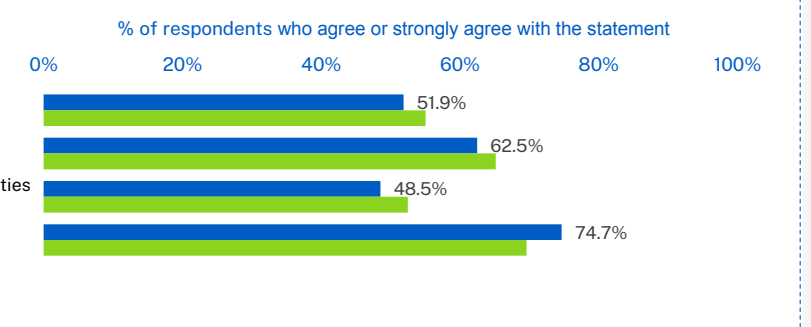|	2019	2020	2021	2022	1 yr change
HDI	0.946	0.946	0.947	0.952	+0.005
Life expectancy at birth	81.4	81.5	81.4	81.9	+0.5
Expected years of schooling	18.6	18.6	18.8	18.8	+0.0
Mean years of schooling	12.9	13.0	13.0	13.0	+0.0
GNI per capita (PPP $)	58,454	57,324	59,993	62,019	+2,026

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.
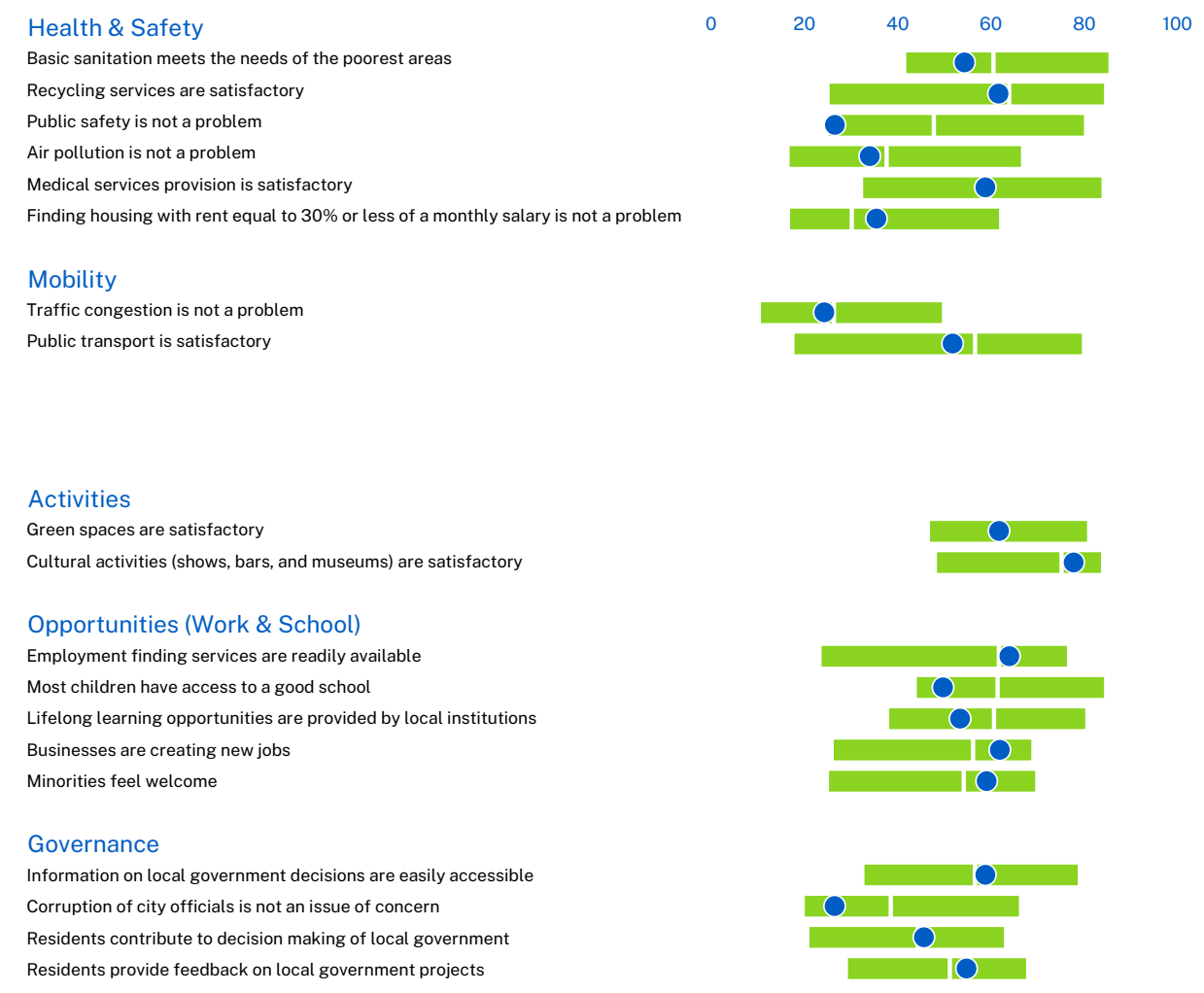
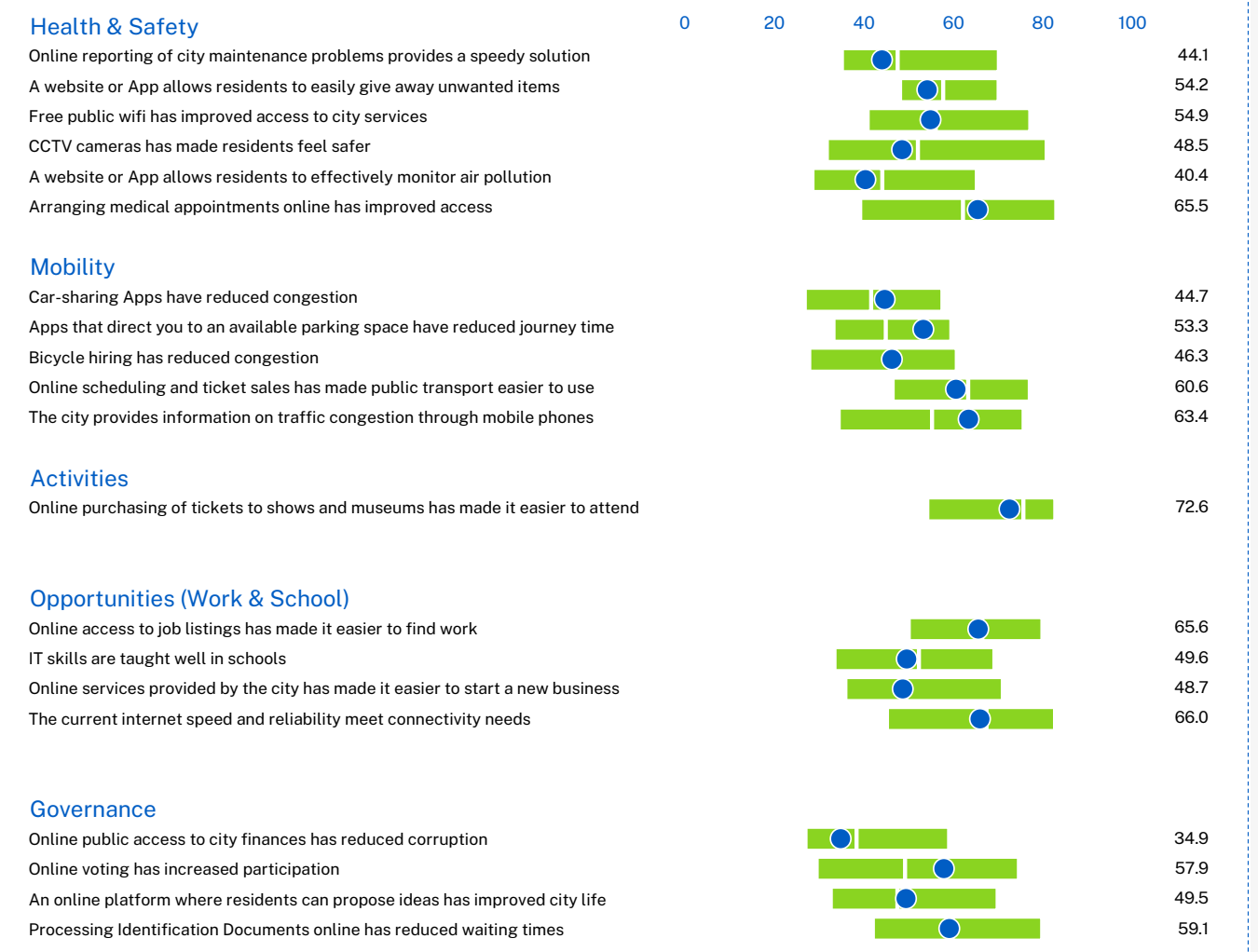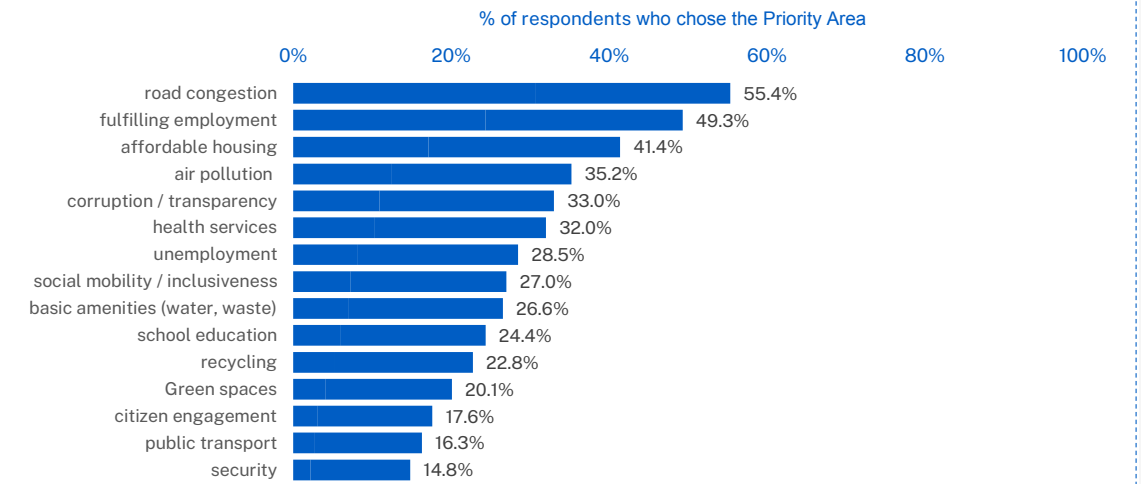% of respondents who chose the Priority Area

Priority Area	%
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	%
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

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	32.3
Public transport is satisfactory	65.9

Activities
	Score
Green spaces are satisfactory	72.2
Cultural activities (shows, bars, and museums) are satisfactory	83.1

Opportunities (Work & School)
	Score
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
	Score
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

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	78.9

Opportunities (Work & School)
	Score
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
	Score
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

CC

TECHNOLOGIES

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
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

% of respondents who chose the Priority Area

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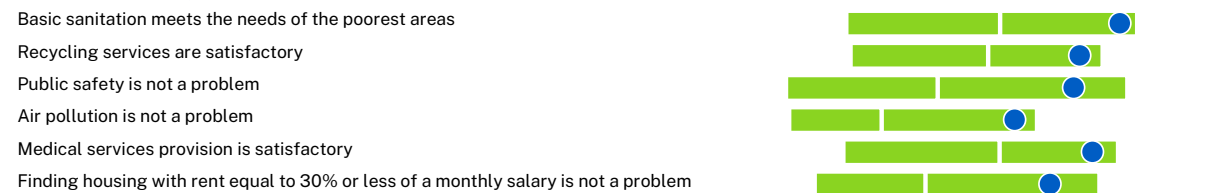
air pollution	69.8%
security	48.8%
basic amenities (water, waste)	44.7%
health services	38.3%
unemployment	36.9%
road congestion	36.6%
Green spaces	32.7%
fulfilling employment	31.1%
corruption / transparency	29.6%
affordable housing	29.5%
recycling	22.1%
public transport	20.3%
school education	13.1%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

ATTITUDES

% of respondents who agree or strongly agree with the statement

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

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES
Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	25.3
Public transport is satisfactory	67.5

Activities
	Score
Green spaces are satisfactory	63.1
Cultural activities (shows, bars, and museums) are satisfactory	73.8

Opportunities (Work & School)
	Score
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
	Score
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

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	80.5

Opportunities (Work & School)
	Score
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
	Score
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

% of respondents who chose the Priority Area

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	%
affordable housing	83.2%
road congestion	60.3%
security	46.0%
air pollution	42.7%
school education	31.3%
unemployment	31.2%
health services	27.2%
corruption / transparency	23.1%
public transport	20.0%
fulfilling employment	19.4%
basic amenities (water, waste)	17.4%
recycling	14.5%
Green spaces	11.6%
social mobility / inclusiveness	11.4%
citizen engagement	7.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	55.9%
You are comfortable with face recognition technologies to lower crime	61.2%
You feel the availability of online information has increased your trust in authorities	43.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	79.7%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	53.7
Recycling services are satisfactory	62.9
Public safety is not a problem	30.8
Air pollution is not a problem	29.0
Medical services provision is satisfactory	62.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	17.7

Mobility

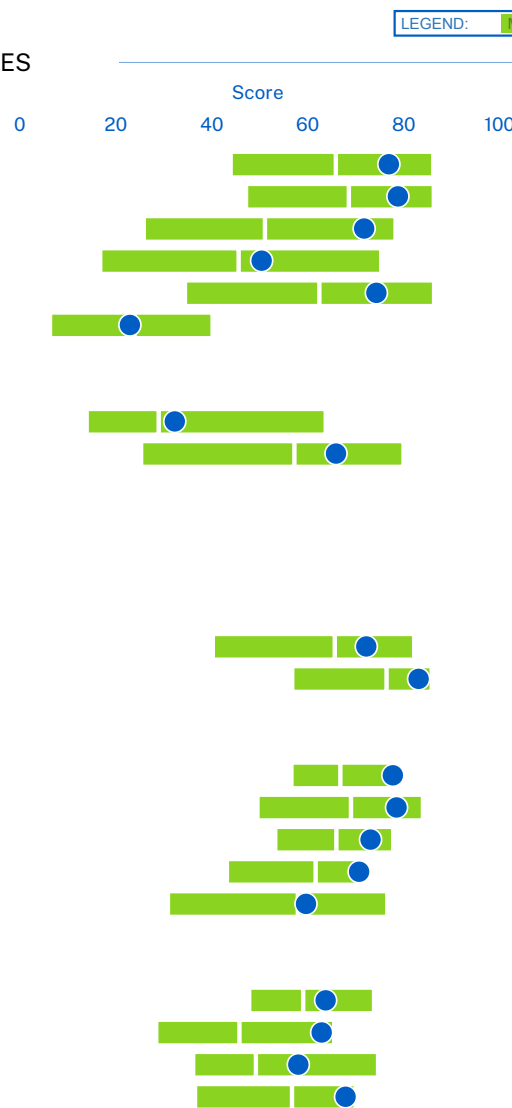|	Score
Traffic congestion is not a problem	19.5
Public transport is satisfactory	49.3

Activities

	Score
Green spaces are satisfactory	67.4
Cultural activities (shows, bars, and museums) are satisfactory	78.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	68.0
Most children have access to a good school	59.8
Lifelong learning opportunities are provided by local institutions	65.2
Businesses are creating new jobs	64.8
Minorities feel welcome	61.3

Governance

	Score
Information on local government decisions are easily accessible	57.4
Corruption of city officials is not an issue of concern	43.1
Residents contribute to decision making of local government	50.4
Residents provide feedback on local government projects	61.3

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	36.5
A website or App allows residents to easily give away unwanted items	56.8
Free public wifi has improved access to city services	42.2
CCTV cameras has made residents feel safer	39.0
A website or App allows residents to effectively monitor air pollution	40.2
Arranging medical appointments online has improved access	63.7

Mobility

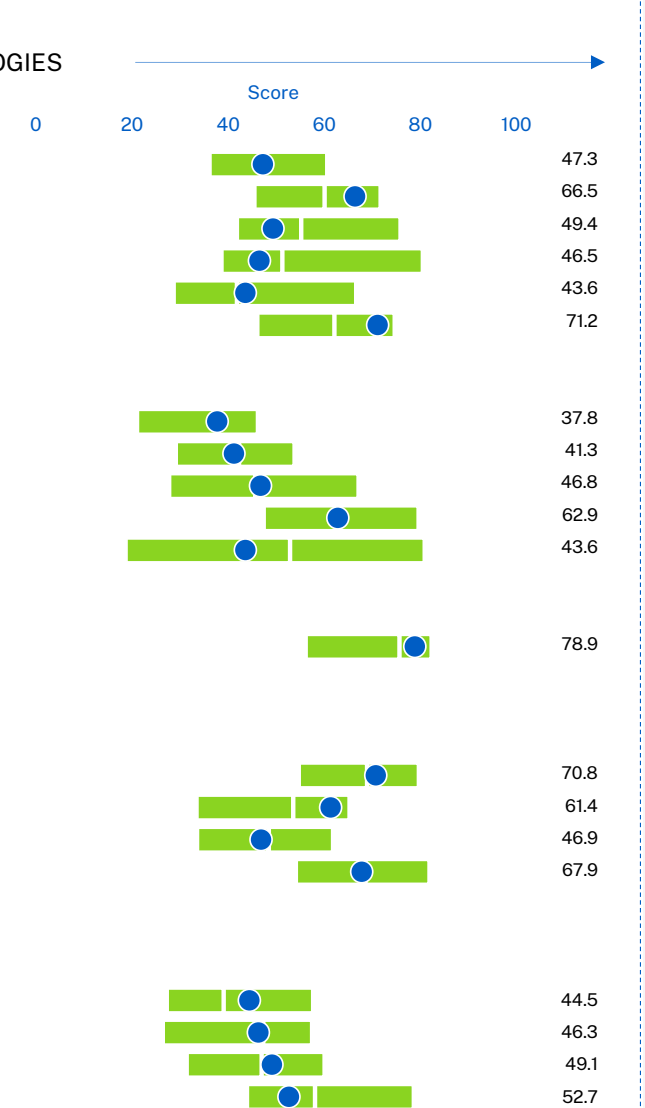|	Score
Car-sharing Apps have reduced congestion	40.1
Apps that direct you to an available parking space have reduced journey time	36.7
Bicycle hiring has reduced congestion	37.1
Online scheduling and ticket sales has made public transport easier to use	52.6
The city provides information on traffic congestion through mobile phones	54.1

Activities

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

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	66.8
IT skills are taught well in schools	45.1
Online services provided by the city has made it easier to start a new business	43.3
The current internet speed and reliability meet connectivity needs	66.4

Governance

	Score
Online public access to city finances has reduced corruption	38.4
Online voting has increased participation	51.7
An online platform where residents can propose ideas has improved city life	39.8
Processing Identification Documents online has reduced waiting times	53.7

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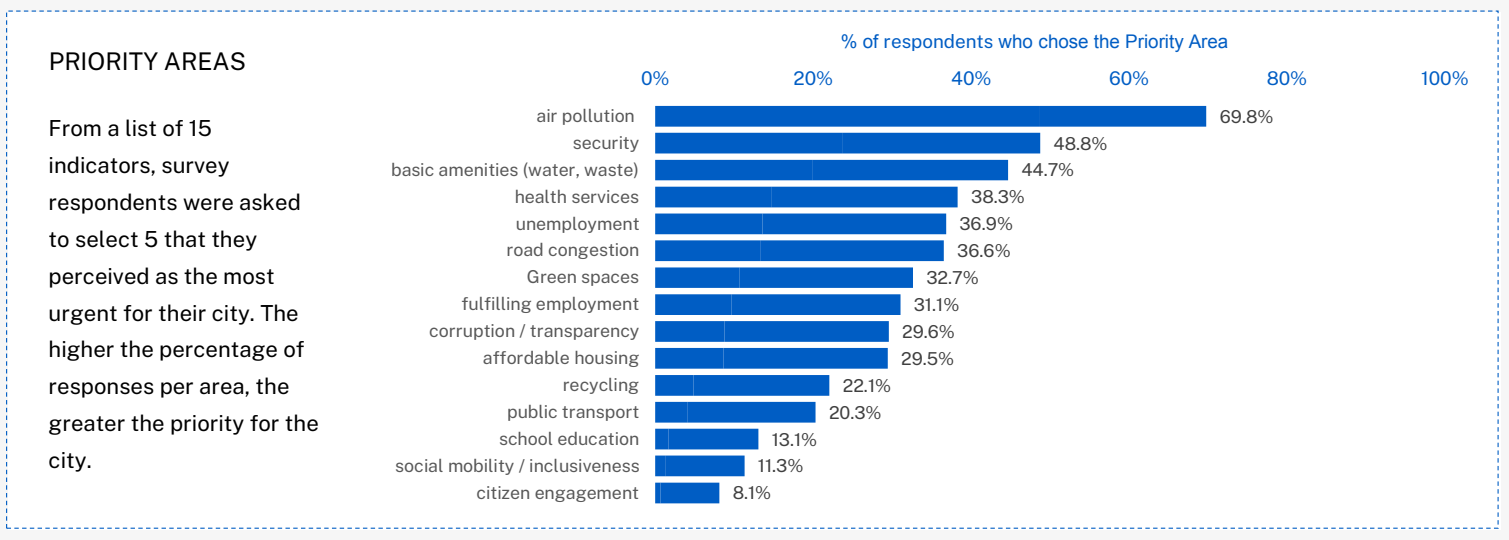
Population	1,190,000
(UN Data)	
HDI	0.855
(Global Data Lab)	

Country

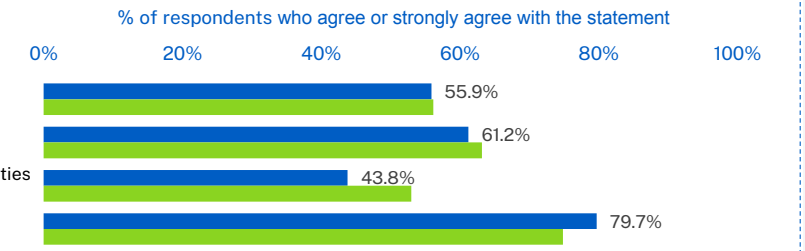| Qatar	2019	2020	2021	2022	1 yr change
HDI	0.869	0.863	0.864	0.875	+0.011
Life expectancy at birth	81.0	79.1	79.3	81.6	+2.3
Expected years of schooling	13.2	13.3	13.3	13.3	+0.0
Mean years of schooling	10.0	10.1	10.1	10.1	+0.0
GNI per capita (PPP $)	88,647	87,385	91,760	95,944	+4,184

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	73.6%
fulfilling employment	47.1%
unemployment	46.4%
road congestion	36.6%
Green spaces	29.6%
health services	28.2%
air pollution	27.9%
public transport	26.3%
recycling	25.4%
citizen engagement	23.6%
school education	23.4%
basic amenities (water, waste)	20.0%
social mobility / inclusiveness	16.8%
corruption / transparency	15.0%
security	14.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	67.1%
You are comfortable with face recognition technologies to lower crime	84.1%
You feel the availability of online information has increased your trust in authorities	85.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	67.4%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	85.0
Recycling services are satisfactory	76.8
Public safety is not a problem	71.5
Air pollution is not a problem	53.9
Medical services provision is satisfactory	83.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	46.5

Mobility

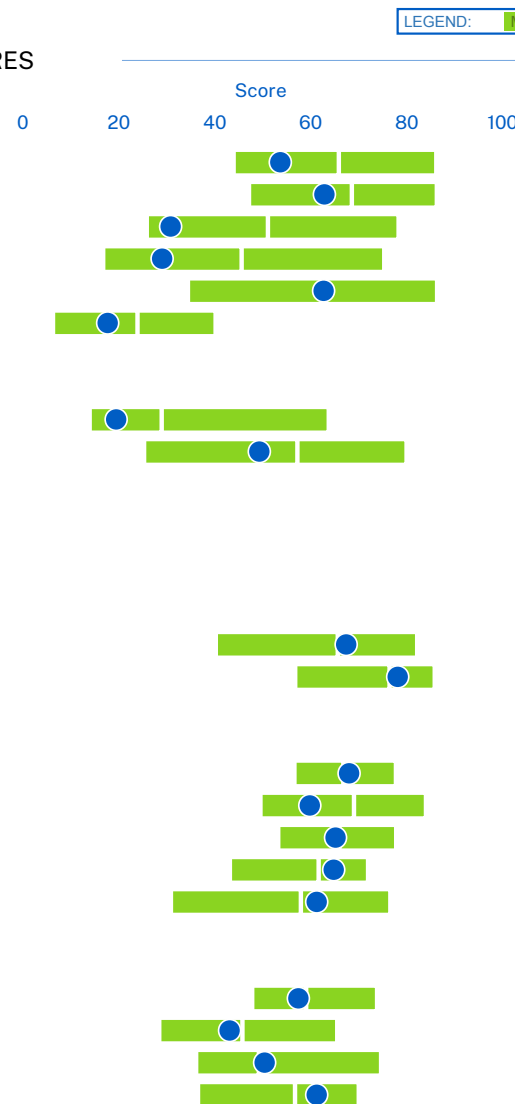|	Score
Traffic congestion is not a problem	56.7
Public transport is satisfactory	80.9

Activities

	Score
Green spaces are satisfactory	78.2
Cultural activities (shows, bars, and museums) are satisfactory	79.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	55.2
Most children have access to a good school	74.3
Lifelong learning opportunities are provided by local institutions	66.6
Businesses are creating new jobs	64.0
Minorities feel welcome	73.2

Governance

	Score
Information on local government decisions are easily accessible	77.7
Corruption of city officials is not an issue of concern	64.8
Residents contribute to decision making of local government	53.3
Residents provide feedback on local government projects	55.7

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	77.5
A website or App allows residents to easily give away unwanted items	72.0
Free public wifi has improved access to city services	70.0
CCTV cameras has made residents feel safer	83.8
A website or App allows residents to effectively monitor air pollution	54.5
Arranging medical appointments online has improved access	77.8

Mobility

	Score
Car-sharing Apps have reduced congestion	71.6
Apps that direct you to an available parking space have reduced journey time	66.7
Bicycle hiring has reduced congestion	63.7
Online scheduling and ticket sales has made public transport easier to use	78.7
The city provides information on traffic congestion through mobile phones	69.9

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	87.3

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	72.4
IT skills are taught well in schools	74.1
Online services provided by the city has made it easier to start a new business	72.6
The current internet speed and reliability meet connectivity needs	85.4

Governance

	Score
Online public access to city finances has reduced corruption	66.3
Online voting has increased participation	62.6
An online platform where residents can propose ideas has improved city life	63.0
Processing Identification Documents online has reduced waiting times	81.5

Dubai

SMART CITY RANKING

12

Out of 142

▲

17 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	2,880,000
	(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

% of respondents who chose the Priority Area

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	%
affordable housing	78.8%
unemployment	52.4%
road congestion	48.9%
fulfilling employment	47.1%
air pollution	32.9%
health services	27.5%
Green spaces	26.7%
recycling	22.7%
citizen engagement	20.6%
school education	20.6%
public transport	19.2%
social mobility / inclusiveness	18.5%
basic amenities (water, waste)	12.9%
corruption / transparency	12.6%
security	11.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	City
You are willing to concede personal data in order to improve traffic congestion	73.7%
You are comfortable with face recognition technologies to lower crime	88.3%
You feel the availability of online information has increased your trust in authorities	92.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	72.1%

LEGEND: GROUP MEAN CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	81.3
Recycling services are satisfactory	83.8
Public safety is not a problem	67.1
Air pollution is not a problem	52.1
Medical services provision is satisfactory	82.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	52.1

Mobility

	Score
Traffic congestion is not a problem	40.8
Public transport is satisfactory	79.7

Activities

	Score
Green spaces are satisfactory	81.9
Cultural activities (shows, bars, and museums) are satisfactory	85.8

Opportunities (Work & School)

	Score
Employment finding services are readily available	68.7
Most children have access to a good school	76.7
Lifelong learning opportunities are provided by local institutions	69.8
Businesses are creating new jobs	70.5
Minorities feel welcome	81.3

Governance

	Score
Information on local government decisions are easily accessible	86.9
Corruption of city officials is not an issue of concern	68.7
Residents contribute to decision making of local government	63.0
Residents provide feedback on local government projects	72.1

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	77.8
A website or App allows residents to easily give away unwanted items	76.0
Free public wifi has improved access to city services	79.8
CCTV cameras has made residents feel safer	88.5
A website or App allows residents to effectively monitor air pollution	59.7
Arranging medical appointments online has improved access	84.3

Mobility

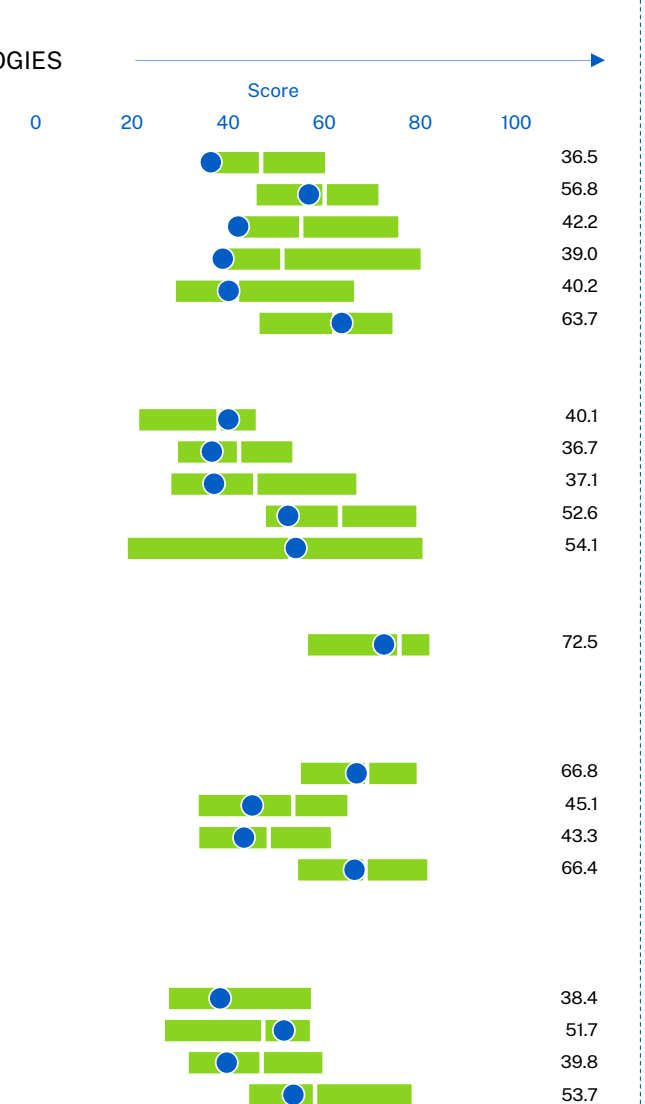|	Score
Car-sharing Apps have reduced congestion	65.5
Apps that direct you to an available parking space have reduced journey time	71.4
Bicycle hiring has reduced congestion	65.9
Online scheduling and ticket sales has made public transport easier to use	78.2
The city provides information on traffic congestion through mobile phones	79.7

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	89.5

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	76.7
IT skills are taught well in schools	76.5
Online services provided by the city has made it easier to start a new business	80.7
The current internet speed and reliability meet connectivity needs	85.3

Governance

	Score
Online public access to city finances has reduced corruption	70.8
Online voting has increased participation	63.5
An online platform where residents can propose ideas has improved city life	73.0
Processing Identification Documents online has reduced waiting times	85.2

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
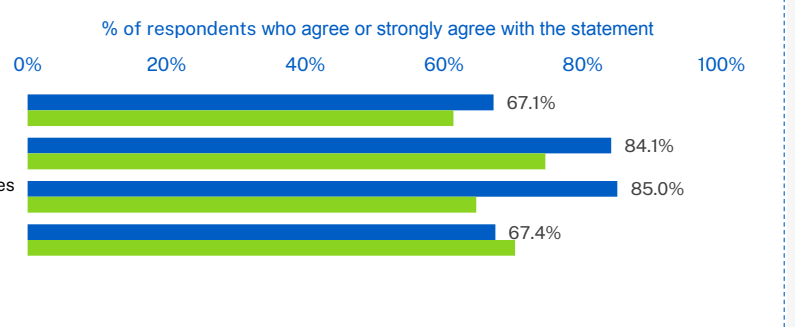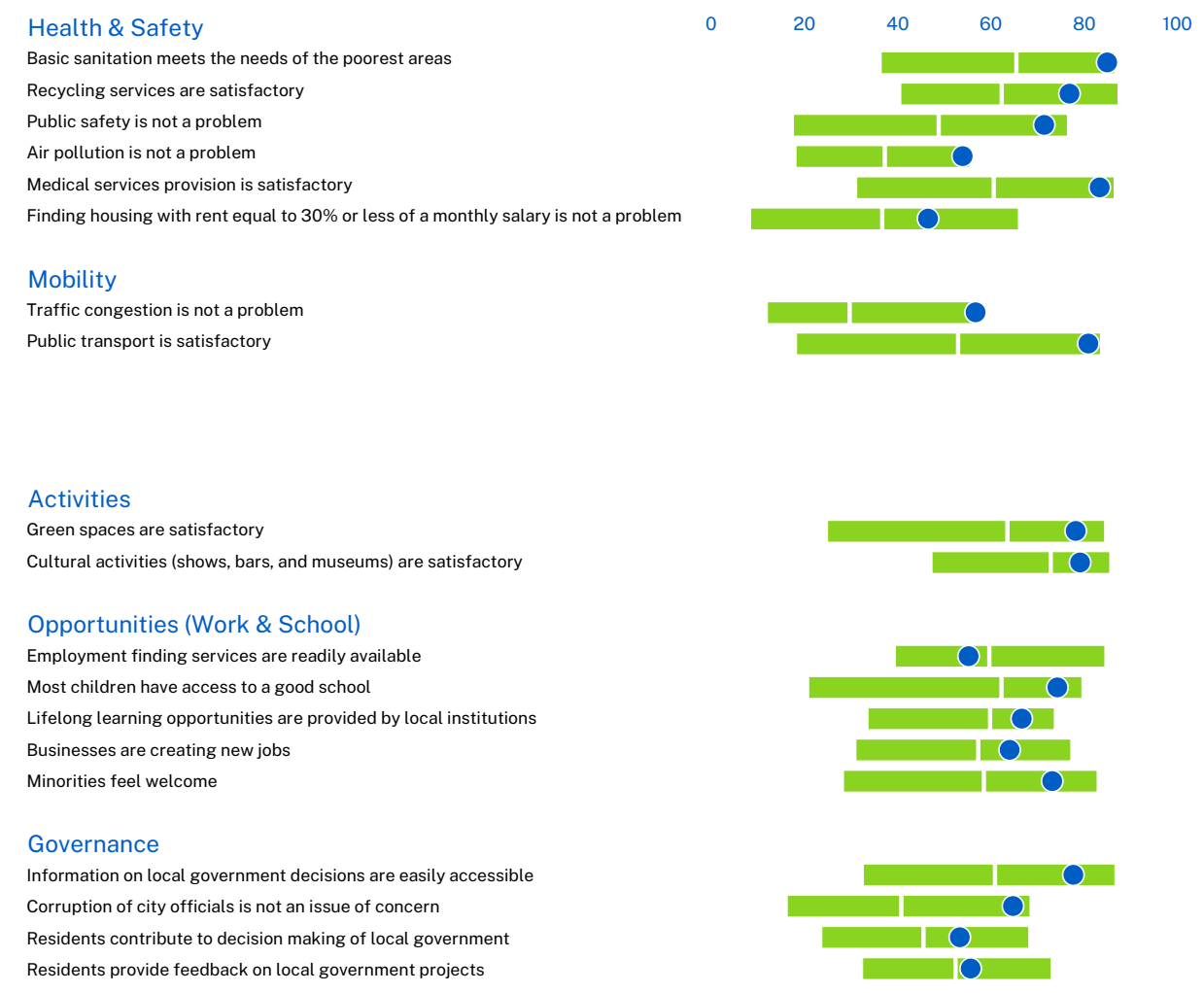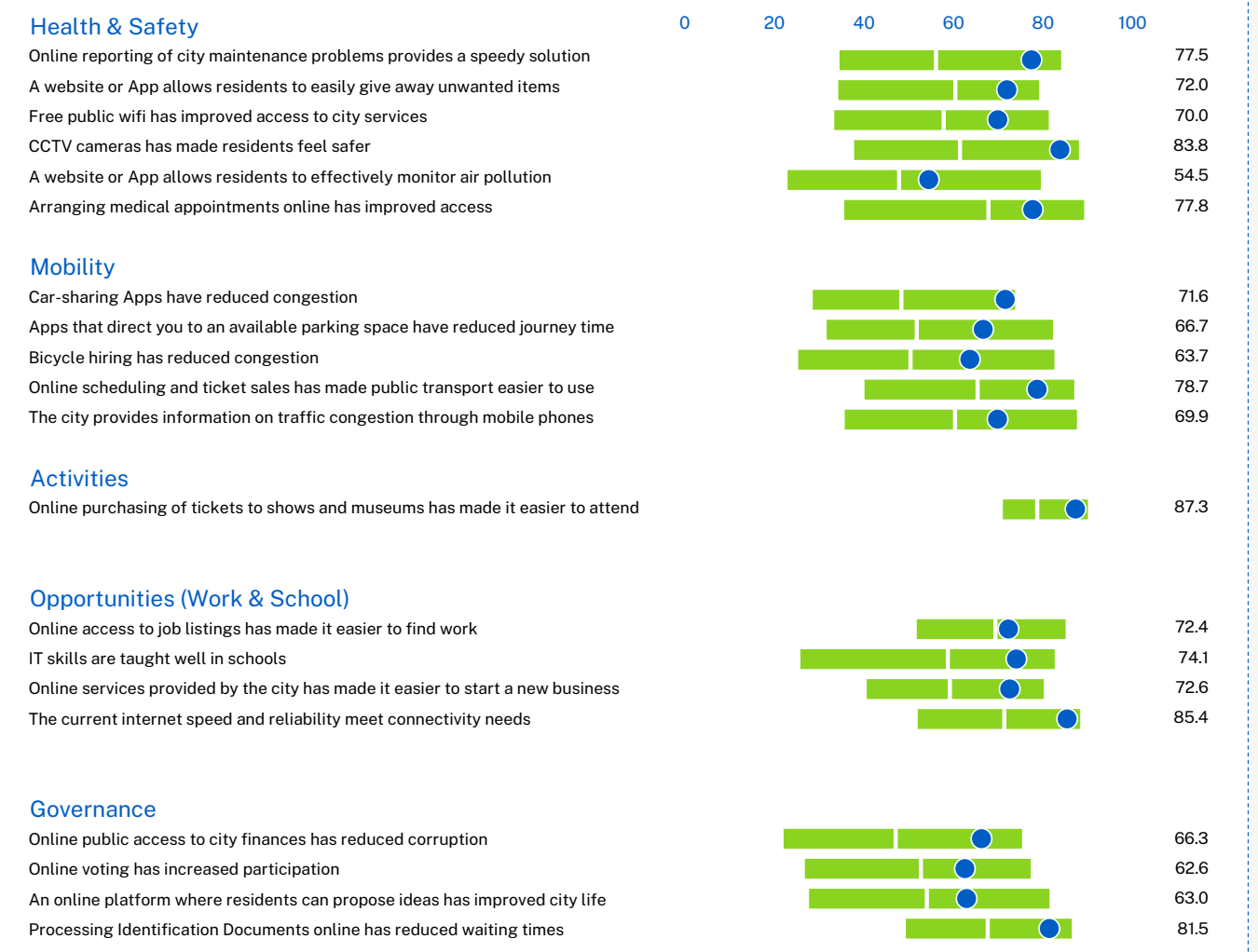
All ratings range
from AAA to D

BACKGROUND INFORMATION

City

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

HDI 0.950
(Global Data Lab)
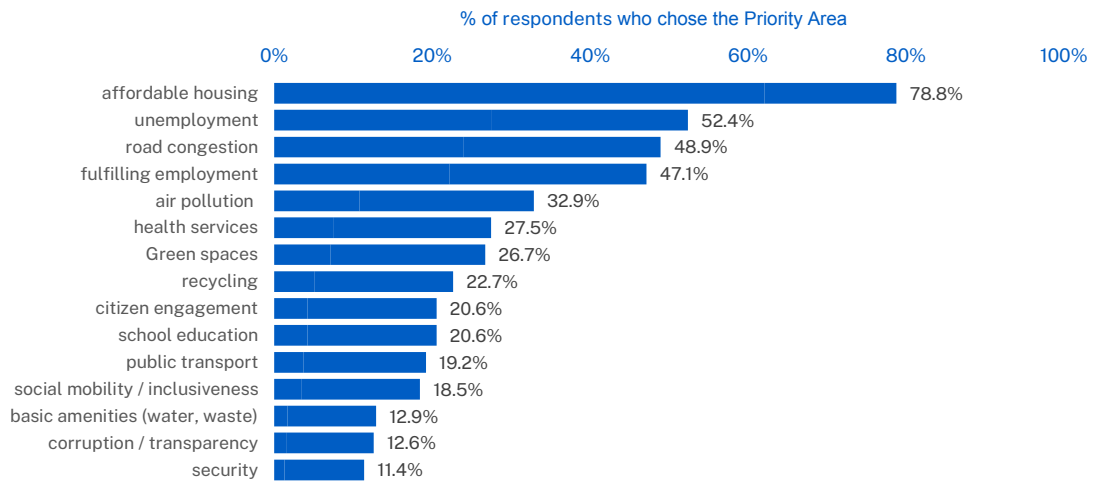
Country
Ireland

	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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	91.0%
health services	73.9%
security	48.6%
public transport	37.2%
road congestion	35.8%
unemployment	31.6%
corruption / transparency	27.1%
school education	22.1%
fulfilling employment	20.9%
Green spaces	15.2%
social mobility / inclusiveness	14.1%
recycling	13.7%
basic amenities (water, waste)	13.0%
air pollution	12.8%
citizen engagement	9.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement
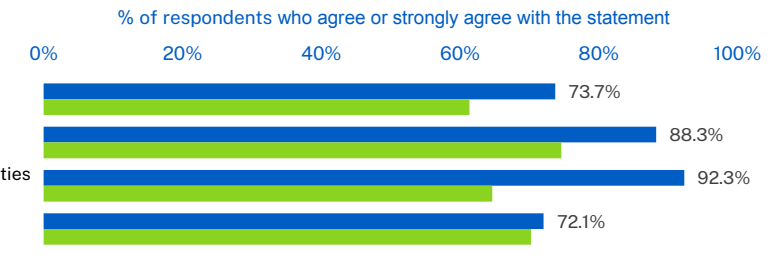
Statement	City %
You are willing to concede personal data in order to improve traffic congestion	59.8%
You are comfortable with face recognition technologies to lower crime	69.2%
You feel the availability of online information has increased your trust in authorities	51.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	74.8%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN • CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	56.6
Recycling services are satisfactory	64.5
Public safety is not a problem	26.1
Air pollution is not a problem	37.5
Medical services provision is satisfactory	34.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	10.9

Mobility

	Score
Traffic congestion is not a problem	20.3
Public transport is satisfactory	41.9

Activities

	Score
Green spaces are satisfactory	54.7
Cultural activities (shows, bars, and museums) are satisfactory	68.2

Opportunities (Work & School)

	Score
Employment finding services are readily available	68.1
Most children have access to a good school	63.9
Lifelong learning opportunities are provided by local institutions	62.4
Businesses are creating new jobs	61.9
Minorities feel welcome	50.5

Governance

	Score
Information on local government decisions are easily accessible	48.1
Corruption of city officials is not an issue of concern	30.2
Residents contribute to decision making of local government	36.4
Residents provide feedback on local government projects	49.1

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	36.5
A website or App allows residents to easily give away unwanted items	65.2
Free public wifi has improved access to city services	54.7
CCTV cameras has made residents feel safer	48.6
A website or App allows residents to effectively monitor air pollution	29.0
Arranging medical appointments online has improved access	46.4

Mobility

	Score
Car-sharing Apps have reduced congestion	30.9
Apps that direct you to an available parking space have reduced journey time	35.7
Bicycle hiring has reduced congestion	51.6
Online scheduling and ticket sales has made public transport easier to use	62.1
The city provides information on traffic congestion through mobile phones	52.8

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	79.2

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	71.8
IT skills are taught well in schools	50.4
Online services provided by the city has made it easier to start a new business	46.8
The current internet speed and reliability meet connectivity needs	67.4

Governance

	Score
Online public access to city finances has reduced corruption	33.3
Online voting has increased participation	41.3
An online platform where residents can propose ideas has improved city life	39.4
Processing Identification Documents online has reduced waiting times	64.0

Dusseldorf

SMART CITY RANKING

44

Out of 142

▼

38 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	630,000
(UN World Urbanization Prospects)	
HDI	0.939
(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.

% of respondents who chose the Priority Area

affordable housing	70.1%
road congestion	53.8%
security	51.6%
unemployment	41.4%
public transport	35.0%
air pollution	32.2%
basic amenities (water, waste)	23.4%
Green spaces	20.5%
recycling	19.7%
school education	18.7%
health services	18.6%
social mobility / inclusiveness	16.1%
fulfilling employment	14.6%
citizen engagement	13.5%
corruption / transparency	10.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	59.5%
You are comfortable with face recognition technologies to lower crime	65.0%
You feel the availability of online information has increased your trust in authorities	53.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	63.0%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN / CITY / MEAN / GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	64.4
Recycling services are satisfactory	72.3
Public safety is not a problem	56.9
Air pollution is not a problem	41.6
Medical services provision is satisfactory	75.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	25.1

Mobility

Traffic congestion is not a problem	34.8
Public transport is satisfactory	58.9

Activities

Green spaces are satisfactory	64.4
Cultural activities (shows, bars, and museums) are satisfactory	78.2

Opportunities (Work & School)

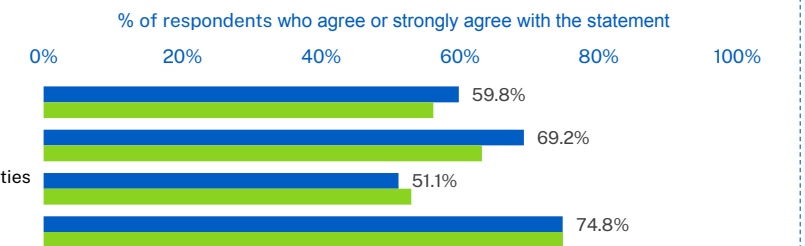|	
Employment finding services are readily available	60.4
Most children have access to a good school	65.2
Lifelong learning opportunities are provided by local institutions	55.5
Businesses are creating new jobs	60.2
Minorities feel welcome	58.1

Governance

Information on local government decisions are easily accessible	54.4
Corruption of city officials is not an issue of concern	52.7
Residents contribute to decision making of local government	48.8
Residents provide feedback on local government projects	54.7

TECHNOLOGIES

Score

Health & Safety

Online reporting of city maintenance problems provides a speedy solution	45.2
A website or App allows residents to easily give away unwanted items	55.4
Free public wifi has improved access to city services	54.4
CCTV cameras has made residents feel safer	45.9
A website or App allows residents to effectively monitor air pollution	37.5
Arranging medical appointments online has improved access	56.7

Mobility

Car-sharing Apps have reduced congestion	40.3
Apps that direct you to an available parking space have reduced journey time	46.2
Bicycle hiring has reduced congestion	48.3
Online scheduling and ticket sales has made public transport easier to use	65.9
The city provides information on traffic congestion through mobile phones	52.3

Activities

Online purchasing of tickets to shows and museums has made it easier to attend	76.2

Opportunities (Work & School)

Online access to job listings has made it easier to find work	69.1
IT skills are taught well in schools	49.2
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	60.2

Governance

Online public access to city finances has reduced corruption	38.6
Online voting has increased participation	54.5
An online platform where residents can propose ideas has improved city life	46.4
Processing Identification Documents online has reduced waiting times	51.9

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 *(Eurostat)*	200,000
HDI *(Global Data Lab)*	0.966

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.

% of respondents who chose the Priority Area

Priority Area	%
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

% of respondents who agree or strongly agree with the statement

Statement	%
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

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

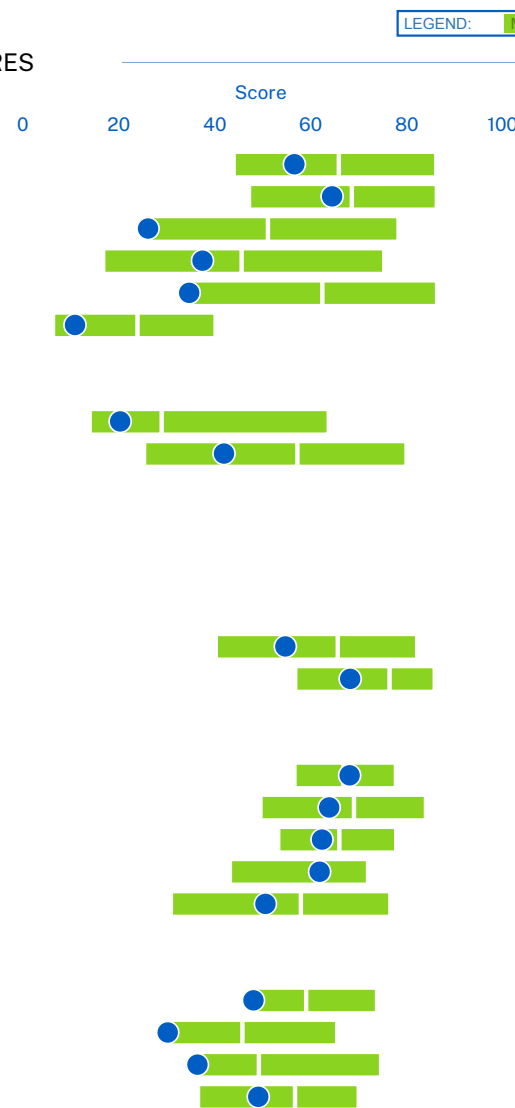|	Score
Traffic congestion is not a problem	39.1
Public transport is satisfactory	72.8

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Score

Health & Safety

	Score
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

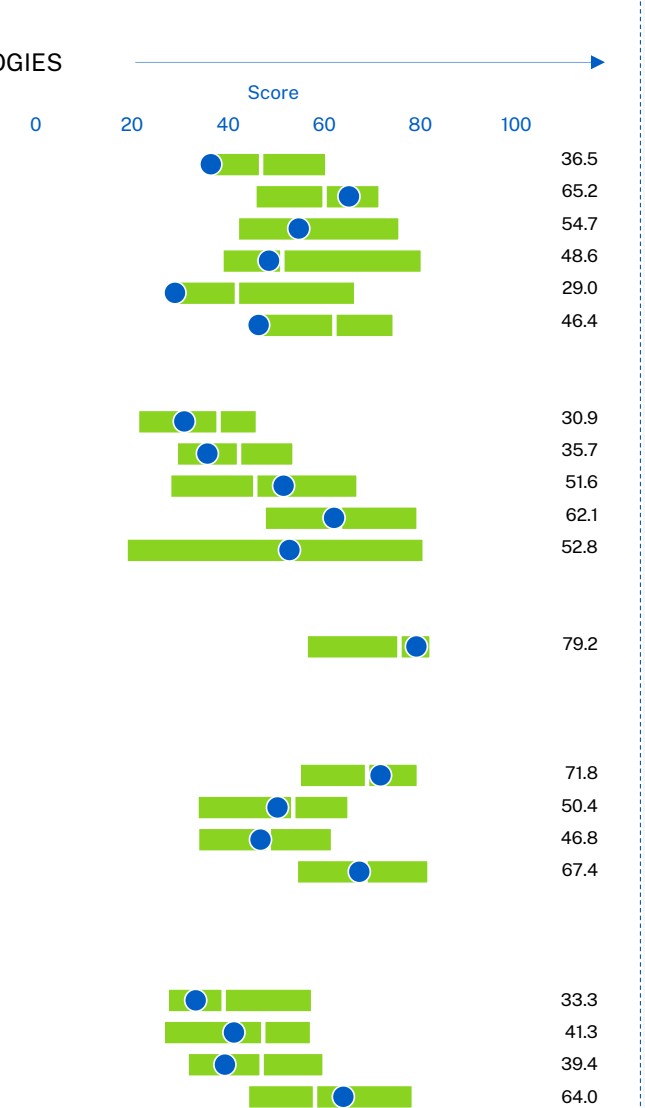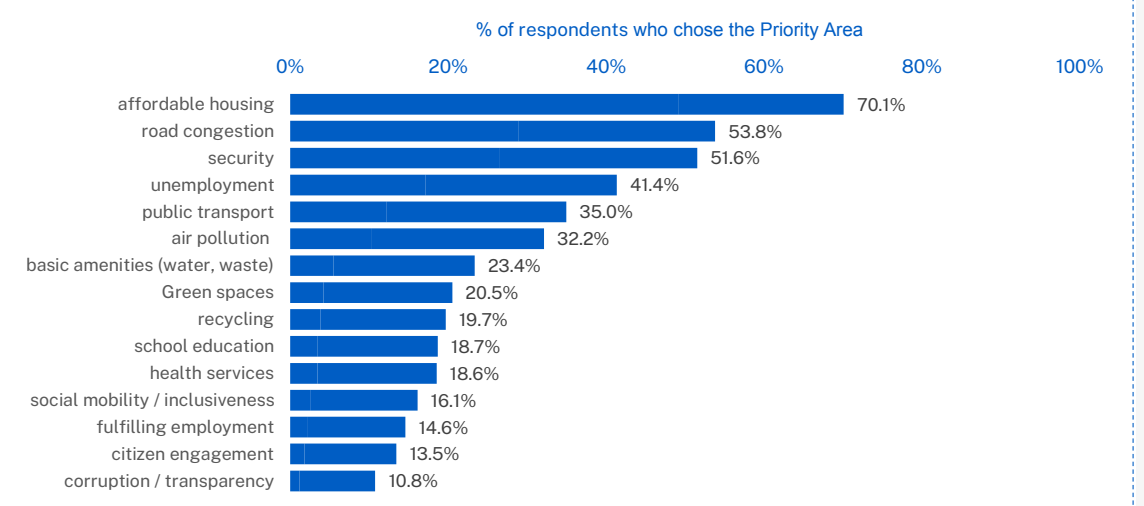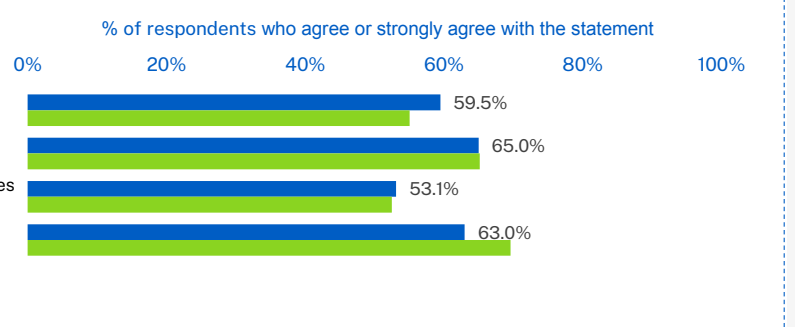|	Score
Car-sharing Apps have reduced congestion	41.3
Apps that direct you to an available parking space have reduced journey time	44.0
Bicycle hiring has reduced congestion	53.2
Online scheduling and ticket sales has made public transport easier to use	77.8
The city provides information on traffic congestion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

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

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

% of respondents who chose the Priority Area

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	%
affordable housing	75.7%
health services	63.1%
unemployment	50.0%
fulfilling employment	39.6%
road congestion	32.7%
school education	29.9%
public transport	29.3%
security	26.7%
recycling	24.6%
air pollution	23.7%
social mobility / inclusiveness	16.3%
Green spaces	15.3%
basic amenities (water, waste)	15.1%
corruption / transparency	13.0%
citizen engagement	10.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	49.7%
You are comfortable with face recognition technologies to lower crime	66.1%
You feel the availability of online information has increased your trust in authorities	46.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	74.1%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	52.2
Recycling services are satisfactory	52.4
Public safety is not a problem	38.6
Air pollution is not a problem	35.0
Medical services provision is satisfactory	47.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	25.6

Mobility
Traffic congestion is not a problem	24.3
Public transport is satisfactory	52.5

Activities
Green spaces are satisfactory	63.9
Cultural activities (shows, bars, and museums) are satisfactory	76.4

Opportunities (Work & School)
Employment finding services are readily available	61.9
Most children have access to a good school	60.0
Lifelong learning opportunities are provided by local institutions	57.5
Businesses are creating new jobs	53.4
Minorities feel welcome	61.0

Governance
Information on local government decisions are easily accessible	52.1
Corruption of city officials is not an issue of concern	38.2
Residents contribute to decision making of local government	40.2
Residents provide feedback on local government projects	48.0

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	40.9
A website or App allows residents to easily give away unwanted items	65.7
Free public wifi has improved access to city services	60.3
CCTV cameras has made residents feel safer	55.1
A website or App allows residents to effectively monitor air pollution	28.8
Arranging medical appointments online has improved access	39.5

Mobility
Car-sharing Apps have reduced congestion	33.8
Apps that direct you to an available parking space have reduced journey time	37.7
Bicycle hiring has reduced congestion	43.2
Online scheduling and ticket sales has made public transport easier to use	60.8
The city provides information on traffic congestion through mobile phones	49.0

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	73.5

Opportunities (Work & School)
Online access to job listings has made it easier to find work	64.7
IT skills are taught well in schools	56.1
Online services provided by the city has made it easier to start a new business	47.0
The current internet speed and reliability meet connectivity needs	66.9

Governance
Online public access to city finances has reduced corruption	34.8
Online voting has increased participation	55.1
An online platform where residents can propose ideas has improved city life	40.6
Processing Identification Documents online has reduced waiting times	48.3

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

A
TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

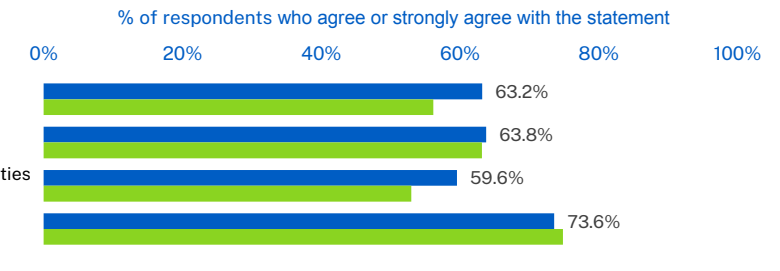|	
Population (Eurostat)	560,000
HDI (Global Data Lab)	0.944

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

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.

% of respondents who chose the Priority Area

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

LEGEND: GROUP MEAN   CITY

STRUCTURES

LEGEND: MIN ●CITY MEAN GROUP MAX

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	30.5
Public transport is satisfactory	50.9

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

	Score
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

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

Opportunities (Work & School)

	Score
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

	Score
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

Guangzhou

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

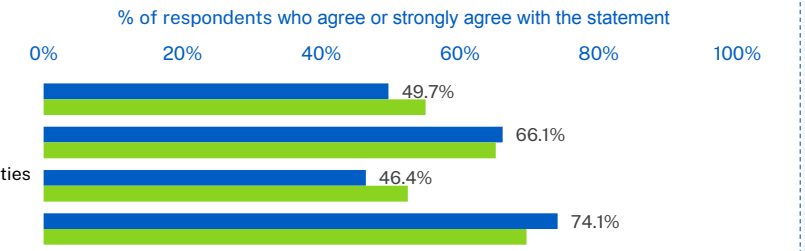|	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP $)	15,934	16,168	17,499	18,025	+526

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
road congestion	60.5%
air pollution	44.4%
fulfilling employment	43.2%
affordable housing	40.8%
health services	38.5%
basic amenities (water, waste)	28.9%
social mobility / inclusiveness	28.0%
school education	24.8%
unemployment	24.3%
corruption / transparency	23.6%
public transport	21.8%
Green spaces	21.3%
security	20.1%
recycling	17.8%
citizen engagement	11.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	87.3%
You are comfortable with face recognition technologies to lower crime	83.9%
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)	84.9%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	85.0
Recycling services are satisfactory	73.9
Public safety is not a problem	68.7
Air pollution is not a problem	59.8
Medical services provision is satisfactory	80.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	64.5

Mobility
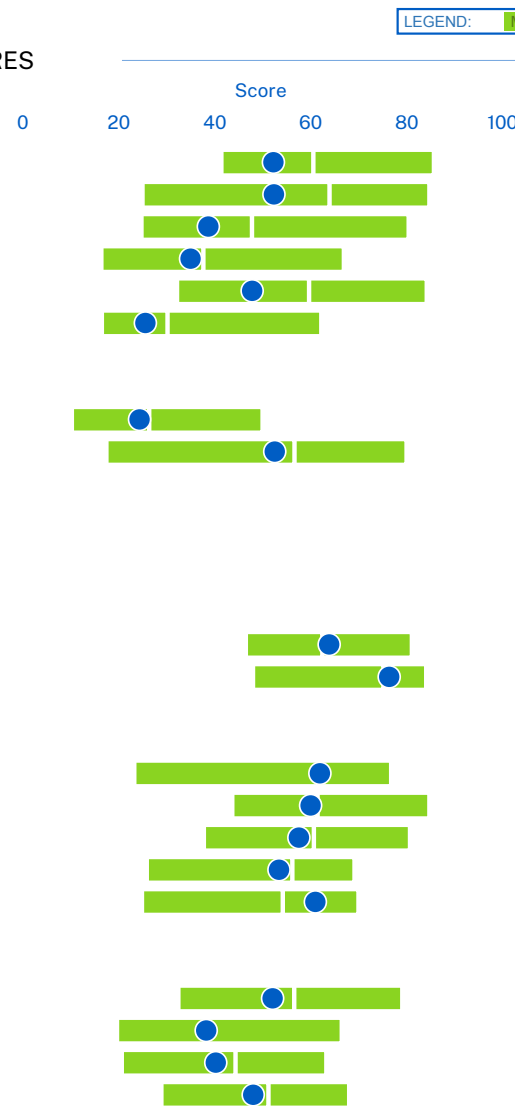|	Score
Traffic congestion is not a problem	46.6
Public transport is satisfactory	64.5

Activities
	Score
Green spaces are satisfactory	78.3
Cultural activities (shows, bars, and museums) are satisfactory	81.6

Opportunities (Work & School)
	Score
Employment finding services are readily available	80.4
Most children have access to a good school	76.8
Lifelong learning opportunities are provided by local institutions	67.7
Businesses are creating new jobs	77.3
Minorities feel welcome	82.4

Governance
	Score
Information on local government decisions are easily accessible	79.1
Corruption of city officials is not an issue of concern	60.6
Residents contribute to decision making of local government	69.6
Residents provide feedback on local government projects	76.6

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	82.5
A website or App allows residents to easily give away unwanted items	77.7
Free public wifi has improved access to city services	80.8
CCTV cameras has made residents feel safer	82.6
A website or App allows residents to effectively monitor air pollution	78.9
Arranging medical appointments online has improved access	88.7

Mobility
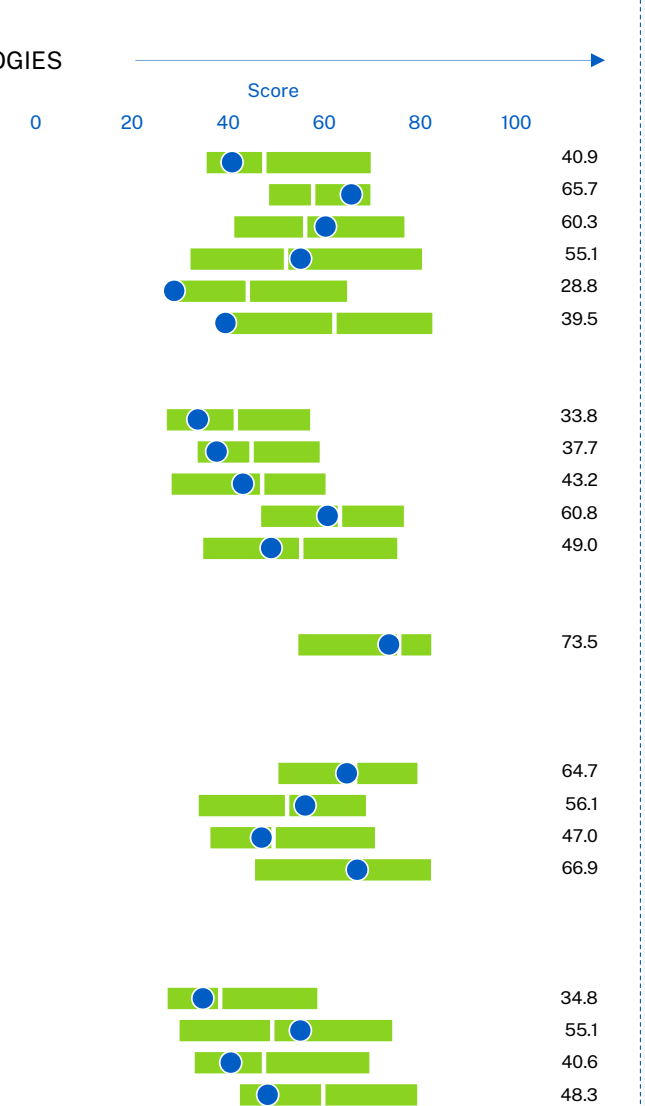|	Score
Car-sharing Apps have reduced congestion	69.4
Apps that direct you to an available parking space have reduced journey time	81.5
Bicycle hiring has reduced congestion	78.3
Online scheduling and ticket sales has made public transport easier to use	84.6
The city provides information on traffic congestion through mobile phones	87.7

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	89.5

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	83.9
IT skills are taught well in schools	80.9
Online services provided by the city has made it easier to start a new business	80.9
The current internet speed and reliability meet connectivity needs	87.9

Governance
	Score
Online public access to city finances has reduced corruption	75.3
Online voting has increased participation	76.0
An online platform where residents can propose ideas has improved city life	81.5
Processing Identification Documents online has reduced waiting times	86.6

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
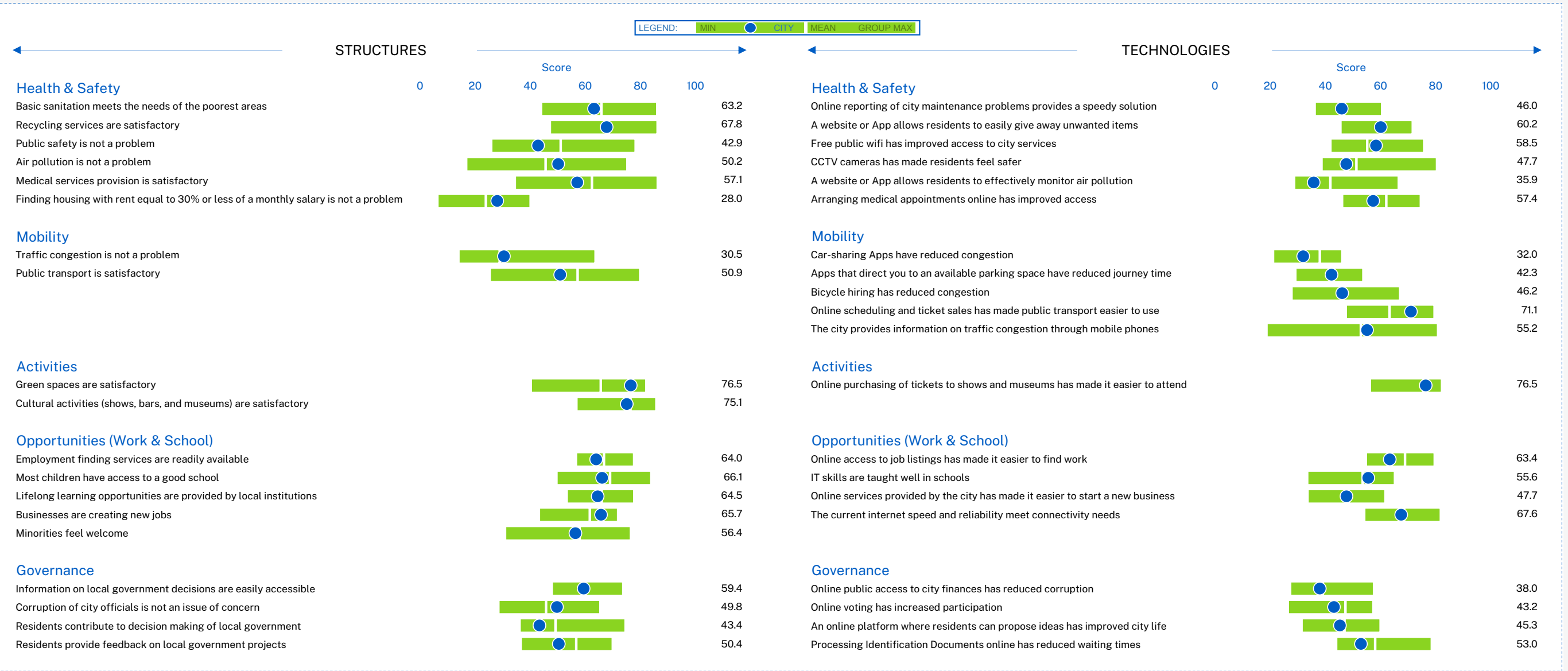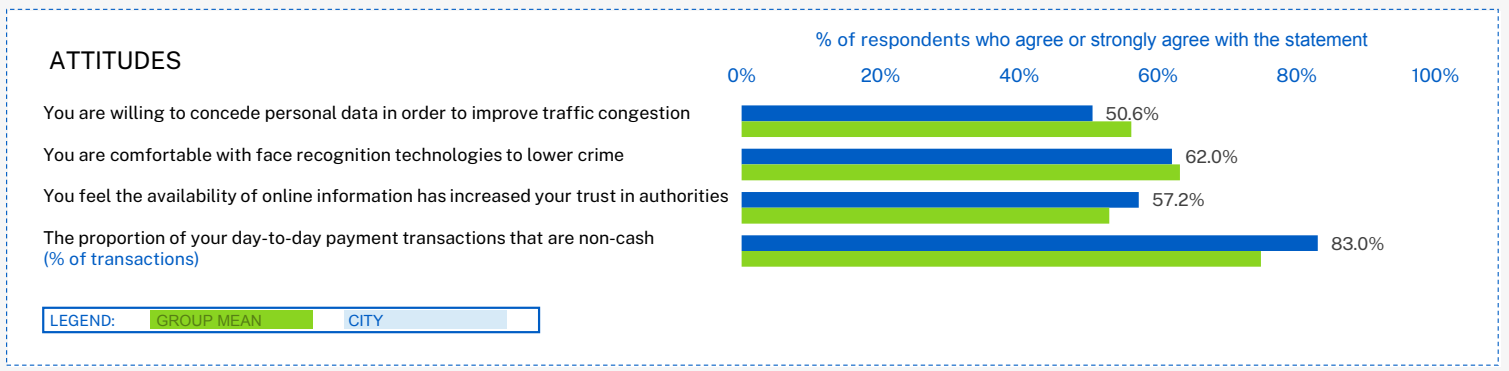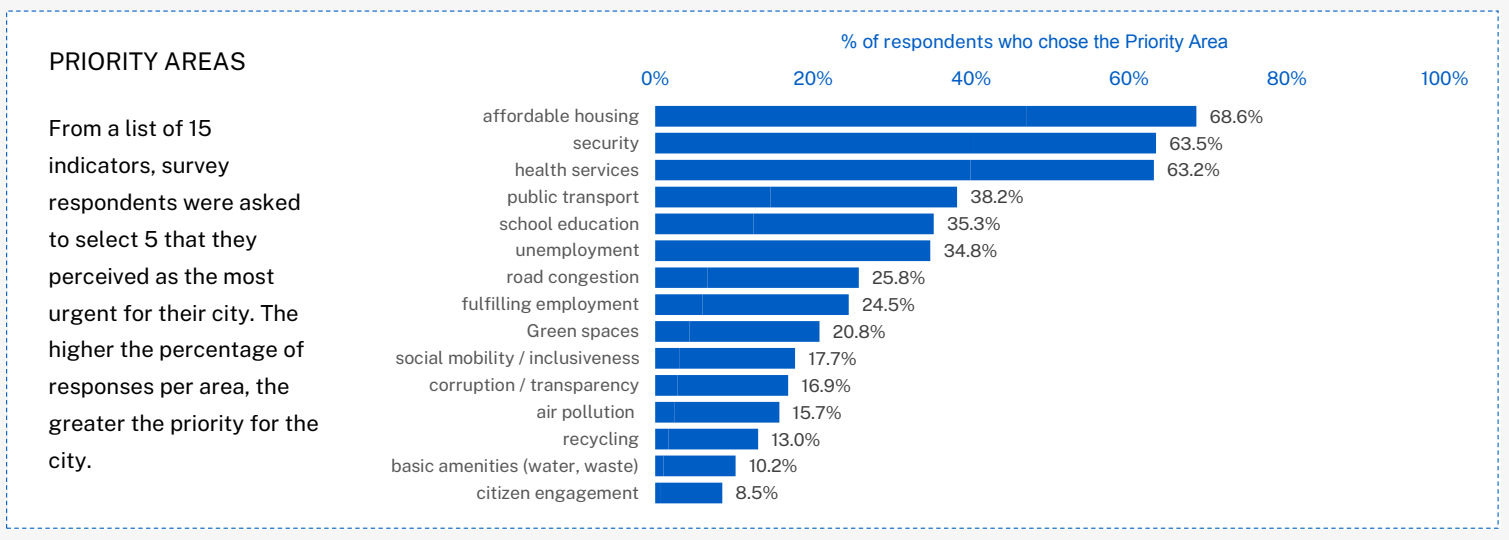from AAA to D

BACKGROUND INFORMATION

City

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

HDI 0.722
(Global Data Lab)

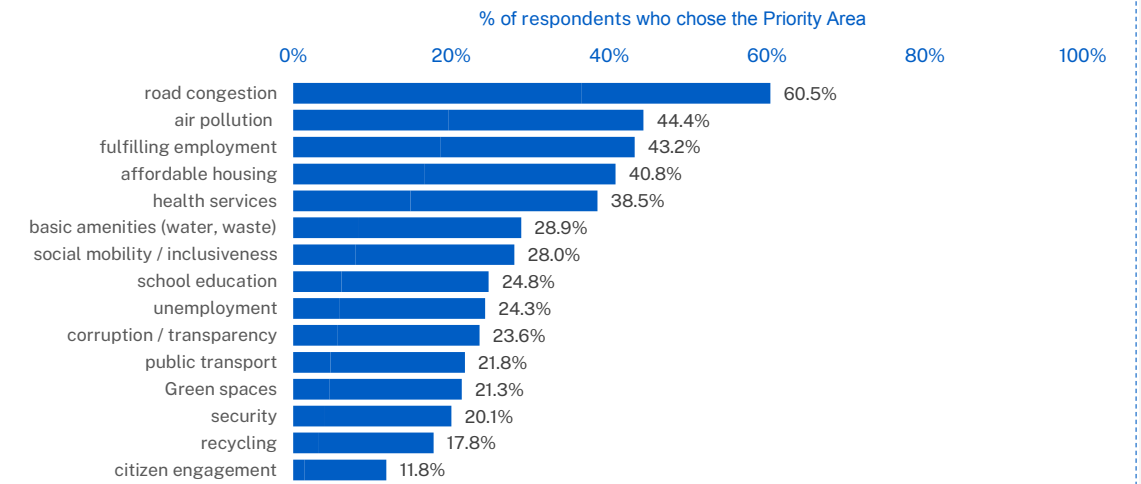Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

% of respondents who chose the Priority Area

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	%
security	81.2%
health services	64.5%
corruption / transparency	62.2%
basic amenities (water, waste)	50.2%
unemployment	40.2%
school education	39.9%
road congestion	38.9%
fulfilling employment	33.5%
public transport	22.1%
affordable housing	19.2%
recycling	14.8%
air pollution	10.6%
Green spaces	7.8%
citizen engagement	5.8%
social mobility / inclusiveness	4.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
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	75.8%
You feel the availability of online information has increased your trust in authorities	36.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	60.6%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	26.2
Recycling services are satisfactory	27.1
Public safety is not a problem	18.3
Air pollution is not a problem	28.7
Medical services provision is satisfactory	25.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	27.8

Mobility

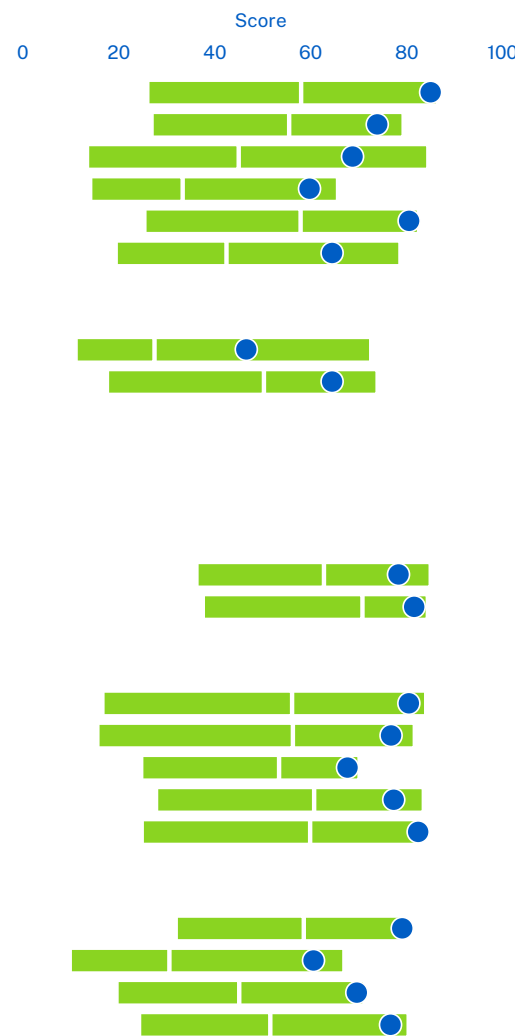|	Score
Traffic congestion is not a problem	17.8
Public transport is satisfactory	23.8

Activities

	Score
Green spaces are satisfactory	57.5
Cultural activities (shows, bars, and museums) are satisfactory	58.3

Opportunities (Work & School)

	Score
Employment finding services are readily available	49.1
Most children have access to a good school	15.8
Lifelong learning opportunities are provided by local institutions	33.8
Businesses are creating new jobs	39.0
Minorities feel welcome	30.0

Governance

	Score
Information on local government decisions are easily accessible	33.5
Corruption of city officials is not an issue of concern	10.0
Residents contribute to decision making of local government	19.8
Residents provide feedback on local government projects	24.5

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	28.9
A website or App allows residents to easily give away unwanted items	30.8
Free public wifi has improved access to city services	28.7
CCTV cameras has made residents feel safer	40.3
A website or App allows residents to effectively monitor air pollution	20.0
Arranging medical appointments online has improved access	46.2

Mobility

	Score
Car-sharing Apps have reduced congestion	28.3
Apps that direct you to an available parking space have reduced journey time	36.4
Bicycle hiring has reduced congestion	23.1
Online scheduling and ticket sales has made public transport easier to use	38.5
The city provides information on traffic congestion through mobile phones	49.1

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	66.7

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	58.5
IT skills are taught well in schools	32.1
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	55.0

Governance

	Score
Online public access to city finances has reduced corruption	19.2
Online voting has increased participation	25.3
An online platform where residents can propose ideas has improved city life	21.0
Processing Identification Documents online has reduced waiting times	56.2

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

% of respondents who chose the Priority Area

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	%
affordable housing	78.6%
road congestion	52.0%
security	42.6%
unemployment	36.5%
public transport	32.9%
school education	29.9%
air pollution	28.8%
health services	25.8%
Green spaces	22.0%
recycling	19.4%
social mobility / inclusiveness	18.4%
citizen engagement	16.6%
basic amenities (water, waste)	15.5%
corruption / transparency	13.1%
fulfilling employment	12.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	59.3%
You are comfortable with face recognition technologies to lower crime	66.9%
You feel the availability of online information has increased your trust in authorities	51.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	65.4%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY   MEAN   GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	67.4
Recycling services are satisfactory	70.3
Public safety is not a problem	53.7
Air pollution is not a problem	43.5
Medical services provision is satisfactory	67.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	19.0

Mobility

	Score
Traffic congestion is not a problem	26.5
Public transport is satisfactory	59.3

Activities

	Score
Green spaces are satisfactory	65.0
Cultural activities (shows, bars, and museums) are satisfactory	80.8

Opportunities (Work & School)

	Score
Employment finding services are readily available	66.4
Most children have access to a good school	63.3
Lifelong learning opportunities are provided by local institutions	58.5
Businesses are creating new jobs	61.8
Minorities feel welcome	59.3

Governance

	Score
Information on local government decisions are easily accessible	53.1
Corruption of city officials is not an issue of concern	53.8
Residents contribute to decision making of local government	50.1
Residents provide feedback on local government projects	54.7

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	45.4
A website or App allows residents to easily give away unwanted items	58.5
Free public wifi has improved access to city services	55.0
CCTV cameras has made residents feel safer	42.2
A website or App allows residents to effectively monitor air pollution	34.3
Arranging medical appointments online has improved access	57.1

Mobility

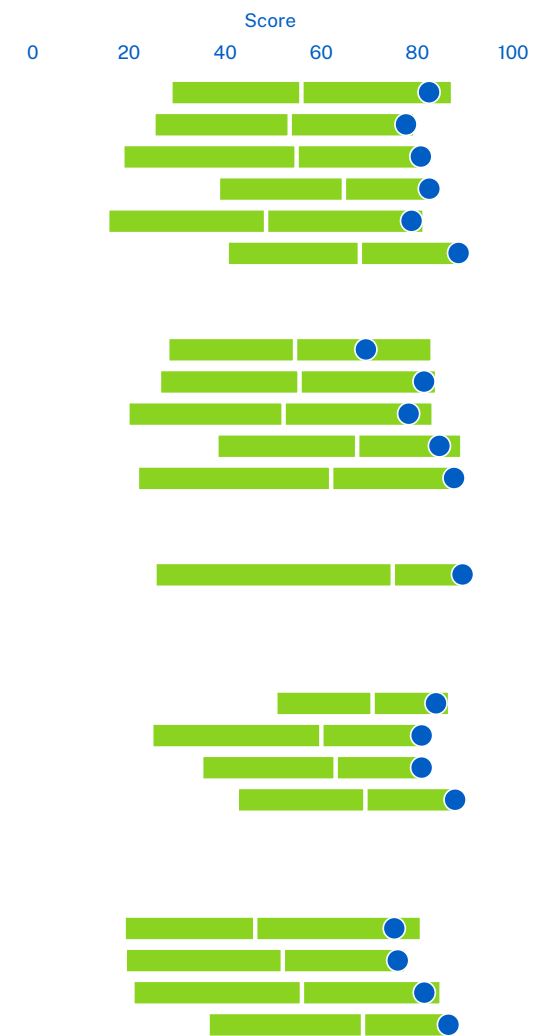|	Score
Car-sharing Apps have reduced congestion	38.0
Apps that direct you to an available parking space have reduced journey time	42.7
Bicycle hiring has reduced congestion	46.1
Online scheduling and ticket sales has made public transport easier to use	67.9
The city provides information on traffic congestion through mobile phones	52.9

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.8

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	71.6
IT skills are taught well in schools	43.6
Online services provided by the city has made it easier to start a new business	43.8
The current internet speed and reliability meet connectivity needs	59.7

Governance

	Score
Online public access to city finances has reduced corruption	35.0
Online voting has increased participation	47.9
An online platform where residents can propose ideas has improved city life	44.5
Processing Identification Documents online has reduced waiting times	53.9

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)
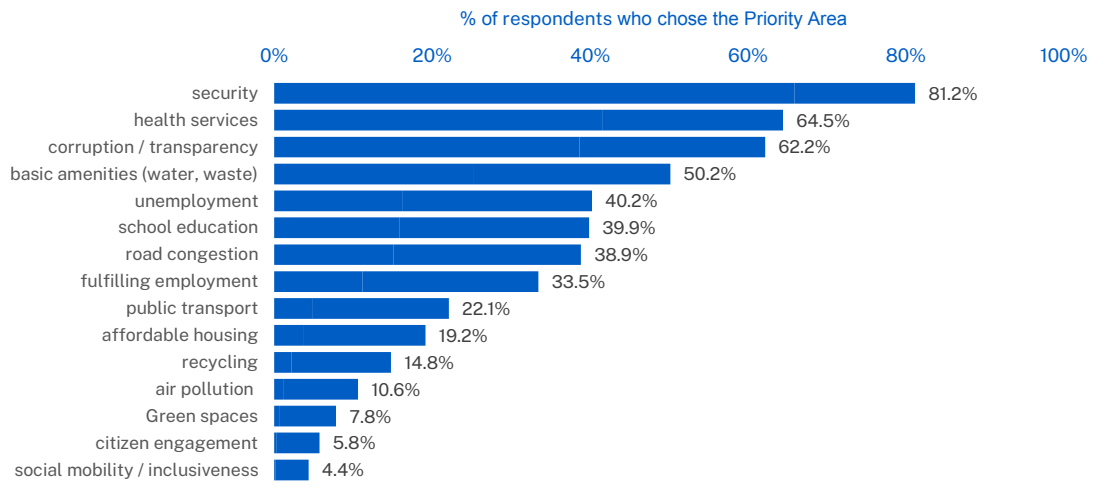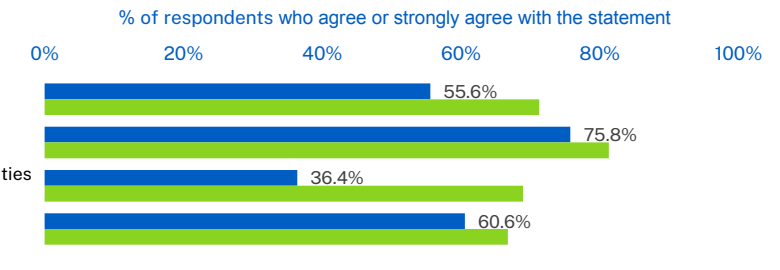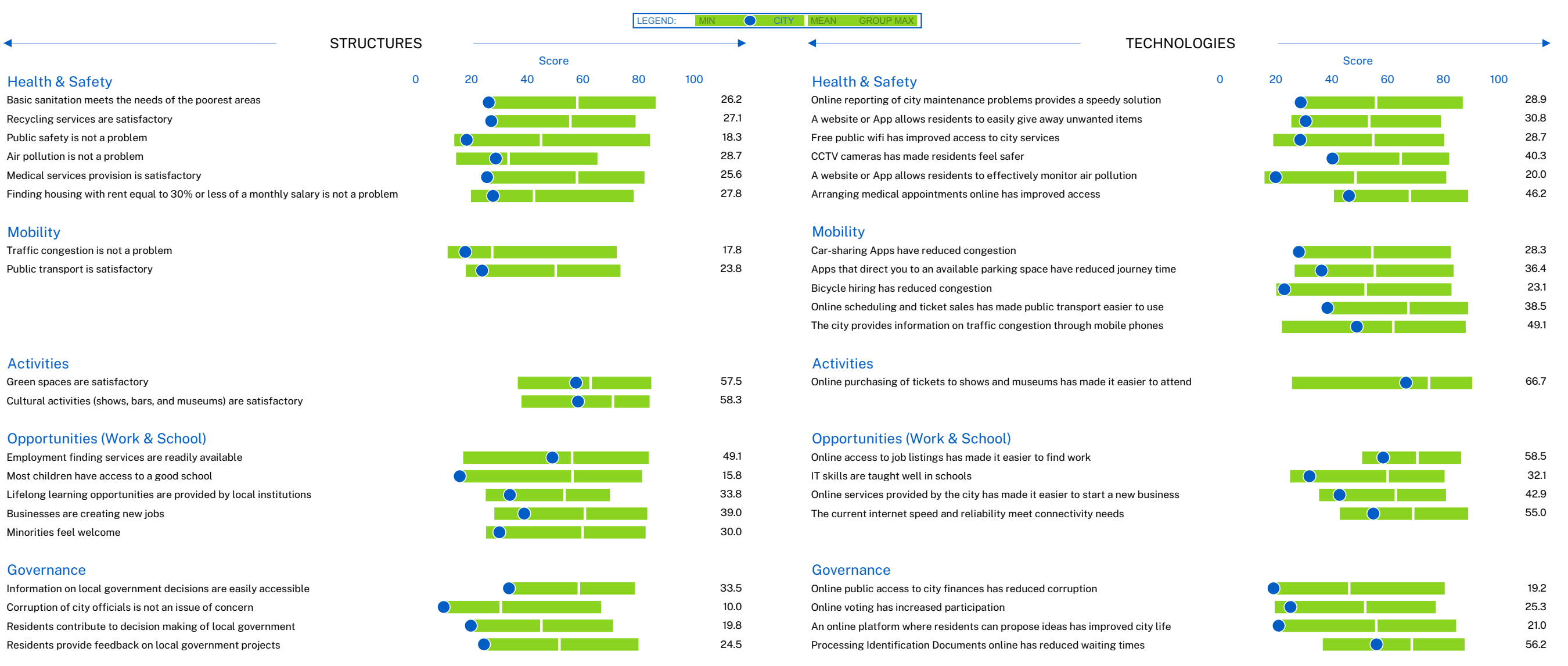
HDI   0.801
(Global Data Lab)

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.

