

Smart City Index 2020

A tool for action, an instrument for better lives for all citizens.

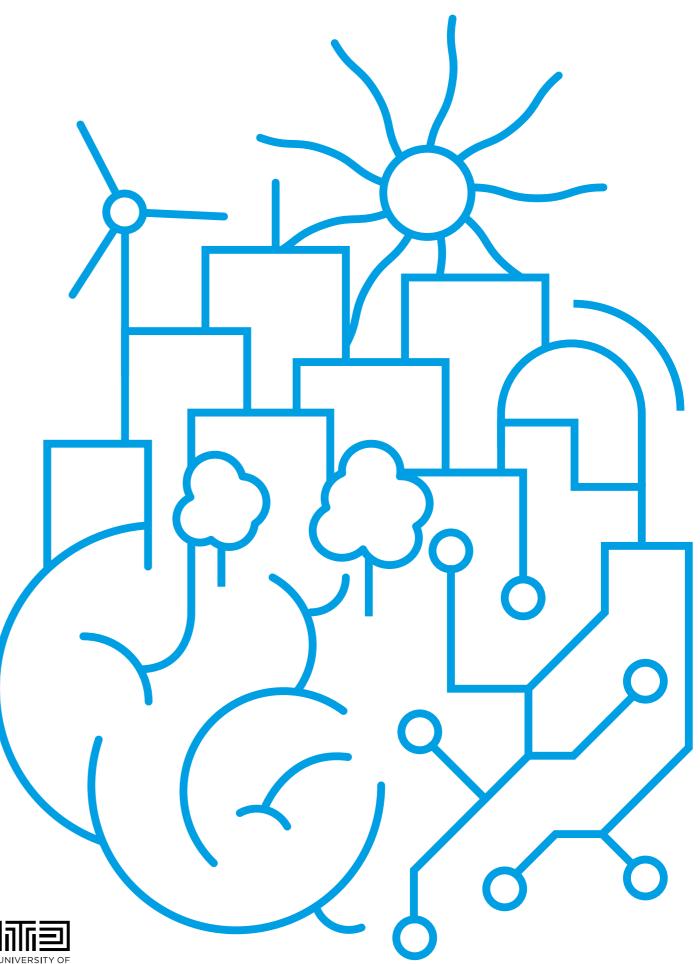
A collaboration between:











"A great city is that which has the greatest men and women."

Walt Whitman

"The City is what it is because our citizens are what they are."

Plato

Preface

This is the second edition of the IMD-SUTD Smart City Index Report. Over the last twelve months, much has happened. Our view of cities in general, and of smart cities in particular, has been confronted to the reality of a sudden pandemic. At the time of writing this report (September 2020), it is still too early to draw the lessons of this experience. In a recent article¹, Francis Fukuyama even expressed the view that it would take years to identify the deeper consequences of the current crisis: "Future historians will trace comparably large effects to the current coronavirus pandemic; the challenge is figuring them out ahead of time".

Although we have still not seen the last of the sanitary crisis, and are only experiencing the first tremors of the much more traumatic economic and social crises to come. we see ways in which cities, smart or not, will be affected and transformed. In a recent study, the OECD underlines that, in many parts of the world, cities have been at the forefront of shaping a post-COVID world by taking inclusive measures (especially for local business support and employment, affordable housing construction and renovation, and support to vulnerable households), and investing to pair economic recovery with environmental sustainability, with an emphasis on clean forms of urban mobility and energy efficiency. The OECD also underlines that 'the pivotal role of digitalisation in emergency responses

to the pandemic has pushed many cities to systematise the use of smart city tools more permanently, while staying alert and monitoring the risk of contagion."

It is now becoming clear that the trends identified in last year's Smart City Index and Report will be accelerated, and that attention to smart cities will continue to increase concomitantly. It is also clear that the COVID crisis is likely to widen inequalities between the haves and the havenots of connectivity, both among and within cities. This is an aspect that will deserve appropriate attention from analysts, and governments, both central and local.

As stressed in last year's SCI Report, it is the position of the authors of this report that smart cities will not generate their full potential unless priority attention is devoted to the necessary balance between the technological aspects of smart cities and their human aspects.

Since last year, and based on the very rich feedback received after the launch of the first edition of the SCI, improvements have been brought to the index methodology, as well as in the way main results are presented. Altogether, however, the approach has not changed: In line with previous and on-going efforts initiated and carried out by IMD's World Competitiveness Center, the Smart City Index presented here remains a holistic attempt to capture the various

dimensions of how citizens could consider that their respective cities are becoming better cities by becoming smarter ones. Part of the SCI's uniqueness is to rely first and foremost on the perceptions of those who live and work in the cities covered by the index, while providing a realistic recognition that not all cities start from the same level of development, nor with the same set of endowments and advantages. In SCI's context, a 'smart city' continues to be defined as an urban setting that applies technology to enhance the benefits and diminish the shortcomings of urbanization for its citizens.

As for the first edition, this new SCI report is the result of a close cooperation between IMD and SUTD (Singapore University for Technology and Design), and benefitted from inputs by numerous experts and city specialists around the world, whom we want to thank most warmly.

Looking forward to more feedback and reactions to this second edition, it is our hope to continue to strengthen the visibility and relevance of the Smart City Index as a tool for action, and an instrument for the betterment of citizens' lives in all parts of the world.



Professor Arturo Bris Director IMD World Competitiveness Center

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

¹ Foreign Affairs Magazine, July-August 2020

Bruno Lanvin President IMD Smart City Observatory

² Cities responses to COVID¹, OECD Centre for Entrepreneurship, SMEs, Regions and Cities (CFE) in collaboration with the OECD Working Party for Urban Policy and the OECD Champion Mayors Initiative for Inclusive Growth. http://www.oecd.org/coronavirus/policy-responses/cities-policy-responses-fd1053ff/, last consulted on 23 July 2020 ³See the introduction to this year's report for details.



Table of contents

Table of contents
The IMD World Competitiveness Center
City performance overview
Alphabetical
By ranking
User's Guide to the Smart City Index
Methodology in a nutshell
City profiles

City Profiles

Abu Dhabi15	5
Abuja	Ď
Amsterdam	7
Ankara	}
Athens)
Auckland)
Bangkok	
Barcelona)
Beijing	}
Bengaluru	Ļ
Berlin)
Bilbao	ò
Birmingham27	7
Bogota	}
Bologna	
Boston)
Bratislava	
Brisbane)
Brussels	}

Bucharest	34
Budapest	35
Buenos Aires	36
Busan	37
Cairo	38
Cape Town	39
Chengdu	
Chicago	
Chongqing	
Copenhagen	
Denver	
Dubai	45
Dublin	46
Dusseldorf	47
Geneva	48
Gothenburg	
Guangzhou	
Hamburg	
Hangzhou	
5	

4

Hanoi	.53
Hanover	.54
Helsinki	.55
Ho Chi Minh City	.56
Hong Kong	.57
Hyderabad	.58
Jakarta	.59
Kiev	.60
Krakow	.61
Kuala Lumpur	.62
Lagos	.63
Lisbon	.64
London	.65
Los Angeles	.66
Lyon	.67
Madrid	.68
Makassar	.69
Manchester	.70
Manila	.71
Marseille	.72
Medan	.73
Medellin	.74
Melbourne	.75
Mexico City	.76
Milan	.77
Montreal	.78
Moscow	.79
Mumbai	.80
Munich	.81
Nairobi	.82
Nanjing	.83
Newcastle	.84
New Delhi	.85
New York	.86
Osaka	.87
Oslo	.88

Paris	
Philadelphia	90
Phoenix	
Prague	
Rabat	
Rio de Janeiro	
Riyadh	
Rome	
Rotterdam	
San Francisco	
Santiago	
São Paulo	
Seattle	
Seoul	
Shanghai	
Shenzhen	
Singapore	
Sofia	
St. Petersburg	
Stockholm	
Sydney	
Taipei City	
Tallinn	
Tel Aviv	
The Hague	
Tianjin	
Tokyo	
Toronto	
Vancouver	
Vienna	
Warsaw	
Washington D.C.	
Zaragoza	
Zhuhai	
Zurich	

The IMD World Competitiveness Center

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

The IMD World Competitiveness Center team:

Professor Arturo Bris	Director
Christos Cabolis	Chief Economist & Head of Operations
Bruno Lanvin	President, Smart City Observatory
José Caballero	Senior Economist
Madeleine Hediger	Data Research and Online Services Specialist
Catherine Jobin	Order and Sales Administrator
William Milner	Research Projects Associate Manager
Marco Pistis	Research Specialist
Maryam Zargari	Research Specialist



City performance overview

Alphabetical

City	Smart City Rank 2020	Change	Smart City Rating 2020	Smart City Rank 2019	Smart City Rating 2019
Abu Dhabi	42	▲ (+14)	BB	56	В
Abuja	107	▼ (-10)	D	97	D
Amsterdam	9	▲ (+2)	A	11	A
Ankara	57	▲ (+17)	В	74	CCC
Athens	99	▼ (-4)	С	95	С
Auckland	4	▲ (+2)	AA	6	A
Bangkok	71	▲ (+4)	CCC	75	CCC
Barcelona	49	▼ (-1)	BB	48	BB
Beijing	82	▼ (-22)	CC	60	В
Bengaluru	95	▼ (-16)	С	79	CC
Berlin	38	▲ (+1)	BBB	39	BBB
Bilbao	24	▼ (-15)	BBB	9	А
Birmingham	40	▲ (+12)	BBB	52	BB
Bogota	92	▲ (+6)	CC	98	D
Bologna	70	▼ (-52)	CCC	18	BBB
Boston	36	▼ (-4)	BBB	32	BBB
Bratislava	76	▲ (+8)	CCC	84	CC
Brisbane	14	▲ (+13)	A	27	BBB
Brussels	60	▲ (+4)	В	64	В
Bucharest	87	▼ (-2)	CC	85	CC
Budapest	77	▲ (+6)	CCC	83	CC
Buenos Aires	88	▼ (-1)	CC	87	CC
Busan	46	▲ (+4)	BB	50	BB
Cairo	106	▼ (-7)	D	99	D

City	Smart City Rank 2020	Change	Smart City Rating 2020	Smart City Rank 2019	Smart City Rating 2019
Cape Town	103	▼ (-10)	D	93	С
Chengdu	69	▼ (-11)	CCC	58	В
Chicago	41	▲ (+12)	BBB	53	BB
Chongqing	64	▼ (-22)	CCC	42	BB
Copenhagen	6	▼ (-1)	AA	5	AA
Denver	35	▼ (-2)	BBB	33	BBB
Dubai	43	▲ (+2)	BB	45	BB
Dublin	34	▼ (-4)	BBB	30	BBB
Dusseldorf	13	▼ (-3)	A	10	A
Geneva	7	▼ (-3)	AA	4	AA
Gothenburg	31	▼ (-3)	BBB	28	BBB
Guangzhou	68	▼ (-11)	CCC	57	В
Hamburg	22	new	A		
Hangzhou	65	▼ (-21)	CCC	44	BB
Hanoi	84	▼ (-18)	CC	66	CCC
Hanover	33	▼ (-7)	BBB	26	BBB
Helsinki	2	▲ (+6)	AA	8	A
Ho Chi Minh City	83	▼ (-18)	CC	65	CCC
Hong Kong	32	▲ (+5)	BBB	37	BBB
Hyderabad	85	▼ (-18)	CC	67	CCC
Jakarta	94	▼ (-13)	С	81	CC
Kiev	98	▼ (-6)	С	92	С
Krakow	58	▲ (+11)	В	69	CCC
Kuala Lumpur	54	▲ (+16)	В	70	CCC

City	Smart City Rank 2020	Change	Smart City Rating 2020	Smart City Rank 2019	Smart City Rating 2019
Lagos	109	▼ (-7)	D	102	D
Lisbon	75	▲ (+1)	CCC	76	CCC
London	15	▲ (+5)	А	20	BBB
Los Angeles	26	▲ (+9)	BBB	35	BBB
Lyon	51	▼ (-28)	BB	23	BBB
Madrid	45	▼ (-24)	BB	21	BBB
Makassar	96	▼ (-16)	С	80	CC
Manchester	17	new	A		
Manila	104	▼ (-10)	D	94	С
Marseille	78	new	CCC		
Medan	97	▼ (-15)	С	82	CC
Medellin	72	▲ (+19)	CCC	91	С
Melbourne	20	▲ (+4)	А	24	BBB
Mexico City	90	▼ (-2)	CC	88	CC
Milan	74	▼ (-52)	CCC	22	BBB
Montreal	21	▼ (-5)	A	16	A
Moscow	56	▲ (+16)	В	72	CCC
Mumbai	93	▼ (-15)	С	78	CC
Munich	11	new	A		
Nairobi	108	▼ (-8)	D	100	D
Nanjing	66	▼ (-11)	CCC	55	В
New Delhi	86	▼ (-18)	CC	68	CCC
New York	10	▲ (+28)	А	38	BBB
Newcastle	23	new	A		
Osaka	80	▼ (-17)	CCC	63	В
Oslo	5	▼ (-2)	AA	3	AA
Paris	61	▼ (-10)	В	51	BB
Philadelphia	52	▲ (+2)	BB	54	BB
Phoenix	39	new	BBB		
Prague	44	▼ (-25)	BB	19	BBB
Rabat	105	▼ (-4)	D	101	D

City	Smart City Rank 2020	Change	Smart City Rating 2020	Smart City Rank 2019	Smart City Rating 2019
Rio de Janeiro	102	▼ (-6)	С	96	С
Riyadh	53	▲ (+18)	В	71	CCC
Rome	101	▼ (-24)	С	77	CCC
Rotterdam	29	▲ (+7)	BBB	36	BBB
San Francisco	27	▼ (-15)	BBB	12	А
Santiago	91	▼ (-5)	CC	86	CC
Sao Paulo	100	▼ (-10)	С	90	CC
Seattle	37	▼ (-3)	BBB	34	BBB
Seoul	47	— (0)	BB	47	BB
Shanghai	81	▼ (-22)	CC	59	В
Shenzhen	67	▼ (-24)	CCC	43	BB
Singapore	1	- (0)	AAA	1	AAA
Sofia	89	— (0)	CC	89	CC
St. Petersburg	73	- (0)	CCC	73	CCC
Stockholm	16	▲ (+9)	А	25	BBB
Sydney	18	▼ (-4)	A	14	А
Taipei City	8	▼ (-1)	A	7	А
Tallinn	59	new	В		
Tel Aviv	50	▼ (-4)	BB	46	BB
The Hague	28	▲ (+1)	BBB	29	BBB
Tianjin	63	▼ (-22)	CCC	41	BB
Tokyo	79	▼ (-17)	CCC	62	В
Toronto	30	▼ (-15)	BBB	15	А
Vancouver	19	▼ (-6)	A	13	А
Vienna	25	▼ (-8)	BBB	17	BBB
Warsaw	55	▲ (+6)	В	61	В
Washington D.C.	12	▲ (+19)	A	31	BBB
Zaragoza	48	▲ (+1)	BB	49	BB
Zhuhai	62	▼ (-22)	CCC	40	BB
Zurich	3	▼ (-1)	AA	2	AAA

By ranking

City	Smart City Rank 2020	Change	Smart City Rating 2020	Smart City Rank 2019	Smart City Rating 2019
Singapore	1	 (0)	AAA	1	AAA
Helsinki	2	▲ (+6)	AA	8	А
Zurich	3	▼ (-1)	AA	2	AAA
Auckland	4	▲ (+2)	AA	6	A
Oslo	5	▼ (-2)	AA	3	AA
Copenhagen	6	▼ (-1)	AA	5	AA
Geneva	7	▼ (-3)	AA	4	AA
Taipei City	8	▼ (-1)	A	7	A
Amsterdam	9	▲ (+2)	А	11	A
New York	10	▲ (+28)	А	38	BBB
Munich	11	new	А		
Washington D.C.	12	▲ (+19)	А	31	BBB
Dusseldorf	13	▼ (-3)	А	10	A
Brisbane	14	▲ (+13)	A	27	BBB
London	15	▲ (+5)	А	20	BBB
Stockholm	16	▲ (+9)	A	25	BBB
Manchester	17	new	А		
Sydney	18	▼ (-4)	А	14	А
Vancouver	19	▼ (-6)	А	13	А
Melbourne	20	▲ (+4)	А	24	BBB
Montreal	21	▼ (-5)	А	16	A
Hamburg	22	new	А		
Newcastle	23	new	А		
Bilbao	24	▼ (-15)	BBB	9	А
Vienna	25	▼ (-8)	BBB	17	BBB

City	Smart City Rank 2020	Change	Smart City Rating 2020	Smart City Rank 2019	Smart City Rating 2019
Los Angeles	26	▲ (+9)	BBB	35	BBB
San Francisco	27	▼ (-15)	BBB	12	A
The Hague	28	▲ (+1)	BBB	29	BBB
Rotterdam	29	▲ (+7)	BBB	36	BBB
Toronto	30	▼ (-15)	BBB	15	A
Gothenburg	31	▼ (-3)	BBB	28	BBB
Hong Kong	32	▲ (+5)	BBB	37	BBB
Hanover	33	▼ (-7)	BBB	26	BBB
Dublin	34	▼ (-4)	BBB	30	BBB
Denver	35	▼ (-2)	BBB	33	BBB
Boston	36	▼ (-4)	BBB	32	BBB
Seattle	37	▼ (-3)	BBB	34	BBB
Berlin	38	▲ (+1)	BBB	39	BBB
Phoenix	39	new	BBB		
Birmingham	40	▲ (+12)	BBB	52	BB
Chicago	41	▲ (+12)	BBB	53	BB
Abu Dhabi	42	▲ (+14)	BB	56	В
Dubai	43	▲ (+2)	BB	45	BB
Prague	44	▼ (-25)	BB	19	BBB
Madrid	45	▼ (-24)	BB	21	BBB
Busan	46	▲ (+4)	BB	50	BB
Seoul	47	— (0)	BB	47	BB
Zaragoza	48	▲ (+1)	BB	49	BB
Barcelona	49	▼ (-1)	BB	48	BB
Tel Aviv	50	▼ (-4)	BB	46	BB

City	Smart City Rank 2020	Change	Smart City Rating 2020	Smart City Rank 2019	Smart City Rating 2019
Lyon	51	▼ (-28)	BB	23	BBB
Philadelphia	52	▲ (+2)	BB	54	BB
Riyadh	53	▲ (+18)	В	71	CCC
Kuala Lumpur	54	▲ (+16)	В	70	CCC
Warsaw	55	▲ (+6)	В	61	В
Moscow	56	▲ (+16)	В	72	CCC
Ankara	57	▲ (+17)	В	74	CCC
Krakow	58	▲ (+11)	В	69	CCC
Tallinn	59	new	В		
Brussels	60	▲ (+4)	В	64	В
Paris	61	▼ (-10)	В	51	BB
Zhuhai	62	▼ (-22)	CCC	40	BB
Tianjin	63	▼ (-22)	CCC	41	BB
Chongqing	64	▼ (-22)	CCC	42	BB
Hangzhou	65	▼ (-21)	CCC	44	BB
Nanjing	66	▼ (-11)	CCC	55	В
Shenzhen	67	▼ (-24)	CCC	43	BB
Guangzhou	68	▼ (-11)	CCC	57	В
Chengdu	69	▼ (-11)	CCC	58	В
Bologna	70	▼ (-52)	CCC	18	BBB
Bangkok	71	▲ (+4)	CCC	75	CCC
Medellin	72	▲ (+19)	CCC	91	С
St. Petersburg	73	- (0)	CCC	73	CCC
Milan	74	▼ (-52)	CCC	22	BBB
Lisbon	75	▲ (+1)	CCC	76	CCC
Bratislava	76	▲ (+8)	CCC	84	СС
Budapest	77	▲ (+6)	CCC	83	СС
Marseille	78	new	CCC		
Tokyo	79	▼ (-17)	CCC	62	В
Osaka	80	▼ (-17)	CCC	63	В
Shanghai	81	▼ (-22)	CC	59	В

City	Smart City Rank 2020	Change	Smart City Rating 2020	Smart City Rank 2019	Smart City Rating 2019
Beijing	82	▼ (-22)	CC	60	В
Ho Chi Minh City	83	▼ (-18)	CC	65	CCC
Hanoi	84	▼ (-18)	CC	66	CCC
Hyderabad	85	▼ (-18)	CC	67	CCC
New Delhi	86	▼ (-18)	CC	68	CCC
Bucharest	87	▼ (-2)	CC	85	CC
Buenos Aires	88	▼ (-1)	CC	87	CC
Sofia	89	- (0)	CC	89	CC
Mexico City	90	▼ (-2)	CC	88	CC
Santiago	91	▼ (-5)	CC	86	CC
Bogota	92	▲ (+6)	CC	98	D
Mumbai	93	▼ (-15)	С	78	CC
Jakarta	94	▼ (-13)	С	81	CC
Bengaluru	95	▼ (-16)	С	79	CC
Makassar	96	▼ (-16)	С	80	CC
Medan	97	▼ (-15)	С	82	CC
Kiev	98	▼ (-6)	С	92	С
Athens	99	▼ (-4)	С	95	С
Sao Paulo	100	▼ (-10)	С	90	СС
Rome	101	▼ (-24)	С	77	CCC
Rio de Janeiro	102	▼ (-6)	С	96	С
Cape Town	103	▼ (-10)	D	93	С
Manila	104	▼ (-10)	D	94	С
Rabat	105	▼ (-4)	D	101	D
Cairo	106	▼ (-7)	D	99	D
Abuja	107	▼ (-10)	D	97	D
Nairobi	108	▼ (-8)	D	100	D
Lagos	109	▼ (-7)	D	102	D

User's Guide to the Smart City Index

Smart City Ranking



Smart City Ranking: The Ranking position of the city amongst the 109 cities measured, based upon the Rating and its components.

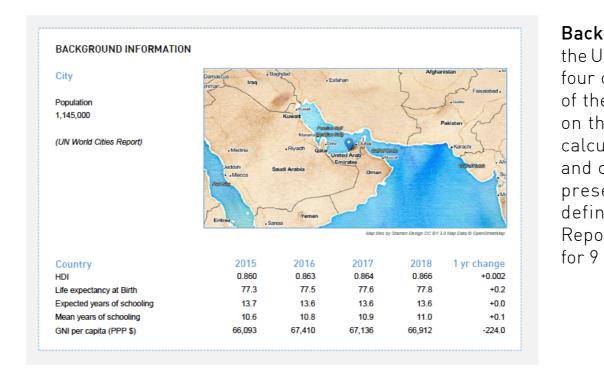
Group: Each city is assigned to one of four groups, based upon its HDI values.

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.

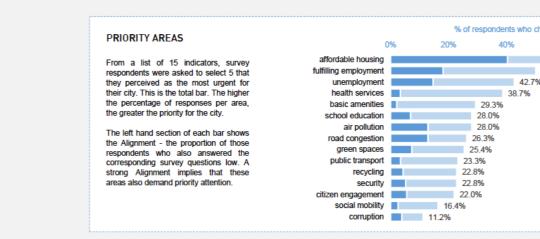
The Methodology section provides the exact procedure for these calculations.

The 2019 Ranking and Rating are also shown for the 102 cities included in last year's index.

Information



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



Background Information: This presents the UN Human Development Index and its four components of the parent economy of the city, as well as the city's position on the map. For Taipei City, the data is calculated using the same methodology and comparable data. This section also presents the population of the city as defined through the UN World Cities Report for 100 of the cities, or Eurostat for 9 small European cities.

chos	se the Priorit	v Area	
crios	o ulo i nom	y / uou	
	60%	80%	100%
	00%	0070	10070
		68.9%	
		08.9%	
50	0%		
7%			

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.

A TTITII					% of responder	its who agree
ATTITUDES		0%	20%	40%		
You are wi	lling to concede per	ngestion				
You are comfortable with face recognition technologies to lower crime						
You feel th	e availability of onlin	e information has	s increased your trust	in authorities		
The propor (% of trans		lay payment trans	sactions that are non-	cash		
(70 01 0 013	actions/					
	GROUP MEAN	CITY				

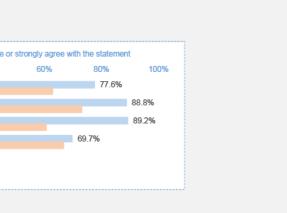
Structures and Technologies

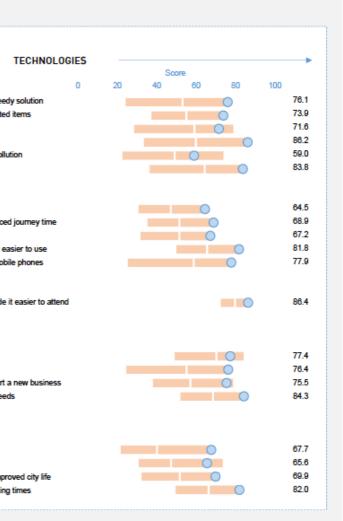
Key survey data collected on Structures (left side) and Technologies (right side), under five key areas: health and safety, mobility, activities, opportunities, and governance.