% of respondents who chose the Priority Area

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

LEGEND: GROUP MEAN   CITY

LEGEND: MIN   CITY   MEAN   GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	41.9
Public transport is satisfactory	67.8

Activities
	Score
Green spaces are satisfactory	84.3
Cultural activities (shows, bars, and museums) are satisfactory	81.4

Opportunities (Work & School)
	Score
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
	Score
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

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	90.8

Opportunities (Work & School)
	Score
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
	Score
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

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

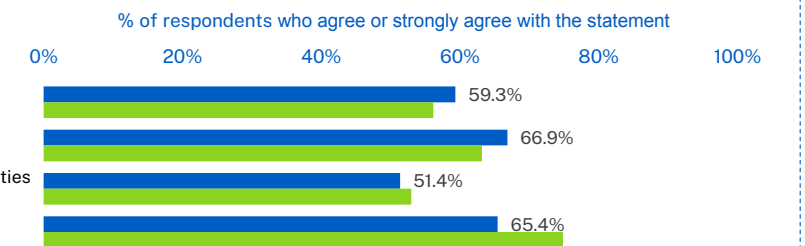|	2019	2020	2021	2022	1 yr change
HDI	0.717	0.726	0.718	0.726	+0.008
Life expectancy at birth	74.1	75.4	73.6	74.6	+1.0
Expected years of schooling	13.0	13.1	13.1	13.1	+0.0
Mean years of schooling	8.4	8.5	8.5	8.5	+0.0
GNI per capita (PPP $)	9,734	10,005	10,085	10,814	+729

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
air pollution	74.5%
road congestion	66.8%
corruption / transparency	47.7%
basic amenities (water, waste)	42.8%
affordable housing	38.1%
public transport	34.2%
Green spaces	33.7%
health services	28.7%
security	24.8%
recycling	18.8%
unemployment	18.1%
fulfilling employment	17.5%
school education	14.8%
social mobility / inclusiveness	10.2%
citizen engagement	5.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	90.7%
You are comfortable with face recognition technologies to lower crime	93.7%
You feel the availability of online information has increased your trust in authorities	91.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.5%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	73.9
Recycling services are satisfactory	66.1
Public safety is not a problem	84.5
Air pollution is not a problem	27.9
Medical services provision is satisfactory	75.1
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	54.8

Mobility

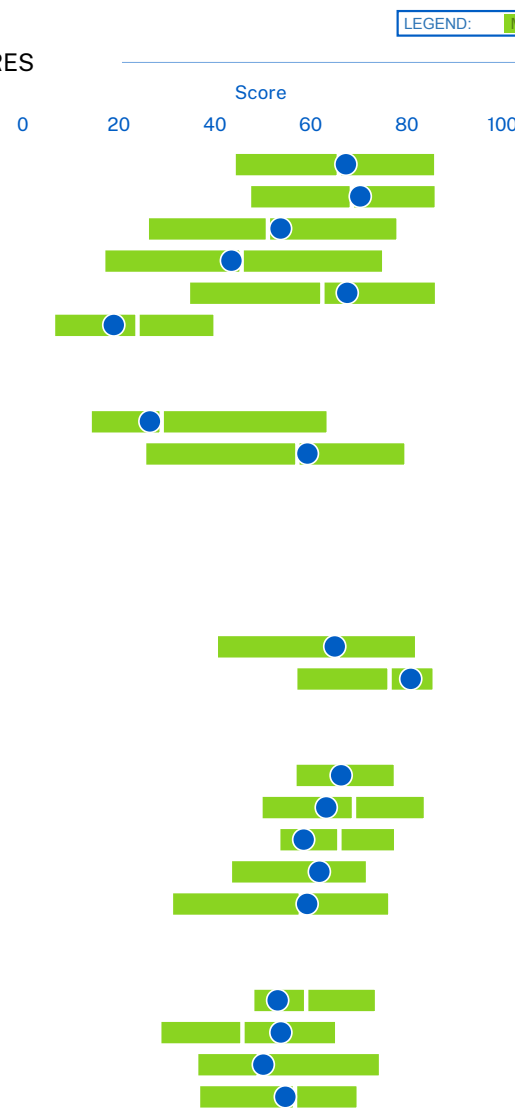|	Score
Traffic congestion is not a problem	25.3
Public transport is satisfactory	55.4

Activities

	Score
Green spaces are satisfactory	66.6
Cultural activities (shows, bars, and museums) are satisfactory	79.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	79.8
Most children have access to a good school	81.7
Lifelong learning opportunities are provided by local institutions	70.2
Businesses are creating new jobs	83.6
Minorities feel welcome	76.0

Governance

	Score
Information on local government decisions are easily accessible	78.3
Corruption of city officials is not an issue of concern	38.3
Residents contribute to decision making of local government	69.2
Residents provide feedback on local government projects	72.7

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	73.8
A website or App allows residents to easily give away unwanted items	69.3
Free public wifi has improved access to city services	68.5
CCTV cameras has made residents feel safer	80.2
A website or App allows residents to effectively monitor air pollution	67.4
Arranging medical appointments online has improved access	84.0

Mobility

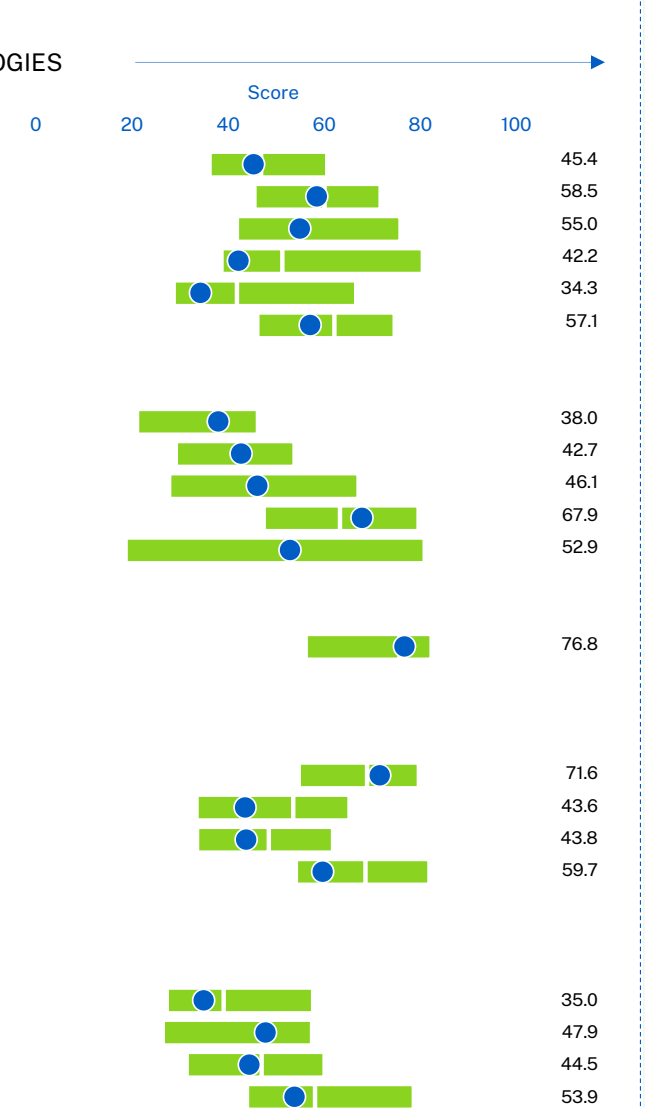|	Score
Car-sharing Apps have reduced congestion	72.1
Apps that direct you to an available parking space have reduced journey time	74.2
Bicycle hiring has reduced congestion	65.8
Online scheduling and ticket sales has made public transport easier to use	79.2
The city provides information on traffic congestion through mobile phones	69.8

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	83.8

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	83.1
IT skills are taught well in schools	79.5
Online services provided by the city has made it easier to start a new business	79.7
The current internet speed and reliability meet connectivity needs	86.0

Governance

	Score
Online public access to city finances has reduced corruption	64.3
Online voting has increased participation	70.8
An online platform where residents can propose ideas has improved city life	74.8
Processing Identification Documents online has reduced waiting times	81.5

Hanover

BACKGROUND INFORMATION

City

Population	540,000
(Eurostat)	
HDI	0.930
(Global Data Lab)	
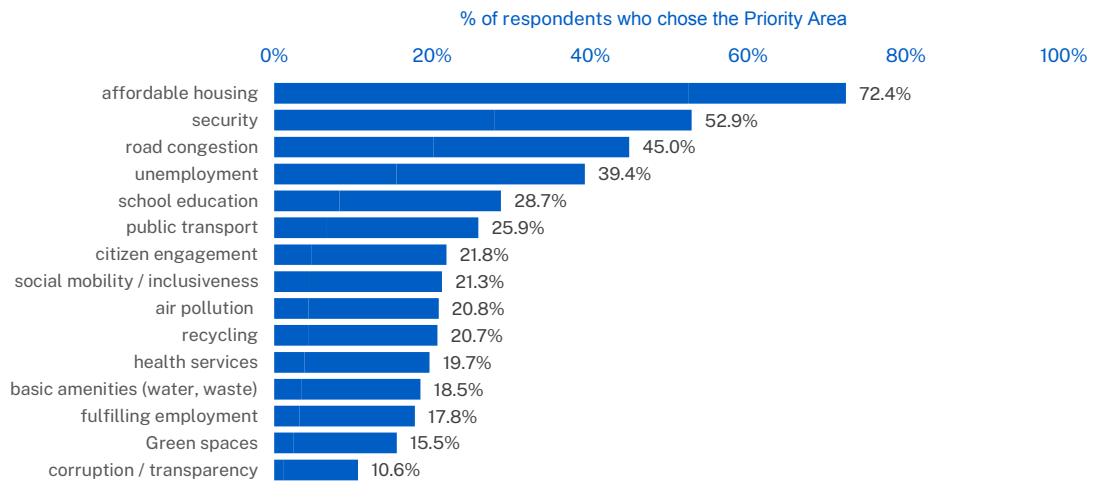
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	72.4%
security	52.9%
road congestion	45.0%
unemployment	39.4%
school education	28.7%
public transport	25.9%
citizen engagement	21.8%
social mobility / inclusiveness	21.3%
air pollution	20.8%
recycling	20.7%
health services	19.7%
basic amenities (water, waste)	18.5%
fulfilling employment	17.8%
Green spaces	15.5%
corruption / transparency	10.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	52.6%
You are comfortable with face recognition technologies to lower crime	59.6%
You feel the availability of online information has increased your trust in authorities	52.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	65.2%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	71.2
Recycling services are satisfactory	75.3
Public safety is not a problem	50.8
Air pollution is not a problem	53.2
Medical services provision is satisfactory	74.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	27.0

Mobility
	Score
Traffic congestion is not a problem	41.5
Public transport is satisfactory	67.3

Activities
	Score
Green spaces are satisfactory	73.0
Cultural activities (shows, bars, and museums) are satisfactory	79.0

Opportunities (Work & School)
	Score
Employment finding services are readily available	65.9
Most children have access to a good school	66.5
Lifelong learning opportunities are provided by local institutions	57.7
Businesses are creating new jobs	59.3
Minorities feel welcome	56.7

Governance
	Score
Information on local government decisions are easily accessible	56.0
Corruption of city officials is not an issue of concern	55.7
Residents contribute to decision making of local government	50.7
Residents provide feedback on local government projects	54.2

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	42.1
A website or App allows residents to easily give away unwanted items	55.2
Free public wifi has improved access to city services	51.8
CCTV cameras has made residents feel safer	42.2
A website or App allows residents to effectively monitor air pollution	34.3
Arranging medical appointments online has improved access	58.6

Mobility
	Score
Car-sharing Apps have reduced congestion	39.1
Apps that direct you to an available parking space have reduced journey time	40.1
Bicycle hiring has reduced congestion	43.0
Online scheduling and ticket sales has made public transport easier to use	68.0
The city provides information on traffic congestion through mobile phones	48.7

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	73.7

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	68.1
IT skills are taught well in schools	46.5
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	63.0

Governance
	Score
Online public access to city finances has reduced corruption	35.6
Online voting has increased participation	47.4
An online platform where residents can propose ideas has improved city life	41.6
Processing Identification Documents online has reduced waiting times	49.8

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
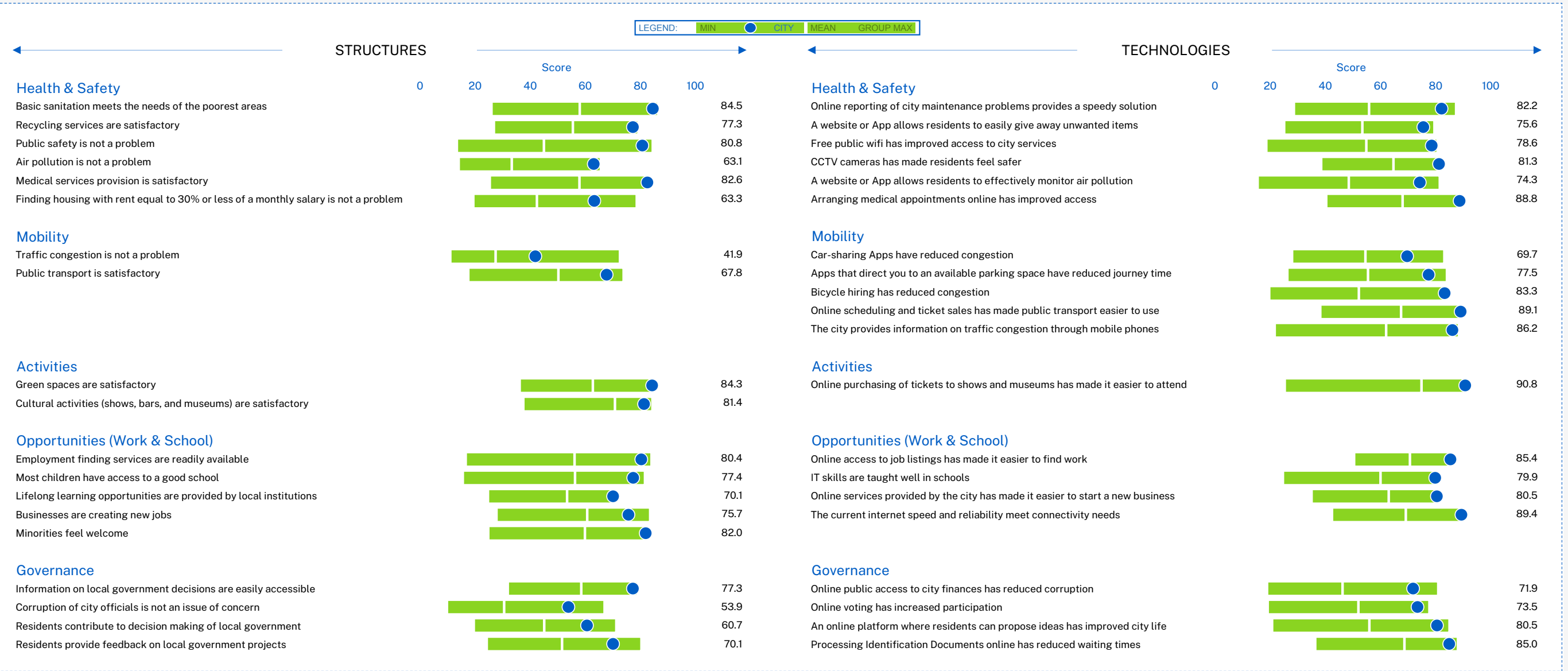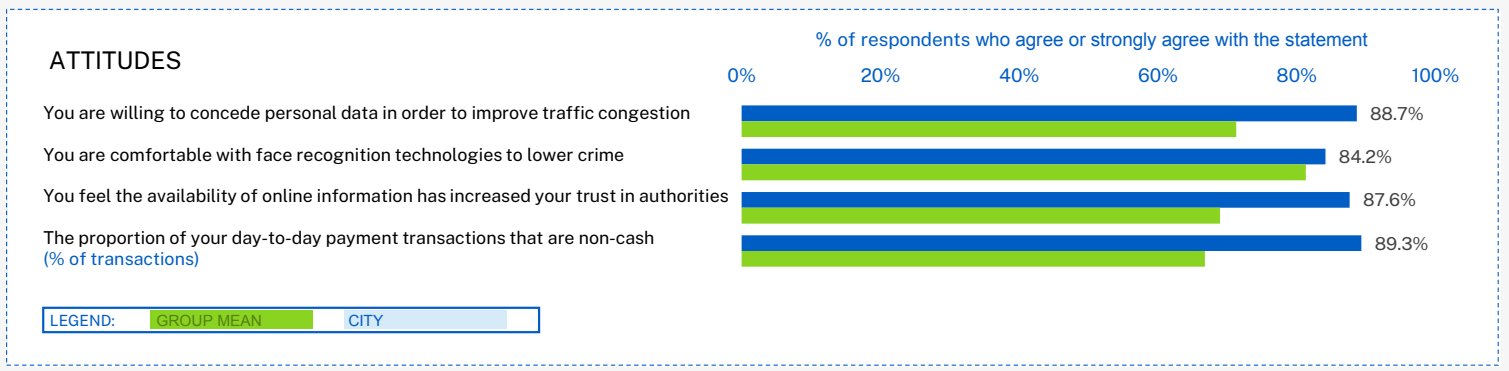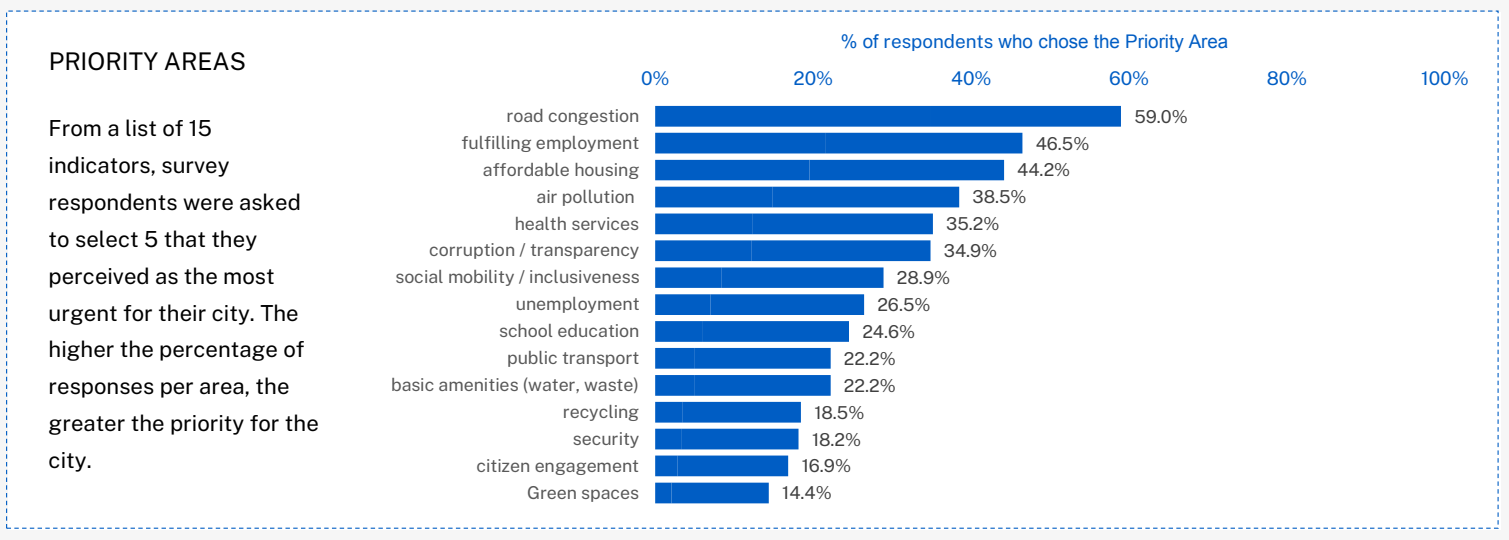
Population	650,000
(Eurostat)	
HDI	0.960
(Global Data Lab)	

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

Country
Finland

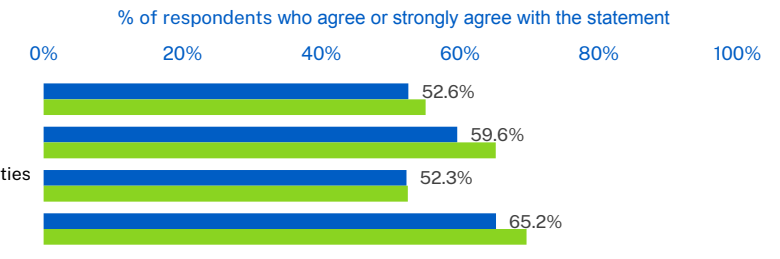|	2019	2020	2021	2022	1 yr change
HDI	0.939	0.939	0.941	0.942	+0.001
Life expectancy at birth	81.9	81.9	82.0	82.4	+0.3
Expected years of schooling	19.0	19.0	19.2	19.2	+0.0
Mean years of schooling	12.9	12.9	12.9	12.9	+0.0
GNI per capita (PPP $)	48,829	48,176	49,481	49,522	+42

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.

% of respondents who chose the Priority Area

Priority Area	%
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

% of respondents who agree or strongly agree with the statement

Statement	%
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

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	42.2
Public transport is satisfactory	74.8

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Score

Health & Safety

	Score
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

	Score
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

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

Opportunities (Work & School)

	Score
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

	Score
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
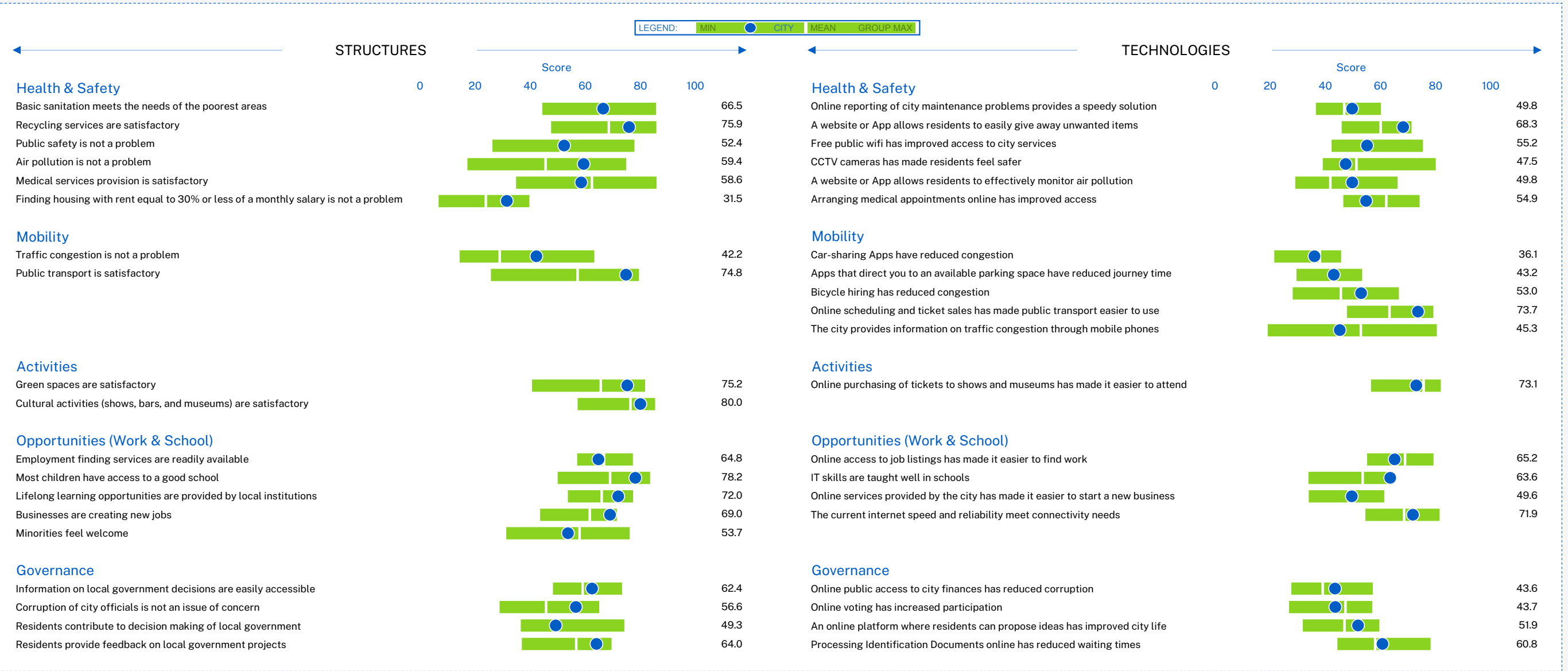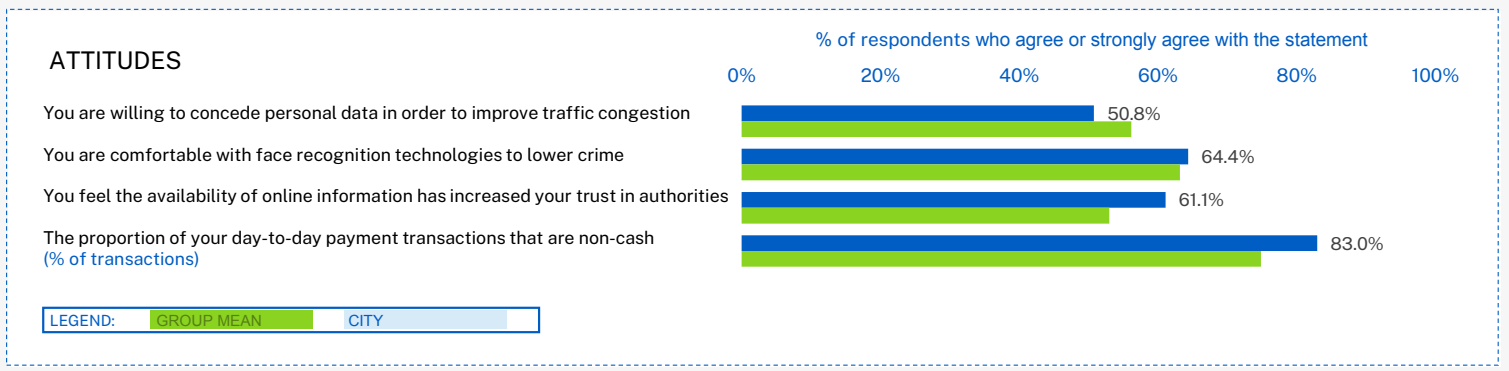
Population	8,600,000
	(UN World Urbanization Prospects)
HDI	0.714
	(Global Data Lab)

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.

% of respondents who chose the Priority Area

Area	%
road congestion	55.0%
air pollution	53.5%
affordable housing	45.9%
basic amenities (water, waste)	40.8%
unemployment	39.5%
security	35.5%
corruption / transparency	35.0%
health services	34.3%
Green spaces	33.8%
public transport	29.2%
fulfilling employment	24.0%
recycling	19.0%
school education	17.7%
citizen engagement	9.2%
social mobility / inclusiveness	5.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	86.5%
You are comfortable with face recognition technologies to lower crime	88.4%
You feel the availability of online information has increased your trust in authorities	84.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.1%

LEGEND: GROUP MEAN CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	71.9
Recycling services are satisfactory	63.6
Public safety is not a problem	71.7
Air pollution is not a problem	34.0
Medical services provision is satisfactory	71.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	53.3

Mobility
	Score
Traffic congestion is not a problem	25.6
Public transport is satisfactory	52.6

Activities
	Score
Green spaces are satisfactory	63.7
Cultural activities (shows, bars, and museums) are satisfactory	72.6

Opportunities (Work & School)
	Score
Employment finding services are readily available	80.6
Most children have access to a good school	80.2
Lifelong learning opportunities are provided by local institutions	66.2
Businesses are creating new jobs	74.2
Minorities feel welcome	69.9

Governance
	Score
Information on local government decisions are easily accessible	73.6
Corruption of city officials is not an issue of concern	37.3
Residents contribute to decision making of local government	61.3
Residents provide feedback on local government projects	69.4

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	72.3
A website or App allows residents to easily give away unwanted items	63.5
Free public wifi has improved access to city services	64.6
CCTV cameras has made residents feel safer	78.4
A website or App allows residents to effectively monitor air pollution	59.6
Arranging medical appointments online has improved access	80.6

Mobility
	Score
Car-sharing Apps have reduced congestion	70.6
Apps that direct you to an available parking space have reduced journey time	74.5
Bicycle hiring has reduced congestion	55.8
Online scheduling and ticket sales has made public transport easier to use	78.7
The city provides information on traffic congestion through mobile phones	67.6

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	84.4

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	85.3
IT skills are taught well in schools	78.5
Online services provided by the city has made it easier to start a new business	75.4
The current internet speed and reliability meet connectivity needs	83.5

Governance
	Score
Online public access to city finances has reduced corruption	57.7
Online voting has increased participation	64.1
An online platform where residents can propose ideas has improved city life	70.3
Processing Identification Documents online has reduced waiting times	78.5

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

AAA
TECHNOLOGIES

GROUP

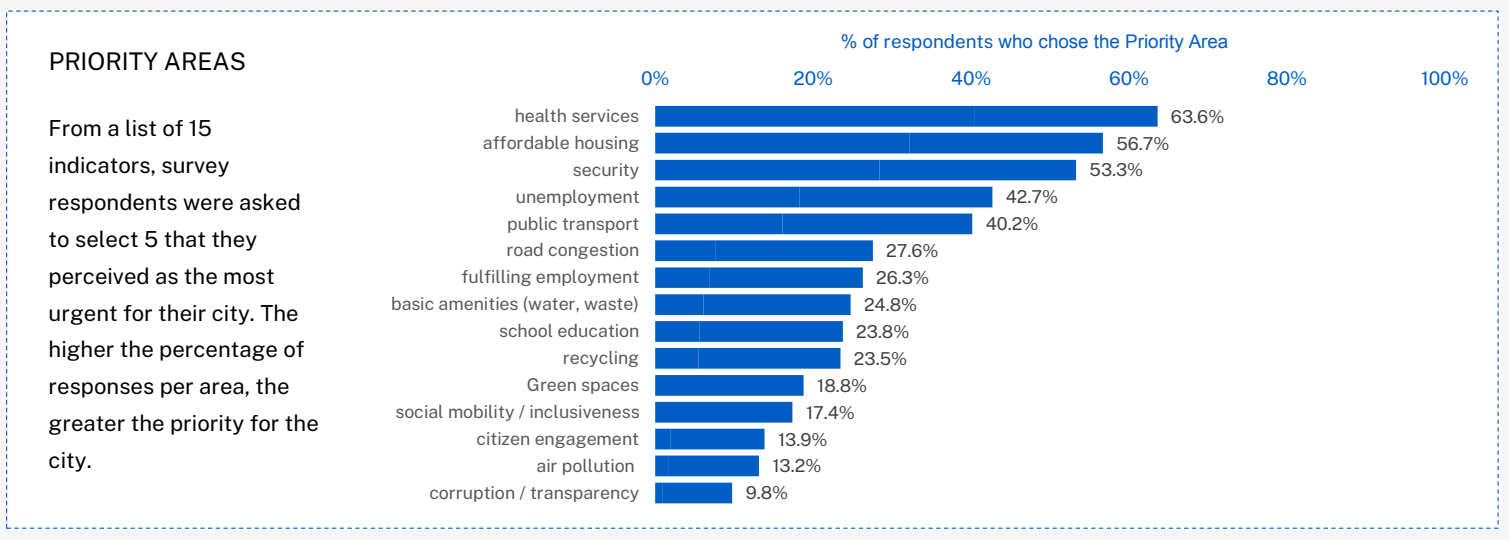### 1

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population	7,550,000
	(UN World Urbanization Prospects)
HDI	0.949
	(Global Data Lab)

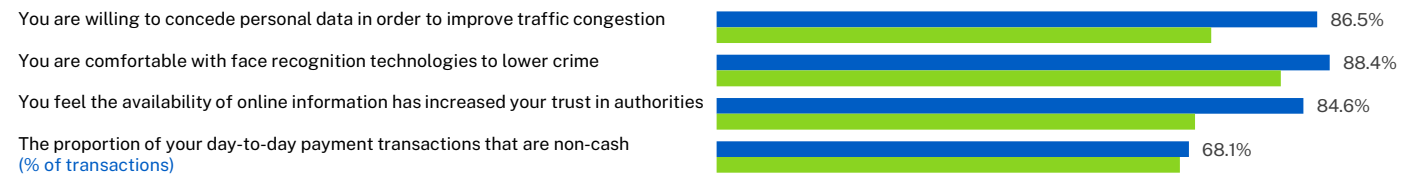Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
affordable housing	71.2%
health services	44.0%
fulfilling employment	33.0%
recycling	31.6%
air pollution	31.6%
citizen engagement	31.1%
corruption / transparency	31.0%
road congestion	30.9%
unemployment	28.5%
security	27.0%
basic amenities (water, waste)	24.2%
social mobility / inclusiveness	23.2%
school education	23.0%
public transport	17.3%
Green spaces	16.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	58.7%
You are comfortable with face recognition technologies to lower crime	52.0%
You feel the availability of online information has increased your trust in authorities	56.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.3%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES
Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	69.4
Recycling services are satisfactory	47.4
Public safety is not a problem	57.5
Air pollution is not a problem	32.5
Medical services provision is satisfactory	58.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	27.6

Mobility
	Score
Traffic congestion is not a problem	30.3
Public transport is satisfactory	63.6

Activities
	Score
Green spaces are satisfactory	53.6
Cultural activities (shows, bars, and museums) are satisfactory	57.1

Opportunities (Work & School)
	Score
Employment finding services are readily available	66.2
Most children have access to a good school	61.9
Lifelong learning opportunities are provided by local institutions	66.9
Businesses are creating new jobs	58.6
Minorities feel welcome	52.0

Governance
	Score
Information on local government decisions are easily accessible	58.8
Corruption of city officials is not an issue of concern	44.3
Residents contribute to decision making of local government	45.0
Residents provide feedback on local government projects	53.8

TECHNOLOGIES
Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	52.6
A website or App allows residents to easily give away unwanted items	56.7
Free public wifi has improved access to city services	67.9
CCTV cameras has made residents feel safer	58.9
A website or App allows residents to effectively monitor air pollution	57.1
Arranging medical appointments online has improved access	67.7

Mobility
	Score
Car-sharing Apps have reduced congestion	46.2
Apps that direct you to an available parking space have reduced journey time	53.7
Bicycle hiring has reduced congestion	43.1
Online scheduling and ticket sales has made public transport easier to use	63.7
The city provides information on traffic congestion through mobile phones	69.2

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.3

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	73.5
IT skills are taught well in schools	60.4
Online services provided by the city has made it easier to start a new business	61.9
The current internet speed and reliability meet connectivity needs	80.1

Governance
	Score
Online public access to city finances has reduced corruption	57.7
Online voting has increased participation	48.9
An online platform where residents can propose ideas has improved city life	52.6
Processing Identification Documents online has reduced waiting times	72.1

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

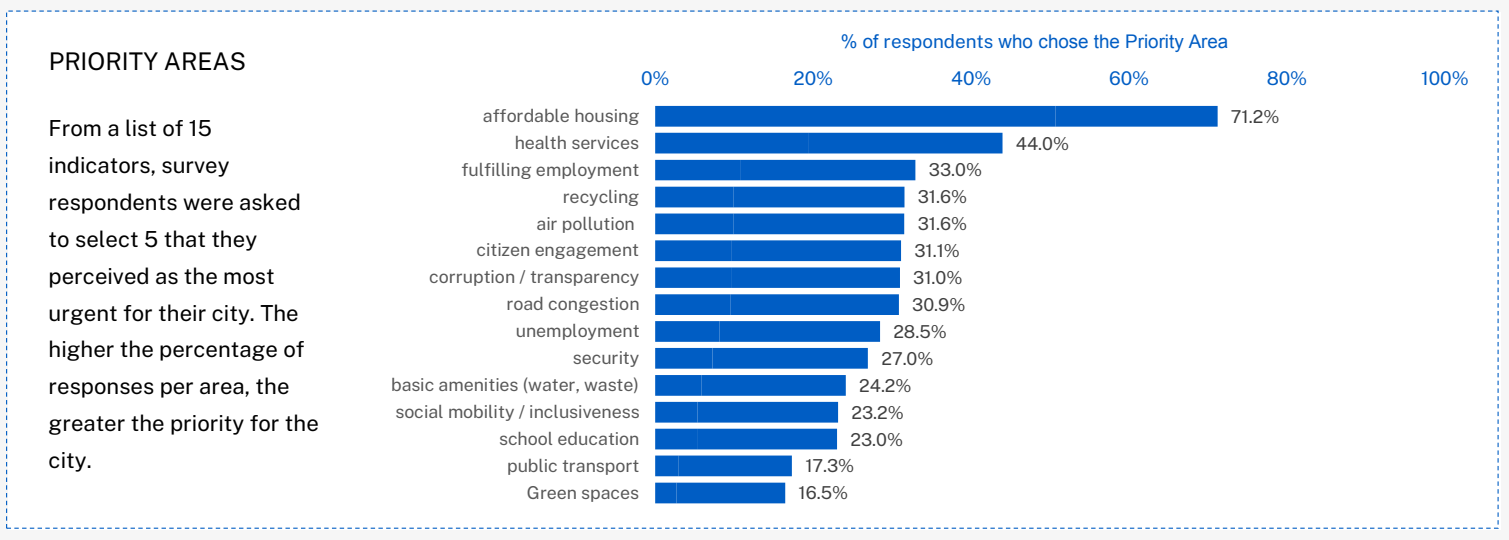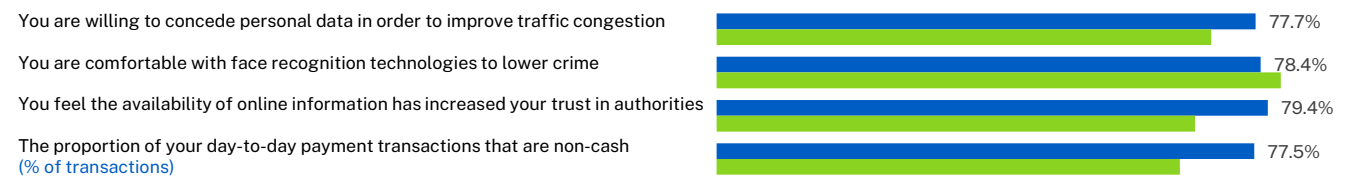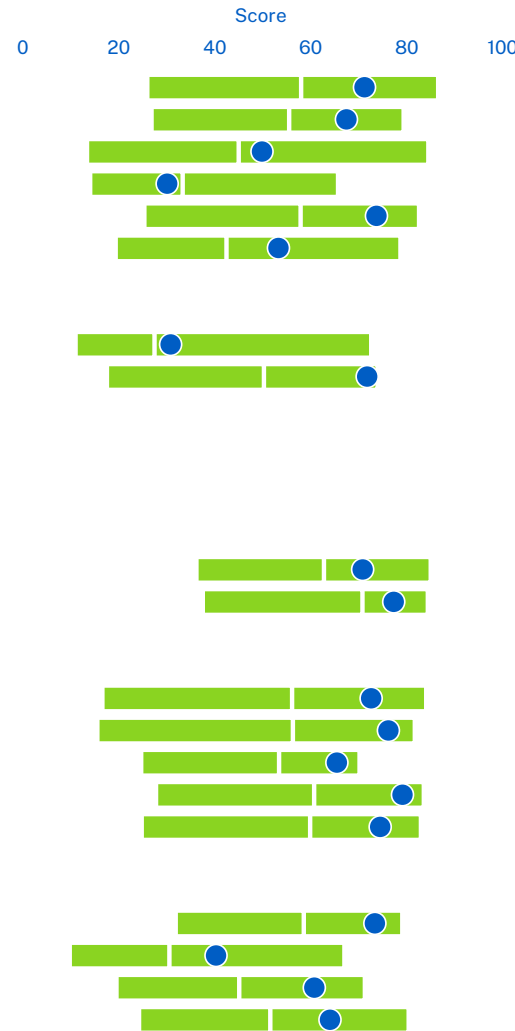Population 10,000,000
(UN World Urbanization Prospects)

HDI 0.647
(Global Data Lab)

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

% of respondents who chose the Priority Area

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	%
air pollution	52.6%
unemployment	43.3%
fulfilling employment	39.8%
health services	39.5%
basic amenities (water, waste)	39.5%
corruption / transparency	37.8%
road congestion	35.7%
affordable housing	35.1%
Green spaces	31.5%
security	31.5%
recycling	25.8%
public transport	25.7%
school education	16.6%
social mobility / inclusiveness	12.4%
citizen engagement	12.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	77.7%
You are comfortable with face recognition technologies to lower crime	78.4%
You feel the availability of online information has increased your trust in authorities	79.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	77.5%

LEGEND: GROUP MEAN CITY

LEGEND: MIN CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	71.2
Recycling services are satisfactory	67.4
Public safety is not a problem	49.9
Air pollution is not a problem	30.1
Medical services provision is satisfactory	73.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	53.3

Mobility
	Score
Traffic congestion is not a problem	30.8
Public transport is satisfactory	71.7

Activities
	Score
Green spaces are satisfactory	70.8
Cultural activities (shows, bars, and museums) are satisfactory	77.3

Opportunities (Work & School)
	Score
Employment finding services are readily available	72.6
Most children have access to a good school	76.2
Lifelong learning opportunities are provided by local institutions	65.5
Businesses are creating new jobs	79.2
Minorities feel welcome	74.5

Governance
	Score
Information on local government decisions are easily accessible	73.4
Corruption of city officials is not an issue of concern	40.3
Residents contribute to decision making of local government	60.7
Residents provide feedback on local government projects	64.0

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	66.6
A website or App allows residents to easily give away unwanted items	57.9
Free public wifi has improved access to city services	59.4
CCTV cameras has made residents feel safer	79.6
A website or App allows residents to effectively monitor air pollution	51.6
Arranging medical appointments online has improved access	78.2

Mobility
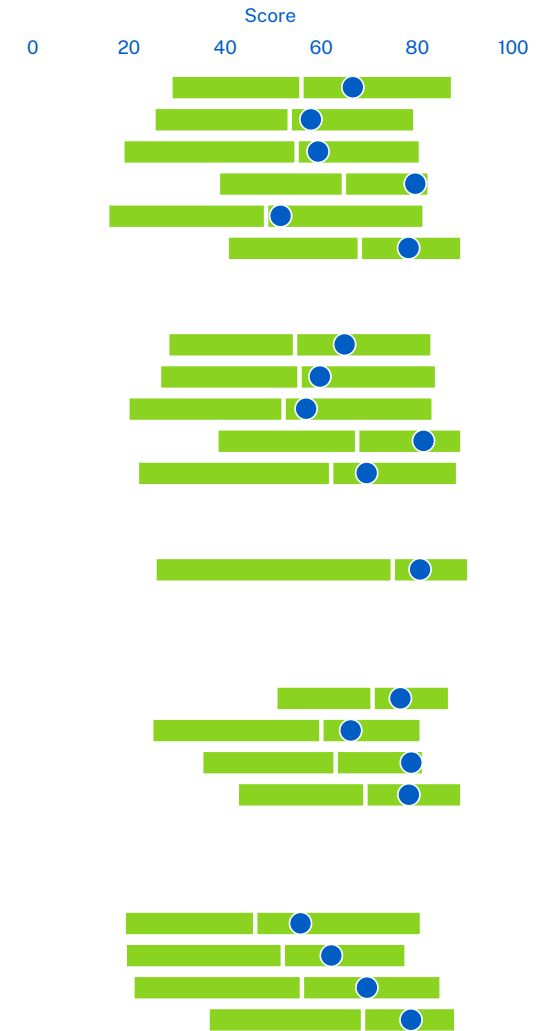|	Score
Car-sharing Apps have reduced congestion	64.9
Apps that direct you to an available parking space have reduced journey time	59.8
Bicycle hiring has reduced congestion	56.9
Online scheduling and ticket sales has made public transport easier to use	81.4
The city provides information on traffic congestion through mobile phones	69.5

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	80.6

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	76.5
IT skills are taught well in schools	66.2
Online services provided by the city has made it easier to start a new business	78.8
The current internet speed and reliability meet connectivity needs	78.3

Governance
	Score
Online public access to city finances has reduced corruption	55.7
Online voting has increased participation	62.2
An online platform where residents can propose ideas has improved city life	69.6
Processing Identification Documents online has reduced waiting times	78.7

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
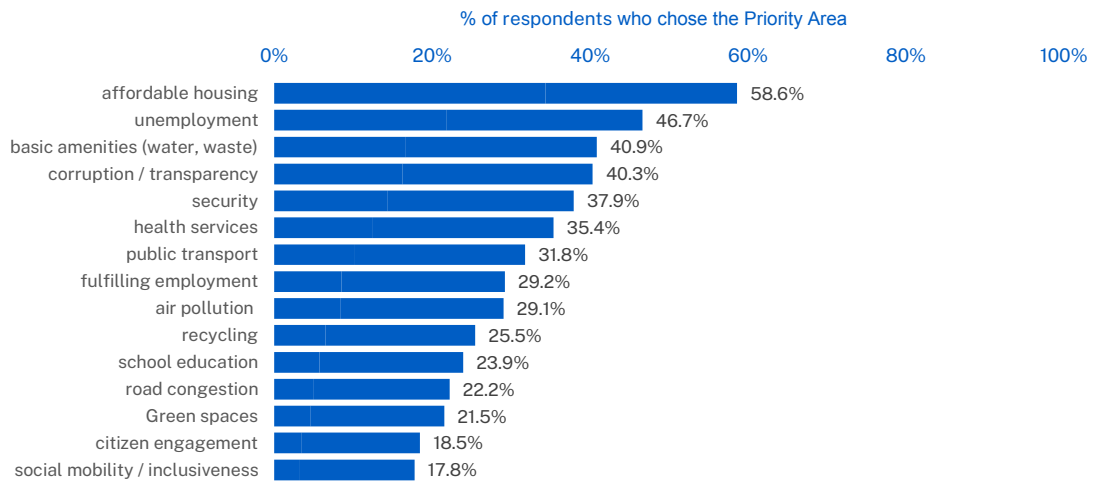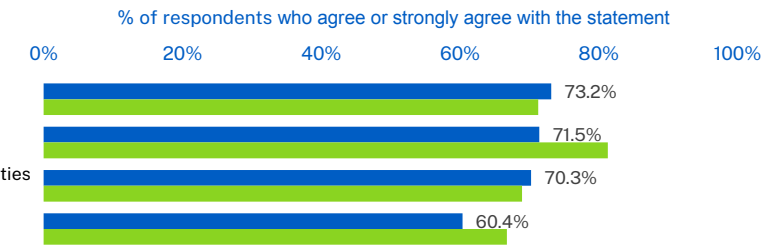Population 1,010,000
(UN Data)

HDI 0.659
(Global Data Lab)

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

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

% of respondents who chose the Priority Area

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	%
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	%
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

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES
Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	43.6
Public transport is satisfactory	62.6

Activities
	Score
Green spaces are satisfactory	79.1
Cultural activities (shows, bars, and museums) are satisfactory	74.1

Opportunities (Work & School)
	Score
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
	Score
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

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	69.0

Opportunities (Work & School)
	Score
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
	Score
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

BACKGROUND INFORMATION

City

Population	15,190,000
	(UN World Urbanization Prospects)
HDI	0.867
	(Global Data Lab)

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

Country
Turkey

	2019	2020	2021	2022	1 yr change
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.

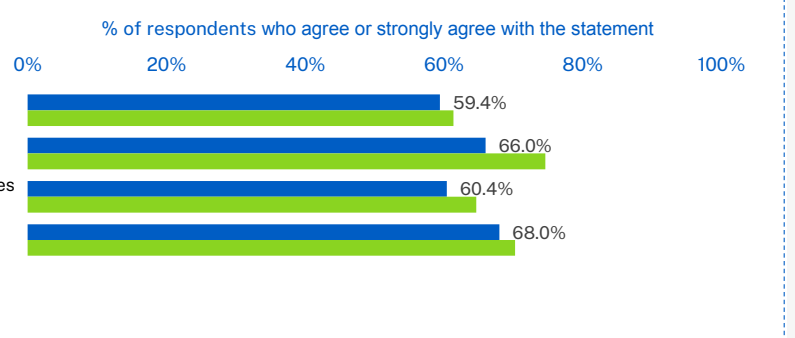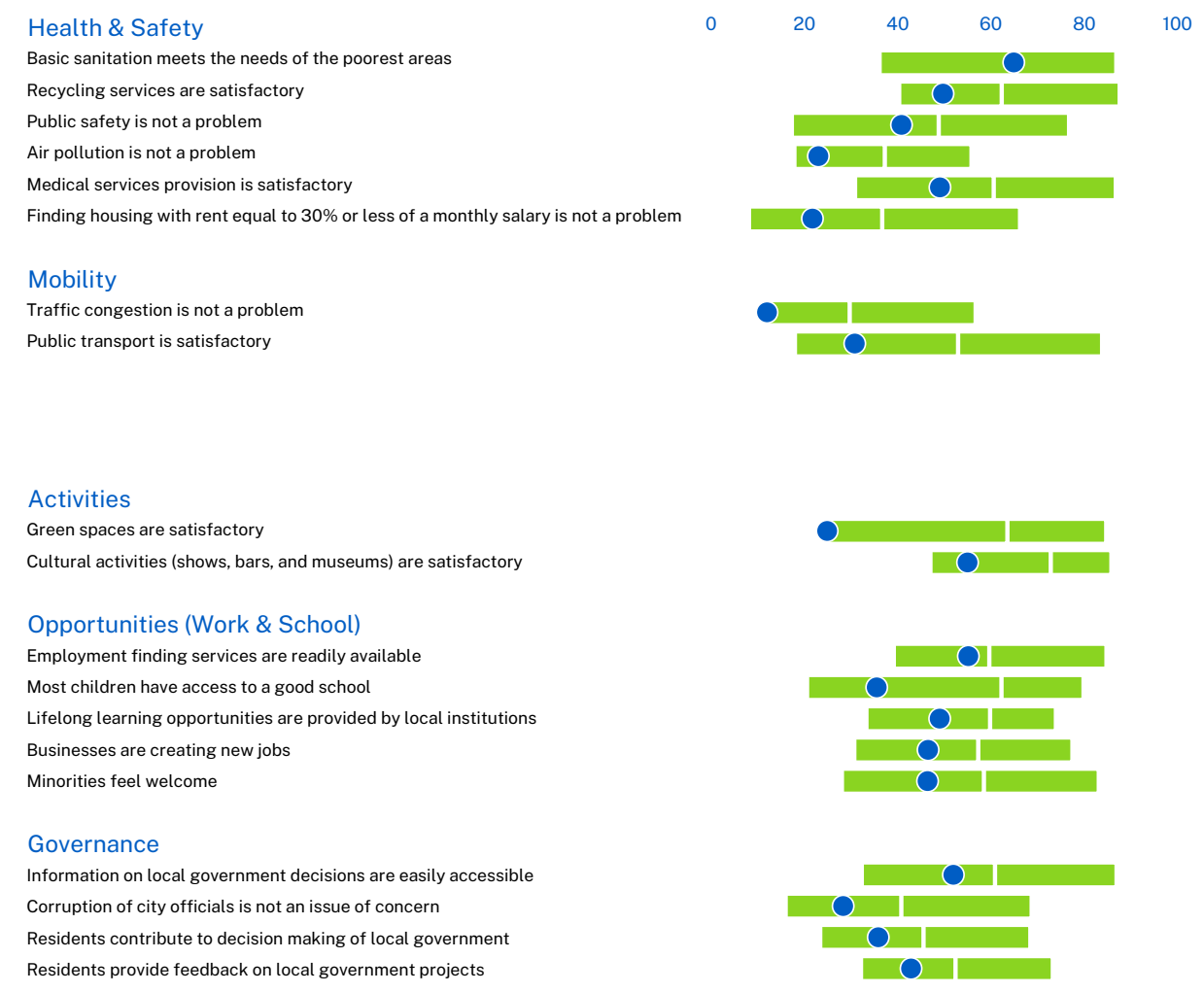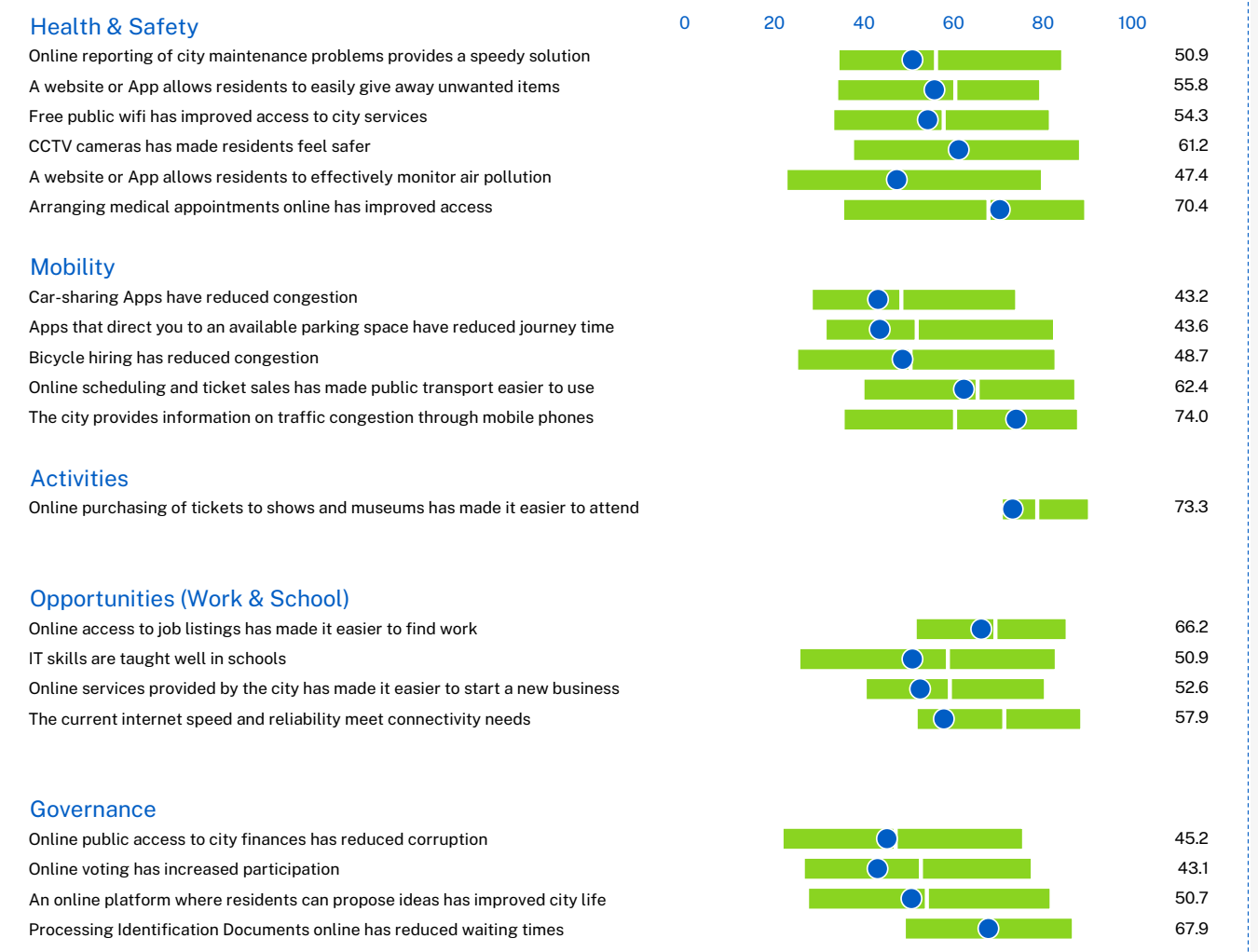% of respondents who chose the Priority Area

Priority Area	%
affordable housing	74.6%
road congestion	69.3%
Green spaces	41.4%
security	40.6%
unemployment	37.9%
air pollution	34.0%
corruption / transparency	33.3%
public transport	30.4%
health services	27.4%
basic amenities (water, waste)	25.4%
fulfilling employment	25.1%
school education	14.4%
recycling	14.0%
social mobility / inclusiveness	5.9%
citizen engagement	4.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	City %
You are willing to concede personal data in order to improve traffic congestion	59.4%
You are comfortable with face recognition technologies to lower crime	66.0%
You feel the availability of online information has increased your trust in authorities	60.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.0%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	64.9
Recycling services are satisfactory	49.7
Public safety is not a problem	40.8
Air pollution is not a problem	23.0
Medical services provision is satisfactory	49.1
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	21.7

Mobility
	Score
Traffic congestion is not a problem	12.0
Public transport is satisfactory	30.8

Activities
	Score
Green spaces are satisfactory	24.9
Cultural activities (shows, bars, and museums) are satisfactory	55.0

Opportunities (Work & School)
	Score
Employment finding services are readily available	55.2
Most children have access to a good school	35.5
Lifelong learning opportunities are provided by local institutions	49.0
Businesses are creating new jobs	46.5
Minorities feel welcome	46.4

Governance
	Score
Information on local government decisions are easily accessible	51.9
Corruption of city officials is not an issue of concern	28.3
Residents contribute to decision making of local government	35.9
Residents provide feedback on local government projects	42.9

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	50.9
A website or App allows residents to easily give away unwanted items	55.8
Free public wifi has improved access to city services	54.3
CCTV cameras has made residents feel safer	61.2
A website or App allows residents to effectively monitor air pollution	47.4
Arranging medical appointments online has improved access	70.4

Mobility
	Score
Car-sharing Apps have reduced congestion	43.2
Apps that direct you to an available parking space have reduced journey time	43.6
Bicycle hiring has reduced congestion	48.7
Online scheduling and ticket sales has made public transport easier to use	62.4
The city provides information on traffic congestion through mobile phones	74.0

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	73.3

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	66.2
IT skills are taught well in schools	50.9
Online services provided by the city has made it easier to start a new business	52.6
The current internet speed and reliability meet connectivity needs	57.9

Governance
	Score
Online public access to city finances has reduced corruption	45.2
Online voting has increased participation	43.1
An online platform where residents can propose ideas has improved city life	50.7
Processing Identification Documents online has reduced waiting times	67.9

Jakarta

BACKGROUND INFORMATION

City

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

HDI 0.759
(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.

% of respondents who chose the Priority Area

Priority Area	%
air pollution	68.4%
road congestion	66.0%
corruption / transparency	51.7%
unemployment	50.7%
basic amenities (water, waste)	46.0%
security	37.0%
health services	31.9%
fulfilling employment	28.9%
affordable housing	24.4%
Green spaces	23.6%
public transport	18.2%
recycling	13.4%
school education	12.7%
citizen engagement	5.8%
social mobility / inclusiveness	5.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement
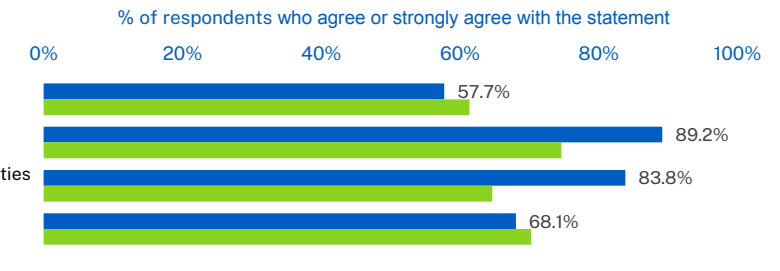
Statement	%
You are willing to concede personal data in order to improve traffic congestion	69.4%
You are comfortable with face recognition technologies to lower crime	88.9%
You feel the availability of online information has increased your trust in authorities	79.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	66.7%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	60.7
Recycling services are satisfactory	58.7
Public safety is not a problem	47.1
Air pollution is not a problem	21.9
Medical services provision is satisfactory	69.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	52.3

Mobility

	Score
Traffic congestion is not a problem	16.9
Public transport is satisfactory	66.1

Activities

	Score
Green spaces are satisfactory	66.4
Cultural activities (shows, bars, and museums) are satisfactory	76.6

Opportunities (Work & School)

	Score
Employment finding services are readily available	64.5
Most children have access to a good school	68.0
Lifelong learning opportunities are provided by local institutions	58.6
Businesses are creating new jobs	80.5
Minorities feel welcome	70.9

Governance

	Score
Information on local government decisions are easily accessible	72.6
Corruption of city officials is not an issue of concern	19.9
Residents contribute to decision making of local government	62.4
Residents provide feedback on local government projects	62.6

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	67.8
A website or App allows residents to easily give away unwanted items	65.6
Free public wifi has improved access to city services	72.4
CCTV cameras has made residents feel safer	77.7
A website or App allows residents to effectively monitor air pollution	66.8
Arranging medical appointments online has improved access	81.1

Mobility

	Score
Car-sharing Apps have reduced congestion	63.7
Apps that direct you to an available parking space have reduced journey time	65.3
Bicycle hiring has reduced congestion	63.6
Online scheduling and ticket sales has made public transport easier to use	83.2
The city provides information on traffic congestion through mobile phones	75.8

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	84.9

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	81.0
IT skills are taught well in schools	68.1
Online services provided by the city has made it easier to start a new business	78.6
The current internet speed and reliability meet connectivity needs	76.3

Governance

	Score
Online public access to city finances has reduced corruption	52.9
Online voting has increased participation	67.2
An online platform where residents can propose ideas has improved city life	69.4
Processing Identification Documents online has reduced waiting times	79.1

Jeddah

BACKGROUND INFORMATION

City

Population 4,780,000
(UN World Urbanization Prospects)
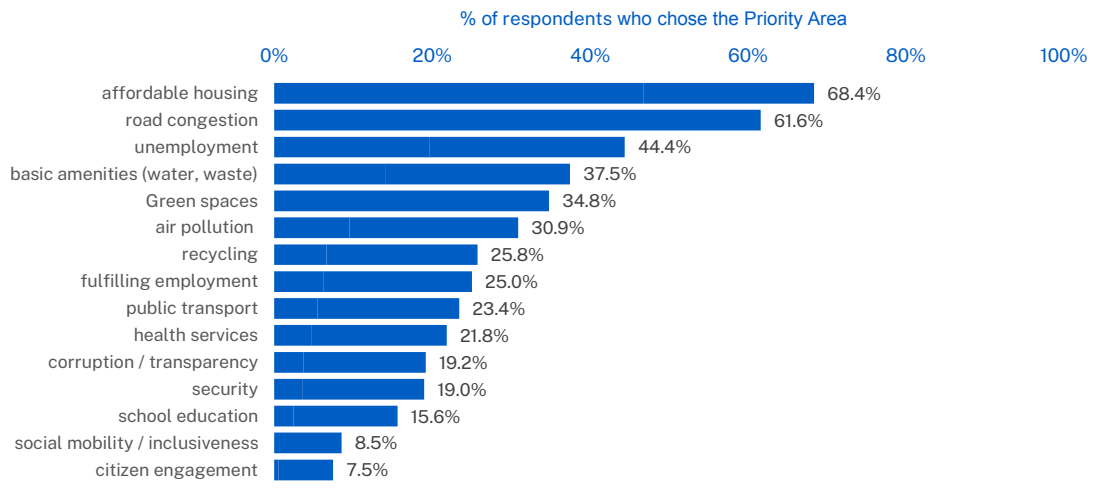
HDI 0.871
(Global Data Lab)

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

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	68.4%
road congestion	61.6%
unemployment	44.4%
basic amenities (water, waste)	37.5%
Green spaces	34.8%
air pollution	30.9%
recycling	25.8%
fulfilling employment	25.0%
public transport	23.4%
health services	21.8%
corruption / transparency	19.2%
security	19.0%
school education	15.6%
social mobility / inclusiveness	8.5%
citizen engagement	7.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	57.7%
You are comfortable with face recognition technologies to lower crime	89.2%
You feel the availability of online information has increased your trust in authorities	83.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.1%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	79.2
Recycling services are satisfactory	71.2
Public safety is not a problem	54.2
Air pollution is not a problem	34.5
Medical services provision is satisfactory	77.0
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	51.8

Mobility
Traffic congestion is not a problem	23.2
Public transport is satisfactory	58.1

Activities
Green spaces are satisfactory	64.8
Cultural activities (shows, bars, and museums) are satisfactory	76.1

Opportunities (Work & School)
Employment finding services are readily available	54.8
Most children have access to a good school	77.6
Lifelong learning opportunities are provided by local institutions	68.8
Businesses are creating new jobs	61.3
Minorities feel welcome	69.0

Governance
Information on local government decisions are easily accessible	78.6
Corruption of city officials is not an issue of concern	51.1
Residents contribute to decision making of local government	54.6
Residents provide feedback on local government projects	60.4

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	75.3
A website or App allows residents to easily give away unwanted items	67.2
Free public wifi has improved access to city services	62.4
CCTV cameras has made residents feel safer	75.3
A website or App allows residents to effectively monitor air pollution	57.8
Arranging medical appointments online has improved access	85.7

Mobility
Car-sharing Apps have reduced congestion	59.0
Apps that direct you to an available parking space have reduced journey time	68.7
Bicycle hiring has reduced congestion	55.0
Online scheduling and ticket sales has made public transport easier to use	73.7
The city provides information on traffic congestion through mobile phones	71.9

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	84.6

Opportunities (Work & School)
Online access to job listings has made it easier to find work	73.2
IT skills are taught well in schools	68.2
Online services provided by the city has made it easier to start a new business	75.0
The current internet speed and reliability meet connectivity needs	77.4

Governance
Online public access to city finances has reduced corruption	66.5
Online voting has increased participation	66.9
An online platform where residents can propose ideas has improved city life	71.2
Processing Identification Documents online has reduced waiting times	81.5

Kiel

BACKGROUND INFORMATION

City

Population	250,000
(Eurostat)	
HDI	0.921
(Global Data Lab)	

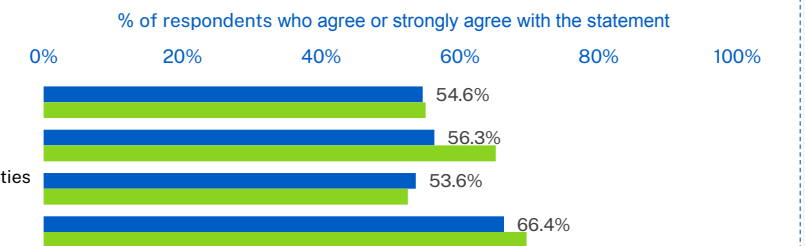Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

% of respondents who chose the Priority Area

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	%
affordable housing	78.6%
road congestion	47.2%
security	42.9%
unemployment	38.5%
school education	32.6%
public transport	31.1%
air pollution	27.9%
citizen engagement	24.8%
Green spaces	21.1%
social mobility / inclusiveness	20.2%
health services	18.2%
basic amenities (water, waste)	15.4%
recycling	14.6%
fulfilling employment	13.0%
corruption / transparency	7.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	54.6%
You are comfortable with face recognition technologies to lower crime	56.3%
You feel the availability of online information has increased your trust in authorities	53.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	66.4%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	67.2
Recycling services are satisfactory	71.3
Public safety is not a problem	55.6
Air pollution is not a problem	48.9
Medical services provision is satisfactory	75.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	22.6

Mobility
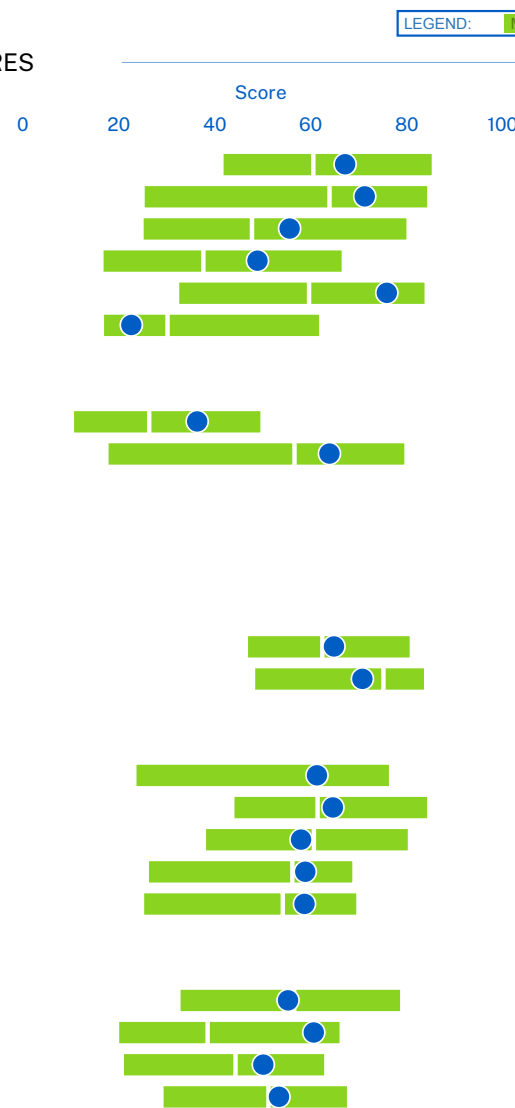|	
Traffic congestion is not a problem	36.3
Public transport is satisfactory	63.9

Activities
Green spaces are satisfactory	64.9
Cultural activities (shows, bars, and museums) are satisfactory	70.8

Opportunities (Work & School)
Employment finding services are readily available	61.3
Most children have access to a good school	64.6
Lifelong learning opportunities are provided by local institutions	58.0
Businesses are creating new jobs	58.9
Minorities feel welcome	58.7

Governance
Information on local government decisions are easily accessible	55.3
Corruption of city officials is not an issue of concern	60.6
Residents contribute to decision making of local government	50.1
Residents provide feedback on local government projects	53.4

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	44.7
A website or App allows residents to easily give away unwanted items	55.6
Free public wifi has improved access to city services	53.9
CCTV cameras has made residents feel safer	32.0
A website or App allows residents to effectively monitor air pollution	30.7
Arranging medical appointments online has improved access	49.0

Mobility
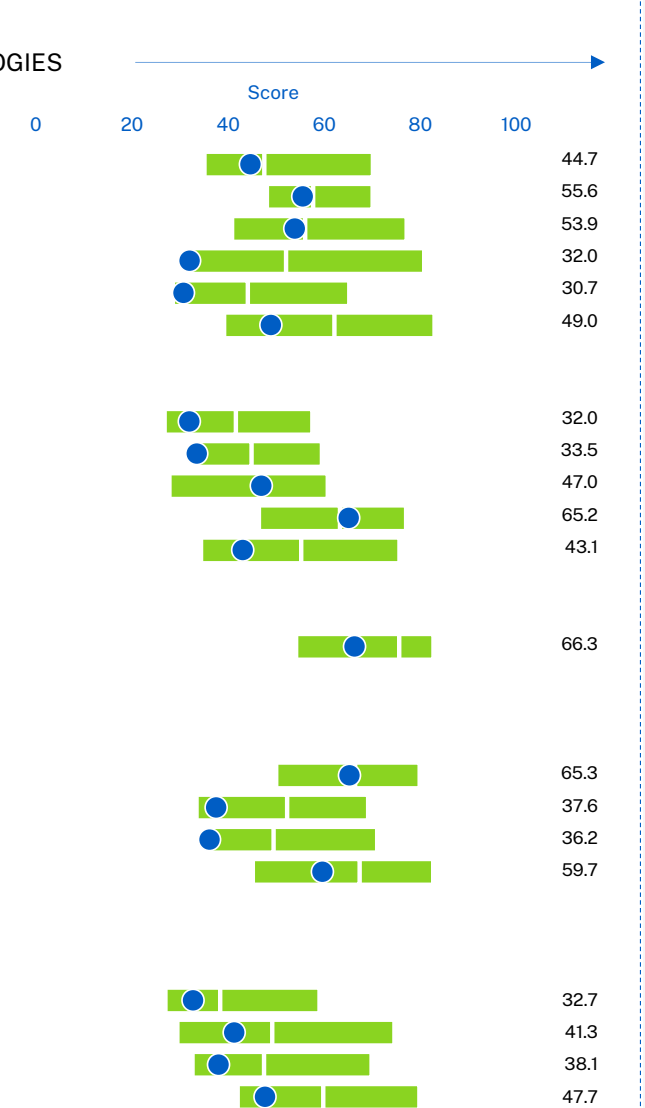|	
Car-sharing Apps have reduced congestion	32.0
Apps that direct you to an available parking space have reduced journey time	33.5
Bicycle hiring has reduced congestion	47.0
Online scheduling and ticket sales has made public transport easier to use	65.2
The city provides information on traffic congestion through mobile phones	43.1

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	66.3

Opportunities (Work & School)
Online access to job listings has made it easier to find work	65.3
IT skills are taught well in schools	37.6
Online services provided by the city has made it easier to start a new business	36.2
The current internet speed and reliability meet connectivity needs	59.7

Governance
Online public access to city finances has reduced corruption	32.7
Online voting has increased participation	41.3
An online platform where residents can propose ideas has improved city life	38.1
Processing Identification Documents online has reduced waiting times	47.7

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)
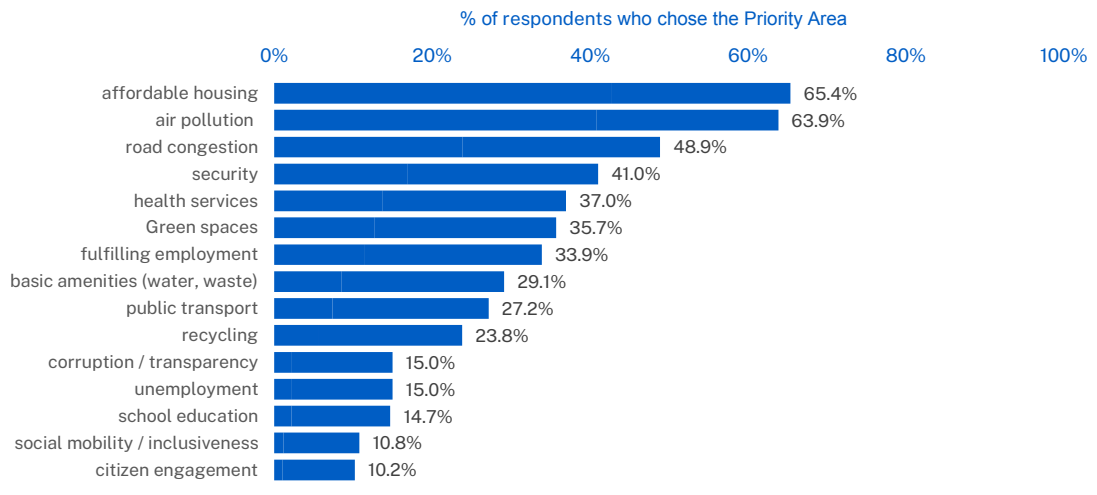
Country
Poland

	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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	65.4%
air pollution	63.9%
road congestion	48.9%
security	41.0%
health services	37.0%
Green spaces	35.7%
fulfilling employment	33.9%
basic amenities (water, waste)	29.1%
public transport	27.2%
recycling	23.8%
corruption / transparency	15.0%
unemployment	15.0%
school education	14.7%
social mobility / inclusiveness	10.8%
citizen engagement	10.2%

ATTITUDES

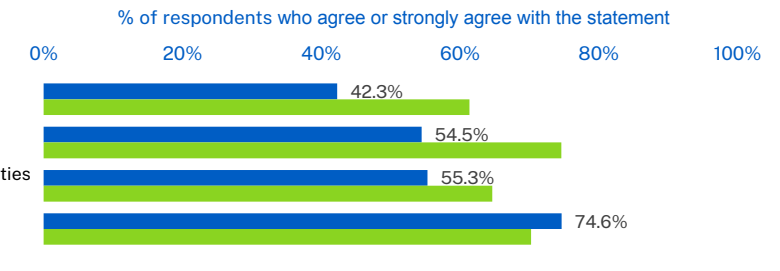**% of respondents who agree or strongly agree with the statement**

Statement	%
You are willing to concede personal data in order to improve traffic congestion	42.3%
You are comfortable with face recognition technologies to lower crime	54.5%
You feel the availability of online information has increased your trust in authorities	55.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	74.6%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN ● CITY / MEAN / GROUP MAX

STRUCTURES

Score (0 20 40 60 80 100)

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	62.6
Recycling services are satisfactory	65.5
Public safety is not a problem	64.8
Air pollution is not a problem	24.6
Medical services provision is satisfactory	52.0
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	24.9

Mobility
	Score
Traffic congestion is not a problem	28.7
Public transport is satisfactory	61.6

Activities
	Score
Green spaces are satisfactory	62.9
Cultural activities (shows, bars, and museums) are satisfactory	82.7

Opportunities (Work & School)
	Score
Employment finding services are readily available	61.7
Most children have access to a good school	68.2
Lifelong learning opportunities are provided by local institutions	70.1
Businesses are creating new jobs	64.6
Minorities feel welcome	60.8

Governance
	Score
Information on local government decisions are easily accessible	64.2
Corruption of city officials is not an issue of concern	41.6
Residents contribute to decision making of local government	53.1
Residents provide feedback on local government projects	66.5

TECHNOLOGIES

Score (0 20 40 60 80 100)

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	50.2
A website or App allows residents to easily give away unwanted items	56.5
Free public wifi has improved access to city services	53.6
CCTV cameras has made residents feel safer	57.7
A website or App allows residents to effectively monitor air pollution	69.0
Arranging medical appointments online has improved access	63.1

Mobility
	Score
Car-sharing Apps have reduced congestion	40.9
Apps that direct you to an available parking space have reduced journey time	48.6
Bicycle hiring has reduced congestion	51.8
Online scheduling and ticket sales has made public transport easier to use	71.2
The city provides information on traffic congestion through mobile phones	45.0

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	79.1

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	73.6
IT skills are taught well in schools	53.6
Online services provided by the city has made it easier to start a new business	57.8
The current internet speed and reliability meet connectivity needs	70.2

Governance
	Score
Online public access to city finances has reduced corruption	42.6
Online voting has increased participation	51.9
An online platform where residents can propose ideas has improved city life	58.9
Processing Identification Documents online has reduced waiting times	65.0

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	57.3%
road congestion	53.9%
corruption / transparency	51.2%
security	41.2%
unemployment	39.7%
air pollution	33.2%
basic amenities (water, waste)	32.4%
health services	30.2%
public transport	29.8%
fulfilling employment	26.5%
recycling	22.5%
Green spaces	20.7%
school education	16.8%
social mobility / inclusiveness	12.5%
citizen engagement	9.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	76.6%
You are comfortable with face recognition technologies to lower crime	81.1%
You feel the availability of online information has increased your trust in authorities	77.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.0%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	70.0
Recycling services are satisfactory	61.9
Public safety is not a problem	50.0
Air pollution is not a problem	37.6
Medical services provision is satisfactory	76.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	44.5

Mobility
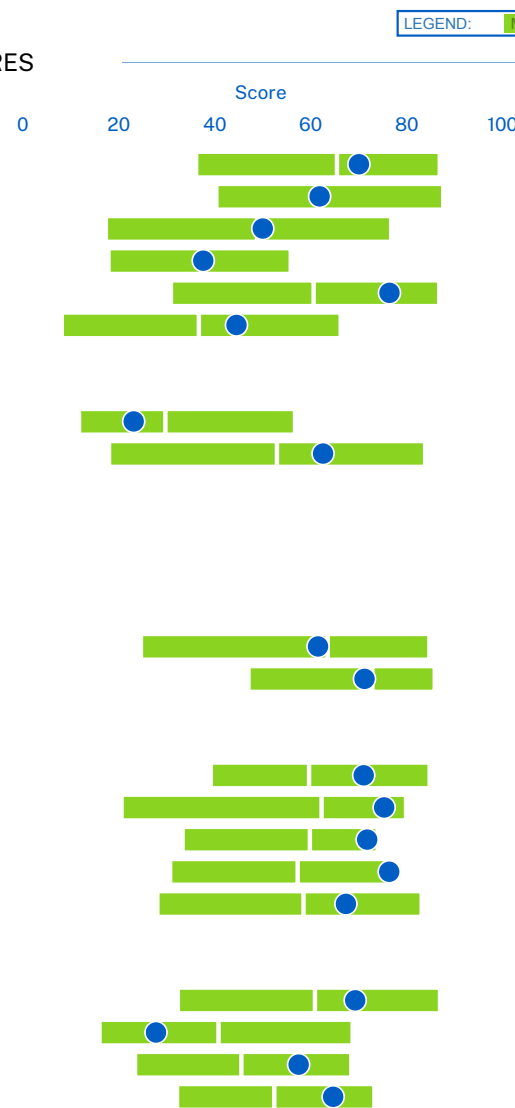|	
Traffic congestion is not a problem	23.1
Public transport is satisfactory	62.6

Activities
Green spaces are satisfactory	61.5
Cultural activities (shows, bars, and museums) are satisfactory	71.2

Opportunities (Work & School)
Employment finding services are readily available	71.1
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	76.4
Minorities feel welcome	67.3

Governance
Information on local government decisions are easily accessible	69.3
Corruption of city officials is not an issue of concern	27.8
Residents contribute to decision making of local government	57.5
Residents provide feedback on local government projects	64.7

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	61.0
A website or App allows residents to easily give away unwanted items	57.9
Free public wifi has improved access to city services	61.8
CCTV cameras has made residents feel safer	72.5
A website or App allows residents to effectively monitor air pollution	57.6
Arranging medical appointments online has improved access	76.2

Mobility
Car-sharing Apps have reduced congestion	61.2
Apps that direct you to an available parking space have reduced journey time	53.4
Bicycle hiring has reduced congestion	54.4
Online scheduling and ticket sales has made public transport easier to use	75.4
The city provides information on traffic congestion through mobile phones	72.8

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	84.3

Opportunities (Work & School)
Online access to job listings has made it easier to find work	81.7
IT skills are taught well in schools	62.6
Online services provided by the city has made it easier to start a new business	74.0
The current internet speed and reliability meet connectivity needs	72.0

Governance
Online public access to city finances has reduced corruption	51.7
Online voting has increased participation	57.9
An online platform where residents can propose ideas has improved city life	64.4
Processing Identification Documents online has reduced waiting times	69.7

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

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.