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	Оспу	MEAN GROUP MAX
STRUCTURES	_						4
lealth & Safety 0	20	40 5	ore 60	80	100		Health & Safety
lasic sanitation meets the needs of the poorest areas					86.4		Online reporting of city maintenance problems provides a speed
Recycling services are satisfactory					83.8		A website or App allows residents to easily give away unwanted
ublic safety is not a problem	_				72.6		Free public wifi has improved access to city services
ir pollution is not a problem	_		~ `		59.2		CCTV cameras has made residents feel safer
fedical services provision is satisfactory			0	0	88.4		A website or App allows residents to effectively monitor air pollu
inding housing with rent equal to 30% or less of a monthly salary is not a problem		(48.6		Arranging medical appointments online has improved access
fobility							Mobility
raffic congestion is not a problem			0		67.6		Car-sharing Apps have reduced congestion
ublic transport is satisfactory			Ĭ	0	81.6		Apps that direct you to an available parking space have reduce
							Bicycle hiring has reduced congestion
							Online scheduling and ticket sales has made public transport ex
							The city provides information on traffic congestion through mob
Activities							Activities
Freen spaces are satisfactory				0	82.0		Online purchasing of tickets to shows and museums has made
ultural activities (shows, bars, and museums) are satisfactory				0	84.8		
pportunities (Work & School)							Opportunities (Work & School)
imployment finding services are readily available			0		68.4		Online access to job listings has made it easier to find work
fost children have access to a good school				0	79.8		IT skills are taught well in schools
ifelong learning opportunities are provided by local institutions					70.9		Online services provided by the city has made it easier to start a
lusinesses are creating new jobs			0		67.8		The current internet speed and reliability meet connectivity need
finorities feel welcome				0	82.0		
Governance							Governance
formation on local government decisions are easily accessible				0	82.3		Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			0		69.8		Online voting has increased participation
Residents contribute to decision making of local government			0		64.2		An online platform where residents can propose ideas has impr
lesidents provide feedback on local government projects			(72.3		Processing Identification Documents online has reduced waiting





Methodology in a nutshell

1. The IMD-SUTD Smart City Index (SCI) assesses the perceptions of residents on issues related to structures and technology applications available to them in their city.

2. This edition of the SCI ranks 109 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 two years of the survey.

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

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

5. The cities are distributed into four groups based on the UN Human Development Index (HDI) score of the economy they are part of.

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

For group 1 (highest HDI quartile), scale For group 2 (second HDI quartile), scale For group 3 (third HDI quartile), scale For group 4 (lowest HDI quartile), scale AAA-AA-A-BBB-BB A-BBB-BB-B-CCC BB-B-CCC-CC-C CCC-CC-C-D

7. Rankings are then presented in two formats:

- an overall ranking (1 to 109)
- a rating for each pillar and overall





Abu Dhabi



SMART

CITY

RATING

BB

BACKGROUND INFORMATION





1,145,000

(UN World Cities Report)



2015	2016	2017	2018	1 yr change
0.860	0.863	0.864	0.866	+0.002
77.3	77.5	77.6	77.8	+0.2
13.7	13.6	13.6	13.6	+0.0
10.6	10.8	10.9	11.0	+0.1
66,093	67,410	67,136	66,912	-224.0
	0.860 77.3 13.7 10.6	0.860 0.863 77.3 77.5 13.7 13.6 10.6 10.8	0.8600.8630.86477.377.577.613.713.613.610.610.810.9	0.8600.8630.8640.86677.377.577.677.813.713.613.613.610.610.810.911.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% affordable housing fulfilling employment unemployment health services basic amenities school education air pollution road congestion green spaces public transport recycling security

0%

ATTITUDES

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

		Γ	LEGEND: MIN	CITY MEAN GROUP MAX]
7	STRUCTURES				TECHNOLOG
	Health & Safety 0	Score 20 40 60 8	30 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas	20 40 00 0	86.4		maintenance problems provides a speedy solution
	Recycling services are satisfactory		83.	······································	vs residents to easily give away unwanted items
R	Public safety is not a problem		72.0		proved access to city services
	Air pollution is not a problem		59.1	· · · · · · · · · · · · · · · · · · ·	ade residents feel safer
S			86.4		
	Medical services provision is satisfactory Finding housing with rent equal to 30% or less of a monthly salary is not a problem		48.	/ Hebelle el / pp allel	vs residents to effectively monitor air pollution pointments online has improved access
	Finding housing with tent equal to 30% or less of a monthly salary is not a problem		40.	o Ananging medical app	ontiments online has improved access
	Mark 1995			Mark III.	
	Mobility		67.	Mobility	
RES	Traffic congestion is not a problem			5	
(ES	Public transport is satisfactory		81.0	11 3	an available parking space have reduced journey time
				Bicycle hiring has redu	0
				•	ticket sales has made public transport easier to use
				I ne city provides infor	mation on traffic congestion through mobile phones
	Activities			Activities	
GIES	Green spaces are satisfactory		82.0	0 Online purchasing of ti	ickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		84.	8	
-	Opportunities (Work & School)			Opportunities (W	ork & School)
	Employment finding services are readily available		68.4		stings has made it easier to find work
P	Most children have access to a good school		79.		0
	Lifelong learning opportunities are provided by local institutions		70.		ed by the city has made it easier to start a new business
	Businesses are creating new jobs		67.		beed and reliability meet connectivity needs
	Minorities feel welcome		82.0	I	
			02.	•	
	Governance			Governance	
-	Information on local government decisions are easily accessible		82.	3 Online public access to	o city finances has reduced corruption
	Corruption of city officials is not an issue of concern		69.	8 Online voting has incre	eased participation
ange	Residents contribute to decision making of local government		64.	2 An online platform whe	ere residents can propose ideas has improved city life
o D	Residents provide feedback on local government projects		72.	3 Processing Identification	on Documents online has reduced waiting times

B in 2019 FACTOR RATINGS

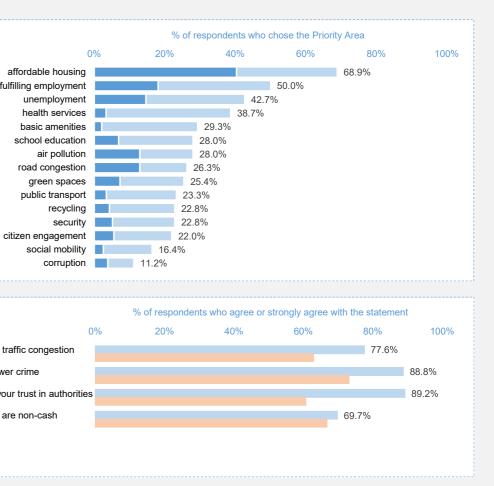
> BB STRUCTURES

BB TECHNOLOGIE

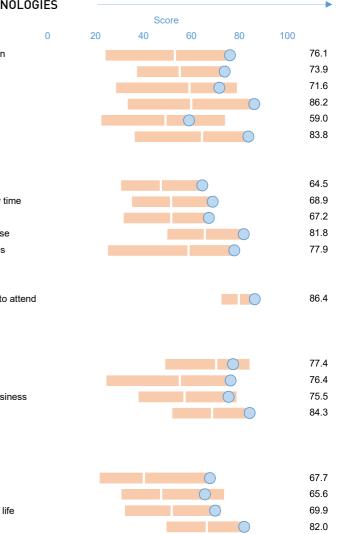
GROUP

3

All ratings rang from AAA to E



OGIES



Abuja



D

BACKGROUND INFORMATION



Country

Mali Nige .Kand Caduna (UN World Cities Report) Cala/Calan

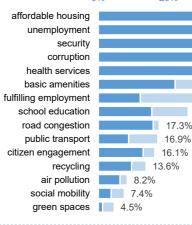
	Congo (Brazzaville)	Litrevile			
0 Map Data © OpenStreetMap	Stamen Design CC BY 3.				
1 yr change	2018	2017	2016	2015	
+0.001	0.534	0.533	0.528	0.527	

HDI	0.527	0.526	0.555	0.554	+0.001	
Life expectancy at Birth	53.1	53.5	54.0	54.3	+0.3	
Expected years of schooling	9.7	9.5	9.7	9.7	+0.0	
Mean years of schooling	6.2	6.3	6.5	6.5	+0.0	
GNI per capita (PPP \$)	5,540	5,336	5,203	5,086	-117.0	

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.



ATTITUDES

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

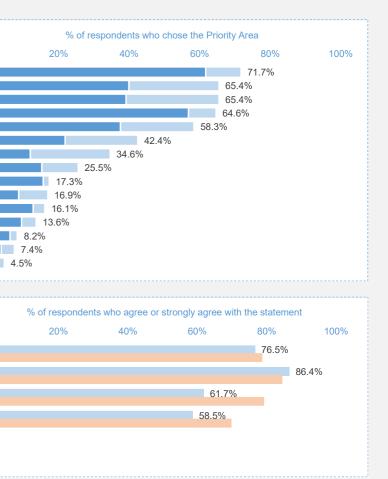
			LEGEND: MIN	CITY MEAN GROUP MAX
D in 2019	STRUCTURES			TECHNOLOG
		Score		
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		50.5	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		45.4	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		41.7	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		40.5	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		49.3	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		24.2	Arranging medical appointments online has improved access
D	Mobility			Mobility
	Traffic congestion is not a problem	\bigcirc	47.5	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		57.1	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
D				
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		61.0	Online purchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		72.7	
	Opportunities (Work & School)			Opportunities (Work & School)
	Employment finding services are readily available		43.3	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		55.8	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		46.5	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		67.8	The current internet speed and reliability meet connectivity needs
4	Minorities feel welcome		52.1	····
•				
	Governance			Governance
	Information on local government decisions are easily accessible		47.7	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		16.7	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		24.4	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		37.0	Processing Identification Documents online has reduced waiting times

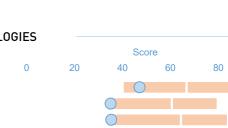
Chad

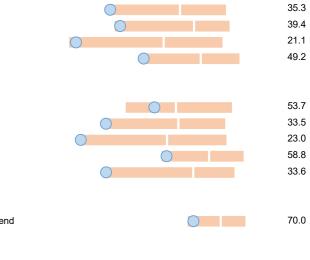
Central African

0%

0%

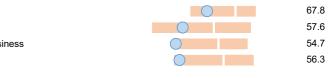


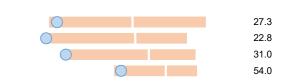




100

47.1 35.0





Amsterdam



CITY

RATING

BACKGROUND INFORMATION

City Population 1,091,000

Country

Life expectancy at Birth

Expected years of schooling

Mean years of schooling

GNI per capita (PPP \$)

HDI

(UN World Cities Report)

2016

0.929

81.9

18.0

12.2

47,008

2017

0.932

82.0

18.0

12.2

48,994

2015

0.927

81.7

18.1

12.1

46,976

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% affordable housing security air pollution health services green spaces public transport road congestion basic amenities unemployment recycling school education citizen engagement

ATTITUDES	0%
You are willing to concede personal data in order to improve traffic congestion	
You are comfortable with face recognition technologies to lower crime	
You feel the availability of online information has increased your trust in authorities	;
The proportion of your day-to-day payment transactions that are non-cash (% of transactions)	
LEGEND: GROUP MEAN CITY	

Α			LEGEND: MIN	CITY MEAN GROUP MAX	
A in 2019	STRUCTURES		LEGEND. MIN		TECHNOLO
		Score			
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		64	.2 Online reporting of cit	y maintenance problems provides a speedy solution
FLOTOR	Recycling services are satisfactory		67	A website or App allow	ws residents to easily give away unwanted items
FACTOR	Public safety is not a problem		58	8.4 Free public wifi has in	nproved access to city services
RATINGS	Air pollution is not a problem		38	6.6 CCTV cameras has n	nade residents feel safer
	Medical services provision is satisfactory		78	A website or App allo	ws residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		34	Arranging medical ap	pointments online has improved access
AA	Mobility			Mobility	
	Traffic congestion is not a problem		36	6.8 Car-sharing Apps hav	ve reduced congestion
STRUCTURES	Public transport is satisfactory		71	.1 Apps that direct you to	o an available parking space have reduced journey time
				Bicycle hiring has red	uced congestion
				Online scheduling and	d ticket sales has made public transport easier to use
Δ				The city provides info	rmation on traffic congestion through mobile phones
~	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		60	0.7 Online purchasing of	tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory		78	3.3	
	Opportunities (Work & School)			Opportunities (W	/ork & School)
000110	Employment finding services are readily available		68		istings has made it easier to find work
GROUP	Most children have access to a good school		75	-	-
	Lifelong learning opportunities are provided by local institutions		67	7.3 Online services provid	ded by the city has made it easier to start a new business
	Businesses are creating new jobs		67	7.0 The current internet s	peed and reliability meet connectivity needs
	Minorities feel welcome		62	2.6	
	Governance			Governance	
	Information on local government decisions are easily accessible		62	2.1 Online public access	to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		53	0.5 Online voting has incr	reased participation
All ratings range	Residents contribute to decision making of local government		57	An online platform wh	ere residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		63	8.9 Processing Identificat	ion Documents online has reduced waiting times
L	l				

Poland

lungary

1 yr change

+0.002

+0.1

+0.0

+0.0

+1,019.0

2018

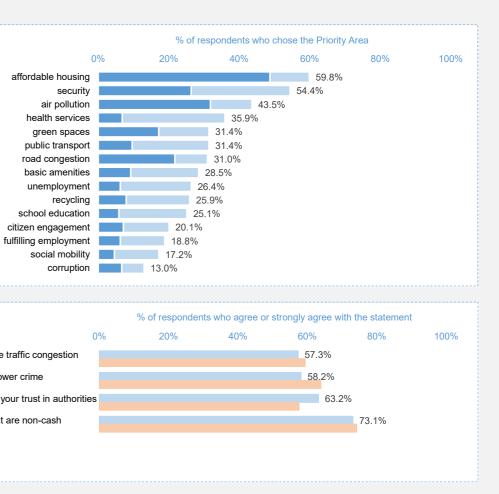
0.934

82.1

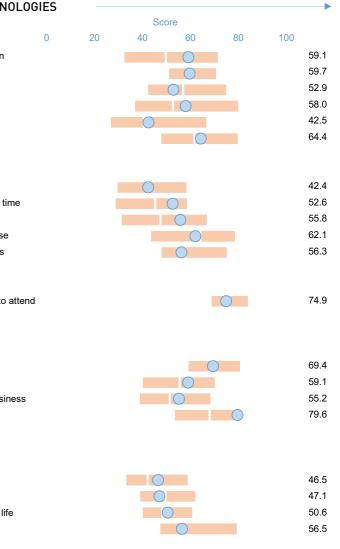
18.0

12.2

50,013







Ankara

SMART CITY RANKING
57
Out of 109
74 in 2019
SMART

CITY

RATING

B

BACKGROUND INFORMATION



(UN World Cities Report)

Country	2015	2016	2017	2018	1 yr change
HDI	0.800	0.800	0.805	0.807	+0.002
Life expectancy at Birth	76.5	76.9	77.2	77.4	+0.2
Expected years of schooling	16.2	16.4	16.4	16.4	+0.0
Mean years of schooling	8.0	7.6	7.7	7.7	+0.0
GNI per capita (PPP \$)	23,048	23,409	24,702	24,905	+203.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

unemployment affordable housing green spaces corruption road congestion air pollution fulfilling employment security recycling public transport school education health services citizen engagement 12.7%

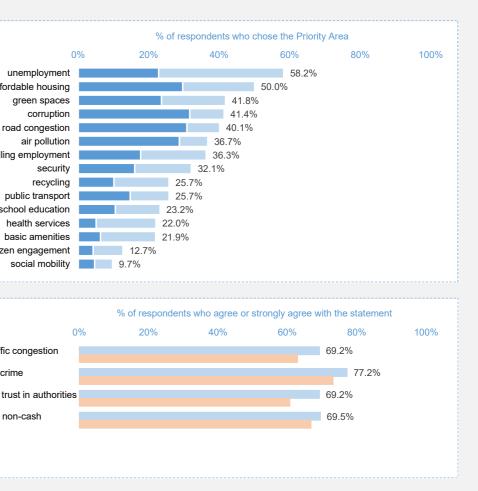
ATTITUDES

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

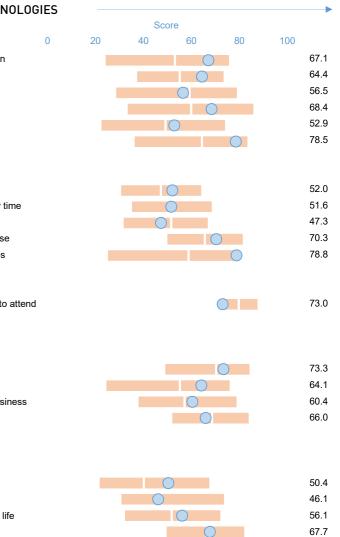
В				ITY MEAN GROUP MAX
CCC in 2019	STRUCTURES		•	TECHNOLOGI
		Score	400	
	Health & Safety 0	20 40 60 80		Health & Safety
	Basic sanitation meets the needs of the poorest areas		73.1	Online reporting of city maintenance problems provides a speedy solution
FACTOR	Recycling services are satisfactory		62.4	A website or App allows residents to easily give away unwanted items
	Public safety is not a problem		56.8	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		35.1	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		68.8	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		46.2	Arranging medical appointments online has improved access
B				A. 1999
D	Mobility		07.0	Mobility
CTRUCTURES	Traffic congestion is not a problem		37.2	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		63.2	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
B				The city provides information on traffic congestion through mobile phones
				Activities
TECHNOLOGIES	Activities Green spaces are satisfactory		54.4	Activities Online purchasing of tickets to shows and museums has made it easier to attend
TECHNOLOGIES			-	Online purchasing or lickets to shows and museums has made it easier to altend
	Cultural activities (shows, bars, and museums) are satisfactory		07.9	
	Opportunities (Work & School)			Opportunities (Work & School)
	Employment finding services are readily available		61.8	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		57.6	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		63.9	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		54.3	The current internet speed and reliability meet connectivity needs
3	Minorities feel welcome		59.4	
	Governance			Governance
	Information on local government decisions are easily accessible		67.0	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		38.4	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		54.3	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		57.3	Processing Identification Documents online has reduced waiting times

0%

0%







Athens



C in 2019

FACTOR

RATINGS

STRUCTURES

TECHNOLOGIES

GROUP

3

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.868	0.866	0.871	0.872	+0.001
Life expectancy at Birth	81.5	81.7	81.9	82.1	+0.2
Expected years of schooling	17.3	17.3	17.3	17.3	+0.0
Mean years of schooling	10.6	10.3	10.5	10.5	+0.0
GNI per capita (PPP \$)	24,165	24,187	24,647	24,909	+262.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

security unemployment health services corruption road congestion green spaces fulfilling employment recycling air pollution public transport affordable housing school education basic amenities citizen engagement

0%

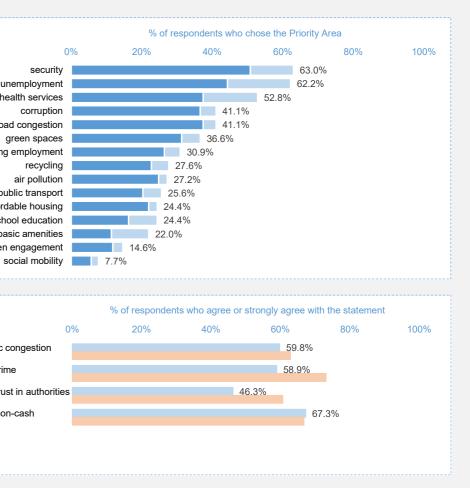
0%

ATTITUDES

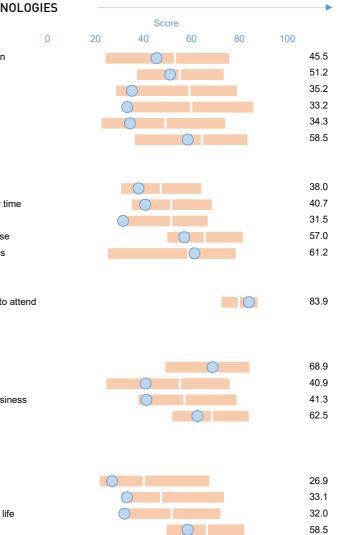
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

				LEG	SEND:	MIN	CITY	MEAN	GROUP MAX		
STR	UCTURES							•			TECHNOLO
			Score								
Health & Safety	0	20	40	60 80		100		Health	& Safety		
Basic sanitation meets the needs of the poorest areas				\bigcirc		60.2		Online re	porting of city	/ maintenance probler	ms provides a speedy solution
Recycling services are satisfactory			\bigcirc			37.7		A website	or App allow	vs residents to easily	give away unwanted items
Public safety is not a problem		\bigcirc				32.5		Free publ	ic wifi has in	proved access to city	services
Air pollution is not a problem						22.1		CCTV ca	meras has m	ade residents feel saf	ier
Medical services provision is satisfactory			\bigcirc			37.5		A website	or App allow	vs residents to effectiv	vely monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not	a problem	\bigcirc				29.1		Arranging	medical app	pointments online has	improved access
Mobility								Mobility	/		
Traffic congestion is not a problem		\bigcirc				19.3		Car-shari	ng Apps hav	e reduced congestion	
Public transport is satisfactory			\bigcirc			39.2		Apps that	direct you to	o an available parking	space have reduced journey time
								Bicycle hi	ring has redu	uced congestion	
								Online sc	heduling and	l ticket sales has made	le public transport easier to use
								The city p	rovides infor	mation on traffic cong	gestion through mobile phones
Activities								Activiti	25		
Green spaces are satisfactory		\bigcirc				29.4		Online pu	rchasing of t	ickets to shows and m	nuseums has made it easier to atten
Cultural activities (shows, bars, and museums) are satisfactory				\bigcirc		76.0					
Opportunities (Work & School)								Opport	unities (W	ork & School)	
Employment finding services are readily available		C)			33.6		Online ac	cess to job li	stings has made it eas	sier to find work
Most children have access to a good school			\bigcirc			41.1		IT skills a	re taught we	ll in schools	
Lifelong learning opportunities are provided by local institutions			\bigcirc			41.5		Online se	rvices provid	led by the city has ma	ade it easier to start a new business
Businesses are creating new jobs		\bigcirc				24.9		The curre	nt internet s	peed and reliability me	eet connectivity needs
Minorities feel welcome						35.1					
Governance								Govern	ance		
Information on local government decisions are easily accessible			\bigcirc			44.7		Online pu	blic access t	o city finances has rec	duced corruption
Corruption of city officials is not an issue of concern						19.6		Online vo	ting has incr	eased participation	
Residents contribute to decision making of local government		\bigcirc				21.4		An online	platform wh	ere residents can prop	pose ideas has improved city life
Residents provide feedback on local government projects						32.7		Processir	g Identificati	on Documents online	has reduced waiting times

All ratings range from AAA to D







Auckland



BACKGROUND INFORMATION

City Population 1,344,000

(UN World Cities Report)

SMART CITY RATING Δ

A in 2019

FACTOR RATINGS

AA STRUCTURES

ΔΔ TECHNOLOGIES

GROUP

All ratings range from AAA to D



Country HDI	2015 0.914	2016 0.917	2017 0.920	2018 0.921	1 yr change +0.001
Life expectancy at Birth	81.7	81.9	82.0	82.1	+0.1
Expected years of schooling	18.9	18.1	18.8	18.8	+0.0
Mean years of schooling	12.4	12.6	12.7	12.7	+0.0
GNI per capita (PPP \$)	33,983	34,538	34,668	35,108	+440.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

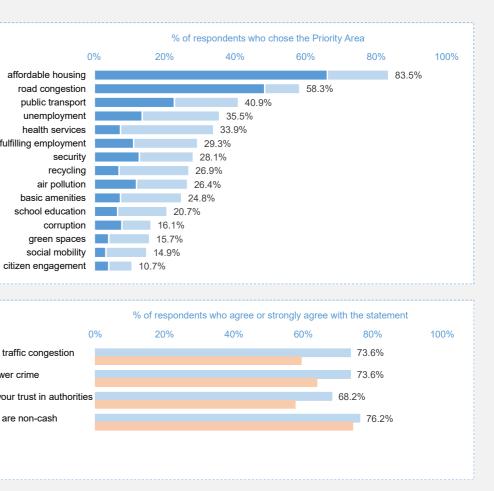
0% affordable housing road congestion public transport unemployment health services fulfilling employment security recycling air pollution basic amenities school education corruption

0%

ATTITUDES

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

	LEGE	ND: MIN	CITY MEAN GROUP MAX		
STRUCTURES	0		TECHNOLOGIES		
Health & Safety 0	Score 20 40 60 80	100	Health & Safety 0 20	Score 40 60 80	100
Basic sanitation meets the needs of the poorest areas		74.5	Online reporting of city maintenance problems provides a speedy solution		58.3
Recycling services are satisfactory		77.3	A website or App allows residents to easily give away unwanted items		67.6
Public safety is not a problem		61.6	Free public wifi has improved access to city services		67.1
Air pollution is not a problem		63.8	CCTV cameras has made residents feel safer		61.
Medical services provision is satisfactory		77.6	A website or App allows residents to effectively monitor air pollution		43.
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	0	28.7	Arranging medical appointments online has improved access		67.6
Mobility			Mobility		
Traffic congestion is not a problem		32.0	Car-sharing Apps have reduced congestion		51.9
Public transport is satisfactory		56.1	Apps that direct you to an available parking space have reduced journey time		52.
			Bicycle hiring has reduced congestion		51.
			Online scheduling and ticket sales has made public transport easier to use		70.
			The city provides information on traffic congestion through mobile phones		60.
Activities			Activities		
Green spaces are satisfactory		77.2	Online purchasing of tickets to shows and museums has made it easier to attend		79
Cultural activities (shows, bars, and museums) are satisfactory	\bigcirc	80.7			
Opportunities (Work & School)			Opportunities (Work & School)		
Employment finding services are readily available		71.9	Online access to job listings has made it easier to find work		79.
Most children have access to a good school		74.8	IT skills are taught well in schools		62
Lifelong learning opportunities are provided by local institutions		71.2	Online services provided by the city has made it easier to start a new business		58
Businesses are creating new jobs		64.7	The current internet speed and reliability meet connectivity needs		71
Minorities feel welcome		69.6			
Governance			Governance		
Information on local government decisions are easily accessible		67.5	Online public access to city finances has reduced corruption		52
Corruption of city officials is not an issue of concern		59.9	Online voting has increased participation		61
Residents contribute to decision making of local government		62.4	An online platform where residents can propose ideas has improved city life		57
Residents provide feedback on local government projects		70.2	Processing Identification Documents online has reduced waiting times		67