% of respondents who chose the Priority Area

Priority Area	%
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	%
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	84.2%
You feel the availability of online information has increased your trust in authorities	48.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	63.4%

LEGEND: GROUP MEAN · CITY

LEGEND: MIN · CITY · MEAN · GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	11.3
Public transport is satisfactory	30.7

Activities
	Score
Green spaces are satisfactory	43.3
Cultural activities (shows, bars, and museums) are satisfactory	70.8

Opportunities (Work & School)
	Score
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
	Score
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

Score

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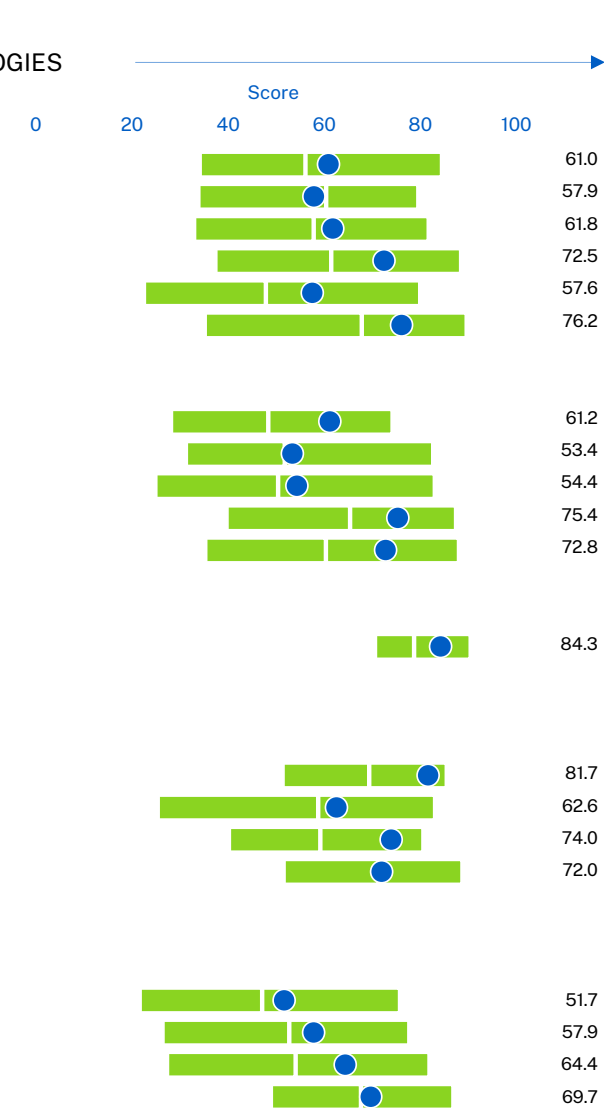|	Score
Car-sharing Apps have reduced congestion	42.0
Apps that direct you to an available parking space have reduced journey time	36.8
Bicycle hiring has reduced congestion	24.3
Online scheduling and ticket sales has made public transport easier to use	57.0
The city provides information on traffic congestion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

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	73.0

Opportunities (Work & School)
	Score
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
	Score
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

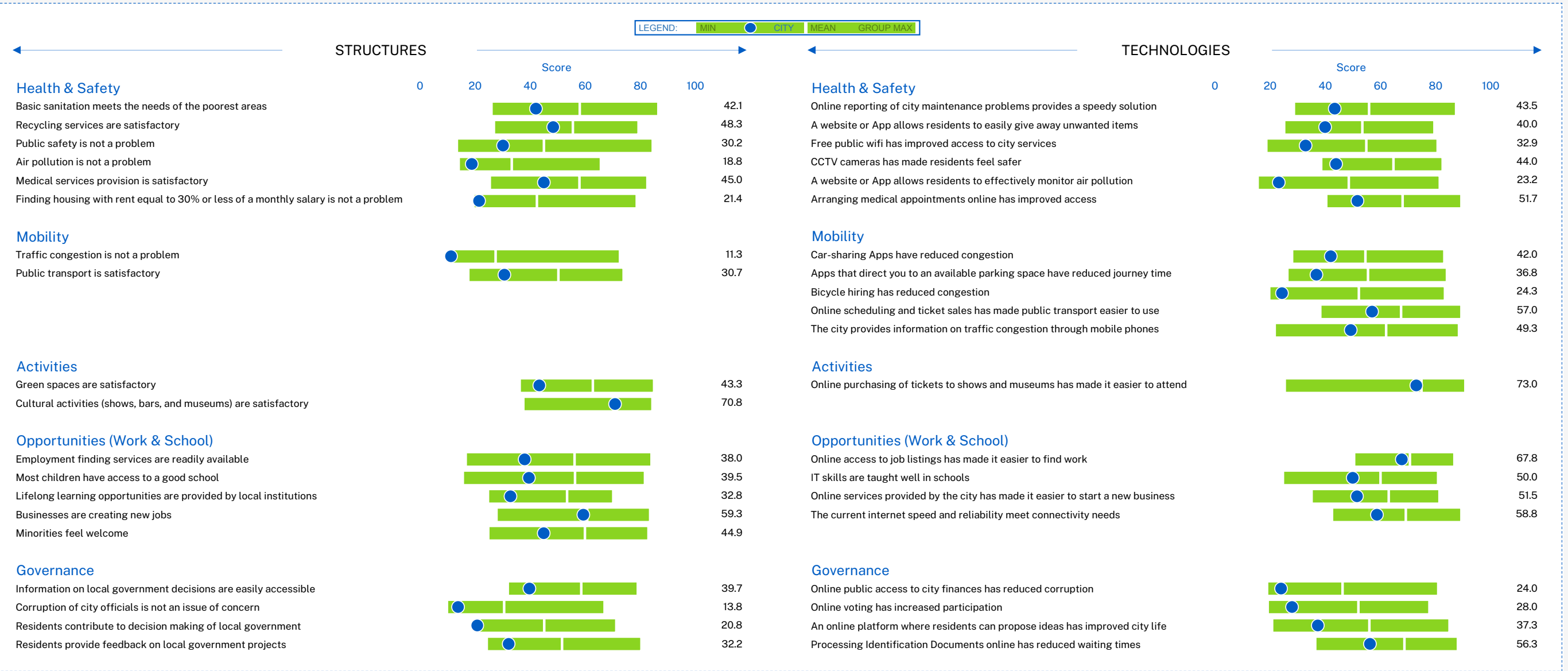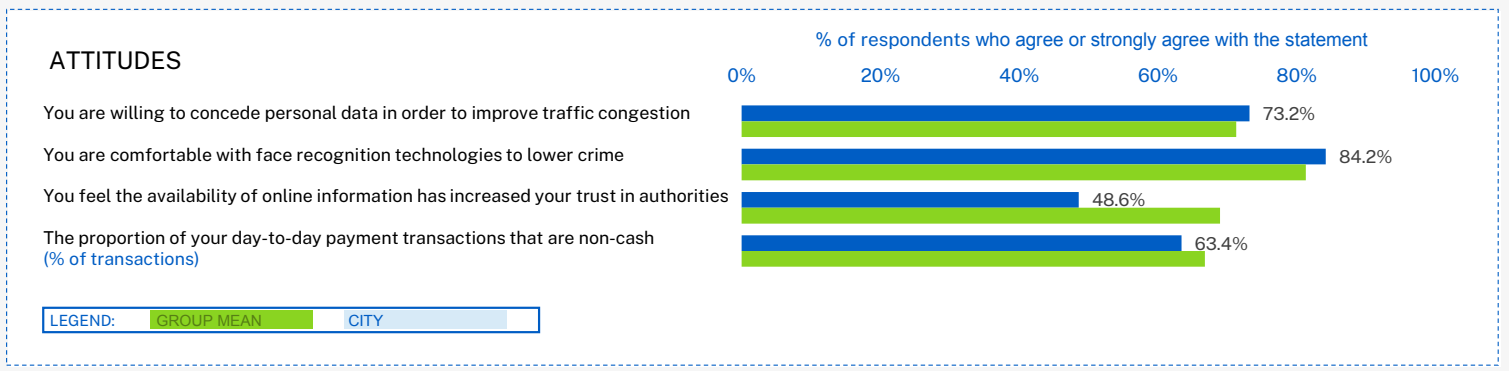## FACTOR RATINGS

AA

STRUCTURES

A

TECHNOLOGIES

GROUP

1
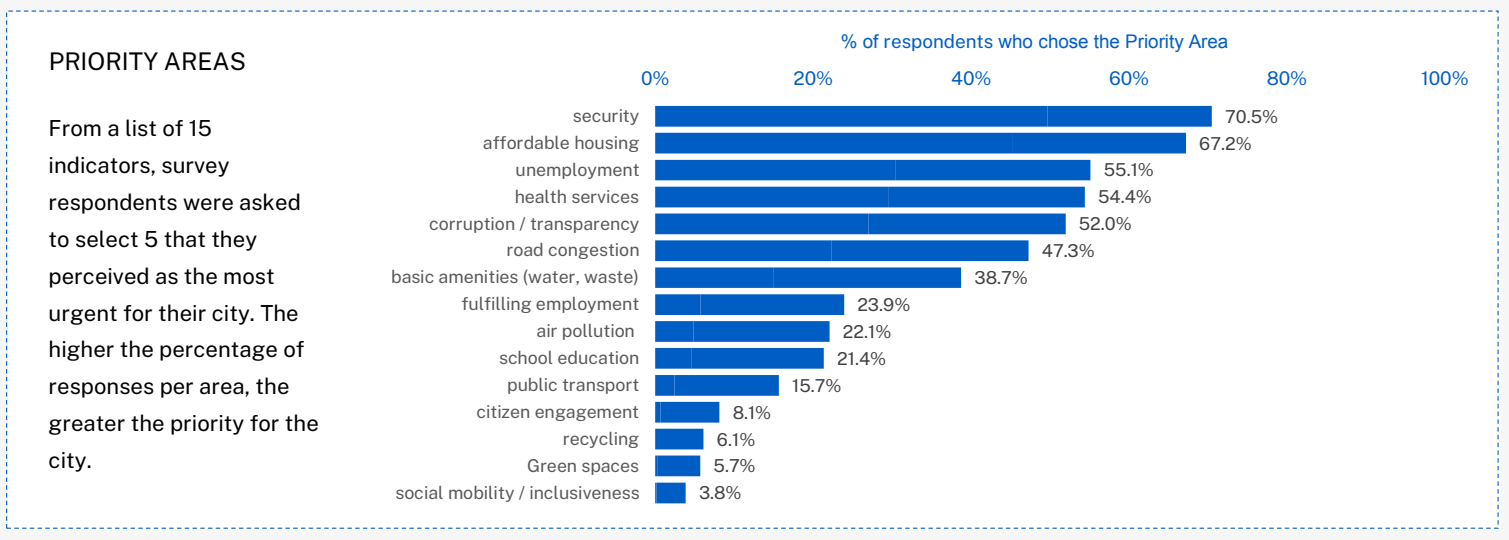
All ratings range from AAA to D

BACKGROUND INFORMATION

City

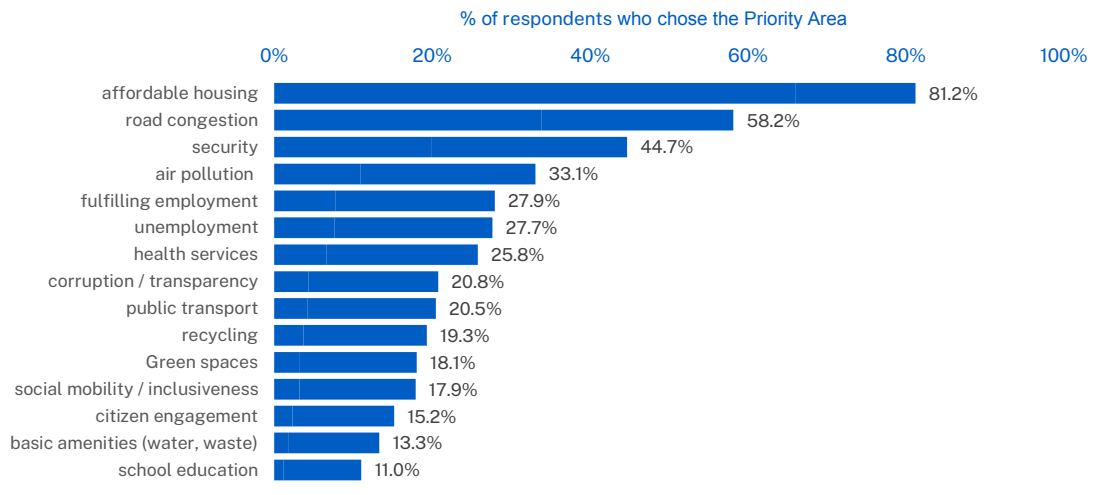Population   140,000
(Eurostat)

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

% of respondents who chose the Priority Area

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.

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

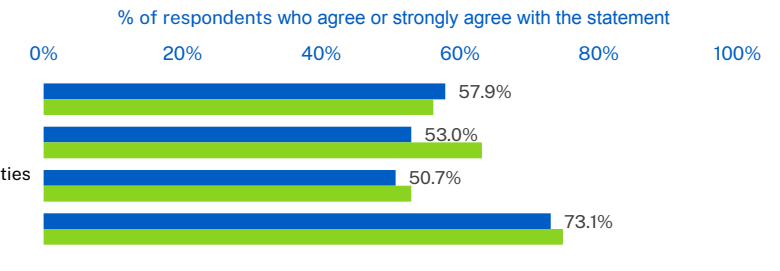**% of respondents who agree or strongly agree with the statement**

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

LEGEND: GROUP MEAN   CITY

STRUCTURES

LEGEND: MIN   CITY   MEAN   GROUP MAX

Score

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

Score

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
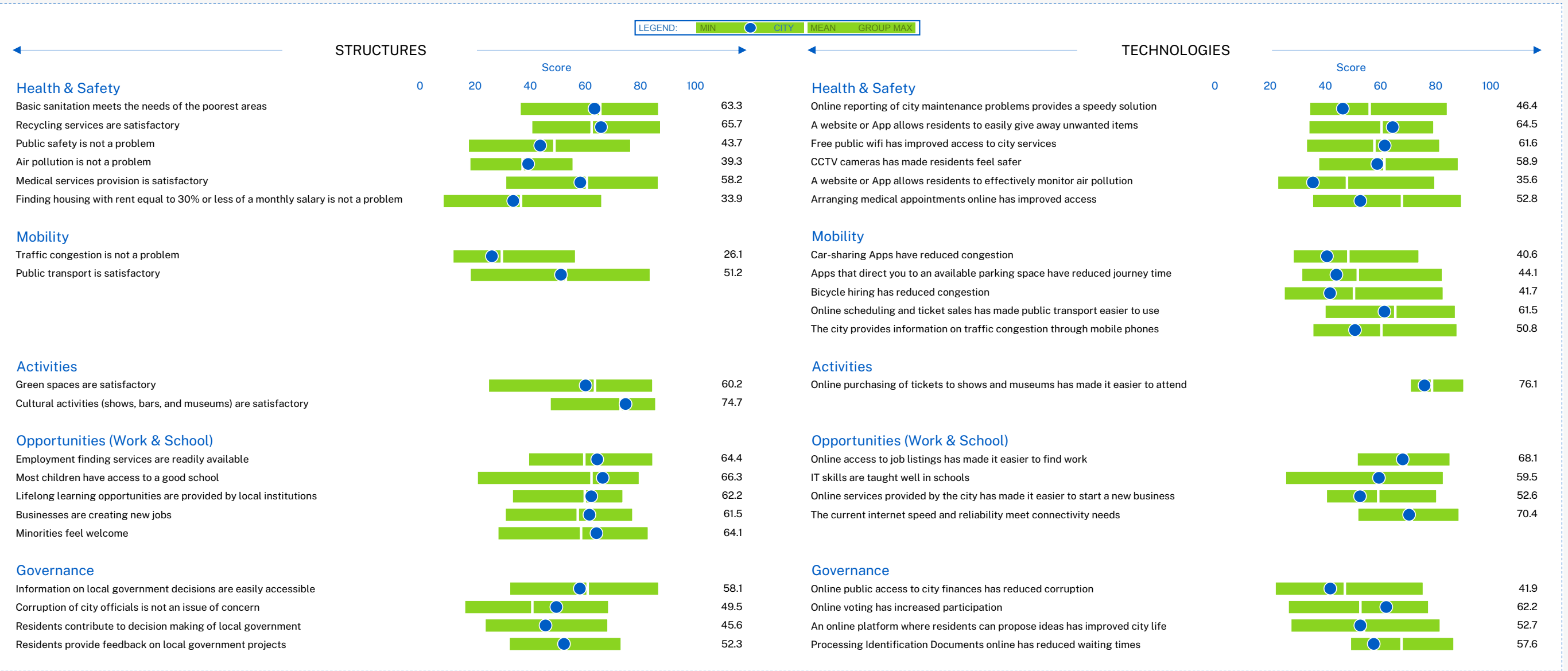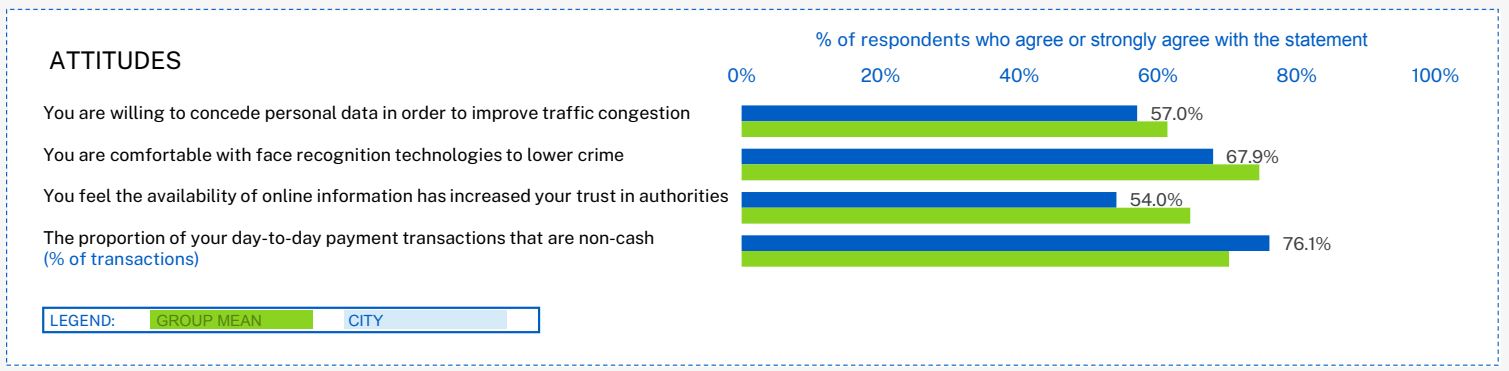from AAA to D

BACKGROUND INFORMATION

City
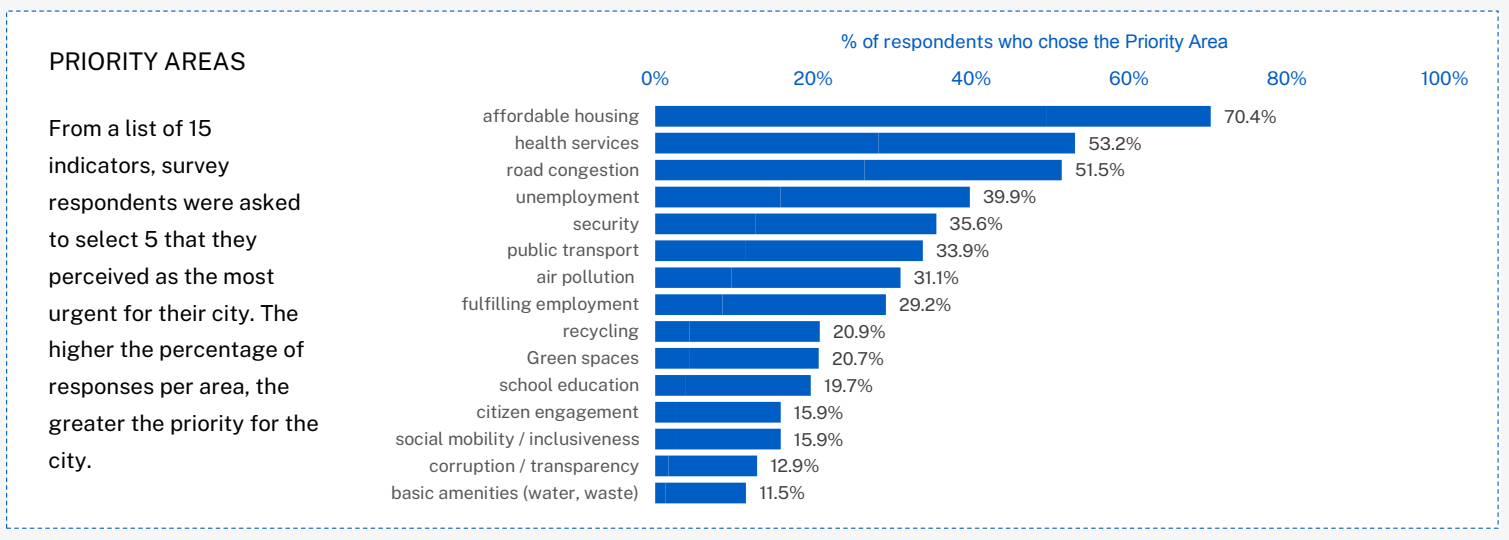
Population	790,000	
(Eurostat)		
HDI	0.908	
(Global Data Lab)		

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

% of respondents who chose the Priority Area

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.

affordable housing	70.4%
health services	53.2%
road congestion	51.5%
unemployment	39.9%
security	35.6%
public transport	33.9%
air pollution	31.1%
fulfilling employment	29.2%
recycling	20.9%
Green spaces	20.7%
school education	19.7%
citizen engagement	15.9%
social mobility / inclusiveness	15.9%
corruption / transparency	12.9%
basic amenities (water, waste)	11.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	57.0%
You are comfortable with face recognition technologies to lower crime	67.9%
You feel the availability of online information has increased your trust in authorities	54.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	76.1%

LEGEND: GROUP MEAN CITY

LEGEND: MIN CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	63.3
Recycling services are satisfactory	65.7
Public safety is not a problem	43.7
Air pollution is not a problem	39.3
Medical services provision is satisfactory	58.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	33.9

Mobility
	Score
Traffic congestion is not a problem	26.1
Public transport is satisfactory	51.2

Activities
	Score
Green spaces are satisfactory	60.2
Cultural activities (shows, bars, and museums) are satisfactory	74.7

Opportunities (Work & School)
	Score
Employment finding services are readily available	64.4
Most children have access to a good school	66.3
Lifelong learning opportunities are provided by local institutions	62.2
Businesses are creating new jobs	61.5
Minorities feel welcome	64.1

Governance
	Score
Information on local government decisions are easily accessible	58.1
Corruption of city officials is not an issue of concern	49.5
Residents contribute to decision making of local government	45.6
Residents provide feedback on local government projects	52.3

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	46.4
A website or App allows residents to easily give away unwanted items	64.5
Free public wifi has improved access to city services	61.6
CCTV cameras has made residents feel safer	58.9
A website or App allows residents to effectively monitor air pollution	35.6
Arranging medical appointments online has improved access	52.8

Mobility
	Score
Car-sharing Apps have reduced congestion	40.6
Apps that direct you to an available parking space have reduced journey time	44.1
Bicycle hiring has reduced congestion	41.7
Online scheduling and ticket sales has made public transport easier to use	61.5
The city provides information on traffic congestion through mobile phones	50.8

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.1

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	68.1
IT skills are taught well in schools	59.5
Online services provided by the city has made it easier to start a new business	52.6
The current internet speed and reliability meet connectivity needs	70.4

Governance
	Score
Online public access to city finances has reduced corruption	41.9
Online voting has increased participation	62.2
An online platform where residents can propose ideas has improved city life	52.7
Processing Identification Documents online has reduced waiting times	57.6

Lille

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

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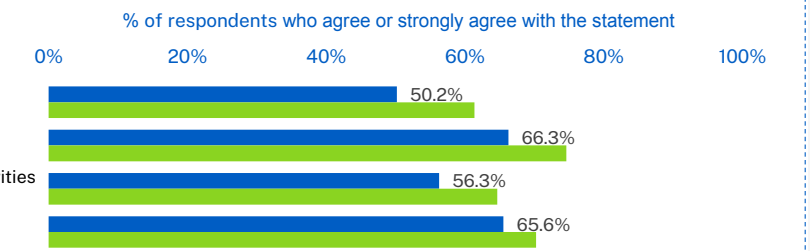
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.

affordable housing	59.9%
security	55.0%
air pollution	51.5%
road congestion	43.3%
unemployment	41.3%
health services	28.1%
recycling	23.8%
public transport	23.8%
fulfilling employment	23.6%
Green spaces	21.4%
basic amenities (water, waste)	21.2%
school education	16.6%
corruption / transparency	15.7%
citizen engagement	12.7%
social mobility / inclusiveness	8.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	50.2%
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	56.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	65.6%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	57.9
Recycling services are satisfactory	64.1
Public safety is not a problem	49.4
Air pollution is not a problem	28.0
Medical services provision is satisfactory	59.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	33.0

Mobility

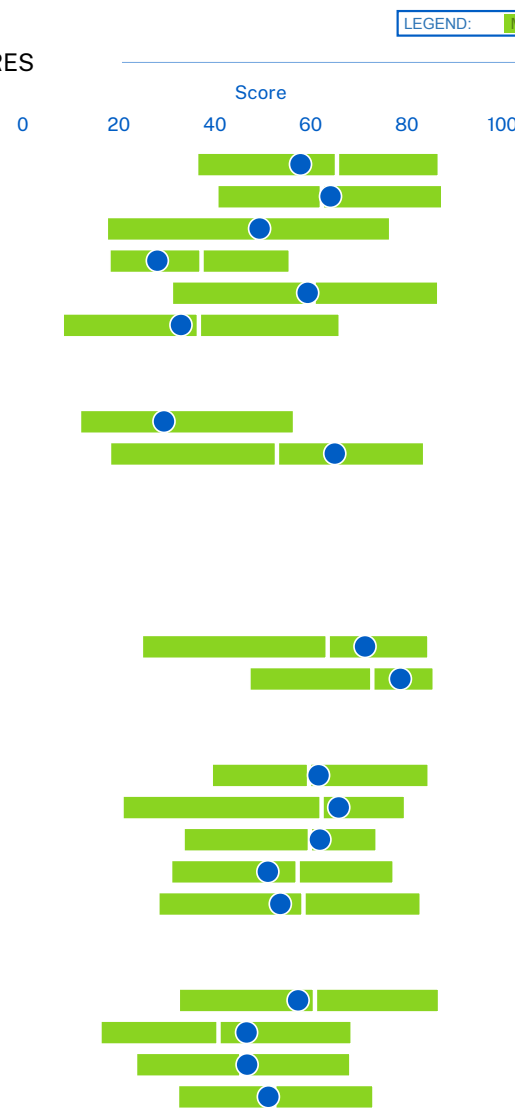|	Score
Traffic congestion is not a problem	29.4
Public transport is satisfactory	65.0

Activities

	Score
Green spaces are satisfactory	71.3
Cultural activities (shows, bars, and museums) are satisfactory	78.7

Opportunities (Work & School)

	Score
Employment finding services are readily available	61.6
Most children have access to a good school	65.9
Lifelong learning opportunities are provided by local institutions	61.9
Businesses are creating new jobs	51.1
Minorities feel welcome	53.6

Governance

	Score
Information on local government decisions are easily accessible	57.4
Corruption of city officials is not an issue of concern	46.7
Residents contribute to decision making of local government	46.7
Residents provide feedback on local government projects	51.2

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	50.7
A website or App allows residents to easily give away unwanted items	60.2
Free public wifi has improved access to city services	57.2
CCTV cameras has made residents feel safer	58.1
A website or App allows residents to effectively monitor air pollution	51.8
Arranging medical appointments online has improved access	68.4

Mobility

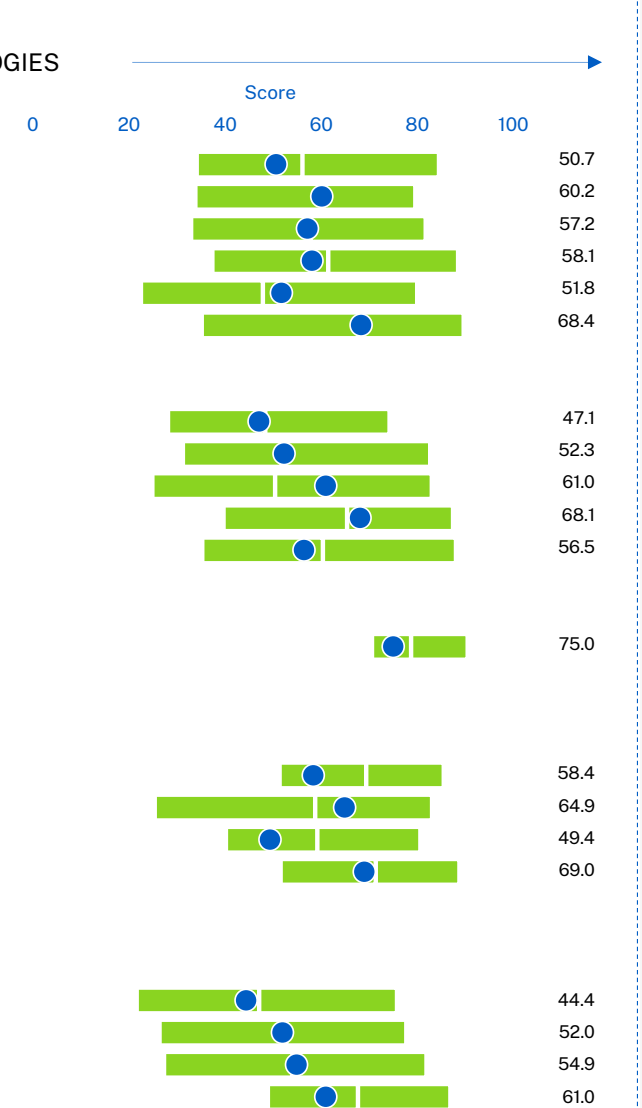|	Score
Car-sharing Apps have reduced congestion	47.1
Apps that direct you to an available parking space have reduced journey time	52.3
Bicycle hiring has reduced congestion	61.0
Online scheduling and ticket sales has made public transport easier to use	68.1
The city provides information on traffic congestion through mobile phones	56.5

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.0

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	58.4
IT skills are taught well in schools	64.9
Online services provided by the city has made it easier to start a new business	49.4
The current internet speed and reliability meet connectivity needs	69.0

Governance

	Score
Online public access to city finances has reduced corruption	44.4
Online voting has increased participation	52.0
An online platform where residents can propose ideas has improved city life	54.9
Processing Identification Documents online has reduced waiting times	61.0

Lima

SMART CITY RANKING

134

Out of 142

134 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	9,560,000
(UN Data)	
HDI	0.820
(Global Data Lab)	

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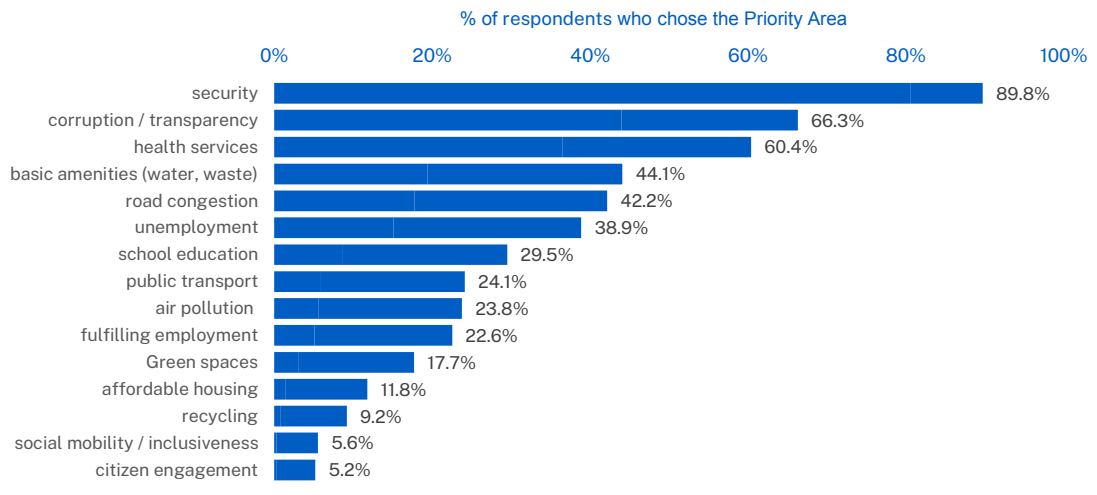
Country

Peru	2019	2020	2021	2022	1 yr change
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

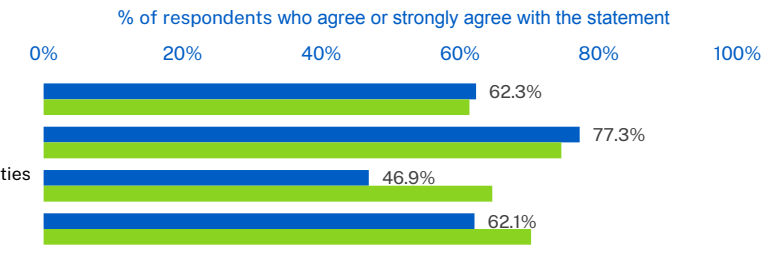% of respondents who chose the Priority Area

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

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	17.0
Public transport is satisfactory	23.4

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

	Score
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

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

Opportunities (Work & School)

	Score
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

	Score
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 (Eurostat)	510,000
HDI (Global Data Lab)	0.900
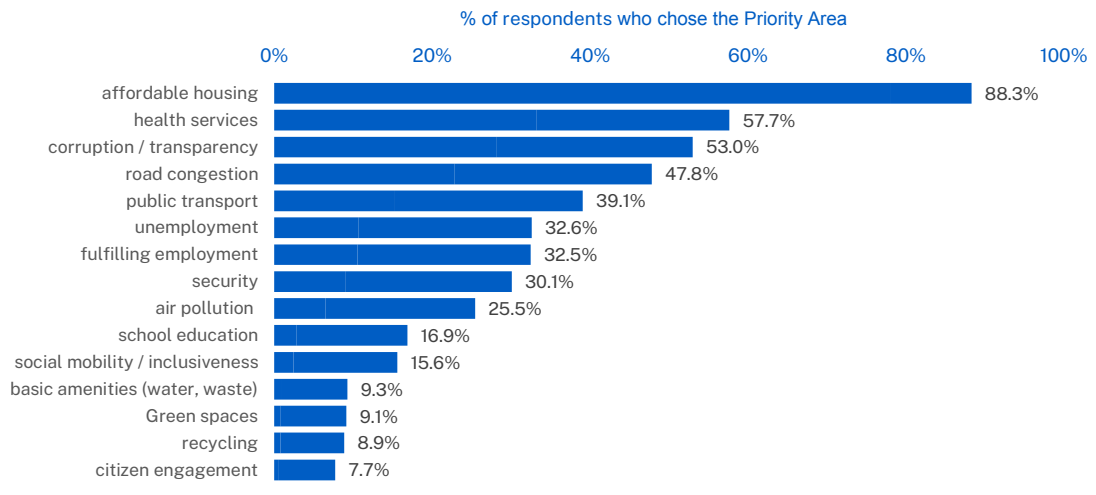
Country
Portugal

	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

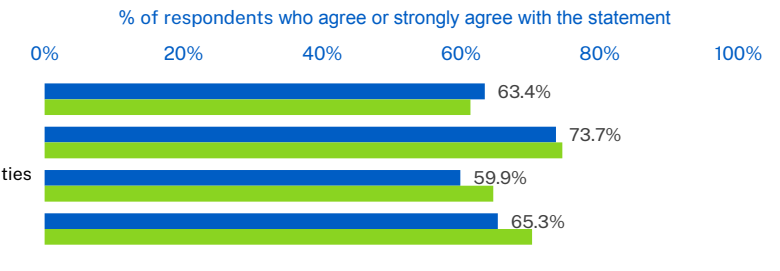## PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
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	%
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 — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	16.3
Public transport is satisfactory	35.8

Activities

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

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

	Score
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

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

Opportunities (Work & School)

	Score
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

	Score
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

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	65.4%
health services	55.4%
road congestion	49.7%
corruption / transparency	42.1%
air pollution	36.1%
public transport	35.3%
security	32.3%
unemployment	27.7%
basic amenities (water, waste)	25.0%
fulfilling employment	23.0%
Green spaces	22.0%
school education	14.5%
recycling	13.3%
social mobility / inclusiveness	11.7%
citizen engagement	11.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	47.5%
You are comfortable with face recognition technologies to lower crime	55.6%
You feel the availability of online information has increased your trust in authorities	38.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	64.6%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	71.2
Recycling services are satisfactory	72.6
Public safety is not a problem	64.0
Air pollution is not a problem	39.0
Medical services provision is satisfactory	45.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	20.7

Mobility
	Score
Traffic congestion is not a problem	21.0
Public transport is satisfactory	53.2

Activities
	Score
Green spaces are satisfactory	68.6
Cultural activities (shows, bars, and museums) are satisfactory	74.1

Opportunities (Work & School)
	Score
Employment finding services are readily available	59.2
Most children have access to a good school	72.3
Lifelong learning opportunities are provided by local institutions	65.9
Businesses are creating new jobs	58.5
Minorities feel welcome	58.1

Governance
	Score
Information on local government decisions are easily accessible	53.2
Corruption of city officials is not an issue of concern	33.7
Residents contribute to decision making of local government	37.1
Residents provide feedback on local government projects	44.5

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	44.9
A website or App allows residents to easily give away unwanted items	45.8
Free public wifi has improved access to city services	55.0
CCTV cameras has made residents feel safer	43.2
A website or App allows residents to effectively monitor air pollution	52.6
Arranging medical appointments online has improved access	55.1

Mobility
	Score
Car-sharing Apps have reduced congestion	43.7
Apps that direct you to an available parking space have reduced journey time	49.0
Bicycle hiring has reduced congestion	67.2
Online scheduling and ticket sales has made public transport easier to use	63.1
The city provides information on traffic congestion through mobile phones	47.3

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.7

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	68.5
IT skills are taught well in schools	53.7
Online services provided by the city has made it easier to start a new business	51.1
The current internet speed and reliability meet connectivity needs	70.9

Governance
	Score
Online public access to city finances has reduced corruption	35.4
Online voting has increased participation	39.4
An online platform where residents can propose ideas has improved city life	45.9
Processing Identification Documents online has reduced waiting times	52.5

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)		

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

Country
United Kingdom

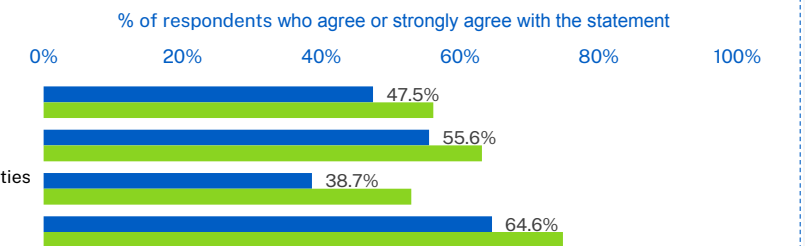|	2019	2020	2021	2022	1 yr change
HDI	0.933	0.920	0.931	0.940	+0.009
Life expectancy at birth	81.7	80.4	80.7	82.2	+1.4
Expected years of schooling	17.2	17.2	17.6	17.6	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP $)	47,066	40,799	44,750	46,624	+1,874

PRIORITY AREAS

% of respondents who chose the Priority Area

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.

affordable housing	73.8%
health services	54.1%
road congestion	40.4%
air pollution	40.0%
security	40.0%
unemployment	35.6%
public transport	29.3%
fulfilling employment	26.5%
recycling	22.7%
school education	21.6%
corruption / transparency	21.4%
basic amenities (water, waste)	17.9%
Green spaces	16.6%
social mobility / inclusiveness	13.1%
citizen engagement	6.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	59.3%
You are comfortable with face recognition technologies to lower crime	71.1%
You feel the availability of online information has increased your trust in authorities	55.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.4%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN | CITY | MEAN | GROUP MAX

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	61.7
Recycling services are satisfactory	60.4
Public safety is not a problem	32.6
Air pollution is not a problem	30.6
Medical services provision is satisfactory	48.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	25.7

Mobility

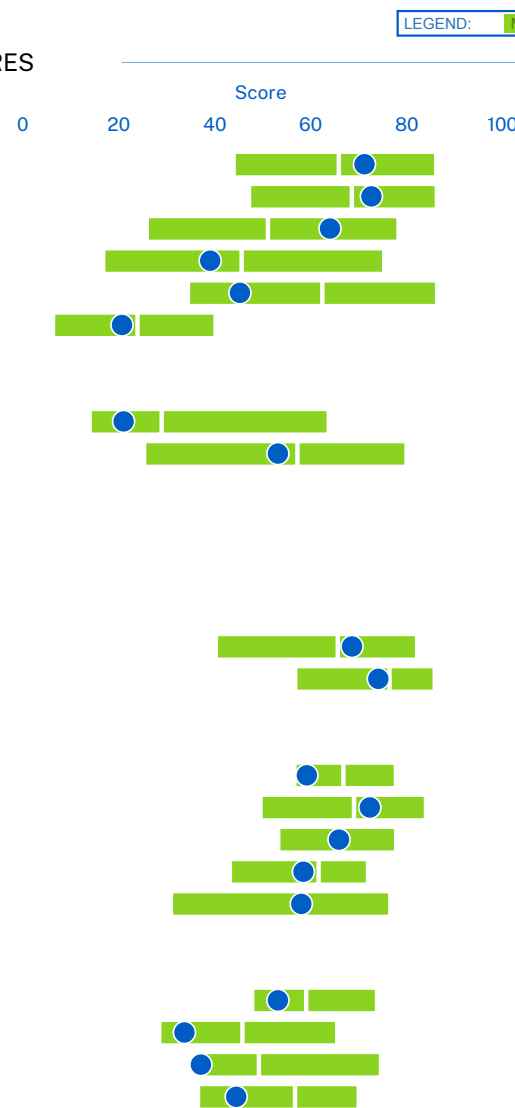|	Score
Traffic congestion is not a problem	24.9
Public transport is satisfactory	58.1

Activities

	Score
Green spaces are satisfactory	71.2
Cultural activities (shows, bars, and museums) are satisfactory	75.0

Opportunities (Work & School)

	Score
Employment finding services are readily available	65.0
Most children have access to a good school	61.4
Lifelong learning opportunities are provided by local institutions	61.5
Businesses are creating new jobs	59.9
Minorities feel welcome	60.9

Governance

	Score
Information on local government decisions are easily accessible	62.4
Corruption of city officials is not an issue of concern	37.7
Residents contribute to decision making of local government	45.3
Residents provide feedback on local government projects	50.8

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	48.7
A website or App allows residents to easily give away unwanted items	65.0
Free public wifi has improved access to city services	61.6
CCTV cameras has made residents feel safer	56.8
A website or App allows residents to effectively monitor air pollution	43.9
Arranging medical appointments online has improved access	52.1

Mobility

	Score
Car-sharing Apps have reduced congestion	45.1
Apps that direct you to an available parking space have reduced journey time	50.8
Bicycle hiring has reduced congestion	57.4
Online scheduling and ticket sales has made public transport easier to use	65.6
The city provides information on traffic congestion through mobile phones	64.6

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.8

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	69.1
IT skills are taught well in schools	64.4
Online services provided by the city has made it easier to start a new business	58.1
The current internet speed and reliability meet connectivity needs	69.2

Governance

	Score
Online public access to city finances has reduced corruption	44.3
Online voting has increased participation	55.4
An online platform where residents can propose ideas has improved city life	52.5
Processing Identification Documents online has reduced waiting times	62.2

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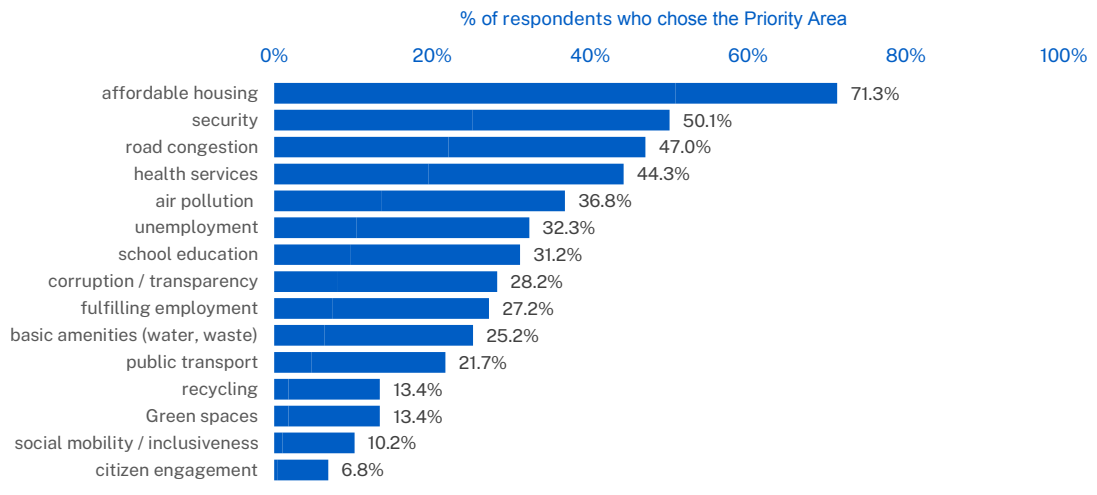
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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.

% of respondents who chose the Priority Area

Priority Area	%
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	%
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	50.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.4%

LEGEND: GROUP MEAN / CITY

STRUCTURES

LEGEND: MIN · CITY / MEAN / GROUP MAX

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	22.5
Public transport is satisfactory	42.8

Activities
	Score
Green spaces are satisfactory	55.0
Cultural activities (shows, bars, and museums) are satisfactory	70.5

Opportunities (Work & School)
	Score
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
	Score
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

Score

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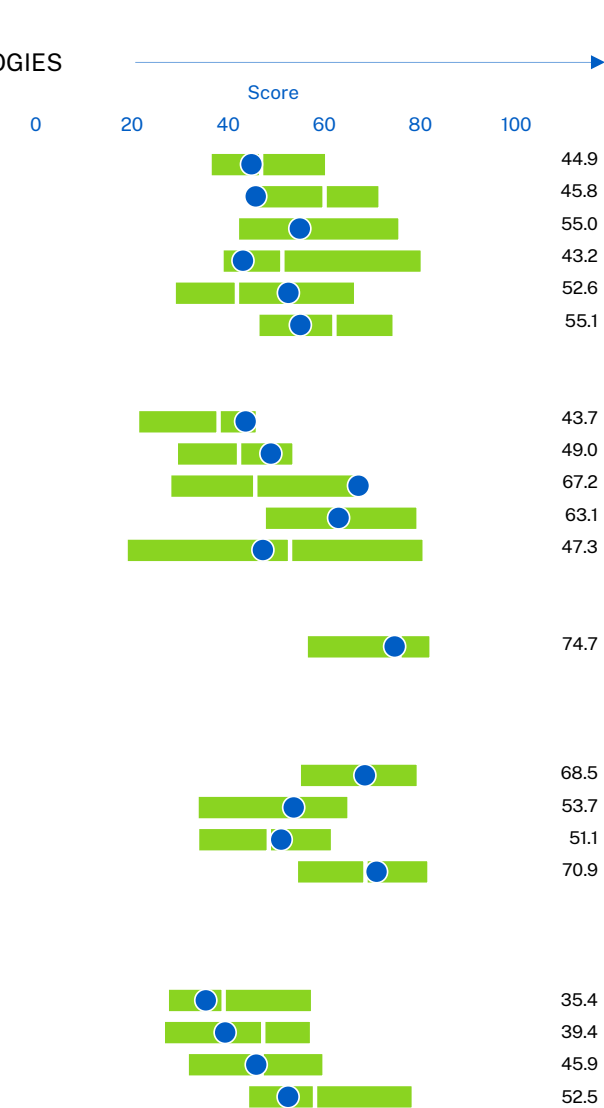|	Score
Car-sharing Apps have reduced congestion	49.3
Apps that direct you to an available parking space have reduced journey time	50.3
Bicycle hiring has reduced congestion	43.3
Online scheduling and ticket sales has made public transport easier to use	56.3
The city provides information on traffic congestion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

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	72.5

Opportunities (Work & School)
	Score
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
	Score
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

BACKGROUND INFORMATION

City

Population	120,000
(Eurostat)	
HDI	0.930
(Global Data Lab)	

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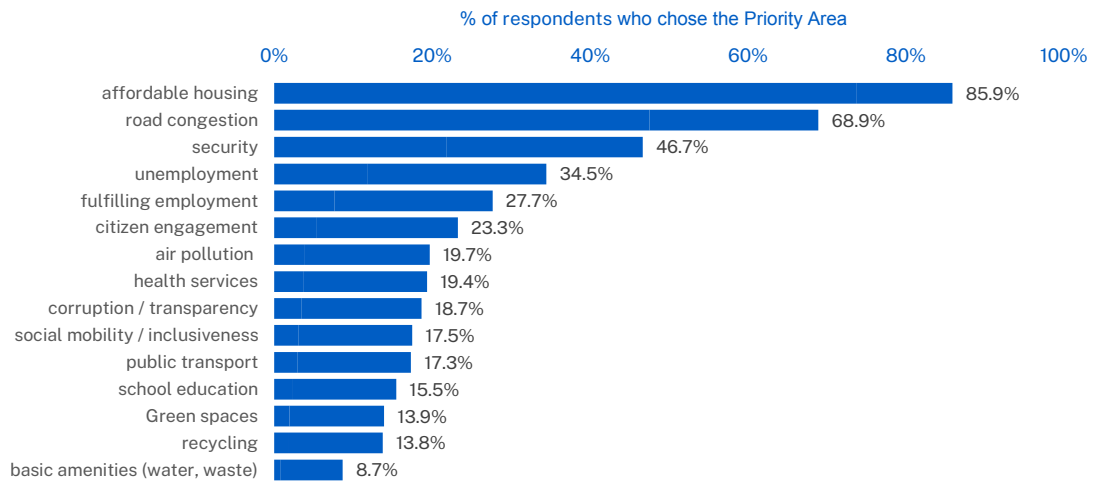
Country

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

PRIORITY AREAS

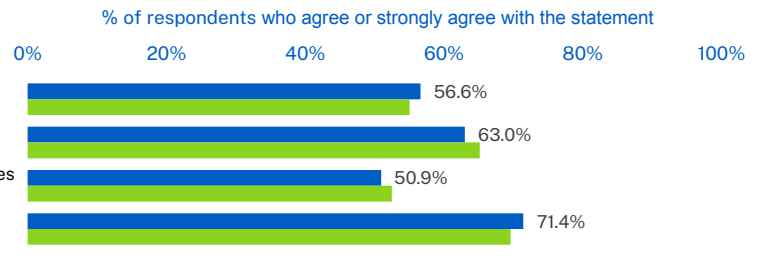% of respondents who chose the Priority Area

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	%
affordable housing	85.9%
road congestion	68.9%
security	46.7%
unemployment	34.5%
fulfilling employment	27.7%
citizen engagement	23.3%
air pollution	19.7%
health services	19.4%
corruption / transparency	18.7%
social mobility / inclusiveness	17.5%
public transport	17.3%
school education	15.5%
Green spaces	13.9%
recycling	13.8%
basic amenities (water, waste)	8.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	52.0%
You are comfortable with face recognition technologies to lower crime	69.6%
You feel the availability of online information has increased your trust in authorities	63.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	70.6%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN — CITY — MEAN — GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	79.6
Recycling services are satisfactory	84.7
Public safety is not a problem	67.3
Air pollution is not a problem	57.8
Medical services provision is satisfactory	80.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	16.8

Mobility

	Score
Traffic congestion is not a problem	26.1
Public transport is satisfactory	73.0

Activities

	Score
Green spaces are satisfactory	81.1
Cultural activities (shows, bars, and museums) are satisfactory	76.5

Opportunities (Work & School)

	Score
Employment finding services are readily available	68.3
Most children have access to a good school	84.7
Lifelong learning opportunities are provided by local institutions	73.8
Businesses are creating new jobs	61.2
Minorities feel welcome	65.4

Governance

	Score
Information on local government decisions are easily accessible	72.8
Corruption of city officials is not an issue of concern	57.8
Residents contribute to decision making of local government	52.7
Residents provide feedback on local government projects	54.8

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	52.6
A website or App allows residents to easily give away unwanted items	56.0
Free public wifi has improved access to city services	61.8
CCTV cameras has made residents feel safer	48.1
A website or App allows residents to effectively monitor air pollution	35.4
Arranging medical appointments online has improved access	74.4

Mobility

	Score
Car-sharing Apps have reduced congestion	35.8
Apps that direct you to an available parking space have reduced journey time	37.7
Bicycle hiring has reduced congestion	47.0
Online scheduling and ticket sales has made public transport easier to use	57.4
The city provides information on traffic congestion through mobile phones	54.2

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	80.0

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	66.0
IT skills are taught well in schools	57.0
Online services provided by the city has made it easier to start a new business	52.1
The current internet speed and reliability meet connectivity needs	75.9

Governance

	Score
Online public access to city finances has reduced corruption	37.8
Online voting has increased participation	40.8
An online platform where residents can propose ideas has improved city life	44.4
Processing Identification Documents online has reduced waiting times	67.5

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)	

Country
France

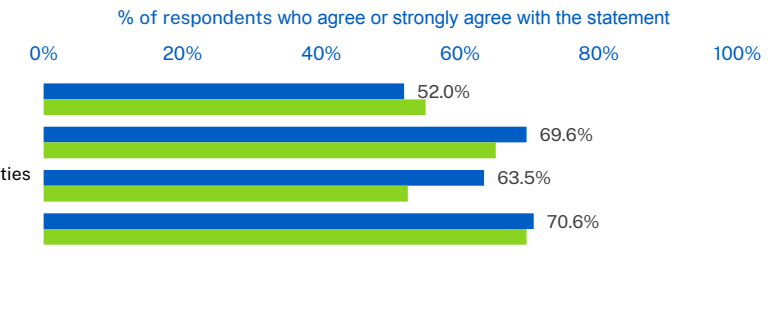|	2019	2020	2021	2022	1 yr change
HDI	0.905	0.900	0.906	0.910	+0.004
Life expectancy at birth	82.7	82.2	82.5	83.2	+0.7
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	11.6	11.7	11.7	11.7	+0.0
GNI per capita (PPP $)	46,907	42,891	46,322	47,379	+1,057

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.

% of respondents who chose the Priority Area

affordable housing	66.6%
air pollution	62.0%
security	58.7%
road congestion	57.2%
unemployment	33.2%
health services	26.6%
recycling	23.1%
public transport	22.0%
fulfilling employment	21.8%
basic amenities (water, waste)	18.5%
school education	15.6%
social mobility / inclusiveness	14.9%
Green spaces	14.7%
corruption / transparency	12.2%
citizen engagement	8.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	51.9%
You are comfortable with face recognition technologies to lower crime	63.6%
You feel the availability of online information has increased your trust in authorities	55.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	66.9%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	58.2
Recycling services are satisfactory	61.9
Public safety is not a problem	43.4
Air pollution is not a problem	19.2
Medical services provision is satisfactory	58.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	29.6

Mobility
Traffic congestion is not a problem	25.2
Public transport is satisfactory	63.6

Activities
Green spaces are satisfactory	75.9
Cultural activities (shows, bars, and museums) are satisfactory	82.6

Opportunities (Work & School)
Employment finding services are readily available	66.1
Most children have access to a good school	67.8
Lifelong learning opportunities are provided by local institutions	61.9
Businesses are creating new jobs	61.5
Minorities feel welcome	49.7

Governance
Information on local government decisions are easily accessible	56.7
Corruption of city officials is not an issue of concern	45.5
Residents contribute to decision making of local government	47.6
Residents provide feedback on local government projects	49.8

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	48.6
A website or App allows residents to easily give away unwanted items	59.6
Free public wifi has improved access to city services	58.6
CCTV cameras has made residents feel safer	58.4
A website or App allows residents to effectively monitor air pollution	52.5
Arranging medical appointments online has improved access	70.9

Mobility
Car-sharing Apps have reduced congestion	48.3
Apps that direct you to an available parking space have reduced journey time	52.2
Bicycle hiring has reduced congestion	59.1
Online scheduling and ticket sales has made public transport easier to use	65.4
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	78.3

Opportunities (Work & School)
Online access to job listings has made it easier to find work	62.3
IT skills are taught well in schools	59.6
Online services provided by the city has made it easier to start a new business	52.8
The current internet speed and reliability meet connectivity needs	72.6

Governance
Online public access to city finances has reduced corruption	42.5
Online voting has increased participation	50.5
An online platform where residents can propose ideas has improved city life	51.9
Processing Identification Documents online has reduced waiting times	62.2

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)	

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

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	72.1%
fulfilling employment	59.0%
health services	57.4%
unemployment	41.8%
security	38.0%
air pollution	35.9%
corruption / transparency	30.5%
road congestion	25.2%
school education	23.5%
public transport	21.6%
basic amenities (water, waste)	17.2%
Green spaces	16.9%
recycling	12.8%
citizen engagement	12.1%
social mobility / inclusiveness	10.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	62.6%
You are comfortable with face recognition technologies to lower crime	72.6%
You feel the availability of online information has increased your trust in authorities	59.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.7%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES
Score — 0 20 40 60 80 100

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	63.2
Recycling services are satisfactory	64.1
Public safety is not a problem	55.6
Air pollution is not a problem	32.3
Medical services provision is satisfactory	49.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	21.0

Mobility
	Score
Traffic congestion is not a problem	24.0
Public transport is satisfactory	63.4

Activities
	Score
Green spaces are satisfactory	71.5
Cultural activities (shows, bars, and museums) are satisfactory	79.6

Opportunities (Work & School)
	Score
Employment finding services are readily available	72.9
Most children have access to a good school	64.9
Lifelong learning opportunities are provided by local institutions	68.1
Businesses are creating new jobs	51.2
Minorities feel welcome	55.0

Governance
	Score
Information on local government decisions are easily accessible	54.0
Corruption of city officials is not an issue of concern	33.3
Residents contribute to decision making of local government	39.4
Residents provide feedback on local government projects	43.7

TECHNOLOGIES
Score — 0 20 40 60 80 100

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	51.0
A website or App allows residents to easily give away unwanted items	57.5
Free public wifi has improved access to city services	51.8
CCTV cameras has made residents feel safer	54.6
A website or App allows residents to effectively monitor air pollution	47.9
Arranging medical appointments online has improved access	63.0

Mobility
	Score
Car-sharing Apps have reduced congestion	49.9
Apps that direct you to an available parking space have reduced journey time	55.9
Bicycle hiring has reduced congestion	55.4
Online scheduling and ticket sales has made public transport easier to use	70.8
The city provides information on traffic congestion through mobile phones	68.5

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	78.7

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	64.7
IT skills are taught well in schools	58.9
Online services provided by the city has made it easier to start a new business	56.0
The current internet speed and reliability meet connectivity needs	77.1

Governance
	Score
Online public access to city finances has reduced corruption	39.3
Online voting has increased participation	50.5
An online platform where residents can propose ideas has improved city life	52.9
Processing Identification Documents online has reduced waiting times	64.8

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

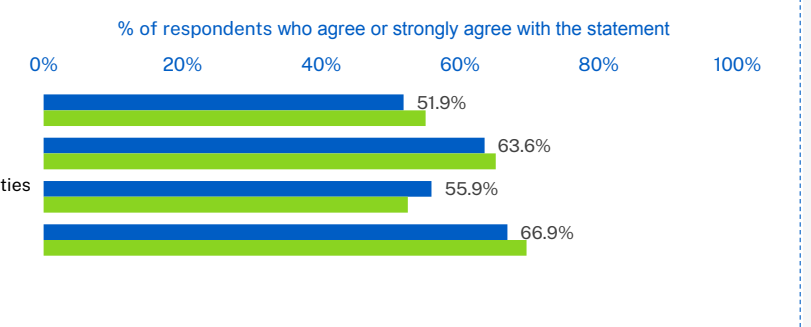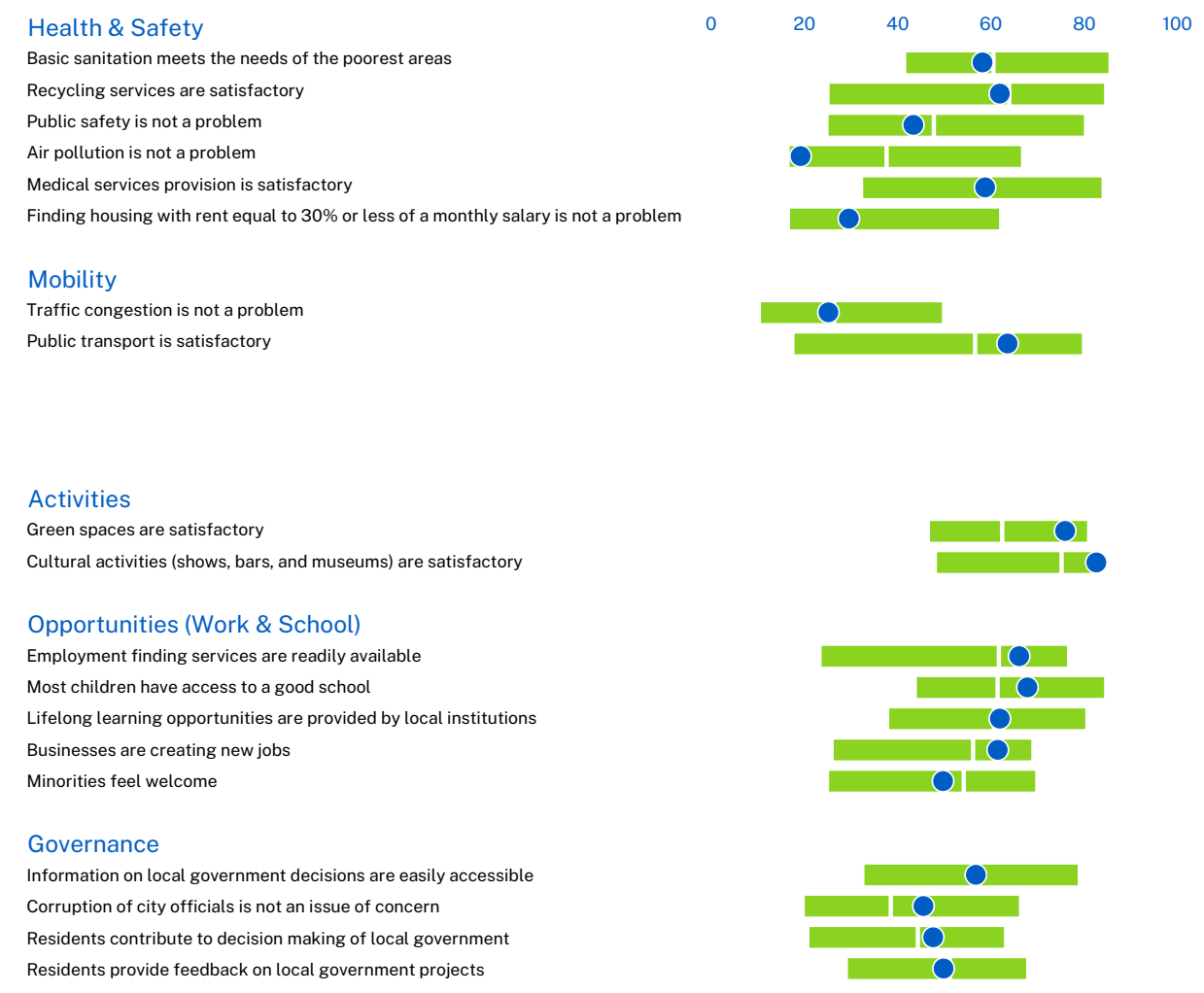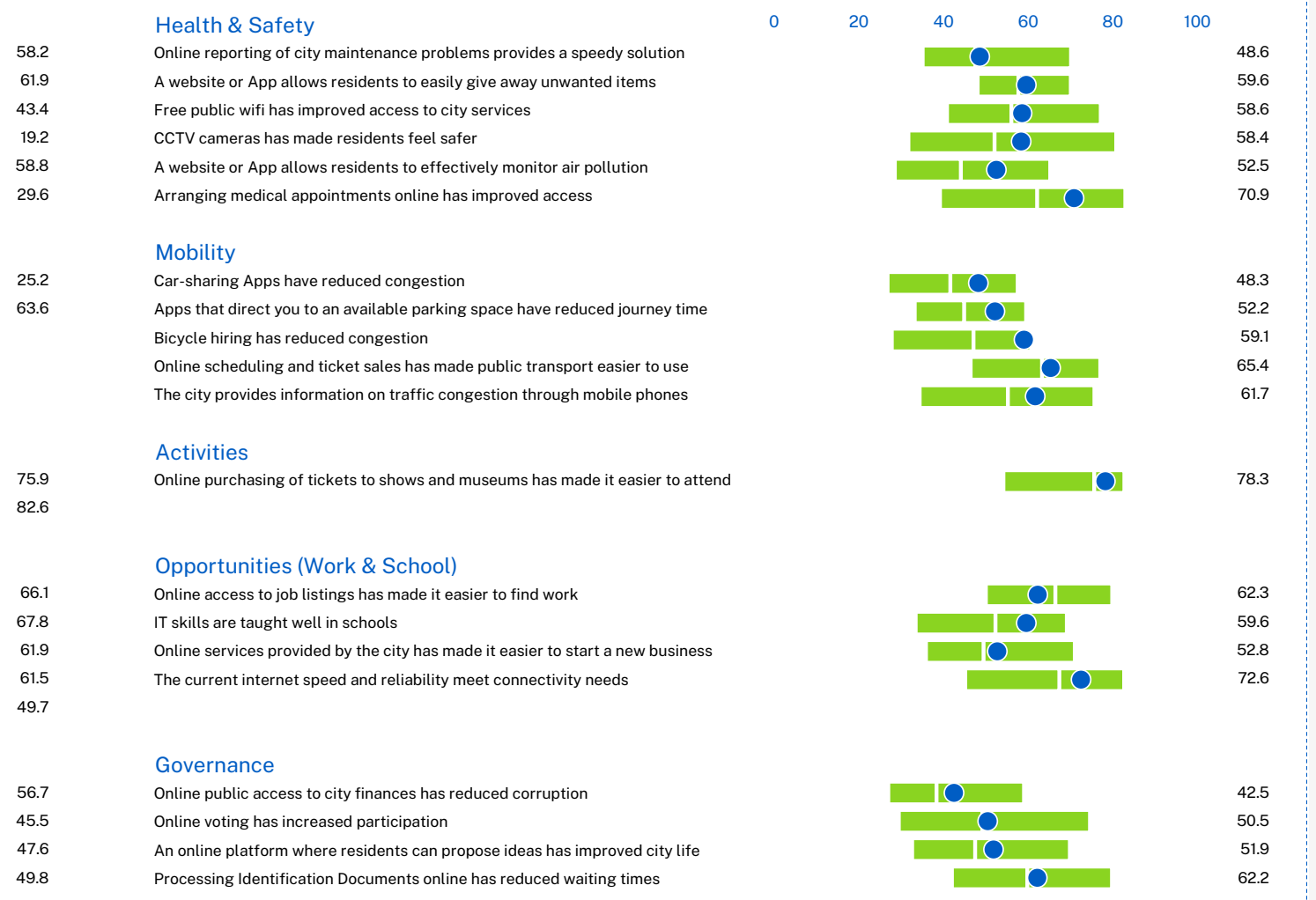### City

Population	1,580,000
	(UN World Urbanization Prospects)
HDI	0.699
	(Global Data Lab)

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.

% of respondents who chose the Priority Area

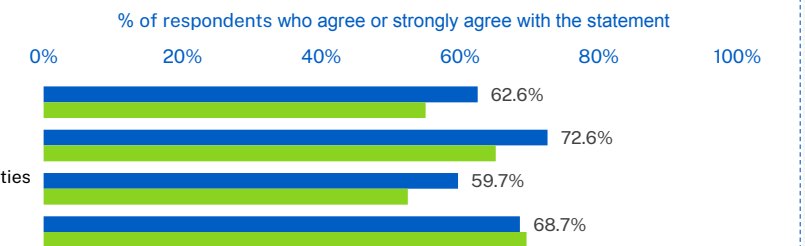|	
road congestion	52.6%
unemployment	52.5%
corruption / transparency	49.6%
basic amenities (water, waste)	49.3%
security	43.5%
health services	38.4%
public transport	31.8%
Green spaces	27.5%
air pollution	26.5%
fulfilling employment	24.0%
affordable housing	22.8%
recycling	22.1%
school education	21.1%
citizen engagement	12.2%
social mobility / inclusiveness	11.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	67.2%
You are comfortable with face recognition technologies to lower crime	84.3%
You feel the availability of online information has increased your trust in authorities	75.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	62.7%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	58.9
Recycling services are satisfactory	51.6
Public safety is not a problem	48.1
Air pollution is not a problem	38.4
Medical services provision is satisfactory	65.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	60.4

Mobility
Traffic congestion is not a problem	30.3
Public transport is satisfactory	55.9

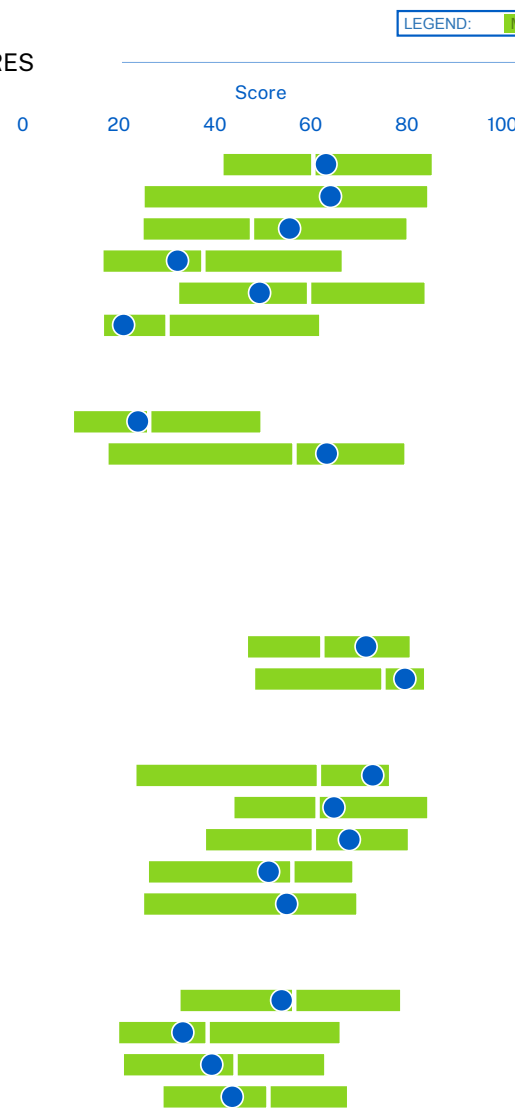### Activities
Green spaces are satisfactory	61.3
Cultural activities (shows, bars, and museums) are satisfactory	65.0

Opportunities (Work & School)
Employment finding services are readily available	57.7
Most children have access to a good school	67.5
Lifelong learning opportunities are provided by local institutions	56.5
Businesses are creating new jobs	78.5
Minorities feel welcome	73.6

Governance
Information on local government decisions are easily accessible	62.0
Corruption of city officials is not an issue of concern	22.5
Residents contribute to decision making of local government	56.3
Residents provide feedback on local government projects	55.0

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	52.4
A website or App allows residents to easily give away unwanted items	53.8
Free public wifi has improved access to city services	52.2
CCTV cameras has made residents feel safer	68.9
A website or App allows residents to effectively monitor air pollution	52.2
Arranging medical appointments online has improved access	74.0

Mobility
Car-sharing Apps have reduced congestion	51.1
Apps that direct you to an available parking space have reduced journey time	49.1
Bicycle hiring has reduced congestion	45.1
Online scheduling and ticket sales has made public transport easier to use	72.1
The city provides information on traffic congestion through mobile phones	59.3

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	67.8

Opportunities (Work & School)
Online access to job listings has made it easier to find work	73.9
IT skills are taught well in schools	64.2
Online services provided by the city has made it easier to start a new business	68.4
The current internet speed and reliability meet connectivity needs	68.4

Governance
Online public access to city finances has reduced corruption	47.5
Online voting has increased participation	56.1
An online platform where residents can propose ideas has improved city life	58.2
Processing Identification Documents online has reduced waiting times	71.0

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.

% of respondents who chose the Priority Area

affordable housing	75.6%
health services	54.5%
unemployment	42.8%
road congestion	40.1%
security	34.6%
air pollution	29.9%
public transport	26.8%
fulfilling employment	26.6%
school education	25.1%
Green spaces	24.3%
recycling	18.5%
corruption / transparency	18.1%
social mobility / inclusiveness	14.3%
basic amenities (water, waste)	13.7%
citizen engagement	11.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	51.0%
You are comfortable with face recognition technologies to lower crime	70.9%
You feel the availability of online information has increased your trust in authorities	53.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.5%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN | CITY | MEAN | GROUP MAX

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	63.0
Recycling services are satisfactory	66.4
Public safety is not a problem	39.7
Air pollution is not a problem	36.9
Medical services provision is satisfactory	51.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	30.2

Mobility
	Score
Traffic congestion is not a problem	28.9
Public transport is satisfactory	59.9

Activities
	Score
Green spaces are satisfactory	59.3
Cultural activities (shows, bars, and museums) are satisfactory	75.4

Opportunities (Work & School)
	Score
Employment finding services are readily available	64.2
Most children have access to a good school	66.1
Lifelong learning opportunities are provided by local institutions	62.6
Businesses are creating new jobs	60.7
Minorities feel welcome	67.8

Governance
	Score
Information on local government decisions are easily accessible	58.8
Corruption of city officials is not an issue of concern	43.7
Residents contribute to decision making of local government	46.8
Residents provide feedback on local government projects	52.9

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	43.2
A website or App allows residents to easily give away unwanted items	66.0
Free public wifi has improved access to city services	59.7
CCTV cameras has made residents feel safer	57.9
A website or App allows residents to effectively monitor air pollution	30.7
Arranging medical appointments online has improved access	51.7

Mobility
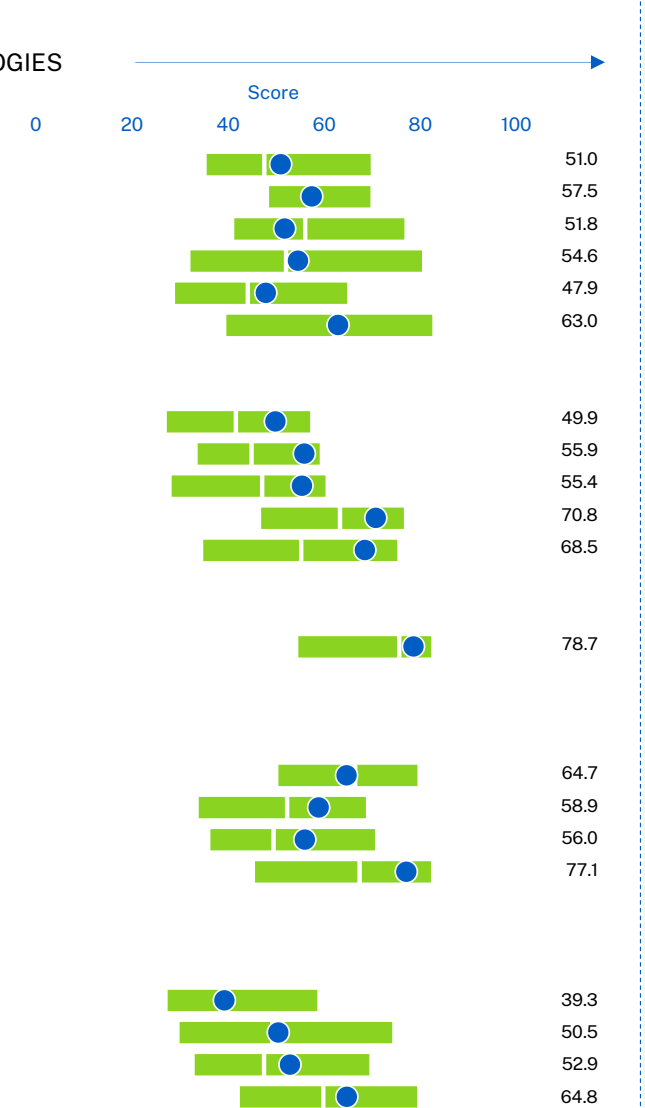|	Score
Car-sharing Apps have reduced congestion	38.9
Apps that direct you to an available parking space have reduced journey time	40.5
Bicycle hiring has reduced congestion	45.2
Online scheduling and ticket sales has made public transport easier to use	60.2
The city provides information on traffic congestion through mobile phones	52.8

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.5

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	66.9
IT skills are taught well in schools	60.2
Online services provided by the city has made it easier to start a new business	51.6
The current internet speed and reliability meet connectivity needs	69.7

Governance
	Score
Online public access to city finances has reduced corruption	40.7
Online voting has increased participation	56.6
An online platform where residents can propose ideas has improved city life	47.4
Processing Identification Documents online has reduced waiting times	57.4

Manila

SMART CITY RANKING

121

Out of 142

▼

115 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   1,850,000
(UN World Urbanization Prospects)
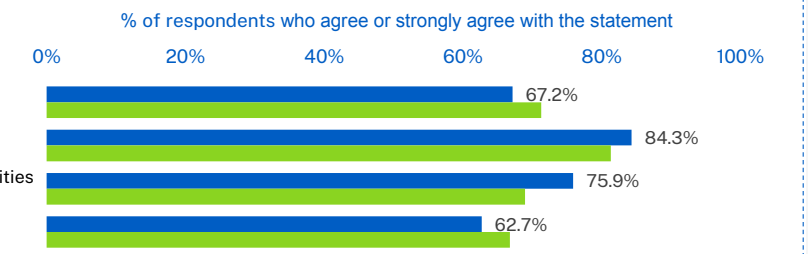
HDI   0.760
(Global Data Lab)

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.

% of respondents who chose the Priority Area

Priority Area	%
health services	53.9%
corruption / transparency	50.6%
unemployment	45.9%
public transport	43.8%
road congestion	42.2%
security	42.0%
affordable housing	39.8%
air pollution	38.1%
basic amenities (water, waste)	36.9%
fulfilling employment	27.9%
school education	22.4%
recycling	19.0%
Green spaces	12.9%
social mobility / inclusiveness	4.8%
citizen engagement	4.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	67.2%
You are comfortable with face recognition technologies to lower crime	77.5%
You feel the availability of online information has increased your trust in authorities	63.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	61.0%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN   ● CITY   MEAN   GROUP MAX

STRUCTURES

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	48.7
Recycling services are satisfactory	50.7
Public safety is not a problem	35.2
Air pollution is not a problem	18.2
Medical services provision is satisfactory	50.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	33.6

Mobility

	Score
Traffic congestion is not a problem	13.3
Public transport is satisfactory	33.9

Activities
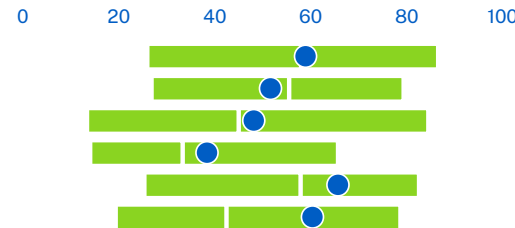
	Score
Green spaces are satisfactory	50.1
Cultural activities (shows, bars, and museums) are satisfactory	68.5

Opportunities (Work & School)

	Score
Employment finding services are readily available	58.1
Most children have access to a good school	47.5
Lifelong learning opportunities are provided by local institutions	52.6
Businesses are creating new jobs	71.6
Minorities feel welcome	55.3

Governance

	Score
Information on local government decisions are easily accessible	59.5
Corruption of city officials is not an issue of concern	16.8
Residents contribute to decision making of local government	44.0
Residents provide feedback on local government projects	57.2

TECHNOLOGIES

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	53.7
A website or App allows residents to easily give away unwanted items	48.0
Free public wifi has improved access to city services	54.0
CCTV cameras has made residents feel safer	69.4
A website or App allows residents to effectively monitor air pollution	40.0
Arranging medical appointments online has improved access	67.5

Mobility

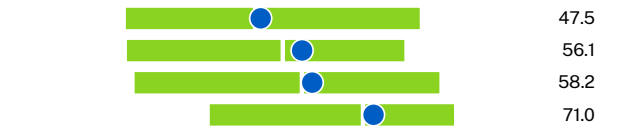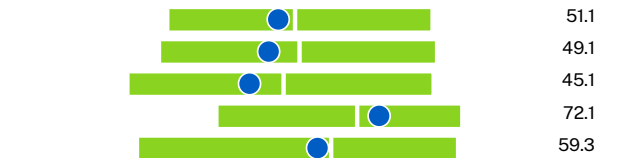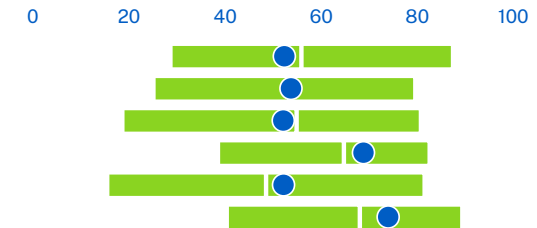|	Score
Car-sharing Apps have reduced congestion	48.5
Apps that direct you to an available parking space have reduced journey time	46.3
Bicycle hiring has reduced congestion	49.2
Online scheduling and ticket sales has made public transport easier to use	60.3
The city provides information on traffic congestion through mobile phones	62.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.2

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	75.7
IT skills are taught well in schools	59.7
Online services provided by the city has made it easier to start a new business	66.5
The current internet speed and reliability meet connectivity needs	51.6

Governance

	Score
Online public access to city finances has reduced corruption	44.5
Online voting has increased participation	59.6
An online platform where residents can propose ideas has improved city life	53.5
Processing Identification Documents online has reduced waiting times	68.5

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
France

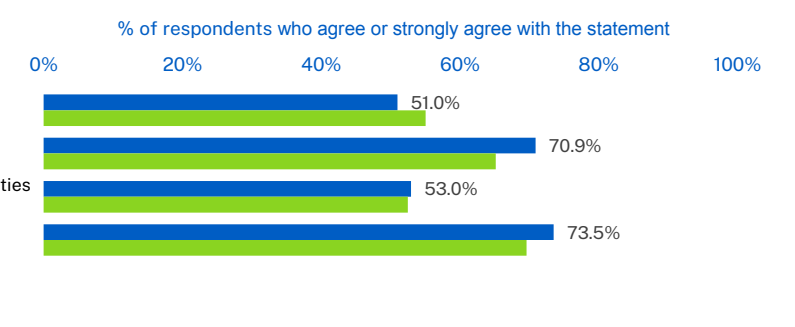|	2019	2020	2021	2022	1 yr change
HDI	0.905	0.900	0.906	0.910	+0.004
Life expectancy at birth	82.7	82.2	82.5	83.2	+0.7
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	11.6	11.7	11.7	11.7	+0.0
GNI per capita (PPP $)	46,907	42,891	46,322	47,379	+1,057

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.