Bangkok



BACKGROUND INFORMATION





(UN World Cities Report)

SMART CITY RATING CCC CCC in 2019

FACTOR RATINGS CCC STRUCTURES

B TECHNOLOGIES

GROUP

3 All ratings range from AAA to D

	Governance
-	Information on local gov



Country	2015	2016	2017	2018	1 yr change
HDI	0.746	0.753	0.762	0.765	+0.003
Life expectancy at Birth	76.1	76.4	76.7	76.9	+0.2
Expected years of schooling	13.9	14.3	14.7	14.7	+0.0
Mean years of schooling	7.6	7.6	7.7	7.7	+0.0
GNI per capita (PPP \$)	14,466	14,966	15,548	16,129	+581.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

air pollution road congestion corruption security basic amenities public transport social mobility affordable housing health services unemployment fulfilling employment green spaces school education 13.6% citizen engagement 10.2%

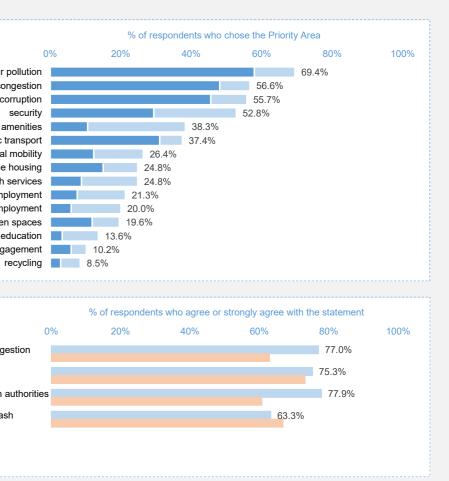
0%

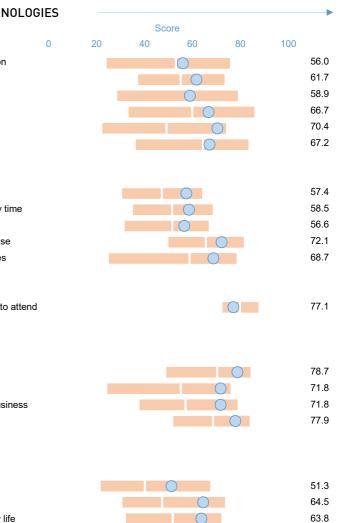
0%

ATTITUDES

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

	[EGEND: MIN CI	TY MEAN GROUP MAX
STRUCTURES			TECHNOLOGIES
	Score	400	
Health & Safety 0	20 40 60 8		Health & Safety 0
Basic sanitation meets the needs of the poorest areas		65.6	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory	\bigcirc	58.0	A website or App allows residents to easily give away unwanted items
Public safety is not a problem	\bigcirc	45.4	Free public wifi has improved access to city services
Air pollution is not a problem		25.2	CCTV cameras has made residents feel safer
Medical services provision is satisfactory		70.1	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem		44.8	Arranging medical appointments online has improved access
Mobility			Mobility
Traffic congestion is not a problem		22.1	Car-sharing Apps have reduced congestion
Public transport is satisfactory		33.0	Apps that direct you to an available parking space have reduced journey time
			Bicycle hiring has reduced congestion
			Online scheduling and ticket sales has made public transport easier to use
			The city provides information on traffic congestion through mobile phones
Activities			Activities
Green spaces are satisfactory		52.2	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory	0	62.8	
Opportunities (Work & School)			Opportunities (Work & School)
Employment finding services are readily available		63.5	Online access to job listings has made it easier to find work
Most children have access to a good school		60.4	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions		54.8	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs		67.7	The current internet speed and reliability meet connectivity needs
Minorities feel welcome	0	51.3	
Governance			Governance
Information on local government decisions are easily accessible		47.4	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern		28.7	Online voting has increased participation
Residents contribute to decision making of local government		43.9	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects	0	47.8	Processing Identification Documents online has reduced waiting times





Barcelona



SMART

CITY

RATING

BB

BB in 2019

FACTOR

RATINGS

BB

STRUCTURES

BB

TECHNOLOGIES

GROUP

All ratings range

from AAA to D

BACKGROUND INFORMATION

City Population

5,258,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change	
HDI	0.885	0.888	0.891	0.893	+0.002	
Life expectancy at Birth	83.0	83.1	83.3	83.4	+0.1	
Expected years of schooling	17.8	17.8	17.9	17.9	+0.0	
Mean years of schooling	9.7	9.8	9.8	9.8	+0.0	
GNI per capita (PPP \$)	32,265	33,379	34,226	35,041	+815.0	

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing fulfilling employment security air pollution unemployment health services corruption road congestion green spaces school education social mobility public transport 16.3% citizen engagement 15.5% basic amenities 14.6%

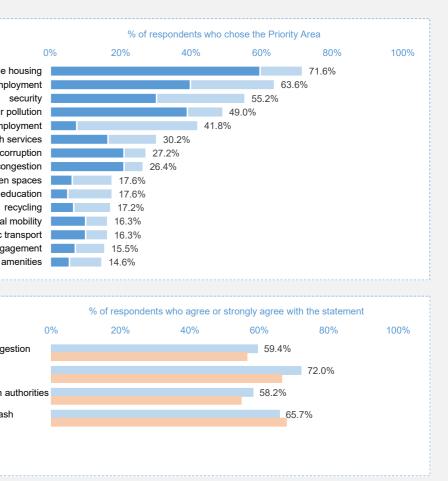
ATTITUDES

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

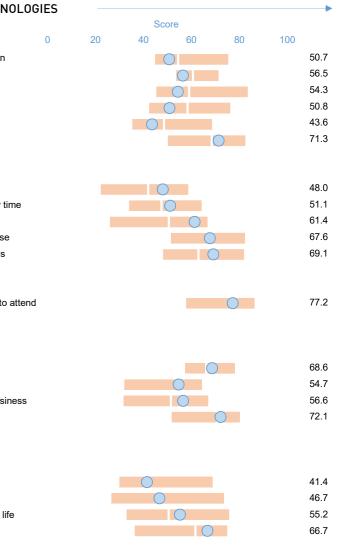
		LEGEN	D: MIN	CITY MEAN GROUP MAX	
STRUCTURES			•	4	TECHNOLOG
	Score				
Health & Safety 0	20 40 60	80	100	Health & Safety	
Basic sanitation meets the needs of the poorest areas	(\bigcirc	65.6	Online reporting of city maintenance prob	elems provides a speedy solution
Recycling services are satisfactory			62.8	A website or App allows residents to easil	ily give away unwanted items
Public safety is not a problem			52.0	Free public wifi has improved access to c	city services
Air pollution is not a problem	\bigcirc		26.3	CCTV cameras has made residents feel s	safer
Medical services provision is satisfactory	\bigcirc		60.0	A website or App allows residents to effect	ctively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			20.4	Arranging medical appointments online ha	as improved access
Mobility				Mobility	
Traffic congestion is not a problem			27.8	Car-sharing Apps have reduced congestion	on
Public transport is satisfactory		\bigcirc	66.5	Apps that direct you to an available parkir	ng space have reduced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has ma	ade public transport easier to use
				The city provides information on traffic co	ongestion through mobile phones
Activities				Activities	
Green spaces are satisfactory			64.0	Online purchasing of tickets to shows and	d museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory			80.5		
Opportunities (Work & School)				Opportunities (Work & School)	
Employment finding services are readily available		\bigcirc	77.1	Online access to job listings has made it e	easier to find work
Most children have access to a good school			63.5	IT skills are taught well in schools	
Lifelong learning opportunities are provided by local institutions		\bigcirc	70.6	Online services provided by the city has n	made it easier to start a new business
Businesses are creating new jobs			46.2	The current internet speed and reliability i	meet connectivity needs
Minorities feel welcome	\bigcirc		48.2		
Governance				Governance	
Information on local government decisions are easily accessible			52.5	Online public access to city finances has	reduced corruption
Corruption of city officials is not an issue of concern	\bigcirc		38.8	Online voting has increased participation	
Residents contribute to decision making of local government			40.6	An online platform where residents can pr	ropose ideas has improved city life

0%

0%







Beijing



SMART

CITY

RATING

CC

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.742	0.749	0.753	0.758	+0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

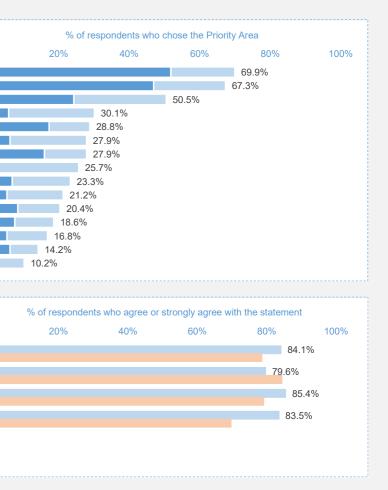
0% air pollution road congestion affordable housing basic amenities corruption fulfilling employment public transport social mobility health services school education security green spaces unemployment 16.8% citizen engagement 14.2% recycling 10.2%

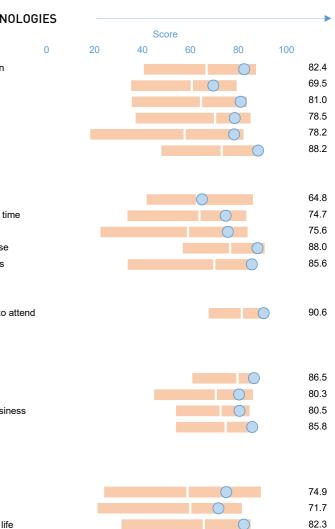
0%

ATTITUDES

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

		LEGEN	ND: MIN OC	TTY MEAN GROUP MAX
B in 2019	STRUCTURES			TECHNOLOG
	Health & Cafety	Score 20 40 60 80	100	
		20 40 60 80	100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		80.8 72.2	Online reporting of city maintenance problems provides a speedy solution
FACTOR	Recycling services are satisfactory			A website or App allows residents to easily give away unwanted items
	Public safety is not a problem		70.0	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		35.0 72.6	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory			A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	54.9	Arranging medical appointments online has improved access
	Mark II.			Mobility
	Mobility Traffic congestion is not a problem		38.6	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		54.6	Apps that direct you to an available parking space have reduced journey time
STRUCTURES	r ubic transport is satisfactory		04.0	Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
000				The city provides information on traffic congestion through mobile phones
CCC				
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		72.8	Online purchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		79.0	
	Opportunities (Work & School)			Opportunities (Work & School)
	Employment finding services are readily available		79.1	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		71.8	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		67.2	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		79.3	The current internet speed and reliability meet connectivity needs
4	Minorities feel welcome		76.1	
	Governance			Governance
	Information on local government decisions are easily accessible		78.5	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		54.1	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		62.6	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		70.4	Processing Identification Documents online has reduced waiting times





Bengaluru



CITY

RATING

BACKGROUND INFORMATION



10,087,000

Population

(UN World Cities Report)



2015	2016	2017	2018	1 yr change
0.627	0.637	0.643	0.647	+0.004
68.6	68.9	69.2	69.4	+0.2
12.0	12.3	12.3	12.3	+0.0
6.2	6.4	6.5	6.5	+0.0
5,674	6.075	6.446	6,829	+383.0
	0.627 68.6 12.0 6.2	0.627 0.637 68.6 68.9 12.0 12.3 6.2 6.4	0.627 0.637 0.643 68.6 68.9 69.2 12.0 12.3 12.3 6.2 6.4 6.5	0.6270.6370.6430.64768.668.969.269.412.012.312.312.36.26.46.56.5

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

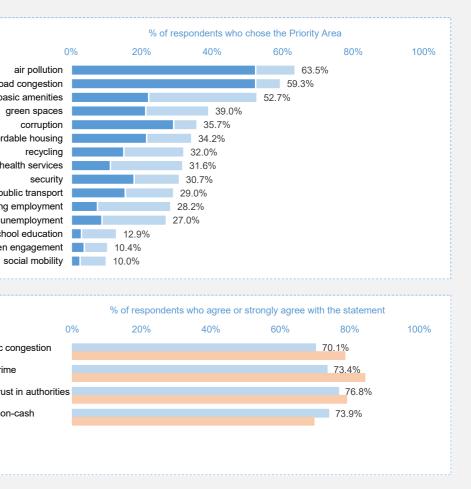
0% air pollution road congestion basic amenities green spaces corruption affordable housing recycling health services security public transport fulfilling employment unemployment school education 12.9% citizen engagement 10.4%

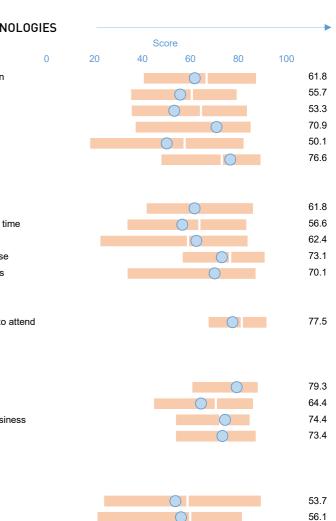
0%

ATTITUDES

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

		LEGEN		Y MEAN GROUP MAX
CC in 2019	STRUCTURES			
00112017	Sincorones	ore		
	Health & Safety 0 20 40	60 80	100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		59.8	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		58.2	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		49.1	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		27.2	CCTV cameras has made residents feel safer
10111100	Medical services provision is satisfactory		71.5	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		50.3	Arranging medical appointments online has improved access
	Mobility			Mobility
	Traffic congestion is not a problem		22.1	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		58.5	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		61.8	Online purchasing of tickets to shows and museums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory		72.6	
	Opportunities (Work & School)	_		Opportunities (Work & School)
GROUP	Employment finding services are readily available		70.7	Online access to job listings has made it easier to find work
UNCOT	Most children have access to a good school		68.4	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		65.3	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs	\bigcirc	74.6	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		70.3	
	Courses			Courses
	Governance Information on local government decisions are easily accessible		61.1	Governance Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		30.2	Online public access to city infances has reduced continuition Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		52.1	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents contribute to decision making of local government Residents provide feedback on local government projects		57.5	Processing Identification Documents online has reduced waiting times
ΠΟΠΙΑΑΑ ΙΟ Β			51.5	Frocessing identification Documents online has reduced walting times





64.3

74.9

 \bigcirc

Berlin



SMART

CITY

RATING

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.933	0.936	0.938	0.939	+0.001
Life expectancy at Birth	80.8	80.9	81.0	81.2	+0.2
Expected years of schooling	17.0	17.1	17.1	17.1	+0.0
Mean years of schooling	14.1	14.1	14.1	14.1	+0.0
GNI per capita (PPP \$)	45,012	45,577	46,438	46,946	+508.0

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion security school education air pollution unemployment public transport green spaces recycling citizen engagement fulfilling employment basic amenities social mobility 12.5%

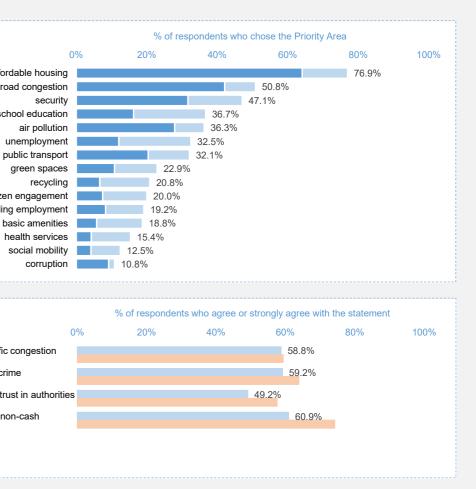
ATTITUDES

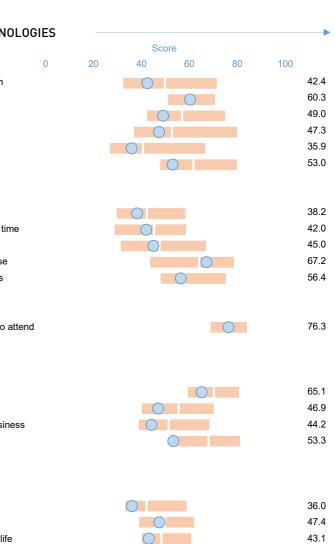
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

BBB								
					LEGEND	: MIN	CITY	MEAN GROUP MAX
BBB in 2019	STRUCTURES		Scor	9				TECHNOLO
	Health & Safety 0	20	40	60	80	100		Health & Safety
	Basic sanitation meets the needs of the poorest areas			\bigcirc		70.0		Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory					71.7		A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		\bigcirc			49.5		Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		\bigcirc			40.1		CCTV cameras has made residents feel safer
i w i i i i i e e	Medical services provision is satisfactory			\bigcirc		72.2		A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem					25.2		Arranging medical appointments online has improved access
Δ	Mobility							Mobility
	Traffic congestion is not a problem					31.0		Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory					57.0		Apps that direct you to an available parking space have reduced journey time
0	·							Bicycle hiring has reduced congestion
								Online scheduling and ticket sales has made public transport easier to use
BB								The city provides information on traffic congestion through mobile phones
DD	Activities							Activities
TECHNOLOGIES	Green spaces are satisfactory					66.0		Online purchasing of tickets to shows and museums has made it easier to atter
	Cultural activities (shows, bars, and museums) are satisfactory				0	81.1		
	Opportunities (Work & School)							Opportunities (Work & School)
00010	Employment finding services are readily available					61.8		Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school			Õ		59.2		IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions			Õ		61.1		Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs			Õ		62.6		The current internet speed and reliability meet connectivity needs
	Minorities feel welcome			0		62.5		
	Governance							Governance
	Information on local government decisions are easily accessible			0		57.7		Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		\bigcirc	_		49.9		Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		\bigcirc			49.0		An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects			\bigcirc		57.4		Processing Identification Documents online has reduced waiting times

0%

0%





 \bigcirc

Bilbao



BACKGROUND INFORMATION

City Population

414,000

(Eurostat)



9 in 2019

SMART CITY RATING BBB

A in 2019

FACTOR RATING

А STRUCTURE

BB

TECHNOLOGI

GROUP

All ratings rar from AAA to Madrid Map tiles l

0015	001/	0017	0010	1
2015	2016	2017	2018	1 yr change
0.885	0.888	0.891	0.893	+0.002
83.0	83.1	83.3	83.4	+0.1
17.8	17.8	17.9	17.9	+0.0
9.7	9.8	9.8	9.8	+0.0
32,265	33,379	34,226	35,041	+815.0
	83.0 17.8 9.7	0.885 0.888 83.0 83.1 17.8 17.8 9.7 9.8	0.8850.8880.89183.083.183.317.817.817.99.79.89.8	0.8850.8880.8910.89383.083.183.383.417.817.817.917.99.79.89.89.8

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

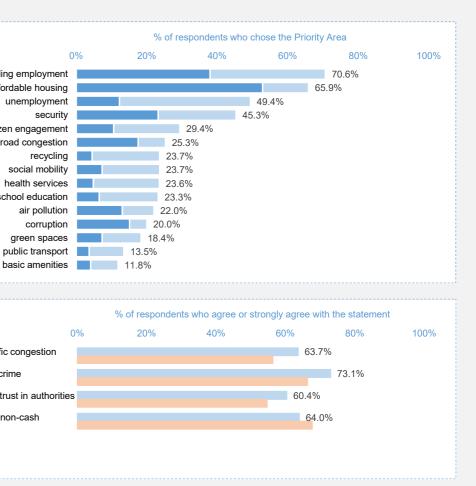
0% fulfilling employment affordable housing unemployment security citizen engagement road congestion recycling social mobility health services school education air pollution corruption public transport 13.5%

0%

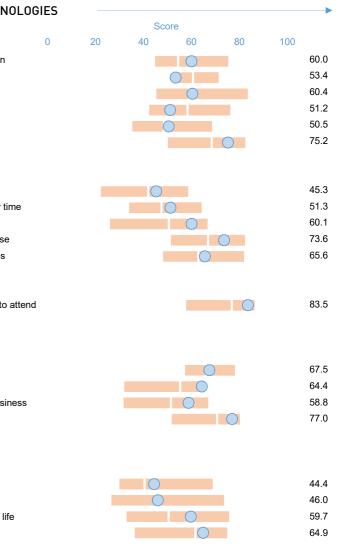
ATTITUDES

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

8				
9	STRUCTURES		LEGEND: MIN C	TY MEAN GROUP MAX
		Score		
_	Health & Safety 0	20 40 60 8	30 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		77.3	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		77.7	A website or App allows residents to easily give away unwanted items
)R	Public safety is not a problem		64.3	Free public wifi has improved access to city services
GS	Air pollution is not a problem		53.1	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		78.0	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		27.6	Arranging medical appointments online has improved access
	Mobility			Mobility
	Traffic congestion is not a problem		44.0	Car-sharing Apps have reduced congestion
RES	Public transport is satisfactory		82.4	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
2				The city provides information on traffic congestion through mobile phones
	Activities			Activities
GIES	Green spaces are satisfactory		76.6	Online purchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		80.3	
	Opportunities (Work & School)			Opportunities (Work & School)
Р	Employment finding services are readily available		73.8	Online access to job listings has made it easier to find work
г	Most children have access to a good school		78.7	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		81.0	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		50.2	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		62.9	
	Governance			Governance
	Information on local government decisions are easily accessible		62.1	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		53.1	Online voting has increased participation
ange	Residents contribute to decision making of local government		49.3	An online platform where residents can propose ideas has improved city life
to D	Residents provide feedback on local government projects		58.3	Processing Identification Documents online has reduced waiting times







Birmingham



SMART

CITY

RATING

BACKGROUND INFORMATION

City Population

2,515,000 (UN World Cities Report)

Country	2015	2016	2017	2018	1 yr change
HDI	0.916	0.918	0.919	0.920	+0.001
Life expectancy at Birth	81.1	81.1	81.2	81.2	+0.0
Expected years of schooling	17.4	17.4	17.4	17.4	+0.0
Mean years of schooling	12.8	12.9	12.9	13.0	+0.1
GNI per capita (PPP \$)	38,116	38,421	39,216	39,507	+291.0

	PRI	ORIT	Y AF	REAS
--	-----	------	------	------

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

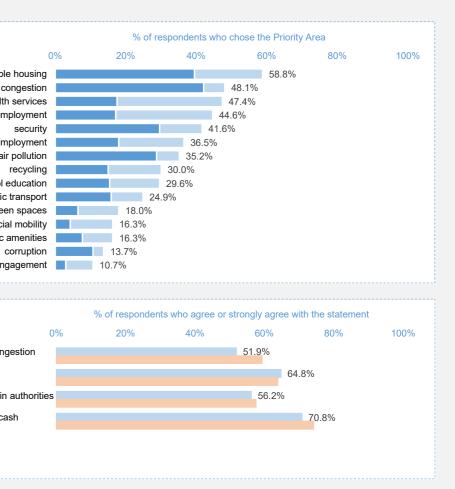
0% affordable housing road congestion health services unemployment security fulfilling employment air pollution recycling school education public transport green spaces social mobility basic amenities 16.3% citizen engagement 10.7%

0%

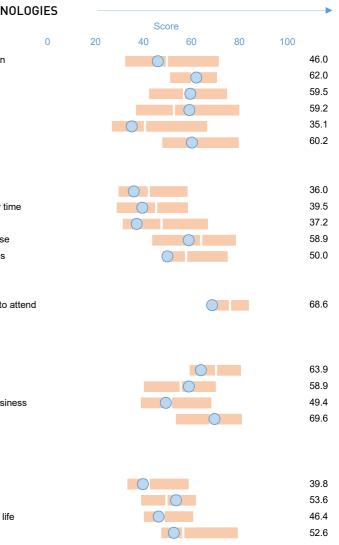
ATTITUDES

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

BBB				
			LEGEND: MIN	CITY MEAN GROUP MAX
BB in 2019	STRUCTURES	Score	•	< TECHNOL
	Health & Safety 0		80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		63.9	Online reporting of city maintenance problems provides a speedy solution
FLOTOR	Recycling services are satisfactory		59.5	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		38.2	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		30.7	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		57.7	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		38.3	Arranging medical appointments online has improved access
BBB	Mobility			Mobility
	Traffic congestion is not a problem		23.7	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		48.7	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
BBB				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		61.2	Online purchasing of tickets to shows and museums has made it easier to att
	Cultural activities (shows, bars, and museums) are satisfactory	\bigcirc	69.3	
	Opportunities (Work & School)			Opportunities (Work & School)
CDOUD	Employment finding services are readily available		62.9	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		58.2	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		56.5	Online services provided by the city has made it easier to start a new busines
1	Businesses are creating new jobs		56.1	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		64.2	
	Governance			Governance
	Information on local government decisions are easily accessible		59.3	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		43.9	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		46.7	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		51.0	Processing Identification Documents online has reduced waiting times







Bogota



SMART

CITY

RATING

CC

D in 2019

BACKGROUND INFORMATION



(UN World Cities Report)



2015	2016	2017	2018	1 yr change
0.753	0.759	0.760	0.761	+0.001
76.5	76.7	76.9	77.1	+0.2
14.4	14.6	14.6	14.6	+0.0
8.1	8.3	8.3	8.3	+0.0
12,951	13,087	12,963	12,896	-67.0
	0.753 76.5 14.4 8.1	0.753 0.759 76.5 76.7 14.4 14.6 8.1 8.3	0.7530.7590.76076.576.776.914.414.614.68.18.38.3	0.7530.7590.7600.76176.576.776.977.114.414.614.614.68.18.38.38.3

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% security corruption health services air pollution public transport unemployment road congestion fulfilling employment affordable housing basic amenities social mobility school education green spaces 8.5% citizen engagement 5.7%

0%

ATTITUDES

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

		LEGEND	D: MIN	CITY MEAN GROUP MAX
STRUCTURES			•	TECHNOLOG
	Score			
Health & Safety 0	20 40 60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas	\bigcirc		34.8	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory	\bigcirc		47.0	A website or App allows residents to easily give away unwanted items
Public safety is not a problem			24.9	Free public wifi has improved access to city services
Air pollution is not a problem	\bigcirc		21.8	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			39.6	A website or App allows residents to effectively monitor air pollution
inding housing with rent equal to 30% or less of a monthly salary is not a problem			22.8	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem	\bigcirc		15.8	Car-sharing Apps have reduced congestion
ublic transport is satisfactory			25.0	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory	\bigcirc		63.8	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory			71.7	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			54.2	Online access to job listings has made it easier to find work
Nost children have access to a good school			48.1	IT skills are taught well in schools
ifelong learning opportunities are provided by local institutions			51.6	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs			37.2	The current internet speed and reliability meet connectivity needs
/inorities feel welcome	0		33.7	
Governance				Governance
nformation on local government decisions are easily accessible	\bigcirc		47.6	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern	0		15.4	Online voting has increased participation
Residents contribute to decision making of local government			29.1	An online platform where residents can propose ideas has improved city life
5 5				

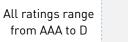
FACTOR RATINGS CC

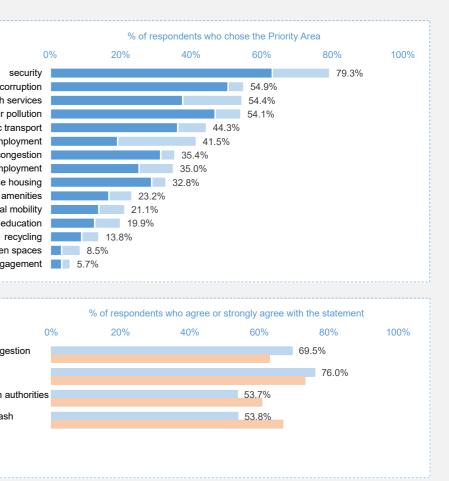
STRUCTURES

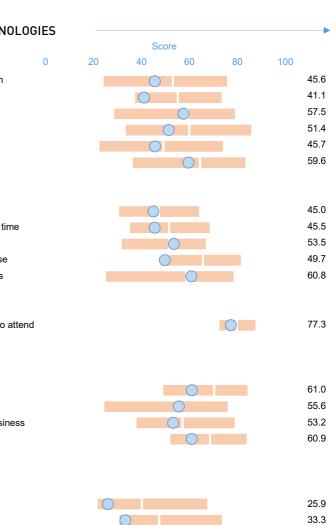
CC **TECHNOLOGIES**

GROUP

3







39.5

Bologna



BACKGROUND INFORMATION





784,000

(UN World Cities Report)

Snain

Country	2015	2016	2017	2018	1 yr change
Country HDI	0.875	0.878	0.881	0.883	+0.002
Life expectancy at Birth	82.8	83.0	83.2	83.4	+0.2
Expected years of schooling	16.3	16.2	16.2	16.2	+0.0
Mean years of schooling	10.1	10.2	10.2	10.2	+0.0
GNI per capita (PPP \$)	34,105	34,818	35,573	36,141	+568.0

PRIORITY AR	EAS
-------------	-----

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

air pollution affordable housing security unemployment road congestion fulfilling employment public transport recycling corruption social mobility citizen engagement health services school education 8.4%

0%

0%

ATTITUDES

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

STRUCTURES		•	TECHNOLOG
Health & Safety 0	Score 20 40 60 80	100	Health & Cafaty
Health & Safety 0 Basic sanitation meets the needs of the poorest areas	20 40 00 00	72.3	Health & Safety Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory		72.3	A website or App allows residents to easily give away unwanted items
Public safety is not a problem		50.6	Free public wifi has improved access to city services
ir pollution is not a problem		30.7	CCTV cameras has made residents feel safer
Addical services provision is satisfactory		77.0	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem		79.3	Arranging medical appointments online has improved access
		10.0	Arranging medical appointments online has improved access
1 obility			Mobility
raffic congestion is not a problem	\bigcirc	31.8	Car-sharing Apps have reduced congestion
ublic transport is satisfactory		64.0	Apps that direct you to an available parking space have reduced journey time
			Bicycle hiring has reduced congestion
			Online scheduling and ticket sales has made public transport easier to use
			The city provides information on traffic congestion through mobile phones
Activities			Activities
Green spaces are satisfactory		74.6	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory	0	83.0	
Opportunities (Work & School)			Opportunities (Work & School)
Employment finding services are readily available		42.6	Online access to job listings has made it easier to find work
Nost children have access to a good school		71.8	IT skills are taught well in schools
ifelong learning opportunities are provided by local institutions		66.2	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs		49.4	The current internet speed and reliability meet connectivity needs
/linorities feel welcome		52.5	
Governance			Governance
nformation on local government decisions are easily accessible		63.6	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern		49.7	Online voting has increased participation
Residents contribute to decision making of local government		48.5	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects		55.1	Processing Identification Documents online has reduced waiting times

SMART CITY RATING CCC

BBB in 2019

FACTOR RATINGS

B STRUCTURES

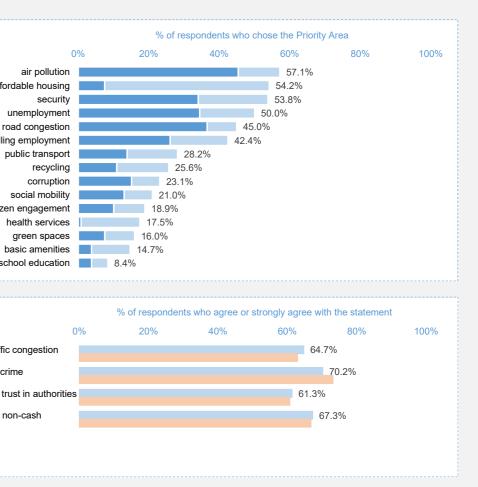
CCC

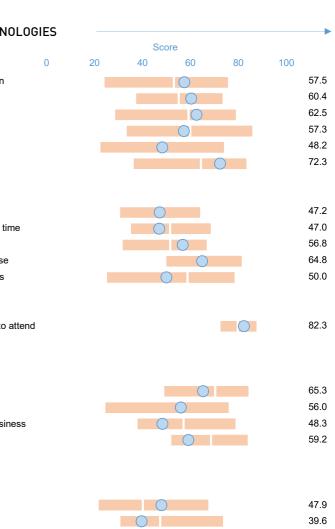
TECHNOLOGIES

GROUP

3

All ratings range from AAA to D





47.6

Boston



32 in 2019

SMART

CITY

RATING

BACKGROUND INFORMATION



(UN World Cities Report)



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

Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.919	0.919	0.920	+0.001
Life expectancy at Birth	78.9	78.9	78.9	78.9	+0.0
Expected years of schooling	16.2	16.3	16.3	16.3	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	54,039	54,443	55,351	56,140	+789.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion public transport school education security health services unemployment air pollution fulfilling employment recycling corruption citizen engagement basic amenities 13.5%

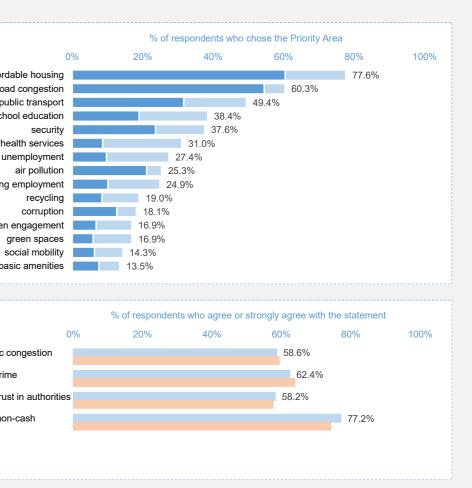
ATTITUDES

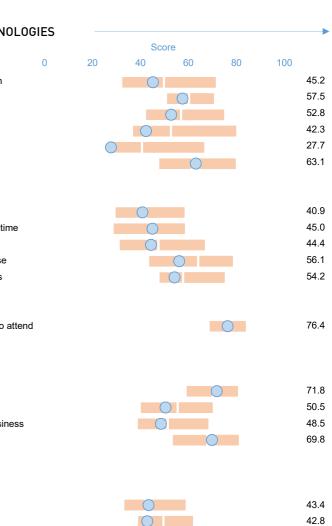
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

BBB							
				LEGEND:	MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES		Score		•	TECHN	OLO
	Health & Safety 0	20	40 60	80	100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas				58.8	Online reporting of city maintenance problems provides a speedy solution	
	Recycling services are satisfactory				67.2	A website or App allows residents to easily give away unwanted items	
FACTOR	Public safety is not a problem				48.0	Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem		\bigcirc		42.8	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory				74.3	A website or App allows residents to effectively monitor air pollution	
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem				26.6	Arranging medical appointments online has improved access	
Δ	A4 - 5 115 -					Mark Har	
	Mobility				18.4	Mobility	
STRUCTURES	Traffic congestion is not a problem Public transport is satisfactory				45.9	Car-sharing Apps have reduced congestion Apps that direct you to an available parking space have reduced journey ti	mo
STRUCTURES	Public transport is satisfactory				40.5	Bicycle hiring has reduced congestion	ne
						Online scheduling and ticket sales has made public transport easier to use	
DDD						The city provides information on traffic congestion through mobile phones	
BBB							
	Activities					Activities	
TECHNOLOGIES	Green spaces are satisfactory				64.9	Online purchasing of tickets to shows and museums has made it easier to	atten
	Cultural activities (shows, bars, and museums) are satisfactory				84.0		
	Opportunities (Work & School)					Opportunities (Work & School)	
000110	Employment finding services are readily available				66.0	Online access to job listings has made it easier to find work	
GROUP	Most children have access to a good school	The second se	0		59.5	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions				66.8	Online services provided by the city has made it easier to start a new busir	ness
	Businesses are creating new jobs		Ŏ		66.6	The current internet speed and reliability meet connectivity needs	
	Minorities feel welcome				61.1		
	Governance					Governance	
	Information on local government decisions are easily accessible				66.8	Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern				49.1	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government				56.2	An online platform where residents can propose ideas has improved city lif	ie
from AAA to D	Residents provide feedback on local government projects				59.4	Processing Identification Documents online has reduced waiting times	
						5	

0%

0%





46.1

Bratislava

SMART CITY RANKING 76

Out of 109



84 in 2019

SMART CITY RATING CC in 2019

FACTOR RATINGS CCC STRUCTURES

CC

GROUP

3 All ratings range from AAA to D BACKGROUND INFORMATION

City Population 433,000

(Eurostat)



Country HDI	2015 0.849	2016 0.851	2017 0.854	2018 0.857	1 yr change +0.003
Life expectancy at Birth	76.8	77.0	77.2	77.4	+0.2
Expected years of schooling	14.7	14.5	14.5	14.5	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	27,693	28,706	29,544	30,672	+1,128.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention. road congestion affordable housing corruption green spaces health services air pollution public transport recycling security unemployment fulfilling employment school education basic amenities citizen engagement social mobility

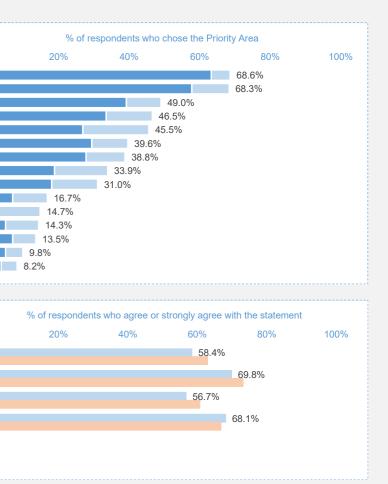
0%

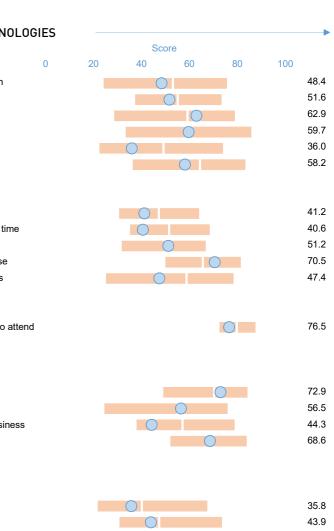
0%

ATTITUDES

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

STRUCTURES				TEC
SIRUCIURES	Score			
Health & Safety 0		0 10	0	Health & Safety
Basic sanitation meets the needs of the poorest areas			57.5	Online reporting of city maintenance problems provides a speedy solu
Recycling services are satisfactory			50.5	A website or App allows residents to easily give away unwanted items
Public safety is not a problem			62.7	Free public wifi has improved access to city services
Air pollution is not a problem			39.2	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			49.7	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			27.5	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem	\bigcirc		18.6	Car-sharing Apps have reduced congestion
Public transport is satisfactory			43.1	Apps that direct you to an available parking space have reduced journ
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to
				The city provides information on traffic congestion through mobile pho
Activities				Activities
Green spaces are satisfactory			40.1	Online purchasing of tickets to shows and museums has made it easier
Cultural activities (shows, bars, and museums) are satisfactory			73.1	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			66.8	Online access to job listings has made it easier to find work
Most children have access to a good school			72.9	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			63.3	Online services provided by the city has made it easier to start a new
Businesses are creating new jobs			69.0	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			43.2	
Governance				Governance
Information on local government decisions are easily accessible			60.6	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			27.0	Online voting has increased participation
Residents contribute to decision making of local government	\bigcirc		41.8	An online platform where residents can propose ideas has improved of
Residents provide feedback on local government projects			49.8	Processing Identification Documents online has reduced waiting times





31

46.0

Brisbane



SMART

CITY

RATING

Д

BBB in 2019

FACTOR

RATINGS

AA

STRUCTURES

BBB

TECHNOLOGIES

GROUP

All ratings range

from AAA to D

BACKGROUND INFORMATION



2,202,000 (UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.933	0.935	0.937	0.938	+0.001
Life expectancy at Birth	82.8	83.0	83.1	83.3	+0.2
Expected years of schooling	23.3	22.9	22.1	22.1	+0.0
Mean years of schooling	12.5	12.6	12.7	12.7	+0.0
GNI per capita (PPP \$)	43,246	43,653	43,756	44,097	+341.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion unemployment fulfilling employment health services public transport security corruption recycling air pollution basic amenities 13.1%

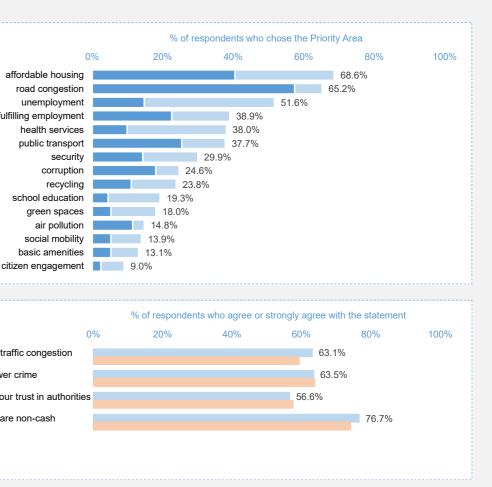
0%

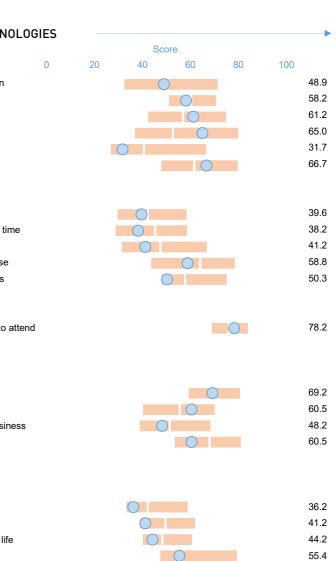
0%

ATTITUDES

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

STRUCTURES				>	ТЕСЦ	
STRUCTURES		Score			TECH	NULU
Health & Safety 0	20	40 60	80	100	Health & Safety	
Basic sanitation meets the needs of the poorest areas			\bigcirc	75.8	Online reporting of city maintenance problems provides a speedy solution	on
Recycling services are satisfactory		(68.9	A website or App allows residents to easily give away unwanted items	
Public safety is not a problem				61.2	Free public wifi has improved access to city services	
Air pollution is not a problem				57.5	CCTV cameras has made residents feel safer	
Medical services provision is satisfactory			\bigcirc	73.4	A website or App allows residents to effectively monitor air pollution	
inding housing with rent equal to 30% or less of a monthly salary is not a problem		\bigcirc		48.8	Arranging medical appointments online has improved access	
Mobility					Mobility	
raffic congestion is not a problem				25.5	Car-sharing Apps have reduced congestion	
ublic transport is satisfactory				54.5	Apps that direct you to an available parking space have reduced journey	y time
					Bicycle hiring has reduced congestion	
					Online scheduling and ticket sales has made public transport easier to u	ise
					The city provides information on traffic congestion through mobile phone	es
ctivities					Activities	
Green spaces are satisfactory			\bigcirc	74.5	Online purchasing of tickets to shows and museums has made it easier	to atten
ultural activities (shows, bars, and museums) are satisfactory			\bigcirc	79.9		
Opportunities (Work & School)					Opportunities (Work & School)	
Employment finding services are readily available				66.2	Online access to job listings has made it easier to find work	
Nost children have access to a good school				77.9	IT skills are taught well in schools	
ifelong learning opportunities are provided by local institutions			\bigcirc	73.4	Online services provided by the city has made it easier to start a new bu	usiness
Businesses are creating new jobs				54.6	The current internet speed and reliability meet connectivity needs	
Vinorities feel welcome)	65.9		
Governance					Governance	
nformation on local government decisions are easily accessible				61.4	Online public access to city finances has reduced corruption	
Corruption of city officials is not an issue of concern		\bigcirc		43.9	Online voting has increased participation	
Residents contribute to decision making of local government				48.3	An online platform where residents can propose ideas has improved city	/ life
Residents provide feedback on local government projects				60.5	Processing Identification Documents online has reduced waiting times	





Brussels



BACKGROUND INFORMATION

City Population 1,205,000

(Eurostat)

SMART CITY RATING

B

B in 2019

FACTOR RATING BB

STRUCTURI

B TECHNOLOG

GROUP

All ratings rar from AAA to



Country	2015	2016	2017	2018	1 yr change
HDI	0.913	0.915	0.917	0.919	+0.002
Life expectancy at Birth	81.0	81.1	81.3	81.5	+0.2
Expected years of schooling	19.7	19.7	19.7	19.7	+0.0
Mean years of schooling	11.7	11.8	11.8	11.8	+0.0
GNI per capita (PPP \$)	41,598	42,260	43,300	43,821	+521.0

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

air pollution affordable housing road congestion security unemployment health services green spaces fulfilling employment school education public transport corruption citizen engagement

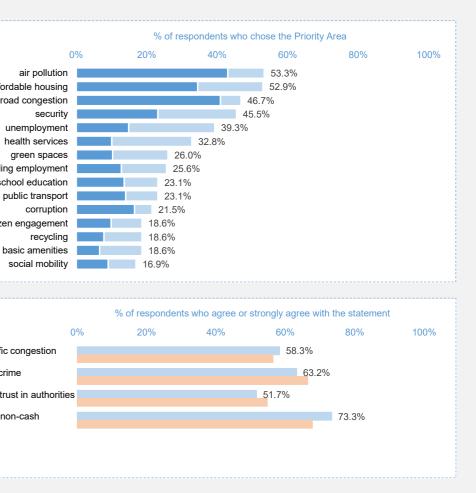
0%

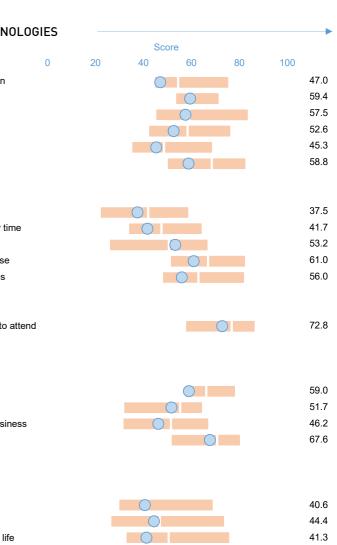
0%

ATTITUDES

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

			LEGEND:		Y MEAN GROUP MAX
9	STRUCTURES				TECHNOL
		Score			
_	Health & Safety ⁰	20 40 60	80 10	00	Health & Safety
	Basic sanitation meets the needs of the poorest areas			57.1	Online reporting of city maintenance problems provides a speedy solution
_	Recycling services are satisfactory			61.5	A website or App allows residents to easily give away unwanted items
DR	Public safety is not a problem			52.4	Free public wifi has improved access to city services
GS	Air pollution is not a problem			30.4	CCTV cameras has made residents feel safer
00	Medical services provision is satisfactory			68.5	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			42.6	Arranging medical appointments online has improved access
3	Mobility				Mobility
	Traffic congestion is not a problem			26.4	Car-sharing Apps have reduced congestion
RES	Public transport is satisfactory			57.9	Apps that direct you to an available parking space have reduced journey time
					Bicycle hiring has reduced congestion
					Online scheduling and ticket sales has made public transport easier to use
					The city provides information on traffic congestion through mobile phones
	Activities				Activities
OGIES	Green spaces are satisfactory			67.4	Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory			71.7	
_	Opportunities (Work & School)				Opportunities (Work & School)
	Employment finding services are readily available			65.1	Online access to job listings has made it easier to find work
P	Most children have access to a good school			59.2	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions			63.4	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs			55.9	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome	\circ		48.6	
	Governance				Governance
_	Information on local government decisions are easily accessible			55.2	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern			44.0	Online voting has increased participation
range	Residents contribute to decision making of local government			44.1	An online platform where residents can propose ideas has improved city life
to D	Residents provide feedback on local government projects			46.3	Processing Identification Documents online has reduced waiting times





Bucharest

SMART CITY RANKING
87
Out of 109
85 in 2019
SMART

CITY

RATING

CC

CC in 2019

FACTOR

RATINGS

CC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

3

BACKGROUND INFORMATION



1,868,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.806	0.808	0.813	0.816	+0.003
Life expectancy at Birth	75.5	75.6	75.8	75.9	+0.1
Expected years of schooling	14.5	14.3	14.3	14.3	+0.0
Mean years of schooling	10.9	11.0	11.0	11.0	+0.0
GNI per capita (PPP \$)	20,157	21,173	22,828	23,906	+1,078.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

air pollution corruption road congestion health services green spaces fulfilling employment public transport recycling security basic amenities school education affordable housing unemployment social mobility 7.5%

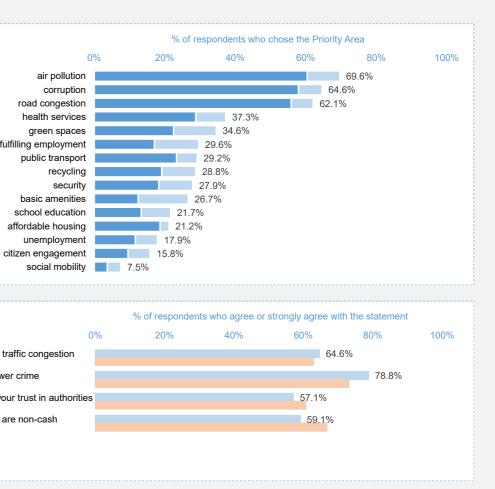
ATTITUDES

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

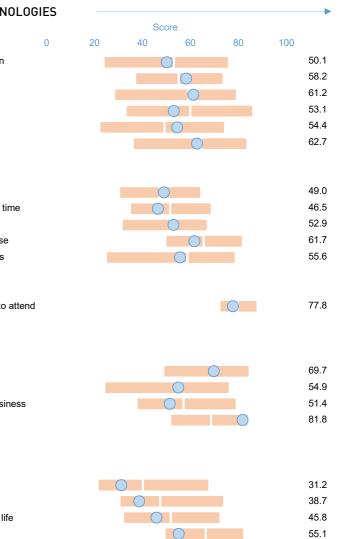
STRUCTURES	Score		•	<pre>TECHNOL</pre>
Health & Safety 0	20 40 60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas			51.1	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			39.4	A website or App allows residents to easily give away unwanted items
Public safety is not a problem	\bigcirc		47.8	Free public wifi has improved access to city services
Air pollution is not a problem			19.9	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			38.9	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			30.2	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			17.8	Car-sharing Apps have reduced congestion
Public transport is satisfactory			34.7	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory			51.7	Online purchasing of tickets to shows and museums has made it easier to atte
Cultural activities (shows, bars, and museums) are satisfactory		0	72.8	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			53.6	Online access to job listings has made it easier to find work
Most children have access to a good school			54.9	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			54.9	Online services provided by the city has made it easier to start a new busines
Businesses are creating new jobs			59.1	The current internet speed and reliability meet connectivity needs
Minorities feel welcome	\bigcirc		55.1	
Governance				Governance
Information on local government decisions are easily accessible			44.8	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			21.5	Online voting has increased participation
Residents contribute to decision making of local government			26.2	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects			39.4	Processing Identification Documents online has reduced waiting times