% of respondents who chose the Priority Area

Priority Area	%
security	73.0%
affordable housing	53.5%
road congestion	46.2%
air pollution	45.9%
unemployment	34.6%
recycling	30.1%
basic amenities (water, waste)	30.0%
corruption / transparency	26.1%
public transport	24.0%
Green spaces	21.0%
health services	20.3%
school education	18.8%
fulfilling employment	14.8%
social mobility / inclusiveness	10.8%
citizen engagement	7.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	48.9%
You are comfortable with face recognition technologies to lower crime	55.2%
You feel the availability of online information has increased your trust in authorities	45.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	64.0%

LEGEND: GROUP MEAN CITY

STRUCTURES

LEGEND: MIN CITY MEAN GROUP MAX

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	45.6
Recycling services are satisfactory	40.6
Public safety is not a problem	34.6
Air pollution is not a problem	22.4
Medical services provision is satisfactory	55.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	32.1

Mobility
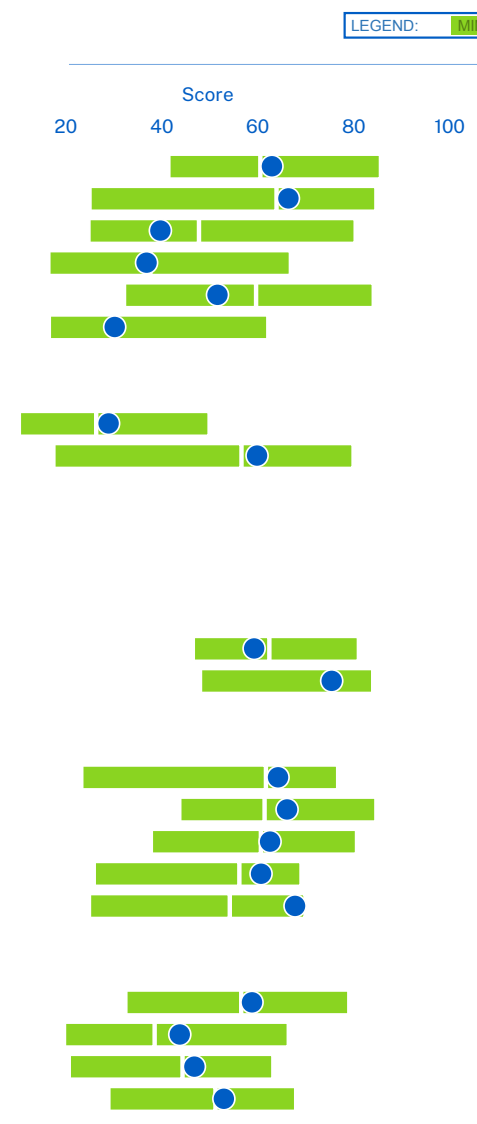|	Score
Traffic congestion is not a problem	24.0
Public transport is satisfactory	49.7

Activities
	Score
Green spaces are satisfactory	54.6
Cultural activities (shows, bars, and museums) are satisfactory	66.3

Opportunities (Work & School)
	Score
Employment finding services are readily available	54.0
Most children have access to a good school	49.3
Lifelong learning opportunities are provided by local institutions	48.5
Businesses are creating new jobs	49.4
Minorities feel welcome	46.6

Governance
	Score
Information on local government decisions are easily accessible	50.1
Corruption of city officials is not an issue of concern	36.5
Residents contribute to decision making of local government	38.3
Residents provide feedback on local government projects	43.2

TECHNOLOGIES

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	41.8
A website or App allows residents to easily give away unwanted items	55.3
Free public wifi has improved access to city services	57.5
CCTV cameras has made residents feel safer	49.3
A website or App allows residents to effectively monitor air pollution	44.9
Arranging medical appointments online has improved access	65.2

Mobility
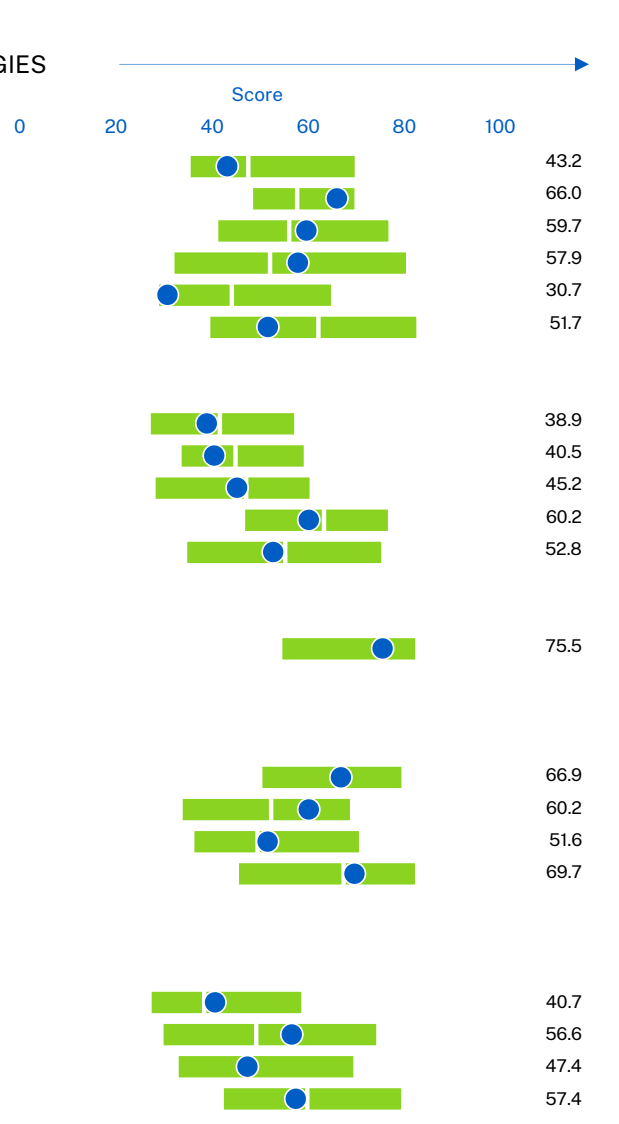|	Score
Car-sharing Apps have reduced congestion	40.2
Apps that direct you to an available parking space have reduced journey time	47.6
Bicycle hiring has reduced congestion	52.3
Online scheduling and ticket sales has made public transport easier to use	60.2
The city provides information on traffic congestion through mobile phones	52.6

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	71.9

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	51.7
IT skills are taught well in schools	52.9
Online services provided by the city has made it easier to start a new business	47.5
The current internet speed and reliability meet connectivity needs	61.2

Governance
	Score
Online public access to city finances has reduced corruption	38.4
Online voting has increased participation	46.4
An online platform where residents can propose ideas has improved city life	43.6
Processing Identification Documents online has reduced waiting times	54.8

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

% of respondents who chose the Priority Area

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	%
affordable housing	65.4%
unemployment	47.0%
road congestion	43.6%
health services	32.5%
basic amenities (water, waste)	30.7%
fulfilling employment	30.1%
Green spaces	29.6%
air pollution	29.0%
recycling	27.4%
security	21.3%
corruption / transparency	20.7%
public transport	18.9%
school education	17.7%
social mobility / inclusiveness	15.2%
citizen engagement	13.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	CITY
You are willing to concede personal data in order to improve traffic congestion	50.1%
You are comfortable with face recognition technologies to lower crime	81.5%
You feel the availability of online information has increased your trust in authorities	81.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	61.3%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN   CITY   MEAN   GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	82.6
Recycling services are satisfactory	70.1
Public safety is not a problem	50.1
Air pollution is not a problem	34.6
Medical services provision is satisfactory	75.1
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	57.4

Mobility
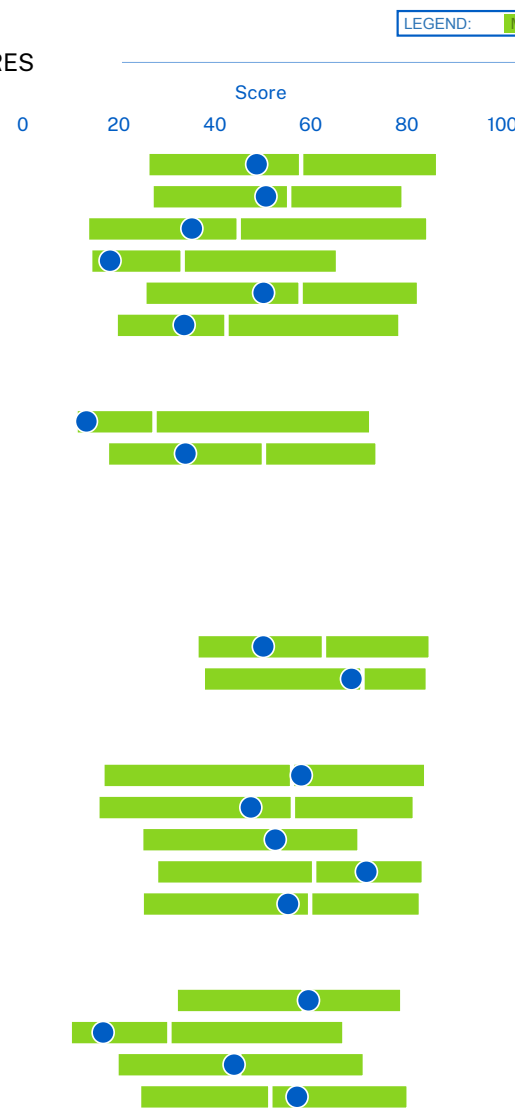|	Score
Traffic congestion is not a problem	42.2
Public transport is satisfactory	72.5

Activities
	Score
Green spaces are satisfactory	65.9
Cultural activities (shows, bars, and museums) are satisfactory	70.6

Opportunities (Work & School)
	Score
Employment finding services are readily available	54.3
Most children have access to a good school	75.9
Lifelong learning opportunities are provided by local institutions	67.9
Businesses are creating new jobs	65.6
Minorities feel welcome	66.7

Governance
	Score
Information on local government decisions are easily accessible	78.7
Corruption of city officials is not an issue of concern	51.0
Residents contribute to decision making of local government	56.6
Residents provide feedback on local government projects	57.7

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	73.1
A website or App allows residents to easily give away unwanted items	64.2
Free public wifi has improved access to city services	60.0
CCTV cameras has made residents feel safer	77.5
A website or App allows residents to effectively monitor air pollution	57.3
Arranging medical appointments online has improved access	80.4

Mobility
	Score
Car-sharing Apps have reduced congestion	69.2
Apps that direct you to an available parking space have reduced journey time	68.6
Bicycle hiring has reduced congestion	51.7
Online scheduling and ticket sales has made public transport easier to use	73.2
The city provides information on traffic congestion through mobile phones	67.7

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.5

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	72.2
IT skills are taught well in schools	74.1
Online services provided by the city has made it easier to start a new business	74.4
The current internet speed and reliability meet connectivity needs	78.3

Governance
	Score
Online public access to city finances has reduced corruption	69.5
Online voting has increased participation	70.3
An online platform where residents can propose ideas has improved city life	70.1
Processing Identification Documents online has reduced waiting times	83.6

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)

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

% of respondents who chose the Priority Area

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	%
security	58.3%
unemployment	53.2%
corruption / transparency	52.7%
road congestion	52.1%
basic amenities (water, waste)	46.5%
air pollution	40.8%
health services	37.9%
fulfilling employment	29.8%
Green spaces	19.8%
public transport	19.7%
school education	18.9%
recycling	15.1%
affordable housing	14.5%
citizen engagement	10.1%
social mobility / inclusiveness	9.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	69.5%
You are comfortable with face recognition technologies to lower crime	81.4%
You feel the availability of online information has increased your trust in authorities	74.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	61.8%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	58.4
Recycling services are satisfactory	52.3
Public safety is not a problem	46.1
Air pollution is not a problem	30.9
Medical services provision is satisfactory	64.0
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	58.9

Mobility
Traffic congestion is not a problem	30.2
Public transport is satisfactory	55.1

Activities
Green spaces are satisfactory	60.9
Cultural activities (shows, bars, and museums) are satisfactory	67.4

Opportunities (Work & School)
Employment finding services are readily available	59.3
Most children have access to a good school	67.6
Lifelong learning opportunities are provided by local institutions	57.0
Businesses are creating new jobs	78.3
Minorities feel welcome	72.4

Governance
Information on local government decisions are easily accessible	62.5
Corruption of city officials is not an issue of concern	25.3
Residents contribute to decision making of local government	55.9
Residents provide feedback on local government projects	54.2

TECHNOLOGIES

Score

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	57.0
Free public wifi has improved access to city services	57.2
CCTV cameras has made residents feel safer	69.2
A website or App allows residents to effectively monitor air pollution	57.6
Arranging medical appointments online has improved access	74.9

Mobility
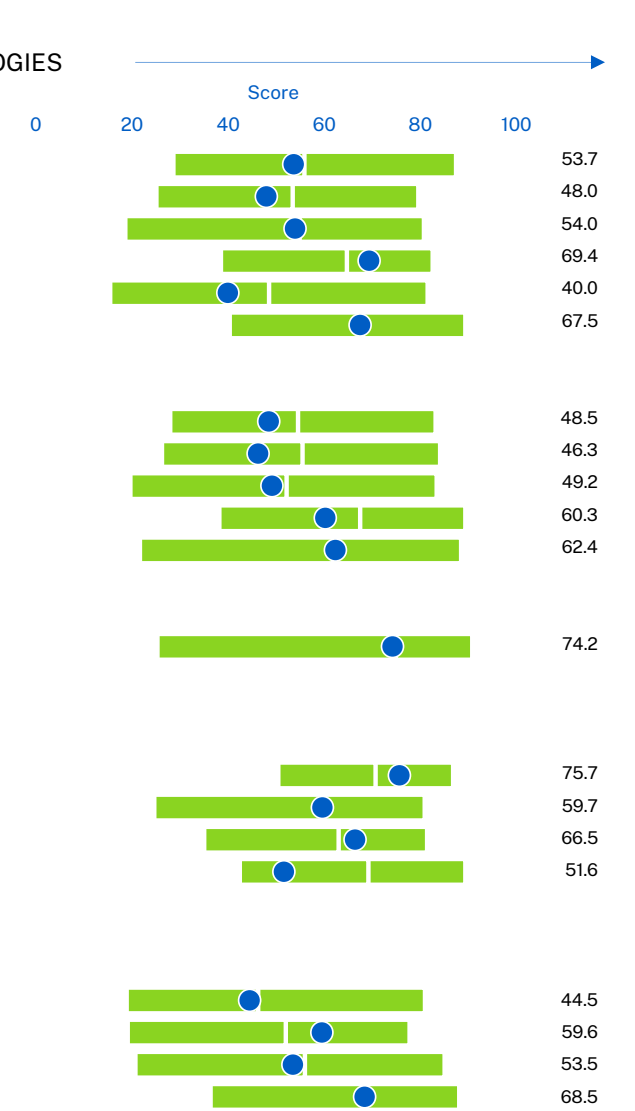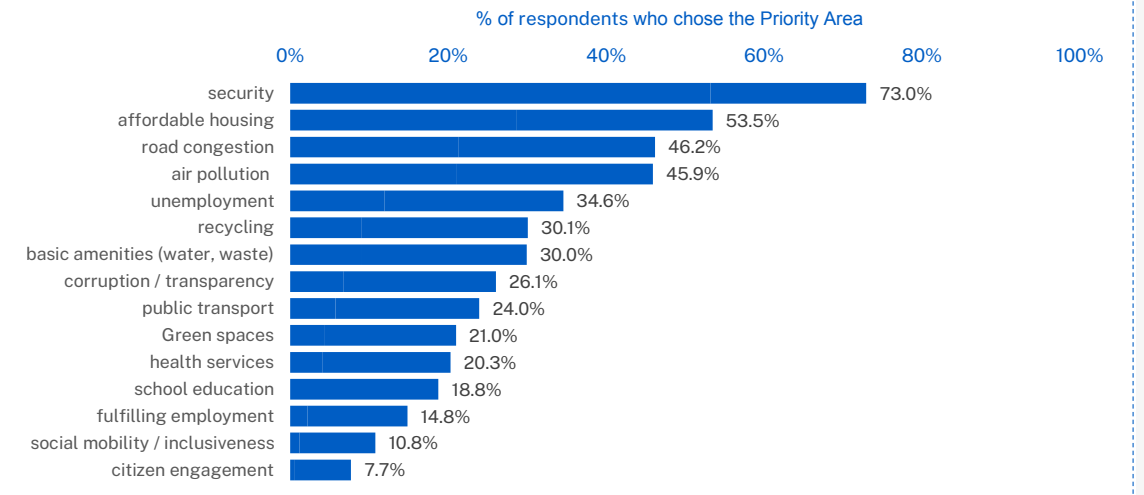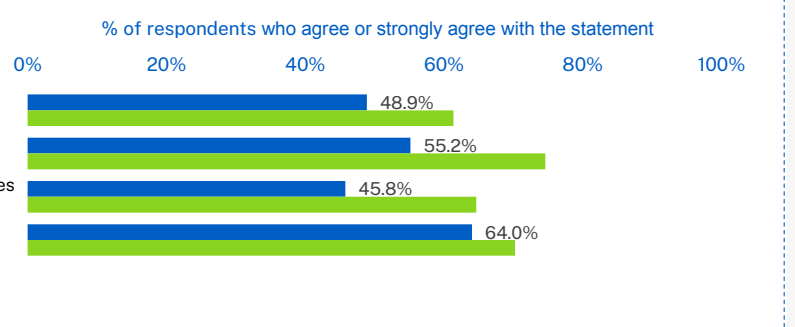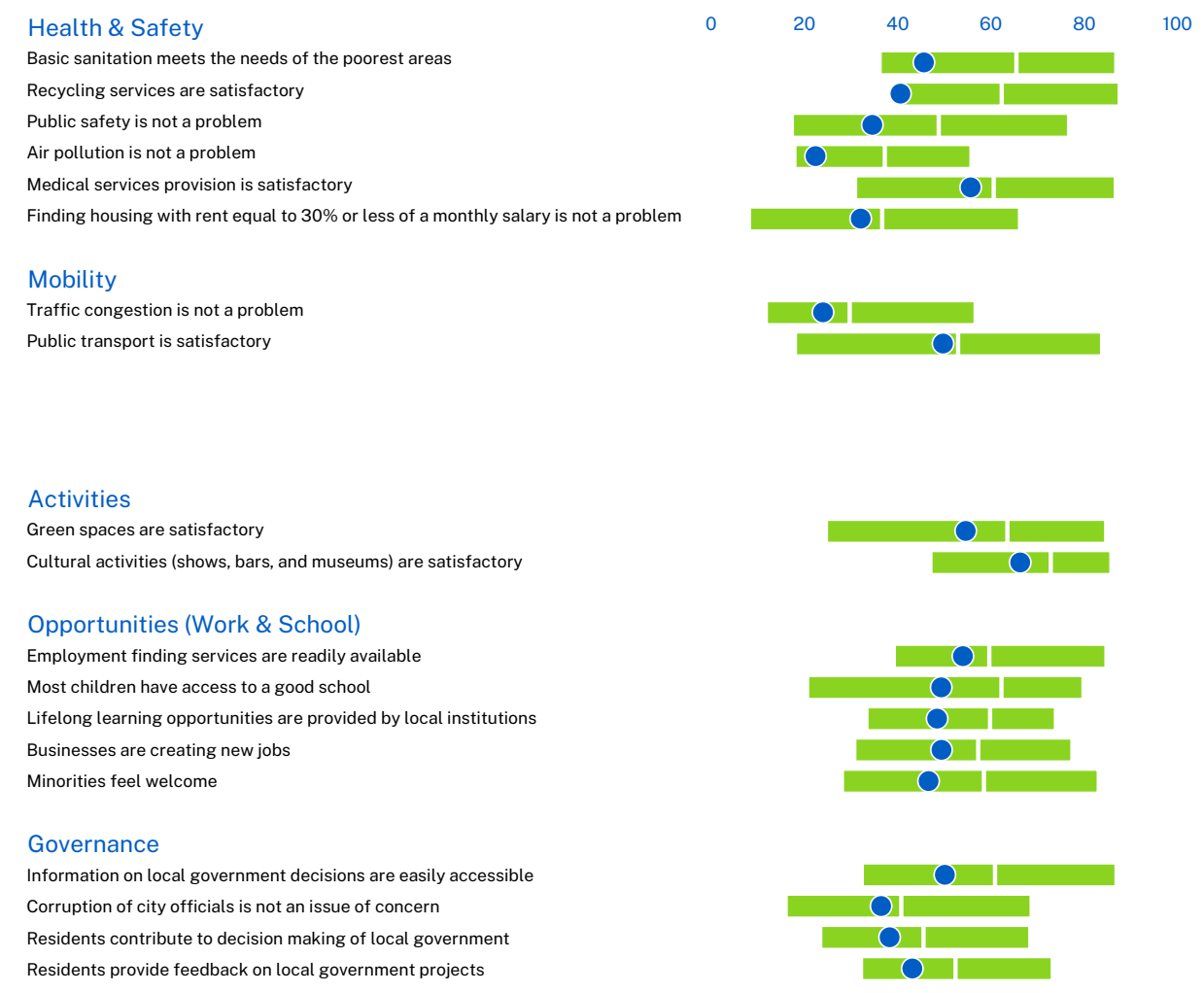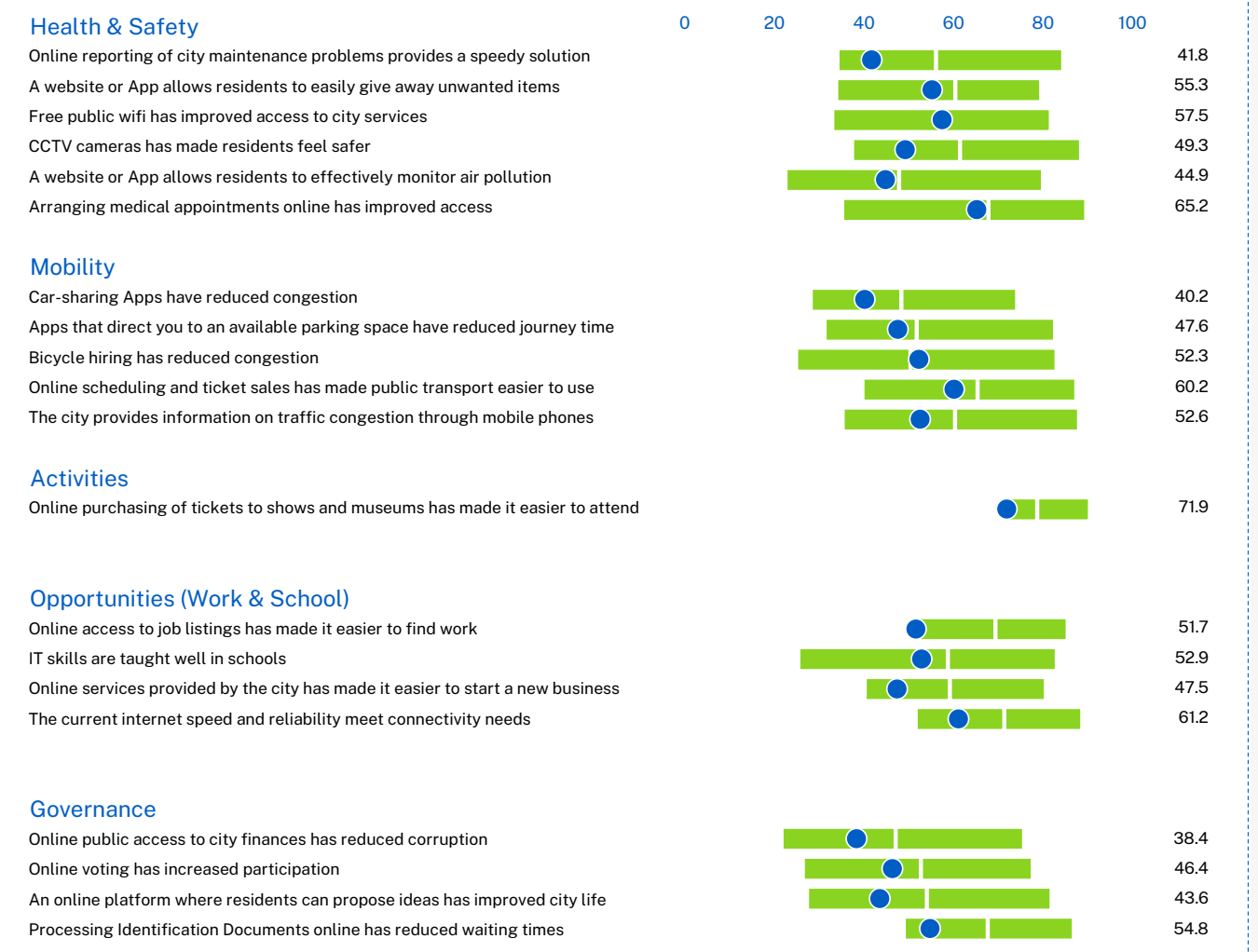|	
Car-sharing Apps have reduced congestion	56.0
Apps that direct you to an available parking space have reduced journey time	53.8
Bicycle hiring has reduced congestion	49.8
Online scheduling and ticket sales has made public transport easier to use	77.8
The city provides information on traffic congestion through mobile phones	60.8

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	77.0
IT skills are taught well in schools	67.2
Online services provided by the city has made it easier to start a new business	70.4
The current internet speed and reliability meet connectivity needs	68.9

Governance
Online public access to city finances has reduced corruption	47.8
Online voting has increased participation	56.5
An online platform where residents can propose ideas has improved city life	62.3
Processing Identification Documents online has reduced waiting times	73.7

Medellin

BACKGROUND INFORMATION

City

Population	2,370,000
(UN Data)	
HDI	0.757
(Global Data Lab)	

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

Country
Colombia

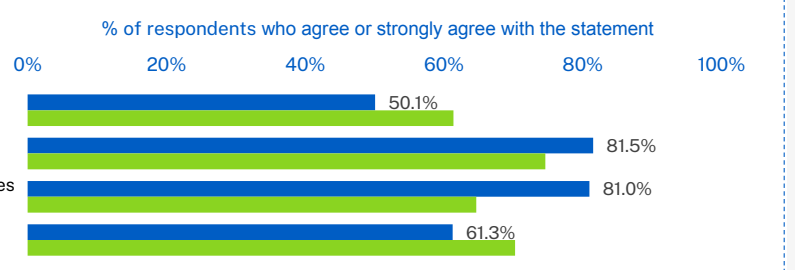|	2019	2020	2021	2022	1 yr change
HDI	0.768	0.756	0.752	0.758	+0.006
Life expectancy at birth	76.8	74.8	72.8	73.7	+0.8
Expected years of schooling	14.5	14.4	14.4	14.4	+0.0
Mean years of schooling	8.6	8.9	8.9	8.9	+0.0
GNI per capita (PPP $)	14,294	13,220	14,403	15,014	+611

PRIORITY AREAS

% of respondents who chose the Priority Area

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.
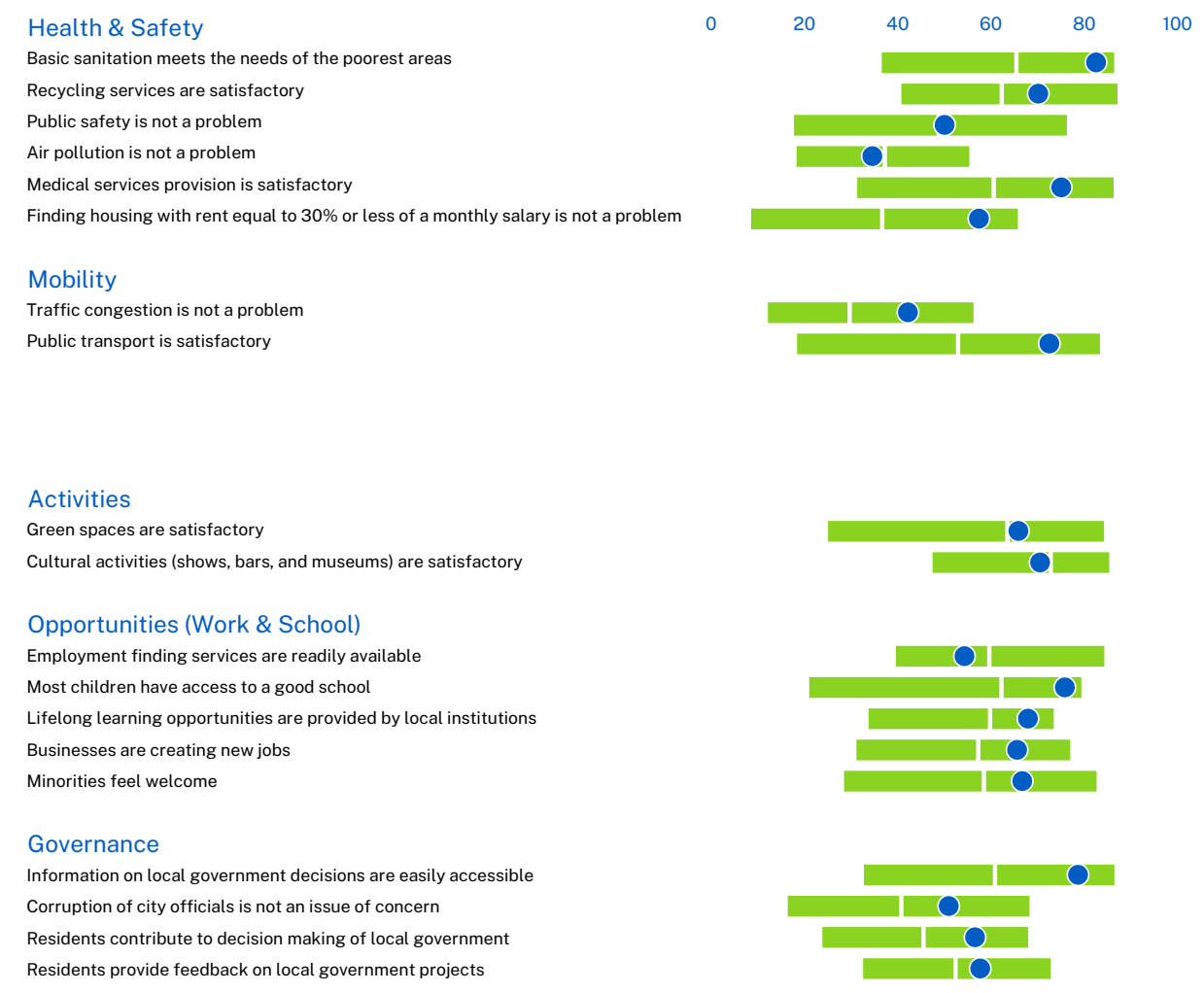
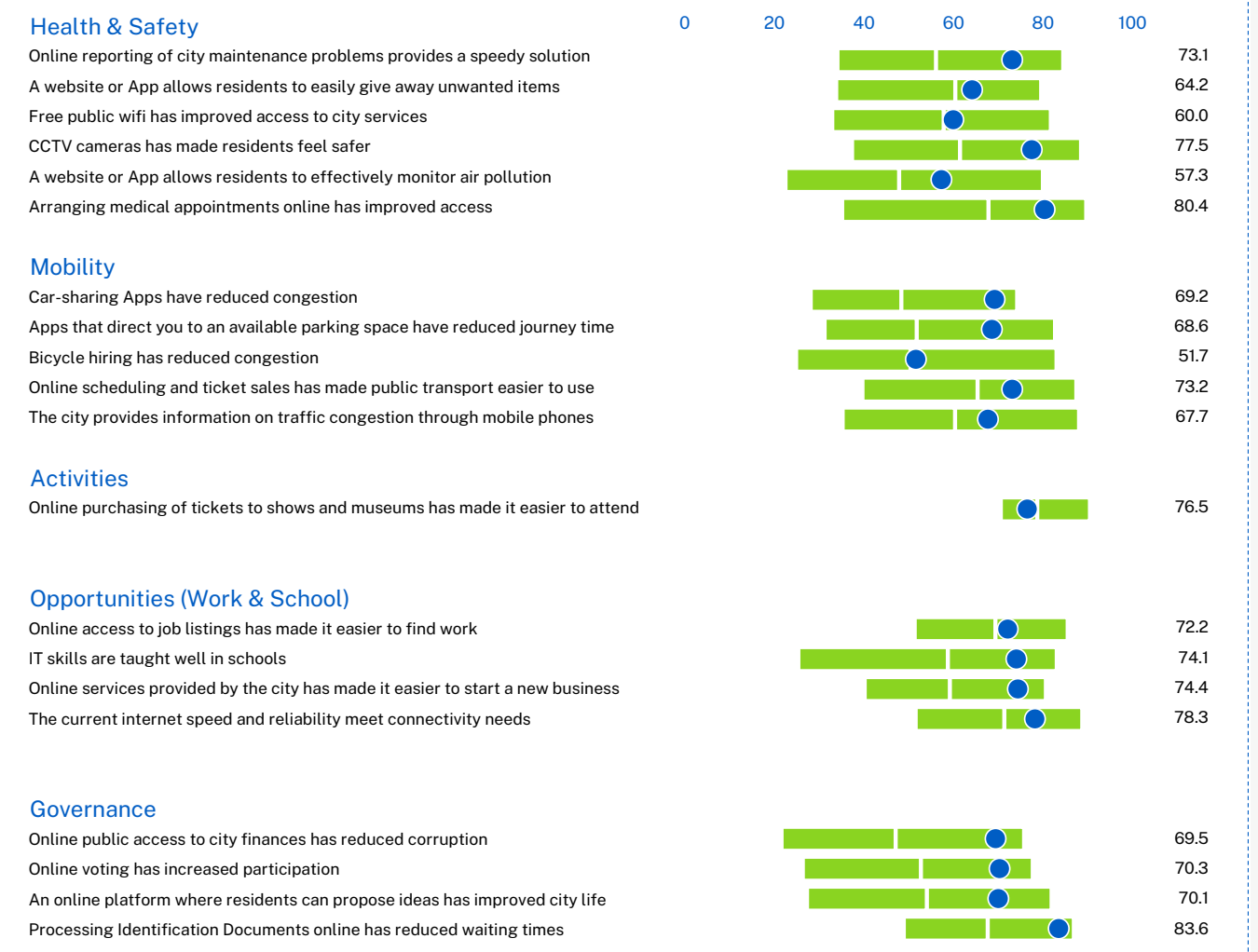| Priority Area	%
security	78.6%
corruption / transparency	54.3%
affordable housing	47.7%
unemployment	45.3%
health services	44.6%
air pollution	42.5%
fulfilling employment	36.6%
road congestion	34.6%
basic amenities (water, waste)	21.1%
school education	17.1%
social mobility / inclusiveness	15.8%
public transport	14.5%
recycling	11.7%
Green spaces	10.8%
citizen engagement	10.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	69.2%
You are comfortable with face recognition technologies to lower crime	79.8%
You feel the availability of online information has increased your trust in authorities	62.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	61.6%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	51.2
Recycling services are satisfactory	63.8
Public safety is not a problem	32.9
Air pollution is not a problem	29.8
Medical services provision is satisfactory	49.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	28.7

Mobility

	Score
Traffic congestion is not a problem	28.9
Public transport is satisfactory	57.5

Activities

	Score
Green spaces are satisfactory	74.7
Cultural activities (shows, bars, and museums) are satisfactory	75.6

Opportunities (Work & School)

	Score
Employment finding services are readily available	63.0
Most children have access to a good school	55.2
Lifelong learning opportunities are provided by local institutions	60.5
Businesses are creating new jobs	52.3
Minorities feel welcome	48.2

Governance

	Score
Information on local government decisions are easily accessible	50.1
Corruption of city officials is not an issue of concern	23.5
Residents contribute to decision making of local government	32.5
Residents provide feedback on local government projects	44.0

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	48.6
A website or App allows residents to easily give away unwanted items	49.4
Free public wifi has improved access to city services	62.6
CCTV cameras has made residents feel safer	54.8
A website or App allows residents to effectively monitor air pollution	54.9
Arranging medical appointments online has improved access	66.0

Mobility

	Score
Car-sharing Apps have reduced congestion	45.5
Apps that direct you to an available parking space have reduced journey time	48.7
Bicycle hiring has reduced congestion	53.5
Online scheduling and ticket sales has made public transport easier to use	64.1
The city provides information on traffic congestion through mobile phones	59.0

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.6

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	67.5
IT skills are taught well in schools	57.7
Online services provided by the city has made it easier to start a new business	58.6
The current internet speed and reliability meet connectivity needs	68.6

Governance

	Score
Online public access to city finances has reduced corruption	32.0
Online voting has increased participation	36.6
An online platform where residents can propose ideas has improved city life	45.1
Processing Identification Documents online has reduced waiting times	63.5

Medina

SMART CITY RANKING

74

Out of 142

▲

85 in 2023
Out of 141

SMART CITY RATING

CCC

CCC in 2023

FACTOR RATINGS

B

STRUCTURES

CCC

TECHNOLOGIES

GROUP

3

All ratings range
from AAA to D

BACKGROUND INFORMATION

City

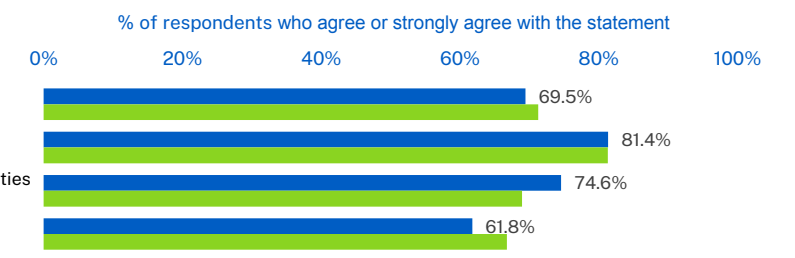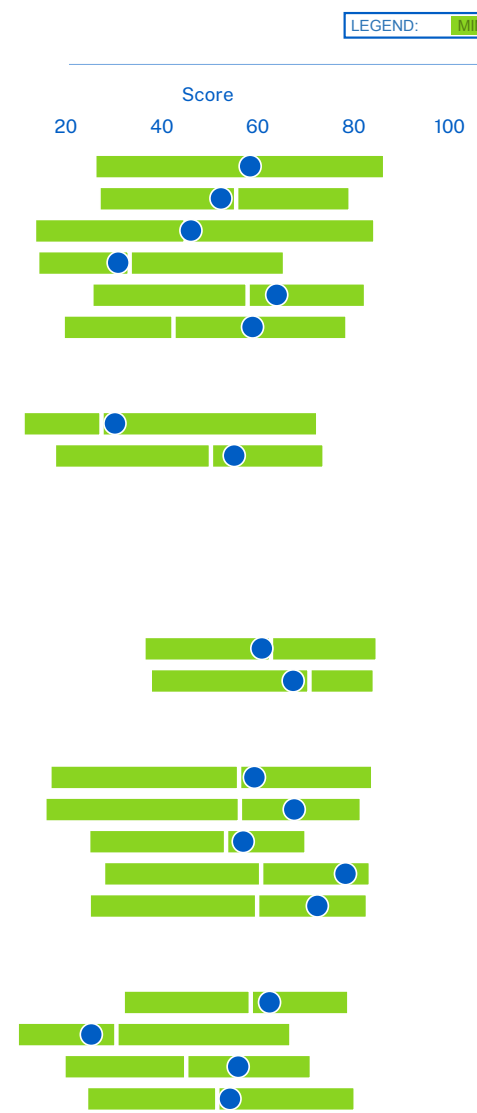|	
Population	150,000
(UN Data)	
HDI	0.871
(Global Data Lab)	

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

% of respondents who chose the Priority Area

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	%
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	%
You are willing to concede personal data in order to improve traffic congestion	47.6%
You are comfortable with face recognition technologies to lower crime	79.1%
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)	60.5%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	37.4
Public transport is satisfactory	60.1

Activities
	Score
Green spaces are satisfactory	60.7
Cultural activities (shows, bars, and museums) are satisfactory	68.7

Opportunities (Work & School)
	Score
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
	Score
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

Score

Health & Safety
	Score
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
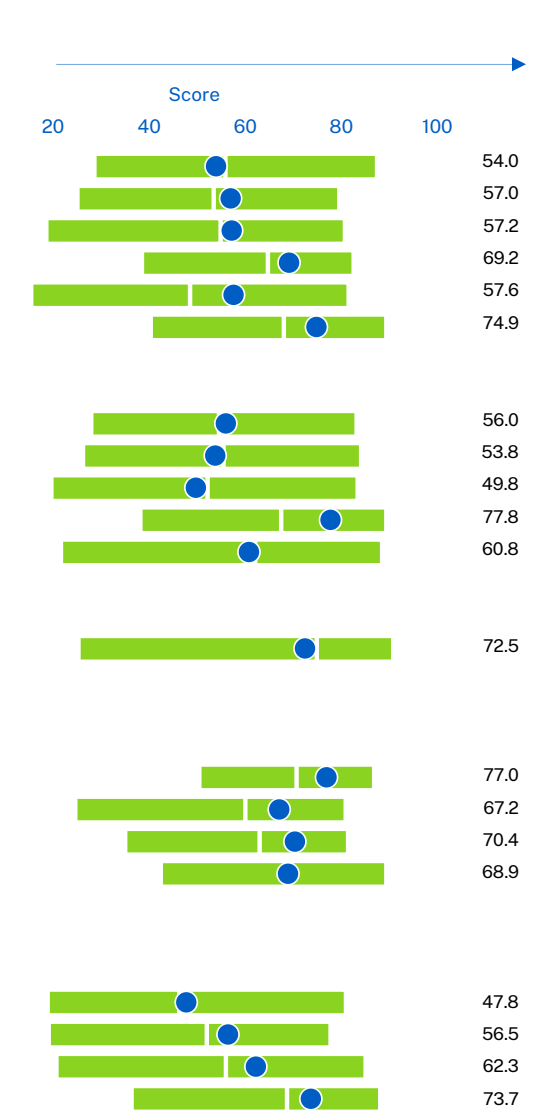|	Score
Car-sharing Apps have reduced congestion	55.3
Apps that direct you to an available parking space have reduced journey time	62.7
Bicycle hiring has reduced congestion	49.3
Online scheduling and ticket sales has made public transport easier to use	69.8
The city provides information on traffic congestion through mobile phones	56.6

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	70.9

Opportunities (Work & School)
	Score
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
	Score
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

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

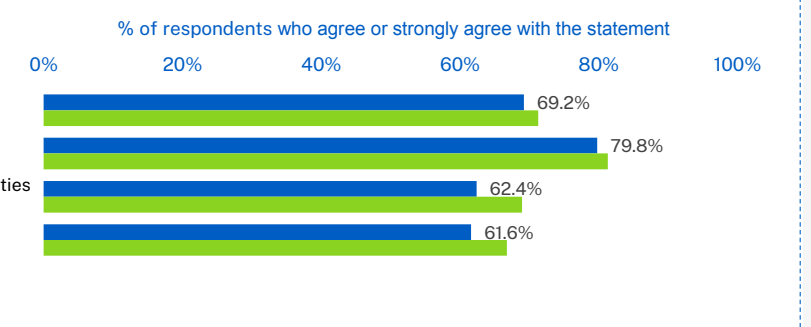|	
Population	4,200,000
(UN Data)	
HDI	0.948
(Global Data Lab)	

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

% of respondents who chose the Priority Area

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.
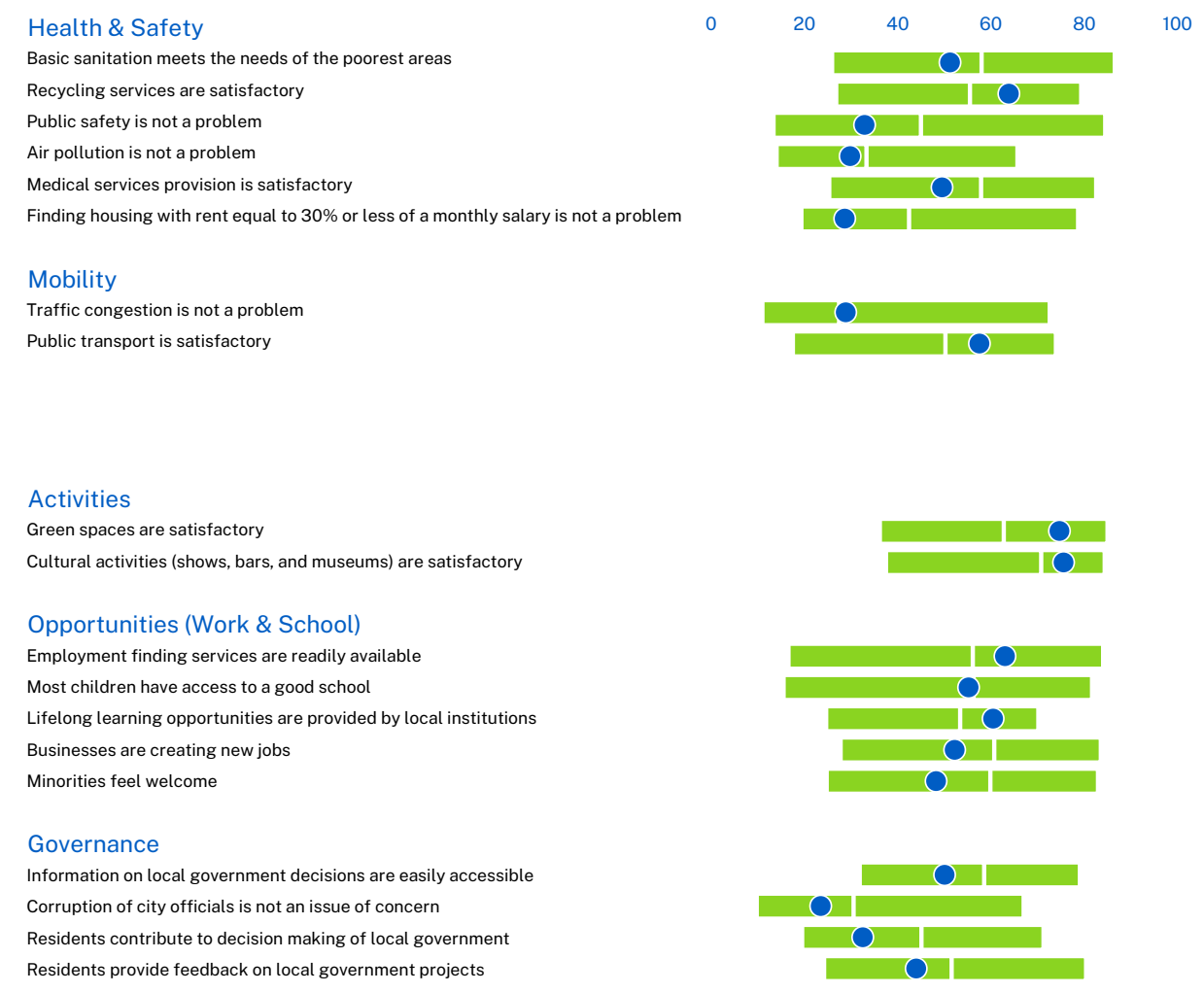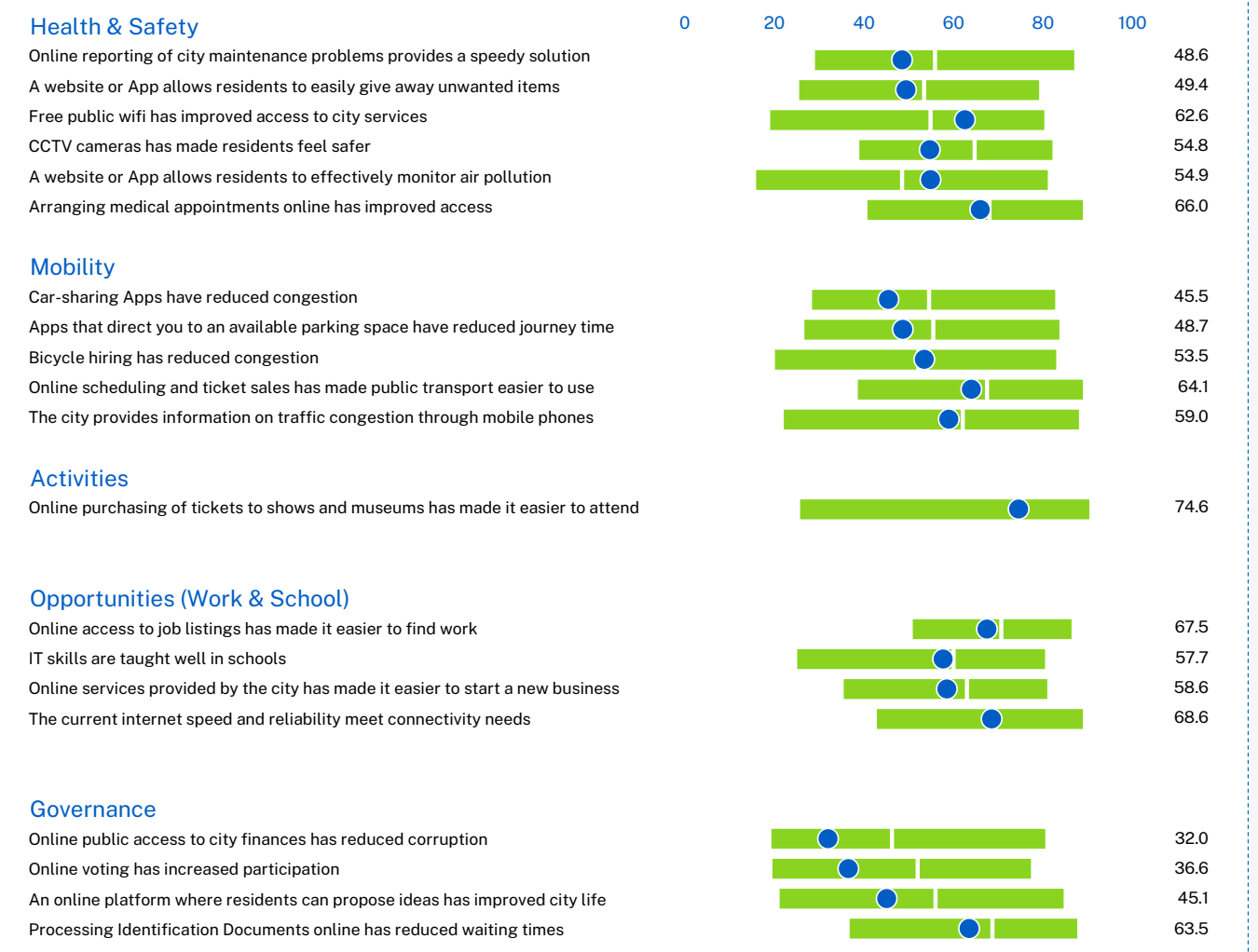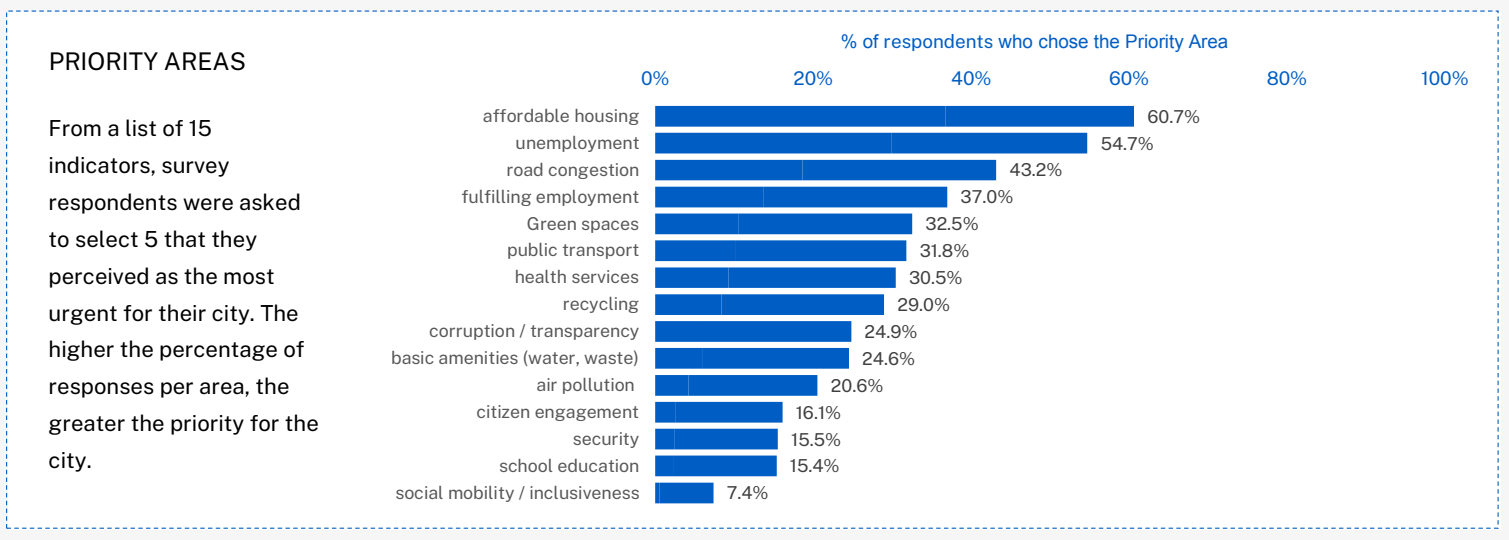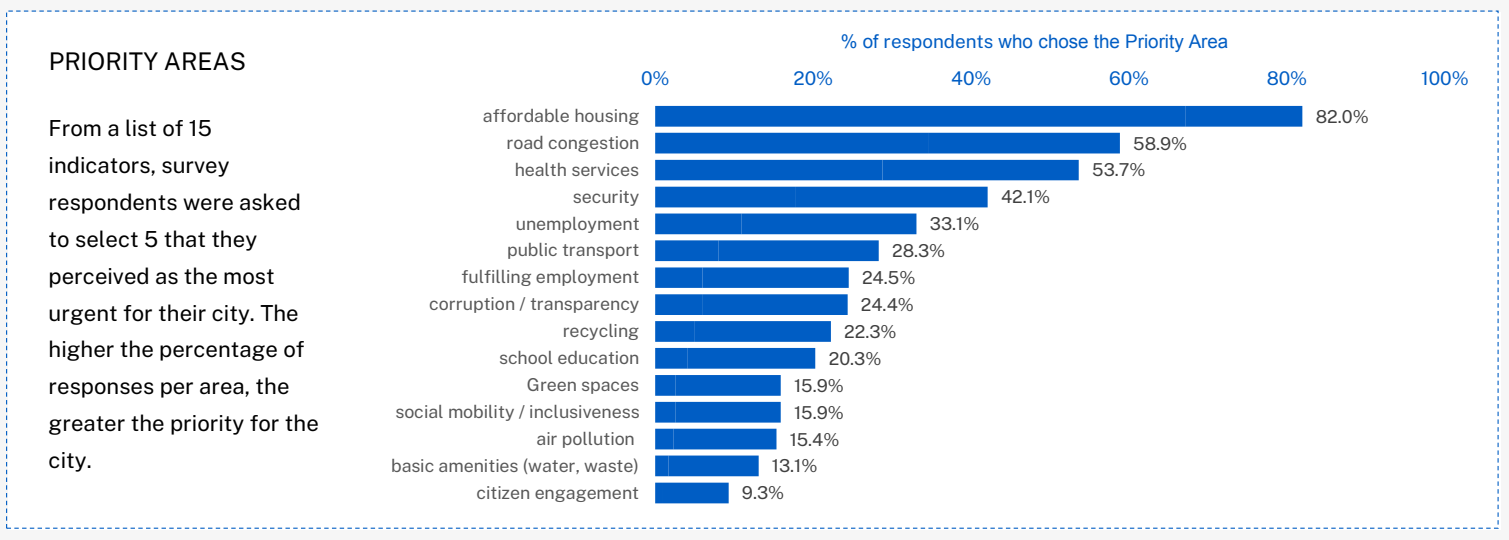
Priority Area	%
affordable housing	82.0%
road congestion	58.9%
health services	53.7%
security	42.1%
unemployment	33.1%
public transport	28.3%
fulfilling employment	24.5%
corruption / transparency	24.4%
recycling	22.3%
school education	20.3%
Green spaces	15.9%
social mobility / inclusiveness	15.9%
air pollution	15.4%
basic amenities (water, waste)	13.1%
citizen engagement	9.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	52.5%
You are comfortable with face recognition technologies to lower crime	63.1%
You feel the availability of online information has increased your trust in authorities	43.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	74.0%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN | CITY | MEAN | GROUP MAX

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	68.1
Recycling services are satisfactory	65.0
Public safety is not a problem	39.3
Air pollution is not a problem	49.5
Medical services provision is satisfactory	58.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	23.5

Mobility

	Score
Traffic congestion is not a problem	21.4
Public transport is satisfactory	54.1

Activities

	Score
Green spaces are satisfactory	67.9
Cultural activities (shows, bars, and museums) are satisfactory	77.7

Opportunities (Work & School)

	Score
Employment finding services are readily available	69.8
Most children have access to a good school	70.7
Lifelong learning opportunities are provided by local institutions	69.2
Businesses are creating new jobs	61.1
Minorities feel welcome	62.6

Governance

	Score
Information on local government decisions are easily accessible	53.0
Corruption of city officials is not an issue of concern	40.7
Residents contribute to decision making of local government	44.1
Residents provide feedback on local government projects	57.6

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	47.6
A website or App allows residents to easily give away unwanted items	58.4
Free public wifi has improved access to city services	59.6
CCTV cameras has made residents feel safer	54.9
A website or App allows residents to effectively monitor air pollution	38.8
Arranging medical appointments online has improved access	68.7

Mobility

	Score
Car-sharing Apps have reduced congestion	38.4
Apps that direct you to an available parking space have reduced journey time	39.5
Bicycle hiring has reduced congestion	40.9
Online scheduling and ticket sales has made public transport easier to use	59.4
The city provides information on traffic congestion through mobile phones	54.7

Activities

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

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	70.7
IT skills are taught well in schools	54.3
Online services provided by the city has made it easier to start a new business	45.9
The current internet speed and reliability meet connectivity needs	63.5

Governance

	Score
Online public access to city finances has reduced corruption	35.0
Online voting has increased participation	45.5
An online platform where residents can propose ideas has improved city life	43.3
Processing Identification Documents online has reduced waiting times	57.0

Mexico City

BACKGROUND INFORMATION

City

Population 21,780,000
(UN World Urbanization Prospects)

HDI 0.815
(Global Data Lab)
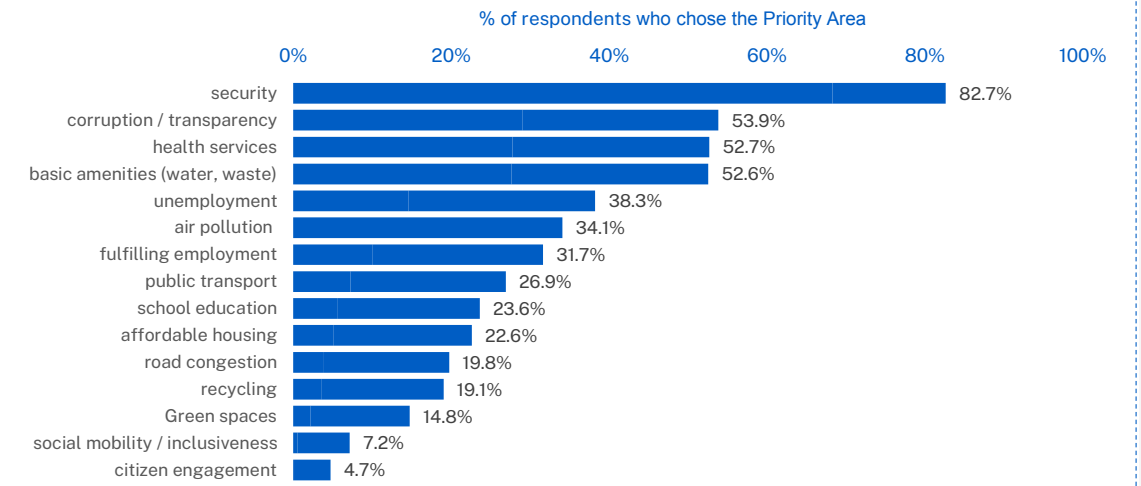
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

Country

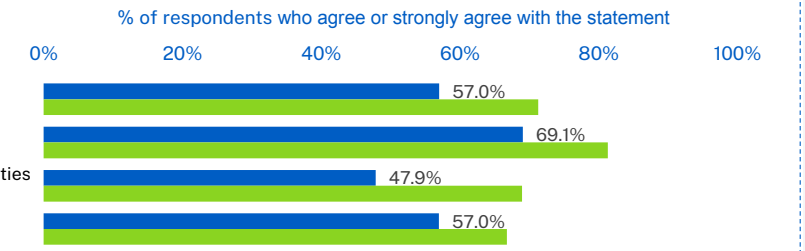| Mexico	2019	2020	2021	2022	1 yr change
HDI	0.781	0.757	0.757	0.781	+0.024
Life expectancy at birth	74.2	70.1	70.2	74.8	+4.6
Expected years of schooling	14.9	14.8	14.5	14.5	+0.0
Mean years of schooling	9.1	9.2	9.2	9.2	+0.0
GNI per capita (PPP $)	19,471	17,721	18,582	19,138	+556

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.

% of respondents who chose the Priority Area

security	82.7%
corruption / transparency	53.9%
health services	52.7%
basic amenities (water, waste)	52.6%
unemployment	38.3%
air pollution	34.1%
fulfilling employment	31.7%
public transport	26.9%
school education	23.6%
affordable housing	22.6%
road congestion	19.8%
recycling	19.1%
Green spaces	14.8%
social mobility / inclusiveness	7.2%
citizen engagement	4.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	57.0%
You are comfortable with face recognition technologies to lower crime	69.1%
You feel the availability of online information has increased your trust in authorities	47.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	57.0%

LEGEND: GROUP MEAN · CITY

LEGEND: MIN · CITY · MEAN · GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	43.5
Recycling services are satisfactory	45.8
Public safety is not a problem	20.7
Air pollution is not a problem	20.1
Medical services provision is satisfactory	39.0
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	27.8

Mobility
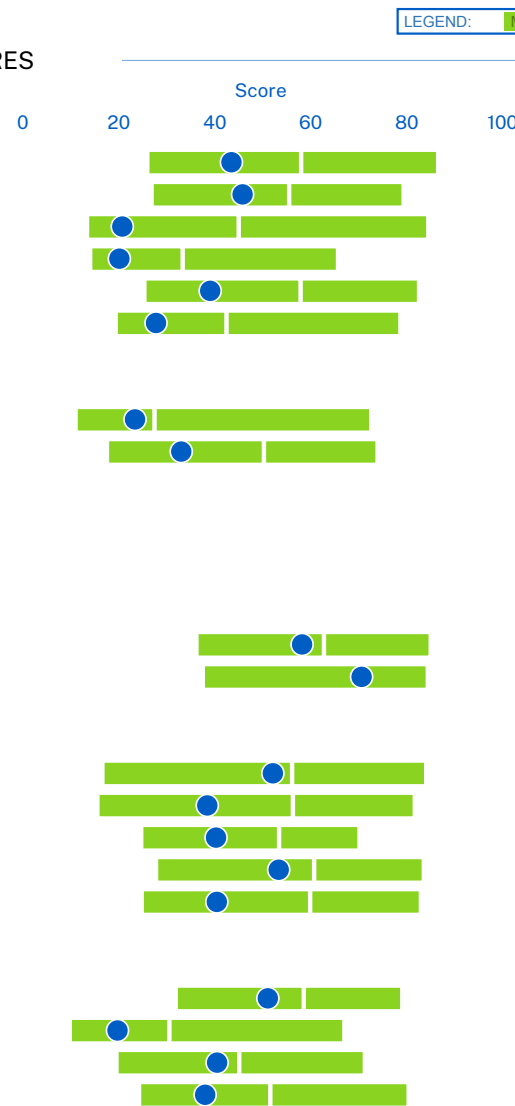|	
Traffic congestion is not a problem	23.4
Public transport is satisfactory	33.0

Activities
Green spaces are satisfactory	58.2
Cultural activities (shows, bars, and museums) are satisfactory	70.6

Opportunities (Work & School)
Employment finding services are readily available	52.1
Most children have access to a good school	38.4
Lifelong learning opportunities are provided by local institutions	40.3
Businesses are creating new jobs	53.3
Minorities feel welcome	40.4

Governance
Information on local government decisions are easily accessible	51.1
Corruption of city officials is not an issue of concern	19.7
Residents contribute to decision making of local government	40.5
Residents provide feedback on local government projects	38.0

TECHNOLOGIES

Score

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	46.2
Free public wifi has improved access to city services	61.3
CCTV cameras has made residents feel safer	53.7
A website or App allows residents to effectively monitor air pollution	48.1
Arranging medical appointments online has improved access	57.4

Mobility
Car-sharing Apps have reduced congestion	42.6
Apps that direct you to an available parking space have reduced journey time	43.0
Bicycle hiring has reduced congestion	52.8
Online scheduling and ticket sales has made public transport easier to use	55.1
The city provides information on traffic congestion through mobile phones	63.4

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	71.5

Opportunities (Work & School)
Online access to job listings has made it easier to find work	60.6
IT skills are taught well in schools	50.2
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	65.0

Governance
Online public access to city finances has reduced corruption	35.0
Online voting has increased participation	44.6
An online platform where residents can propose ideas has improved city life	45.9
Processing Identification Documents online has reduced waiting times	69.0

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)	

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.

% of respondents who chose the Priority Area

air pollution	71.7%
security	66.2%
affordable housing	57.0%
road congestion	43.3%
unemployment	40.1%
fulfilling employment	30.0%
public transport	28.2%
Green spaces	25.8%
corruption / transparency	24.4%
health services	16.1%
citizen engagement	15.3%
school education	13.9%
recycling	13.2%
social mobility / inclusiveness	12.5%
basic amenities (water, waste)	9.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	58.1%
You are comfortable with face recognition technologies to lower crime	67.9%
You feel the availability of online information has increased your trust in authorities	45.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	60.2%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	60.0
Recycling services are satisfactory	74.7
Public safety is not a problem	32.7
Air pollution is not a problem	16.6
Medical services provision is satisfactory	54.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	54.6

Mobility

Traffic congestion is not a problem	19.6
Public transport is satisfactory	52.2

Activities

Green spaces are satisfactory	55.3
Cultural activities (shows, bars, and museums) are satisfactory	78.3

Opportunities (Work & School)

Employment finding services are readily available	45.4
Most children have access to a good school	58.8
Lifelong learning opportunities are provided by local institutions	53.6
Businesses are creating new jobs	45.9
Minorities feel welcome	38.7

Governance

Information on local government decisions are easily accessible	50.8
Corruption of city officials is not an issue of concern	30.1
Residents contribute to decision making of local government	33.1
Residents provide feedback on local government projects	39.6

TECHNOLOGIES

Score

Health & Safety

Online reporting of city maintenance problems provides a speedy solution	52.0
A website or App allows residents to easily give away unwanted items	59.2
Free public wifi has improved access to city services	46.3
CCTV cameras has made residents feel safer	49.9
A website or App allows residents to effectively monitor air pollution	46.8
Arranging medical appointments online has improved access	68.3

Mobility

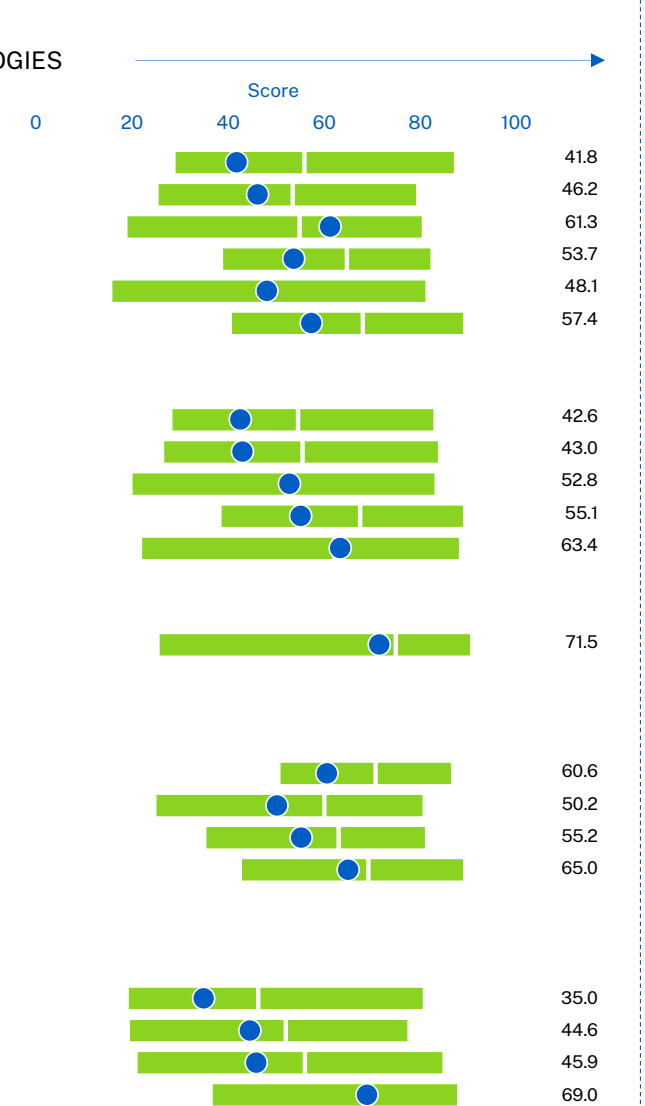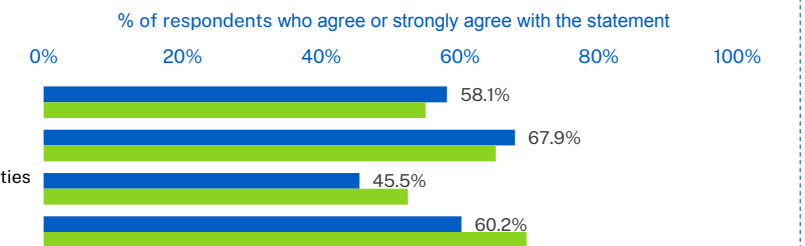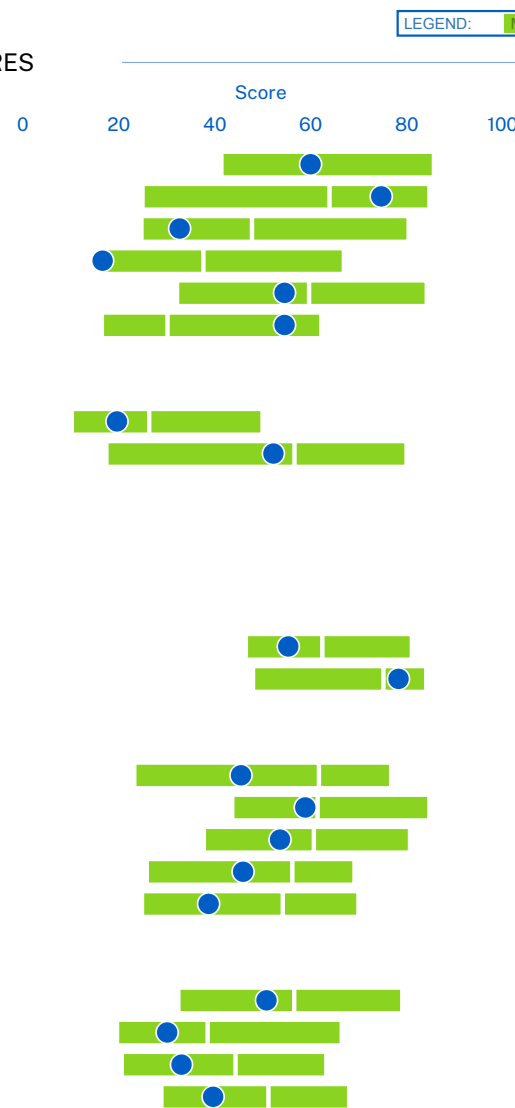|	
Car-sharing Apps have reduced congestion	39.1
Apps that direct you to an available parking space have reduced journey time	44.9
Bicycle hiring has reduced congestion	48.3
Online scheduling and ticket sales has made public transport easier to use	68.7
The city provides information on traffic congestion through mobile phones	51.7

Activities

Online purchasing of tickets to shows and museums has made it easier to attend	81.4

Opportunities (Work & School)

Online access to job listings has made it easier to find work	64.5
IT skills are taught well in schools	43.0
Online services provided by the city has made it easier to start a new business	44.4
The current internet speed and reliability meet connectivity needs	57.6

Governance

Online public access to city finances has reduced corruption	35.7
Online voting has increased participation	37.2
An online platform where residents can propose ideas has improved city life	45.4
Processing Identification Documents online has reduced waiting times	65.5

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)	
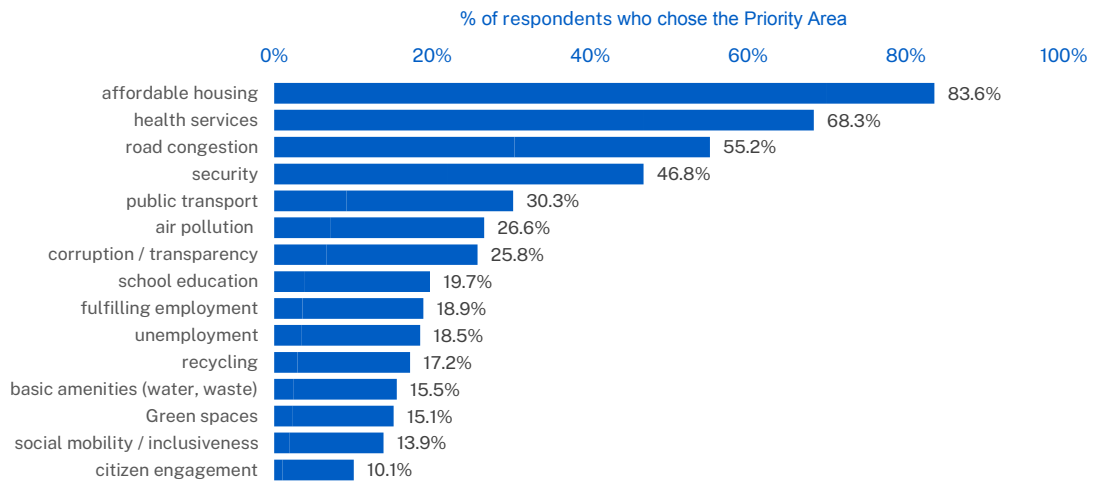
Country
Canada

	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.

% of respondents who chose the Priority Area

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

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	59.9%
You feel the availability of online information has increased your trust in authorities	51.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.2%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

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

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

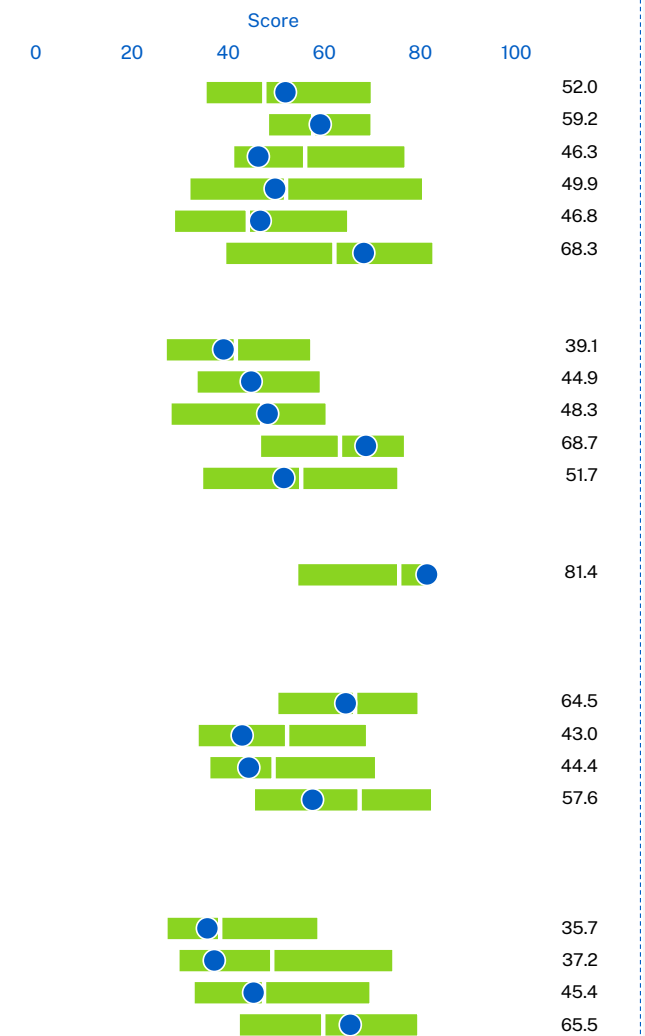|	
Car-sharing Apps have reduced congestion	35.1
Apps that direct you to an available parking space have reduced journey time	35.5
Bicycle hiring has reduced congestion	44.5
Online scheduling and ticket sales has made public transport easier to use	53.8
The city provides information on traffic congestion 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
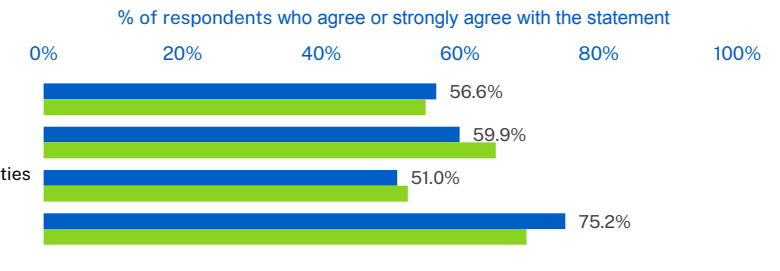
City

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

% of respondents who chose the Priority Area

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	%
air pollution	54.9%
affordable housing	48.3%
basic amenities (water, waste)	43.2%
road congestion	40.9%
security	34.9%
Green spaces	34.1%
unemployment	34.1%
health services	33.5%
corruption / transparency	33.4%
public transport	28.7%
fulfilling employment	26.3%
recycling	23.2%
school education	18.6%
social mobility / inclusiveness	11.1%
citizen engagement	9.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	82.0%
You are comfortable with face recognition technologies to lower crime	82.1%
You feel the availability of online information has increased your trust in authorities	82.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	76.9%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN • CITY | MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	69.8
Recycling services are satisfactory	68.1
Public safety is not a problem	50.0
Air pollution is not a problem	27.4
Medical services provision is satisfactory	74.0
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	47.3

Mobility
	Score
Traffic congestion is not a problem	24.7
Public transport is satisfactory	70.7

Activities
	Score
Green spaces are satisfactory	67.3
Cultural activities (shows, bars, and museums) are satisfactory	75.8

Opportunities (Work & School)
	Score
Employment finding services are readily available	75.3
Most children have access to a good school	70.9
Lifelong learning opportunities are provided by local institutions	69.8
Businesses are creating new jobs	78.3
Minorities feel welcome	73.3

Governance
	Score
Information on local government decisions are easily accessible	77.3
Corruption of city officials is not an issue of concern	40.2
Residents contribute to decision making of local government	65.5
Residents provide feedback on local government projects	66.2

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	69.5
A website or App allows residents to easily give away unwanted items	62.9
Free public wifi has improved access to city services	68.6
CCTV cameras has made residents feel safer	80.8
A website or App allows residents to effectively monitor air pollution	63.1
Arranging medical appointments online has improved access	79.4

Mobility
	Score
Car-sharing Apps have reduced congestion	67.9
Apps that direct you to an available parking space have reduced journey time	65.0
Bicycle hiring has reduced congestion	63.1
Online scheduling and ticket sales has made public transport easier to use	79.4
The city provides information on traffic congestion through mobile phones	77.6

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	82.4

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	78.5
IT skills are taught well in schools	69.6
Online services provided by the city has made it easier to start a new business	78.3
The current internet speed and reliability meet connectivity needs	79.3

Governance
	Score
Online public access to city finances has reduced corruption	63.1
Online voting has increased participation	65.8
An online platform where residents can propose ideas has improved city life	71.1
Processing Identification Documents online has reduced waiting times	78.3

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

A

TECHNOLOGIES

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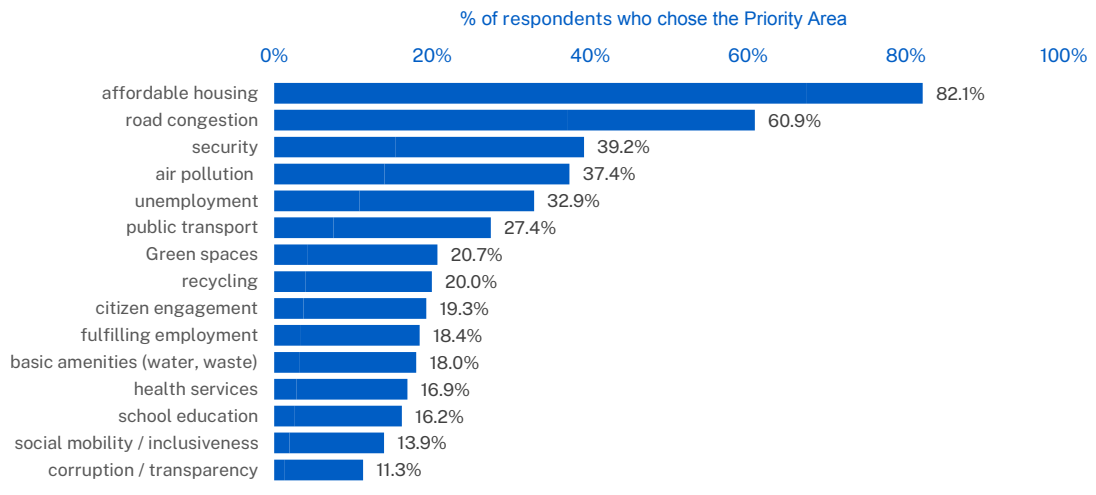
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

Country
Germany

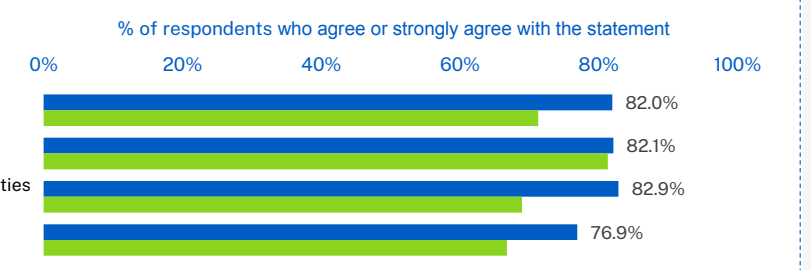|	2019	2020	2021	2022	1 yr change
HDI	0.951	0.948	0.948	0.950	+0.002
Life expectancy at birth	81.6	81.1	80.6	81.0	+0.4
Expected years of schooling	17.2	17.2	17.3	17.3	+0.0
Mean years of schooling	14.2	14.3	14.3	14.3	+0.0
GNI per capita (PPP $)	55,685	53,375	55,057	55,340	+284

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.
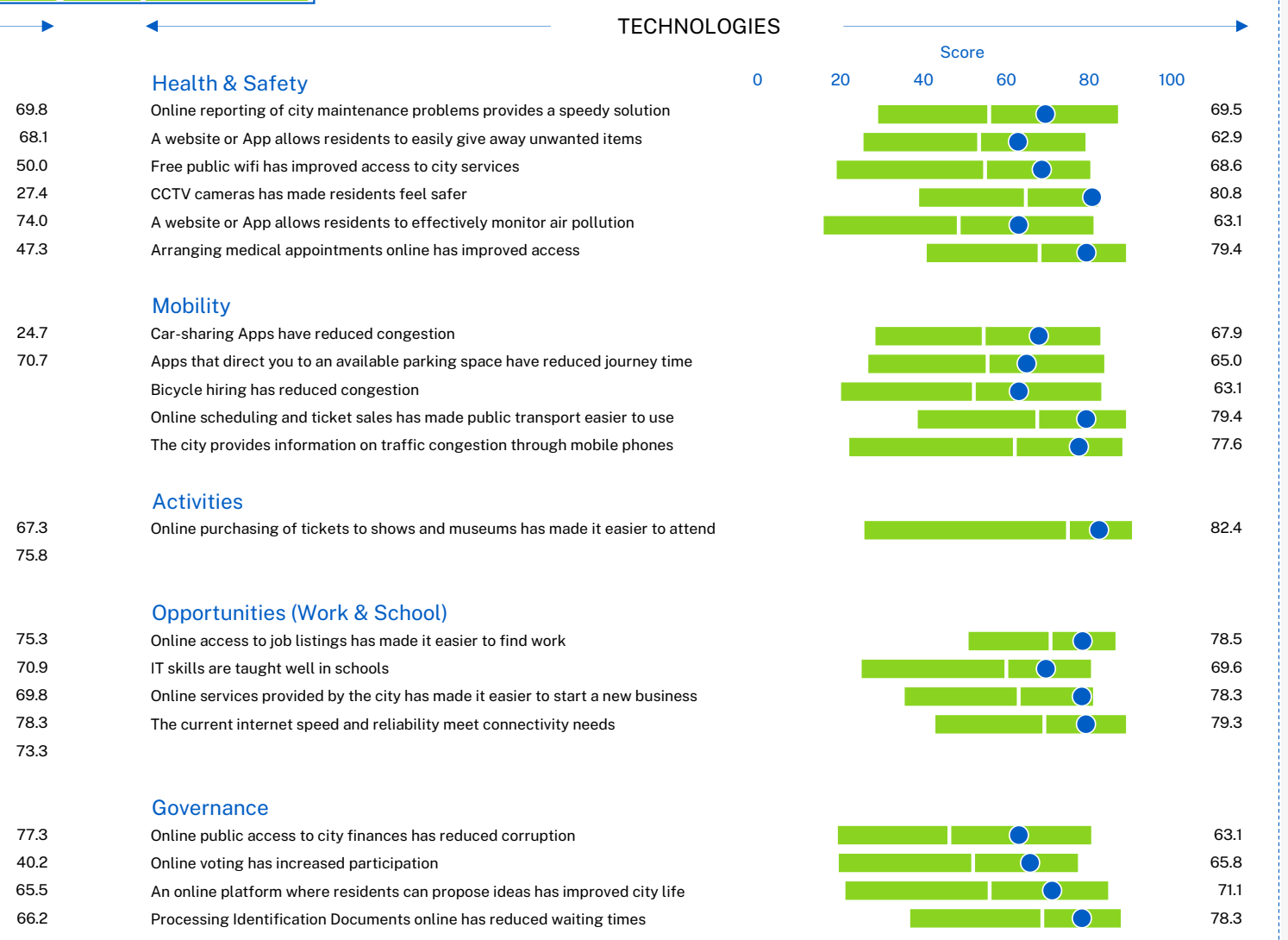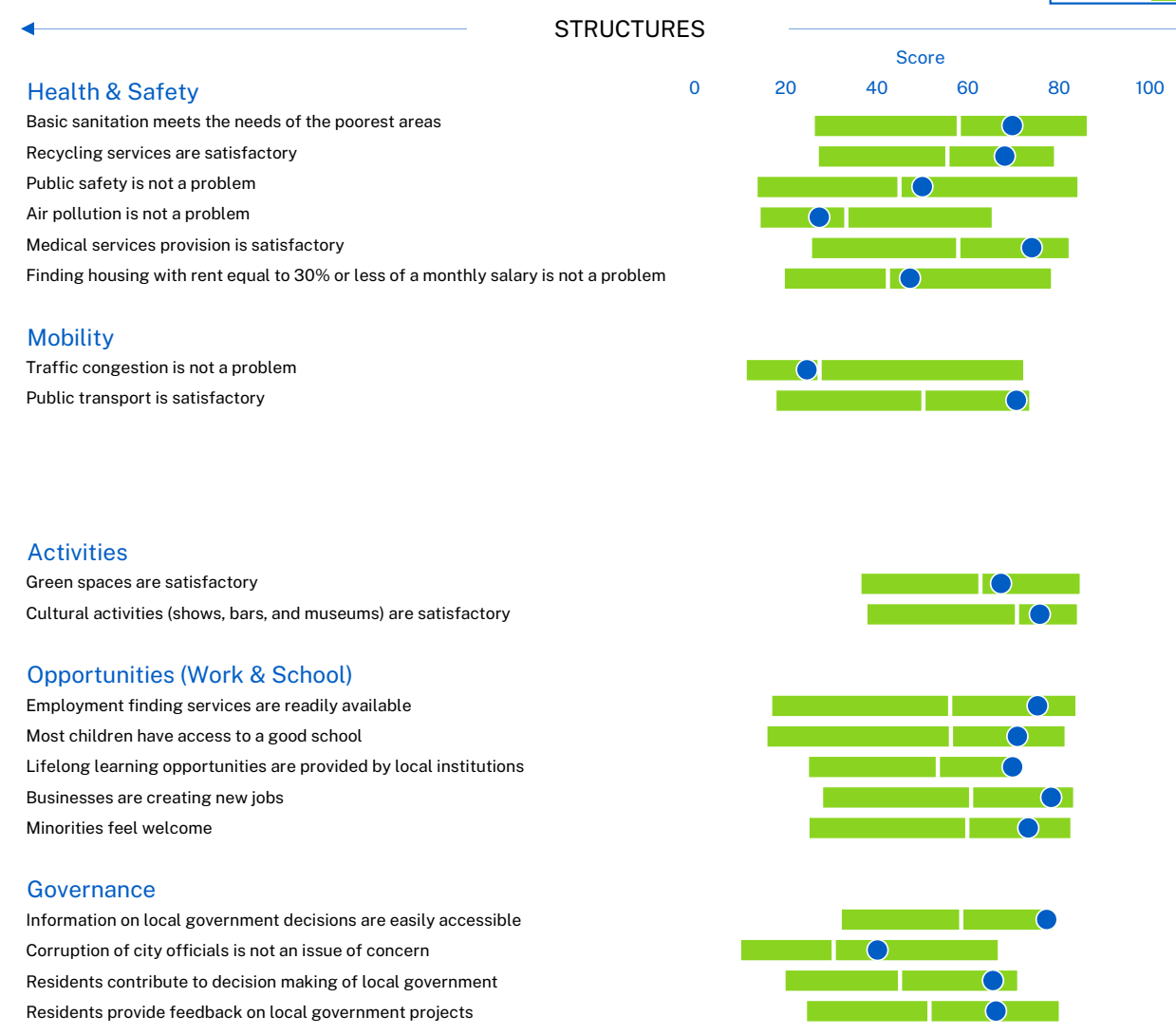
% of respondents who chose the Priority Area

Priority Area	%
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

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	59.5%
You are comfortable with face recognition technologies to lower crime	60.3%
You feel the availability of online information has increased your trust in authorities	55.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	65.1%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score 0 20 40 60 80 100

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	30.1
Public transport is satisfactory	64.4

Activities

	Score
Green spaces are satisfactory	70.1
Cultural activities (shows, bars, and museums) are satisfactory	83.8

Opportunities (Work & School)

	Score
Employment finding services are readily available	63.4
Most children have access to a good school	68.8
Lifelong learning opportunities are provided by local institutions	62.0
Businesses are creating new jobs	67.3
Minorities feel welcome	59.5

Governance

	Score
Information on local government decisions are easily accessible	58.6
Corruption of city officials is not an issue of concern	55.4
Residents contribute to decision making of local government	51.5
Residents provide feedback on local government projects	55.1

TECHNOLOGIES

Score 0 20 40 60 80 100

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	48.2
A website or App allows residents to easily give away unwanted items	55.6
Free public wifi has improved access to city services	57.3
CCTV cameras has made residents feel safer	49.8
A website or App allows residents to effectively monitor air pollution	35.5
Arranging medical appointments online has improved access	54.6

Mobility

	Score
Car-sharing Apps have reduced congestion	41.8
Apps that direct you to an available parking space have reduced journey time	43.5
Bicycle hiring has reduced congestion	46.6
Online scheduling and ticket sales has made public transport easier to use	68.3
The city provides information on traffic congestion through mobile phones	54.2

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	79.7

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	71.3
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

	Score
Online public access to city finances has reduced corruption	41.2
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

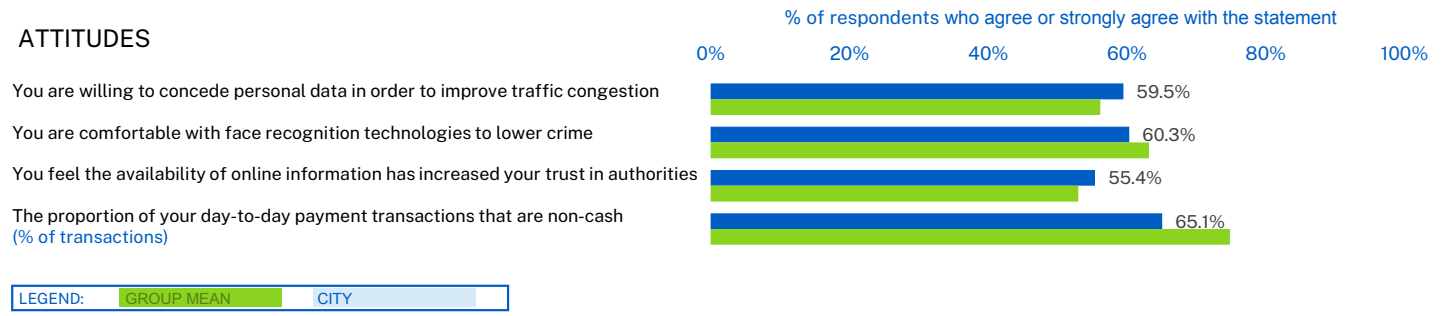|	
Population	1,620,000
(UN World Urbanization Prospects)	
HDI	0.816
(Global Data Lab)	

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

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.

% of respondents who chose the Priority Area

Priority Area	%
unemployment	66.1%
affordable housing	58.0%
road congestion	43.6%
fulfilling employment	42.2%
public transport	32.3%
Green spaces	29.6%
health services	28.9%
corruption / transparency	26.3%
recycling	26.1%
basic amenities (water, waste)	24.0%
citizen engagement	21.5%
air pollution	21.3%
social mobility / inclusiveness	15.7%
school education	15.7%
security	14.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	60.8%
You are comfortable with face recognition technologies to lower crime	82.4%
You feel the availability of online information has increased your trust in authorities	85.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	61.7%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	79.7
Recycling services are satisfactory	72.2
Public safety is not a problem	65.4
Air pollution is not a problem	53.6
Medical services provision is satisfactory	75.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	55.0

Mobility
	Score
Traffic congestion is not a problem	44.4
Public transport is satisfactory	67.1

Activities
	Score
Green spaces are satisfactory	70.2
Cultural activities (shows, bars, and museums) are satisfactory	70.3

Opportunities (Work & School)
	Score
Employment finding services are readily available	47.4
Most children have access to a good school	79.8
Lifelong learning opportunities are provided by local institutions	64.4
Businesses are creating new jobs	60.2
Minorities feel welcome	69.8

Governance
	Score
Information on local government decisions are easily accessible	73.8
Corruption of city officials is not an issue of concern	50.1
Residents contribute to decision making of local government	54.2
Residents provide feedback on local government projects	60.5

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	70.1
A website or App allows residents to easily give away unwanted items	63.8
Free public wifi has improved access to city services	61.4
CCTV cameras has made residents feel safer	73.5
A website or App allows residents to effectively monitor air pollution	47.3
Arranging medical appointments online has improved access	72.3

Mobility
	Score
Car-sharing Apps have reduced congestion	56.3
Apps that direct you to an available parking space have reduced journey time	60.0
Bicycle hiring has reduced congestion	42.3
Online scheduling and ticket sales has made public transport easier to use	73.2
The city provides information on traffic congestion through mobile phones	62.2

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.7

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	67.8
IT skills are taught well in schools	66.6
Online services provided by the city has made it easier to start a new business	67.9
The current internet speed and reliability meet connectivity needs	76.0

Governance
	Score
Online public access to city finances has reduced corruption	59.1
Online voting has increased participation	65.7
An online platform where residents can propose ideas has improved city life	60.1
Processing Identification Documents online has reduced waiting times	78.9

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

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

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
basic amenities (water, waste)	68.3%
unemployment	66.9%
security	62.9%
health services	59.9%
corruption / transparency	57.9%
affordable housing	52.1%
fulfilling employment	34.3%
road congestion	30.0%
school education	14.9%
air pollution	12.2%
public transport	11.5%
citizen engagement	9.1%
recycling	5.5%
social mobility / inclusiveness	4.1%
Green spaces	3.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	72.5%
You are comfortable with face recognition technologies to lower crime	85.3%
You feel the availability of online information has increased your trust in authorities	69.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	70.4%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	38.6
Recycling services are satisfactory	44.3
Public safety is not a problem	28.7
Air pollution is not a problem	21.8
Medical services provision is satisfactory	51.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	35.7

Mobility

	Score
Traffic congestion is not a problem	14.3
Public transport is satisfactory	47.6

Activities

	Score
Green spaces are satisfactory	52.7
Cultural activities (shows, bars, and museums) are satisfactory	75.6

Opportunities (Work & School)

	Score
Employment finding services are readily available	29.2
Most children have access to a good school	42.4
Lifelong learning opportunities are provided by local institutions	45.5
Businesses are creating new jobs	68.1
Minorities feel welcome	51.6

Governance

	Score
Information on local government decisions are easily accessible	55.3
Corruption of city officials is not an issue of concern	11.0
Residents contribute to decision making of local government	34.1
Residents provide feedback on local government projects	47.8

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	42.3
A website or App allows residents to easily give away unwanted items	38.0
Free public wifi has improved access to city services	46.7
CCTV cameras has made residents feel safer	63.9
A website or App allows residents to effectively monitor air pollution	23.3
Arranging medical appointments online has improved access	61.3

Mobility

	Score
Car-sharing Apps have reduced congestion	53.5
Apps that direct you to an available parking space have reduced journey time	46.8
Bicycle hiring has reduced congestion	31.8
Online scheduling and ticket sales has made public transport easier to use	61.8
The city provides information on traffic congestion through mobile phones	48.2

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.4

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	68.9
IT skills are taught well in schools	65.0
Online services provided by the city has made it easier to start a new business	60.6
The current internet speed and reliability meet connectivity needs	72.2

Governance

	Score
Online public access to city finances has reduced corruption	32.5
Online voting has increased participation	38.1
An online platform where residents can propose ideas has improved city life	45.0
Processing Identification Documents online has reduced waiting times	66.4

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)
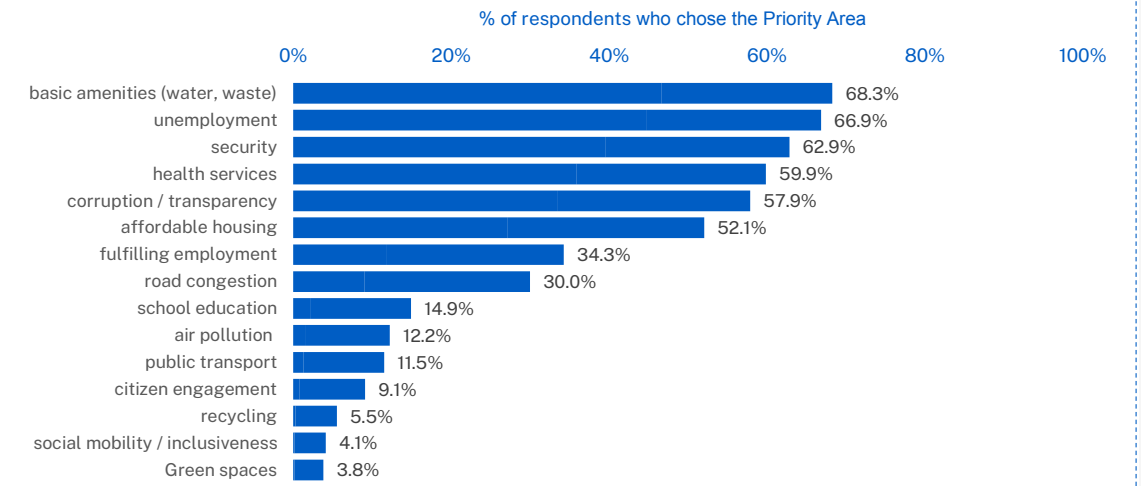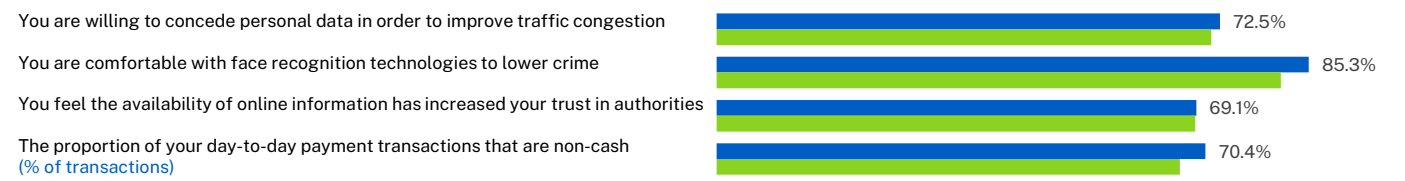
HDI 0.810
(Global Data Lab)

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.