All ratings range from AAA to D

0%







Budapest

SMART CITY RANKING 77 Out of 109

83 in 2019

SMART

CITY

RATING

CCC

BACKGROUND INFORMATION





(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.835	0.838	0.841	0.845	+0.004
Life expectancy at Birth	76.0	76.3	76.5	76.7	+0.2
Expected years of schooling	15.2	15.1	15.1	15.1	+0.0
Mean years of schooling	11.8	11.8	11.9	11.9	+0.0
GNI per capita (PPP \$)	23,965	25,081	25,774	27,144	+1,370.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

health services affordable housing corruption security air pollution fulfilling employment road congestion unemployment green spaces public transport school education basic amenities social mobility 6.9% citizen engagement 5.7%

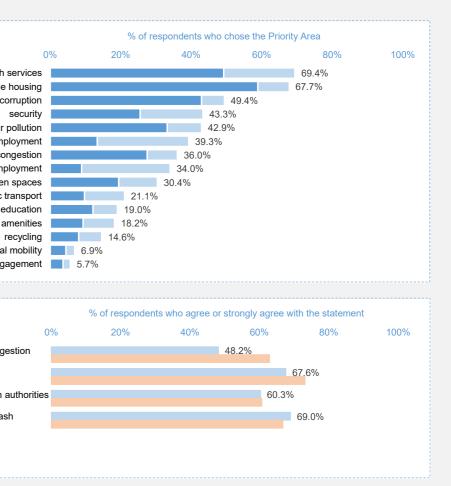
0%

0%

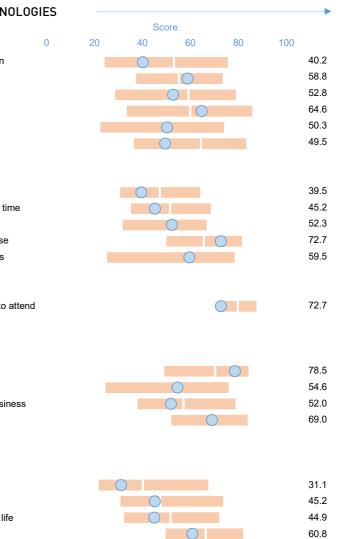
ATTITUDES

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

			LEGEND: MIN C	TY MEAN GROUP MAX
CC in 2019	STRUCTURES		•	TECHNOLOG
	Health & Safety 0	Score 20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		51.1	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		54.9	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem	0	50.9	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		33.5	CCTV cameras has made residents feel safer
10111100	Medical services provision is satisfactory		35.4	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	18.8	Arranging medical appointments online has improved access
000				
CCC	Mobility			Mobility
	Traffic congestion is not a problem		29.5	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		55.7	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
CCC				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		51.2	Online purchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		77.5	
	Opportunities (Work & School)		70.0	Opportunities (Work & School)
GROUP	Employment finding services are readily available		70.0	Online access to job listings has made it easier to find work
	Most children have access to a good school		54.5	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		64.8	Online services provided by the city has made it easier to start a new business
2	Businesses are creating new jobs		66.8	The current internet speed and reliability meet connectivity needs
U	Minorities feel welcome		31.5	
	Governance			Governance
	Information on local government decisions are easily accessible		49.9	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		28.5	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		35.8	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		45.9	Processing Identification Documents online has reduced waiting times
	······································			







Buenos Aires



CITY

RATING

CC

BACKGROUND INFORMATION



15,180,000



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.828	0.828	0.832	0.830	-0.002
Life expectancy at Birth	76.1	76.2	76.4	76.5	+0.1
Expected years of schooling	17.4	17.4	17.6	17.6	+0.0
Mean years of schooling	10.4	10.5	10.6	10.6	+0.0
GNI per capita (PPP \$)	18,901	18,249	18,462	17,611	-851.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

security unemployment corruption fulfilling employment affordable housing health services school education basic amenities road congestion recycling air pollution public transport citizen engagement 13.2% green spaces 9.1% social mobility 7.8%

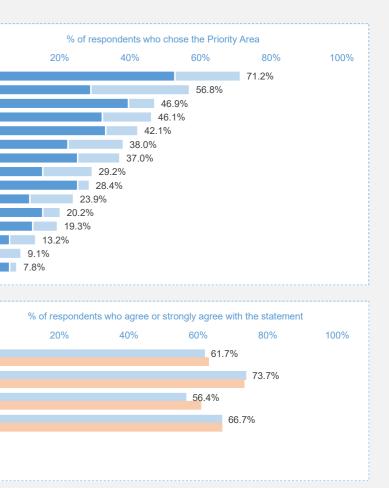
ATTITUDES

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

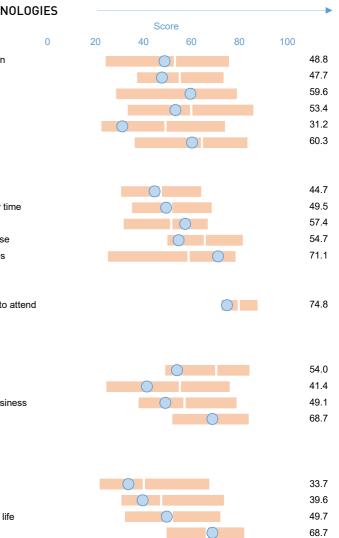
			LEGEND: MIN	CITY MEAN GROUP MAX	
CC in 2019	STRUCTURES			TECHNOLO	GI
	Health & Safety 0	Score 20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		46.2	Online reporting of city maintenance problems provides a speedy solution	
	Recycling services are satisfactory		52.1	A website or App allows residents to easily give away unwanted items	
FACTOR	Public safety is not a problem		29.5	Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem		28.9	CCTV cameras has made residents feel safer	
RATINUS	Medical services provision is satisfactory		53.6	A website or App allows residents to effectively monitor air pollution	
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		30.3	Arranging medical appointments online has improved access	
<u> </u>					
	Mobility			Mobility	
	Traffic congestion is not a problem		21.2	Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory	\bigcirc	49.9	Apps that direct you to an available parking space have reduced journey time	
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has made public transport easier to use	
				The city provides information on traffic congestion through mobile phones	
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory	(74.8	Online purchasing of tickets to shows and museums has made it easier to atten	d
	Cultural activities (shows, bars, and museums) are satisfactory		76.5		
	Opportunities (Work & School)			Opportunities (Work & School)	
	Employment finding services are readily available		50.8	Online access to job listings has made it easier to find work	
GROUP	Most children have access to a good school		40.5	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		52.3	Online services provided by the city has made it easier to start a new business	
	Businesses are creating new jobs		37.2	The current internet speed and reliability meet connectivity needs	
3	Minorities feel welcome	0	46.1	. , , ,	
	Governance			Governance	
	Information on local government decisions are easily accessible		53.2	Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern		27.2	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government		36.1	An online platform where residents can propose ideas has improved city life	
from AAA to D	Residents provide feedback on local government projects	\bigcirc	50.0	Processing Identification Documents online has reduced waiting times	

0%

0%







Busan



50 in 2019

SMART

CITY

RATING

BB

BACKGROUND INFORMATION



(UN World Cities Report)

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

Country	2015	2016	2017	2018	1 yr change
HDI	0.899	0.901	0.904	0.906	+0.002
Life expectancy at Birth	82.1	82.4	82.6	82.8	+0.2
Expected years of schooling	16.5	16.4	16.4	16.4	+0.0
Mean years of schooling	12.1	12.2	12.2	12.2	+0.0
GNI per capita (PPP \$)	34,276	35,122	35,945	36,757	+812.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

fulfilling employment unemployment road congestion air pollution affordable housing corruption basic amenities security public transport citizen engagement green spaces social mobility

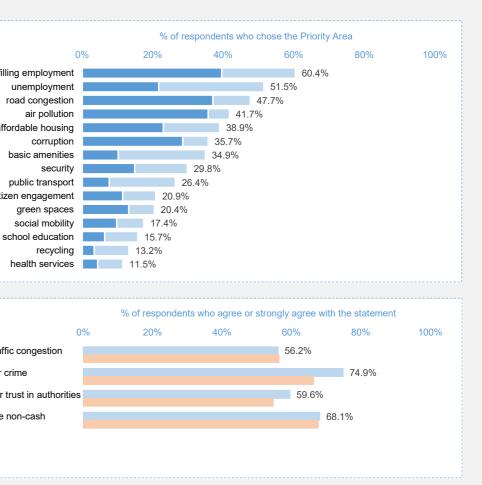
ATTITUDES

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

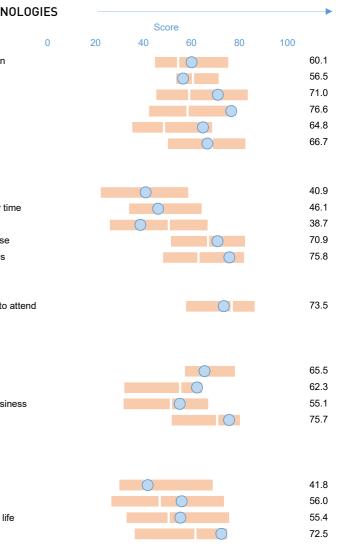
DD			LEGEND: MIN	CITY MEAN GROUP MAX
BB in 2019	STRUCTURES			TECHNOLO
		Score		
	Health & Safety 0	20 40 60 8	30 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		72.5	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		67.9	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		64.0	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		26.0	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		75.7	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		47.8	Arranging medical appointments online has improved access
BB	Mobility			Mobility
	Traffic congestion is not a problem		33.7	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		70.0	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
BBB				The city provides information on traffic congestion through mobile phones
DDD				A LATISTIC -
TECHNOLOGIES	Activities		58.5	Activities
TECHNOLOGIES	Green spaces are satisfactory		56.9	Online purchasing of tickets to shows and museums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory		50.9	
	Opportunities (Work & School)			Opportunities (Work & School)
CDOUD	Employment finding services are readily available		55.7	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		60.1	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		65.6	Online services provided by the city has made it easier to start a new business
9	Businesses are creating new jobs		42.1	The current internet speed and reliability meet connectivity needs
∠	Minorities feel welcome		38.9	
	Governance			Governance
	Information on local government decisions are easily accessible		60.6	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		33.3	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		48.4	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		50.4	Processing Identification Documents online has reduced waiting times

0%

0%







Cairo



CITY

RATING

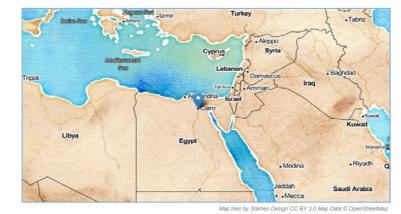
D

BACKGROUND INFORMATION



18,772,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.690	0.695	0.696	0.700	+0.004
Life expectancy at Birth	71.3	71.5	71.7	71.8	+0.1
Expected years of schooling	13.0	13.1	13.1	13.1	+0.0
Mean years of schooling	7.1	7.2	7.2	7.3	+0.1
GNI per capita (PPP \$)	10,069	10,323	10,473	10,744	+271.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

road congestion air pollution health services corruption unemployment affordable housing school education basic amenities green spaces security fulfilling employment public transport citizen engagement 8.7% social mobility | 3.3%

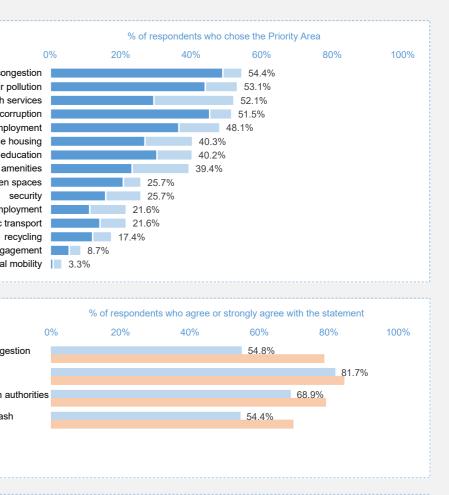
0%

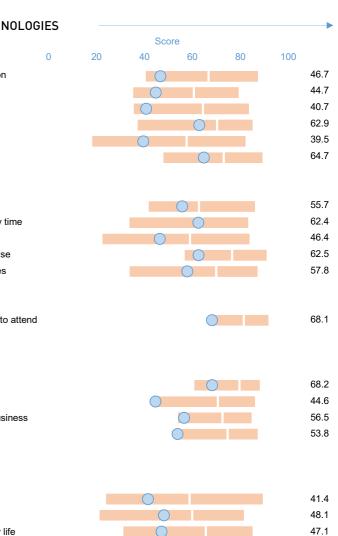
0%

ATTITUDES

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

U			LEGEND: MIN	CITY MEAN GROUP MAX
D in 2019	STRUCTURES		•	TECHNOLO
		Score		
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		54.7	Online reporting of city maintenance problems provides a speedy solution
FLOTOR	Recycling services are satisfactory		40.4	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		38.9	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		20.6	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		50.1	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		39.8	Arranging medical appointments online has improved access
	Mobility		40.0	Mobility
STRUCTURES	Traffic congestion is not a problem		13.8	Car-sharing Apps have reduced congestion
SIRUCIURES	Public transport is satisfactory		43.4	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		36.2	Online purchasing of tickets to shows and museums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory		62.7	
	Opportunities (Work & School)			Opportunities (Work & School)
GROUP	Employment finding services are readily available		35.6	Online access to job listings has made it easier to find work
encer	Most children have access to a good school		41.1	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		42.7	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs	\bigcirc	44.2	The current internet speed and reliability meet connectivity needs
4	Minorities feel welcome		59.9	
	Governance			Governance
	Information on local government decisions are easily accessible		60.4	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		24.8	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		30.8	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		38.9	Processing Identification Documents online has reduced waiting times
				· · ·





Cape Town



BACKGROUND INFORMATION

City

Population

3,660,000

(UN World Cities Report)



93 in 2019

SMART CITY RATING D

C in 2019

FACTOR RATINGS

D STRUCTURES

TECHNOLOGIES

GROUP

All ratings range from AAA to D

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

	0045	001/	0045	0010	
Country	2015	2016	2017	2018	1 yr change
HDI	0.699	0.702	0.704	0.705	+0.001
Life expectancy at Birth	62.6	63.2	63.5	63.9	+0.4
Expected years of schooling	13.8	13.7	13.7	13.7	+0.0
Mean years of schooling	10.1	10.2	10.2	10.2	+0.0
GNI per capita (PPP \$)	12,052	11,908	11,864	11,756	-108.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

unemployment affordable housing security basic amenities corruption health services fulfilling employment school education public transport road congestion air pollution citizen engagement 10.9% green spaces 8.9% recycling 8.1% social mobility 6.5%

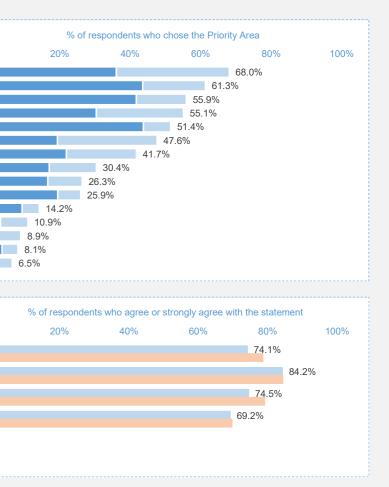
0%

0%

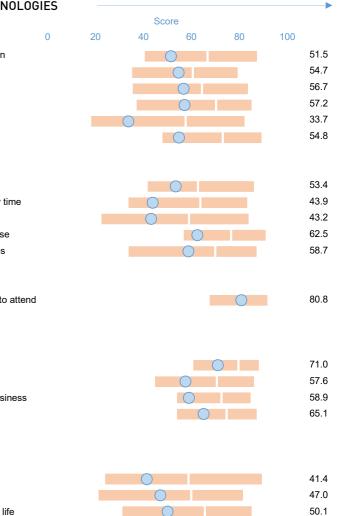
ATTITUDES

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

		LEGEND: MIN		
STRUCTURES	Score		→	TECHNOLOG
Health & Safety 0	20 40 60	80 100	Н	ealth & Safety
Basic sanitation meets the needs of the poorest areas				nline reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory				website or App allows residents to easily give away unwanted items
Public safety is not a problem				ee public wifi has improved access to city services
Air pollution is not a problem			39.8 CC	CTV cameras has made residents feel safer
Medical services provision is satisfactory			55.5 A	website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem				ranging medical appointments online has improved access
Mobility			м	obility
Traffic congestion is not a problem	\bigcirc		35.2 Ca	ar-sharing Apps have reduced congestion
Public transport is satisfactory			49.2 Ap	ops that direct you to an available parking space have reduced journey time
			Bi	cycle hiring has reduced congestion
			Or	nline scheduling and ticket sales has made public transport easier to use
			Th	ne city provides information on traffic congestion through mobile phones
Activities			A	ctivities
Green spaces are satisfactory	\bigcirc		66.9 Or	nline purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory		\bigcirc	76.6	
Opportunities (Work & School)			0	pportunities (Work & School)
Employment finding services are readily available			51.1 Or	nline access to job listings has made it easier to find work
Most children have access to a good school			51.2 IT	skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			54.1 Or	nline services provided by the city has made it easier to start a new business
Businesses are creating new jobs			53.2 Th	ne current internet speed and reliability meet connectivity needs
Minorities feel welcome			48.3	
			G	overnance
Governance				
Governance Information on local government decisions are easily accessible			59.5 Or	nline public access to city finances has reduced corruption
				nline public access to city finances has reduced corruption nline voting has increased participation
Information on local government decisions are easily accessible			26.1 Or	



.0GIES



Chengdu



SMART

CITY

RATING

BACKGROUND INFORMATION



7,556,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.742	0.749	0.753	0.758	+0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0

PRIORITY AREAS

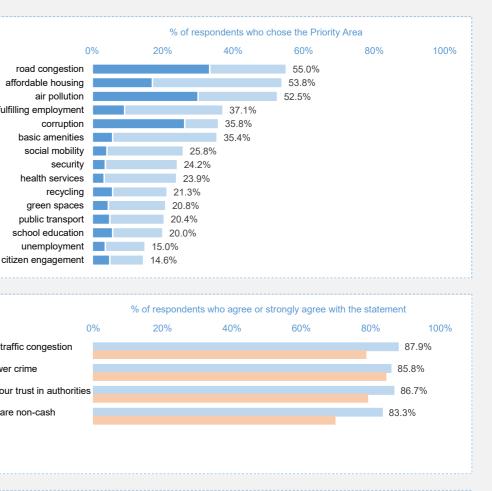
From a list of 15 indicators, survey respondents were asked to select 5 that they perceived as the most urgent for their city. This is the total bar. The higher the percentage of responses per area, the greater the priority for the city.

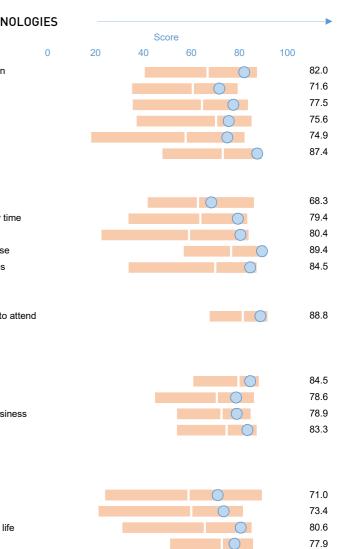
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% road congestion affordable housing air pollution fulfilling employment corruption basic amenities social mobility security health services recycling green spaces public transport unemployment 15.0%

ATTITUDES

CCC							
					LEGEN	ND: MIN	CITY MEAN GROUP MAX
B in 2019	STRUCTURES		Sc			•	TECHNOLO
	Health & Safety 0	20	40	60	80	100	Health & Safety
	Basic sanitation meets the needs of the poorest areas				\bigcirc	78.9	Online reporting of city maintenance problems provides a speedy solution
FLOTOR	Recycling services are satisfactory					71.7	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem					70.0	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem			\bigcirc		52.9	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory				\bigcirc	74.9	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			\bigcirc		67.5	Arranging medical appointments online has improved access
CC	Mobility						Mobility
	Traffic congestion is not a problem					50.9	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory					69.9	Apps that direct you to an available parking space have reduced journey time
0							Bicycle hiring has reduced congestion
							Online scheduling and ticket sales has made public transport easier to use
CCC							The city provides information on traffic congestion through mobile phones
	Activities						Activities
TECHNOLOGIES	Green spaces are satisfactory				\bigcirc	78.5	Online purchasing of tickets to shows and museums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory					84.1	
	Opportunities (Work & School)						Opportunities (Work & School)
000110	Employment finding services are readily available				\bigcirc	76.1	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school				Õ	76.2	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions			\bigcirc		64.4	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs				\bigcirc	74.9	The current internet speed and reliability meet connectivity needs
4	Minorities feel welcome				\bigcirc	78.2	
	Governance						Governance
	Information on local government decisions are easily accessible					71.3	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern			\bigcirc		53.1	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government			\bigcirc		62.4	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects			(72.7	Processing Identification Documents online has reduced waiting times





Chicago



53 in 2019

SMART

CITY

RATING

BBB

BB in 2019

FACTOR

RATINGS

BB

STRUCTURES

BBB

TECHNOLOGIES

GROUP

1

All ratings range from AAA to D

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.919	0.919	0.920	+0.001
Life expectancy at Birth	78.9	78.9	78.9	78.9	+0.0
Expected years of schooling	16.2	16.3	16.3	16.3	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	54,039	54,443	55,351	56,140	+789.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

security affordable housing school education road congestion health services corruption unemployment fulfilling employment air pollution recycling public transport green spaces basic amenities 11.7%

citizen engagement 9.6%

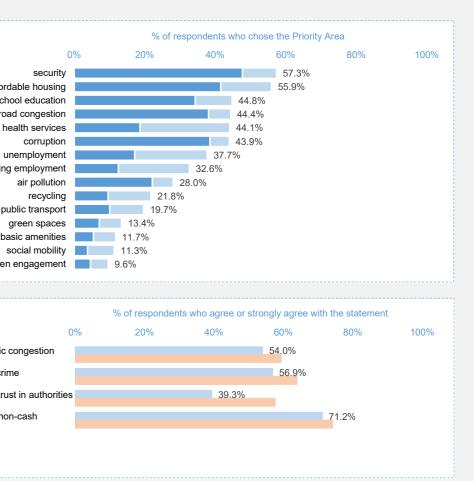
ATTITUDES

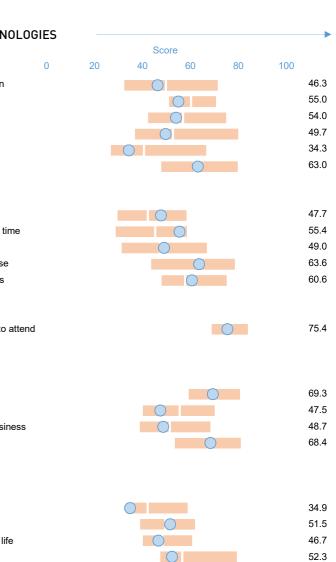
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

STRUCTURES				TECHNOLOG
STRUCTURES	Score			TECHNOLO
Health & Safety 0	20 40 60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas			46.4	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			60.3	A website or App allows residents to easily give away unwanted items
Public safety is not a problem	\bigcirc		26.9	Free public wifi has improved access to city services
Air pollution is not a problem			35.8	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			58.4	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			34.0	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			25.9	Car-sharing Apps have reduced congestion
Public transport is satisfactory			51.5	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory			55.9	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory		\bigcirc	78.7	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			64.6	Online access to job listings has made it easier to find work
Most children have access to a good school			43.2	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			56.3	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs			57.7	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			57.3	
Governance				Governance
Information on local government decisions are easily accessible			60.0	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			27.8	Online voting has increased participation
Residents contribute to decision making of local government	\bigcirc		44.4	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects			52.3	Processing Identification Documents online has reduced waiting times

0%

0%





41

Chongqing



BACKGROUND INFORMATION



13,332,000

(UN World Cities Report)

SMART CITY RATING CCC BB in 2019

FACTOR RATINGS CCC STRUCTURES

CCC **TECHNOLOGIES**

GROUP

All ratings range from AAA to D



Country	2015	2016	2017	2018	1 yr change
HDI	0.742	0.749	0.753	0.758	+0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0