% of respondents who chose the Priority Area

Priority Area	%
road congestion	61.0%
fulfilling employment	46.5%
air pollution	42.8%
affordable housing	42.5%
health services	42.2%
corruption / transparency	39.4%
unemployment	28.4%
school education	28.1%
basic amenities (water, waste)	26.7%
social mobility / inclusiveness	21.9%
citizen engagement	18.7%
public transport	15.5%
recycling	15.1%
Green spaces	15.1%
security	13.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	87.4%
You are comfortable with face recognition technologies to lower crime	86.5%
You feel the availability of online information has increased your trust in authorities	89.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	91.3%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	83.7
Recycling services are satisfactory	78.4
Public safety is not a problem	77.4
Air pollution is not a problem	60.0
Medical services provision is satisfactory	79.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	65.7

Mobility
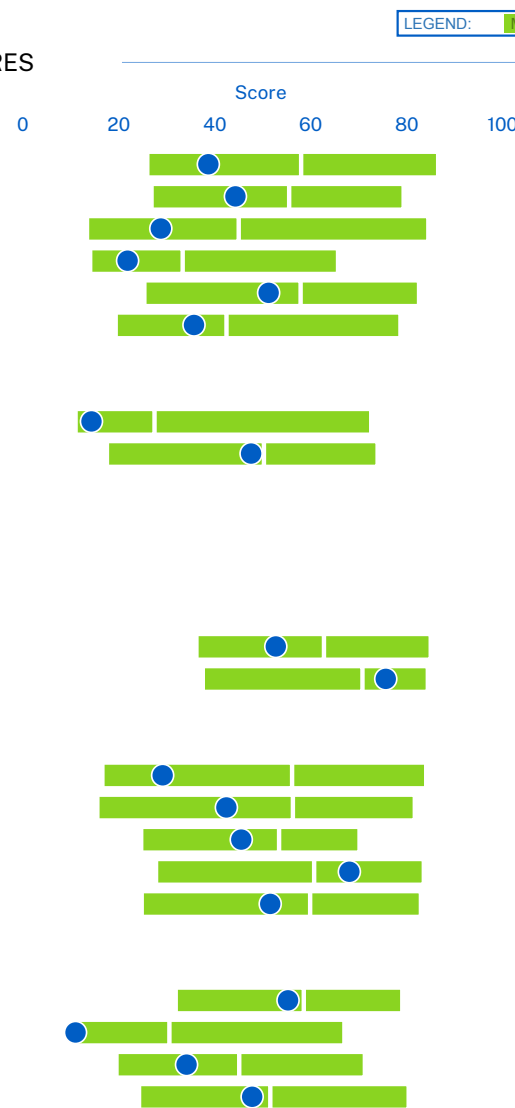|	Score
Traffic congestion is not a problem	40.3
Public transport is satisfactory	71.4

Activities
	Score
Green spaces are satisfactory	83.3
Cultural activities (shows, bars, and museums) are satisfactory	83.3

Opportunities (Work & School)
	Score
Employment finding services are readily available	77.0
Most children have access to a good school	78.5
Lifelong learning opportunities are provided by local institutions	67.2
Businesses are creating new jobs	74.0
Minorities feel welcome	81.6

Governance
	Score
Information on local government decisions are easily accessible	71.9
Corruption of city officials is not an issue of concern	50.7
Residents contribute to decision making of local government	55.7
Residents provide feedback on local government projects	70.6

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	83.4
A website or App allows residents to easily give away unwanted items	73.6
Free public wifi has improved access to city services	79.2
CCTV cameras has made residents feel safer	78.9
A website or App allows residents to effectively monitor air pollution	73.6
Arranging medical appointments online has improved access	85.5

Mobility
	Score
Car-sharing Apps have reduced congestion	71.2
Apps that direct you to an available parking space have reduced journey time	79.2
Bicycle hiring has reduced congestion	81.2
Online scheduling and ticket sales has made public transport easier to use	85.3
The city provides information on traffic congestion through mobile phones	83.8

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	90.1

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	81.1
IT skills are taught well in schools	80.2
Online services provided by the city has made it easier to start a new business	74.6
The current internet speed and reliability meet connectivity needs	86.8

Governance
	Score
Online public access to city finances has reduced corruption	68.2
Online voting has increased participation	68.5
An online platform where residents can propose ideas has improved city life	76.7
Processing Identification Documents online has reduced waiting times	81.9

New York

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	71.0%
security	54.5%
road congestion	43.0%
health services	39.1%
corruption / transparency	33.6%
air pollution	32.5%
unemployment	31.9%
public transport	28.8%
school education	28.0%
fulfilling employment	27.8%
basic amenities (water, waste)	21.6%
recycling	15.4%
Green spaces	14.5%
social mobility / inclusiveness	14.1%
citizen engagement	7.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	57.7%
You are comfortable with face recognition technologies to lower crime	66.2%
You feel the availability of online information has increased your trust in authorities	53.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	69.9%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN   CITY   MEAN   GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	58.6
Recycling services are satisfactory	67.0
Public safety is not a problem	36.1
Air pollution is not a problem	34.3
Medical services provision is satisfactory	64.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	36.2

Mobility

	Score
Traffic congestion is not a problem	27.8
Public transport is satisfactory	55.2

Activities

	Score
Green spaces are satisfactory	63.0
Cultural activities (shows, bars, and museums) are satisfactory	78.2

Opportunities (Work & School)

	Score
Employment finding services are readily available	63.4
Most children have access to a good school	57.7
Lifelong learning opportunities are provided by local institutions	62.8
Businesses are creating new jobs	61.0
Minorities feel welcome	61.4

Governance

	Score
Information on local government decisions are easily accessible	62.1
Corruption of city officials is not an issue of concern	36.0
Residents contribute to decision making of local government	50.6
Residents provide feedback on local government projects	59.1

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	49.2
A website or App allows residents to easily give away unwanted items	60.0
Free public wifi has improved access to city services	64.4
CCTV cameras has made residents feel safer	57.2
A website or App allows residents to effectively monitor air pollution	47.4
Arranging medical appointments online has improved access	68.6

Mobility

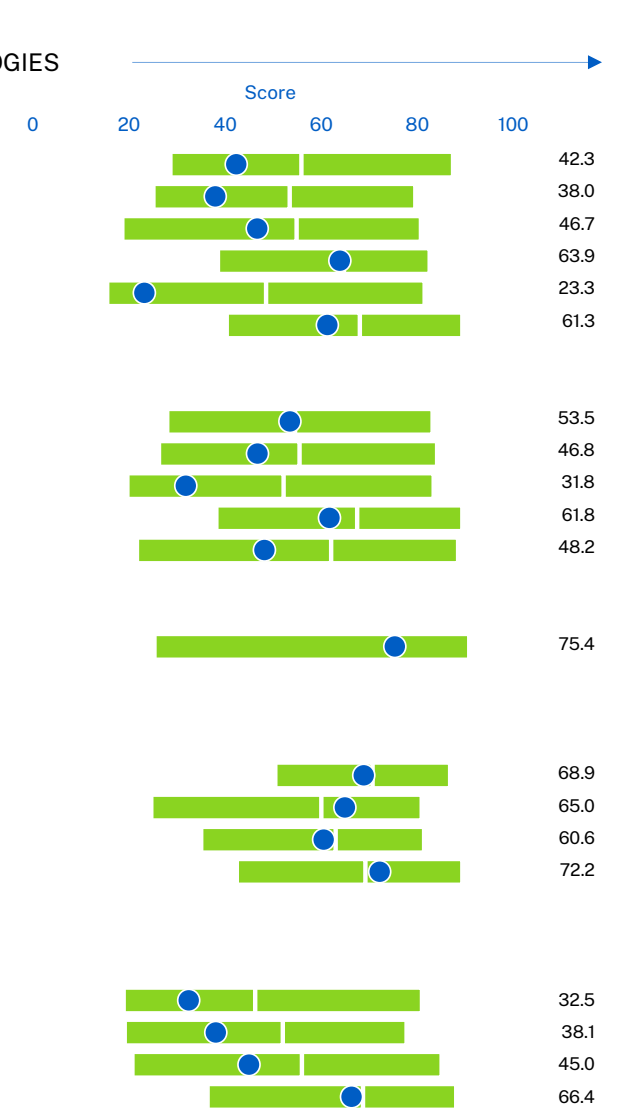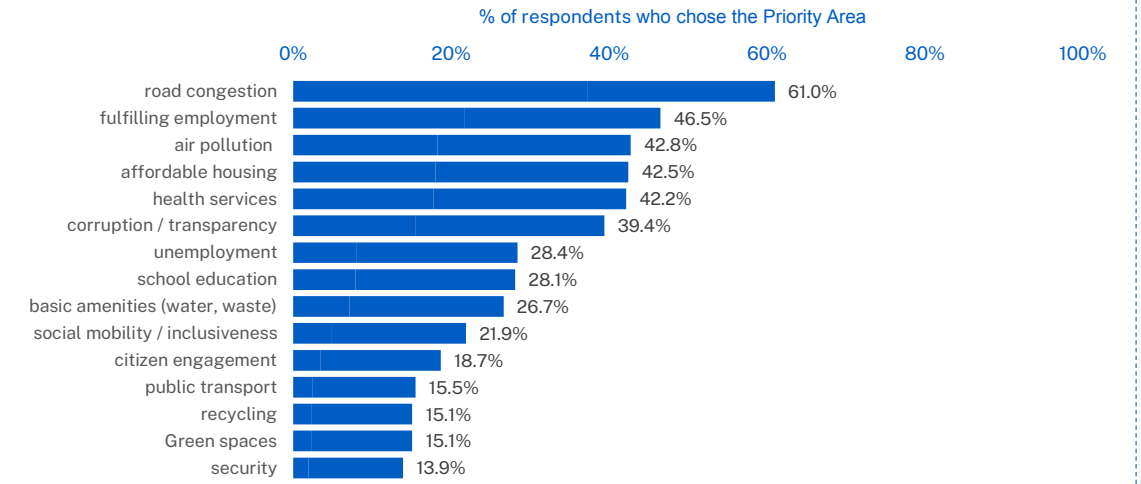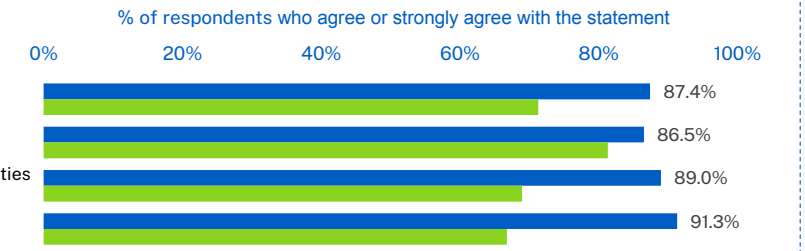|	Score
Car-sharing Apps have reduced congestion	48.5
Apps that direct you to an available parking space have reduced journey time	52.4
Bicycle hiring has reduced congestion	51.4
Online scheduling and ticket sales has made public transport easier to use	64.9
The city provides information on traffic congestion through mobile phones	63.6

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.0

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	66.7
IT skills are taught well in schools	50.6
Online services provided by the city has made it easier to start a new business	52.7
The current internet speed and reliability meet connectivity needs	71.1

Governance

	Score
Online public access to city finances has reduced corruption	44.0
Online voting has increased participation	57.6
An online platform where residents can propose ideas has improved city life	50.4
Processing Identification Documents online has reduced waiting times	63.1

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

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population	300,000
(Eurostat)	
HDI	0.901
(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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	77.9%
unemployment	56.9%
health services	54.6%
road congestion	37.2%
fulfilling employment	36.6%
security	31.3%
public transport	28.9%
recycling	20.5%
Green spaces	20.1%
school education	19.7%
air pollution	19.4%
citizen engagement	17.8%
social mobility / inclusiveness	15.6%
basic amenities (water, waste)	13.3%
corruption / transparency	11.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	57.7%
You are comfortable with face recognition technologies to lower crime	72.1%
You feel the availability of online information has increased your trust in authorities	55.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.6%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	63.1
Recycling services are satisfactory	68.9
Public safety is not a problem	47.7
Air pollution is not a problem	48.7
Medical services provision is satisfactory	57.0
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	36.1

Mobility
	Score
Traffic congestion is not a problem	36.5
Public transport is satisfactory	60.7

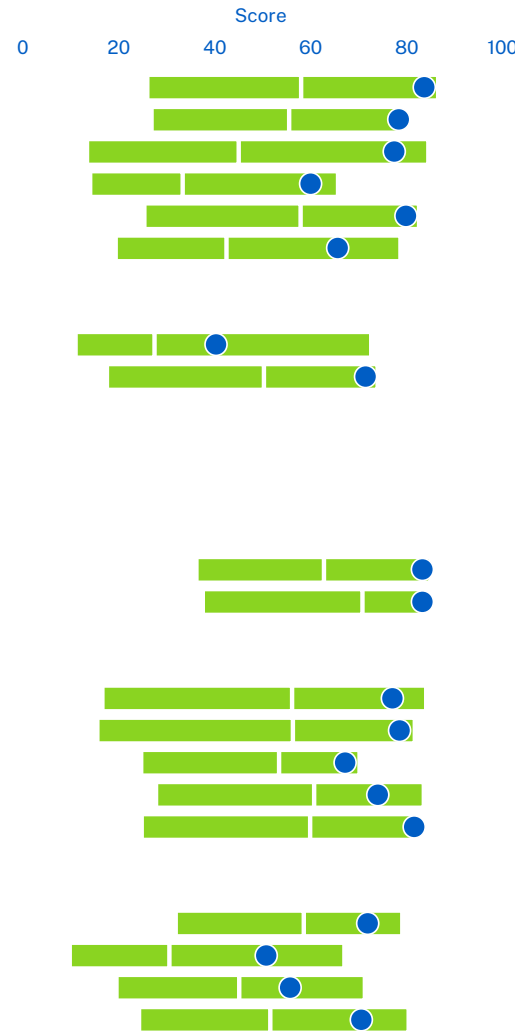### Activities
	Score
Green spaces are satisfactory	65.5
Cultural activities (shows, bars, and museums) are satisfactory	80.8

Opportunities (Work & School)
	Score
Employment finding services are readily available	64.7
Most children have access to a good school	70.7
Lifelong learning opportunities are provided by local institutions	60.9
Businesses are creating new jobs	58.4
Minorities feel welcome	64.6

Governance
	Score
Information on local government decisions are easily accessible	54.2
Corruption of city officials is not an issue of concern	51.8
Residents contribute to decision making of local government	45.5
Residents provide feedback on local government projects	55.8

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	44.5
A website or App allows residents to easily give away unwanted items	66.3
Free public wifi has improved access to city services	62.2
CCTV cameras has made residents feel safer	58.2
A website or App allows residents to effectively monitor air pollution	29.9
Arranging medical appointments online has improved access	53.0

Mobility
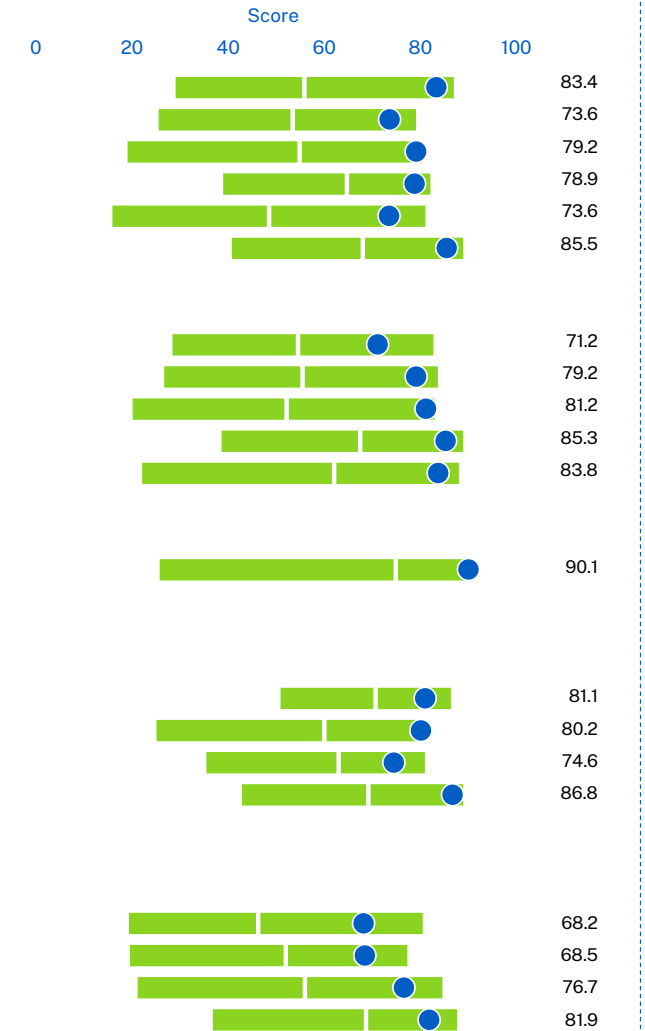|	Score
Car-sharing Apps have reduced congestion	38.4
Apps that direct you to an available parking space have reduced journey time	38.6
Bicycle hiring has reduced congestion	42.6
Online scheduling and ticket sales has made public transport easier to use	62.1
The city provides information on traffic congestion through mobile phones	45.6

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.1

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	66.0
IT skills are taught well in schools	61.1
Online services provided by the city has made it easier to start a new business	45.6
The current internet speed and reliability meet connectivity needs	68.0

Governance
	Score
Online public access to city finances has reduced corruption	37.7
Online voting has increased participation	57.4
An online platform where residents can propose ideas has improved city life	43.4
Processing Identification Documents online has reduced waiting times	55.0

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)	
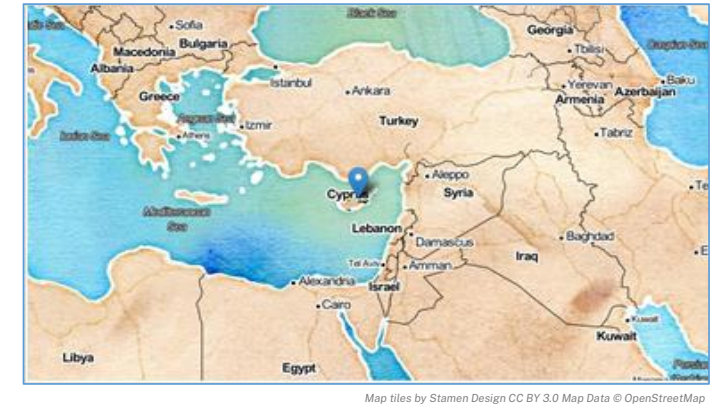
Country
Cyprus

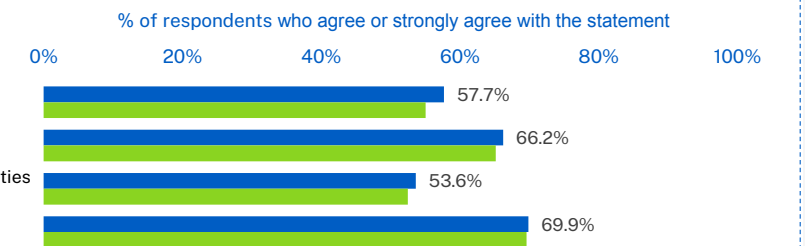|	2019	2020	2021	2022	1 yr change
HDI	0.901	0.900	0.901	0.907	+0.006
Life expectancy at birth	81.4	81.4	81.2	81.9	+0.7
Expected years of schooling	16.0	16.2	16.2	16.2	+0.0
Mean years of schooling	12.4	12.4	12.4	12.4	+0.0
GNI per capita (PPP $)	39,467	36,716	38,169	40,137	+1,968

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
affordable housing	60.2%
road congestion	56.0%
corruption / transparency	44.5%
public transport	43.5%
security	41.0%
health services	36.3%
Green spaces	35.5%
school education	29.9%
fulfilling employment	25.6%
unemployment	25.3%
recycling	21.2%
basic amenities (water, waste)	15.5%
air pollution	15.4%
citizen engagement	13.3%
social mobility / inclusiveness	12.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	62.3%
You are comfortable with face recognition technologies to lower crime	67.1%
You feel the availability of online information has increased your trust in authorities	50.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.2%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN • CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	68.3
Recycling services are satisfactory	52.6
Public safety is not a problem	47.4
Air pollution is not a problem	37.3
Medical services provision is satisfactory	58.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	18.4

Mobility
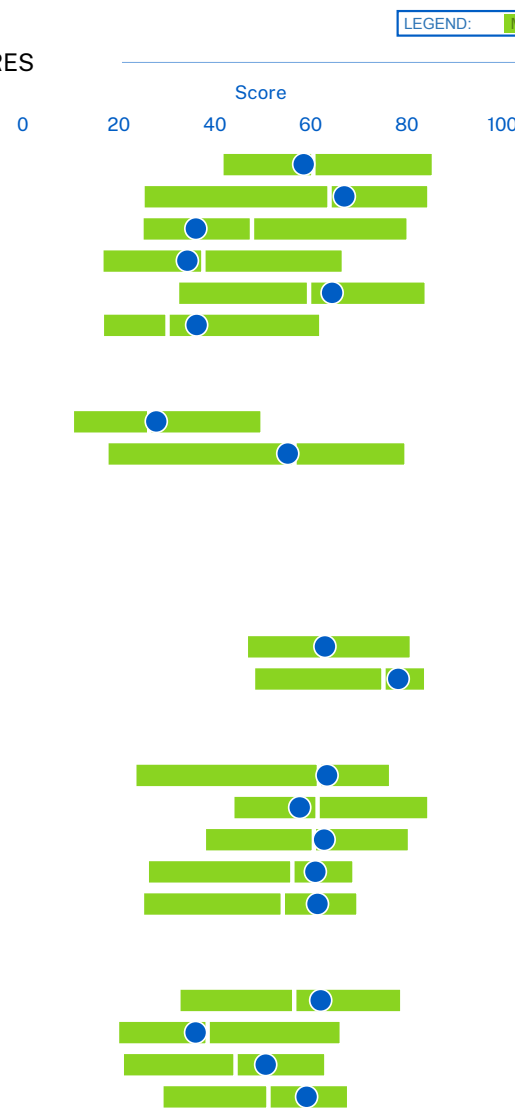|	Score
Traffic congestion is not a problem	13.9
Public transport is satisfactory	18.2

Activities
	Score
Green spaces are satisfactory	44.5
Cultural activities (shows, bars, and museums) are satisfactory	58.4

Opportunities (Work & School)
	Score
Employment finding services are readily available	54.6
Most children have access to a good school	60.4
Lifelong learning opportunities are provided by local institutions	50.8
Businesses are creating new jobs	53.9
Minorities feel welcome	43.9

Governance
	Score
Information on local government decisions are easily accessible	41.5
Corruption of city officials is not an issue of concern	22.6
Residents contribute to decision making of local government	23.9
Residents provide feedback on local government projects	33.3

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	40.0
A website or App allows residents to easily give away unwanted items	52.2
Free public wifi has improved access to city services	46.6
CCTV cameras has made residents feel safer	41.4
A website or App allows residents to effectively monitor air pollution	44.5
Arranging medical appointments online has improved access	44.6

Mobility
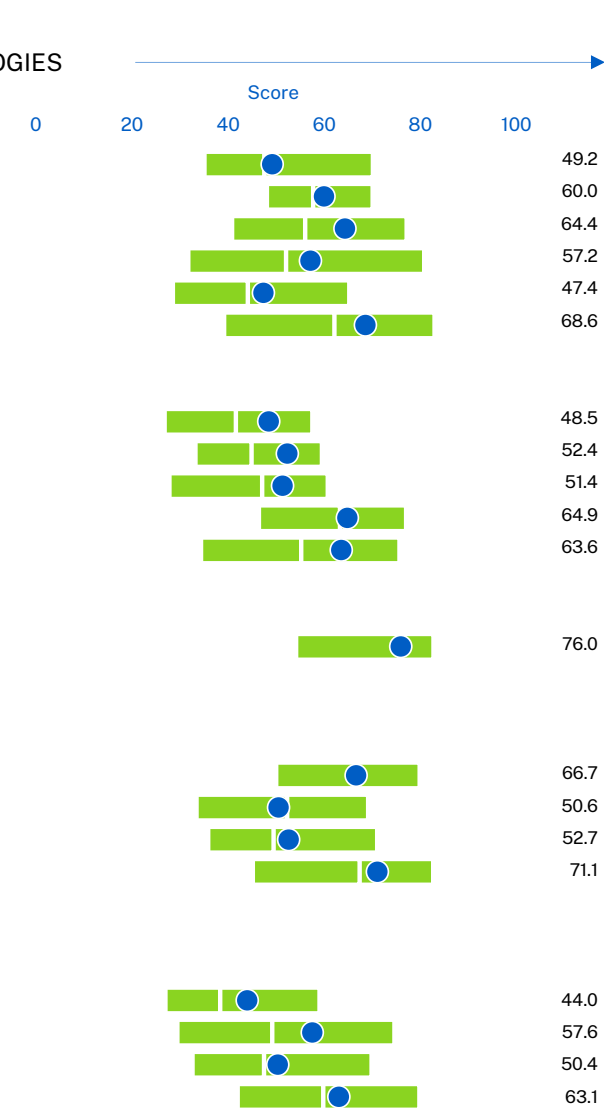|	Score
Car-sharing Apps have reduced congestion	28.4
Apps that direct you to an available parking space have reduced journey time	31.5
Bicycle hiring has reduced congestion	29.2
Online scheduling and ticket sales has made public transport easier to use	42.4
The city provides information on traffic congestion through mobile phones	35.6

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.3

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	77.0
IT skills are taught well in schools	46.9
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	71.1

Governance
	Score
Online public access to city finances has reduced corruption	21.9
Online voting has increased participation	28.9
An online platform where residents can propose ideas has improved city life	27.6
Processing Identification Documents online has reduced waiting times	51.3

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

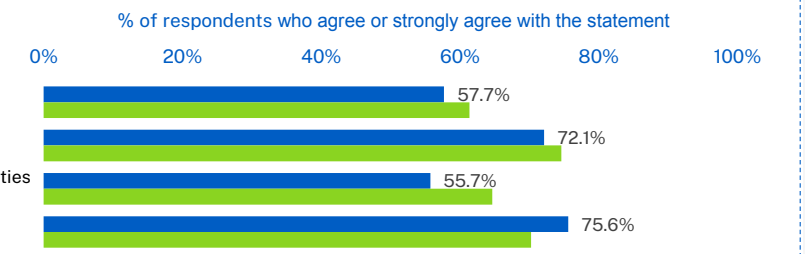|	2019	2020	2021	2022	1 yr change
HDI	0.918	0.917	0.920	0.920	+0.000
Life expectancy at birth	84.4	84.7	84.8	84.8	+0.0
Expected years of schooling	15.4	15.5	15.5	15.5	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP $)	43,276	41,446	43,008	43,644	+636

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.

% of respondents who chose the Priority Area

Priority Area	%
basic amenities (water, waste)	51.1%
health services	49.9%
affordable housing	39.0%
road congestion	36.5%
school education	35.7%
security	33.3%
public transport	32.3%
fulfilling employment	28.8%
corruption / transparency	26.9%
Green spaces	24.5%
unemployment	23.1%
citizen engagement	21.8%
air pollution	19.1%
social mobility / inclusiveness	16.0%
recycling	14.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	41.5%
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	40.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.8%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	68.4
Recycling services are satisfactory	65.3
Public safety is not a problem	49.5
Air pollution is not a problem	41.5
Medical services provision is satisfactory	70.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	52.0

Mobility

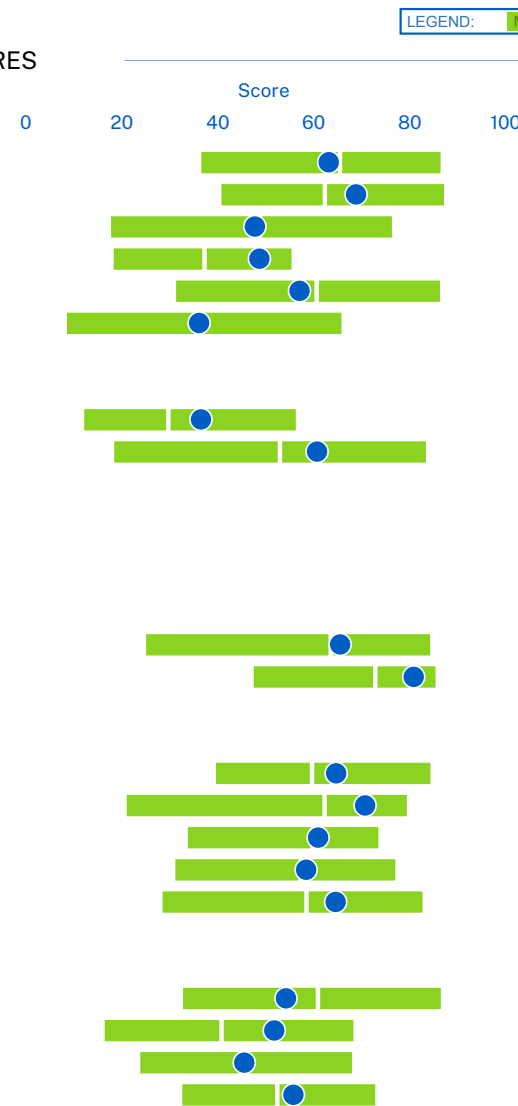|	Score
Traffic congestion is not a problem	38.0
Public transport is satisfactory	73.3

Activities

	Score
Green spaces are satisfactory	49.8
Cultural activities (shows, bars, and museums) are satisfactory	58.7

Opportunities (Work & School)

	Score
Employment finding services are readily available	55.0
Most children have access to a good school	54.9
Lifelong learning opportunities are provided by local institutions	56.8
Businesses are creating new jobs	49.3
Minorities feel welcome	38.2

Governance

	Score
Information on local government decisions are easily accessible	54.3
Corruption of city officials is not an issue of concern	35.3
Residents contribute to decision making of local government	46.4
Residents provide feedback on local government projects	46.3

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	42.8
A website or App allows residents to easily give away unwanted items	51.0
Free public wifi has improved access to city services	46.4
CCTV cameras has made residents feel safer	52.6
A website or App allows residents to effectively monitor air pollution	37.0
Arranging medical appointments online has improved access	47.5

Mobility

	Score
Car-sharing Apps have reduced congestion	27.1
Apps that direct you to an available parking space have reduced journey time	34.4
Bicycle hiring has reduced congestion	28.1
Online scheduling and ticket sales has made public transport easier to use	46.7
The city provides information on traffic congestion through mobile phones	54.2

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	54.5

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	54.4
IT skills are taught well in schools	33.8
Online services provided by the city has made it easier to start a new business	37.2
The current internet speed and reliability meet connectivity needs	56.9

Governance

	Score
Online public access to city finances has reduced corruption	32.8
Online voting has increased participation	29.8
An online platform where residents can propose ideas has improved city life	32.9
Processing Identification Documents online has reduced waiting times	42.3

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)	

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

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

% of respondents who chose the Priority Area

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.

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

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

LEGEND: MIN CITY MEAN GROUP MAX

STRUCTURES

Score

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

Score

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

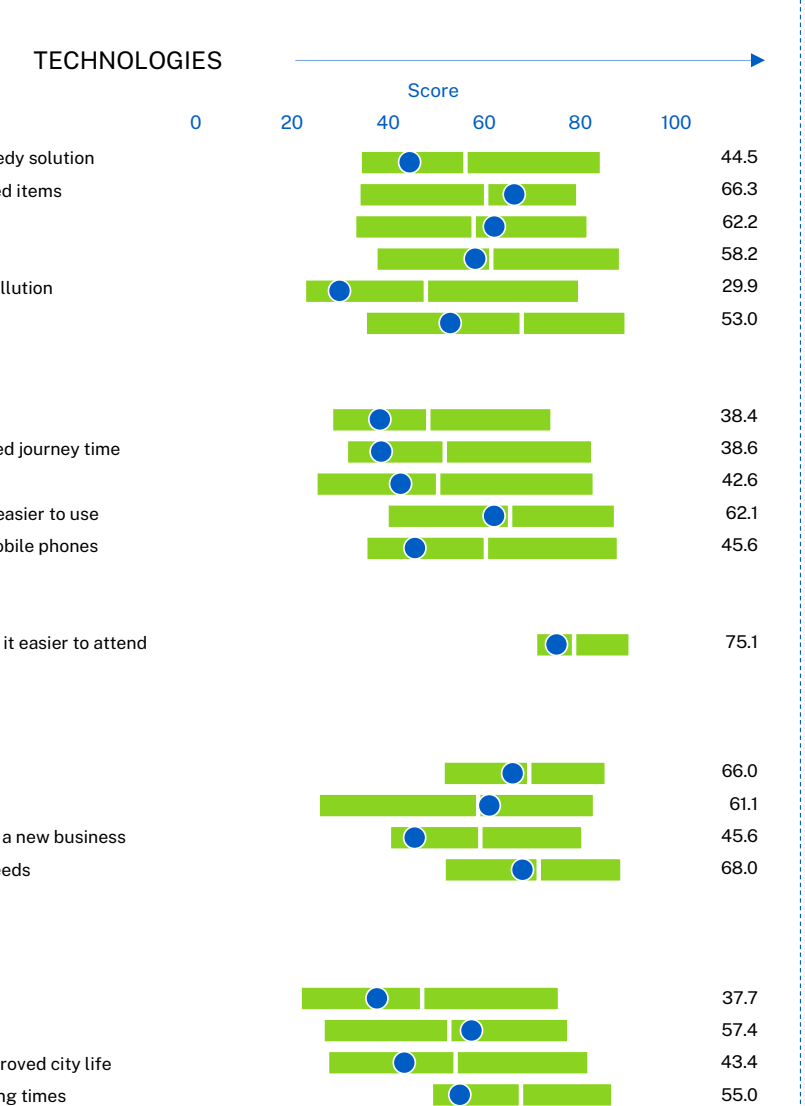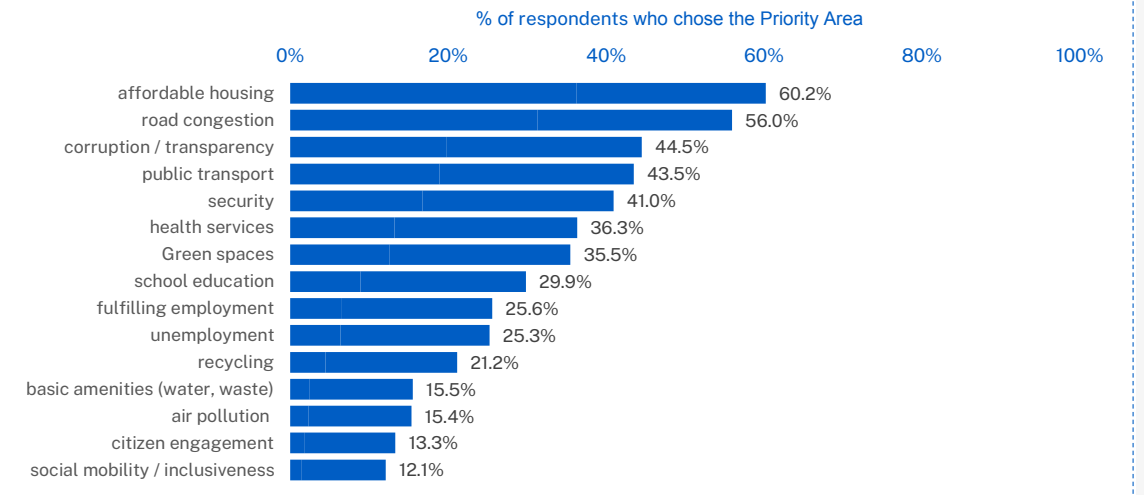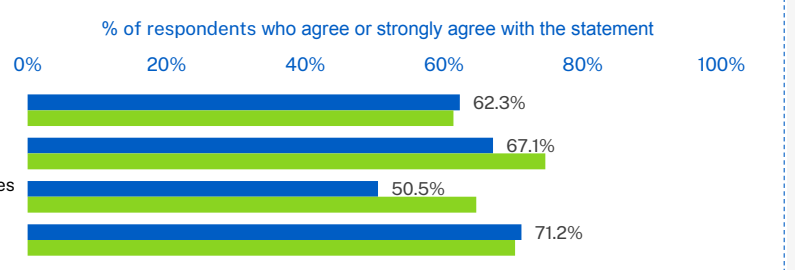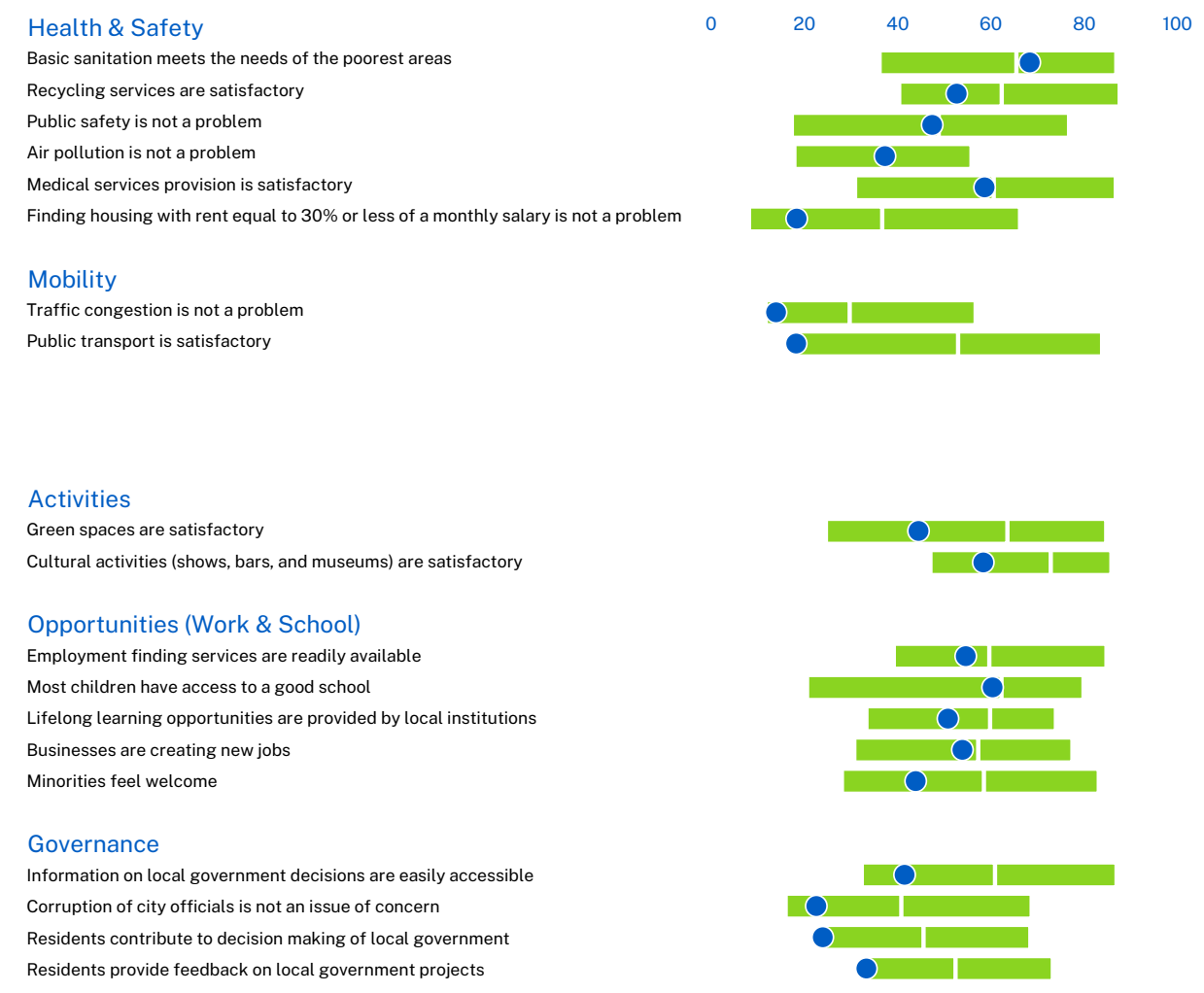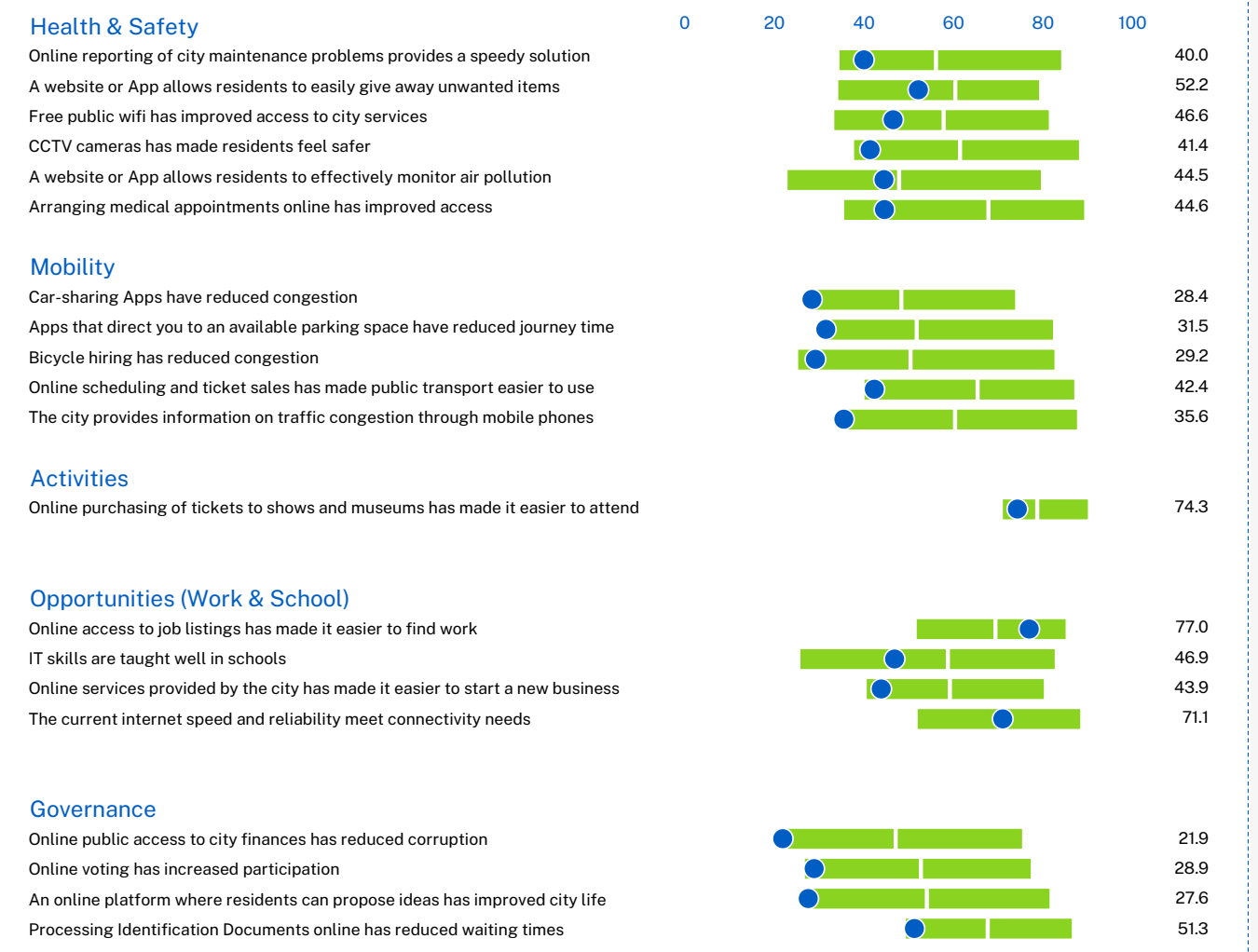|	
Car-sharing Apps have reduced congestion	41.9
Apps that direct you to an available parking space have reduced journey time	39.6
Bicycle hiring has reduced congestion	52.2
Online scheduling and ticket sales has made public transport easier to use	78.0
The city provides information on traffic congestion 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)	
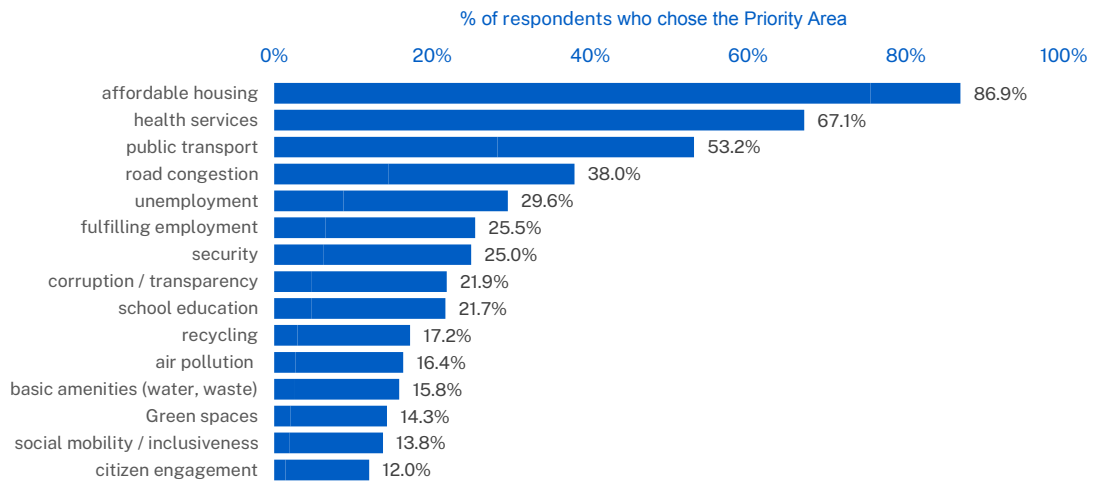
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

Country

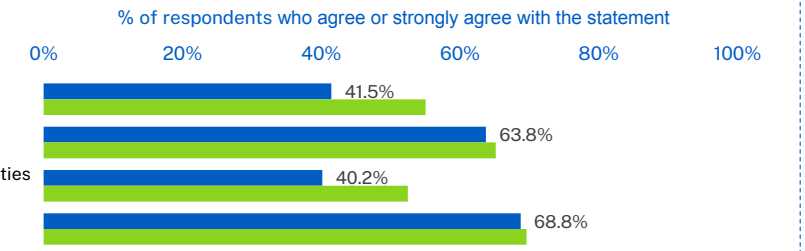| Canada	2019	2020	2021	2022	1 yr change
HDI	0.932	0.928	0.934	0.935	+0.001
Life expectancy at birth	82.4	82.0	82.7	82.8	+0.2
Expected years of schooling	15.9	15.9	16.0	16.0	+0.0
Mean years of schooling	13.8	13.9	13.9	13.9	+0.0
GNI per capita (PPP $)	48,591	45,828	47,933	48,444	+512

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
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	%
You are willing to concede personal data in order to improve traffic congestion	55.2%
You are comfortable with face recognition technologies to lower crime	58.3%
You feel the availability of online information has increased your trust in authorities	45.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	78.9%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN | CITY | MEAN | GROUP MAX

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	35.8
Public transport is satisfactory	38.7

Activities
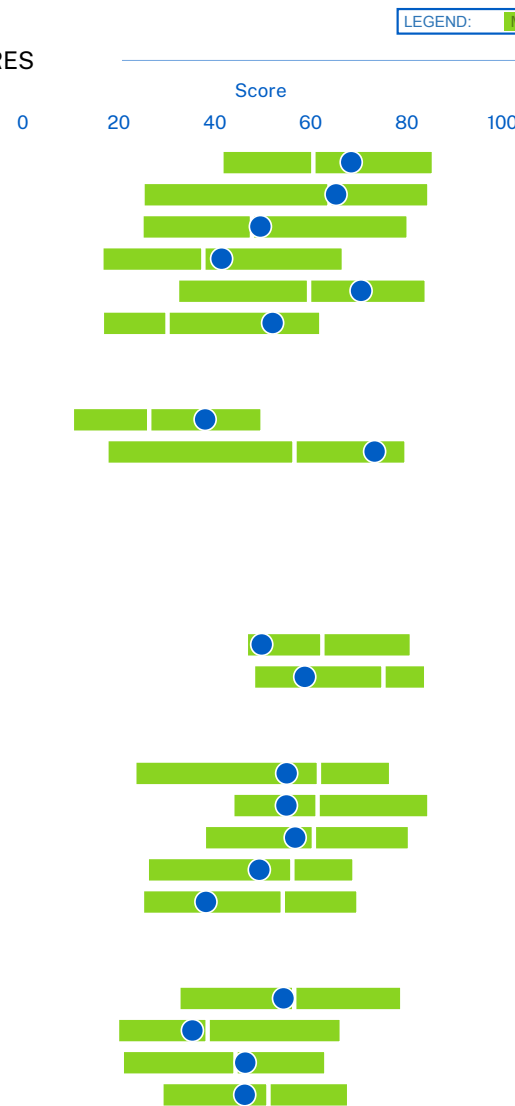
	Score
Green spaces are satisfactory	74.4
Cultural activities (shows, bars, and museums) are satisfactory	77.3

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

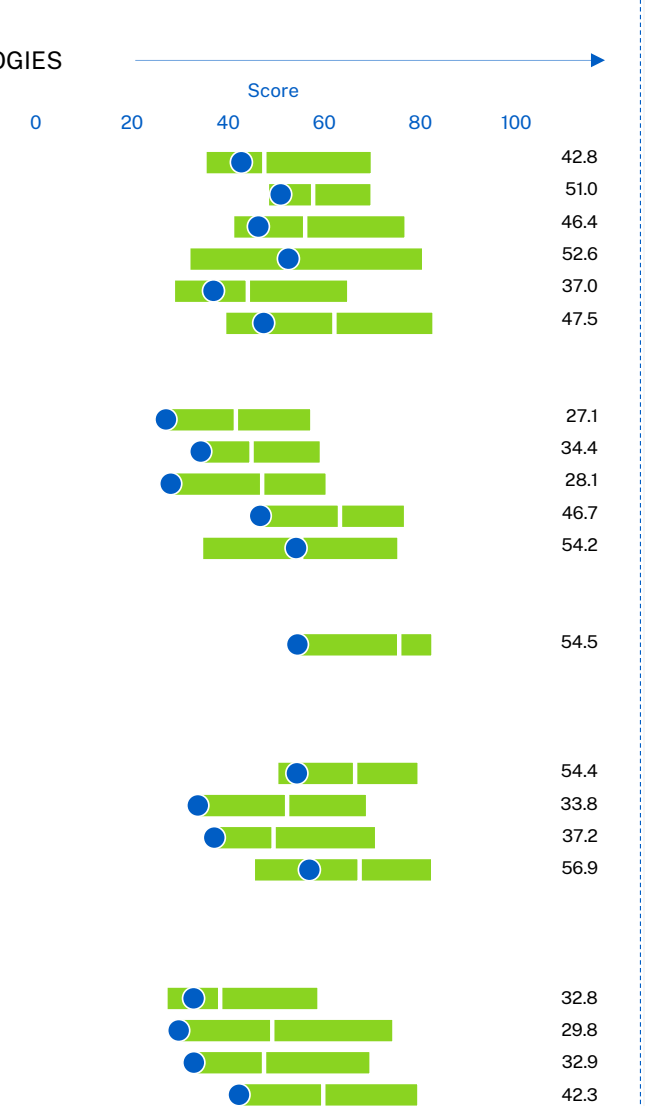|	Score
Car-sharing Apps have reduced congestion	41.2
Apps that direct you to an available parking space have reduced journey time	32.6
Bicycle hiring has reduced congestion	36.3
Online scheduling and ticket sales has made public transport easier to use	49.5
The city provides information on traffic congestion through mobile phones	46.0

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	70.2

Opportunities (Work & School)

	Score
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

	Score
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

BACKGROUND INFORMATION

City

Population	2,150,000
(UN Data)	
HDI	0.949
(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

% of respondents who chose the Priority Area

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	%
affordable housing	65.4%
security	61.1%
air pollution	58.7%
road congestion	44.0%
public transport	32.3%
health services	29.9%
unemployment	27.6%
recycling	24.2%
basic amenities (water, waste)	24.1%
Green spaces	21.2%
fulfilling employment	18.4%
school education	17.1%
corruption / transparency	15.0%
social mobility / inclusiveness	11.0%
citizen engagement	7.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	51.1%
You are comfortable with face recognition technologies to lower crime	56.8%
You feel the availability of online information has increased your trust in authorities	51.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	64.2%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	44.2
Recycling services are satisfactory	51.4
Public safety is not a problem	35.0
Air pollution is not a problem	17.1
Medical services provision is satisfactory	53.1
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	23.2

Mobility
	Score
Traffic congestion is not a problem	22.2
Public transport is satisfactory	48.5

Activities
	Score
Green spaces are satisfactory	61.5
Cultural activities (shows, bars, and museums) are satisfactory	78.3

Opportunities (Work & School)
	Score
Employment finding services are readily available	57.1
Most children have access to a good school	57.3
Lifelong learning opportunities are provided by local institutions	55.5
Businesses are creating new jobs	54.0
Minorities feel welcome	41.9

Governance
	Score
Information on local government decisions are easily accessible	53.6
Corruption of city officials is not an issue of concern	37.9
Residents contribute to decision making of local government	43.0
Residents provide feedback on local government projects	49.1

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	44.1
A website or App allows residents to easily give away unwanted items	61.5
Free public wifi has improved access to city services	59.2
CCTV cameras has made residents feel safer	52.8
A website or App allows residents to effectively monitor air pollution	53.8
Arranging medical appointments online has improved access	71.4

Mobility
	Score
Car-sharing Apps have reduced congestion	43.0
Apps that direct you to an available parking space have reduced journey time	46.3
Bicycle hiring has reduced congestion	59.3
Online scheduling and ticket sales has made public transport easier to use	64.2
The city provides information on traffic congestion through mobile phones	59.5

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	77.3

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	58.2
IT skills are taught well in schools	56.5
Online services provided by the city has made it easier to start a new business	50.7
The current internet speed and reliability meet connectivity needs	66.0

Governance
	Score
Online public access to city finances has reduced corruption	38.1
Online voting has increased participation	49.2
An online platform where residents can propose ideas has improved city life	50.8
Processing Identification Documents online has reduced waiting times	55.7

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

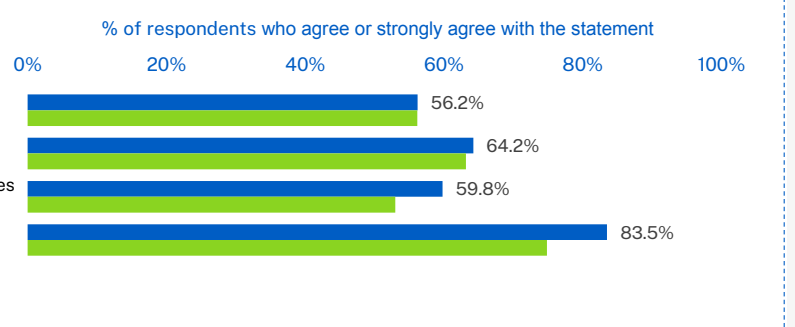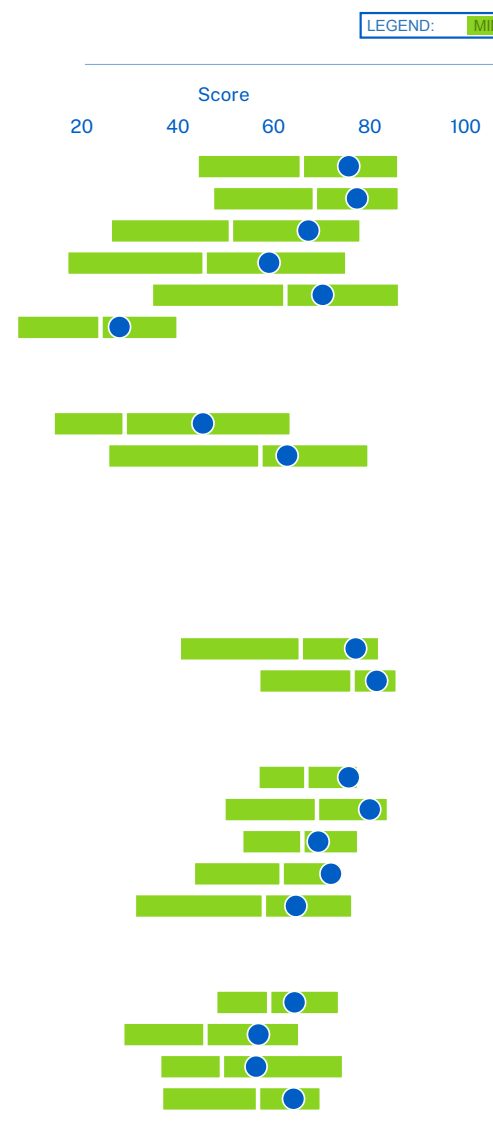|	
Population	1,600,000
(UN Data)	
HDI	0.923
(Global Data Lab)	

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

% of respondents who chose the Priority Area

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	%
affordable housing	71.0%
security	60.3%
school education	42.0%
unemployment	36.8%
road congestion	35.5%
health services	35.4%
corruption / transparency	33.9%
fulfilling employment	28.3%
basic amenities (water, waste)	24.8%
public transport	23.2%
air pollution	23.2%
Green spaces	19.3%
recycling	16.9%
citizen engagement	8.8%
social mobility / inclusiveness	7.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	48.8%
You are comfortable with face recognition technologies to lower crime	61.0%
You feel the availability of online information has increased your trust in authorities	47.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	69.0%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	45.7
Recycling services are satisfactory	56.1
Public safety is not a problem	26.1
Air pollution is not a problem	32.1
Medical services provision is satisfactory	59.9
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	23.6
Public transport is satisfactory	49.2

Activities

Green spaces are satisfactory	49.5
Cultural activities (shows, bars, and museums) are satisfactory	76.1

Opportunities (Work & School)

Employment finding services are readily available	57.4
Most children have access to a good school	43.9
Lifelong learning opportunities are provided by local institutions	51.8
Businesses are creating new jobs	54.8
Minorities feel welcome	59.1

Governance

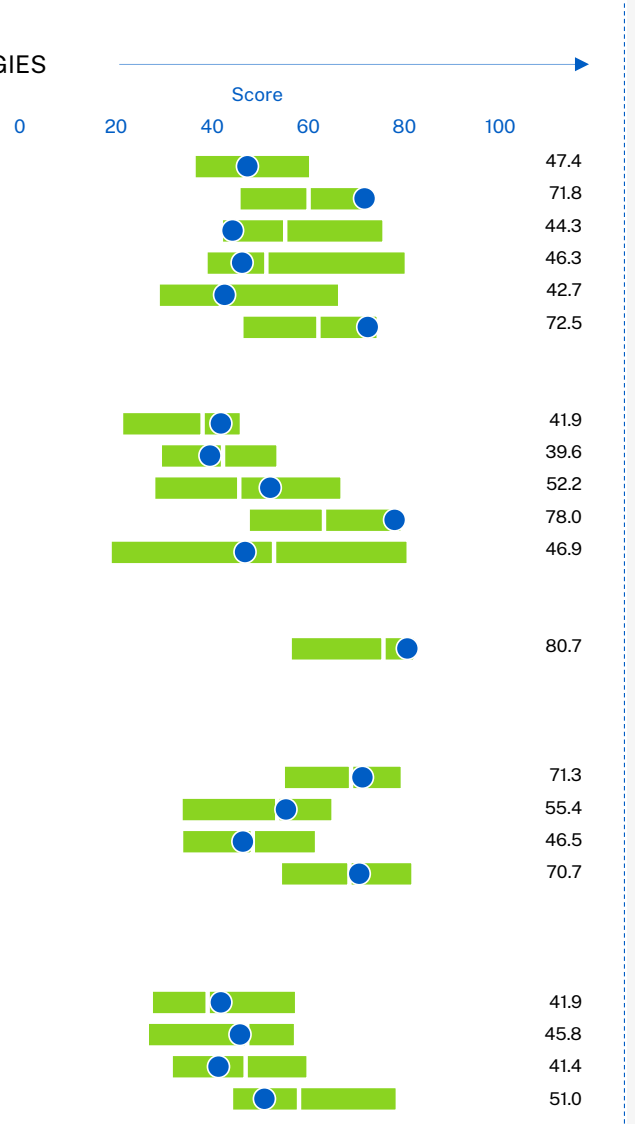|	
Information on local government decisions are easily accessible	54.9
Corruption of city officials is not an issue of concern	34.6
Residents contribute to decision making of local government	44.9
Residents provide feedback on local government projects	51.7

TECHNOLOGIES

Score

Health & Safety

Online reporting of city maintenance problems provides a speedy solution	38.1
A website or App allows residents to easily give away unwanted items	53.6
Free public wifi has improved access to city services	49.4
CCTV cameras has made residents feel safer	45.5
A website or App allows residents to effectively monitor air pollution	37.7
Arranging medical appointments online has improved access	60.1

Mobility

Car-sharing Apps have reduced congestion	42.3
Apps that direct you to an available parking space have reduced journey time	46.3
Bicycle hiring has reduced congestion	44.0
Online scheduling and ticket sales has made public transport easier to use	57.4
The city provides information on traffic congestion through mobile phones	54.1

Activities

Online purchasing of tickets to shows and museums has made it easier to attend	72.2

Opportunities (Work & School)

Online access to job listings has made it easier to find work	62.6
IT skills are taught well in schools	44.8
Online services provided by the city has made it easier to start a new business	46.2
The current internet speed and reliability meet connectivity needs	63.7

Governance

Online public access to city finances has reduced corruption	36.2
Online voting has increased participation	53.7
An online platform where residents can propose ideas has improved city life	44.8
Processing Identification Documents online has reduced waiting times	53.5

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

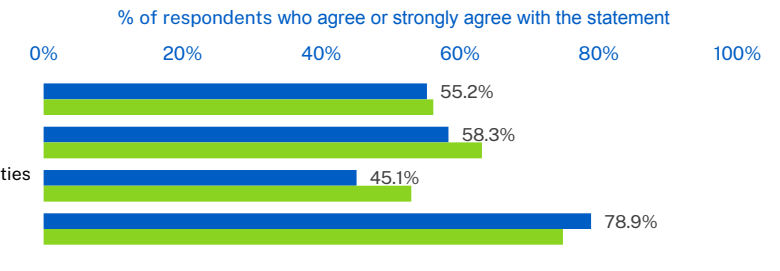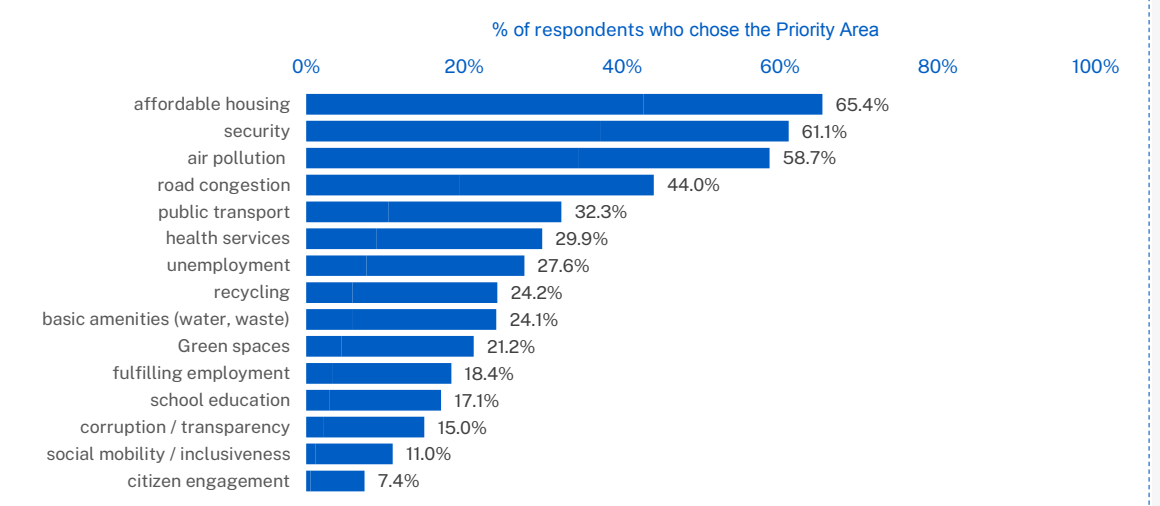|	
Population	1,610,000
(UN Data)	
HDI	0.908
(Global Data Lab)	

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.

% of respondents who chose the Priority Area

affordable housing	82.9%
road congestion	51.4%
air pollution	44.5%
school education	37.5%
security	36.6%
unemployment	34.7%
health services	31.2%
corruption / transparency	26.8%
basic amenities (water, waste)	25.6%
fulfilling employment	22.4%
public transport	21.0%
recycling	18.3%
citizen engagement	10.2%
Green spaces	8.3%
social mobility / inclusiveness	8.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	47.3%
You are comfortable with face recognition technologies to lower crime	58.5%
You feel the availability of online information has increased your trust in authorities	44.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	77.3%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	53.8
Recycling services are satisfactory	62.7
Public safety is not a problem	36.6
Air pollution is not a problem	31.3
Medical services provision is satisfactory	66.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	22.2

Mobility

Traffic congestion is not a problem	19.8
Public transport is satisfactory	46.0

Activities

Green spaces are satisfactory	52.1
Cultural activities (shows, bars, and museums) are satisfactory	71.9

Opportunities (Work & School)

Employment finding services are readily available	69.0
Most children have access to a good school	58.6
Lifelong learning opportunities are provided by local institutions	58.5
Businesses are creating new jobs	64.0
Minorities feel welcome	59.3

Governance

Information on local government decisions are easily accessible	58.6
Corruption of city officials is not an issue of concern	37.7
Residents contribute to decision making of local government	47.0
Residents provide feedback on local government projects	54.5

TECHNOLOGIES

Score

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	60.2
Free public wifi has improved access to city services	44.4
CCTV cameras has made residents feel safer	37.7
A website or App allows residents to effectively monitor air pollution	43.7
Arranging medical appointments online has improved access	67.6

Mobility

Car-sharing Apps have reduced congestion	39.7
Apps that direct you to an available parking space have reduced journey time	32.7
Bicycle hiring has reduced congestion	29.0
Online scheduling and ticket sales has made public transport easier to use	50.7
The city provides information on traffic congestion through mobile phones	55.8

Activities

Online purchasing of tickets to shows and museums has made it easier to attend	74.5

Opportunities (Work & School)

Online access to job listings has made it easier to find work	70.5
IT skills are taught well in schools	40.3
Online services provided by the city has made it easier to start a new business	40.5
The current internet speed and reliability meet connectivity needs	67.7

Governance

Online public access to city finances has reduced corruption	32.8
Online voting has increased participation	46.8
An online platform where residents can propose ideas has improved city life	37.4
Processing Identification Documents online has reduced waiting times	50.9

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

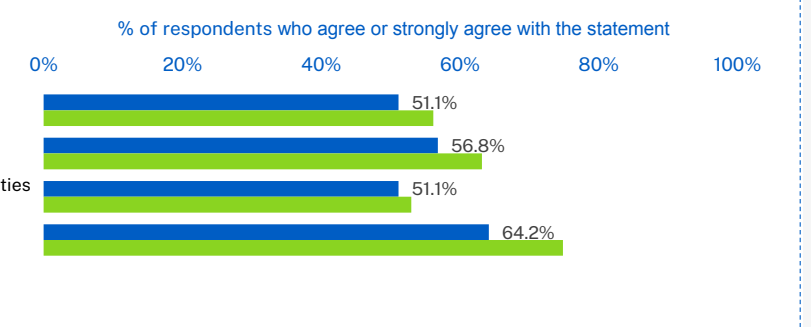| Czech Rep.	2019	2020	2021	2022	1 yr change
HDI	0.896	0.891	0.891	0.895	+0.004
Life expectancy at birth	79.2	78.6	77.7	78.1	+0.4
Expected years of schooling	16.1	16.1	16.3	16.3	+0.0
Mean years of schooling	12.9	12.9	12.9	12.9	+0.0
GNI per capita (PPP $)	38,512	36,696	39,061	39,945	+884

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.
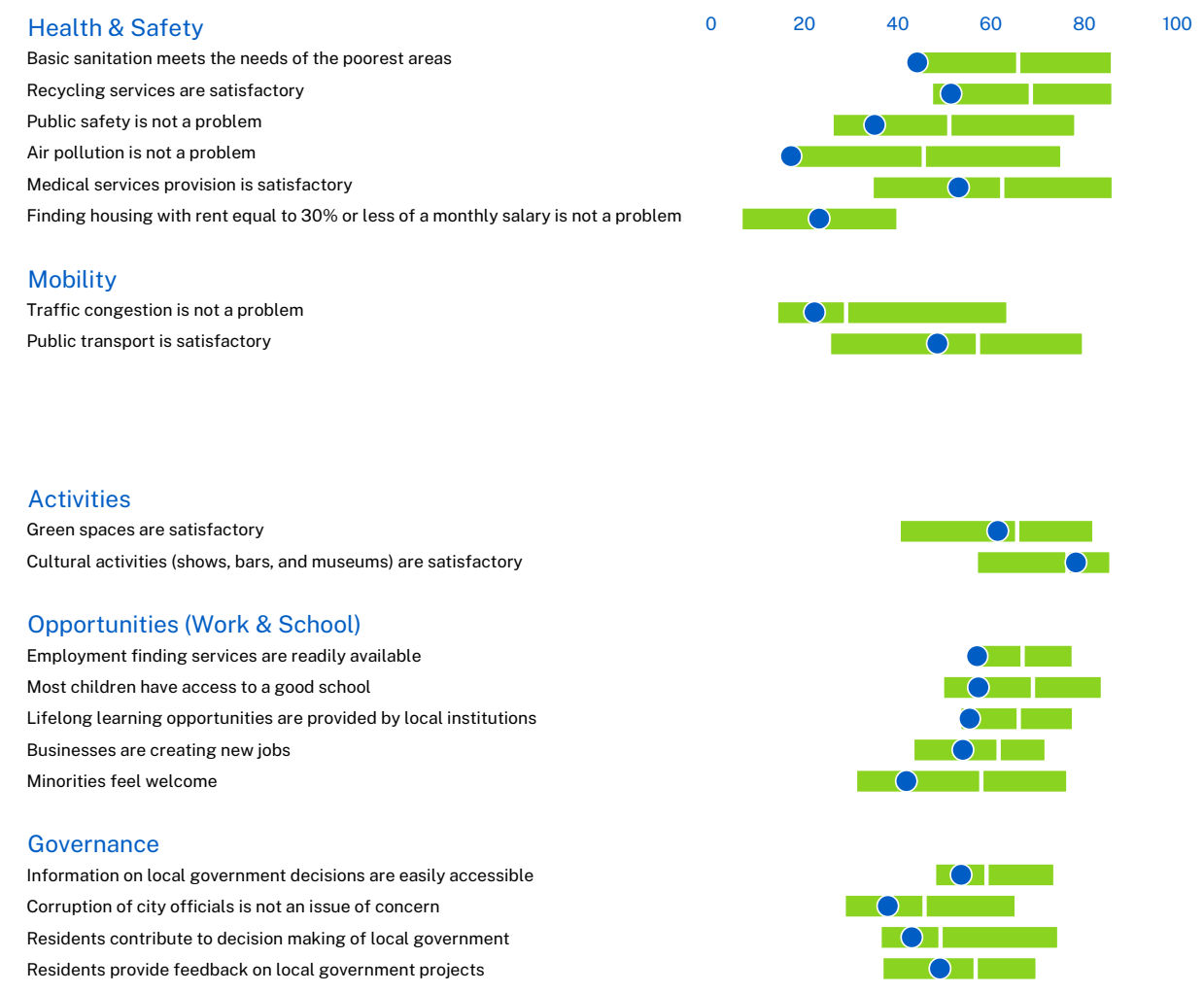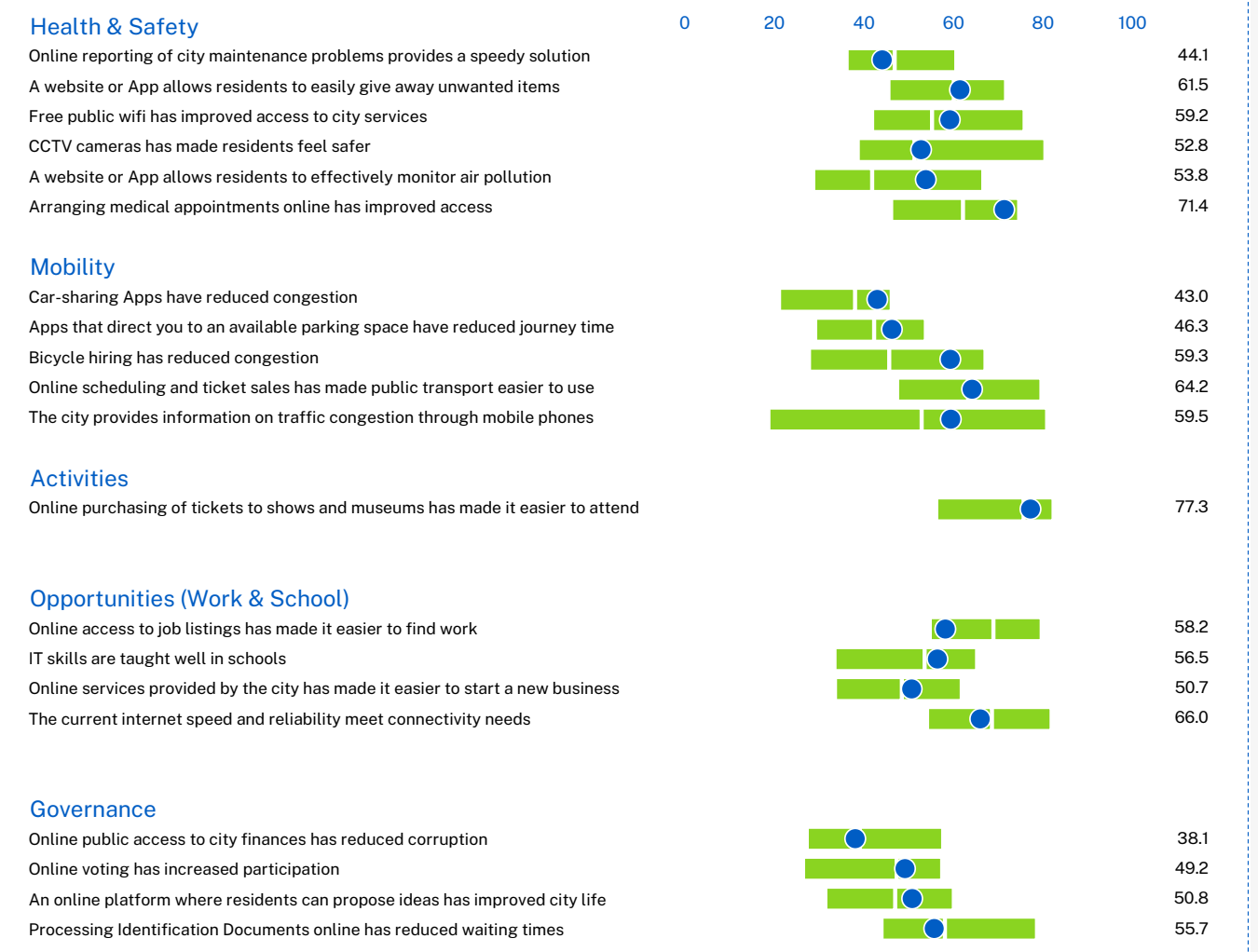
% of respondents who chose the Priority Area

Priority Area	%
affordable housing	76.9%
road congestion	66.3%
security	44.8%
air pollution	42.9%
corruption / transparency	38.6%
Green spaces	33.1%
unemployment	25.2%
recycling	23.8%
fulfilling employment	21.8%
public transport	18.5%
citizen engagement	17.1%
school education	15.8%
health services	15.7%
social mobility / inclusiveness	13.9%
basic amenities (water, waste)	12.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	57.4%
You are comfortable with face recognition technologies to lower crime	64.8%
You feel the availability of online information has increased your trust in authorities	57.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.6%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN | CITY | MEAN | GROUP MAX

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	62.1
Recycling services are satisfactory	63.1
Public safety is not a problem	54.2
Air pollution is not a problem	40.4
Medical services provision is satisfactory	71.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	27.6

Mobility

	Score
Traffic congestion is not a problem	24.8
Public transport is satisfactory	67.9

Activities

	Score
Green spaces are satisfactory	49.0
Cultural activities (shows, bars, and museums) are satisfactory	79.4

Opportunities (Work & School)

	Score
Employment finding services are readily available	71.8
Most children have access to a good school	70.2
Lifelong learning opportunities are provided by local institutions	66.9
Businesses are creating new jobs	65.7
Minorities feel welcome	57.1

Governance

	Score
Information on local government decisions are easily accessible	60.9
Corruption of city officials is not an issue of concern	38.2
Residents contribute to decision making of local government	52.3
Residents provide feedback on local government projects	59.4

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	51.5
A website or App allows residents to easily give away unwanted items	60.6
Free public wifi has improved access to city services	58.8
CCTV cameras has made residents feel safer	63.4
A website or App allows residents to effectively monitor air pollution	47.1
Arranging medical appointments online has improved access	62.3

Mobility

	Score
Car-sharing Apps have reduced congestion	38.1
Apps that direct you to an available parking space have reduced journey time	50.8
Bicycle hiring has reduced congestion	44.6
Online scheduling and ticket sales has made public transport easier to use	69.6
The city provides information on traffic congestion through mobile phones	49.0

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.4

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	71.9
IT skills are taught well in schools	52.5
Online services provided by the city has made it easier to start a new business	49.5
The current internet speed and reliability meet connectivity needs	67.0

Governance

	Score
Online public access to city finances has reduced corruption	38.2
Online voting has increased participation	50.5
An online platform where residents can propose ideas has improved city life	54.1
Processing Identification Documents online has reduced waiting times	61.9

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

GROUP

4

All ratings range
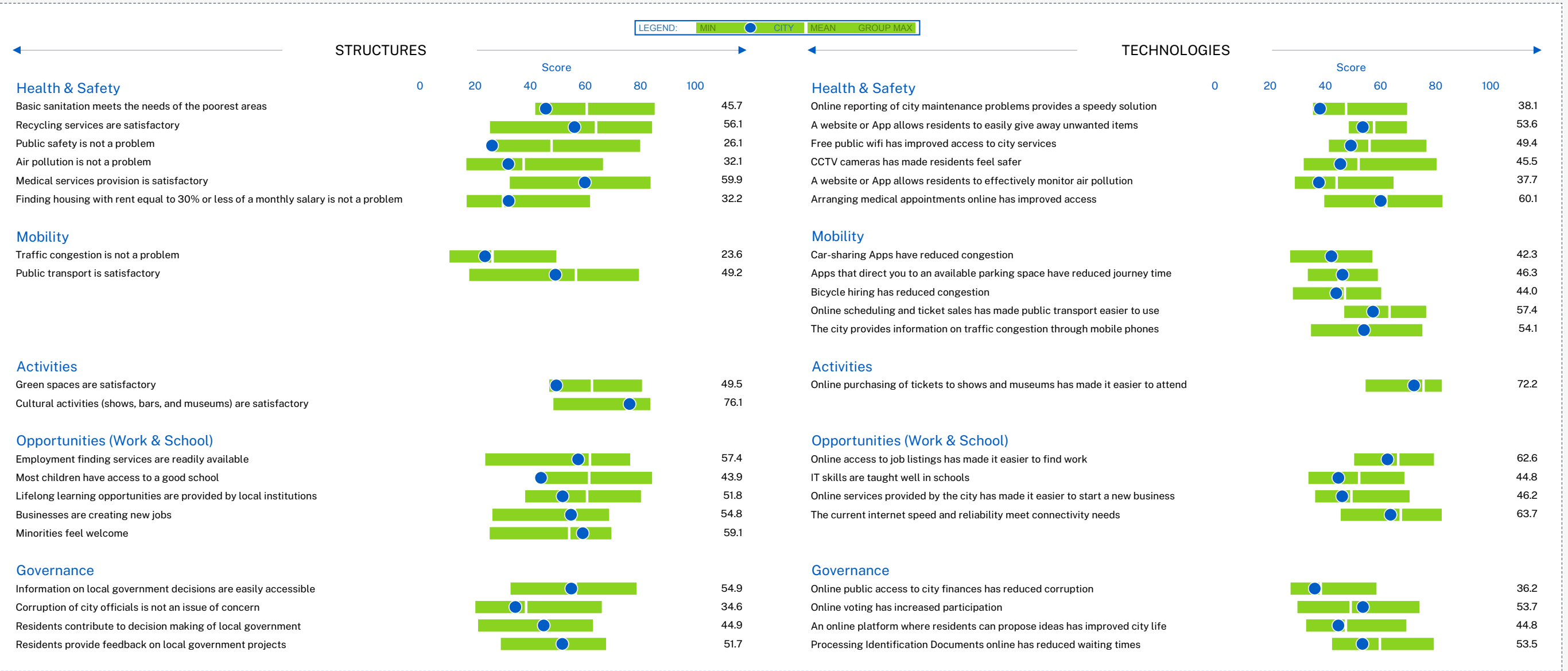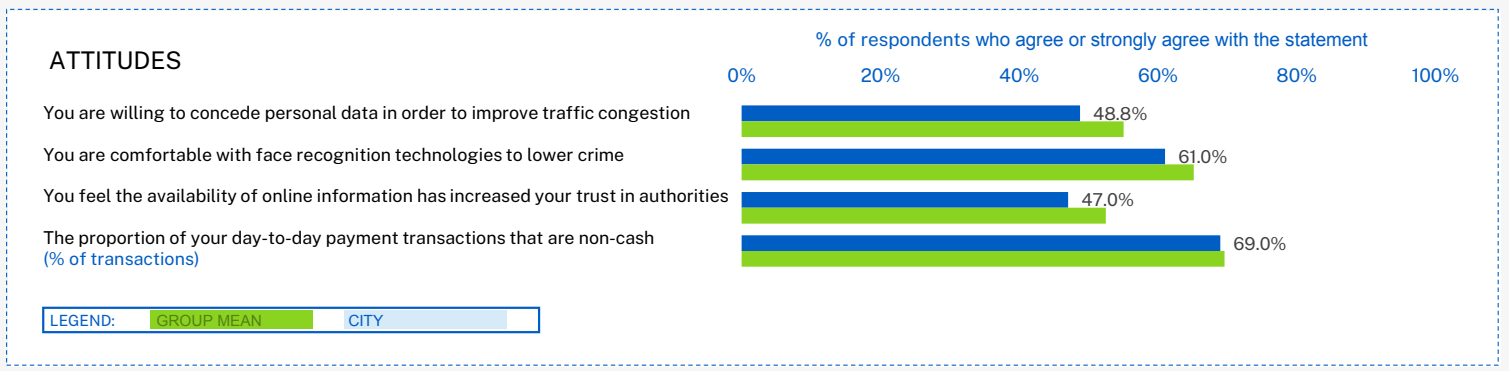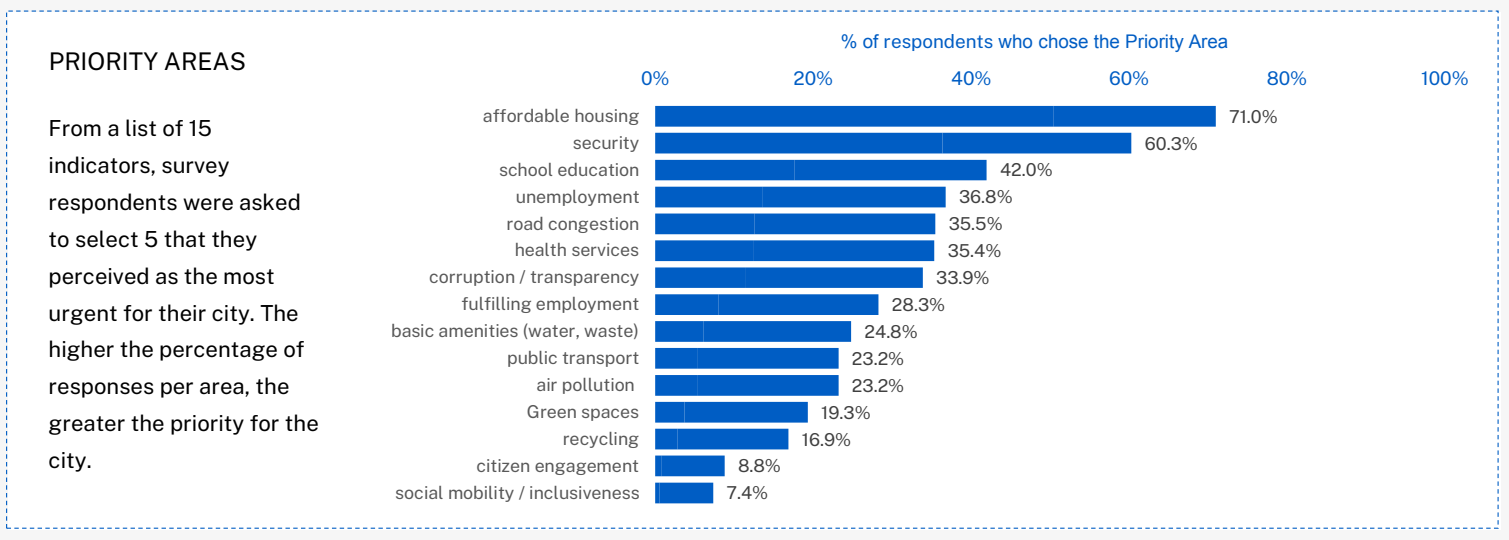from AAA to D

BACKGROUND INFORMATION

City

Population	190,000
(UN Data)	
HDI	0.702
(Global Data Lab)	

Country

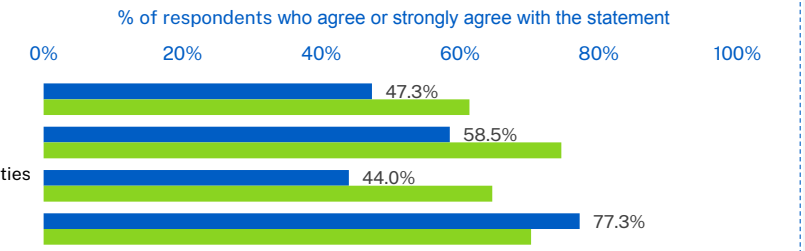| Morocco	2019	2020	2021	2022	1 yr change
HDI	0.684	0.683	0.688	0.698	+0.010
Life expectancy at birth	74.3	73.9	74.0	75.0	+0.9
Expected years of schooling	13.7	13.9	14.0	14.6	+0.6
Mean years of schooling	5.9	6.1	6.1	6.1	+0.0
GNI per capita (PPP $)	8,093	7,474	7,948	7,955	+7

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.

% of respondents who chose the Priority Area

Priority Area	%
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	%
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	85.4%
You feel the availability of online information has increased your trust in authorities	69.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	52.2%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	34.1
Public transport is satisfactory	55.2

Activities
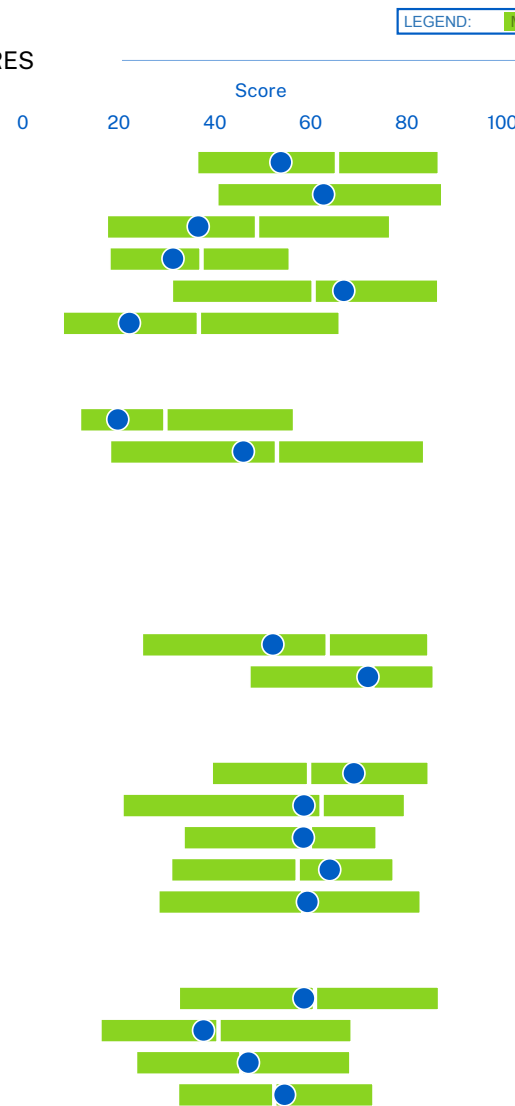
	Score
Green spaces are satisfactory	77.9
Cultural activities (shows, bars, and museums) are satisfactory	73.5

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

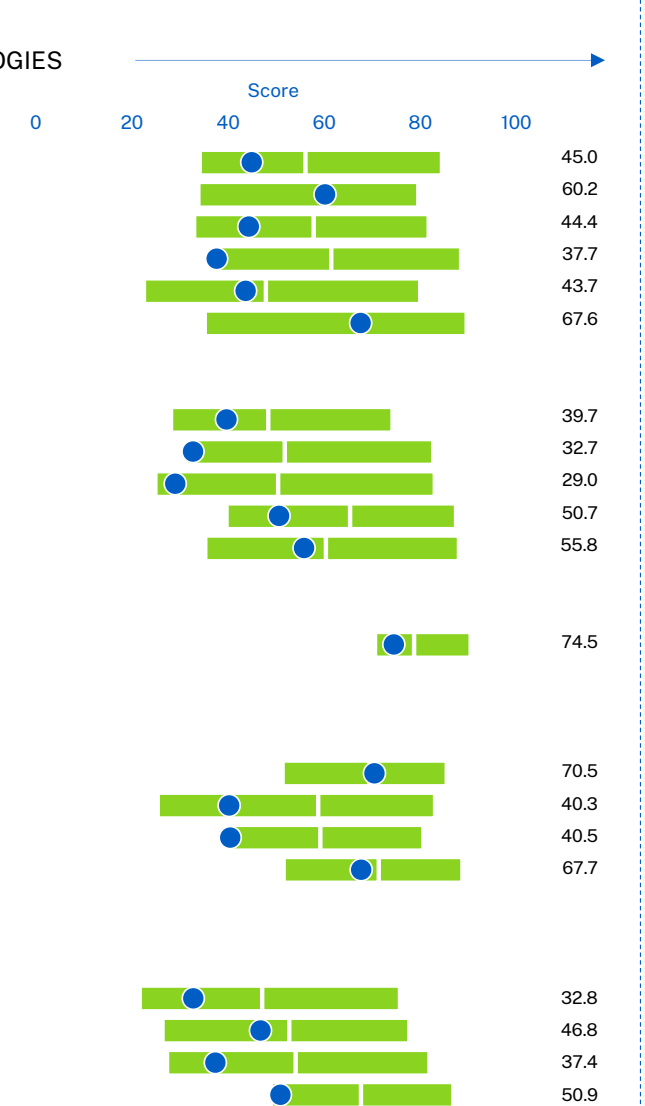|	Score
Car-sharing Apps have reduced congestion	48.6
Apps that direct you to an available parking space have reduced journey time	48.6
Bicycle hiring has reduced congestion	40.0
Online scheduling and ticket sales has made public transport easier to use	67.8
The city provides information on traffic congestion through mobile phones	43.1

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	70.7

Opportunities (Work & School)

	Score
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

	Score
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

BACKGROUND INFORMATION

City

Population	240,000	
(Eurostat)		
HDI	0.959	
(Global Data Lab)		

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

Country
Iceland

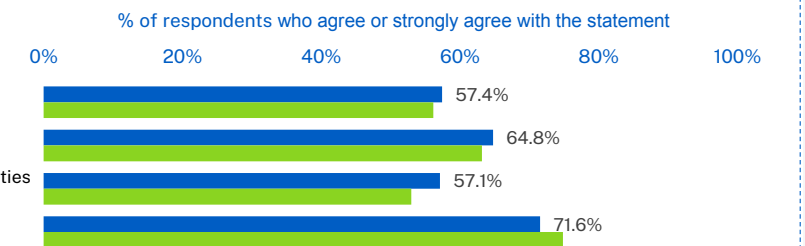|	2019	2020	2021	2022	1 yr change
HDI	0.958	0.955	0.957	0.959	+0.002
Life expectancy at birth	82.4	82.6	82.7	82.8	+0.1
Expected years of schooling	18.2	18.2	19.1	19.1	+0.0
Mean years of schooling	13.7	13.8	13.8	13.8	+0.0
GNI per capita (PPP $)	56,453	51,984	52,671	54,688	+2,017

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	84.1%
health services	71.1%
public transport	52.6%
school education	36.6%
road congestion	32.8%
security	26.7%
basic amenities (water, waste)	26.3%
corruption / transparency	25.4%
Green spaces	24.1%
recycling	23.7%
air pollution	20.3%
fulfilling employment	15.5%
citizen engagement	12.5%
social mobility / inclusiveness	12.5%
unemployment	12.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	68.5%
You are comfortable with face recognition technologies to lower crime	75.4%
You feel the availability of online information has increased your trust in authorities	60.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	89.2%

LEGEND: GROUP MEAN CITY

LEGEND: MIN CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	75.3
Recycling services are satisfactory	69.8
Public safety is not a problem	78.3
Air pollution is not a problem	63.5
Medical services provision is satisfactory	49.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	6.5

Mobility

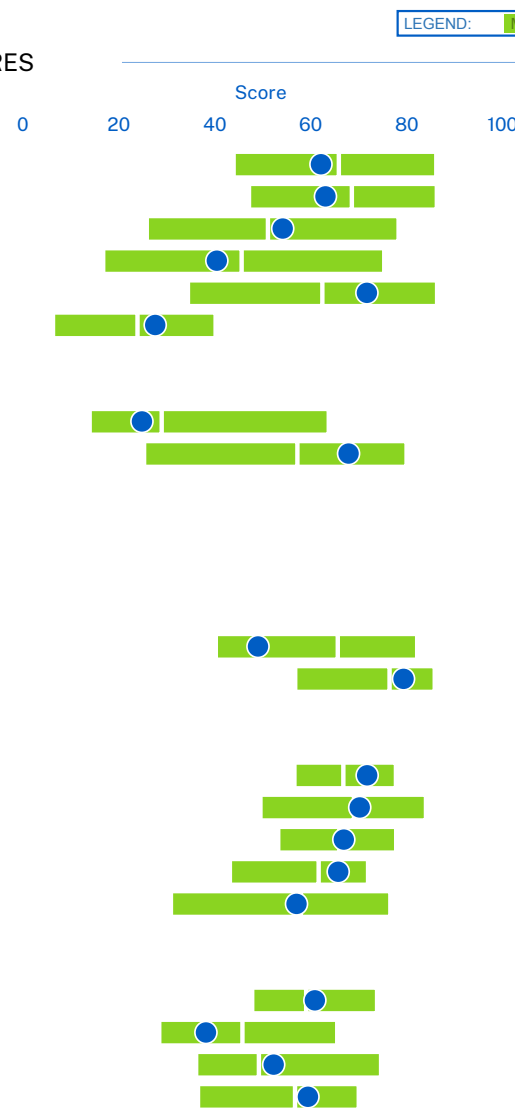|	Score
Traffic congestion is not a problem	32.1
Public transport is satisfactory	25.6

Activities

	Score
Green spaces are satisfactory	59.1
Cultural activities (shows, bars, and museums) are satisfactory	79.5

Opportunities (Work & School)

	Score
Employment finding services are readily available	75.4
Most children have access to a good school	83.6
Lifelong learning opportunities are provided by local institutions	77.8
Businesses are creating new jobs	66.7
Minorities feel welcome	57.2

Governance

	Score
Information on local government decisions are easily accessible	51.1
Corruption of city officials is not an issue of concern	35.6
Residents contribute to decision making of local government	48.9
Residents provide feedback on local government projects	54.3

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	38.8
A website or App allows residents to easily give away unwanted items	63.7
Free public wifi has improved access to city services	43.9
CCTV cameras has made residents feel safer	50.8
A website or App allows residents to effectively monitor air pollution	58.0
Arranging medical appointments online has improved access	62.8

Mobility

	Score
Car-sharing Apps have reduced congestion	21.3
Apps that direct you to an available parking space have reduced journey time	29.5
Bicycle hiring has reduced congestion	30.0
Online scheduling and ticket sales has made public transport easier to use	51.9
The city provides information on traffic congestion through mobile phones	19.0

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	82.4

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	75.5
IT skills are taught well in schools	48.4
Online services provided by the city has made it easier to start a new business	33.8
The current internet speed and reliability meet connectivity needs	73.0

Governance

	Score
Online public access to city finances has reduced corruption	28.9
Online voting has increased participation	41.1
An online platform where residents can propose ideas has improved city life	60.1
Processing Identification Documents online has reduced waiting times	61.4

Riga

BACKGROUND INFORMATION

City

Population	630,000
(Eurostat)	
HDI	0.929
(Global Data Lab)	

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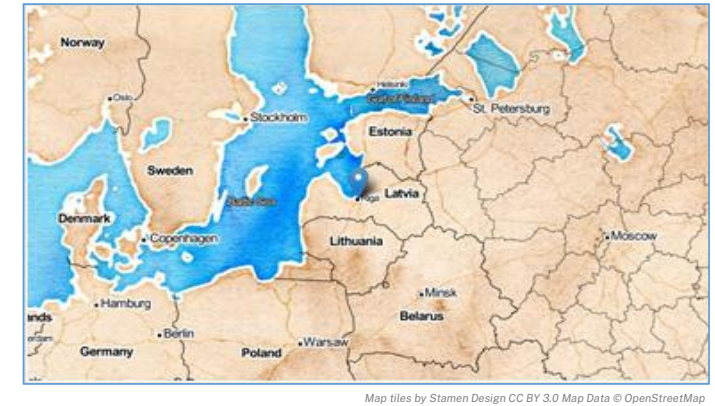
Country
Latvia

	2019	2020	2021	2022	1 yr change
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

% of respondents who chose the Priority Area

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	%
affordable housing	60.4%
road congestion	51.4%
corruption / transparency	46.9%
unemployment	43.8%
security	35.8%
school education	28.5%
basic amenities (water, waste)	26.7%
citizen engagement	26.4%
public transport	25.7%
fulfilling employment	24.0%
Green spaces	20.8%
air pollution	18.4%
recycling	16.0%
health services	14.2%
social mobility / inclusiveness	13.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	48.3%
You are comfortable with face recognition technologies to lower crime	68.1%
You feel the availability of online information has increased your trust in authorities	56.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.4%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	60.9
Recycling services are satisfactory	67.4
Public safety is not a problem	58.0
Air pollution is not a problem	52.3
Medical services provision is satisfactory	54.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	34.0

Mobility
	Score
Traffic congestion is not a problem	31.8
Public transport is satisfactory	59.9

Activities
	Score
Green spaces are satisfactory	66.7
Cultural activities (shows, bars, and museums) are satisfactory	74.0

Opportunities (Work & School)
	Score
Employment finding services are readily available	65.0
Most children have access to a good school	66.4
Lifelong learning opportunities are provided by local institutions	62.3
Businesses are creating new jobs	53.6
Minorities feel welcome	47.2

Governance
	Score
Information on local government decisions are easily accessible	54.5
Corruption of city officials is not an issue of concern	30.0
Residents contribute to decision making of local government	36.8
Residents provide feedback on local government projects	46.6

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	50.9
A website or App allows residents to easily give away unwanted items	59.6
Free public wifi has improved access to city services	59.3
CCTV cameras has made residents feel safer	56.8
A website or App allows residents to effectively monitor air pollution	43.1
Arranging medical appointments online has improved access	57.9

Mobility
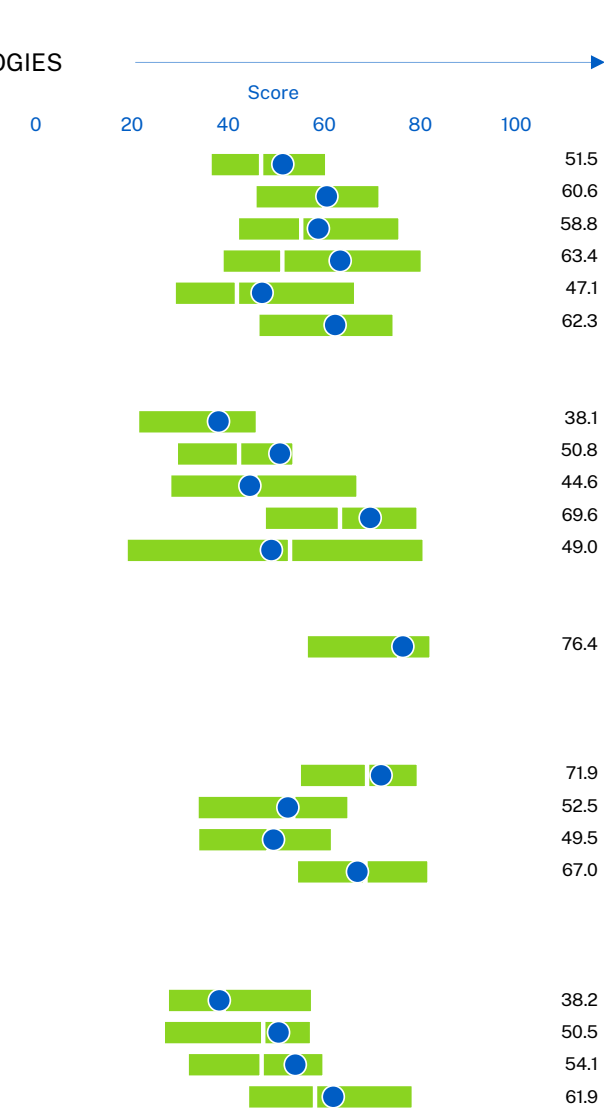|	Score
Car-sharing Apps have reduced congestion	43.8
Apps that direct you to an available parking space have reduced journey time	48.0
Bicycle hiring has reduced congestion	45.7
Online scheduling and ticket sales has made public transport easier to use	64.8
The city provides information on traffic congestion through mobile phones	50.5

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	71.1

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	74.5
IT skills are taught well in schools	50.5
Online services provided by the city has made it easier to start a new business	50.5
The current internet speed and reliability meet connectivity needs	69.3

Governance
	Score
Online public access to city finances has reduced corruption	32.8
Online voting has increased participation	42.2
An online platform where residents can propose ideas has improved city life	47.2
Processing Identification Documents online has reduced waiting times	56.0

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
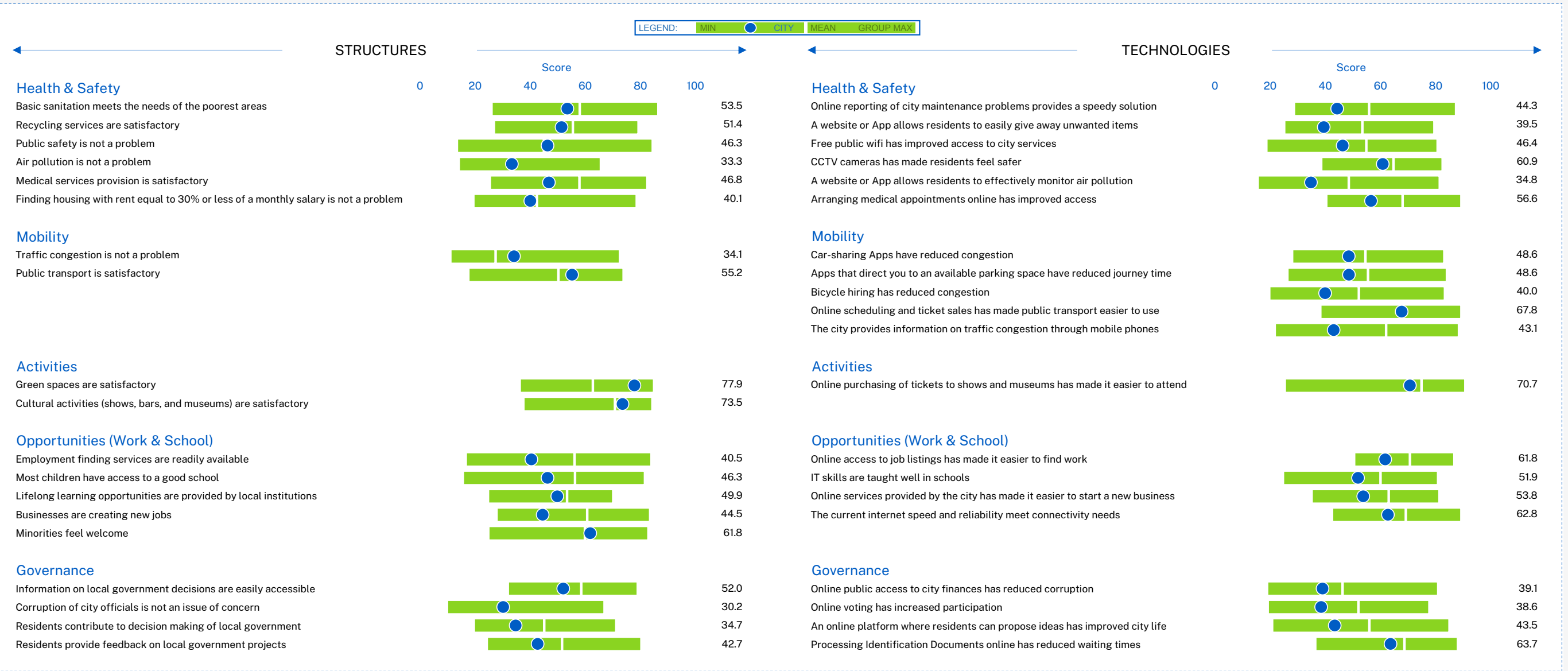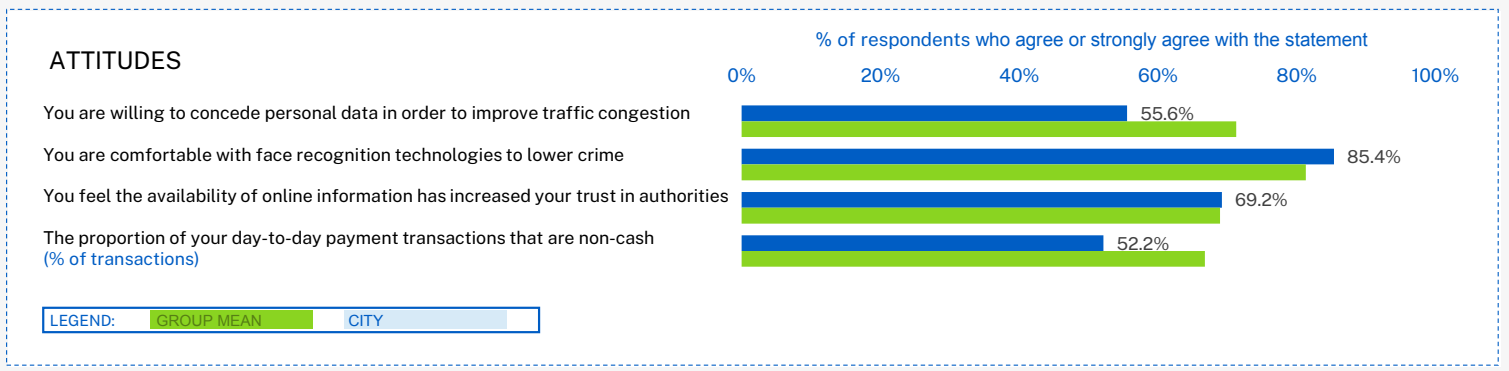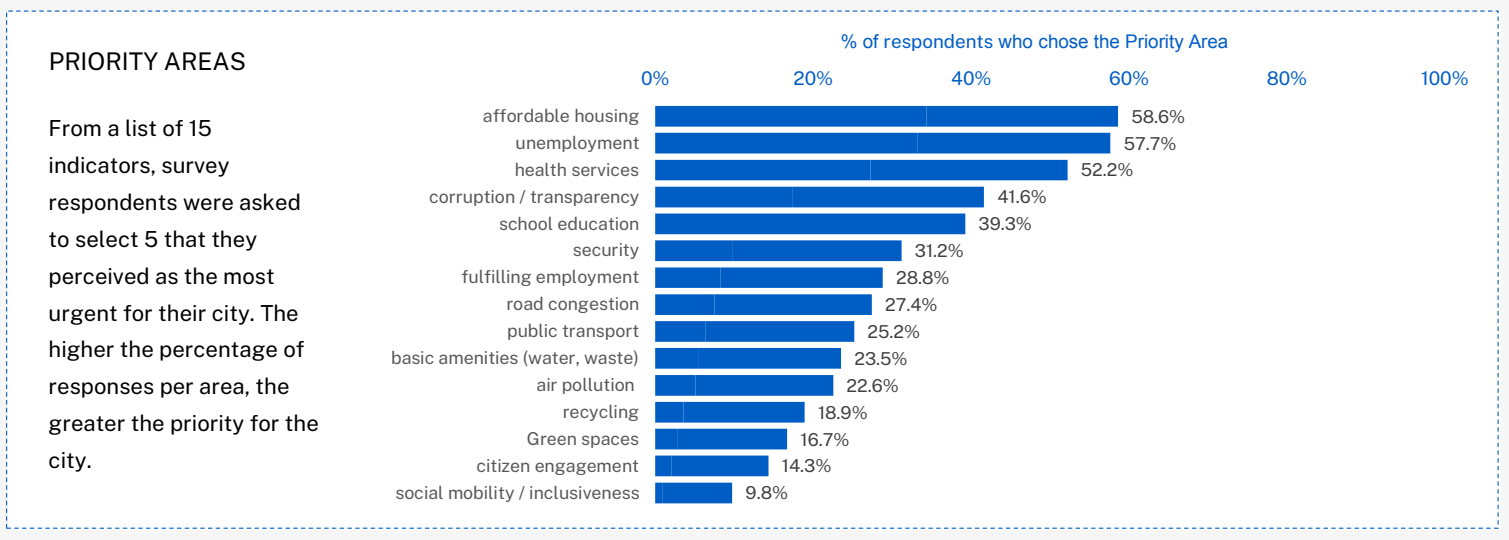from AAA to D

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

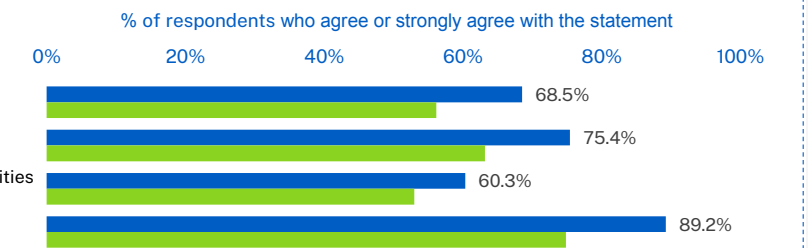|	2019	2020	2021	2022	1 yr change
HDI	0.764	0.758	0.756	0.760	+0.004
Life expectancy at birth	75.3	74.0	72.8	73.4	+0.7
Expected years of schooling	15.4	15.4	15.6	15.6	+0.0
Mean years of schooling	8.1	8.3	8.3	8.3	+0.0
GNI per capita (PPP $)	14,291	13,815	14,342	14,616	+274

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
security	81.5%
health services	69.9%
public transport	49.2%
unemployment	48.3%
school education	47.6%
corruption / transparency	37.5%
basic amenities (water, waste)	36.1%
fulfilling employment	27.4%
affordable housing	25.8%
road congestion	15.3%
social mobility / inclusiveness	14.6%
air pollution	13.6%
recycling	9.7%
citizen engagement	5.2%
Green spaces	4.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	67.7%
You are comfortable with face recognition technologies to lower crime	78.2%
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)	63.4%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	35.5
Recycling services are satisfactory	40.4
Public safety is not a problem	13.7
Air pollution is not a problem	26.0
Medical services provision is satisfactory	28.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	19.6

Mobility

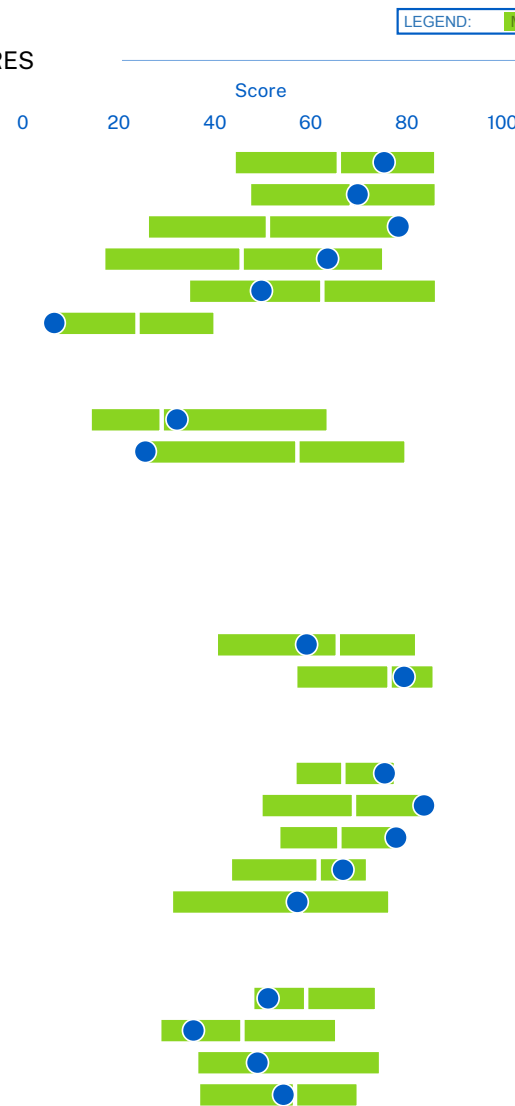|	Score
Traffic congestion is not a problem	14.1
Public transport is satisfactory	17.8

Activities

	Score
Green spaces are satisfactory	56.3
Cultural activities (shows, bars, and museums) are satisfactory	64.2

Opportunities (Work & School)

	Score
Employment finding services are readily available	45.2
Most children have access to a good school	22.4
Lifelong learning opportunities are provided by local institutions	35.9
Businesses are creating new jobs	39.2
Minorities feel welcome	25.0

Governance

	Score
Information on local government decisions are easily accessible	36.7
Corruption of city officials is not an issue of concern	13.6
Residents contribute to decision making of local government	21.3
Residents provide feedback on local government projects	27.6

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	30.9
A website or App allows residents to easily give away unwanted items	40.9
Free public wifi has improved access to city services	32.3
CCTV cameras has made residents feel safer	39.2
A website or App allows residents to effectively monitor air pollution	25.8
Arranging medical appointments online has improved access	40.6

Mobility

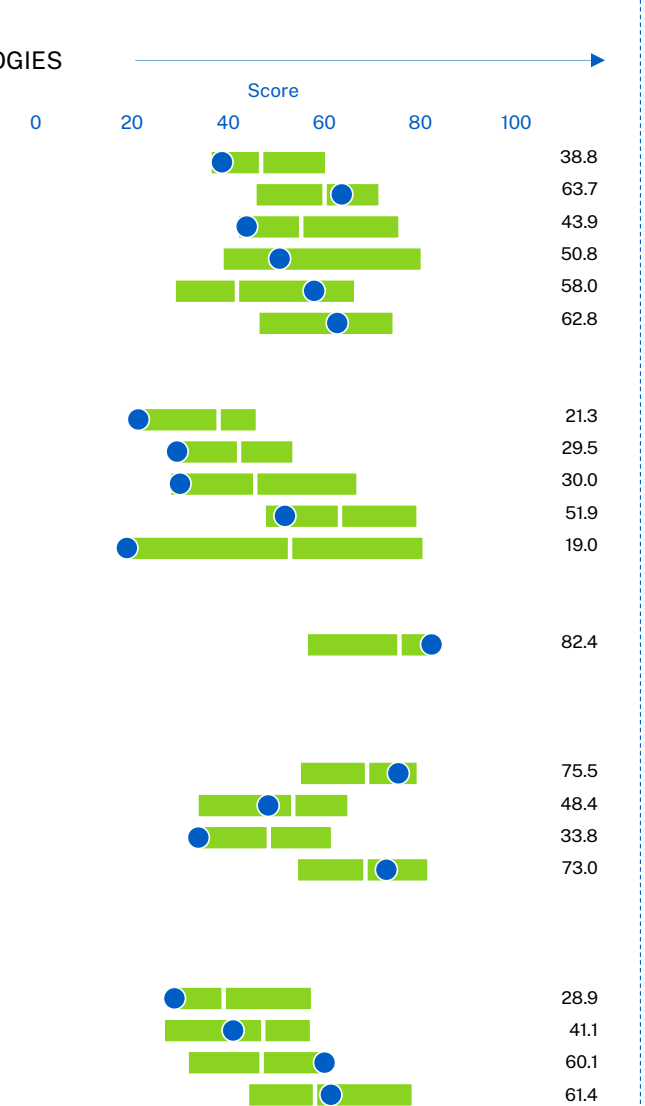|	Score
Car-sharing Apps have reduced congestion	42.7
Apps that direct you to an available parking space have reduced journey time	42.5
Bicycle hiring has reduced congestion	45.1
Online scheduling and ticket sales has made public transport easier to use	54.2
The city provides information on traffic congestion through mobile phones	54.2

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.5

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	56.2
IT skills are taught well in schools	25.0
Online services provided by the city has made it easier to start a new business	46.2
The current internet speed and reliability meet connectivity needs	55.2

Governance

	Score
Online public access to city finances has reduced corruption	22.9
Online voting has increased participation	38.6
An online platform where residents can propose ideas has improved city life	35.5
Processing Identification Documents online has reduced waiting times	57.4

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

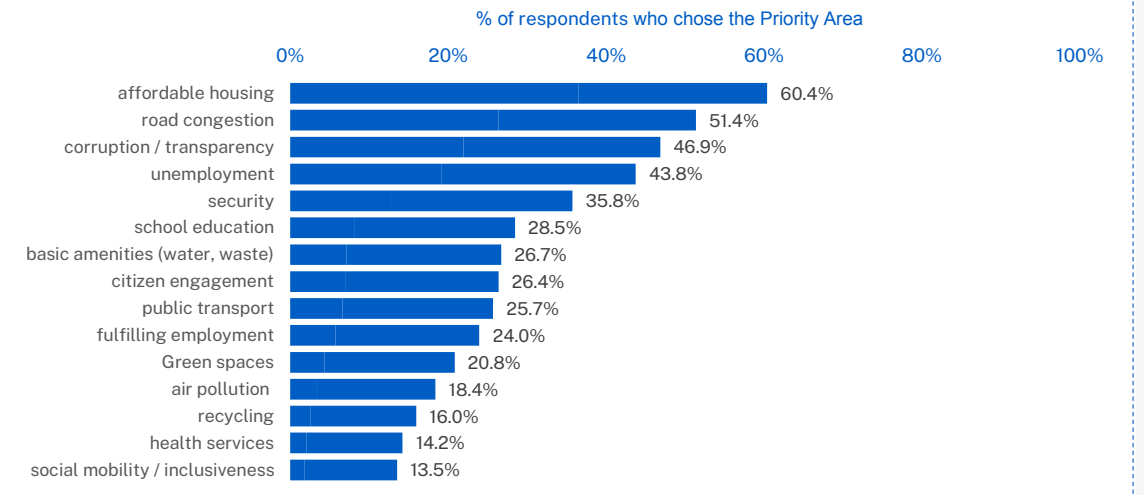All ratings range
from AAA to D

BACKGROUND INFORMATION

City

Population: 7,230,000
(UN World Urbanization Prospects)

HDI: 0.900
(Global Data Lab)

Country
Saudi Arabia

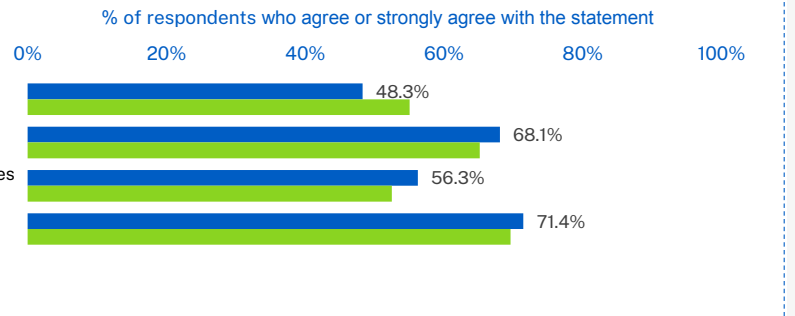|	2019	2020	2021	2022	1 yr change
HDI	0.862	0.861	0.867	0.875	+0.008
Life expectancy at birth	77.3	76.2	76.9	77.9	+1.0
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	10.9	11.3	11.3	11.3	+0.0
GNI per capita (PPP $)	47,529	45,563	47,441	50,620	+3,179

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.
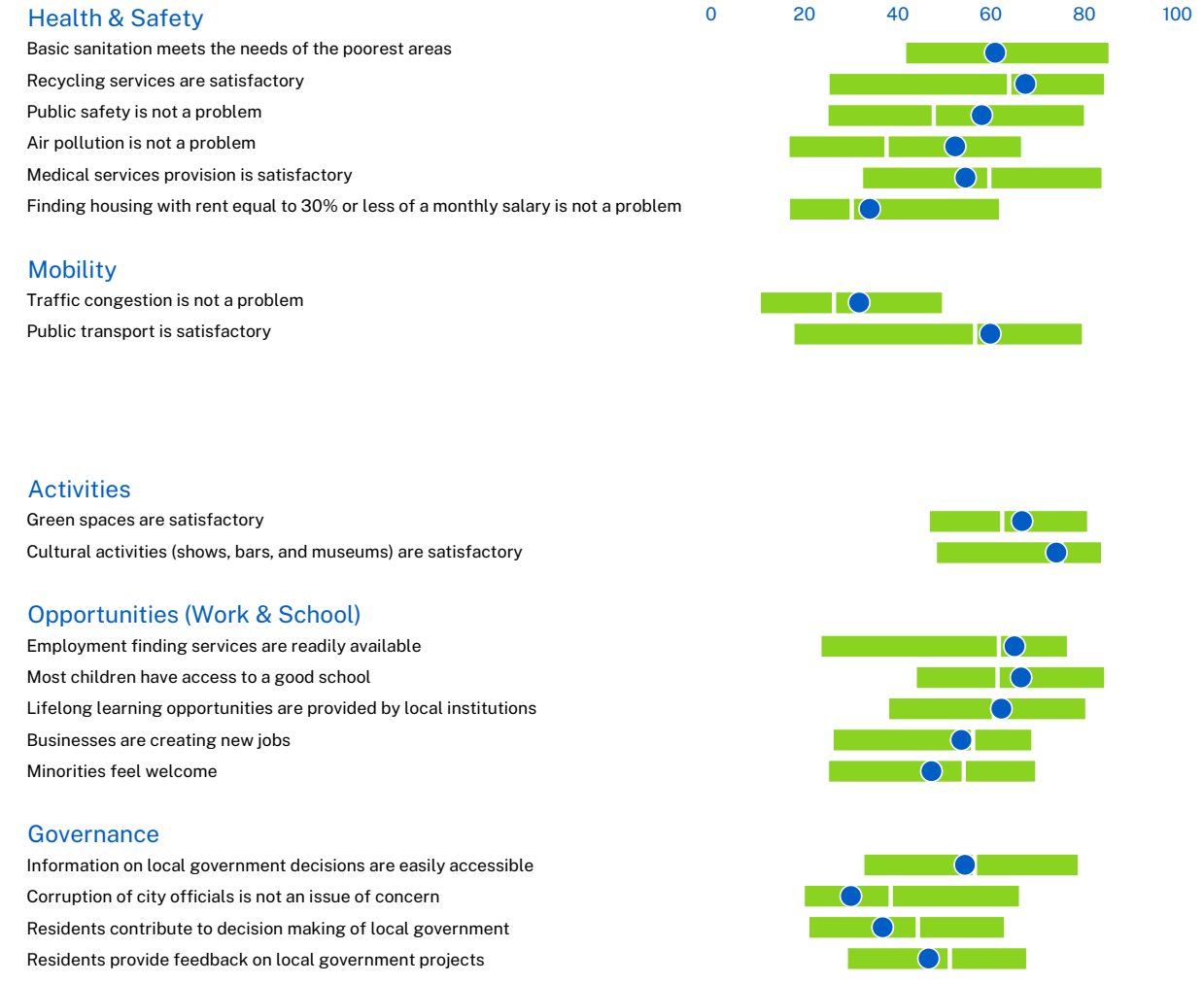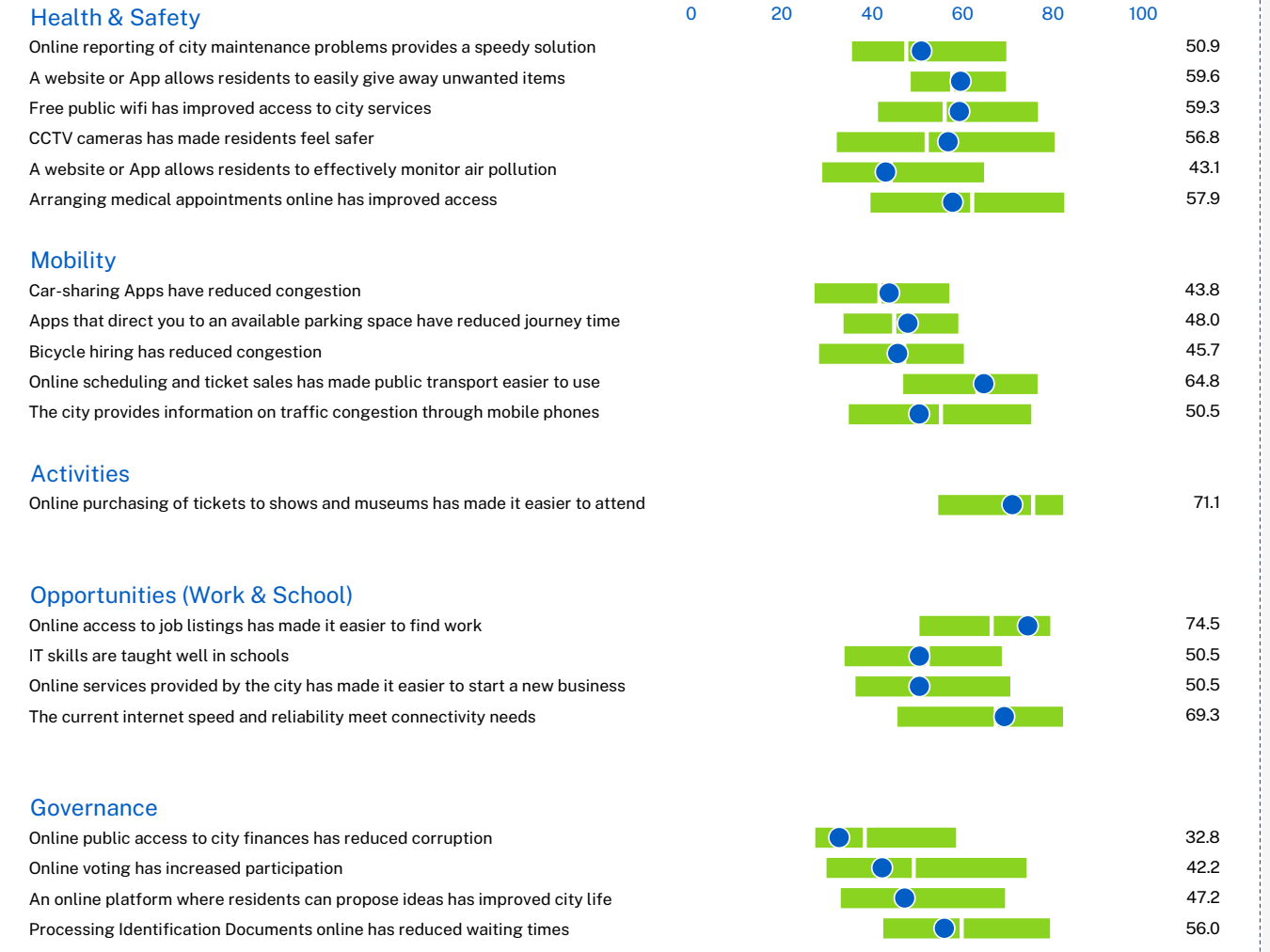
% of respondents who chose the Priority Area

Priority Area	%
affordable housing	65.4%
road congestion	62.8%
unemployment	34.9%
air pollution	33.1%
basic amenities (water, waste)	31.6%
public transport	30.9%
Green spaces	29.8%
security	26.3%
recycling	26.1%
health services	25.4%
fulfilling employment	24.7%
corruption / transparency	19.5%
school education	14.8%
social mobility / inclusiveness	13.7%
citizen engagement	7.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	CITY
You are willing to concede personal data in order to improve traffic congestion	59.1%
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	85.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	70.7%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN | CITY | MEAN | GROUP MAX

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	83.8
Recycling services are satisfactory	70.5
Public safety is not a problem	49.3
Air pollution is not a problem	34.0
Medical services provision is satisfactory	79.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	53.5

Mobility

	Score
Traffic congestion is not a problem	24.1
Public transport is satisfactory	61.1

Activities

	Score
Green spaces are satisfactory	68.9
Cultural activities (shows, bars, and museums) are satisfactory	81.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	60.9
Most children have access to a good school	77.8
Lifelong learning opportunities are provided by local institutions	72.0
Businesses are creating new jobs	67.6
Minorities feel welcome	68.3

Governance

	Score
Information on local government decisions are easily accessible	81.4
Corruption of city officials is not an issue of concern	52.4
Residents contribute to decision making of local government	56.2
Residents provide feedback on local government projects	59.9

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	78.8
A website or App allows residents to easily give away unwanted items	69.7
Free public wifi has improved access to city services	62.8
CCTV cameras has made residents feel safer	79.8
A website or App allows residents to effectively monitor air pollution	59.0
Arranging medical appointments online has improved access	86.5

Mobility

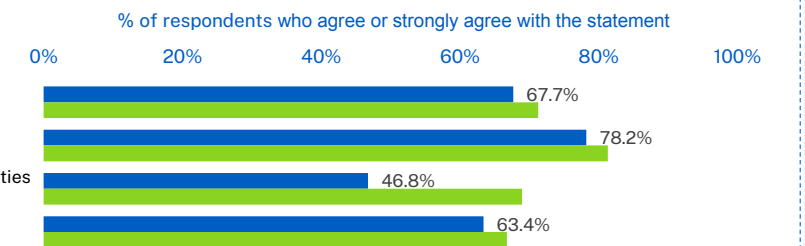|	Score
Car-sharing Apps have reduced congestion	63.0
Apps that direct you to an available parking space have reduced journey time	66.9
Bicycle hiring has reduced congestion	54.5
Online scheduling and ticket sales has made public transport easier to use	73.6
The city provides information on traffic congestion through mobile phones	70.9

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	84.6

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	76.1
IT skills are taught well in schools	72.7
Online services provided by the city has made it easier to start a new business	73.8
The current internet speed and reliability meet connectivity needs	80.3

Governance

	Score
Online public access to city finances has reduced corruption	70.4
Online voting has increased participation	72.1
An online platform where residents can propose ideas has improved city life	73.8
Processing Identification Documents online has reduced waiting times	86.1

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 (Eurostat)	2,810,000
HDI (Global Data Lab)	0.917

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.

% of respondents who chose the Priority Area

Area	%
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	%
You are willing to concede personal data in order to improve traffic congestion	58.0%
You are comfortable with face recognition technologies to lower crime	59.6%
You feel the availability of online information has increased your trust in authorities	40.6%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	55.9%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

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
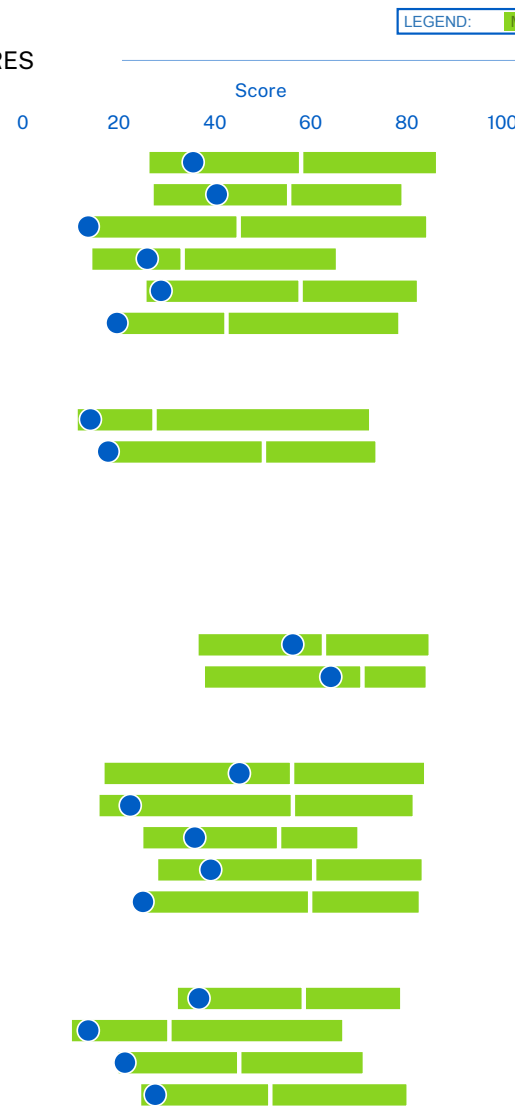|	
Traffic congestion is not a problem	11.8
Public transport is satisfactory	17.7

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

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
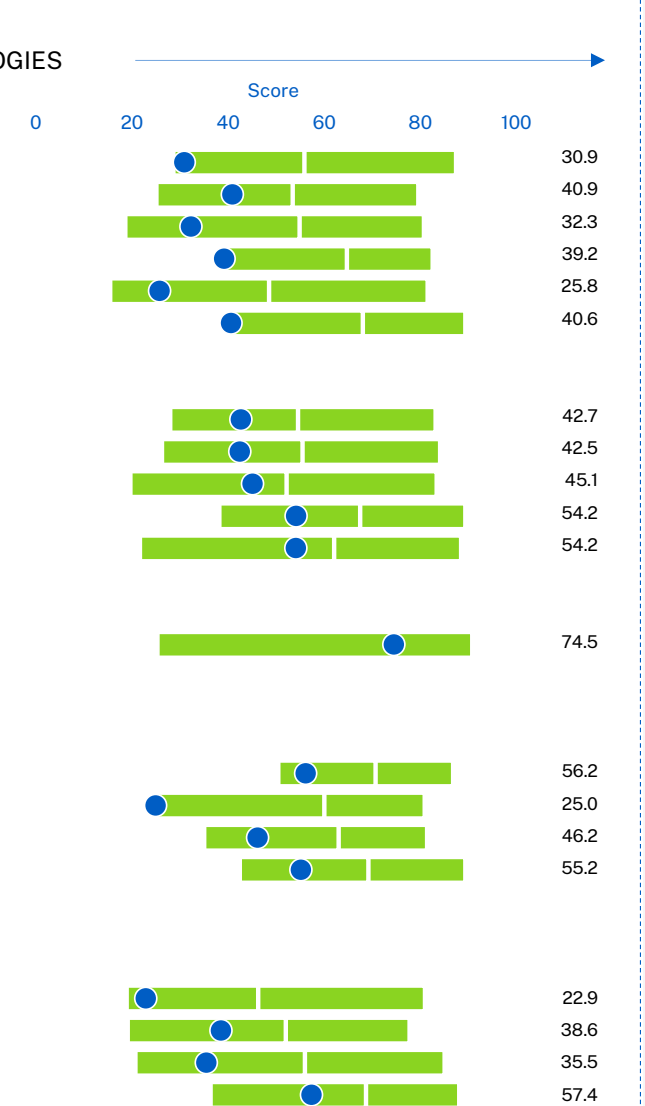|	
Car-sharing Apps have reduced congestion	32.4
Apps that direct you to an available parking space have reduced journey time	35.0
Bicycle hiring has reduced congestion	35.1
Online scheduling and ticket sales has made public transport easier to use	57.1
The city provides information on traffic congestion 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

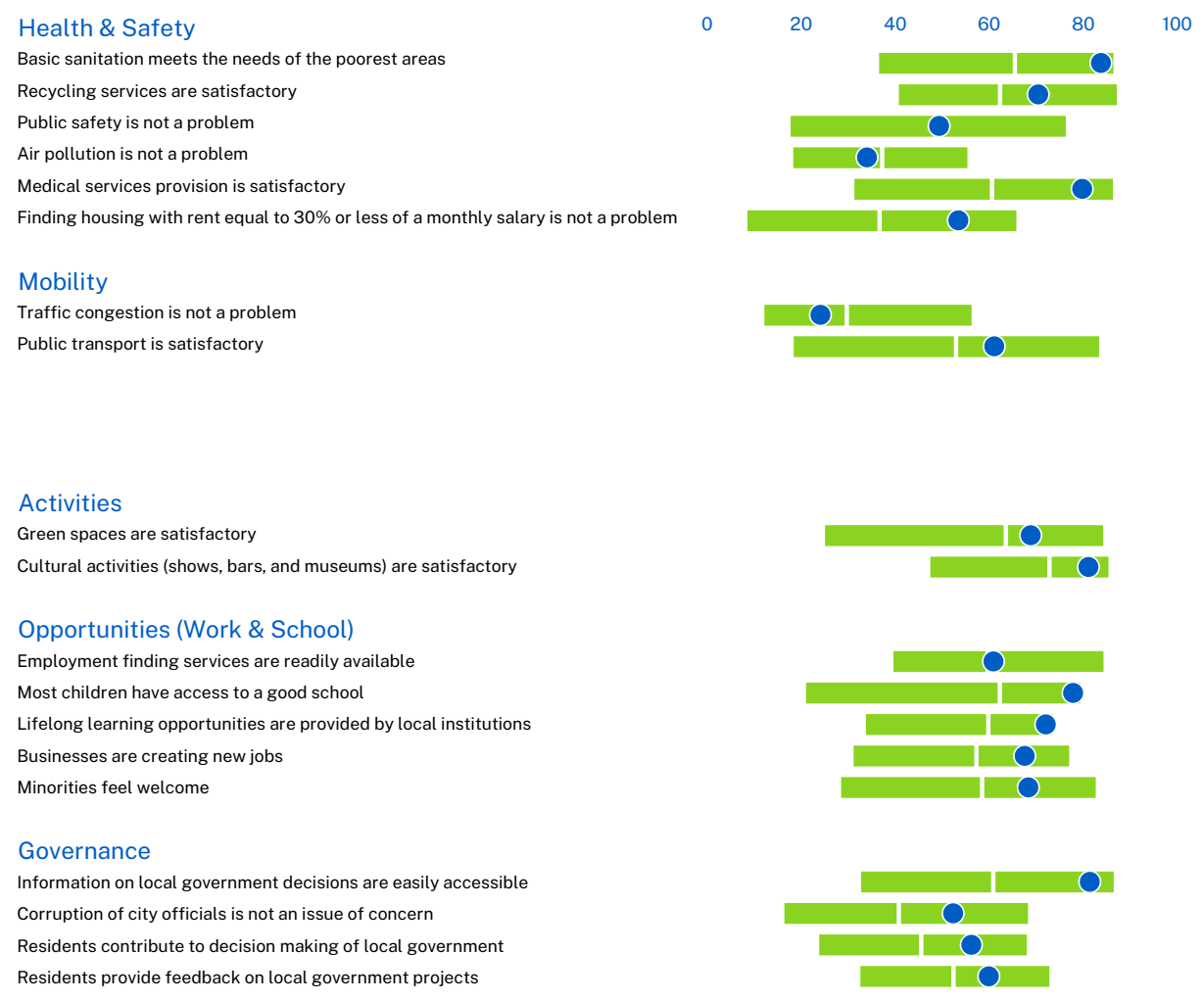|	2019	2020	2021	2022	1 yr change
HDI	0.941	0.938	0.941	0.946	+0.005
Life expectancy at birth	82.0	81.6	81.7	82.5	+0.8
Expected years of schooling	18.4	18.4	18.6	18.6	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP $)	55,628	52,500	55,355	57,278	+1,923

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.

% of respondents who chose the Priority Area

affordable housing	77.8%
security	68.3%
health services	38.2%
unemployment	34.3%
road congestion	32.9%
basic amenities (water, waste)	32.9%
Green spaces	29.7%
public transport	27.5%
school education	26.3%
air pollution	26.1%
recycling	17.0%
citizen engagement	15.0%
social mobility / inclusiveness	14.7%
fulfilling employment	11.9%
corruption / transparency	9.5%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	61.0%
You are comfortable with face recognition technologies to lower crime	62.7%
You feel the availability of online information has increased your trust in authorities	57.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.9%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	56.3
Recycling services are satisfactory	60.8
Public safety is not a problem	39.2
Air pollution is not a problem	33.1
Medical services provision is satisfactory	71.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	20.7

Mobility

Traffic congestion is not a problem	25.7
Public transport is satisfactory	64.2

Activities

Green spaces are satisfactory	52.8
Cultural activities (shows, bars, and museums) are satisfactory	73.7

Opportunities (Work & School)

Employment finding services are readily available	68.7
Most children have access to a good school	71.3
Lifelong learning opportunities are provided by local institutions	59.7
Businesses are creating new jobs	62.0
Minorities feel welcome	57.7

Governance

Information on local government decisions are easily accessible	58.1
Corruption of city officials is not an issue of concern	49.4
Residents contribute to decision making of local government	49.6
Residents provide feedback on local government projects	57.1

TECHNOLOGIES

Score

Health & Safety

Online reporting of city maintenance problems provides a speedy solution	49.1
A website or App allows residents to easily give away unwanted items	59.2
Free public wifi has improved access to city services	55.2
CCTV cameras has made residents feel safer	55.4
A website or App allows residents to effectively monitor air pollution	34.7
Arranging medical appointments online has improved access	62.6

Mobility

Car-sharing Apps have reduced congestion	32.6
Apps that direct you to an available parking space have reduced journey time	51.9
Bicycle hiring has reduced congestion	47.2
Online scheduling and ticket sales has made public transport easier to use	61.8
The city provides information on traffic congestion through mobile phones	51.3

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	75.0
IT skills are taught well in schools	52.0
Online services provided by the city has made it easier to start a new business	53.0
The current internet speed and reliability meet connectivity needs	69.8

Governance

Online public access to city finances has reduced corruption	39.6
Online voting has increased participation	48.2
An online platform where residents can propose ideas has improved city life	53.2
Processing Identification Documents online has reduced waiting times	60.6

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

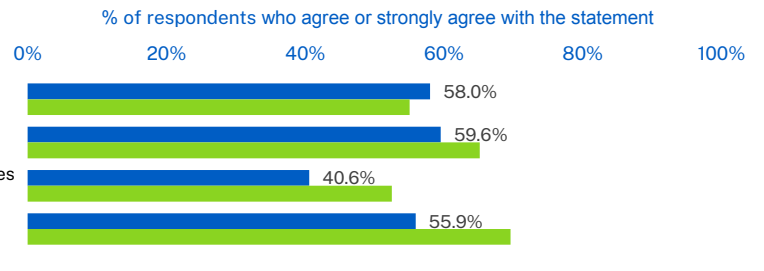### City

Population	870,000
(UN Data)	
HDI	0.931
(Global Data Lab)	

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

% of respondents who chose the Priority Area

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	%
affordable housing	84.5%
security	58.9%
road congestion	46.2%
health services	40.1%
unemployment	34.3%
school education	30.6%
corruption / transparency	25.9%
public transport	23.8%
air pollution	20.9%
fulfilling employment	19.1%
basic amenities (water, waste)	17.8%
social mobility / inclusiveness	14.7%
recycling	12.9%
citizen engagement	11.8%
Green spaces	11.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	49.2%
You are comfortable with face recognition technologies to lower crime	58.9%
You feel the availability of online information has increased your trust in authorities	47.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	72.5%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN — ● CITY — MEAN — GROUP MAX

STRUCTURES

Score (0 – 100)

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	42.8
Recycling services are satisfactory	62.8
Public safety is not a problem	25.6
Air pollution is not a problem	42.7
Medical services provision is satisfactory	60.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	19.0

Mobility

	Score
Traffic congestion is not a problem	20.5
Public transport is satisfactory	51.0

Activities

	Score
Green spaces are satisfactory	63.6
Cultural activities (shows, bars, and museums) are satisfactory	78.3

Opportunities (Work & School)

	Score
Employment finding services are readily available	58.4
Most children have access to a good school	52.0
Lifelong learning opportunities are provided by local institutions	60.0
Businesses are creating new jobs	53.5
Minorities feel welcome	59.7

Governance

	Score
Information on local government decisions are easily accessible	62.8
Corruption of city officials is not an issue of concern	35.2
Residents contribute to decision making of local government	54.0
Residents provide feedback on local government projects	63.3

TECHNOLOGIES

Score (0 – 100)

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	35.4
A website or App allows residents to easily give away unwanted items	54.2
Free public wifi has improved access to city services	50.4
CCTV cameras has made residents feel safer	40.8
A website or App allows residents to effectively monitor air pollution	47.0
Arranging medical appointments online has improved access	60.2

Mobility

	Score
Car-sharing Apps have reduced congestion	46.8
Apps that direct you to an available parking space have reduced journey time	46.7
Bicycle hiring has reduced congestion	46.9
Online scheduling and ticket sales has made public transport easier to use	58.3
The city provides information on traffic congestion through mobile phones	54.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	71.6

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	60.6
IT skills are taught well in schools	44.0
Online services provided by the city has made it easier to start a new business	42.1
The current internet speed and reliability meet connectivity needs	62.0

Governance

	Score
Online public access to city finances has reduced corruption	35.6
Online voting has increased participation	53.2
An online platform where residents can propose ideas has improved city life	45.9
Processing Identification Documents online has reduced waiting times	50.5

San José

BACKGROUND INFORMATION

City

Population 350,000
(UN Data)

HDI 0.826
(Global Data Lab)

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

Country
Costa Rica

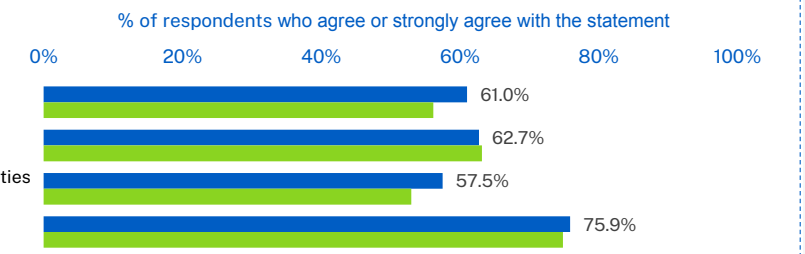|	2019	2020	2021	2022	1 yr change
HDI	0.811	0.811	0.804	0.806	+0.002
Life expectancy at birth	79.4	79.3	77.0	77.3	+0.3
Expected years of schooling	15.8	16.1	16.1	16.1	+0.0
Mean years of schooling	8.8	8.8	8.8	8.8	+0.0
GNI per capita (PPP $)	19,585	18,632	19,913	20,248	+335

PRIORITY AREAS

% of respondents who chose the Priority Area

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	%
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

% of respondents who agree or strongly agree with the statement

Statement	%
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

LEGEND: MIN CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

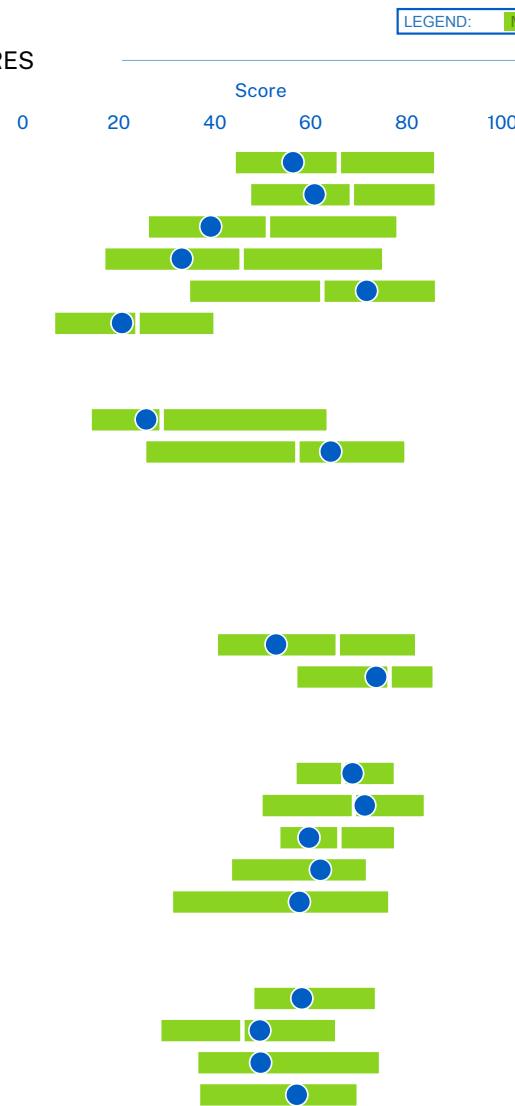|	Score
Traffic congestion is not a problem	18.2
Public transport is satisfactory	34.5

Activities

	Score
Green spaces are satisfactory	66.5
Cultural activities (shows, bars, and museums) are satisfactory	72.3

Opportunities (Work & School)

	Score
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

	Score
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

Score

Health & Safety

	Score
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

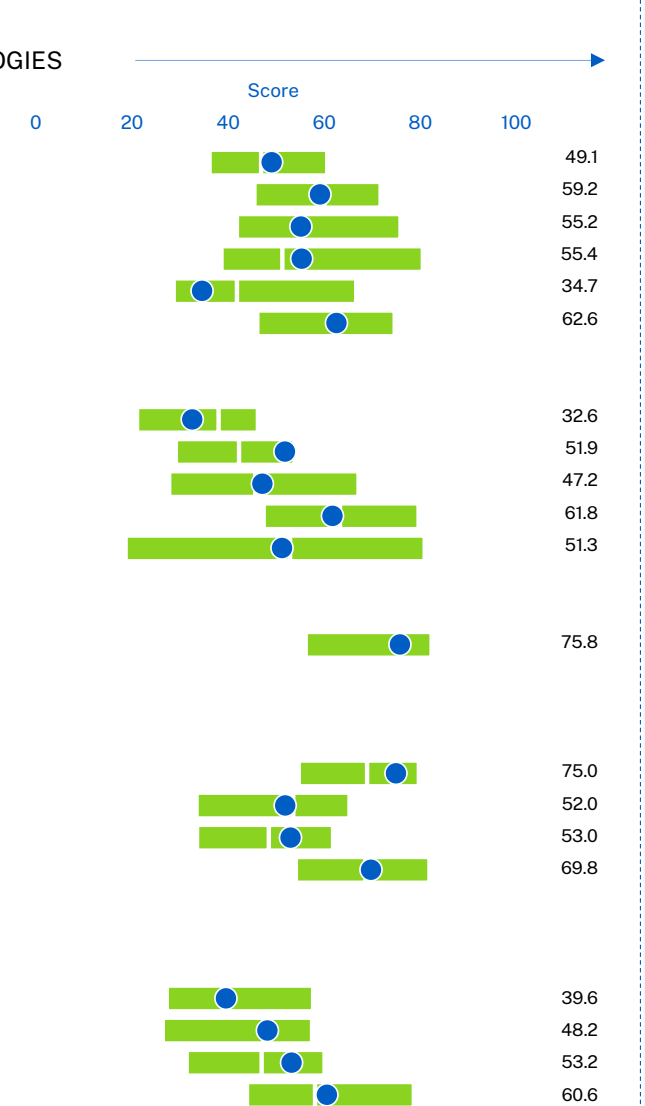|	Score
Car-sharing Apps have reduced congestion	34.2
Apps that direct you to an available parking space have reduced journey time	38.3
Bicycle hiring has reduced congestion	25.2
Online scheduling and ticket sales has made public transport easier to use	40.0
The city provides information on traffic congestion through mobile phones	45.8

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.4

Opportunities (Work & School)

	Score
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

	Score
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

Sana'a

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

% of respondents who chose the Priority Area

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	%
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

% of respondents who agree or strongly agree with the statement

Statement	CITY
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

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	17.4
Public transport is satisfactory	39.6

Activities

	Score
Green spaces are satisfactory	37.8
Cultural activities (shows, bars, and museums) are satisfactory	37.8

Opportunities (Work & School)

	Score
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

	Score
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

Score

Health & Safety

	Score
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

	Score
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

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	25.6

Opportunities (Work & School)

	Score
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

	Score
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)	

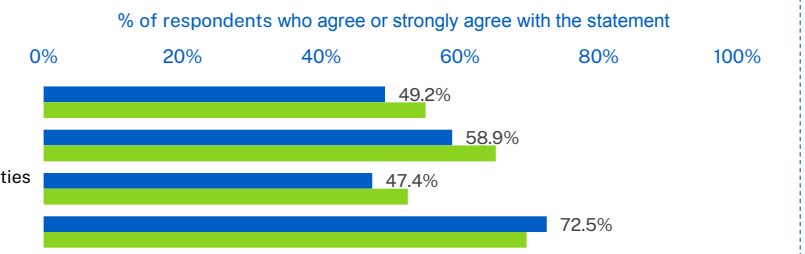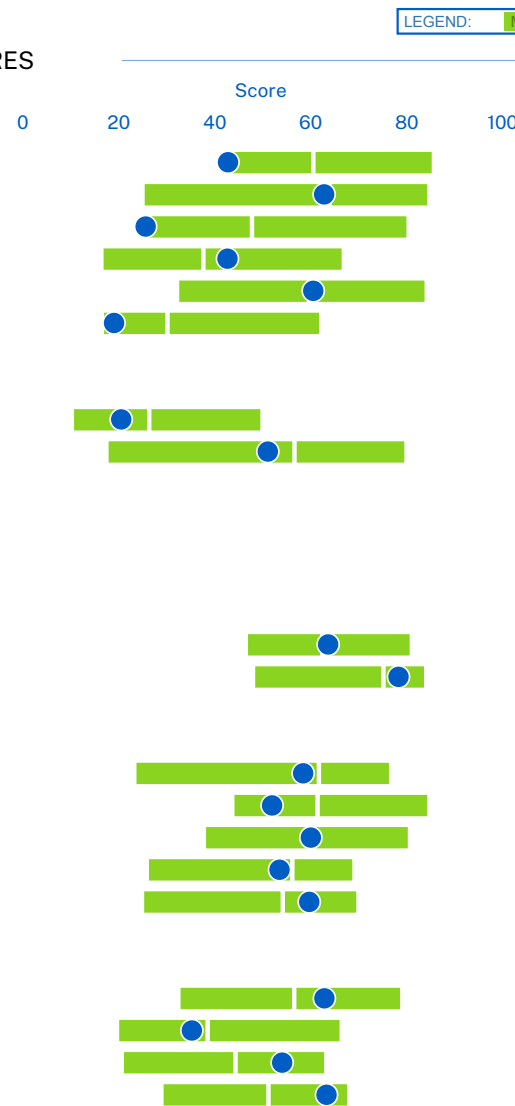Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

% of respondents who chose the Priority Area

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	%
security	83.3%
health services	58.5%
affordable housing	49.4%
unemployment	39.1%
corruption / transparency	39.0%
fulfilling employment	37.0%
air pollution	30.7%
school education	30.2%
Green spaces	20.8%
basic amenities (water, waste)	20.5%
public transport	17.9%
recycling	17.5%
road congestion	15.5%
social mobility / inclusiveness	13.3%
citizen engagement	9.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	62.6%
You are comfortable with face recognition technologies to lower crime	73.6%
You feel the availability of online information has increased your trust in authorities	45.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	68.7%

LEGEND: GROUP MEAN CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES
Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	43.5
Recycling services are satisfactory	45.0
Public safety is not a problem	17.6
Air pollution is not a problem	18.1
Medical services provision is satisfactory	42.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	18.1

Mobility
	Score
Traffic congestion is not a problem	21.3
Public transport is satisfactory	48.3

Activities
	Score
Green spaces are satisfactory	53.7
Cultural activities (shows, bars, and museums) are satisfactory	60.2

Opportunities (Work & School)
	Score
Employment finding services are readily available	62.3
Most children have access to a good school	35.5
Lifelong learning opportunities are provided by local institutions	40.4
Businesses are creating new jobs	41.1
Minorities feel welcome	33.2

Governance
	Score
Information on local government decisions are easily accessible	47.0
Corruption of city officials is not an issue of concern	28.3
Residents contribute to decision making of local government	28.0
Residents provide feedback on local government projects	39.7

TECHNOLOGIES
Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	41.9
A website or App allows residents to easily give away unwanted items	47.6
Free public wifi has improved access to city services	50.8
CCTV cameras has made residents feel safer	47.1
A website or App allows residents to effectively monitor air pollution	37.1
Arranging medical appointments online has improved access	69.8

Mobility
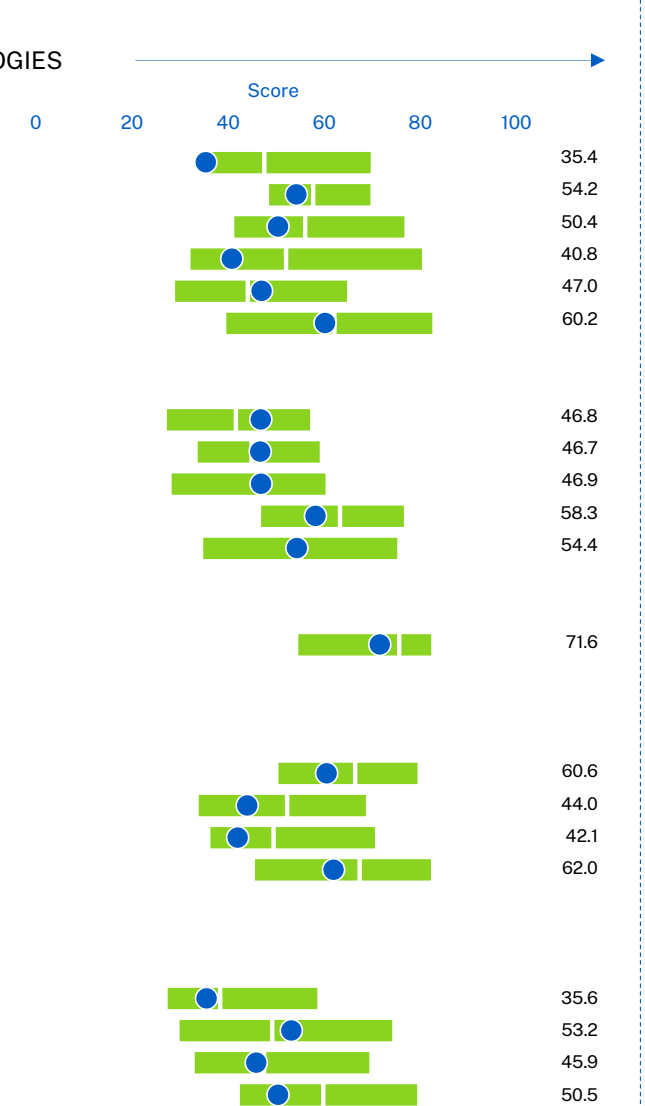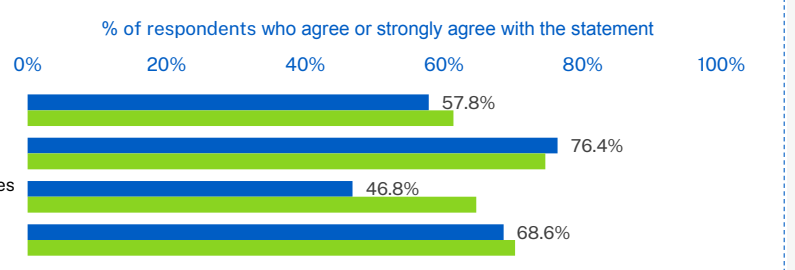|	Score
Car-sharing Apps have reduced congestion	37.9
Apps that direct you to an available parking space have reduced journey time	40.9
Bicycle hiring has reduced congestion	48.3
Online scheduling and ticket sales has made public transport easier to use	55.3
The city provides information on traffic congestion through mobile phones	60.2

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.3

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	65.3
IT skills are taught well in schools	39.9
Online services provided by the city has made it easier to start a new business	56.9
The current internet speed and reliability meet connectivity needs	68.4

Governance
	Score
Online public access to city finances has reduced corruption	29.1
Online voting has increased participation	29.0
An online platform where residents can propose ideas has improved city life	35.4
Processing Identification Documents online has reduced waiting times	56.2

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)	

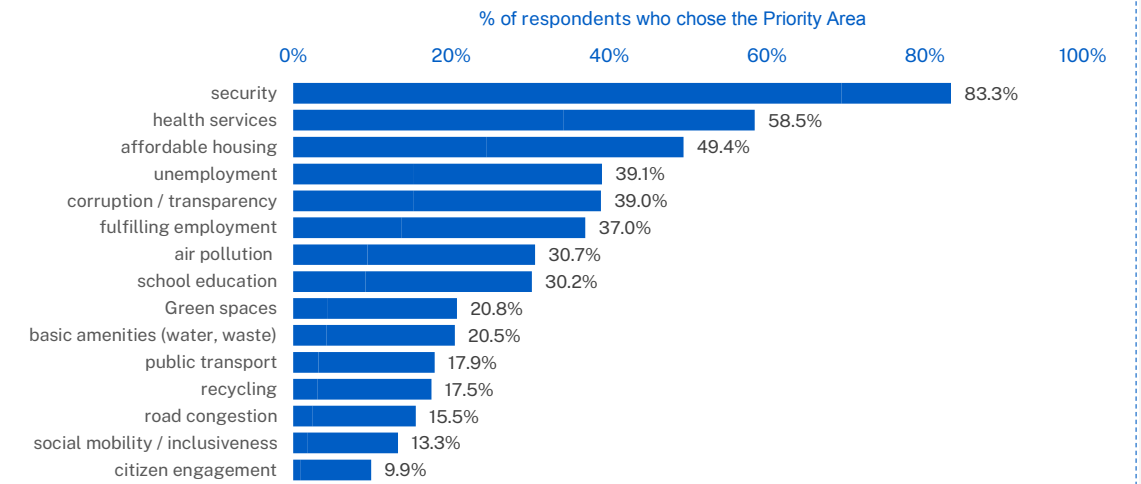Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

Country
Brazil

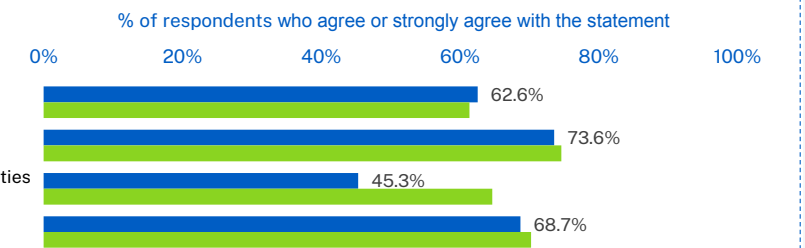|	2019	2020	2021	2022	1 yr change
HDI	0.764	0.758	0.756	0.760	+0.004
Life expectancy at birth	75.3	74.0	72.8	73.4	+0.7
Expected years of schooling	15.4	15.4	15.6	15.6	+0.0
Mean years of schooling	8.1	8.3	8.3	8.3	+0.0
GNI per capita (PPP $)	14,291	13,815	14,342	14,616	+274

PRIORITY AREAS

% of respondents who chose the Priority Area

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.

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

You are willing to concede personal data in order to improve traffic congestion	64.3%
You are comfortable with face recognition technologies to lower crime	75.7%
You feel the availability of online information has increased your trust in authorities	52.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	61.9%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN CITY MEAN GROUP MAX

STRUCTURES
Score

Health & Safety
	Score
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
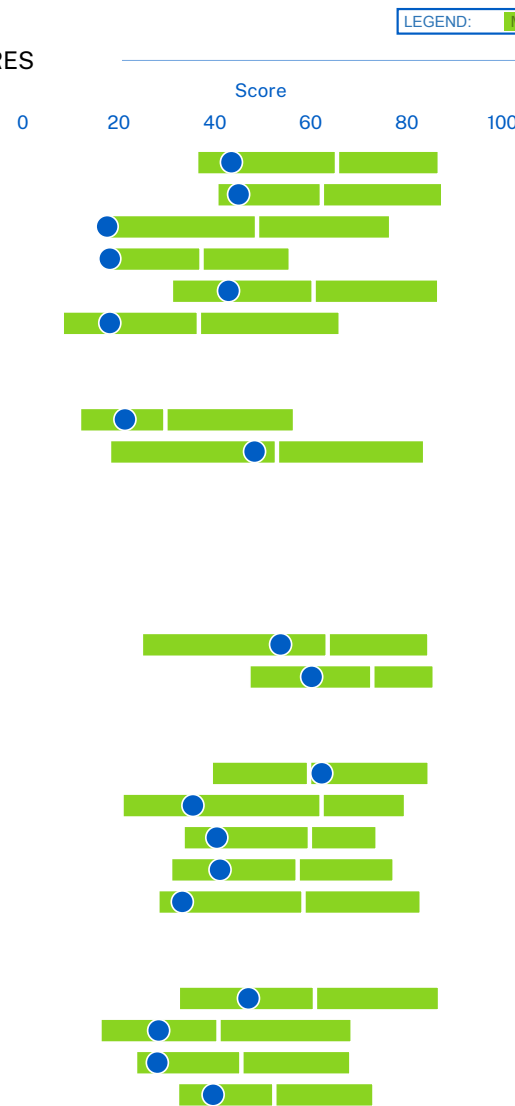|	Score
Traffic congestion is not a problem	13.9
Public transport is satisfactory	26.8

Activities
	Score
Green spaces are satisfactory	51.6
Cultural activities (shows, bars, and museums) are satisfactory	69.1

Opportunities (Work & School)
	Score
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
	Score
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

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	77.2

Opportunities (Work & School)
	Score
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
	Score
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)	

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.

% of respondents who chose the Priority Area

Area	%
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	%
You are willing to concede personal data in order to improve traffic congestion	53.2%
You are comfortable with face recognition technologies to lower crime	54.7%
You feel the availability of online information has increased your trust in authorities	40.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.0%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES
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
Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	42.2
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
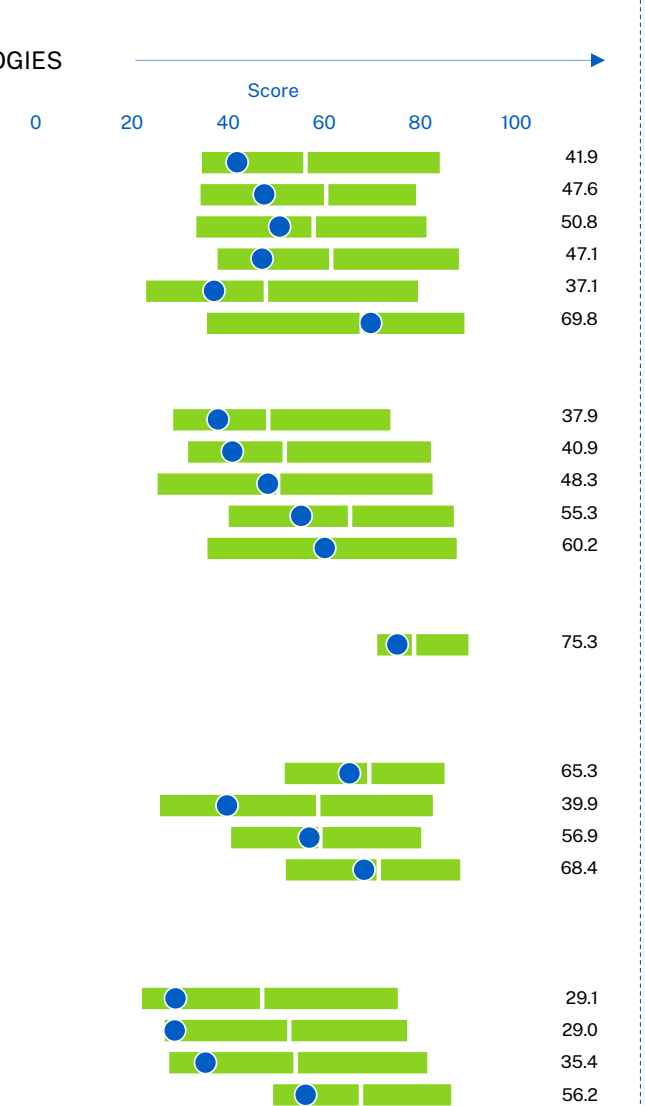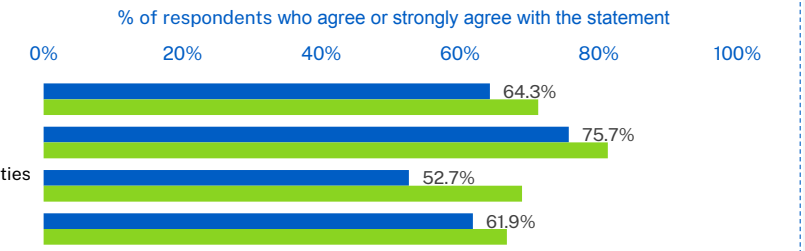|	
Car-sharing Apps have reduced congestion	40.4
Apps that direct you to an available parking space have reduced journey time	37.3
Bicycle hiring has reduced congestion	38.8
Online scheduling and ticket sales has made public transport easier to use	53.0
The city provides information on traffic congestion through mobile phones	58.4

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	71.7

Opportunities (Work & School)
Online access to job listings has made it easier to find work	67.8
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
The current internet speed and reliability meet connectivity needs	66.5

Governance
Online public access to city finances has reduced corruption	34.2
Online voting has increased participation	50.3
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

AAA

TECHNOLOGIES

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)	
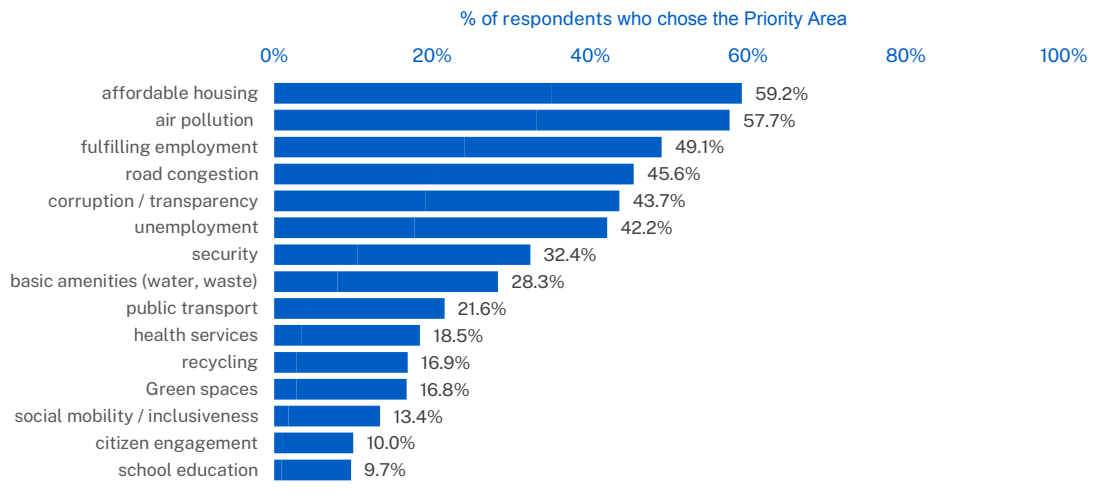
Country
Korea, South

	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.

% of respondents who chose the Priority Area

Priority Area	%
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

% of respondents who agree or strongly agree with the statement

Statement	%
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

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
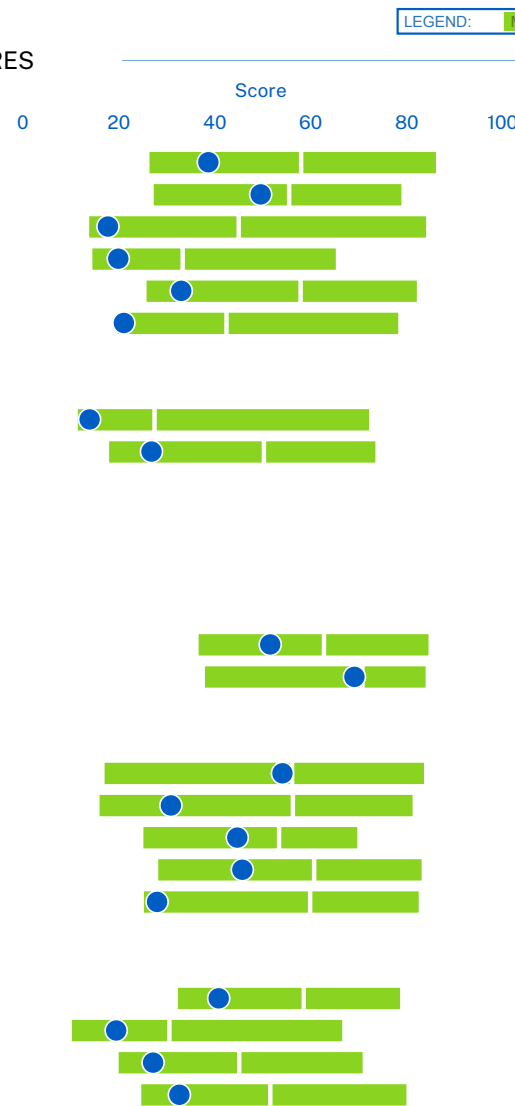|	Score
Traffic congestion is not a problem	20.5
Public transport is satisfactory	72.7

Activities
	Score
Green spaces are satisfactory	54.7
Cultural activities (shows, bars, and museums) are satisfactory	68.1

Opportunities (Work & School)
	Score
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
	Score
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

TECHNOLOGIES

Score

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	79.7

Opportunities (Work & School)
	Score
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
	Score
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)

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.

% of respondents who chose the Priority Area

Priority Area	%
road congestion	54.0%
air pollution	43.8%
affordable housing	42.7%
fulfilling employment	39.8%
health services	32.8%
social mobility / inclusiveness	31.2%
basic amenities (water, waste)	28.9%
corruption / transparency	23.9%
unemployment	23.8%
public transport	22.6%
security	22.6%
Green spaces	17.5%
school education	17.2%
recycling	14.9%
citizen engagement	13.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	City
You are willing to concede personal data in order to improve traffic congestion	89.0%
You are comfortable with face recognition technologies to lower crime	85.5%
You feel the availability of online information has increased your trust in authorities	90.0%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	83.1%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	86.9
Recycling services are satisfactory	80.9
Public safety is not a problem	73.9
Air pollution is not a problem	55.9
Medical services provision is satisfactory	80.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	56.9

Mobility
Traffic congestion is not a problem	42.9
Public transport is satisfactory	66.1

Activities
Green spaces are satisfactory	79.8
Cultural activities (shows, bars, and museums) are satisfactory	85.7

Opportunities (Work & School)
Employment finding services are readily available	84.8
Most children have access to a good school	77.3
Lifelong learning opportunities are provided by local institutions	73.7
Businesses are creating new jobs	77.5
Minorities feel welcome	83.1

Governance
Information on local government decisions are easily accessible	80.9
Corruption of city officials is not an issue of concern	60.6
Residents contribute to decision making of local government	67.9
Residents provide feedback on local government projects	73.3

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	84.5
A website or App allows residents to easily give away unwanted items	79.6
Free public wifi has improved access to city services	81.8
CCTV cameras has made residents feel safer	83.8
A website or App allows residents to effectively monitor air pollution	80.0
Arranging medical appointments online has improved access	89.7

Mobility
Car-sharing Apps have reduced congestion	72.1
Apps that direct you to an available parking space have reduced journey time	82.7
Bicycle hiring has reduced congestion	83.0
Online scheduling and ticket sales has made public transport easier to use	87.5
The city provides information on traffic congestion through mobile phones	88.1

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	90.5

Opportunities (Work & School)
Online access to job listings has made it easier to find work	85.5
IT skills are taught well in schools	83.1
Online services provided by the city has made it easier to start a new business	80.7
The current internet speed and reliability meet connectivity needs	88.8

Governance
Online public access to city finances has reduced corruption	75.8
Online voting has increased participation	77.8
An online platform where residents can propose ideas has improved city life	82.0
Processing Identification Documents online has reduced waiting times	86.9

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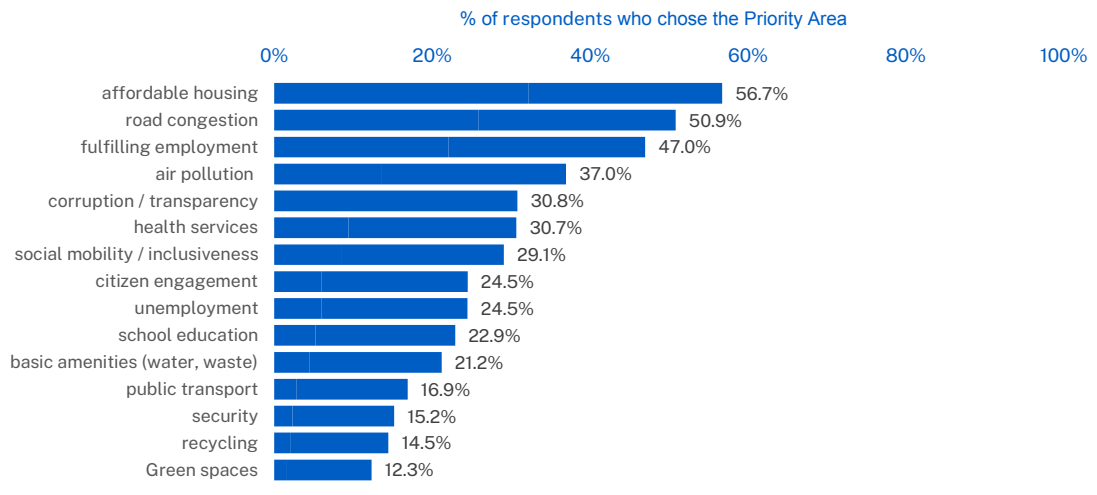
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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.