PRIORITY AREAS

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

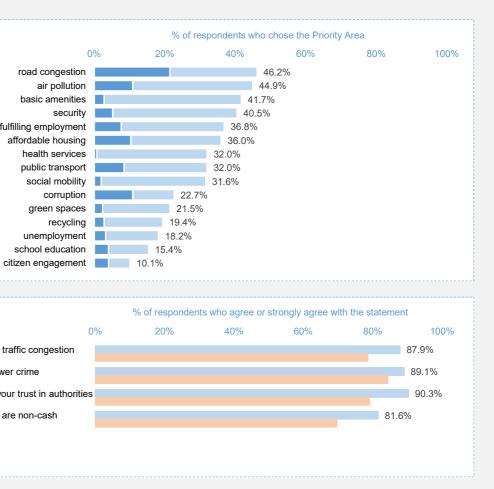
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

road congestion air pollution basic amenities security fulfilling employment affordable housing health services public transport social mobility corruption green spaces recycling school education 15.4%

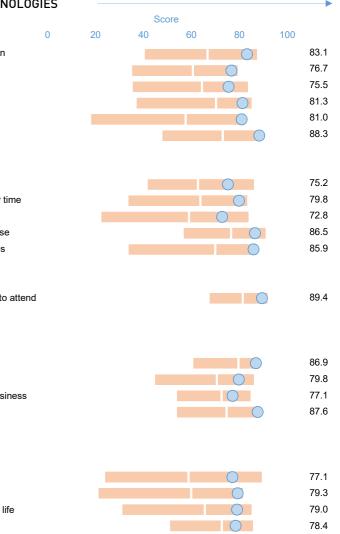
ATTITUDES

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

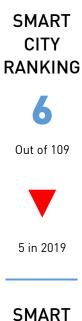
STRUCTURES						TECHNOLOG
		Sc	ore			
Health & Safety 0	20	40	60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas				\bigcirc	83.1	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory				\bigcirc	74.3	A website or App allows residents to easily give away unwanted items
Public safety is not a problem				\bigcirc	76.4	Free public wifi has improved access to city services
Air pollution is not a problem				\bigcirc	71.7	CCTV cameras has made residents feel safer
Medical services provision is satisfactory					82.5	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem				\bigcirc	78.1	Arranging medical appointments online has improved access
Mobility						Mobility
Traffic congestion is not a problem			\bigcirc		64.6	Car-sharing Apps have reduced congestion
Public transport is satisfactory				\bigcirc	75.6	Apps that direct you to an available parking space have reduced journey time
						Bicycle hiring has reduced congestion
						Online scheduling and ticket sales has made public transport easier to use
						The city provides information on traffic congestion through mobile phones
Activities						Activities
Green spaces are satisfactory				\bigcirc	82.9	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory				\bigcirc	80.6	
Opportunities (Work & School)						Opportunities (Work & School)
Employment finding services are readily available					81.0	Online access to job listings has made it easier to find work
Most children have access to a good school				\bigcirc	79.5	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions				\bigcirc	70.6	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs				\bigcirc	76.2	The current internet speed and reliability meet connectivity needs
Minorities feel welcome				\bigcirc	82.5	
Governance						Governance
Information on local government decisions are easily accessible				\bigcirc	80.0	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			(\bigcirc	69.6	Online voting has increased participation
			_		70.0	
Residents contribute to decision making of local government				\bigcirc	72.6	An online platform where residents can propose ideas has improved city life



OGIES



Copenhagen



CITY

RATING

Λ Δ

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.926	0.928	0.929	0.930	+0.001
Life expectancy at Birth	80.5	80.6	80.7	80.8	+0.1
Expected years of schooling	19.2	19.1	19.1	19.1	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	47,213	47,729	48,338	48,836	+498.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

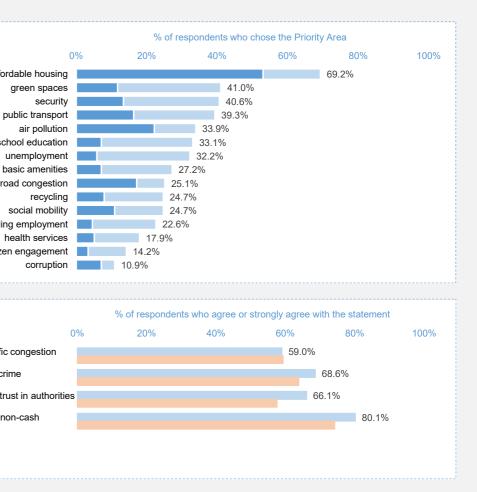
0% affordable housing green spaces security public transport air pollution school education unemployment basic amenities road congestion recycling social mobility fulfilling employment citizen engagement 14.2%

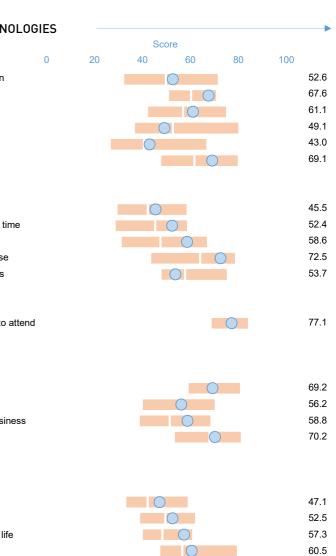
0%

ATTITUDES

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

AA				
AA in 2019	STRUCTURES		GEND: MIN	TECHNOL
	STROOTORES	Score		
	Health & Safety 0	20 40 60 80	100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		71.5	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory	Ŏ	71.5	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		64.5	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		46.4	CCTV cameras has made residents feel safer
NATINO 5	Medical services provision is satisfactory		75.9	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		33.0	Arranging medical appointments online has improved access
AA	Mobility			Mobility
	Traffic congestion is not a problem		40.0	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		61.6	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
Δ				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		73.9	Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory		80.8	
	Opportunities (Work & School)			Opportunities (Work & School)
GROUP	Employment finding services are readily available		72.7	Online access to job listings has made it easier to find work
GROOF	Most children have access to a good school		76.2	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		75.9	Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs		71.7	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		61.2	
	Governance			Governance
	Information on local government decisions are easily accessible		66.2	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		61.4	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		60.6	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		67.4	Processing Identification Documents online has reduced waiting times
·				





43

Denver



SMART

CITY

RATING

BBB

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.919	0.919	0.920	+0.001
Life expectancy at Birth	78.9	78.9	78.9	78.9	+0.0
Expected years of schooling	16.2	16.3	16.3	16.3	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	54,039	54,443	55,351	56,140	+789.0

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion air pollution school education health services public transport security unemployment fulfilling employment recycling corruption green spaces 11.1% basic amenities 9.9%

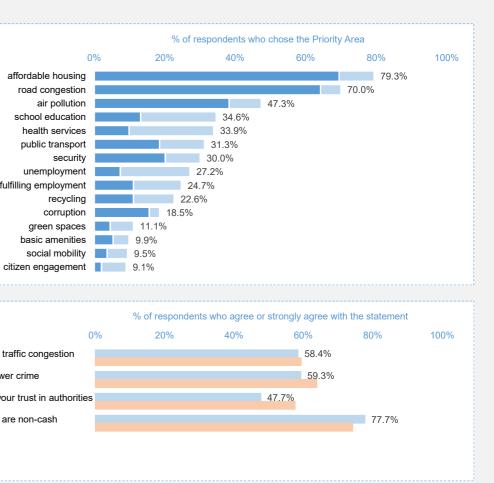
ATTITUDES

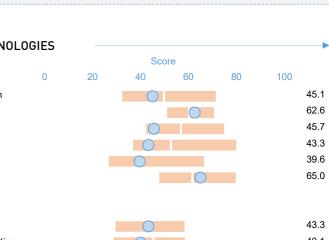
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

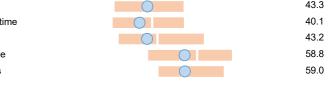
RRR			LEGEND: MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES			• • • • • • • • • • • • • • • • • • •	TECHNOLO
		Score			
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		54.3	Online reporting of city maintenance p	roblems provides a speedy solution
	Recycling services are satisfactory		64.7	A website or App allows residents to e	asily give away unwanted items
FACTOR	Public safety is not a problem		47.6	Free public wifi has improved access t	o city services
RATINGS	Air pollution is not a problem		31.3	CCTV cameras has made residents fe	el safer
10,111100	Medical services provision is satisfactory		67.6	A website or App allows residents to e	ffectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		19.4	Arranging medical appointments online	e has improved access
Λ					
A	Mobility			Mobility	
	Traffic congestion is not a problem	\bigcirc	18.4	Car-sharing Apps have reduced conge	
STRUCTURES	Public transport is satisfactory		57.8		arking space have reduced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has	
BBB				The city provides information on traffic	congestion through mobile phones
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		67.6		and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		80.9		
	Opportunities (Work & School)			Opportunities (Work & Schoo	
GROUP	Employment finding services are readily available	0	72.8	Online access to job listings has made	it easier to find work
	Most children have access to a good school		63.9	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		64.6		as made it easier to start a new business
1	Businesses are creating new jobs		67.1	The current internet speed and reliabil	ity meet connectivity needs
•	Minorities feel welcome		65.6		
	Governance			Governance	
	Information on local government decisions are easily accessible		66.0	Online public access to city finances h	as reduced corruption
	Corruption of city officials is not an issue of concern		39.3	Online voting has increased participati	on
All ratings range	Residents contribute to decision making of local government		58.2	An online platform where residents ca	n propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		64.1	Processing Identification Documents of	nline has reduced waiting times

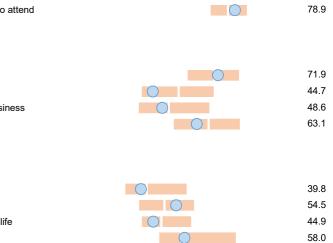
0%

0%









Dubai



SMART

CITY

RATING

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI Life expectancy at Birth	0.860 77.3	0.863 77.5	0.864 77.6	0.866 77.8	+0.002 +0.2
Expected years of schooling	13.7	13.6	13.6	13.6	+0.0
Mean years of schooling	10.6	10.8	10.9	11.0	+0.1
GNI per capita (PPP \$)	66,093	67,410	67,136	66,912	-224.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

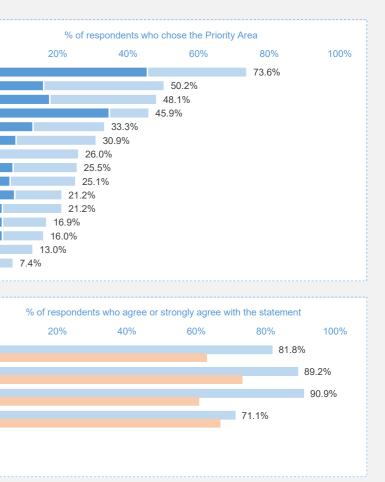
0% affordable housing fulfilling employment unemployment road congestion air pollution health services basic amenities green spaces recycling citizen engagement security school education public transport 16.0% social mobility 13.0% corruption 7.4%

0%

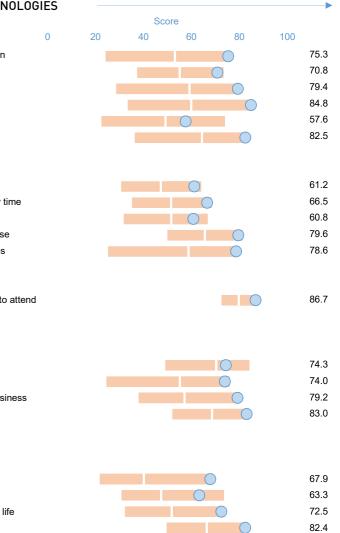
ATTITUDES

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

BB								
					LEGEN	D: MIN	CITY MEAN GROUP MAX	
BB in 2019	STRUCTURES		Sc	ore			TEC	CHNOLO
	Health & Safety 0	20	40	60	80	100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas				\bigcirc	84	84.6 Online reporting of city maintenance problems provides a speedy solu	ution
	Recycling services are satisfactory				\bigcirc	81	81.9 A website or App allows residents to easily give away unwanted items	s
FACTOR	Public safety is not a problem				\bigcirc	79	79.4 Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem			\bigcirc		61	61.5 CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory				\bigcirc	81	81.6 A website or App allows residents to effectively monitor air pollution	
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		\bigcirc			43	43.2 Arranging medical appointments online has improved access	
BB	Mobility						Mobility	
	Traffic congestion is not a problem		\bigcirc			45	45.5 Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory				\bigcirc	83	83.3 Apps that direct you to an available parking space have reduced journ	ney time
							Bicycle hiring has reduced congestion	
							Online scheduling and ticket sales has made public transport easier to	o use
BB							The city provides information on traffic congestion through mobile pho	ones
	Activities						Activities	
TECHNOLOGIES	Green spaces are satisfactory				\bigcirc	81	81.2 Online purchasing of tickets to shows and museums has made it easi	ier to attend
	Cultural activities (shows, bars, and museums) are satisfactory					84	84.4	
	Opportunities (Work & School)						Opportunities (Work & School)	
GROUP	Employment finding services are readily available			\bigcirc		68	68.5 Online access to job listings has made it easier to find work	
URUUP	Most children have access to a good school				\bigcirc	77	77.3 IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions					70	70.0 Online services provided by the city has made it easier to start a new	business
2	Businesses are creating new jobs					66	66.6 The current internet speed and reliability meet connectivity needs	
•	Minorities feel welcome				\bigcirc	77	77.9	
	Governance						Governance	
	Information on local government decisions are easily accessible				\bigcirc	85	85.6 Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern				\bigcirc	75	75.0 Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government			\bigcirc		58	58.5 An online platform where residents can propose ideas has improved of	city life
from AAA to D	Residents provide feedback on local government projects			\bigcirc		68	68.2 Processing Identification Documents online has reduced waiting times	S



OGIES



Dublin



SMART

CITY

RATING

BACKGROUND INFORMATION

City Population

1,169,000

(UN World Cities Report)

2015	2016	2017	2018	1 vr change
0.926	0.936	0.939	0.942	+0.003
81.3	81.6	81.9	82.1	+0.2
18.7	18.8	18.8	18.8	+0.0
12.3	12.5	12.5	12.5	+0.0
45,809	50,911	52,799	55,660	+2,861.0
	81.3 18.7 12.3	0.926 0.936 81.3 81.6 18.7 18.8 12.3 12.5	0.9260.9360.93981.381.681.918.718.818.812.312.512.5	0.9260.9360.9390.94281.381.681.982.118.718.818.818.812.312.512.512.5

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing health services security road congestion public transport unemployment fulfilling employment air pollution recycling basic amenities corruption school education 14.3%

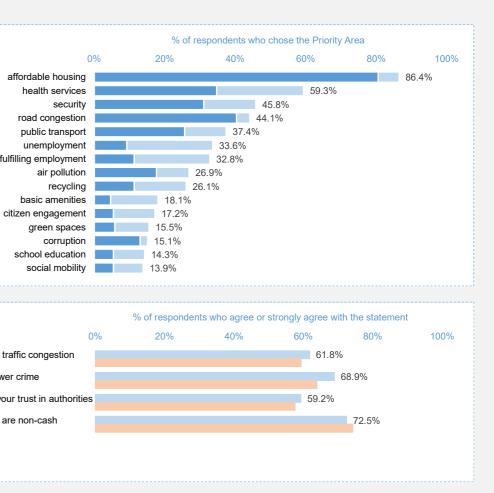
ATTITUDES

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

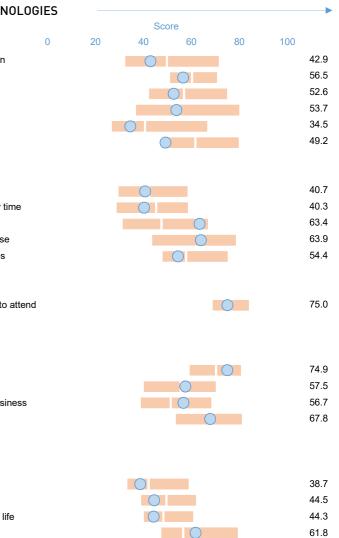
BBB	· · · · · · · · · · · · · · · · · · ·				i		
				LEGEN	ND: MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES		Score		•	TI	ECHNOLO
	Health & Safety 0	20	40 60	80	100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		\bigcirc		61.7	Online reporting of city maintenance problems provides a speedy s	olution
	Recycling services are satisfactory				64.1	A website or App allows residents to easily give away unwanted ite	ms
FACTOR	Public safety is not a problem		\bigcirc		44.1	Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem				49.3	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory		\bigcirc		45.8	A website or App allows residents to effectively monitor air pollution	1
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc			14.1	Arranging medical appointments online has improved access	
BBB	Mobility					Mobility	
	Traffic congestion is not a problem				23.0	Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory				51.9	Apps that direct you to an available parking space have reduced jo	urnev time
						Bicycle hiring has reduced congestion	,
						Online scheduling and ticket sales has made public transport easie	r to use
BBB						The city provides information on traffic congestion through mobile p	hones
	Activities					Activities	
TECHNOLOGIES	Green spaces are satisfactory		\bigcirc		68.5	Online purchasing of tickets to shows and museums has made it ea	asier to atten
	Cultural activities (shows, bars, and museums) are satisfactory			\bigcirc	78.2		
	Opportunities (Work & School)					Opportunities (Work & School)	
	Employment finding services are readily available)	69.5	Online access to job listings has made it easier to find work	
GROUP	Most children have access to a good school				67.6	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions				65.0	Online services provided by the city has made it easier to start a ne	w business
1	Businesses are creating new jobs				68.8	The current internet speed and reliability meet connectivity needs	
•	Minorities feel welcome				64.7		
	Governance					Governance	
	Information on local government decisions are easily accessible				60.7	Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern		\bigcirc		47.4	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government				49.6	An online platform where residents can propose ideas has improve	d city life
from AAA to D	Residents provide feedback on local government projects				57.8	Processing Identification Documents online has reduced waiting tim	ies

0%

0%







Dusseldorf

SMART CITY RANKING 3 Out of 109 10 in 2019

BACKGROUND INFORMATION

City Population 617,000

SMART CITY RATING

Д

A in 2019

FACTOR RATINGS

А STRUCTURES

BBB

TECHNOLOGIE

GROUP

All ratings rang from AAA to E



(Eurostat)

Poland Paris

Country HDI	2015 0.933	2016 0.936	2017 0.938	2018 0.939	1 yr change +0.001
Life expectancy at Birth	80.8	80.9	81.0	81.2	+0.2
Expected years of schooling	17.0	17.1	17.1	17.1	+0.0
Mean years of schooling	14.1	14.1	14.1	14.1	+0.0
GNI per capita (PPP \$)	45,012	45,577	46,438	46,946	+508.0

PRIORITY	AREAS
----------	-------

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion security air pollution unemployment public transport recycling green spaces social mobility fulfilling employment health services citizen engagement school education 15.1%

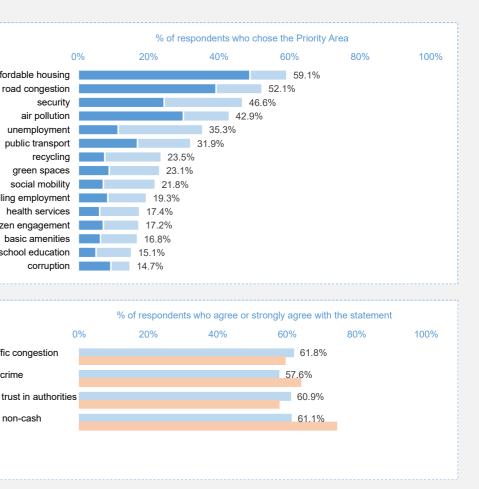
0%

0%

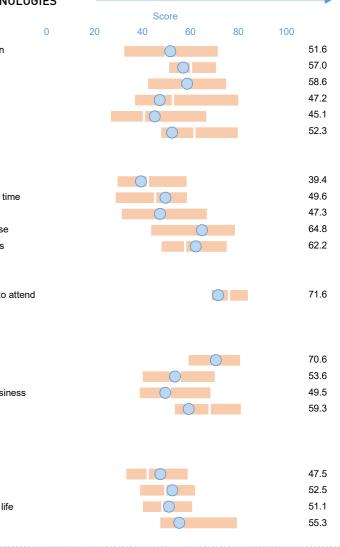
ATTITUDES

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

	STRUCTURES		Score			TECHNOL
	Health & Safety 0	20		80 10	00	Health & Safety
I	Basic sanitation meets the needs of the poorest areas				71.9	Online reporting of city maintenance problems provides a speedy solution
I	Recycling services are satisfactory		Õ		72.7	A website or App allows residents to easily give away unwanted items
I	Public safety is not a problem				59.2	Free public wifi has improved access to city services
,	Air pollution is not a problem				43.6	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory				75.6	A website or App allows residents to effectively monitor air pollution
I	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	(0		30.1	Arranging medical appointments online has improved access
	Mobility					Mobility
	Traffic congestion is not a problem				38.9	Car-sharing Apps have reduced congestion
I	Public transport is satisfactory				62.7	Apps that direct you to an available parking space have reduced journey time
						Bicycle hiring has reduced congestion
						Online scheduling and ticket sales has made public transport easier to use
						The city provides information on traffic congestion through mobile phones
	Activities					Activities
(Green spaces are satisfactory				70.7	Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory)	77.2	
	Opportunities (Work & School)					Opportunities (Work & School)
I	Employment finding services are readily available				66.0	Online access to job listings has made it easier to find work
I	Most children have access to a good school		\bigcirc		68.8	IT skills are taught well in schools
I	Lifelong learning opportunities are provided by local institutions				66.8	Online services provided by the city has made it easier to start a new business
I	Businesses are creating new jobs				65.0	The current internet speed and reliability meet connectivity needs
I	Minorities feel welcome				56.2	
	Governance					Governance
ļ	Information on local government decisions are easily accessible				59.1	Online public access to city finances has reduced corruption
(Corruption of city officials is not an issue of concern				56.5	Online voting has increased participation
I	Residents contribute to decision making of local government				56.9	An online platform where residents can propose ideas has improved city life
	Residents provide feedback on local government projects				60.8	Processing Identification Documents online has reduced waiting times



OLOGIES



Geneva



BACKGROUND INFORMATION



(Eurostat)

SMART CITY RATING

AA in 2019

FACTOR RATINGS

AA STRUCTURES

TECHNOLOGI

GROUP

All ratings ran from AAA to



Country	2015	2016	2017	2018	1 yr change
HDI	0.943	0.943	0.943	0.946	+0.003
Life expectancy at Birth	83.1	83.3	83.5	83.6	+0.1
Expected years of schooling	16.2	16.2	16.2	16.2	+0.0
Mean years of schooling	13.4	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	58,723	58,138	57,301	59,375	+2,074.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion unemployment air pollution security fulfilling employment public transport corruption health services recycling school education 12.9% citizen engagement 12.0% basic amenities 10.0%

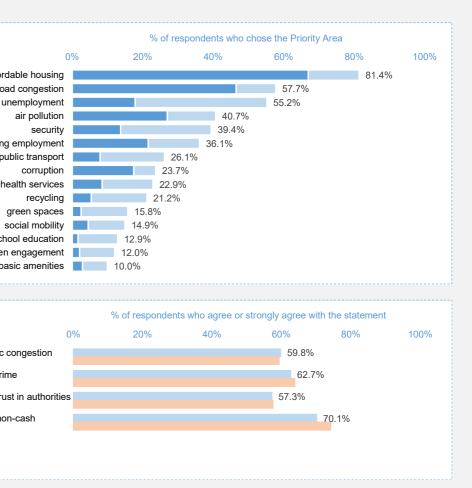
0%

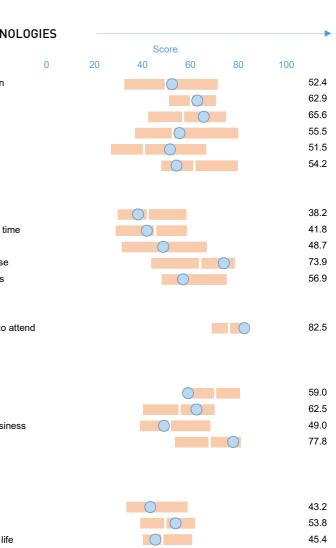
0%

ATTITUDES

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

		LEGEND:	MIN	CITY MEAN GROUP MAX
9	STRUCTURES	Score		TECHNOLO
_	Health & Safety 0		00	Health & Safety
	Basic sanitation meets the needs of the poorest areas		73.1	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		81.9	A website or App allows residents to easily give away unwanted items
R	Public safety is not a problem		71.2	Free public wifi has improved access to city services
S S	Air pollution is not a problem		51.7	CCTV cameras has made residents feel safer
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Medical services provision is satisfactory		78.3	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		24.3	Arranging medical appointments online has improved access
	Mobility			Mobility
	Traffic congestion is not a problem		32.2	Car-sharing Apps have reduced congestion
RES	Public transport is satisfactory		71.4	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
	Activities			Activities
GIES	Green spaces are satisfactory		83.1	Online purchasing of tickets to shows and museums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory		83.3	
	Opportunities (Work & School)			Opportunities (Work & School)
D	Employment finding services are readily available		68.0	Online access to job listings has made it easier to find work
	Most children have access to a good school		85.0	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		74.1	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		47.0	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		62.2	
	Governance			Governance
-	Information on local government decisions are easily accessible		73.4	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern	\bigcirc	53.0	Online voting has increased participation
ange	Residents contribute to decision making of local government		67.8	An online platform where residents can propose ideas has improved city life
o D	Residents provide feedback on local government projects		68.1	Processing Identification Documents online has reduced waiting times