% of respondents who chose the Priority Area

Priority Area	%
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	%
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

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score 0 20 40 60 80 100

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 20 40 60 80 100

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

BACKGROUND INFORMATION

City

Population   5,940,000
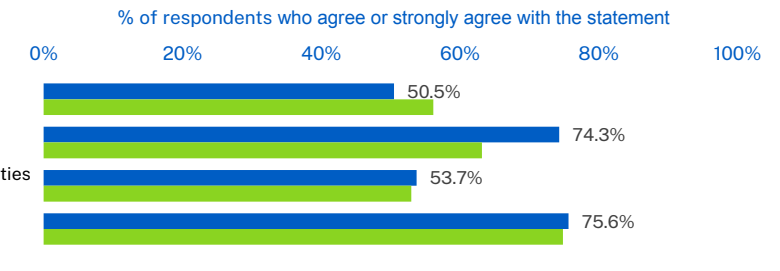*(UN World Urbanization Prospects)*

HDI   0.939
(Global Data Lab)

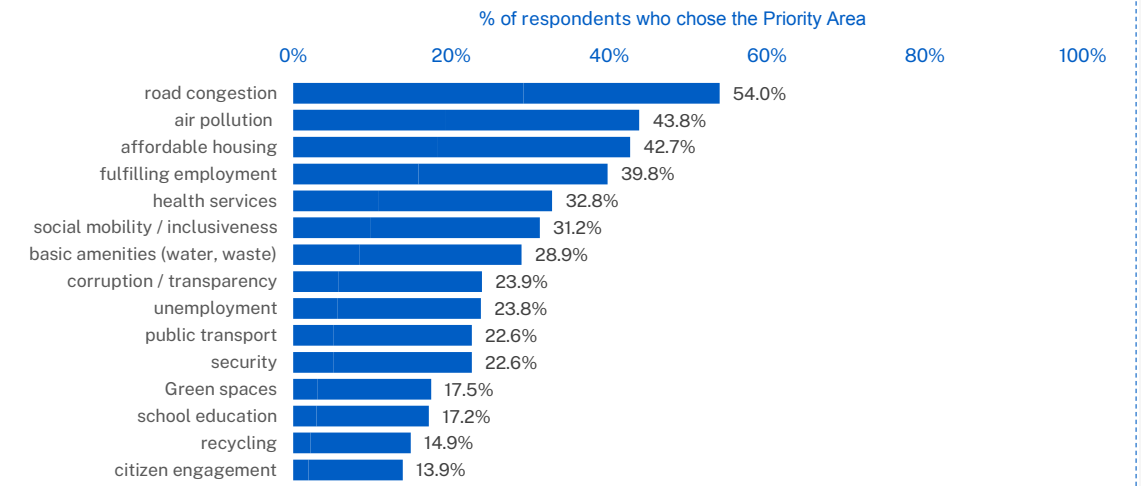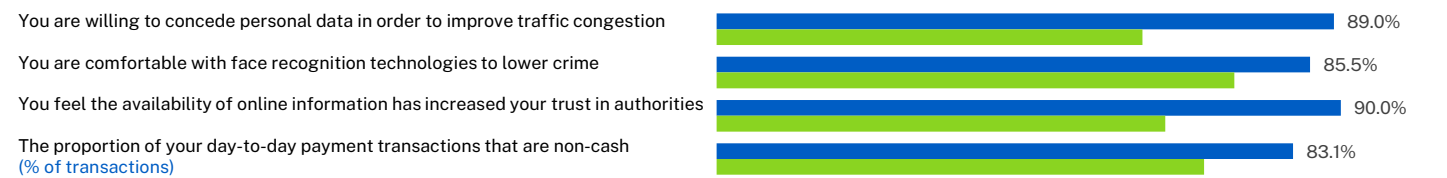Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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

% of respondents who chose the Priority Area

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.
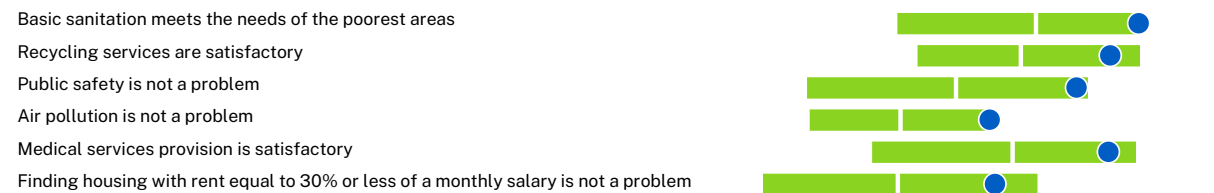
Priority Area	%
affordable housing	77.1%
fulfilling employment	50.1%
unemployment	48.0%
health services	44.6%
recycling	31.8%
citizen engagement	29.9%
social mobility / inclusiveness	25.8%
public transport	23.8%
road congestion	22.9%
security	20.6%
basic amenities (water, waste)	19.3%
air pollution	18.1%
Green spaces	17.6%
school education	16.5%
corruption / transparency	16.0%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	67.9%
You are comfortable with face recognition technologies to lower crime	75.5%
You feel the availability of online information has increased your trust in authorities	77.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	72.4%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN   ● CITY   MEAN   GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	84.8
Recycling services are satisfactory	68.9
Public safety is not a problem	80.4
Air pollution is not a problem	64.9
Medical services provision is satisfactory	81.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	45.0

Mobility

	Score
Traffic congestion is not a problem	50.0
Public transport is satisfactory	78.5

Activities

	Score
Green spaces are satisfactory	76.7
Cultural activities (shows, bars, and museums) are satisfactory	77.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	74.1
Most children have access to a good school	78.1
Lifelong learning opportunities are provided by local institutions	80.7
Businesses are creating new jobs	69.1
Minorities feel welcome	69.9

Governance

	Score
Information on local government decisions are easily accessible	79.1
Corruption of city officials is not an issue of concern	66.5
Residents contribute to decision making of local government	61.3
Residents provide feedback on local government projects	68.0

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	70.2
A website or App allows residents to easily give away unwanted items	66.8
Free public wifi has improved access to city services	71.3
CCTV cameras has made residents feel safer	80.8
A website or App allows residents to effectively monitor air pollution	62.3
Arranging medical appointments online has improved access	79.2

Mobility

	Score
Car-sharing Apps have reduced congestion	57.6
Apps that direct you to an available parking space have reduced journey time	57.5
Bicycle hiring has reduced congestion	56.7
Online scheduling and ticket sales has made public transport easier to use	63.2
The city provides information on traffic congestion through mobile phones	75.7

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	82.0

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	78.5
IT skills are taught well in schools	69.2
Online services provided by the city has made it easier to start a new business	71.1
The current internet speed and reliability meet connectivity needs	82.7

Governance

	Score
Online public access to city finances has reduced corruption	59.1
Online voting has increased participation	56.2
An online platform where residents can propose ideas has improved city life	61.7
Processing Identification Documents online has reduced waiting times	79.9

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
Bulgaria

	2019	2020	2021	2022	1 yr change
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
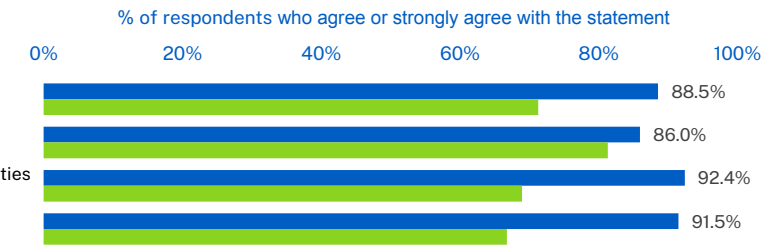
% of respondents who chose the Priority Area

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.

Indicator	%
air pollution	68.8%
road congestion	60.1%
corruption / transparency	55.0%
security	40.3%
affordable housing	38.7%
health services	38.3%
Green spaces	30.5%
unemployment	25.6%
basic amenities (water, waste)	21.7%
recycling	20.0%
school education	20.0%
fulfilling employment	16.9%
public transport	14.4%
social mobility / inclusiveness	9.5%
citizen engagement	6.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	53.1%
You are comfortable with face recognition technologies to lower crime	67.1%
You feel the availability of online information has increased your trust in authorities	43.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	56.1%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	53.1
Recycling services are satisfactory	46.5
Public safety is not a problem	40.7
Air pollution is not a problem	23.4
Medical services provision is satisfactory	45.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	31.7

Mobility
Traffic congestion is not a problem	20.3
Public transport is satisfactory	50.7

Activities
Green spaces are satisfactory	43.9
Cultural activities (shows, bars, and museums) are satisfactory	68.9

Opportunities (Work & School)
Employment finding services are readily available	66.7
Most children have access to a good school	53.1
Lifelong learning opportunities are provided by local institutions	48.5
Businesses are creating new jobs	55.2
Minorities feel welcome	44.0

Governance
Information on local government decisions are easily accessible	44.0
Corruption of city officials is not an issue of concern	21.6
Residents contribute to decision making of local government	30.2
Residents provide feedback on local government projects	36.4

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	42.1
A website or App allows residents to easily give away unwanted items	49.6
Free public wifi has improved access to city services	52.9
CCTV cameras has made residents feel safer	48.5
A website or App allows residents to effectively monitor air pollution	49.6
Arranging medical appointments online has improved access	58.6

Mobility
Car-sharing Apps have reduced congestion	39.0
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
Online purchasing of tickets to shows and museums has made it easier to attend	73.3

Opportunities (Work & School)
Online access to job listings has made it easier to find work	66.6
IT skills are taught well in schools	51.1
Online services provided by the city has made it easier to start a new business	51.1
The current internet speed and reliability meet connectivity needs	70.4

Governance
Online public access to city finances has reduced corruption	27.3
Online voting has increased participation	36.7
An online platform where residents can propose ideas has improved city life	41.8
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)	
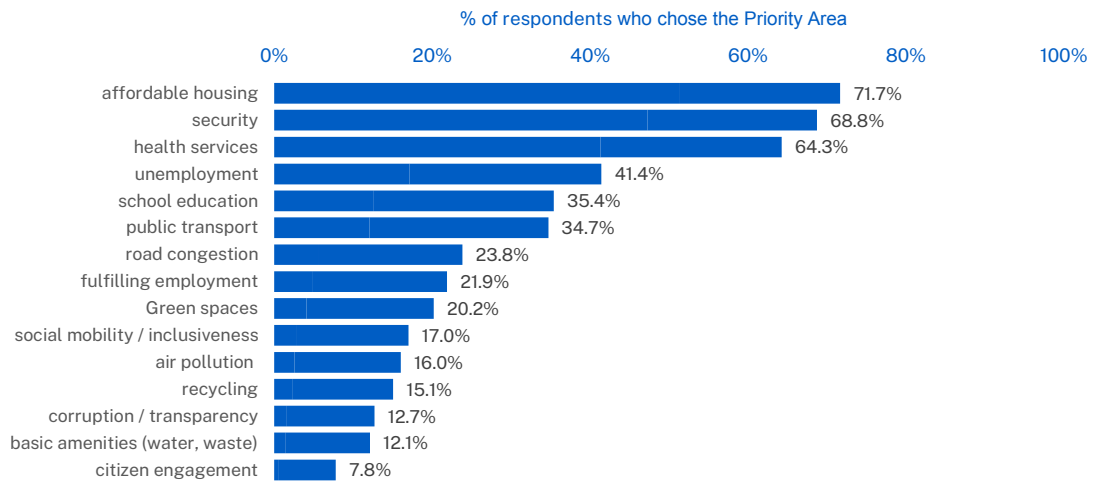
Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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.

% of respondents who chose the Priority Area

Priority Area	%
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	%
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	66.5%
You feel the availability of online information has increased your trust in authorities	55.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	81.4%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN ● CITY | MEAN | GROUP MAX

Score

Health & Safety

	Score
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

	Score
Traffic congestion is not a problem	27.4
Public transport is satisfactory	53.5

Activities

	Score
Green spaces are satisfactory	73.3
Cultural activities (shows, bars, and museums) are satisfactory	78.7

Opportunities (Work & School)

	Score
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

	Score
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

Health & Safety

	Score
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

	Score
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

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.3

Opportunities (Work & School)

	Score
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

	Score
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)
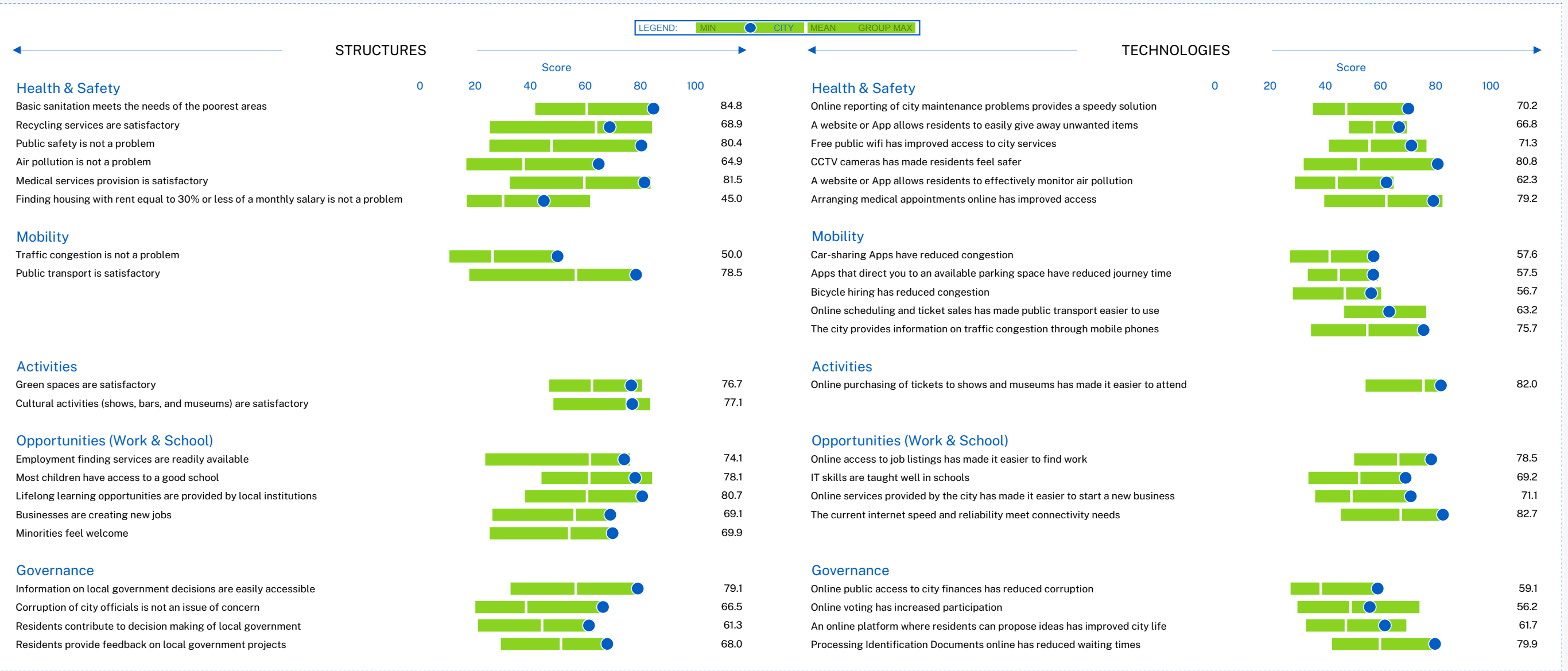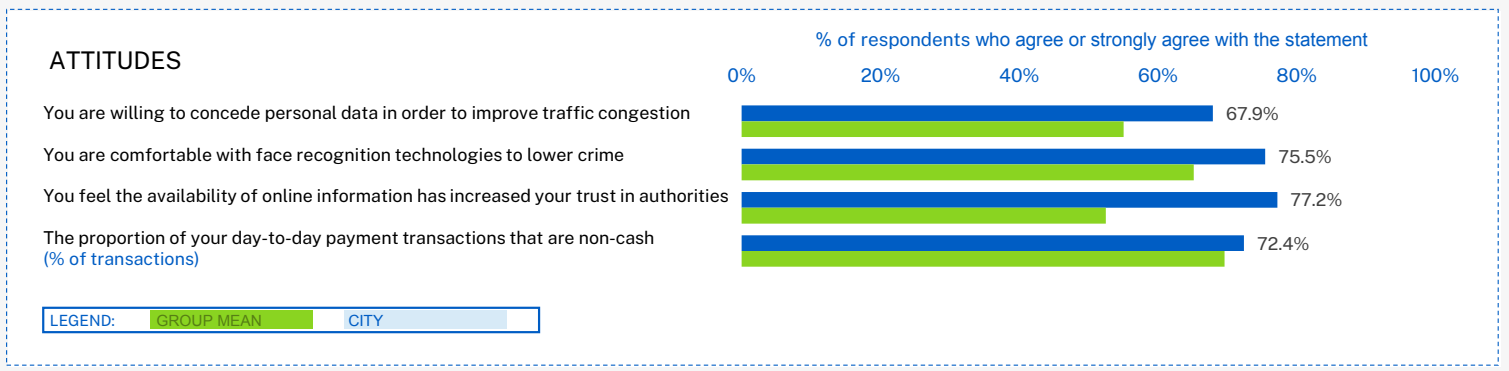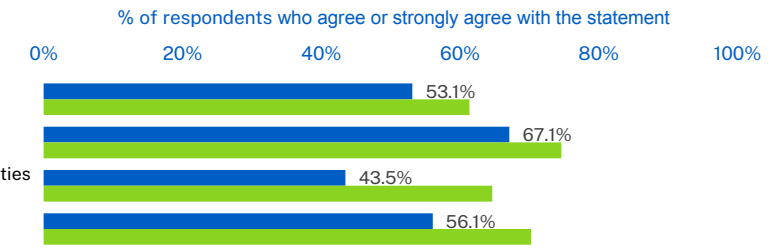
HDI 0.952
(Global Data Lab)

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	82.8%
road congestion	56.4%
health services	49.9%
public transport	35.7%
unemployment	32.9%
fulfilling employment	27.3%
security	25.8%
corruption / transparency	23.6%
air pollution	22.7%
recycling	21.2%
school education	20.6%
basic amenities (water, waste)	15.7%
social mobility / inclusiveness	12.3%
Green spaces	12.1%
citizen engagement	10.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	54.1%
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	52.8%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	77.0%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN | CITY | MEAN | GROUP MAX

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	67.8
Recycling services are satisfactory	69.9
Public safety is not a problem	48.8
Air pollution is not a problem	47.1
Medical services provision is satisfactory	65.8
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	23.1

Mobility
	Score
Traffic congestion is not a problem	24.5
Public transport is satisfactory	59.2

Activities
	Score
Green spaces are satisfactory	65.6
Cultural activities (shows, bars, and museums) are satisfactory	74.3

Opportunities (Work & School)
	Score
Employment finding services are readily available	68.3
Most children have access to a good school	72.2
Lifelong learning opportunities are provided by local institutions	63.9
Businesses are creating new jobs	63.0
Minorities feel welcome	61.3

Governance
	Score
Information on local government decisions are easily accessible	56.7
Corruption of city officials is not an issue of concern	35.1
Residents contribute to decision making of local government	47.8
Residents provide feedback on local government projects	58.1

TECHNOLOGIES

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	51.7
A website or App allows residents to easily give away unwanted items	67.5
Free public wifi has improved access to city services	59.2
CCTV cameras has made residents feel safer	62.3
A website or App allows residents to effectively monitor air pollution	43.5
Arranging medical appointments online has improved access	72.0

Mobility
	Score
Car-sharing Apps have reduced congestion	38.0
Apps that direct you to an available parking space have reduced journey time	40.1
Bicycle hiring has reduced congestion	36.1
Online scheduling and ticket sales has made public transport easier to use	57.8
The city provides information on traffic congestion through mobile phones	60.8

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	75.9

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	70.0
IT skills are taught well in schools	52.2
Online services provided by the city has made it easier to start a new business	50.5
The current internet speed and reliability meet connectivity needs	62.9

Governance
	Score
Online public access to city finances has reduced corruption	38.1
Online voting has increased participation	50.0
An online platform where residents can propose ideas has improved city life	47.7
Processing Identification Documents online has reduced waiting times	61.9

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

Country
Taiwan

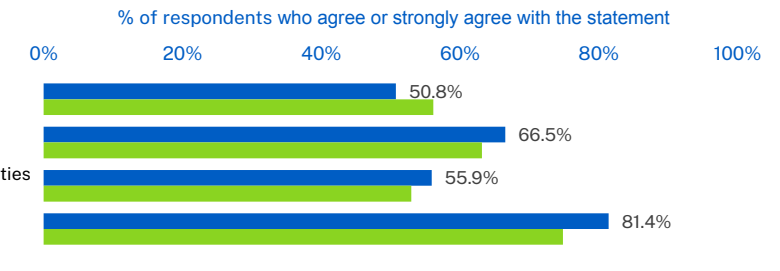|	2019	2020	2021	2022	1 yr change
HDI	0.916		0.926		N/A
Life expectancy at birth	80.9	81.3	80.9	79.8	-1.1
Expected years of schooling	16.5			16.9	N/A
Mean years of schooling	13.0				N/A
GNI per capita (PPP $)	42,404	41,946	44,057		N/A

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.

% of respondents who chose the Priority Area

affordable housing	75.2%
road congestion	57.1%
air pollution	48.2%
fulfilling employment	39.6%
security	37.2%
corruption / transparency	37.0%
unemployment	29.4%
basic amenities (water, waste)	28.7%
public transport	27.0%
health services	20.5%
Green spaces	18.8%
social mobility / inclusiveness	16.2%
school education	15.5%
citizen engagement	13.6%
recycling	11.9%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	77.5%
You are comfortable with face recognition technologies to lower crime	63.3%
You feel the availability of online information has increased your trust in authorities	73.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	66.1%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES
Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	85.7
Recycling services are satisfactory	84.2
Public safety is not a problem	70.6
Air pollution is not a problem	41.7
Medical services provision is satisfactory	84.1
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	29.7

Mobility
Traffic congestion is not a problem	22.7
Public transport is satisfactory	58.9

Activities
Green spaces are satisfactory	62.4
Cultural activities (shows, bars, and museums) are satisfactory	71.3

Opportunities (Work & School)
Employment finding services are readily available	68.8
Most children have access to a good school	63.1
Lifelong learning opportunities are provided by local institutions	72.6
Businesses are creating new jobs	63.2
Minorities feel welcome	64.0

Governance
Information on local government decisions are easily accessible	69.1
Corruption of city officials is not an issue of concern	37.5
Residents contribute to decision making of local government	63.3
Residents provide feedback on local government projects	67.3

TECHNOLOGIES
Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	65.3
A website or App allows residents to easily give away unwanted items	64.3
Free public wifi has improved access to city services	73.6
CCTV cameras has made residents feel safer	74.1
A website or App allows residents to effectively monitor air pollution	65.3
Arranging medical appointments online has improved access	83.0

Mobility
Car-sharing Apps have reduced congestion	55.5
Apps that direct you to an available parking space have reduced journey time	59.5
Bicycle hiring has reduced congestion	60.8
Online scheduling and ticket sales has made public transport easier to use	75.6
The city provides information on traffic congestion through mobile phones	75.0

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	82.8

Opportunities (Work & School)
Online access to job listings has made it easier to find work	70.8
IT skills are taught well in schools	58.9
Online services provided by the city has made it easier to start a new business	61.3
The current internet speed and reliability meet connectivity needs	78.2

Governance
Online public access to city finances has reduced corruption	58.5
Online voting has increased participation	67.5
An online platform where residents can propose ideas has improved city life	69.9
Processing Identification Documents online has reduced waiting times	72.7

Tallinn

BACKGROUND INFORMATION

City

Population	440,000
(Eurostat)	
HDI	0.932
(Global Data Lab)	

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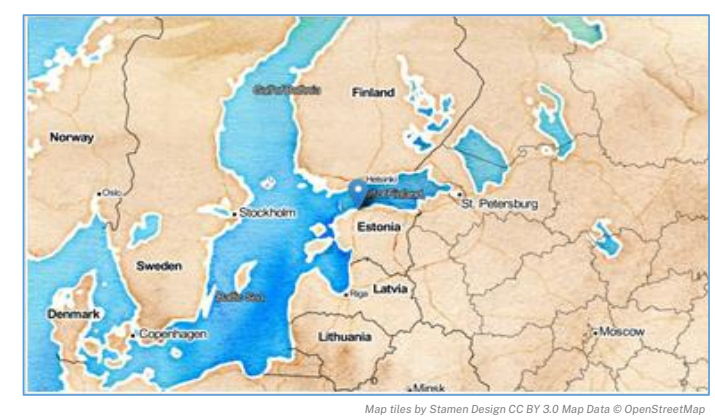
Country
Estonia

	2019	2020	2021	2022	1 yr change
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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	67.9%
unemployment	42.9%
corruption / transparency	42.6%
road congestion	39.8%
health services	36.4%
fulfilling employment	30.7%
Green spaces	26.1%
public transport	23.3%
basic amenities (water, waste)	22.0%
school education	21.6%
citizen engagement	21.0%
recycling	20.5%
security	19.9%
social mobility / inclusiveness	17.5%
air pollution	16.2%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	56.5%
You are comfortable with face recognition technologies to lower crime	57.2%
You feel the availability of online information has increased your trust in authorities	57.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.4%

LEGEND: GROUP MEAN | CITY

STRUCTURES

LEGEND: MIN ● CITY MEAN GROUP MAX

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	71.4
Recycling services are satisfactory	71.5
Public safety is not a problem	73.7
Air pollution is not a problem	66.9
Medical services provision is satisfactory	72.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	33.0

Mobility

	Score
Traffic congestion is not a problem	29.3
Public transport is satisfactory	69.5

Activities

	Score
Green spaces are satisfactory	67.7
Cultural activities (shows, bars, and museums) are satisfactory	81.5

Opportunities (Work & School)

	Score
Employment finding services are readily available	76.8
Most children have access to a good school	74.0
Lifelong learning opportunities are provided by local institutions	63.2
Businesses are creating new jobs	63.4
Minorities feel welcome	53.3

Governance

	Score
Information on local government decisions are easily accessible	67.0
Corruption of city officials is not an issue of concern	39.1
Residents contribute to decision making of local government	46.1
Residents provide feedback on local government projects	53.5

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	55.7
A website or App allows residents to easily give away unwanted items	58.4
Free public wifi has improved access to city services	63.8
CCTV cameras has made residents feel safer	60.5
A website or App allows residents to effectively monitor air pollution	40.1
Arranging medical appointments online has improved access	71.0

Mobility

	Score
Car-sharing Apps have reduced congestion	37.4
Apps that direct you to an available parking space have reduced journey time	44.1
Bicycle hiring has reduced congestion	45.0
Online scheduling and ticket sales has made public transport easier to use	77.1
The city provides information on traffic congestion through mobile phones	34.7

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	82.6

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	79.9
IT skills are taught well in schools	60.4
Online services provided by the city has made it easier to start a new business	61.2
The current internet speed and reliability meet connectivity needs	70.4

Governance

	Score
Online public access to city finances has reduced corruption	38.8
Online voting has increased participation	74.6
An online platform where residents can propose ideas has improved city life	52.8
Processing Identification Documents online has reduced waiting times	77.2

Tel Aviv

BACKGROUND INFORMATION

City

Population	460,000
(UN Data)	
HDI	0.919
(Global Data Lab)	

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

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

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.

% of respondents who chose the Priority Area

Priority Area	%
road congestion	75.9%
affordable housing	70.7%
public transport	52.1%
security	44.2%
air pollution	36.7%
Green spaces	36.3%
school education	23.7%
health services	21.2%
corruption / transparency	20.7%
recycling	19.3%
fulfilling employment	18.3%
basic amenities (water, waste)	15.4%
unemployment	12.0%
citizen engagement	11.4%
social mobility / inclusiveness	9.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	64.9%
You are comfortable with face recognition technologies to lower crime	58.3%
You feel the availability of online information has increased your trust in authorities	55.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	73.6%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	51.1
Recycling services are satisfactory	54.5
Public safety is not a problem	43.7
Air pollution is not a problem	32.2
Medical services provision is satisfactory	66.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	17.1

Mobility
	Score
Traffic congestion is not a problem	10.5
Public transport is satisfactory	34.6

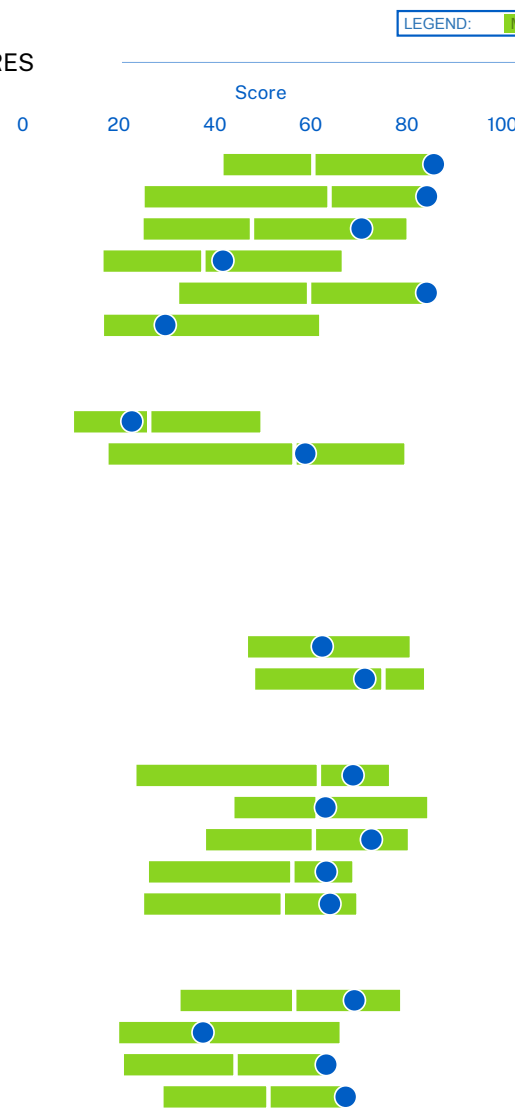### Activities
	Score
Green spaces are satisfactory	48.8
Cultural activities (shows, bars, and museums) are satisfactory	75.4

Opportunities (Work & School)
	Score
Employment finding services are readily available	52.8
Most children have access to a good school	63.3
Lifelong learning opportunities are provided by local institutions	57.8
Businesses are creating new jobs	59.7
Minorities feel welcome	41.9

Governance
	Score
Information on local government decisions are easily accessible	54.0
Corruption of city officials is not an issue of concern	38.7
Residents contribute to decision making of local government	35.8
Residents provide feedback on local government projects	48.4

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	57.9
A website or App allows residents to easily give away unwanted items	54.8
Free public wifi has improved access to city services	48.1
CCTV cameras has made residents feel safer	45.6
A website or App allows residents to effectively monitor air pollution	33.3
Arranging medical appointments online has improved access	74.5

Mobility
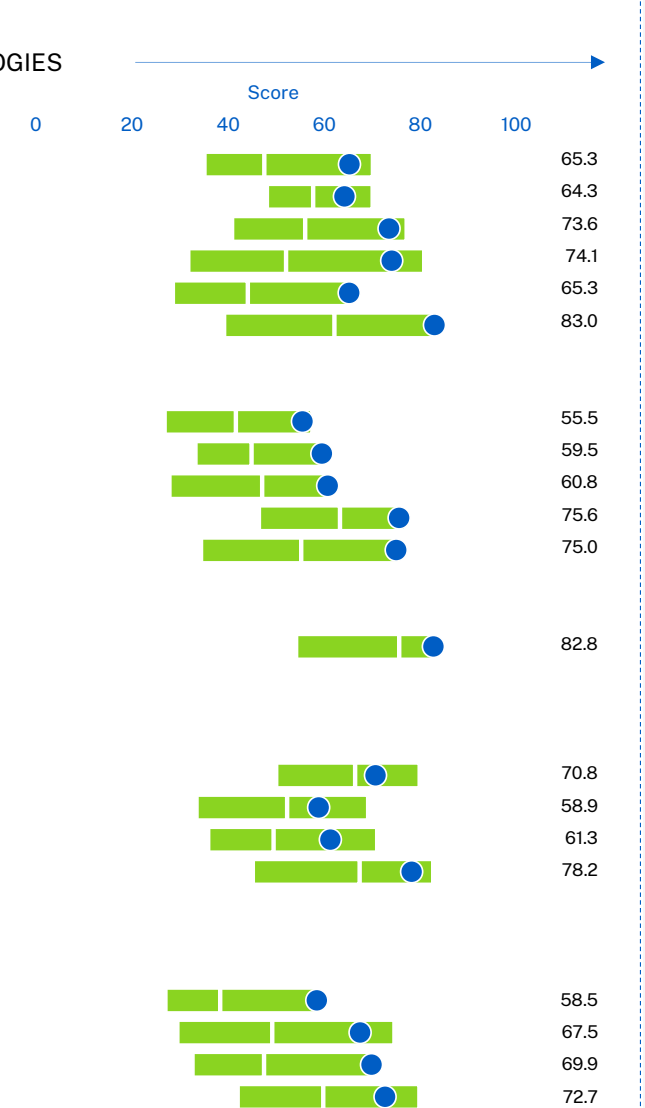|	Score
Car-sharing Apps have reduced congestion	32.8
Apps that direct you to an available parking space have reduced journey time	34.0
Bicycle hiring has reduced congestion	46.6
Online scheduling and ticket sales has made public transport easier to use	58.3
The city provides information on traffic congestion through mobile phones	42.9

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	78.1

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	63.8
IT skills are taught well in schools	56.5
Online services provided by the city has made it easier to start a new business	50.1
The current internet speed and reliability meet connectivity needs	63.7

Governance
	Score
Online public access to city finances has reduced corruption	35.2
Online voting has increased participation	33.8
An online platform where residents can propose ideas has improved city life	46.8
Processing Identification Documents online has reduced waiting times	58.8

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
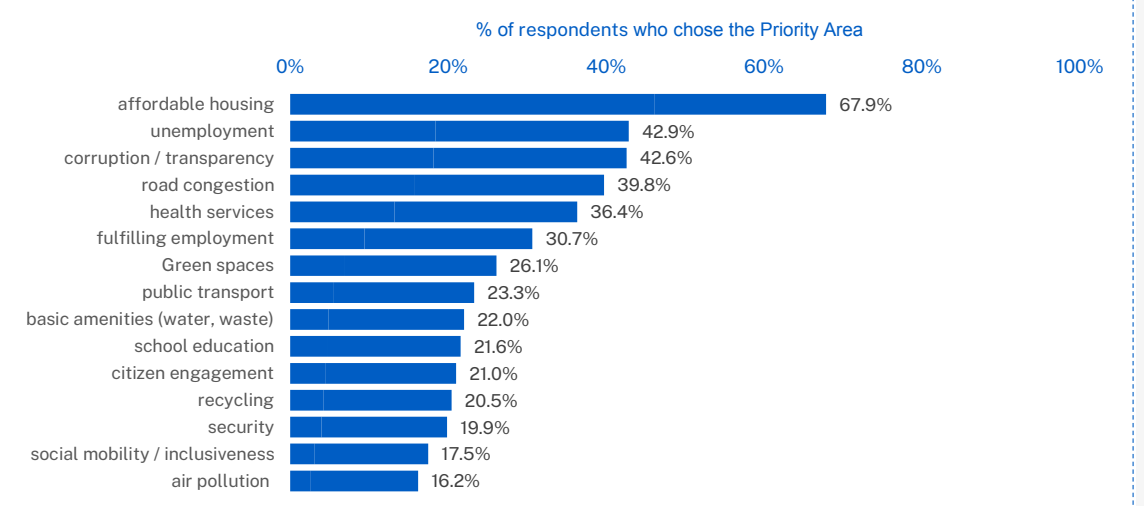
All ratings range
from AAA to D

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

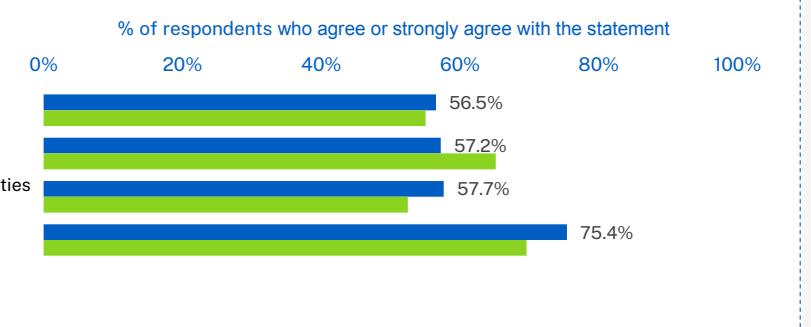|	2019	2020	2021	2022	1 yr change
HDI	0.941	0.938	0.941	0.946	+0.005
Life expectancy at birth	82.0	81.6	81.7	82.5	+0.8
Expected years of schooling	18.4	18.4	18.6	18.6	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP $)	55,628	52,500	55,355	57,278	+1,923

PRIORITY AREAS

% of respondents who chose the Priority Area

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.
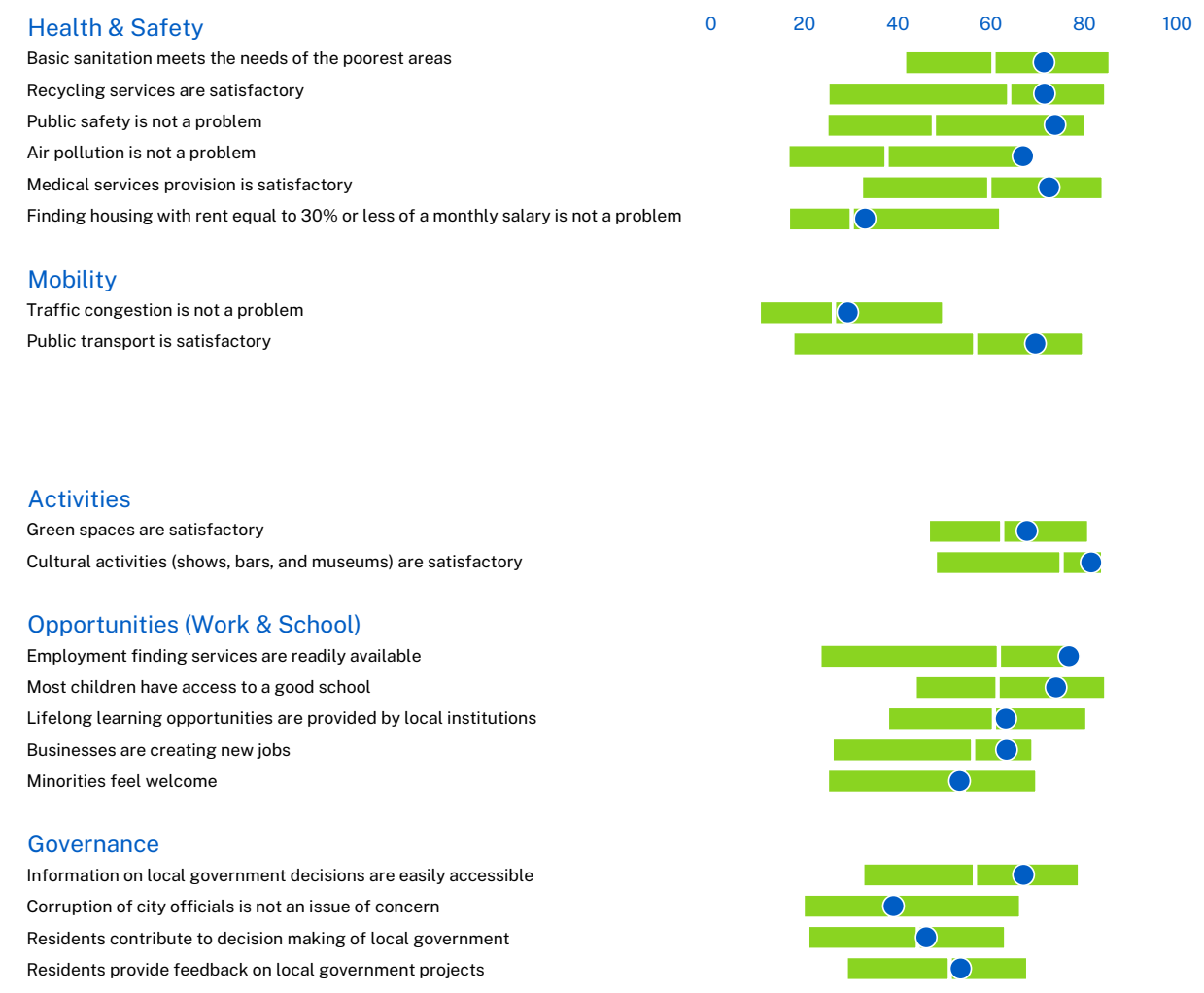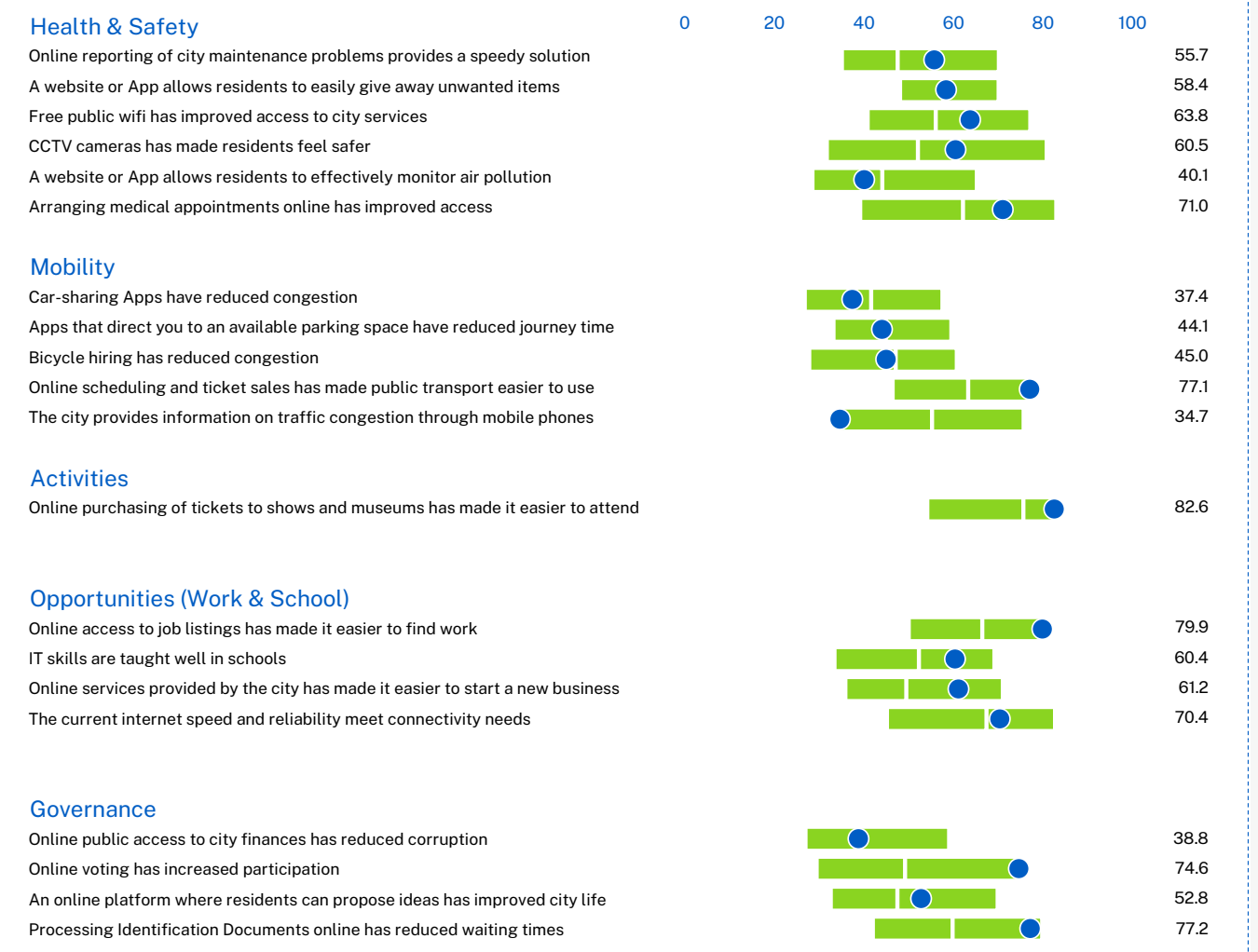
Priority Area	%
affordable housing	79.0%
security	64.1%
road congestion	39.9%
health services	35.8%
Green spaces	29.7%
basic amenities (water, waste)	26.7%
air pollution	26.4%
school education	25.3%
public transport	24.7%
unemployment	24.3%
citizen engagement	16.8%
social mobility / inclusiveness	16.5%
recycling	15.6%
corruption / transparency	14.8%
fulfilling employment	11.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	57.3%
You are comfortable with face recognition technologies to lower crime	64.5%
You feel the availability of online information has increased your trust in authorities	58.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	76.0%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score — 0 20 40 60 80 100

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	62.8
Recycling services are satisfactory	62.6
Public safety is not a problem	46.4
Air pollution is not a problem	41.5
Medical services provision is satisfactory	72.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	21.9

Mobility
	Score
Traffic congestion is not a problem	26.0
Public transport is satisfactory	65.0

Activities
	Score
Green spaces are satisfactory	56.9
Cultural activities (shows, bars, and museums) are satisfactory	74.1

Opportunities (Work & School)
	Score
Employment finding services are readily available	66.2
Most children have access to a good school	70.6
Lifelong learning opportunities are provided by local institutions	59.4
Businesses are creating new jobs	61.2
Minorities feel welcome	59.4

Governance
	Score
Information on local government decisions are easily accessible	59.1
Corruption of city officials is not an issue of concern	48.0
Residents contribute to decision making of local government	49.4
Residents provide feedback on local government projects	55.6

TECHNOLOGIES

Score — 0 20 40 60 80 100

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	45.4
A website or App allows residents to easily give away unwanted items	53.7
Free public wifi has improved access to city services	52.0
CCTV cameras has made residents feel safer	49.6
A website or App allows residents to effectively monitor air pollution	34.4
Arranging medical appointments online has improved access	66.1

Mobility
	Score
Car-sharing Apps have reduced congestion	34.3
Apps that direct you to an available parking space have reduced journey time	44.9
Bicycle hiring has reduced congestion	47.1
Online scheduling and ticket sales has made public transport easier to use	64.8
The city provides information on traffic congestion through mobile phones	48.2

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	76.9

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	69.9
IT skills are taught well in schools	53.1
Online services provided by the city has made it easier to start a new business	49.8
The current internet speed and reliability meet connectivity needs	67.4

Governance
	Score
Online public access to city finances has reduced corruption	40.2
Online voting has increased participation	48.3
An online platform where residents can propose ideas has improved city life	51.5
Processing Identification Documents online has reduced waiting times	59.0

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
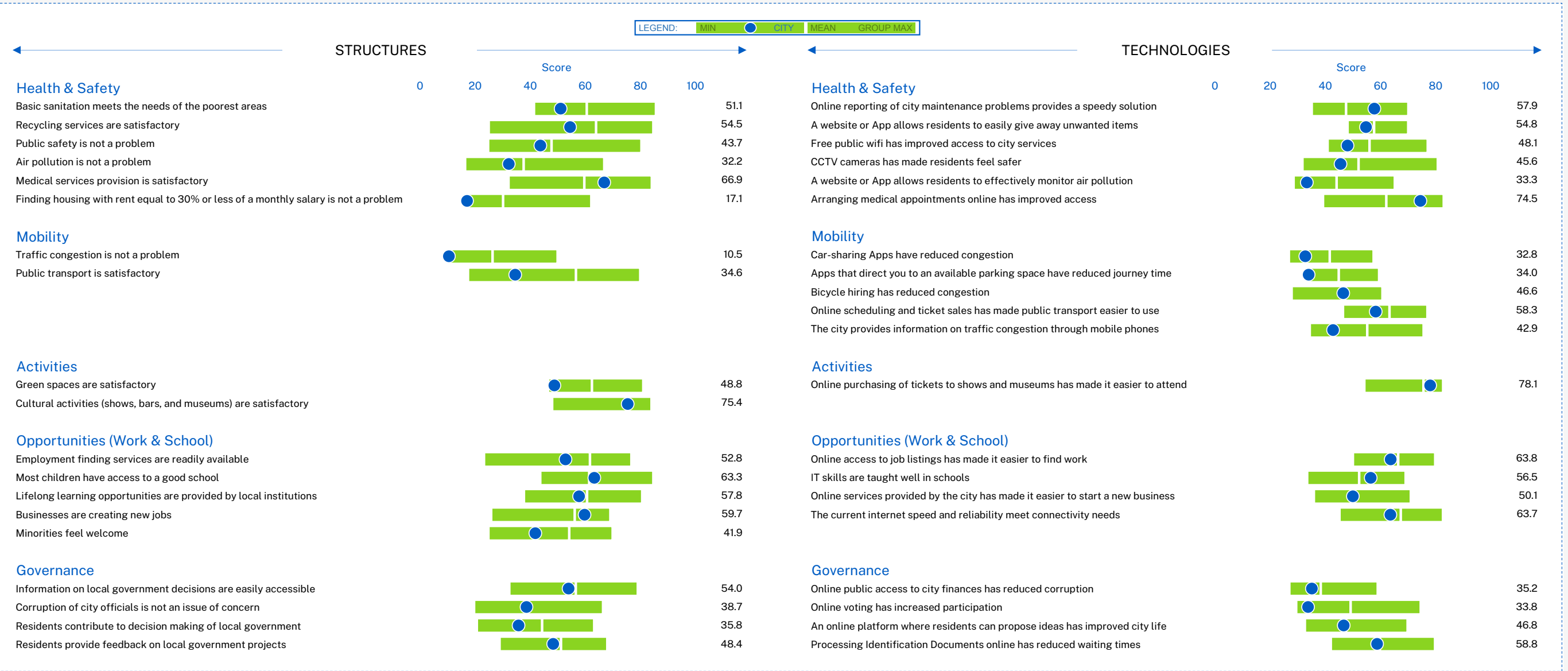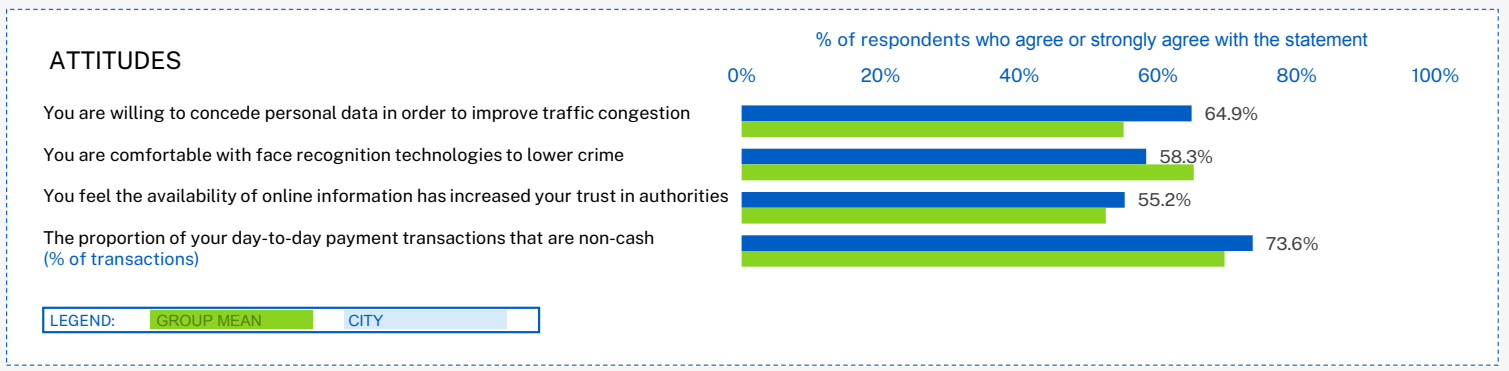
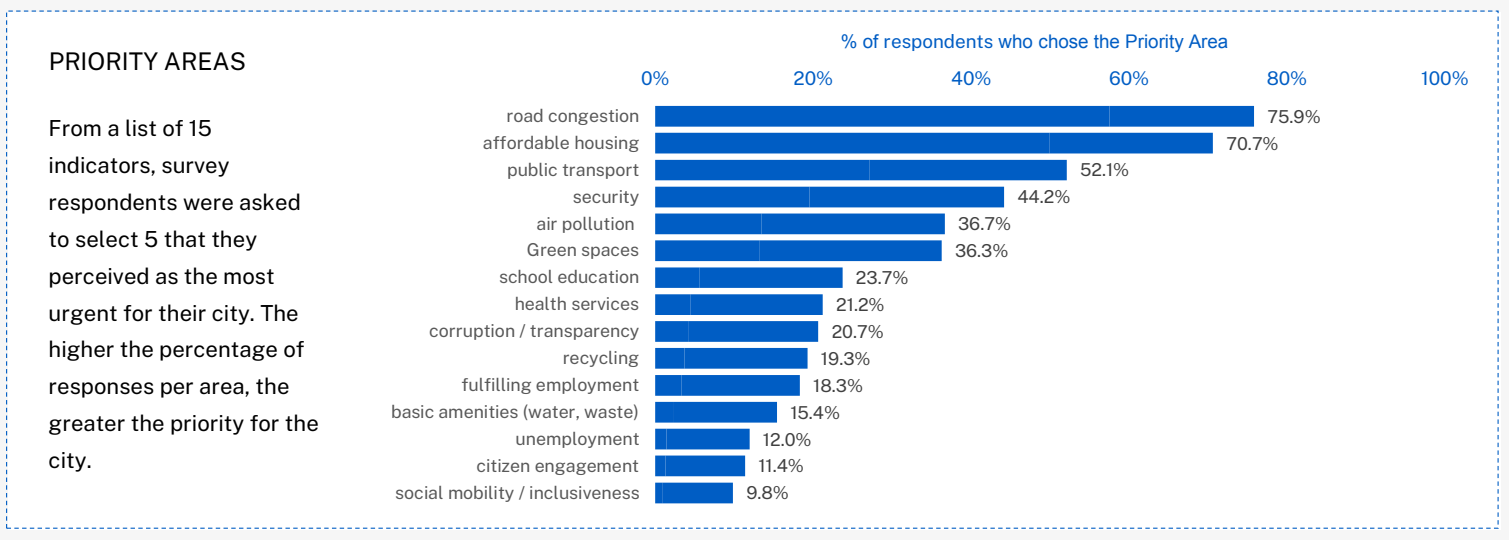## BACKGROUND INFORMATION

City

Population 13,590,000
(UN World Urbanization Prospects)

HDI 0.844
(Global Data Lab)

Country

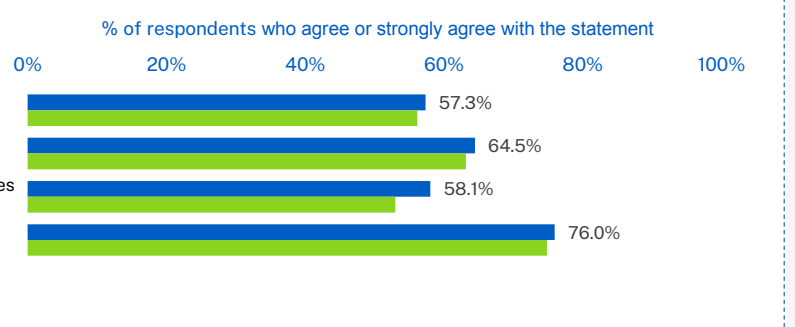| China	2019	2020	2021	2022	1 yr change
HDI	0.775	0.781	0.785	0.788	+0.003
Life expectancy at birth	78.0	78.1	78.2	78.6	+0.4
Expected years of schooling	15.0	15.2	15.2	15.2	+0.0
Mean years of schooling	8.0	8.1	8.1	8.1	+0.0
GNI per capita (PPP $)	15,934	16,168	17,499	18,025	+526

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.
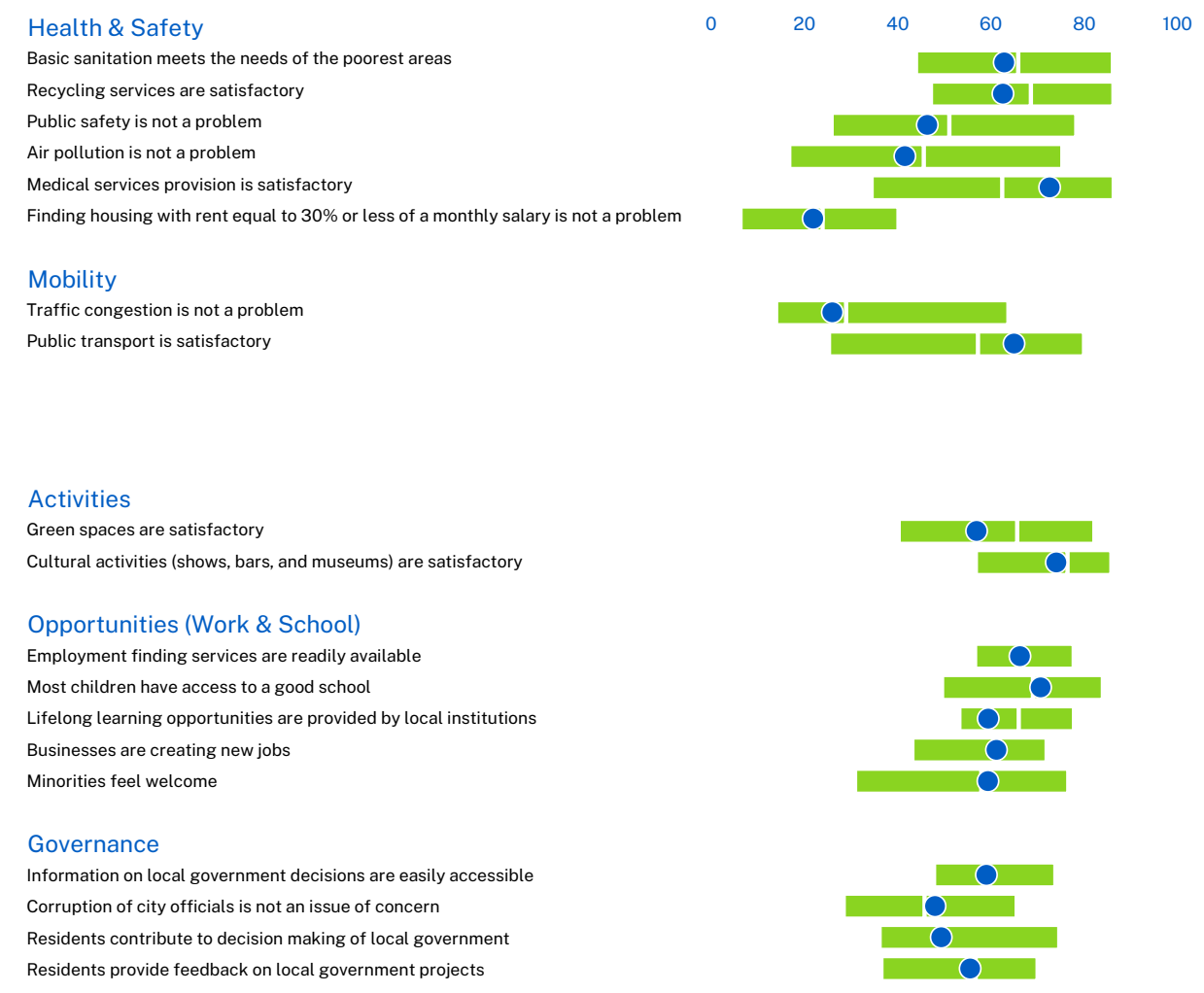
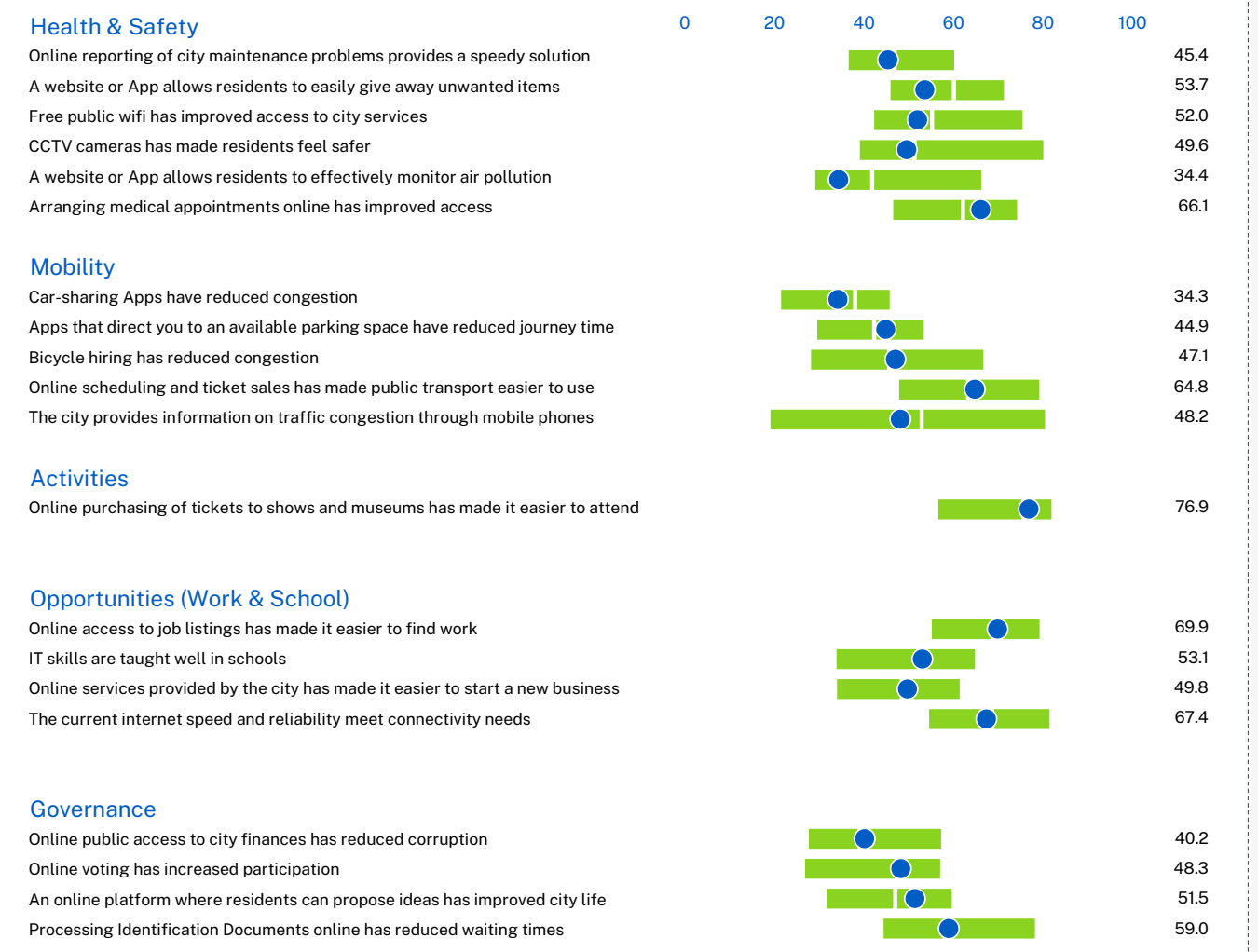**% of respondents who chose the Priority Area**

Priority Area	%
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	%
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

LEGEND: MIN CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	53.2
Public transport is satisfactory	62.8

Activities
	Score
Green spaces are satisfactory	75.8
Cultural activities (shows, bars, and museums) are satisfactory	73.1

Opportunities (Work & School)
	Score
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
	Score
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

Score

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	88.6

Opportunities (Work & School)
	Score
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
	Score
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

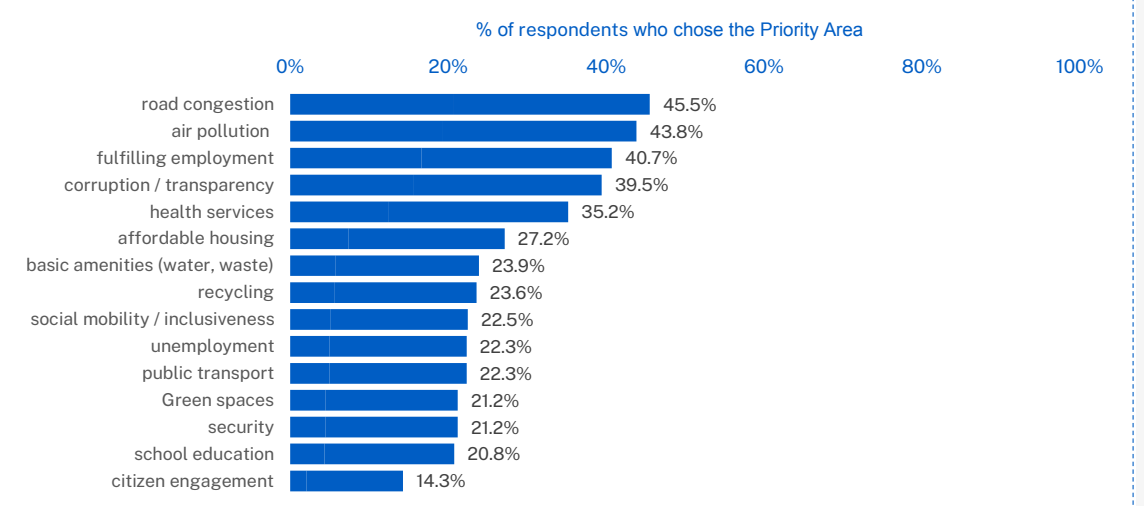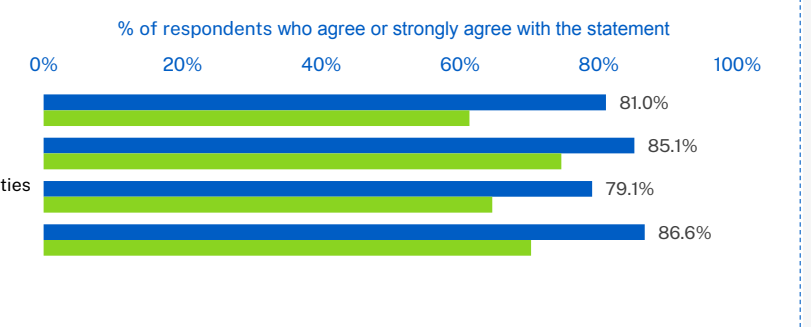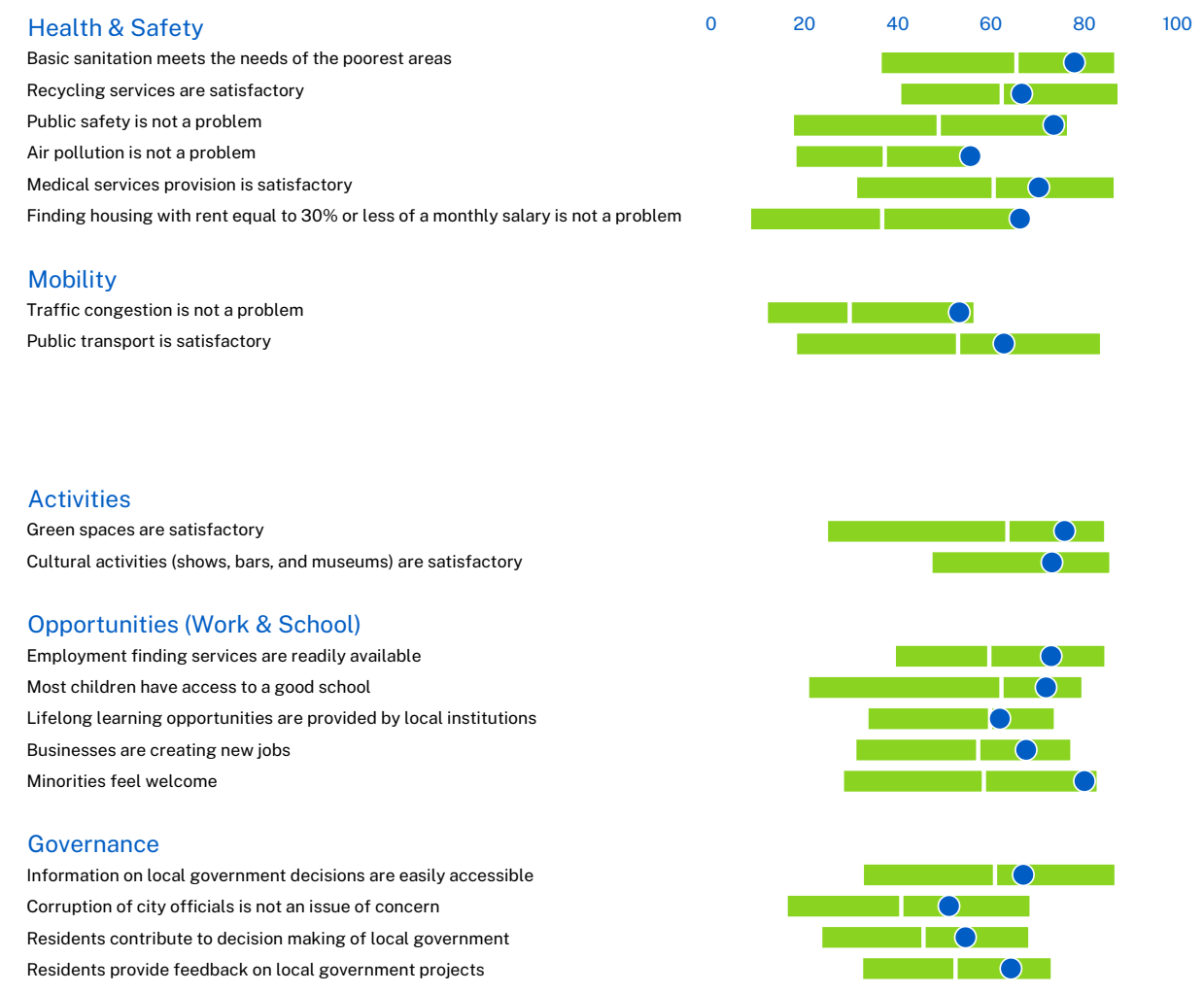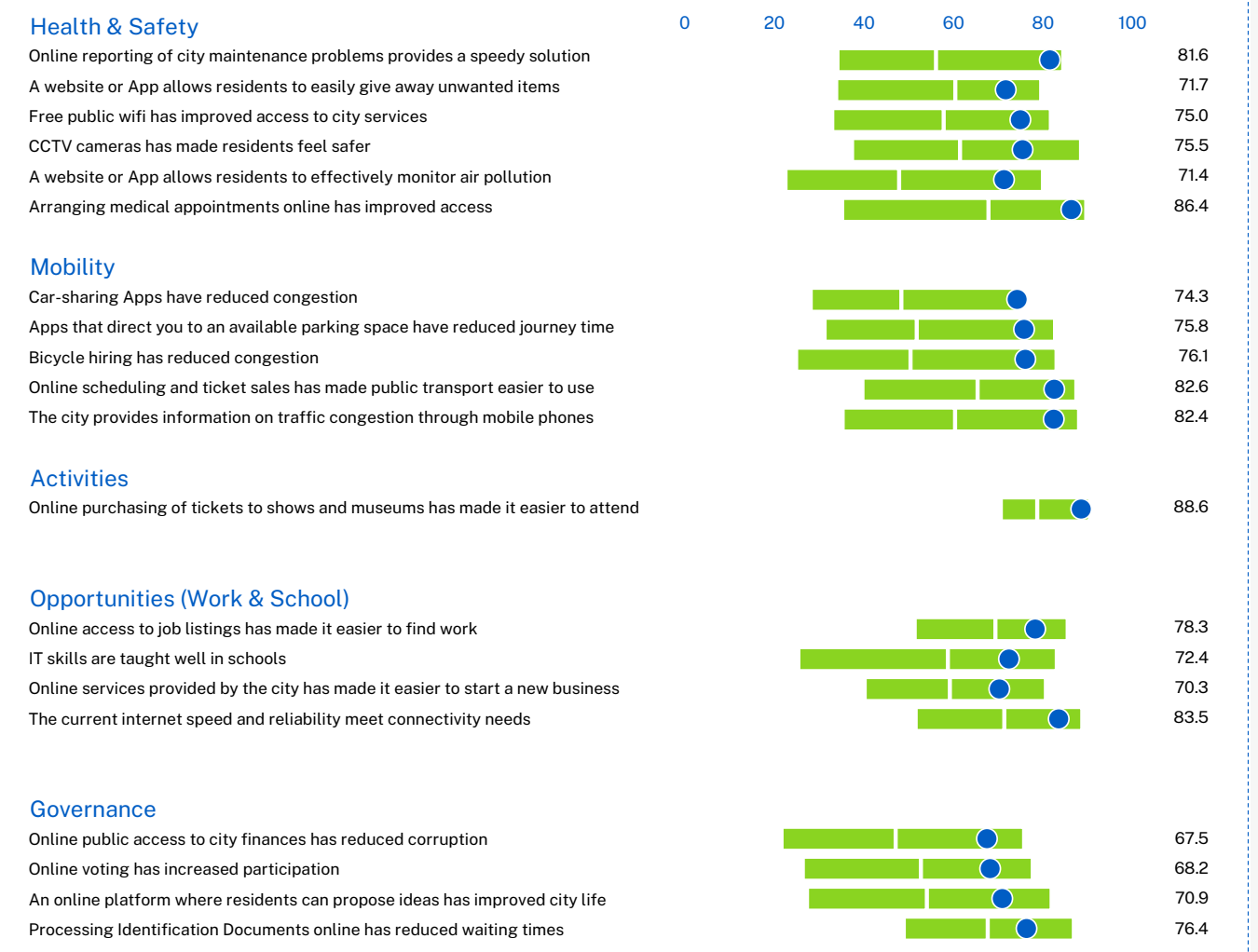All ratings range from AAA to D

BACKGROUND INFORMATION

City

Population *(UN Data)*	9,730,000
HDI *(Global Data Lab)*	0.951

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

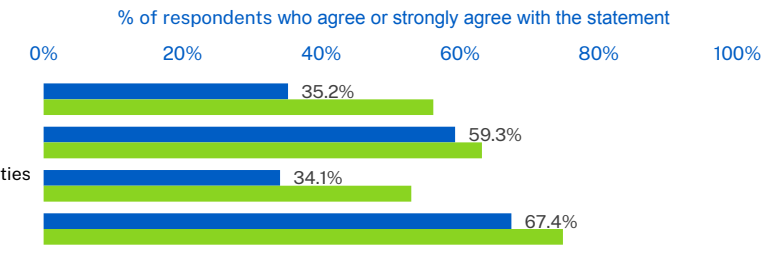% of respondents who chose the Priority Area

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.

basic amenities (water, waste)	49.0%
affordable housing	48.9%
health services	47.3%
security	46.7%
road congestion	32.9%
public transport	31.0%
school education	25.7%
air pollution	24.5%
citizen engagement	23.8%
fulfilling employment	23.6%
corruption / transparency	21.0%
unemployment	19.1%
Green spaces	18.8%
social mobility / inclusiveness	18.7%
recycling	17.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	35.2%
You are comfortable with face recognition technologies to lower crime	59.3%
You feel the availability of online information has increased your trust in authorities	34.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	67.4%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN — CITY — MEAN — GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	68.1
Recycling services are satisfactory	61.8
Public safety is not a problem	56.3
Air pollution is not a problem	40.7
Medical services provision is satisfactory	66.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	40.2

Mobility

	Score
Traffic congestion is not a problem	32.3
Public transport is satisfactory	68.4

Activities

	Score
Green spaces are satisfactory	40.5
Cultural activities (shows, bars, and museums) are satisfactory	59.7

Opportunities (Work & School)

	Score
Employment finding services are readily available	56.9
Most children have access to a good school	49.8
Lifelong learning opportunities are provided by local institutions	53.5
Businesses are creating new jobs	48.4
Minorities feel welcome	36.9

Governance

	Score
Information on local government decisions are easily accessible	50.1
Corruption of city officials is not an issue of concern	31.6
Residents contribute to decision making of local government	39.9
Residents provide feedback on local government projects	36.8

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	43.0
A website or App allows residents to easily give away unwanted items	54.4
Free public wifi has improved access to city services	47.7
CCTV cameras has made residents feel safer	55.7
A website or App allows residents to effectively monitor air pollution	35.9
Arranging medical appointments online has improved access	51.5

Mobility

	Score
Car-sharing Apps have reduced congestion	24.8
Apps that direct you to an available parking space have reduced journey time	32.7
Bicycle hiring has reduced congestion	28.0
Online scheduling and ticket sales has made public transport easier to use	48.3
The city provides information on traffic congestion through mobile phones	56.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	56.5

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	55.0
IT skills are taught well in schools	33.7
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	54.4

Governance

	Score
Online public access to city finances has reduced corruption	27.5
Online voting has increased participation	26.7
An online platform where residents can propose ideas has improved city life	31.7
Processing Identification Documents online has reduced waiting times	44.2

Toronto

BACKGROUND INFORMATION

City

Population	2,930,000
(UN World Urbanization Prospects)	
HDI	0.943
(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

% of respondents who chose the Priority Area

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	%
affordable housing	90.0%
health services	63.9%
road congestion	58.0%
security	39.1%
unemployment	37.6%
public transport	34.1%
fulfilling employment	27.6%
air pollution	23.6%
school education	21.2%
corruption / transparency	20.9%
Green spaces	15.1%
basic amenities (water, waste)	13.1%
recycling	11.1%
social mobility / inclusiveness	8.1%
citizen engagement	5.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	50.4%
You are comfortable with face recognition technologies to lower crime	58.0%
You feel the availability of online information has increased your trust in authorities	48.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	77.5%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN — CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	63.3
Recycling services are satisfactory	68.6
Public safety is not a problem	37.0
Air pollution is not a problem	43.3
Medical services provision is satisfactory	51.7
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	16.5

Mobility

	Score
Traffic congestion is not a problem	14.2
Public transport is satisfactory	46.8

Activities

	Score
Green spaces are satisfactory	66.5
Cultural activities (shows, bars, and museums) are satisfactory	80.1

Opportunities (Work & School)

	Score
Employment finding services are readily available	58.5
Most children have access to a good school	65.9
Lifelong learning opportunities are provided by local institutions	67.2
Businesses are creating new jobs	57.0
Minorities feel welcome	64.1

Governance

	Score
Information on local government decisions are easily accessible	60.6
Corruption of city officials is not an issue of concern	42.6
Residents contribute to decision making of local government	49.1
Residents provide feedback on local government projects	58.0

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	45.1
A website or App allows residents to easily give away unwanted items	55.0
Free public wifi has improved access to city services	53.1
CCTV cameras has made residents feel safer	49.6
A website or App allows residents to effectively monitor air pollution	39.1
Arranging medical appointments online has improved access	52.4

Mobility

	Score
Car-sharing Apps have reduced congestion	38.5
Apps that direct you to an available parking space have reduced journey time	42.6
Bicycle hiring has reduced congestion	42.1
Online scheduling and ticket sales has made public transport easier to use	55.3
The city provides information on traffic congestion through mobile phones	53.9

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.5

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	67.2
IT skills are taught well in schools	49.0
Online services provided by the city has made it easier to start a new business	51.3
The current internet speed and reliability meet connectivity needs	72.4

Governance

	Score
Online public access to city finances has reduced corruption	37.8
Online voting has increased participation	47.8
An online platform where residents can propose ideas has improved city life	43.0
Processing Identification Documents online has reduced waiting times	59.7

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

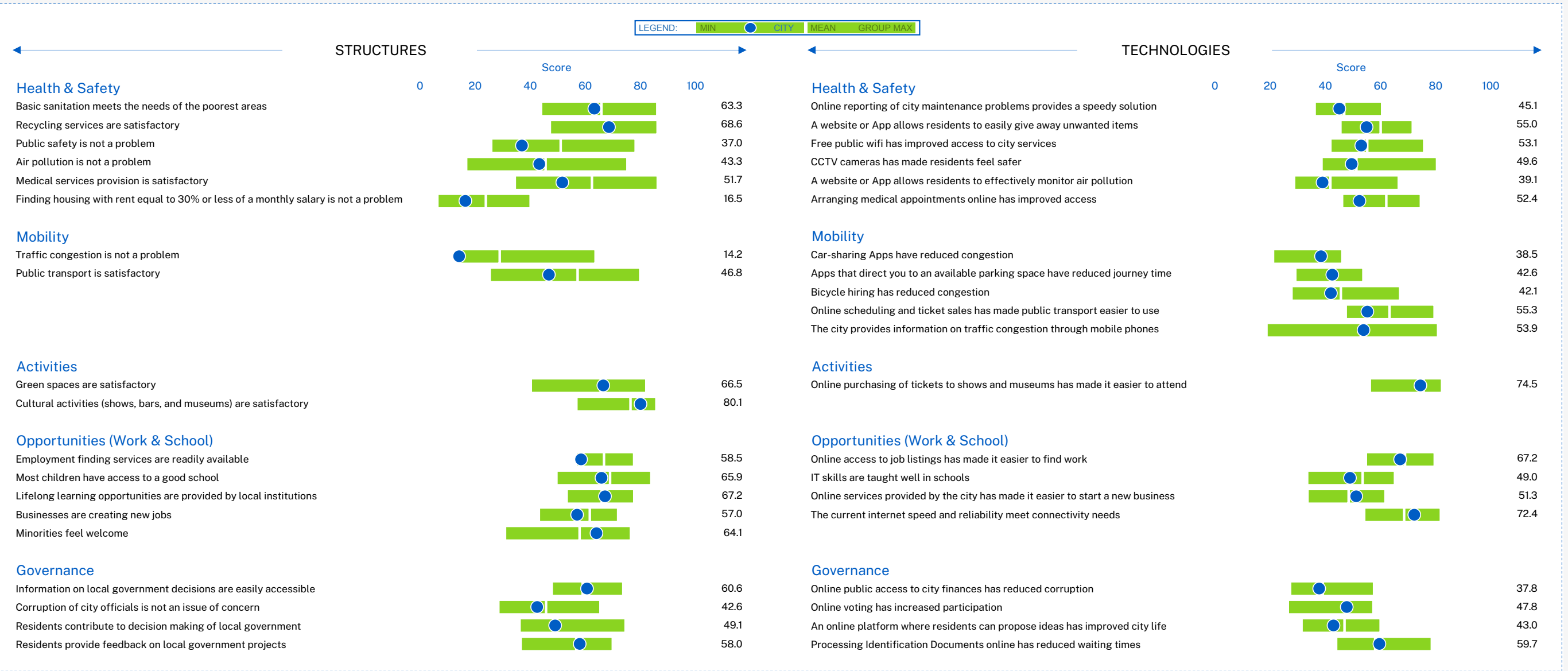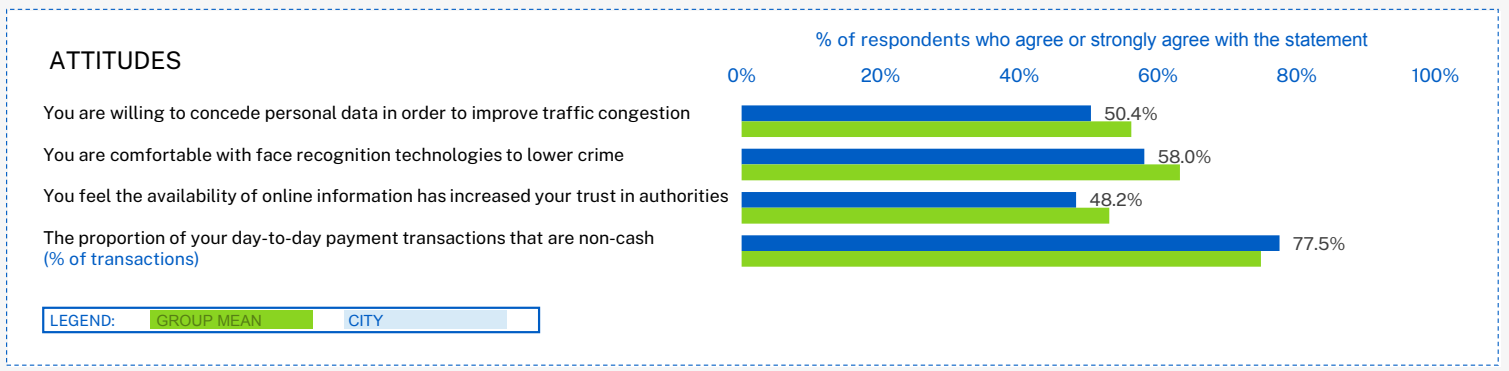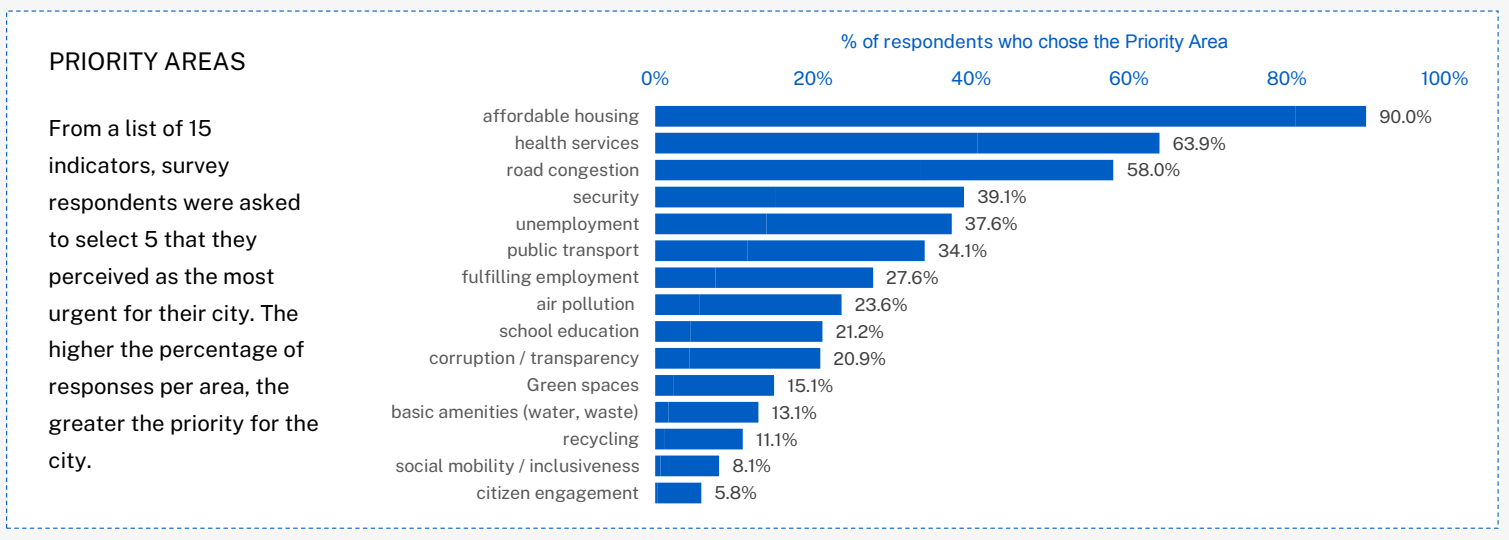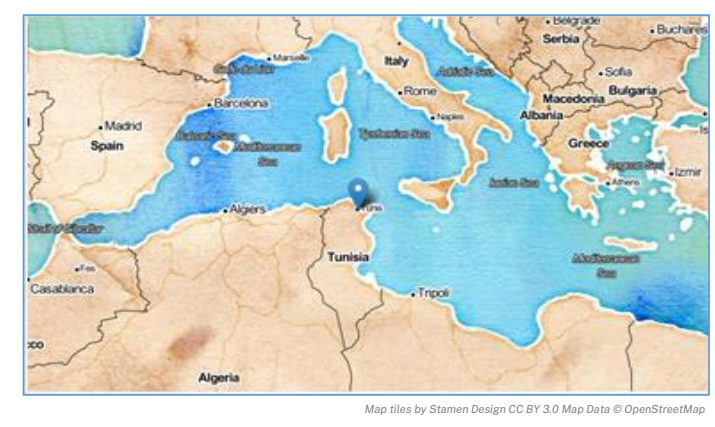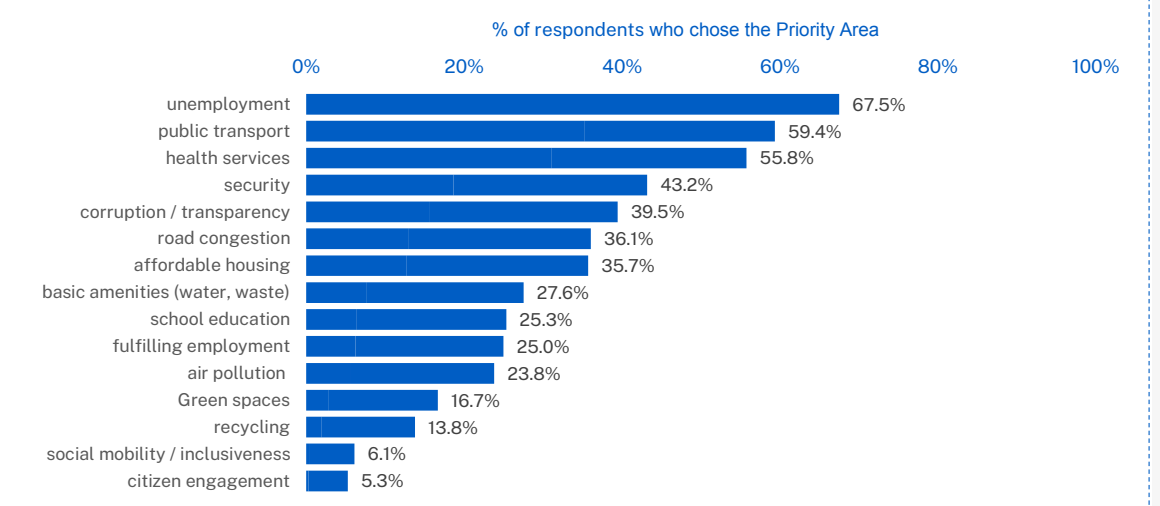All ratings range from AAA to D

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

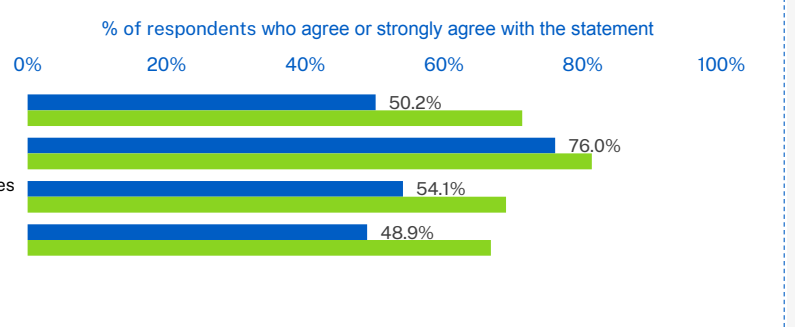| Tunisia	2019	2020	2021	2022	1 yr change
HDI	0.740	0.734	0.729	0.732	+0.003
Life expectancy at birth	76.0	75.3	73.8	74.3	+0.5
Expected years of schooling	14.6	14.6	14.6	14.6	+0.0
Mean years of schooling	7.8	8.0	8.0	8.0	+0.0
GNI per capita (PPP $)	10,821	9,710	10,123	10,297	+174

PRIORITY AREAS

% of respondents who chose the Priority Area

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.
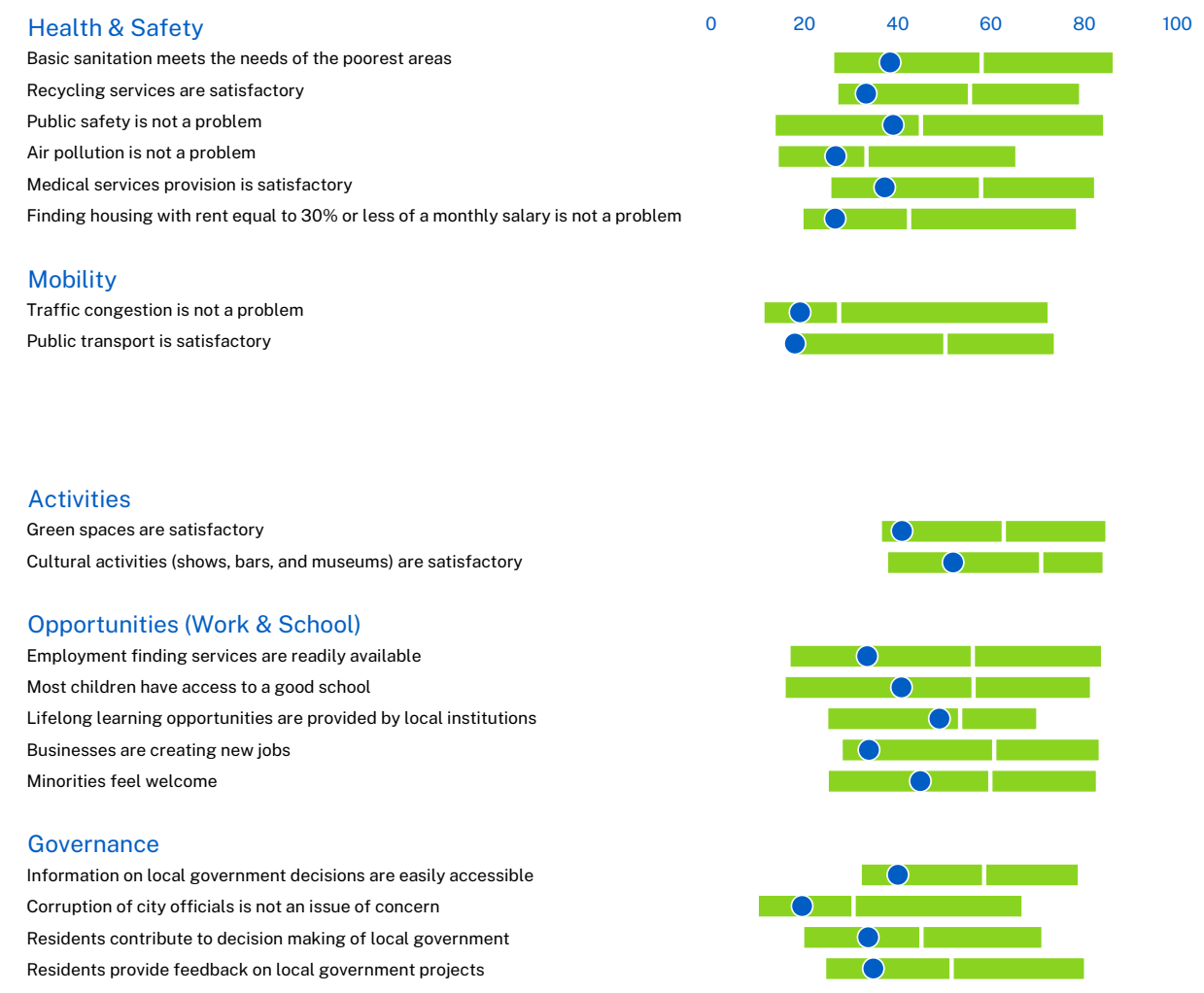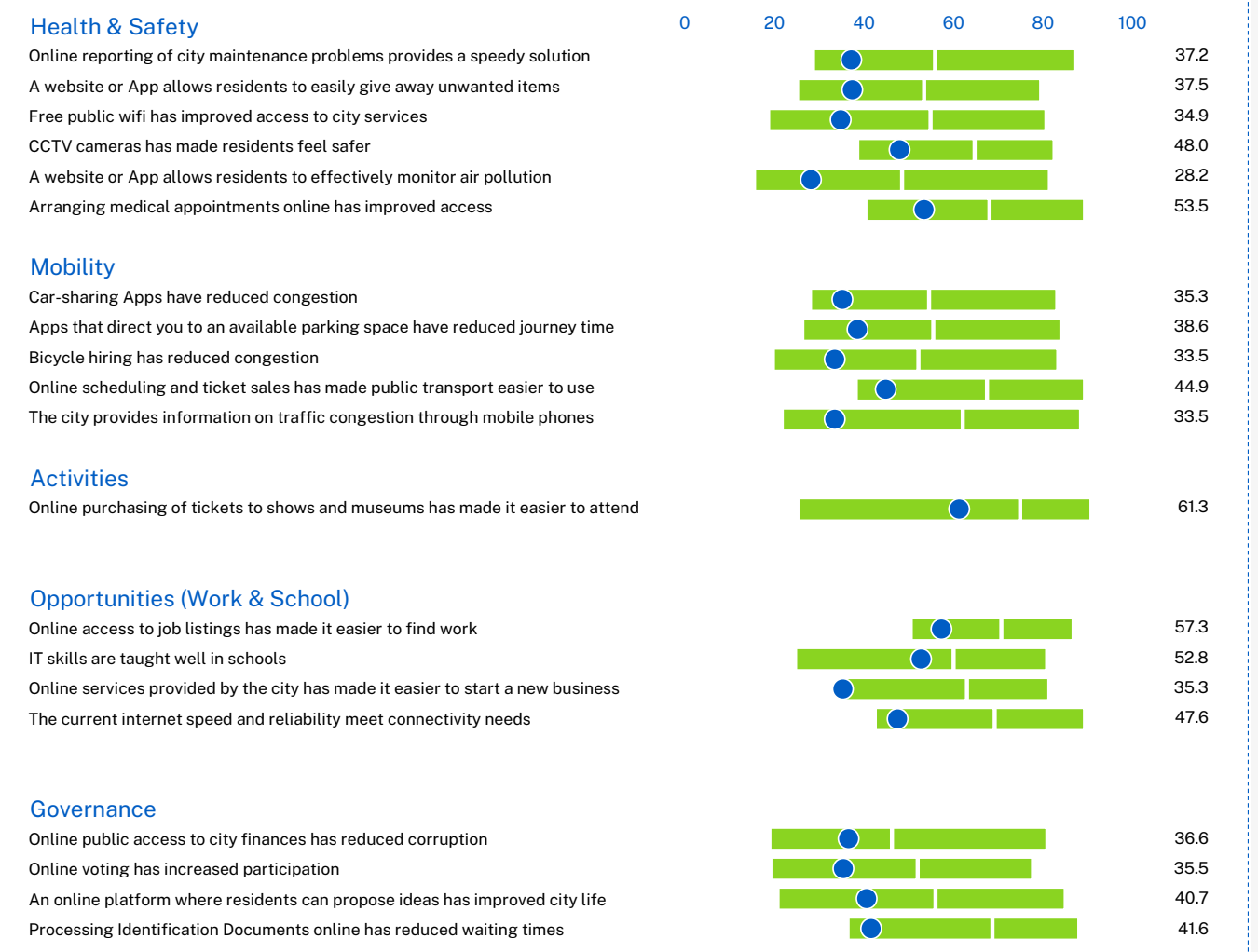
unemployment	67.5%
public transport	59.4%
health services	55.8%
security	43.2%
corruption / transparency	39.5%
road congestion	36.1%
affordable housing	35.7%
basic amenities (water, waste)	27.6%
school education	25.3%
fulfilling employment	25.0%
air pollution	23.8%
Green spaces	16.7%
recycling	13.8%
social mobility / inclusiveness	6.1%
citizen engagement	5.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	50.2%
You are comfortable with face recognition technologies to lower crime	76.0%
You feel the availability of online information has increased your trust in authorities	54.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	48.9%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	38.4
Recycling services are satisfactory	33.2
Public safety is not a problem	39.0
Air pollution is not a problem	26.7
Medical services provision is satisfactory	37.2
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	26.6

Mobility

Traffic congestion is not a problem	19.0
Public transport is satisfactory	17.9

Activities

Green spaces are satisfactory	41.0
Cultural activities (shows, bars, and museums) are satisfactory	51.9

Opportunities (Work & School)

Employment finding services are readily available	33.4
Most children have access to a good school	40.8
Lifelong learning opportunities are provided by local institutions	49.0
Businesses are creating new jobs	33.9
Minorities feel welcome	44.9

Governance

Information on local government decisions are easily accessible	40.1
Corruption of city officials is not an issue of concern	19.5
Residents contribute to decision making of local government	33.7
Residents provide feedback on local government projects	34.8

TECHNOLOGIES

Score

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	37.5
Free public wifi has improved access to city services	34.9
CCTV cameras has made residents feel safer	48.0
A website or App allows residents to effectively monitor air pollution	28.2
Arranging medical appointments online has improved access	53.5

Mobility

Car-sharing Apps have reduced congestion	35.3
Apps that direct you to an available parking space have reduced journey time	38.6
Bicycle hiring has reduced congestion	33.5
Online scheduling and ticket sales has made public transport easier to use	44.9
The city provides information on traffic congestion through mobile phones	33.5

Activities

Online purchasing of tickets to shows and museums has made it easier to attend	61.3

Opportunities (Work & School)

Online access to job listings has made it easier to find work	57.3
IT skills are taught well in schools	52.8
Online services provided by the city has made it easier to start a new business	35.3
The current internet speed and reliability meet connectivity needs	47.6

Governance

Online public access to city finances has reduced corruption	36.6
Online voting has increased participation	35.5
An online platform where residents can propose ideas has improved city life	40.7
Processing Identification Documents online has reduced waiting times	41.6

Vancouver

SMART CITY RANKING

43

Out of 142

▼

42 in 2023
Out of 141

SMART CITY RATING

BBB

A in 2023

FACTOR RATINGS
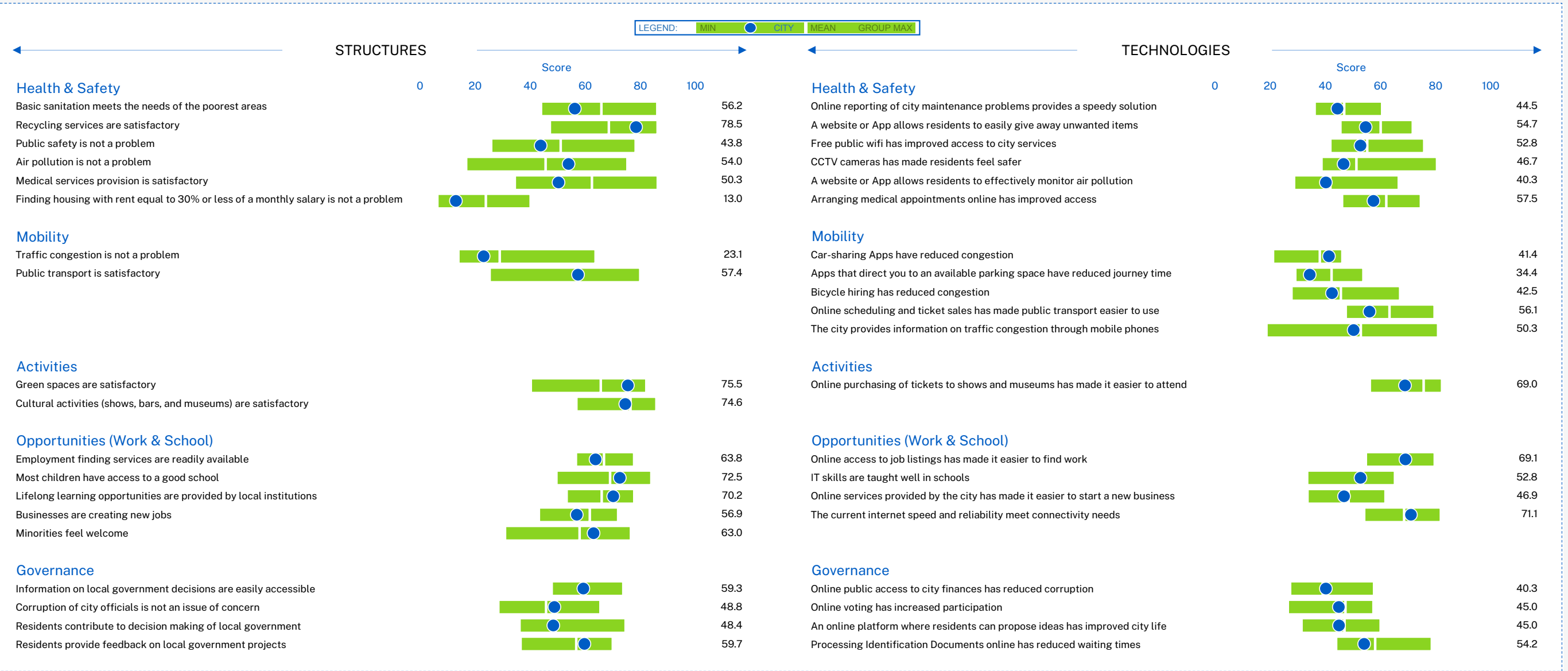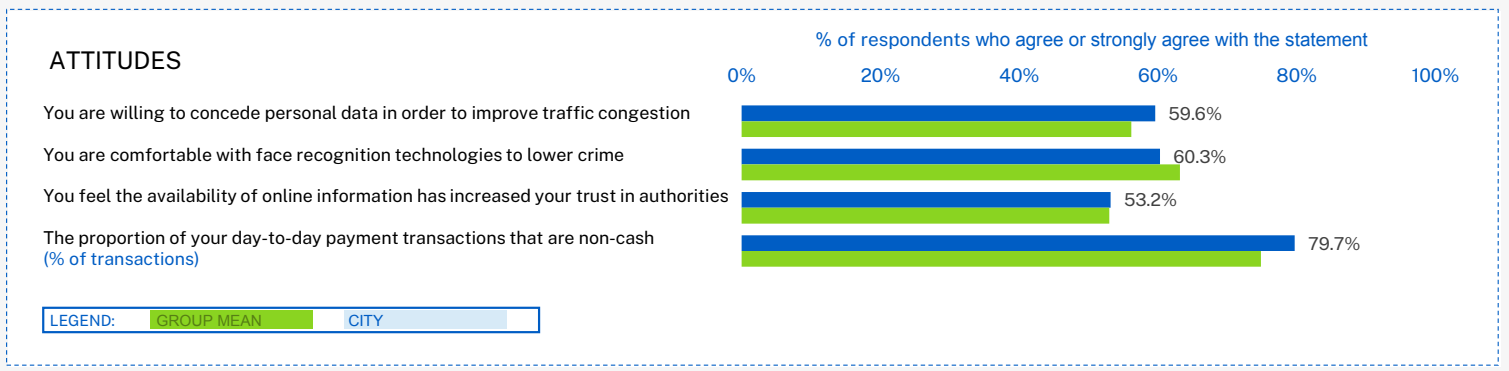
BBB
STRUCTURES

BBB
TECHNOLOGIES

GROUP

1
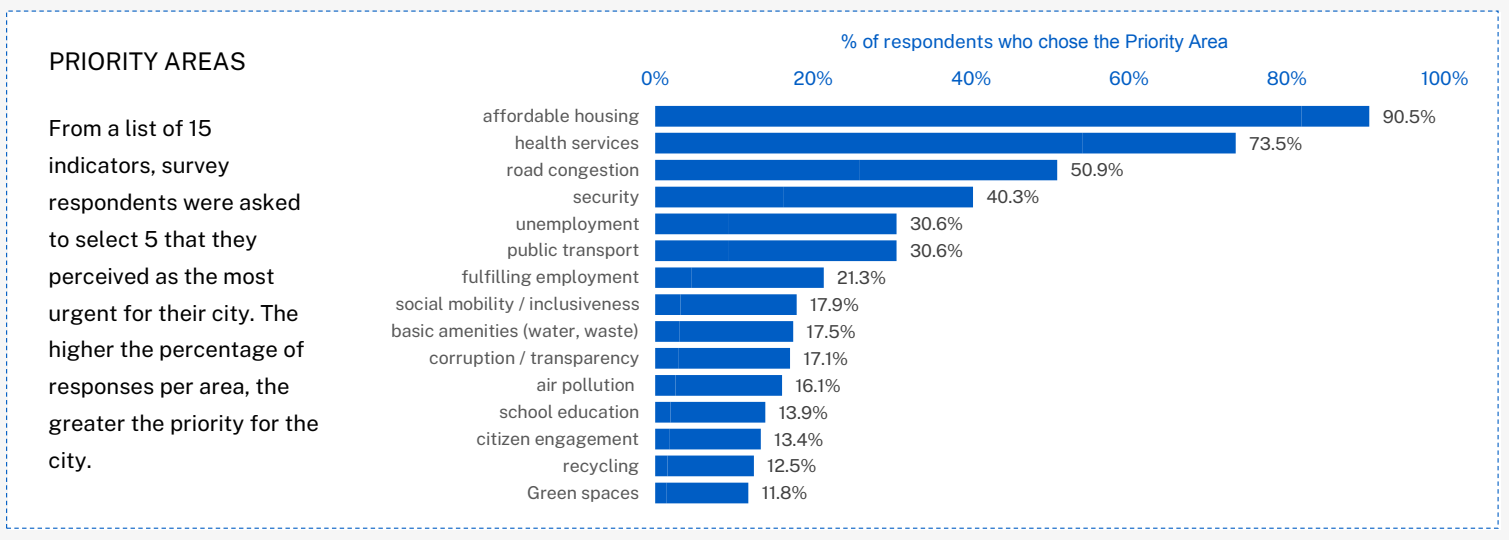
All ratings range from AAA to D

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

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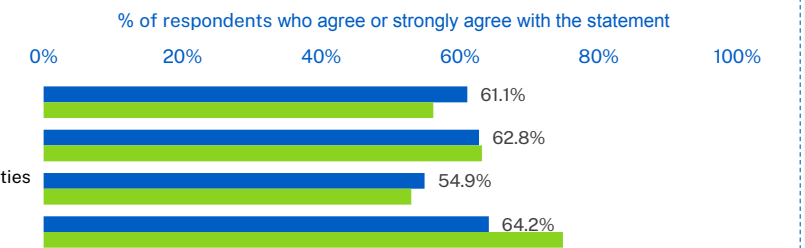
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. The higher the percentage of responses per area, the greater the priority for the city.

Priority Area	%
affordable housing	90.5%
health services	73.5%
road congestion	50.9%
security	40.3%
unemployment	30.6%
public transport	30.6%
fulfilling employment	21.3%
social mobility / inclusiveness	17.9%
basic amenities (water, waste)	17.5%
corruption / transparency	17.1%
air pollution	16.1%
school education	13.9%
citizen engagement	13.4%
recycling	12.5%
Green spaces	11.8%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	59.6%
You are comfortable with face recognition technologies to lower crime	60.3%
You feel the availability of online information has increased your trust in authorities	53.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	79.7%

LEGEND: GROUP MEAN   CITY

LEGEND: MIN ● CITY   MEAN   GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	56.2
Recycling services are satisfactory	78.5
Public safety is not a problem	43.8
Air pollution is not a problem	54.0
Medical services provision is satisfactory	50.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	13.0

Mobility

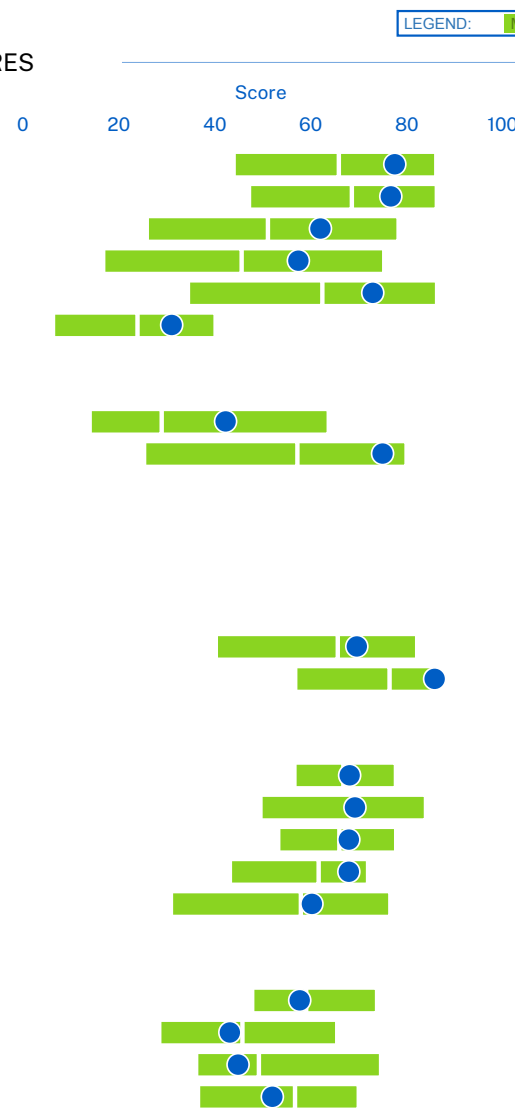|	Score
Traffic congestion is not a problem	23.1
Public transport is satisfactory	57.4

Activities

	Score
Green spaces are satisfactory	75.5
Cultural activities (shows, bars, and museums) are satisfactory	74.6

Opportunities (Work & School)

	Score
Employment finding services are readily available	63.8
Most children have access to a good school	72.5
Lifelong learning opportunities are provided by local institutions	70.2
Businesses are creating new jobs	56.9
Minorities feel welcome	63.0

Governance

	Score
Information on local government decisions are easily accessible	59.3
Corruption of city officials is not an issue of concern	48.8
Residents contribute to decision making of local government	48.4
Residents provide feedback on local government projects	59.7

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	44.5
A website or App allows residents to easily give away unwanted items	54.7
Free public wifi has improved access to city services	52.8
CCTV cameras has made residents feel safer	46.7
A website or App allows residents to effectively monitor air pollution	40.3
Arranging medical appointments online has improved access	57.5

Mobility

	Score
Car-sharing Apps have reduced congestion	41.4
Apps that direct you to an available parking space have reduced journey time	34.4
Bicycle hiring has reduced congestion	42.5
Online scheduling and ticket sales has made public transport easier to use	56.1
The city provides information on traffic congestion through mobile phones	50.3

Activities

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

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	69.1
IT skills are taught well in schools	52.8
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	71.1

Governance

	Score
Online public access to city finances has reduced corruption	40.3
Online voting has increased participation	45.0
An online platform where residents can propose ideas has improved city life	45.0
Processing Identification Documents online has reduced waiting times	54.2

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

Austria	2019	2020	2021	2022	1 yr change
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.

% of respondents who chose the Priority Area

affordable housing	69.5%
security	46.1%
road congestion	44.5%
unemployment	43.9%
corruption / transparency	32.1%
health services	27.5%
Green spaces	26.5%
school education	23.7%
air pollution	22.7%
public transport	21.8%
recycling	20.4%
citizen engagement	17.5%
fulfilling employment	17.1%
social mobility / inclusiveness	15.1%
basic amenities (water, waste)	13.4%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	61.1%
You are comfortable with face recognition technologies to lower crime	62.8%
You feel the availability of online information has increased your trust in authorities	54.9%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	64.2%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	77.5
Recycling services are satisfactory	76.7
Public safety is not a problem	62.0
Air pollution is not a problem	57.4
Medical services provision is satisfactory	72.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	31.0

Mobility

	Score
Traffic congestion is not a problem	42.3
Public transport is satisfactory	75.0

Activities

	Score
Green spaces are satisfactory	69.6
Cultural activities (shows, bars, and museums) are satisfactory	85.8

Opportunities (Work & School)

	Score
Employment finding services are readily available	68.1
Most children have access to a good school	69.2
Lifelong learning opportunities are provided by local institutions	68.0
Businesses are creating new jobs	67.9
Minorities feel welcome	60.2

Governance

	Score
Information on local government decisions are easily accessible	57.7
Corruption of city officials is not an issue of concern	43.1
Residents contribute to decision making of local government	44.9
Residents provide feedback on local government projects	52.0

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	49.3
A website or App allows residents to easily give away unwanted items	60.3
Free public wifi has improved access to city services	53.6
CCTV cameras has made residents feel safer	41.7
A website or App allows residents to effectively monitor air pollution	37.0
Arranging medical appointments online has improved access	62.9

Mobility

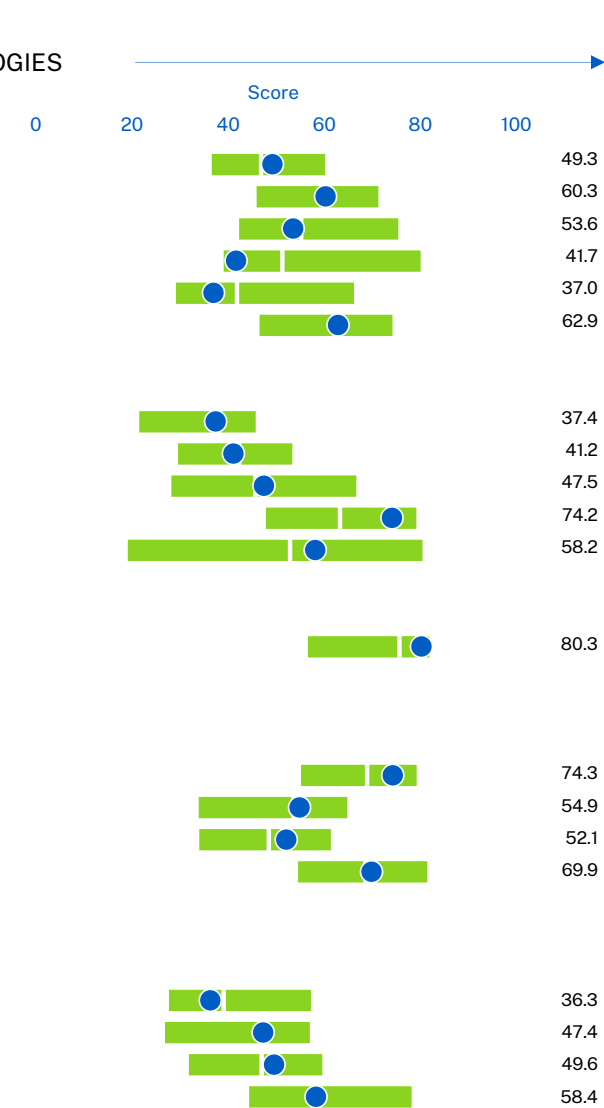|	Score
Car-sharing Apps have reduced congestion	37.4
Apps that direct you to an available parking space have reduced journey time	41.2
Bicycle hiring has reduced congestion	47.5
Online scheduling and ticket sales has made public transport easier to use	74.2
The city provides information on traffic congestion through mobile phones	58.2

Activities

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

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	74.3
IT skills are taught well in schools	54.9
Online services provided by the city has made it easier to start a new business	52.1
The current internet speed and reliability meet connectivity needs	69.9

Governance

	Score
Online public access to city finances has reduced corruption	36.3
Online voting has increased participation	47.4
An online platform where residents can propose ideas has improved city life	49.6
Processing Identification Documents online has reduced waiting times	58.4

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

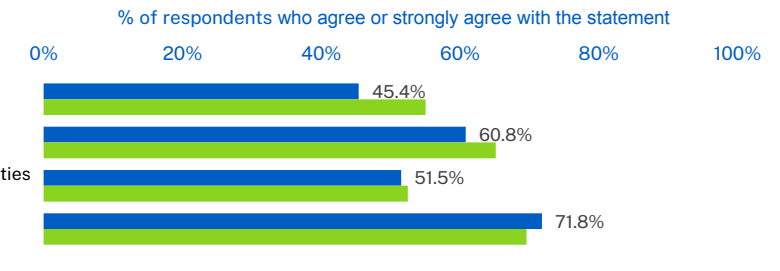|	
Population	550,000
(Eurostat)	
HDI	0.913
(Global Data Lab)	
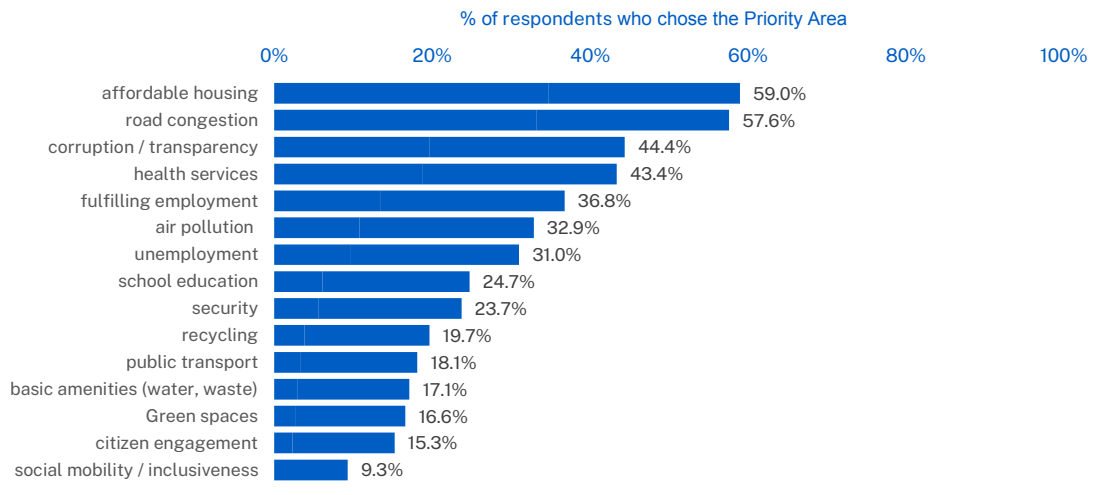
Country

Lithuania	2019	2020	2021	2022	1 yr change
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.

% of respondents who chose the Priority Area

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

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	45.4%
You are comfortable with face recognition technologies to lower crime	60.8%
You feel the availability of online information has increased your trust in authorities	51.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	71.8%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN ● CITY | MEAN | GROUP MAX

STRUCTURES

Score

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

Score

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

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
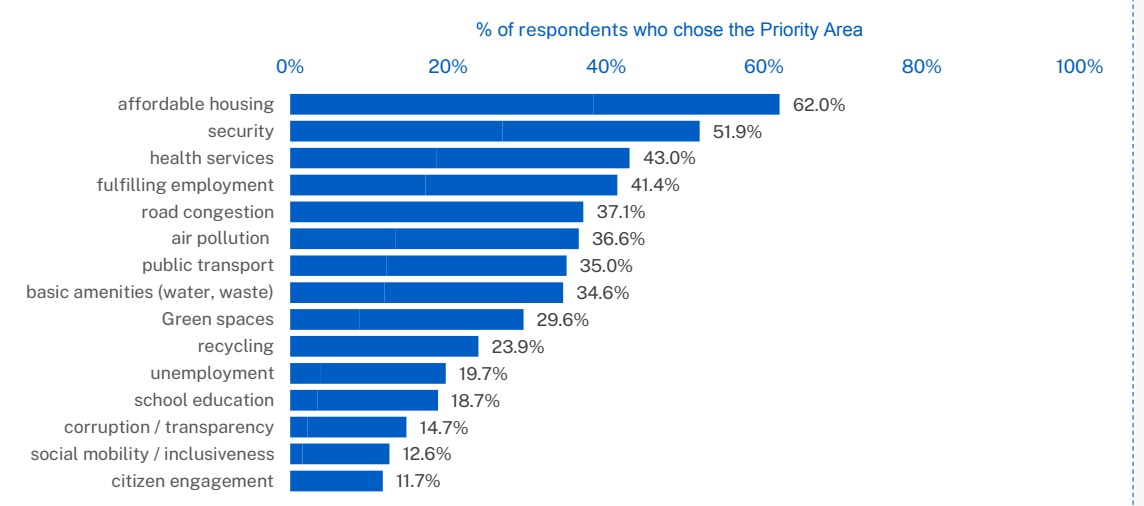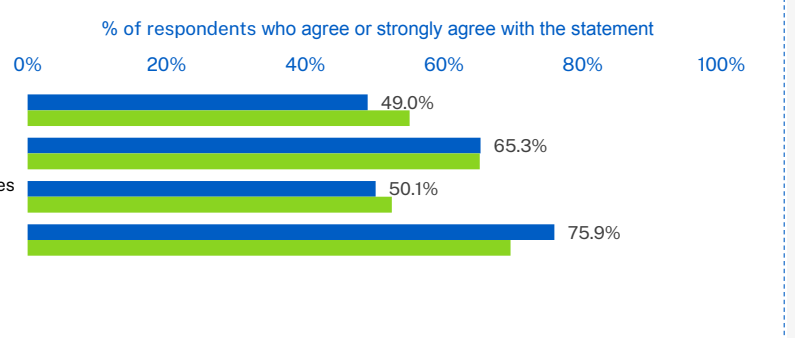
BACKGROUND INFORMATION

City

Population	1,780,000
(UN World Urbanization Prospects)	
HDI	0.926
(Global Data Lab)	

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.
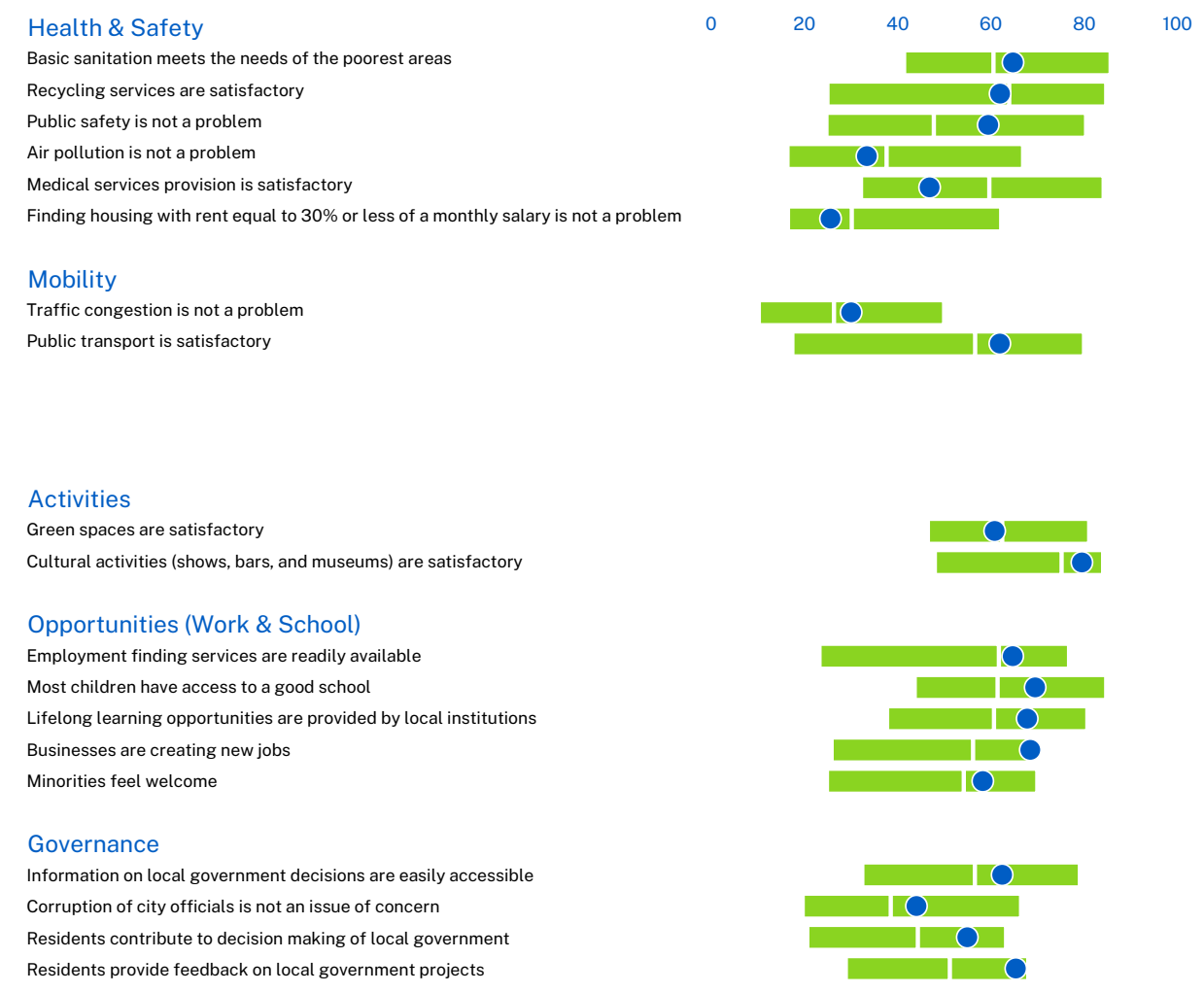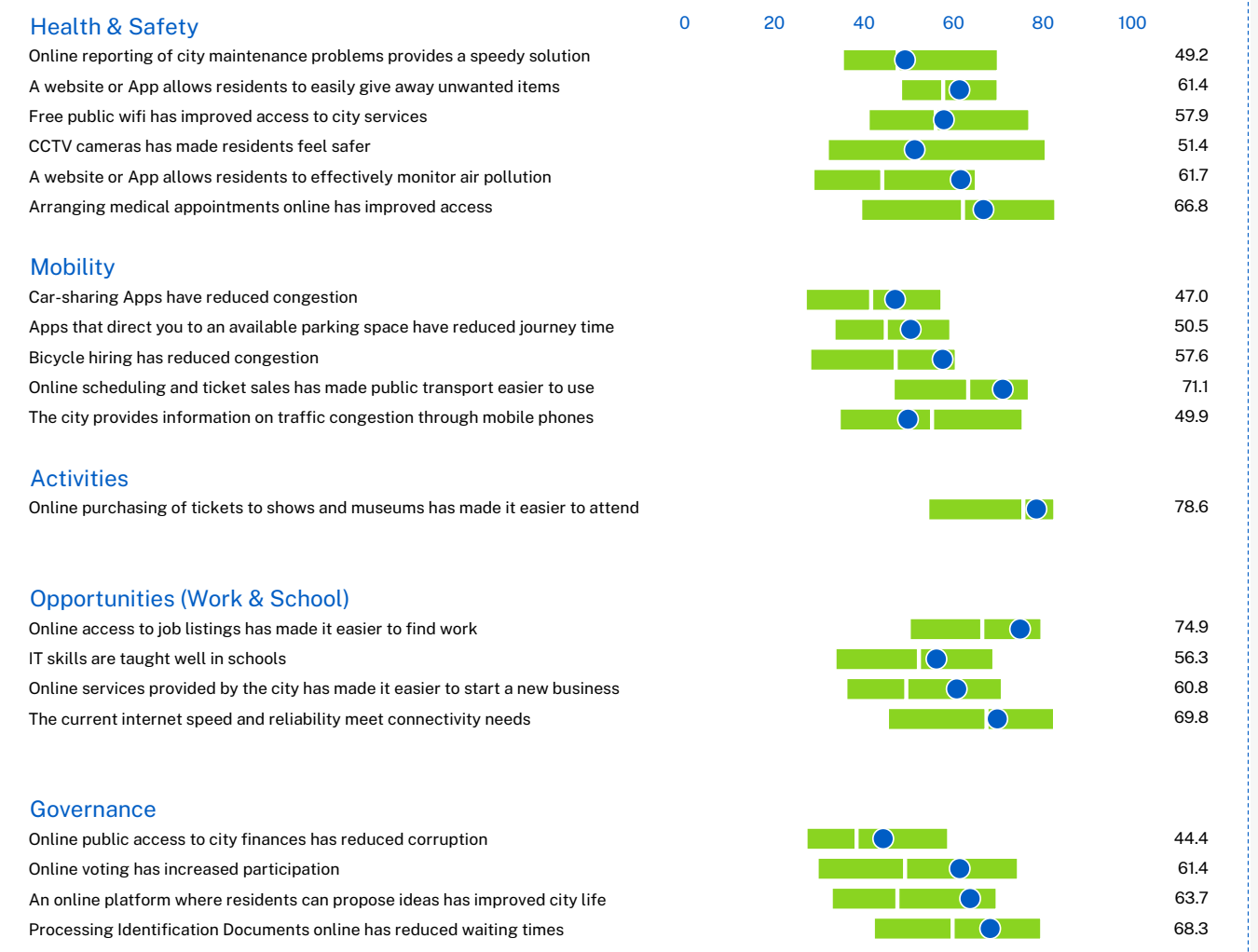
% of respondents who chose the Priority Area

Priority Area	%
affordable housing	62.0%
security	51.9%
health services	43.0%
fulfilling employment	41.4%
road congestion	37.1%
air pollution	36.6%
public transport	35.0%
basic amenities (water, waste)	34.6%
Green spaces	29.6%
recycling	23.9%
unemployment	19.7%
school education	18.7%
corruption / transparency	14.7%
social mobility / inclusiveness	12.6%
citizen engagement	11.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	
You are willing to concede personal data in order to improve traffic congestion	49.0%
You are comfortable with face recognition technologies to lower crime	65.3%
You feel the availability of online information has increased your trust in authorities	50.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.9%

LEGEND: GROUP MEAN CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

Basic sanitation meets the needs of the poorest areas	64.7
Recycling services are satisfactory	62.0
Public safety is not a problem	59.4
Air pollution is not a problem	33.4
Medical services provision is satisfactory	46.9
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	25.6

Mobility

Traffic congestion is not a problem	30.0
Public transport is satisfactory	61.9

Activities

Green spaces are satisfactory	60.8
Cultural activities (shows, bars, and museums) are satisfactory	79.5

Opportunities (Work & School)

Employment finding services are readily available	64.7
Most children have access to a good school	69.5
Lifelong learning opportunities are provided by local institutions	67.8
Businesses are creating new jobs	68.4
Minorities feel welcome	58.3

Governance

Information on local government decisions are easily accessible	62.4
Corruption of city officials is not an issue of concern	44.0
Residents contribute to decision making of local government	54.9
Residents provide feedback on local government projects	65.4

TECHNOLOGIES

Score

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	61.4
Free public wifi has improved access to city services	57.9
CCTV cameras has made residents feel safer	51.4
A website or App allows residents to effectively monitor air pollution	61.7
Arranging medical appointments online has improved access	66.8

Mobility

Car-sharing Apps have reduced congestion	47.0
Apps that direct you to an available parking space have reduced journey time	50.5
Bicycle hiring has reduced congestion	57.6
Online scheduling and ticket sales has made public transport easier to use	71.1
The city provides information on traffic congestion through mobile phones	49.9

Activities

Online purchasing of tickets to shows and museums has made it easier to attend	78.6

Opportunities (Work & School)

Online access to job listings has made it easier to find work	74.9
IT skills are taught well in schools	56.3
Online services provided by the city has made it easier to start a new business	60.8
The current internet speed and reliability meet connectivity needs	69.8

Governance

Online public access to city finances has reduced corruption	44.4
Online voting has increased participation	61.4
An online platform where residents can propose ideas has improved city life	63.7
Processing Identification Documents online has reduced waiting times	68.3

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
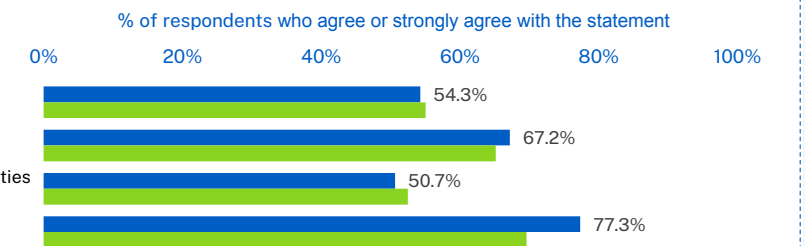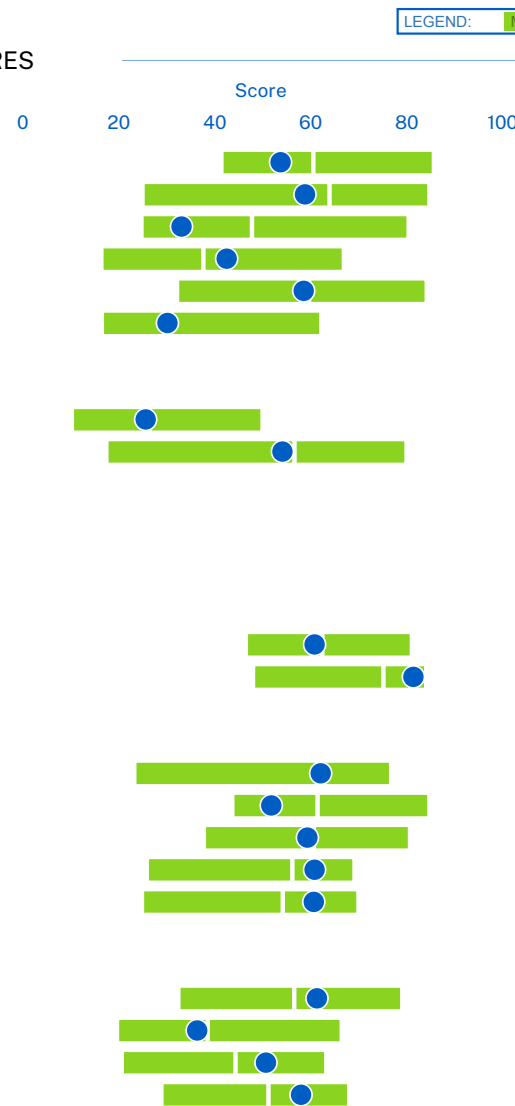*(UN Data)*

HDI 0.940
(Global Data Lab)

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	75.3%
security	55.9%
road congestion	48.2%
health services	42.5%
unemployment	39.3%
school education	34.4%
fulfilling employment	26.7%
public transport	26.4%
air pollution	25.3%
corruption / transparency	25.1%
basic amenities (water, waste)	16.0%
social mobility / inclusiveness	14.1%
recycling	11.9%
citizen engagement	11.3%
Green spaces	9.7%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	%
You are willing to concede personal data in order to improve traffic congestion	54.3%
You are comfortable with face recognition technologies to lower crime	67.2%
You feel the availability of online information has increased your trust in authorities	50.7%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	77.3%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN / CITY / MEAN / GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	53.7
Recycling services are satisfactory	58.8
Public safety is not a problem	33.1
Air pollution is not a problem	42.5
Medical services provision is satisfactory	58.5
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	30.2

Mobility
	Score
Traffic congestion is not a problem	25.6
Public transport is satisfactory	54.1

Activities
	Score
Green spaces are satisfactory	60.8
Cultural activities (shows, bars, and museums) are satisfactory	81.4

Opportunities (Work & School)
	Score
Employment finding services are readily available	62.1
Most children have access to a good school	51.8
Lifelong learning opportunities are provided by local institutions	59.3
Businesses are creating new jobs	60.8
Minorities feel welcome	60.7

Governance
	Score
Information on local government decisions are easily accessible	61.3
Corruption of city officials is not an issue of concern	36.3
Residents contribute to decision making of local government	50.7
Residents provide feedback on local government projects	58.0

TECHNOLOGIES

Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	43.4
A website or App allows residents to easily give away unwanted items	55.5
Free public wifi has improved access to city services	52.9
CCTV cameras has made residents feel safer	45.8
A website or App allows residents to effectively monitor air pollution	41.0
Arranging medical appointments online has improved access	64.4

Mobility
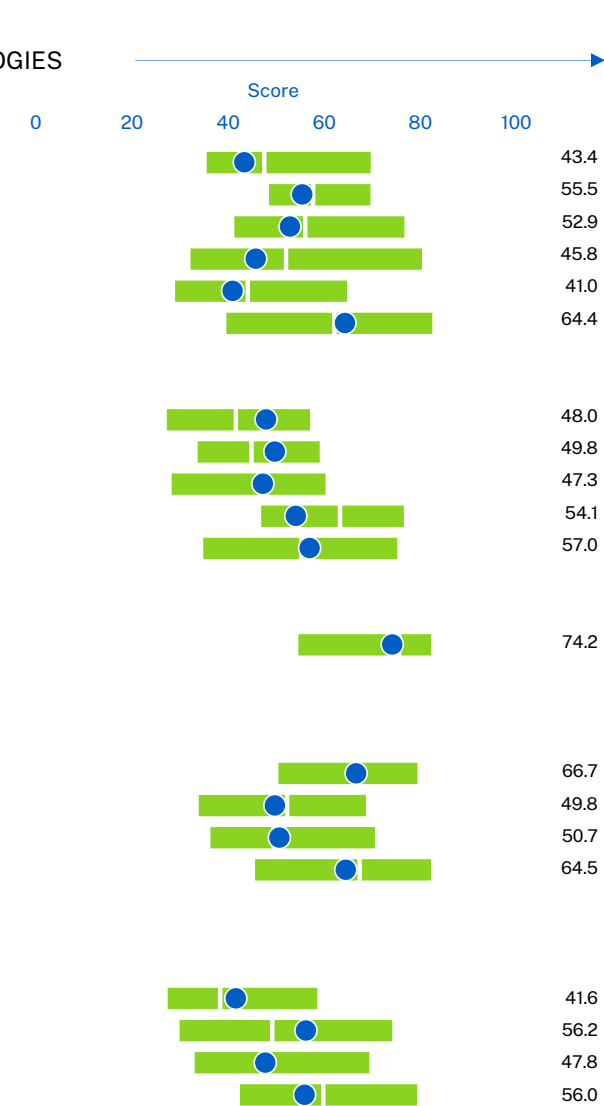|	Score
Car-sharing Apps have reduced congestion	48.0
Apps that direct you to an available parking space have reduced journey time	49.8
Bicycle hiring has reduced congestion	47.3
Online scheduling and ticket sales has made public transport easier to use	54.1
The city provides information on traffic congestion through mobile phones	57.0

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	74.2

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	66.7
IT skills are taught well in schools	49.8
Online services provided by the city has made it easier to start a new business	50.7
The current internet speed and reliability meet connectivity needs	64.5

Governance
	Score
Online public access to city finances has reduced corruption	41.6
Online voting has increased participation	56.2
An online platform where residents can propose ideas has improved city life	47.8
Processing Identification Documents online has reduced waiting times	56.0

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)	

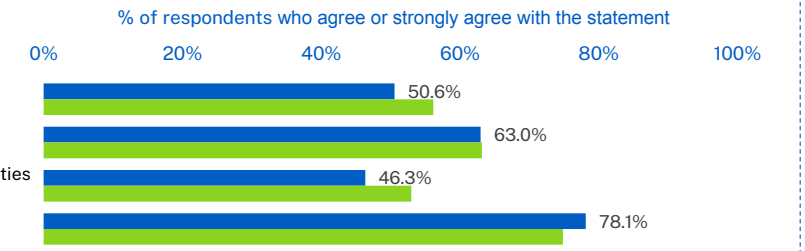Map tiles by Stamen Design CC BY 3.0 Map Data © OpenStreetMap

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.

% of respondents who chose the Priority Area

Priority Area	%
affordable housing	86.4%
health services	54.2%
basic amenities (water, waste)	50.1%
public transport	46.7%
road congestion	38.0%
unemployment	37.4%
fulfilling employment	24.8%
school education	23.4%
security	23.3%
recycling	21.6%
corruption / transparency	15.6%
citizen engagement	13.6%
social mobility / inclusiveness	10.9%
air pollution	8.3%
Green spaces	4.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	City
You are willing to concede personal data in order to improve traffic congestion	50.6%
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	46.3%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	78.1%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY MEAN GROUP MAX

STRUCTURES

Score

Health & Safety

	Score
Basic sanitation meets the needs of the poorest areas	66.2
Recycling services are satisfactory	68.1
Public safety is not a problem	52.0
Air pollution is not a problem	64.0
Medical services provision is satisfactory	55.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	19.6

Mobility

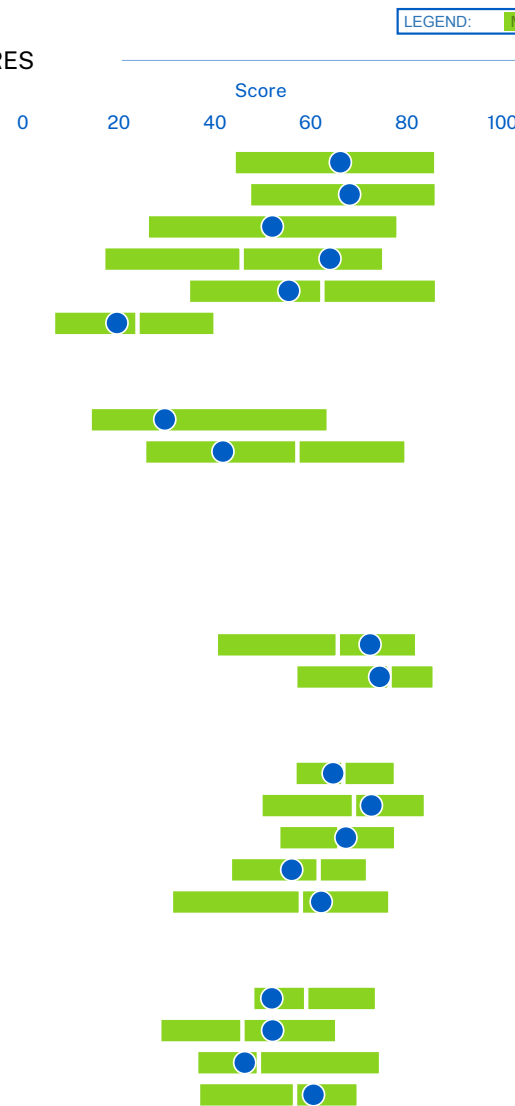|	Score
Traffic congestion is not a problem	29.6
Public transport is satisfactory	41.7

Activities

	Score
Green spaces are satisfactory	72.4
Cultural activities (shows, bars, and museums) are satisfactory	74.4

Opportunities (Work & School)

	Score
Employment finding services are readily available	64.7
Most children have access to a good school	72.7
Lifelong learning opportunities are provided by local institutions	67.3
Businesses are creating new jobs	56.1
Minorities feel welcome	62.2

Governance

	Score
Information on local government decisions are easily accessible	51.9
Corruption of city officials is not an issue of concern	52.1
Residents contribute to decision making of local government	46.2
Residents provide feedback on local government projects	60.6

TECHNOLOGIES

Score

Health & Safety

	Score
Online reporting of city maintenance problems provides a speedy solution	41.6
A website or App allows residents to easily give away unwanted items	63.6
Free public wifi has improved access to city services	54.5
CCTV cameras has made residents feel safer	49.2
A website or App allows residents to effectively monitor air pollution	29.9
Arranging medical appointments online has improved access	56.8

Mobility

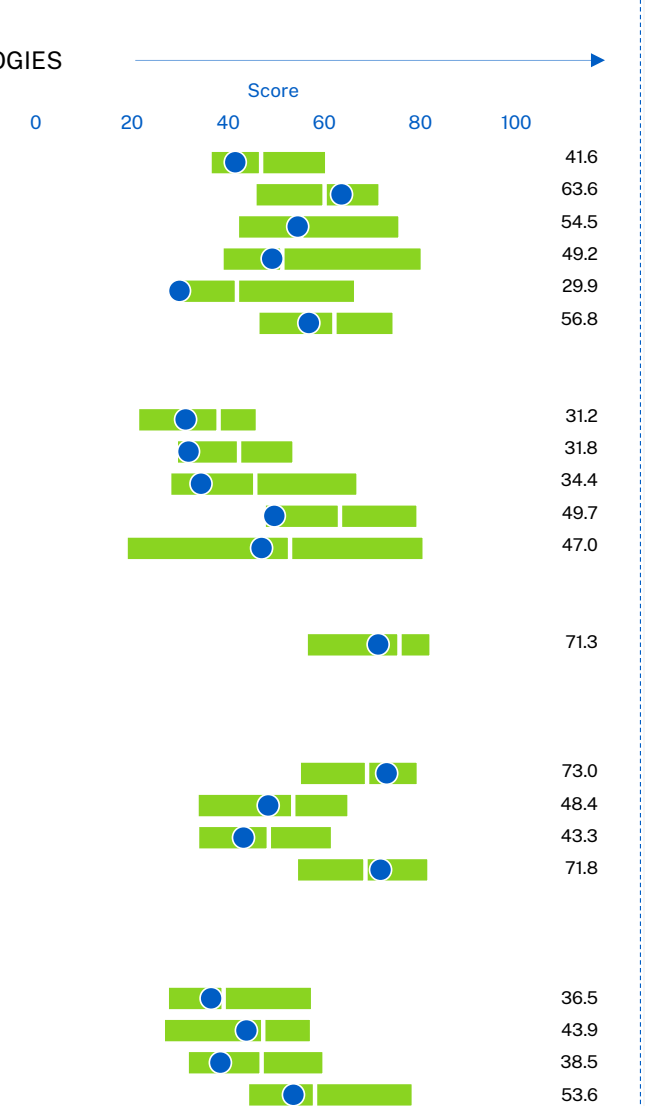|	Score
Car-sharing Apps have reduced congestion	31.2
Apps that direct you to an available parking space have reduced journey time	31.8
Bicycle hiring has reduced congestion	34.4
Online scheduling and ticket sales has made public transport easier to use	49.7
The city provides information on traffic congestion through mobile phones	47.0

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	71.3

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	73.0
IT skills are taught well in schools	48.4
Online services provided by the city has made it easier to start a new business	43.3
The current internet speed and reliability meet connectivity needs	71.8

Governance

	Score
Online public access to city finances has reduced corruption	36.5
Online voting has increased participation	43.9
An online platform where residents can propose ideas has improved city life	38.5
Processing Identification Documents online has reduced waiting times	53.6

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)	

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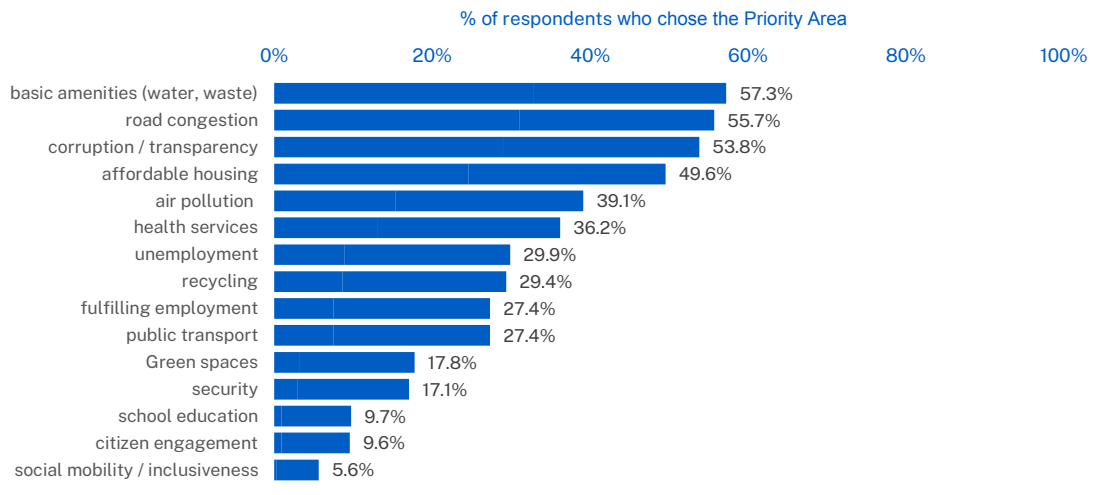
Country
Croatia

	2019	2020	2021	2022	1 yr change
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

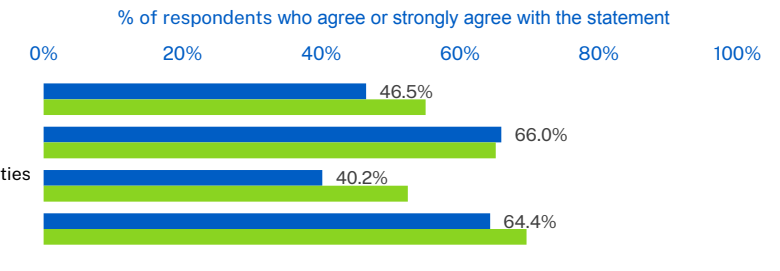**% of respondents who chose the Priority Area**

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	%
basic amenities (water, waste)	57.3%
road congestion	55.7%
corruption / transparency	53.8%
affordable housing	49.6%
air pollution	39.1%
health services	36.2%
unemployment	29.9%
recycling	29.4%
fulfilling employment	27.4%
public transport	27.4%
Green spaces	17.8%
security	17.1%
school education	9.7%
citizen engagement	9.6%
social mobility / inclusiveness	5.6%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	City
You are willing to concede personal data in order to improve traffic congestion	46.5%
You are comfortable with face recognition technologies to lower crime	66.0%
You feel the availability of online information has increased your trust in authorities	40.2%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	64.4%

LEGEND: GROUP MEAN / CITY

LEGEND: MIN / CITY / MEAN / GROUP MAX

STRUCTURES
Score

Health & Safety
	Score
Basic sanitation meets the needs of the poorest areas	49.4
Recycling services are satisfactory	42.5
Public safety is not a problem	65.9
Air pollution is not a problem	33.2
Medical services provision is satisfactory	44.6
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	18.9

Mobility
	Score
Traffic congestion is not a problem	15.9
Public transport is satisfactory	42.5

Activities
	Score
Green spaces are satisfactory	56.1
Cultural activities (shows, bars, and museums) are satisfactory	74.0

Opportunities (Work & School)
	Score
Employment finding services are readily available	60.8
Most children have access to a good school	62.5
Lifelong learning opportunities are provided by local institutions	56.1
Businesses are creating new jobs	50.7
Minorities feel welcome	56.4

Governance
	Score
Information on local government decisions are easily accessible	47.7
Corruption of city officials is not an issue of concern	23.0
Residents contribute to decision making of local government	28.7
Residents provide feedback on local government projects	35.7

TECHNOLOGIES
Score

Health & Safety
	Score
Online reporting of city maintenance problems provides a speedy solution	39.7
A website or App allows residents to easily give away unwanted items	48.4
Free public wifi has improved access to city services	57.2
CCTV cameras has made residents feel safer	45.5
A website or App allows residents to effectively monitor air pollution	51.1
Arranging medical appointments online has improved access	53.3

Mobility
	Score
Car-sharing Apps have reduced congestion	40.0
Apps that direct you to an available parking space have reduced journey time	37.5
Bicycle hiring has reduced congestion	37.5
Online scheduling and ticket sales has made public transport easier to use	61.3
The city provides information on traffic congestion through mobile phones	43.0

Activities
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	78.8

Opportunities (Work & School)
	Score
Online access to job listings has made it easier to find work	65.4
IT skills are taught well in schools	57.7
Online services provided by the city has made it easier to start a new business	49.7
The current internet speed and reliability meet connectivity needs	64.4

Governance
	Score
Online public access to city finances has reduced corruption	32.3
Online voting has increased participation	37.5
An online platform where residents can propose ideas has improved city life	37.9
Processing Identification Documents online has reduced waiting times	61.0

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

GROUP

3

All ratings range
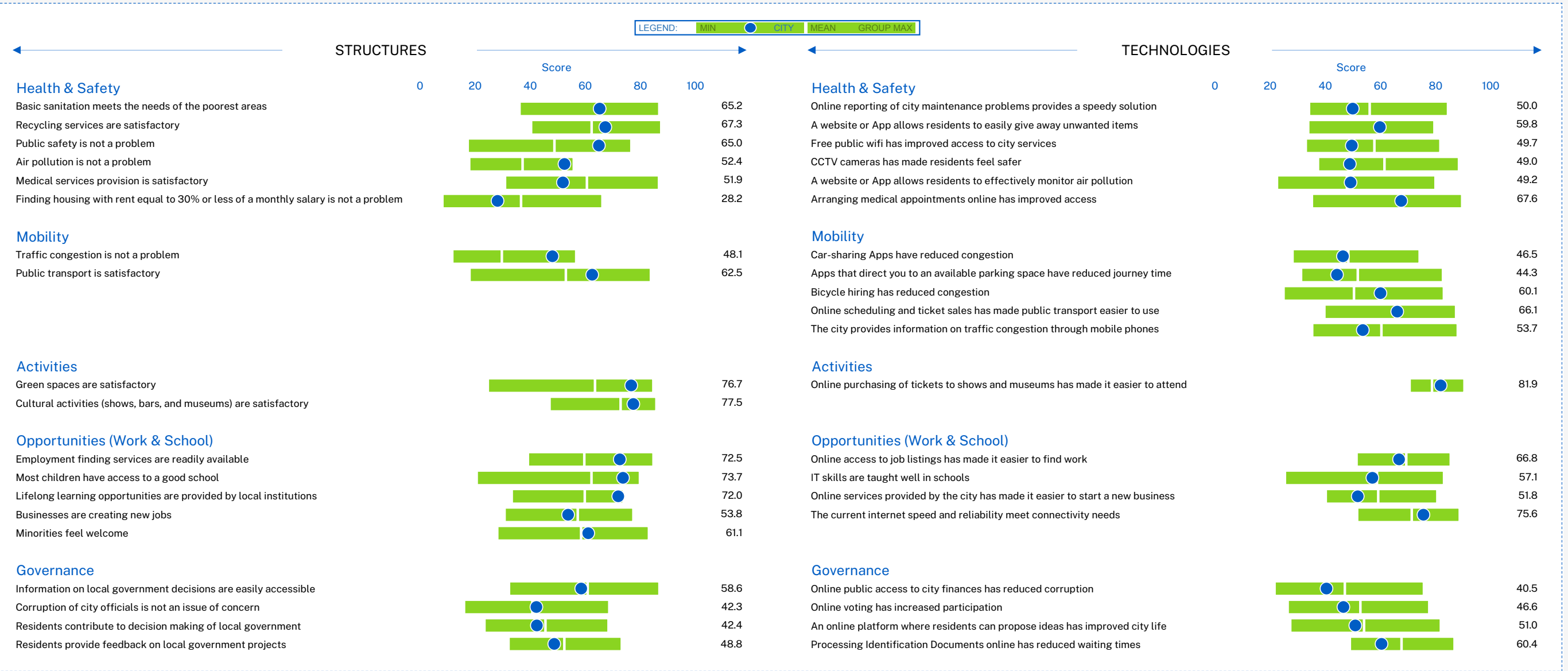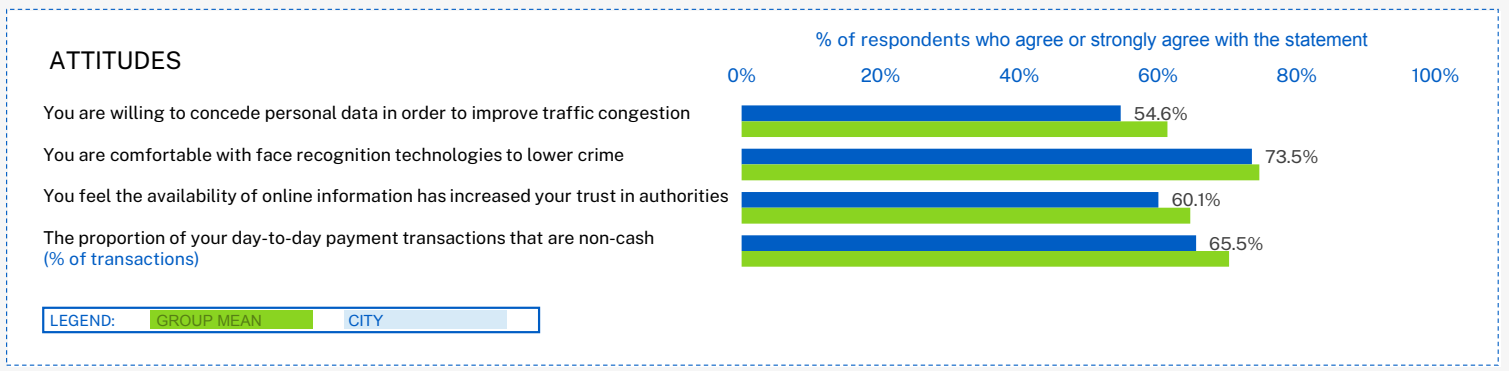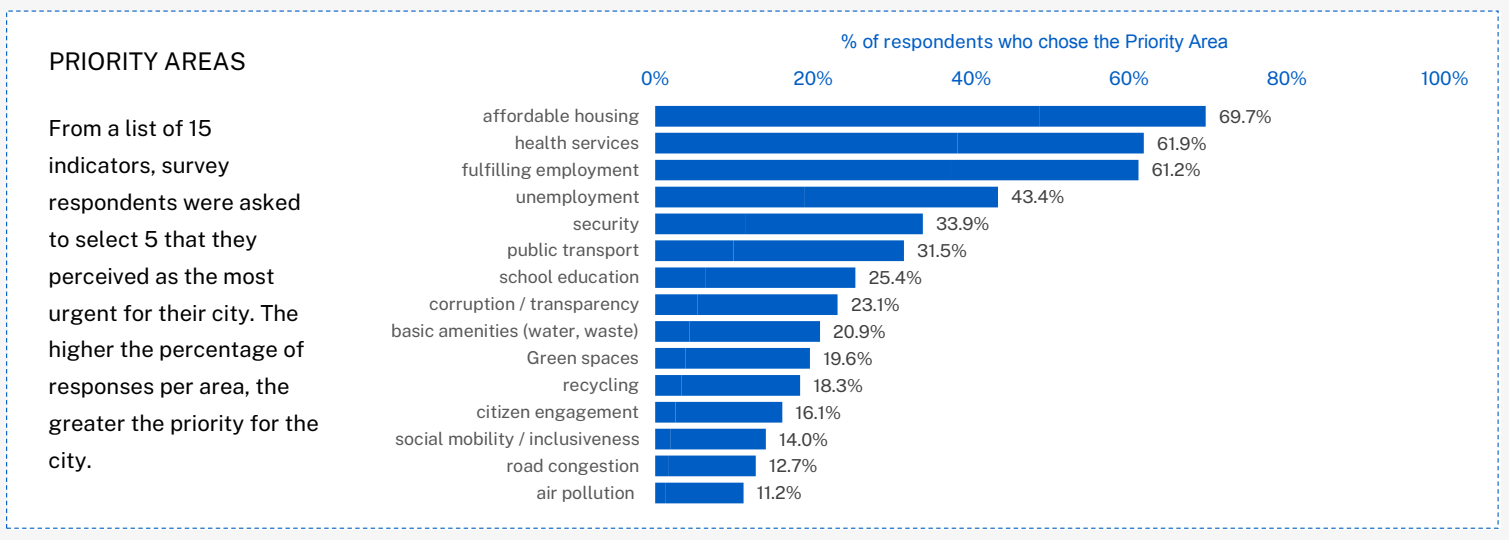from AAA to D

BACKGROUND INFORMATION

City

Population	670,000
(Eurostat)	
HDI	0.912
(Global Data Lab)	

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

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

% of respondents who chose the Priority Area

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	%
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	%
You are willing to concede personal data in order to improve traffic congestion	54.6%
You are comfortable with face recognition technologies to lower crime	73.5%
You feel the availability of online information has increased your trust in authorities	60.1%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	65.5%

LEGEND: GROUP MEAN | CITY

LEGEND: MIN | CITY | MEAN | GROUP MAX

STRUCTURES

Score

Health & Safety
	Score
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
	Score
Traffic congestion is not a problem	48.1
Public transport is satisfactory	62.5

Activities
	Score
Green spaces are satisfactory	76.7
Cultural activities (shows, bars, and museums) are satisfactory	77.5

Opportunities (Work & School)
	Score
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
	Score
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

Score

Health & Safety
	Score
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
	Score
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
	Score
Online purchasing of tickets to shows and museums has made it easier to attend	81.9

Opportunities (Work & School)
	Score
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
	Score
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

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)	

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

% of respondents who chose the Priority Area

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	%
security	46.7%
fulfilling employment	40.8%
social mobility / inclusiveness	39.9%
health services	37.8%
air pollution	36.6%
road congestion	35.9%
affordable housing	35.5%
corruption / transparency	28.4%
public transport	28.0%
basic amenities (water, waste)	27.4%
Green spaces	23.3%
recycling	19.7%
unemployment	15.2%
citizen engagement	11.2%
school education	8.3%

ATTITUDES

% of respondents who agree or strongly agree with the statement

Statement	City %
You are willing to concede personal data in order to improve traffic congestion	88.8%
You are comfortable with face recognition technologies to lower crime	76.0%
You feel the availability of online information has increased your trust in authorities	86.4%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	80.4%

LEGEND: GROUP MEAN — CITY

STRUCTURES

LEGEND: MIN ● CITY MEAN GROUP MAX

Health & Safety
Score

	Score
Basic sanitation meets the needs of the poorest areas	82.5
Recycling services are satisfactory	74.3
Public safety is not a problem	61.7
Air pollution is not a problem	65.7
Medical services provision is satisfactory	80.4
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	78.7

Mobility

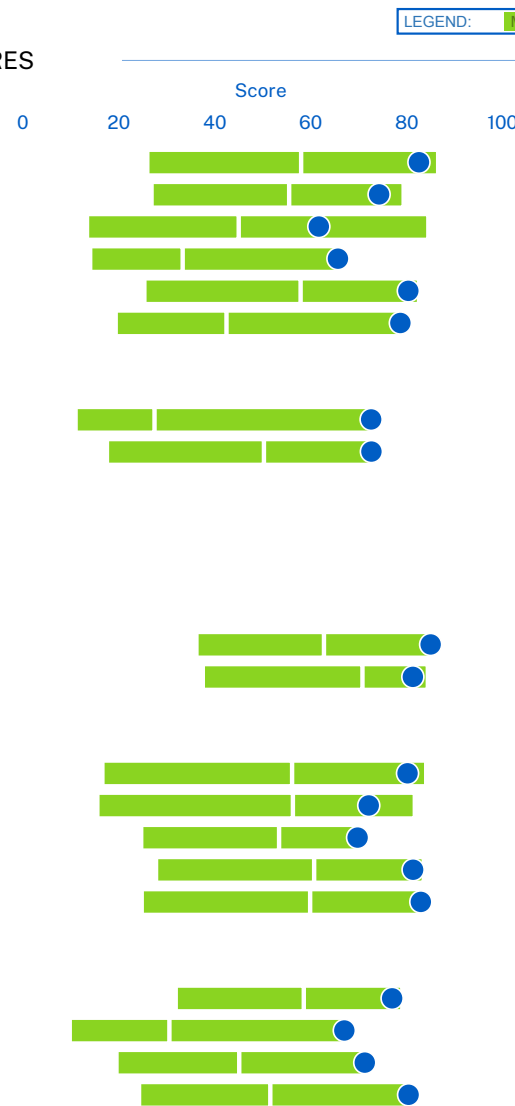|	Score
Traffic congestion is not a problem	72.6
Public transport is satisfactory	72.7

Activities

	Score
Green spaces are satisfactory	85.0
Cultural activities (shows, bars, and museums) are satisfactory	81.3

Opportunities (Work & School)

	Score
Employment finding services are readily available	80.2
Most children have access to a good school	72.1
Lifelong learning opportunities are provided by local institutions	69.8
Businesses are creating new jobs	81.3
Minorities feel welcome	83.0

Governance

	Score
Information on local government decisions are easily accessible	77.0
Corruption of city officials is not an issue of concern	67.0
Residents contribute to decision making of local government	71.3
Residents provide feedback on local government projects	80.4

TECHNOLOGIES

Health & Safety
Score

	Score
Online reporting of city maintenance problems provides a speedy solution	87.5
A website or App allows residents to easily give away unwanted items	76.9
Free public wifi has improved access to city services	80.3
CCTV cameras has made residents feel safer	81.9
A website or App allows residents to effectively monitor air pollution	81.6
Arranging medical appointments online has improved access	82.9

Mobility

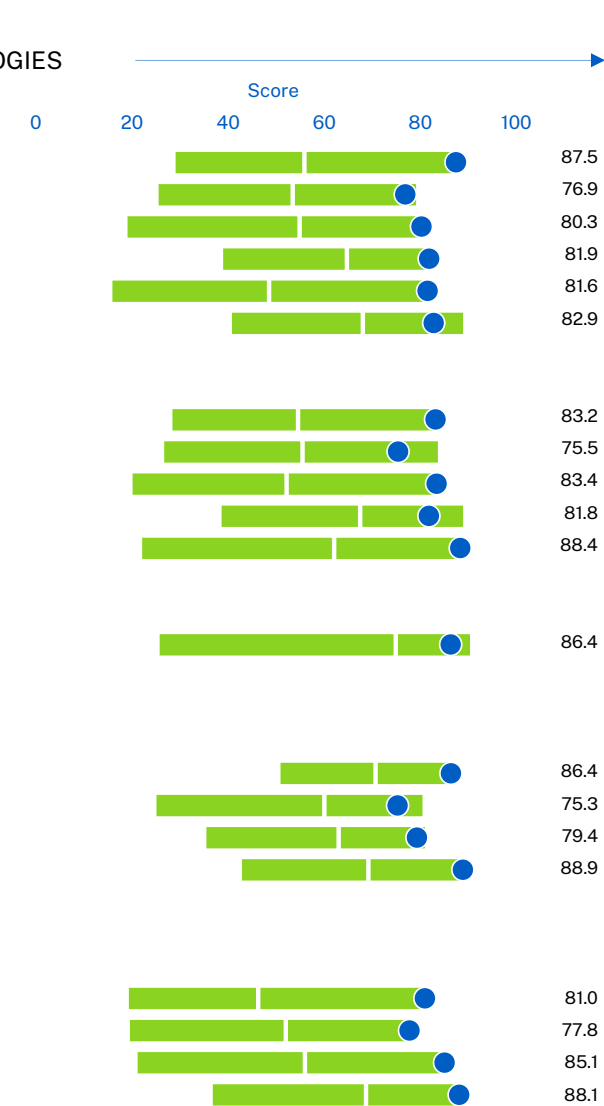|	Score
Car-sharing Apps have reduced congestion	83.2
Apps that direct you to an available parking space have reduced journey time	75.5
Bicycle hiring has reduced congestion	83.4
Online scheduling and ticket sales has made public transport easier to use	81.8
The city provides information on traffic congestion through mobile phones	88.4

Activities

	Score
Online purchasing of tickets to shows and museums has made it easier to attend	86.4

Opportunities (Work & School)

	Score
Online access to job listings has made it easier to find work	86.4
IT skills are taught well in schools	75.3
Online services provided by the city has made it easier to start a new business	79.4
The current internet speed and reliability meet connectivity needs	88.9

Governance

	Score
Online public access to city finances has reduced corruption	81.0
Online voting has increased participation	77.8
An online platform where residents can propose ideas has improved city life	85.1
Processing Identification Documents online has reduced waiting times	88.1

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

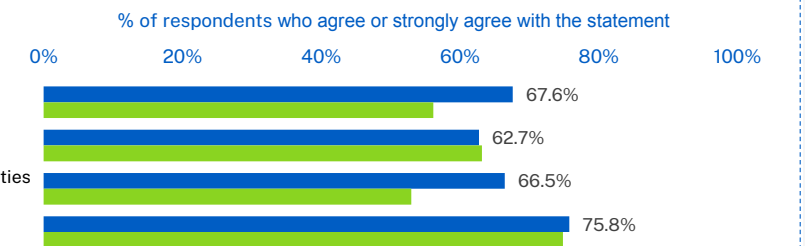|	2019	2020	2021	2022	1 yr change
HDI	0.960	0.957	0.965	0.967	+0.002
Life expectancy at birth	83.8	83.1	84.0	84.3	+0.3
Expected years of schooling	16.3	16.4	16.6	16.6	+0.0
Mean years of schooling	13.9	13.9	13.9	13.9	+0.0
GNI per capita (PPP $)	67,531	66,267	68,550	69,433	+882

PRIORITY AREAS

% of respondents who chose the Priority Area

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.

affordable housing	76.4%
road congestion	58.8%
air pollution	32.2%
unemployment	29.4%
security	28.2%
Green spaces	27.8%
fulfilling employment	25.9%
health services	24.0%
public transport	22.3%
social mobility / inclusiveness	21.0%
recycling	20.1%
citizen engagement	13.7%
basic amenities (water, waste)	11.8%
corruption / transparency	11.2%
school education	11.1%

ATTITUDES

% of respondents who agree or strongly agree with the statement

You are willing to concede personal data in order to improve traffic congestion	67.6%
You are comfortable with face recognition technologies to lower crime	62.7%
You feel the availability of online information has increased your trust in authorities	66.5%
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	75.8%

LEGEND: GROUP MEAN — CITY

LEGEND: MIN ● CITY — MEAN GROUP MAX

STRUCTURES

Score

Health & Safety
Basic sanitation meets the needs of the poorest areas	86.2
Recycling services are satisfactory	86.3
Public safety is not a problem	75.9
Air pollution is not a problem	62.9
Medical services provision is satisfactory	86.3
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	29.6

Mobility
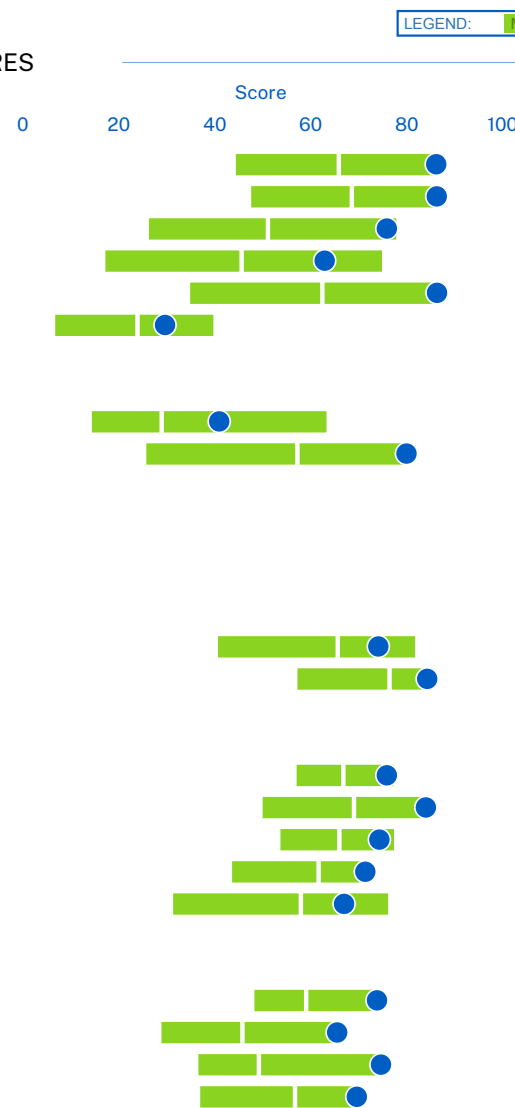|	
Traffic congestion is not a problem	41.0
Public transport is satisfactory	80.0

Activities
Green spaces are satisfactory	74.1
Cultural activities (shows, bars, and museums) are satisfactory	84.3

Opportunities (Work & School)
Employment finding services are readily available	75.9
Most children have access to a good school	84.0
Lifelong learning opportunities are provided by local institutions	74.3
Businesses are creating new jobs	71.4
Minorities feel welcome	67.0

Governance
Information on local government decisions are easily accessible	73.8
Corruption of city officials is not an issue of concern	65.5
Residents contribute to decision making of local government	74.7
Residents provide feedback on local government projects	69.6

TECHNOLOGIES

Score

Health & Safety
Online reporting of city maintenance problems provides a speedy solution	60.6
A website or App allows residents to easily give away unwanted items	58.3
Free public wifi has improved access to city services	54.3
CCTV cameras has made residents feel safer	51.4
A website or App allows residents to effectively monitor air pollution	45.4
Arranging medical appointments online has improved access	63.2

Mobility
Car-sharing Apps have reduced congestion	43.6
Apps that direct you to an available parking space have reduced journey time	44.5
Bicycle hiring has reduced congestion	55.6
Online scheduling and ticket sales has made public transport easier to use	79.7
The city provides information on traffic congestion through mobile phones	61.8

Activities
Online purchasing of tickets to shows and museums has made it easier to attend	82.0

Opportunities (Work & School)
Online access to job listings has made it easier to find work	79.8
IT skills are taught well in schools	63.9
Online services provided by the city has made it easier to start a new business	57.1
The current internet speed and reliability meet connectivity needs	82.0

Governance
Online public access to city finances has reduced corruption	48.4
Online voting has increased participation	53.1
An online platform where residents can propose ideas has improved city life	51.7
Processing Identification Documents online has reduced waiting times	61.6