Gothenburg



CITY

RATING

BACKGROUND INFORMATION

City

Population 557,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.932	0.934	0.935	0.937	+0.002
Life expectancy at Birth	82.3	82.4	82.5	82.7	+0.2
Expected years of schooling	18.6	18.8	18.8	18.8	+0.0
Mean years of schooling	12.4	12.4	12.4	12.4	+0.0
GNI per capita (PPP \$)	46,168	46,662	47,398	47,955	+557.0

PRIORITY AREAS

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

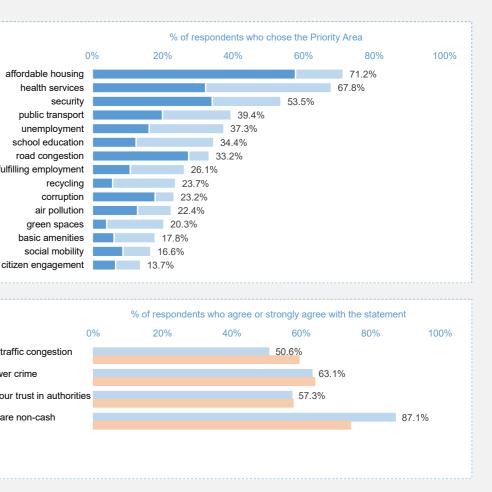
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% affordable housing health services security public transport unemployment school education road congestion fulfilling employment recycling corruption air pollution green spaces

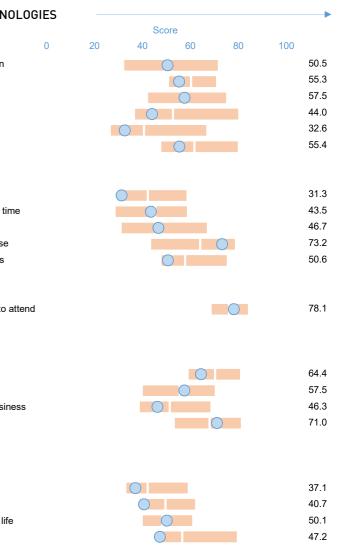
0%

ATTITUDES

BBB					
			LEGEND: MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES	Score		•	TECHNOLO
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		64.2	Online reporting of city maintenance	problems provides a speedy solution
	Recycling services are satisfactory		70.1	A website or App allows residents to	easily give away unwanted items
FACTOR	Public safety is not a problem		48.2	Free public wifi has improved acces	s to city services
RATINGS	Air pollution is not a problem		52.9	CCTV cameras has made residents	feel safer
10/11/100	Medical services provision is satisfactory		52.6	A website or App allows residents to	effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		26.0	Arranging medical appointments on	ine has improved access
Δ	Mobility			Mobility	
	Traffic congestion is not a problem		32.6	Car-sharing Apps have reduced cor	restion
STRUCTURES	Public transport is satisfactory		57.9	• • • •	parking space have reduced journey time
STRUCTURES			01.0	Bicycle hiring has reduced congesti	
				, , ,	as made public transport easier to use
DDD					fic congestion through mobile phones
BBB					
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		77.4		s and museums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory		78.4		
	Opportunities (Work & School)			Opportunities (Work & Scho	ol)
	Employment finding services are readily available		64.5	Online access to job listings has ma	de it easier to find work
GROUP	Most children have access to a good school		65.6	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		67.3	Online services provided by the city	has made it easier to start a new business
1	Businesses are creating new jobs		65.0	The current internet speed and relia	bility meet connectivity needs
	Minorities feel welcome		59.0		
	Governance			Governance	
	Information on local government decisions are easily accessible		67.4	Online public access to city finances	has reduced corruption
	Corruption of city officials is not an issue of concern		49.4	Online voting has increased particip	
All ratings range	Residents contribute to decision making of local government		47.9	• • •	can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects	0	55.5	Processing Identification Document	
				2	







Guangzhou



SMART

CITY

RATING

CCC

B in 2019

FACTOR

RATINGS

CC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

BACKGROUND INFORMATION



Residents contribute to decision making of local government

Residents provide feedback on local government projects

12,458,000 (UN World Cities Report)



Country HDI	2015 0.742	2016 0.749	2017 0.753	2018 0.758	1 yr change +0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% road congestion affordable housing air pollution basic amenities public transport fulfilling employment corruption health services security social mobility green spaces recycling school education citizen engagement 16.0%

0%

ATTITUDES

65.3

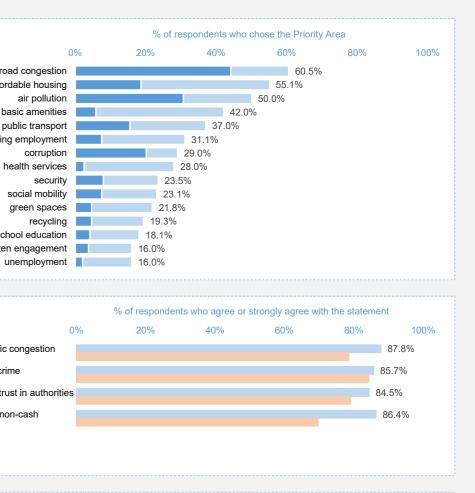
71.0

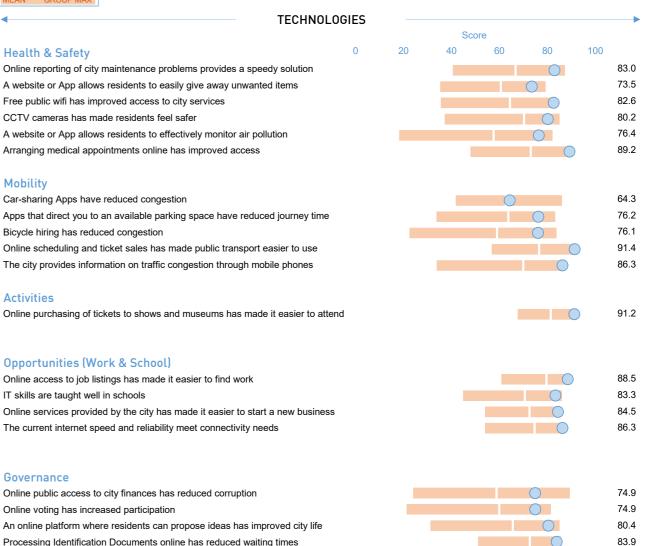
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

Processing Identification Documents online has reduced waiting times

			LEGEN	ND: MIN	MEAN GROUP MAX	
STRUCTURES					•	TECHNOLOG
Health & Safety 0	20	Score 40	60 80	100	Health & Safety	
Basic sanitation meets the needs of the poorest areas				82.7		y maintenance problems provides a speedy solution
Recycling services are satisfactory				74.2		ws residents to easily give away unwanted items
Public safety is not a problem				64.9	Free public wifi has in	nproved access to city services
Air pollution is not a problem			Ŭ	47.5	CCTV cameras has n	nade residents feel safer
Medical services provision is satisfactory				82.1	A website or App allo	ws residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem				57.5	Arranging medical ap	pointments online has improved access
Mobility					Mobility	
Traffic congestion is not a problem		\bigcirc		36.9		re reduced congestion
Public transport is satisfactory		- The second sec	\bigcirc	63.0	Apps that direct you t	o an available parking space have reduced journey time
					Bicycle hiring has red	uced congestion
					Online scheduling and	d ticket sales has made public transport easier to use
					The city provides info	rmation on traffic congestion through mobile phones
Activities					Activities	
Green spaces are satisfactory				77.7	Online purchasing of	tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory				83.5		
Opportunities (Work & School)					Opportunities (W	/ork & School)
Employment finding services are readily available				79.9	Online access to job I	istings has made it easier to find work
Most children have access to a good school				77.7	IT skills are taught we	ell in schools
Lifelong learning opportunities are provided by local institutions				65.8	Online services provi	ded by the city has made it easier to start a new business
Businesses are creating new jobs				79.6	The current internet s	peed and reliability meet connectivity needs
Minorities feel welcome			\bigcirc	74.8		
Governance					Governance	
Information on local government decisions are easily accessible			\bigcirc	73.5	Online public access	to city finances has reduced corruption
Corruption of city officials is not an issue of concern		\bigcirc		49.0	Online voting has inc	eased participation

All ratings range	
from AAA to D	





Hamburg

SMART CITY RANKING 22 Out of 109 N/A not in 2019

SMART

CITY

RATING

ρ

BACKGROUND INFORMATION

City Population

1,831,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.933	0.936	0.938	0.939	+0.001
Life expectancy at Birth	80.8	80.9	81.0	81.2	+0.2
Expected years of schooling	17.0	17.1	17.1	17.1	+0.0
Mean years of schooling	14.1	14.1	14.1	14.1	+0.0
GNI per capita (PPP \$)	45,012	45,577	46,438	46,946	+508.0

PRIORITY A	REAS
------------	------

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

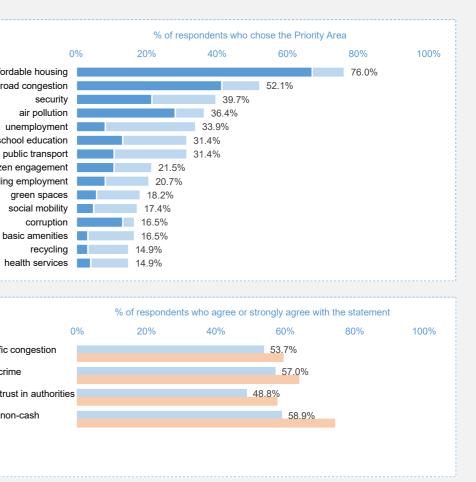
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% affordable housing road congestion security air pollution unemployment school education public transport citizen engagement fulfilling employment corruption

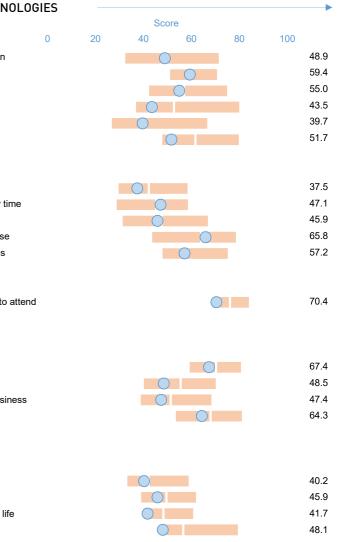
0%

ATTITUDES

A			LEGEND: MIN	CITY MEAN GROUP MAX
not in 2019	STRUCTURES		► ►	TECHNOL
		Score		
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		69.7	Online reporting of city maintenance problems provides a speedy solution
FLOTOR	Recycling services are satisfactory		73.4	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		56.9	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		45.5	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		78.9	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		23.8	Arranging medical appointments online has improved access
•				
A	Mobility			Mobility
	Traffic congestion is not a problem	\bigcirc	31.0	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		67.5	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
DD				The city provides information on traffic congestion through mobile phones
BB				
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		74.8	Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory		81.1	
	Opportunities (Work & School)			Opportunities (Work & School)
GROUP	Employment finding services are readily available		67.1	Online access to job listings has made it easier to find work
UNUUF	Most children have access to a good school		67.9	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		63.9	Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs		59.2	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		59.4	
	Governance			Governance
	Information on local government decisions are easily accessible		60.3	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		57.4	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		59.8	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		60.5	Processing Identification Documents online has reduced waiting times
·				



OLOGIES



Hangzhou



SMART

CITY

RATING

BACKGROUND INFORMATION



(UN World Cities Report)



Country HDI	2015 0.742	2016 0.749	2017 0.753	2018 0.758	1 yr change +0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

road congestion air pollution affordable housing fulfilling employment basic amenities security social mobility health services public transport corruption green spaces recycling citizen engagement 16.4%

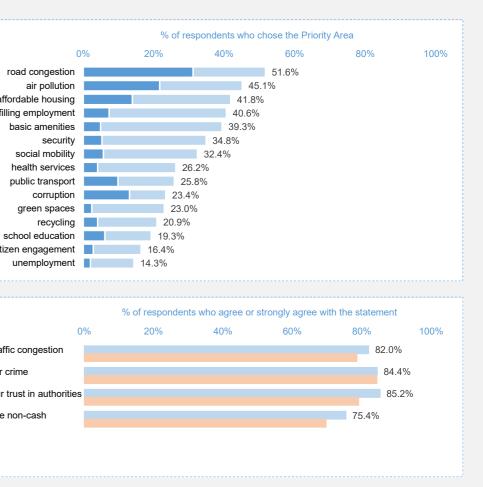
ATTITUDES

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

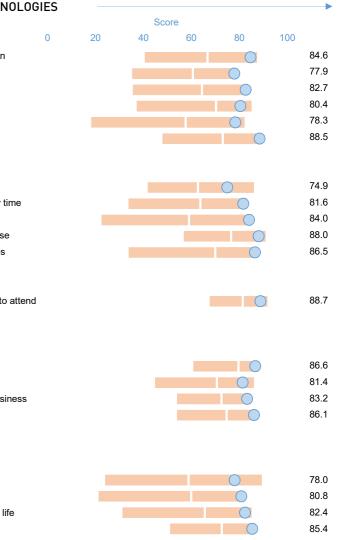
CCC										
					LEGEND	: MIN	CITY MI	EAN GROUP MAX		
BB in 2019	STRUCTURES		Sco	ro			•		TECH	NOLC
	Health & Safety	20	40	60	80	100	н	lealth & Safety		
	Basic sanitation meets the needs of the poorest areas					84.2		· · · · · · · · · · · · · · · · · · ·	e problems provides a speedy solutio	n
	Recycling services are satisfactory					75.5	A	website or App allows residents	to easily give away unwanted items	
FACTOR	Public safety is not a problem					76.8	Fr	ree public wifi has improved acce	ess to city services	
RATINGS	Air pollution is not a problem			\bigcirc		61.1	C	CTV cameras has made residen	s feel safer	
NATINO 5	Medical services provision is satisfactory				\bigcirc	80.3	A	website or App allows residents	to effectively monitor air pollution	
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			\bigcirc		68.6	A	rranging medical appointments o	nline has improved access	
CCC										
	Mobility						Μ	lobility		
	Traffic congestion is not a problem			\bigcirc		55.5	C	ar-sharing Apps have reduced co	ongestion	
STRUCTURES	Public transport is satisfactory					72.5	A	pps that direct you to an available	e parking space have reduced journey	time
							Bi	icycle hiring has reduced conges	tion	
								-	has made public transport easier to u	
CCC							TI	he city provides information on tr	affic congestion through mobile phone	S
	A 14 14									
	Activities					00.0		ctivities		
TECHNOLOGIES	Green spaces are satisfactory					80.3	0	nline purchasing of tickets to sho	ws and museums has made it easier	.o atter
	Cultural activities (shows, bars, and museums) are satisfactory					83.4				
	Opportunities (Work & School)						0	pportunities (Work & Sch	ool)	
000110	Employment finding services are readily available				\bigcirc	81.1		nline access to job listings has m		
GROUP	Most children have access to a good school					75.3	IT	skills are taught well in schools		
	Lifelong learning opportunities are provided by local institutions					73.5	0	nline services provided by the cit	y has made it easier to start a new bu	siness
	Businesses are creating new jobs			(77.9	TI	he current internet speed and rel	ability meet connectivity needs	
4	Minorities feel welcome					76.3				
	Governance						-	overnance		
	Information on local government decisions are easily accessible					75.2		nline public access to city finance		
	Corruption of city officials is not an issue of concern					61.5		nline voting has increased partic	•	
All ratings range	Residents contribute to decision making of local government			\bigcirc		68.4			s can propose ideas has improved city	life
from AAA to D	Residents provide feedback on local government projects					76.2	Pi	rocessing Identification Documer	ts online has reduced waiting times	

0%

0%







Hanoi



SMART

CITY

RATING

CC

CCC in 2019

FACTOR

RATINGS

CC

STRUCTURES

CC

TECHNOLOGIES

GROUP

All ratings range

from AAA to D

BACKGROUND INFORMATION



Population 3,790,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.680	0.685	0.690	0.693	+0.003
Life expectancy at Birth	75.1	75.2	75.2	75.3	+0.1
Expected years of schooling	12.7	12.7	12.7	12.7	+0.0
Mean years of schooling	8.0	8.1	8.2	8.2	+0.0
GNI per capita (PPP \$)	5,314	5,638	5,916	6,220	+304.0

PRIORITY AREAS

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

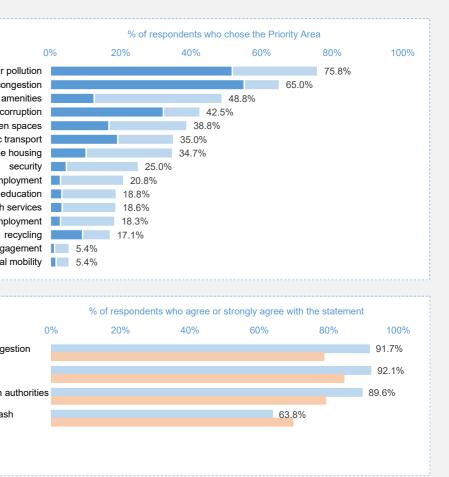
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% air pollution road congestion basic amenities corruption green spaces public transport affordable housing security fulfilling employment school education health services unemployment citizen engagement 5.4% social mobility 5.4%

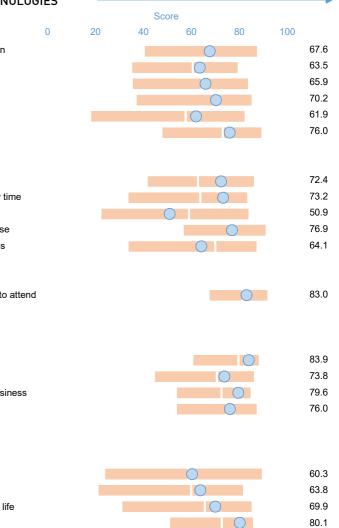
0%

ATTITUDES

STRUCTURES				TECHN
	Score			
Health & Safety 0	20 40 60	80 10	00	Health & Safety
Basic sanitation meets the needs of the poorest areas		\bigcirc	73.9	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			61.4	A website or App allows residents to easily give away unwanted items
Public safety is not a problem		\bigcirc	76.7	Free public wifi has improved access to city services
Air pollution is not a problem			36.4	CCTV cameras has made residents feel safer
Medical services provision is satisfactory		\bigcirc	77.1	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			66.4	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			23.1	Car-sharing Apps have reduced congestion
Public transport is satisfactory			49.4	Apps that direct you to an available parking space have reduced journey t
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to us
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory			63.3	Online purchasing of tickets to shows and museums has made it easier to
Cultural activities (shows, bars, and museums) are satisfactory		\bigcirc	73.4	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available		\bigcirc	76.1	Online access to job listings has made it easier to find work
Most children have access to a good school		\bigcirc	83.1	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions)	69.0	Online services provided by the city has made it easier to start a new bus
Businesses are creating new jobs			82.0	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			70.9	
Governance				Governance
Information on local government decisions are easily accessible		\bigcirc	72.6	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern	\bigcirc		39.1	Online voting has increased participation
Residents contribute to decision making of local government			64.8	An online platform where residents can propose ideas has improved city
Residents provide feedback on local government projects			71.8	Processing Identification Documents online has reduced waiting times



OGIES



Hanover



BACKGROUND INFORMATION

City Population 535,000

(Eurostat)

26 in 2019

SMART CITY RATING BBB

BBB in 201

FACTO RATING

А STRUCTUR

BB TECHNOLOG

GROUP

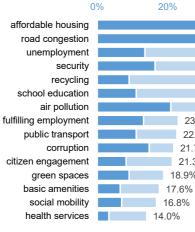
All ratings ra from AAA to Belarus

Country	2015	2016	2017	2018	1 yr change
HDI	0.933	0.936	0.938	0.939	+0.001
Life expectancy at Birth	80.8	80.9	81.0	81.2	+0.2
Expected years of schooling	17.0	17.1	17.1	17.1	+0.0
Mean years of schooling	14.1	14.1	14.1	14.1	+0.0
GNI per capita (PPP \$)	45,012	45,577	46,438	46,946	+508.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

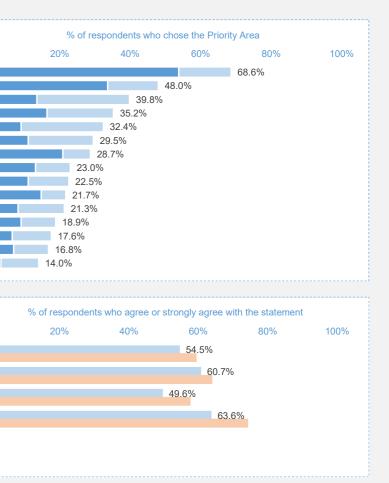


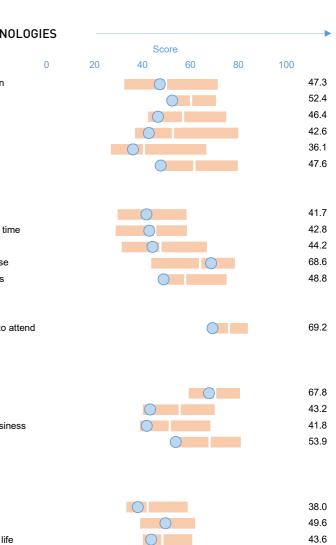
0%

ATTITUDES

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

	· · · · · · · · · · · · · · · · · · ·				
В		[LEGEND: MIN (CITY MEAN GROUP MAX	
2019	STRUCTURES		•	•	TECHNOL
		Score	100		
_	Health & Safety 0	20 40 60 8	30 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas	\bigcirc	67.3	Online reporting of city maintenance problems provides a s	
OR	Recycling services are satisfactory		74.0	A website or App allows residents to easily give away unwa	inted items
	Public safety is not a problem		61.0	Free public wifi has improved access to city services	
IGS	Air pollution is not a problem		51.1	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory			A website or App allows residents to effectively monitor air	-
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		33.2	Arranging medical appointments online has improved acces	iS
	Mobility			Mobility	
	Traffic congestion is not a problem		44.5	Car-sharing Apps have reduced congestion	
JRES	Public transport is satisfactory		68.2	Apps that direct you to an available parking space have red	luced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has made public transpo	rt easier to use
2				The city provides information on traffic congestion through	mobile phones
	Activities			Activities	
OGIES	Green spaces are satisfactory		69.5	Online purchasing of tickets to shows and museums has m	ade it easier to att
00123	Cultural activities (shows, bars, and museums) are satisfactory		77.1		
	Opportunities (Work & School)			Opportunities (Work & School)	
JP	Employment finding services are readily available		62.1	Online access to job listings has made it easier to find work	
7	Most children have access to a good school		68.6	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		61.2	Online services provided by the city has made it easier to s	tart a new busines
	Businesses are creating new jobs		58.9	The current internet speed and reliability meet connectivity	needs
	Minorities feel welcome		58.3		
	Governance			Governance	
	Information on local government decisions are easily accessible		58.9	Online public access to city finances has reduced corruption	n
	Corruption of city officials is not an issue of concern		53.6	Online voting has increased participation	
range	Residents contribute to decision making of local government		48.3	An online platform where residents can propose ideas has i	mproved city life
to D	Residents provide feedback on local government projects	Ŏ	53.3	Processing Identification Documents online has reduced wa	





 \bigcirc

Helsinki



CITY

RATING

Δ

BACKGROUND INFORMATION



1,180,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.919	0.922	0.924	0.925	+0.001
Life expectancy at Birth	81.2	81.4	81.6	81.7	+0.1
Expected years of schooling	19.3	19.3	19.3	19.3	+0.0
Mean years of schooling	12.4	12.4	12.4	12.4	+0.0
GNI per capita (PPP \$)	39,473	40,609	41,142	41,779	+637.0

PRIORITY AREAS	
----------------	--

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

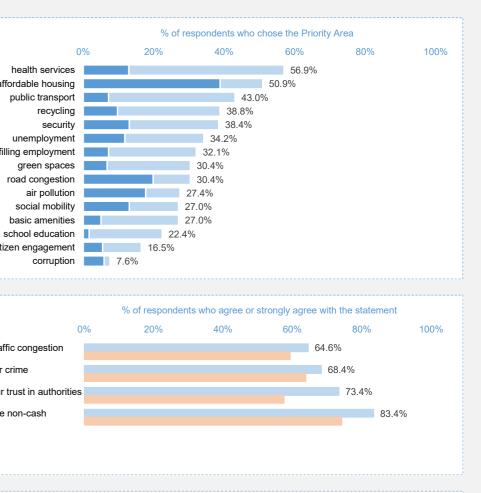
health services affordable housing public transport recycling security unemployment fulfilling employment green spaces road congestion air pollution social mobility basic amenities citizen engagement 16.5%

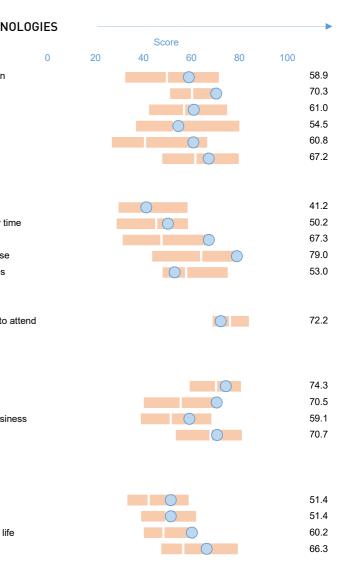
0%

0%

ATTITUDES

			LEGEND: MIN	CITY MEAN GROUP MAX
A in 2019	STRUCTURES		•	TECHNOLO
		Score		
	Health & Safety ⁰	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		72.7	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		72.6	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		71.9	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		56.5	CCTV cameras has made residents feel safer
10111100	Medical services provision is satisfactory		70.0	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		35.3	Arranging medical appointments online has improved access
AAA	Mobility			Mobility
	Traffic congestion is not a problem		52.9	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		78.1	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
AA				
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		75.7	Online purchasing of tickets to shows and museums has made it easier to atter
	Cultural activities (shows, bars, and museums) are satisfactory		78.1	
	Opportunities (Work & School)			Opportunities (Work & School)
GROUP	Employment finding services are readily available		70.3	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		83.0	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		76.2	Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs		73.6	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		56.8	
	Governance			Governance
	Information on local government decisions are easily accessible		65.6	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		64.0	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		58.0	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		65.2	Processing Identification Documents online has reduced waiting times





Ho Chi Minh City



BACKGROUND INFORMATION

City

Population 7,298,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.680	0.685	0.690	0.693	+0.003
Life expectancy at Birth	75.1	75.2	75.2	75.3	+0.1
Expected years of schooling	12.7	12.7	12.7	12.7	+0.0
Mean years of schooling	8.0	8.1	8.2	8.2	+0.0
GNI per capita (PPP \$)	5,314	5,638	5,916	6,220	+304.0



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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% air pollution road congestion security basic amenities public transport affordable housing corruption green spaces health services unemployment fulfilling employment school education social mobility 8.7% citizen engagement 6.2%

0%

ATTITUDES

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

стристиргс			TECHNOLO
STRUCTURES	Score		
Health & Safety 0	20 40 60 80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas		69.9	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory		64.7	A website or App allows residents to easily give away unwanted items
Public safety is not a problem		67.8	Free public wifi has improved access to city services
Air pollution is not a problem		35.9	CCTV cameras has made residents feel safer
Medical services provision is satisfactory		74.9	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem		57.4	Arranging medical appointments online has improved access
Mobility			Mobility
Traffic congestion is not a problem	\bigcirc	29.0	Car-sharing Apps have reduced congestion
Public transport is satisfactory		50.9	Apps that direct you to an available parking space have reduced journey time
			Bicycle hiring has reduced congestion
			Online scheduling and ticket sales has made public transport easier to use
			The city provides information on traffic congestion through mobile phones
Activities			Activities
Green spaces are satisfactory	\bigcirc	65.2	Online purchasing of tickets to shows and museums has made it easier to atter
Cultural activities (shows, bars, and museums) are satisfactory	\bigcirc	75.4	
Opportunities (Work & School)			Opportunities (Work & School)
Employment finding services are readily available		83.8	Online access to job listings has made it easier to find work
Most children have access to a good school		83.1	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions	\bigcirc	63.7	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs		83.7	The current internet speed and reliability meet connectivity needs
Minorities feel welcome		74.6	
Governance			Governance
Information on local government decisions are easily accessible		71.1	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern	\bigcirc	42.1	Online voting has increased participation
Residents contribute to decision making of local government		64.2	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects		72.2	Processing Identification Documents online has reduced waiting times

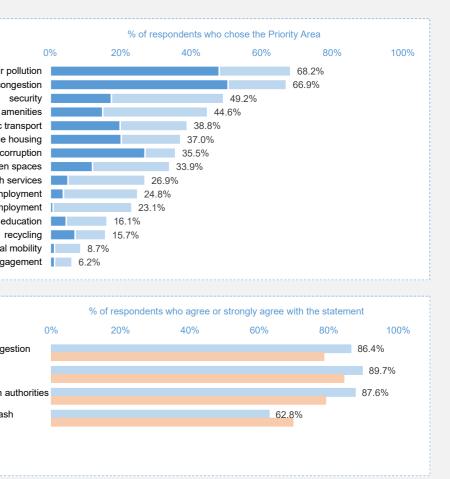
RATING CC CCC in 2019

FACTOR RATINGS CC STRUCTURES

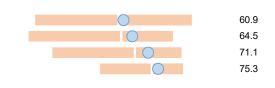
CC **TECHNOLOGIES**

GROUP

All ratings range from AAA to D



OGIES Score 100 0 20 60 80 40 74.3 64.7 \bigcirc 67.6 \bigcirc 78.7 64.3 79.1 \bigcirc 71.7 74.9 50.3 74.0 63.0 78.6 85.7 \bigcirc 78.2 78.5 76.8



Hong Kong



BACKGROUND INFORMATION

City Population

7,314,000

(UN World Cities Report)



37 in 2019

SMART CITY RATING BBB BBB in 2019

FACTOR RATINGS BB

STRUCTURES

TECHNOLOGIES

GROUP

All ratings range from AAA to D

.Wuhan Nancha ign CC BY 3.0 Map Data © 0

Country	2015	2016	2017	2018	1 yr change
HDI	0.927	0.931	0.937	0.939	+0.002
Life expectancy at Birth	84.0	84.3	84.5	84.7	+0.2
Expected years of schooling	16.3	16.3	16.5	16.5	+0.0
Mean years of schooling	11.9	12.0	12.0	12.0	+0.0
GNI per capita (PPP \$)	54,608	55,816	58,553	60,221	+1,668.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

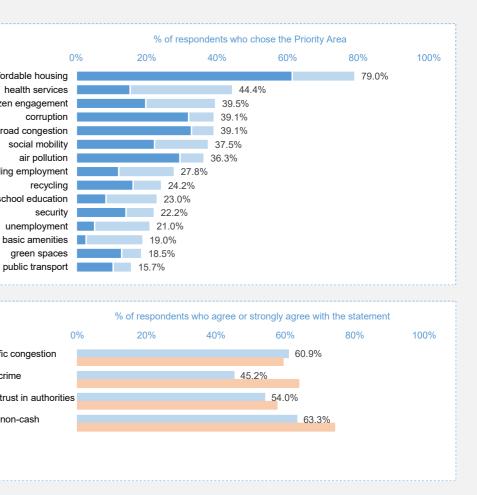
0% affordable housing health services citizen engagement corruption road congestion social mobility air pollution fulfilling employment recycling school education security unemployment basic amenities green spaces

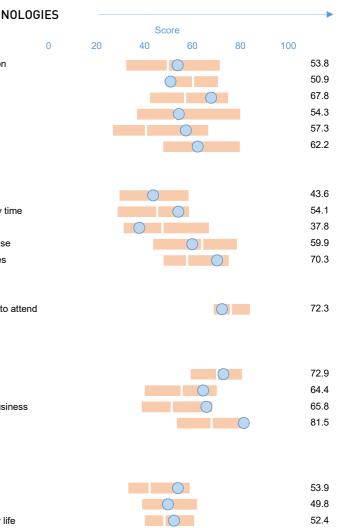
0%

ATTITUDES

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

		LEGEND:		MEAN GROUP MAX
SINUCIONES	Score			TECHNOLOG
Health & Safety 0	20 40 60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas			68.9	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory	\bigcirc		39.9	A website or App allows residents to easily give away unwanted items
Public safety is not a problem			54.6	Free public wifi has improved access to city services
Air pollution is not a problem			30.0	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			53.6	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			26.5	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			26.1	Car-sharing Apps have reduced congestion
Public transport is satisfactory			56.2	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory			42.1	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory	0		54.8	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			66.7	Online access to job listings has made it easier to find work
Most children have access to a good school			61.8	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			64.7	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs			58.2	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			50.3	
Governance				Governance
Information on local government decisions are easily accessible			55.6	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			38.2	Online voting has increased participation
Residents contribute to decision making of local government			42.1	An online platform where residents can propose ideas has improved city life





Hyderabad



BACKGROUND INFORMATION





Population 10,716,000

(UN World Cities Report)

SMART CITY RATING CC CCC in 2019

FACTOR RATINGS CC

STRUCTURES

CC **TECHNOLOGIES**

GROUP

All ratings range from AAA to D

Antho St

Design CC BY 3.0 Map Data © Open

Country	2015	2016	2017	2018	1 yr change
HDI	0.627	0.637	0.643	0.647	+0.004
Life expectancy at Birth	68.6	68.9	69.2	69.4	+0.2
Expected years of schooling	12.0	12.3	12.3	12.3	+0.0
Mean years of schooling	6.2	6.4	6.5	6.5	+0.0
GNI per capita (PPP \$)	5,674	6,075	6,446	6,829	+383.0

PRIORITY AREAS

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

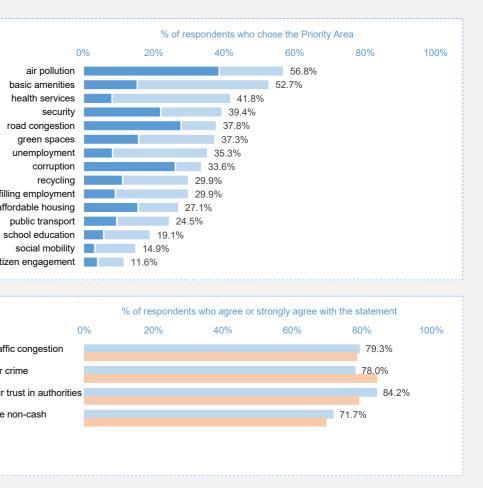
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

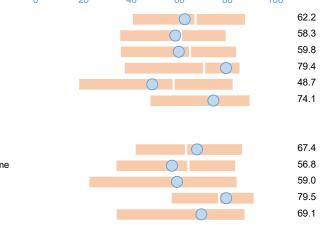
air pollution basic amenities health services security road congestion green spaces unemployment corruption recycling fulfilling employment affordable housing public transport citizen engagement 11.6%

0%

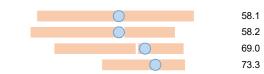
ATTITUDES

STRUCTURES			TECHNOLOGIES	
SINUCIONES	Score		TECHNOLOGIES	Score
Health & Safety 0	20 40 60 80	100	Health & Safety 0	20 40 60 80
Basic sanitation meets the needs of the poorest areas	\bigcirc	68.5	Online reporting of city maintenance problems provides a speedy solution	
Recycling services are satisfactory		63.1	A website or App allows residents to easily give away unwanted items	
Public safety is not a problem		53.7	Free public wifi has improved access to city services	
Air pollution is not a problem		38.1	CCTV cameras has made residents feel safer	
Medical services provision is satisfactory		73.2	A website or App allows residents to effectively monitor air pollution	
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	57.9	Arranging medical appointments online has improved access	0
Mobility			Mobility	
Traffic congestion is not a problem		39.5	Car-sharing Apps have reduced congestion	
Public transport is satisfactory		69.3	Apps that direct you to an available parking space have reduced journey time	
			Bicycle hiring has reduced congestion	
			Online scheduling and ticket sales has made public transport easier to use	
			The city provides information on traffic congestion through mobile phones	\bigcirc
Activities			Activities	
Green spaces are satisfactory		66.5	Online purchasing of tickets to shows and museums has made it easier to attend	
Cultural activities (shows, bars, and museums) are satisfactory		75.0		
Opportunities (Work & School)			Opportunities (Work & School)	
Employment finding services are readily available		73.7	Online access to job listings has made it easier to find work	
Most children have access to a good school		72.6	IT skills are taught well in schools	\bigcirc
Lifelong learning opportunities are provided by local institutions		64.7	Online services provided by the city has made it easier to start a new business	
Businesses are creating new jobs		75.6	The current internet speed and reliability meet connectivity needs	
Minorities feel welcome		72.2		
Governance			Governance	
Information on local government decisions are easily accessible		71.6	Online public access to city finances has reduced corruption	\bigcirc
Corruption of city officials is not an issue of concern		42.7	Online voting has increased participation	









Jakarta



BACKGROUND INFORMATION



Population 10,323,000

(UN World Cities Report)

SMART CITY RATING

CC in 2019

FACTOR RATINGS

STRUCTURES

CC **TECHNOLOGIES**

GROUP

All ratings range from AAA to D



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

Country HDI	2015 0.696	2016 0.700	2017 0.704	2018 0.707	1 yr change +0.003
Life expectancy at Birth	70.8	71.0	71.3	71.5	+0.2
Expected years of schooling	12.8	12.9	12.9	12.9	+0.0
Mean years of schooling	7.9	8.0	8.0	8.0	+0.0
GNI per capita (PPP \$)	10,029	10,419	10,811	11,256	+445.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

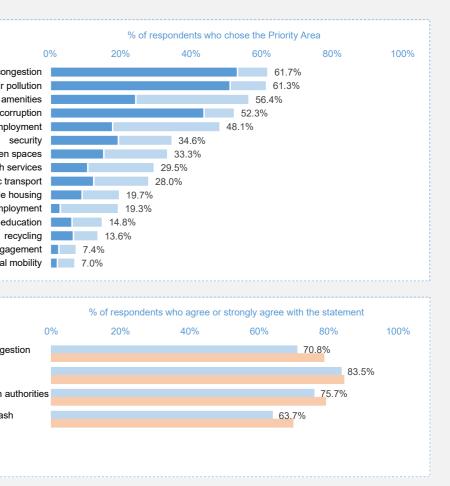
road congestion air pollution basic amenities corruption unemployment security green spaces health services public transport affordable housing fulfilling employment school education 14.8% citizen engagement 7.4% social mobility 7.0%

0%

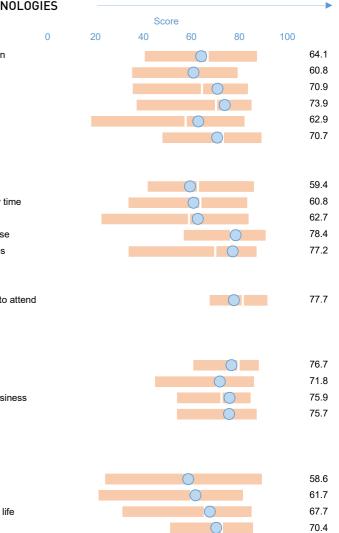
0%

ATTITUDES

STRUCTURES						TECHN	10100
		Sco					
Health & Safety 0	20	40	60	80	100	Health & Safety	
Basic sanitation meets the needs of the poorest areas			\bigcirc		55.6	Online reporting of city maintenance problems provides a speedy solution	l -
Recycling services are satisfactory			\bigcirc		55.3	A website or App allows residents to easily give away unwanted items	
Public safety is not a problem		\bigcirc			48.6	Free public wifi has improved access to city services	
Air pollution is not a problem					23.0	CCTV cameras has made residents feel safer	
Medical services provision is satisfactory			\bigcirc		63.8	A website or App allows residents to effectively monitor air pollution	
Finding housing with rent equal to 30% or less of a monthly salary is not a problem					50.5	Arranging medical appointments online has improved access	
Mobility						Mobility	
Traffic congestion is not a problem					19.3	Car-sharing Apps have reduced congestion	
Public transport is satisfactory			\bigcirc		57.5	Apps that direct you to an available parking space have reduced journey ti	time
						Bicycle hiring has reduced congestion	
						Online scheduling and ticket sales has made public transport easier to use	е
						The city provides information on traffic congestion through mobile phones	j.
Activities						Activities	
Green spaces are satisfactory			\bigcirc		59.3	Online purchasing of tickets to shows and museums has made it easier to	o attend
Cultural activities (shows, bars, and museums) are satisfactory			\bigcirc		69.9		
Opportunities (Work & School)						Opportunities (Work & School)	
Employment finding services are readily available					62.5	Online access to job listings has made it easier to find work	
Most children have access to a good school			\bigcirc		65.5	IT skills are taught well in schools	
Lifelong learning opportunities are provided by local institutions			\bigcirc		62.0	Online services provided by the city has made it easier to start a new busi	iness
Businesses are creating new jobs				\bigcirc	81.4	The current internet speed and reliability meet connectivity needs	
Minorities feel welcome			\bigcirc		63.4		
Governance						Governance	
Information on local government decisions are easily accessible			\bigcirc		66.3	Online public access to city finances has reduced corruption	
Corruption of city officials is not an issue of concern					23.3	Online voting has increased participation	
Residents contribute to decision making of local government			\bigcirc		62.8	An online platform where residents can propose ideas has improved city li	ife



OGIES



Kiev



BACKGROUND INFORMATION



2,942,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.742	0.746	0.747	0.750	+0.003
Life expectancy at Birth	71.5	71.7	71.8	72.0	+0.2
Expected years of schooling	14.9	15.1	15.1	15.1	+0.0
Mean years of schooling	11.3	11.3	11.3	11.3	+0.0
GNI per capita (PPP \$)	7,373	7,601	7,670	7,994	+324.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

corruption road congestion affordable housing air pollution basic amenities security recycling unemployment fulfilling employment health services public transport citizen engagement 13.5% green spaces 9.8% social mobility 6.9% school education 6.9%

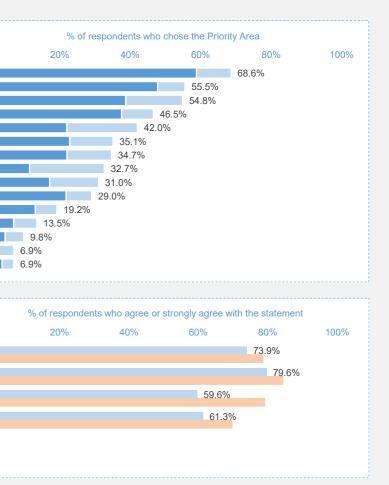
0%

0%

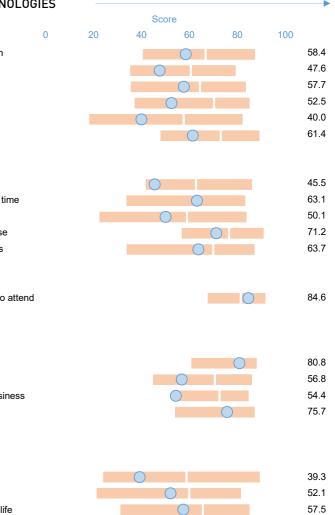
ATTITUDES

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

C in 2019	STRUCTURES	TECHNOLO
	s	Score
	Health & Safety 0 20 40	60 80 100 Health & Safety
	Basic sanitation meets the needs of the poorest areas	54.5 Online reporting of city maintenance problems provides a speedy solution
FLOTOR	Recycling services are satisfactory	42.4 A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem	48.6 Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem	33.6 CCTV cameras has made residents feel safer
	Medical services provision is satisfactory	42.7 A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	35.5 Arranging medical appointments online has improved access
	Mobility	Mobility
	Traffic congestion is not a problem	21.4 Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory	49.2 Apps that direct you to an available parking space have reduced journey time
		Bicycle hiring has reduced congestion
		Online scheduling and ticket sales has made public transport easier to use
		The city provides information on traffic congestion through mobile phones
	Activities	Activities
TECHNOLOGIES	Green spaces are satisfactory	67.4 Online purchasing of tickets to shows and museums has made it easier to attend 76.9
	Cultural activities (shows, bars, and museums) are satisfactory	76.9
	Opportunities (Work & School)	Opportunities (Work & School)
	Employment finding services are readily available	69.4 Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school	62.0 IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions	61.5 Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs	51.2 The current internet speed and reliability meet connectivity needs
4	Minorities feel welcome	47.6
	Governance	Governance
	Information on local government decisions are easily accessible	58.6 Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern	25.8 Online voting has increased participation
All ratings range	Residents contribute to decision making of local government	35.2 An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects	55.5 Processing Identification Documents online has reduced waiting times







60

Krakow



RATING

B

BACKGROUND INFORMATION



760,000

(UN World Cities Report)



Country HDI	2015 0.858	2016 0.864	2017 0.868	2018 0.872	1 yr change +0.004
Life expectancy at Birth	77.9	78.1	78.3	78.5	+0.2
Expected years of schooling	16.1	16.4	16.4	16.4	+0.0
Mean years of schooling	12.2	12.3	12.3	12.3	+0.0
GNI per capita (PPP \$)	24,369	25,042	26,182	27,626	+1,444.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

air pollution road congestion affordable housing security fulfilling employment green spaces recycling basic amenities health services public transport unemployment corruption school education 11.9% social mobility 11.1%

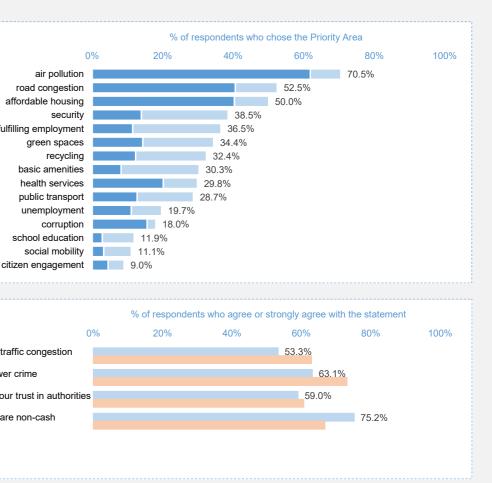
0%

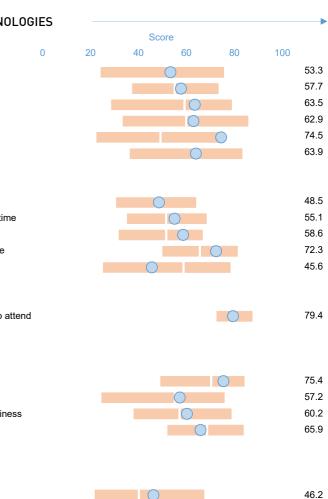
0%

ATTITUDES

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

D			LEGEND: MIN		MEAN GROUP MAX
CCC in 2019	STRUCTURES			→ Ŭ	TECHNOL
		Score			
	Health & Safety ⁰	20 40 60	80 100		Health & Safety
	Basic sanitation meets the needs of the poorest areas		6	5.6	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		62	2.5	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		62	2.5	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		2	0.0	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		5	1.2	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	2	3.9	Arranging medical appointments online has improved access
B	Mobility				Mobility
	Traffic congestion is not a problem		2	9.8	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory			5.8	Apps that direct you to an available parking space have reduced journey time
0	·				Bicycle hiring has reduced congestion
					Online scheduling and ticket sales has made public transport easier to use
B					The city provides information on traffic congestion through mobile phones
D	Activities				Activities
TECHNOLOGIES	Green spaces are satisfactory		6	1.3	Online purchasing of tickets to shows and museums has made it easier to att
	Cultural activities (shows, bars, and museums) are satisfactory).7	
	Opportunities (Work & School)				Opportunities (Work & School)
GROUP	Employment finding services are readily available	0		4.0	Online access to job listings has made it easier to find work
	Most children have access to a good school			3.8	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions).2	Online services provided by the city has made it easier to start a new busines
2	Businesses are creating new jobs		•	9.2	The current internet speed and reliability meet connectivity needs
•	Minorities feel welcome		6	3.4	
	Governance				Governance
	Information on local government decisions are easily accessible		6	4.2	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		4	1.7	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		52	2.2	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		5	3.7	Processing Identification Documents online has reduced waiting times
1					





51.5 61.1 70.6

61

Kuala Lumpur



SMART

CITY

RATING

B

BACKGROUND INFORMATION

City

Population 6,837,000

(UN World Cities Report)

GNI per capita (PPP \$)

Country	2015	2016	2017	2018	1 yr change
HDI	0.797	0.801	0.802	0.804	+0.002
Life expectancy at Birth	75.5	75.6	75.8	76.0	+0.2
Expected years of schooling	13.5	13.7	13.5	13.5	+0.0
Mean years of schooling	10.2	10.2	10.2	10.2	+0.0

25,394

26,555

24,703

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

road congestion affordable housing security corruption air pollution unemployment public transport health services basic amenities fulfilling employment green spaces recycling citizen engagement 11.5%

ATTITUDES

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

D			LEGEND:	MIN	CITY MEAN GROUP MAX
CCC in 2019	STRUCTURES			•	TECHNOLO
		Score			
	Health & Safety 0	20 40 60	80 10		Health & Safety
	Basic sanitation meets the needs of the poorest areas			65.3	Online reporting of city maintenance problems provides a speedy solution
FACTOR	Recycling services are satisfactory			57.7	A website or App allows residents to easily give away unwanted items
	Public safety is not a problem	\bigcirc		48.5	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem			36.3	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		\bigcirc	75.8	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			44.3	Arranging medical appointments online has improved access
B					
D	Mobility	_			Mobility
	Traffic congestion is not a problem			24.1	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory			61.8	Apps that direct you to an available parking space have reduced journey time
					Bicycle hiring has reduced congestion
					Online scheduling and ticket sales has made public transport easier to use
B					The city provides information on traffic congestion through mobile phones
	Activities				Activities
TECHNOLOGIES	Green spaces are satisfactory			59.9	Online purchasing of tickets to shows and museums has made it easier to attend
TECHNOLOGIES	Cultural activities (shows, bars, and museums) are satisfactory			70.1	Online purchasing of tickets to shows and huseums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory			70.1	
	Opportunities (Work & School)				Opportunities (Work & School)
GROUP	Employment finding services are readily available			68.4	Online access to job listings has made it easier to find work
GRUUP	Most children have access to a good school	(73.3	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions	(73.5	Online services provided by the city has made it easier to start a new business
2	Businesses are creating new jobs		\bigcirc	75.4	The current internet speed and reliability meet connectivity needs
3	Minorities feel welcome			63.9	
	Governance				Governance
	Information on local government decisions are easily accessible			64.9	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern	0		30.0	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government			55.5	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects			64.7	Processing Identification Documents online has reduced waiting times

Jakarta Semarang

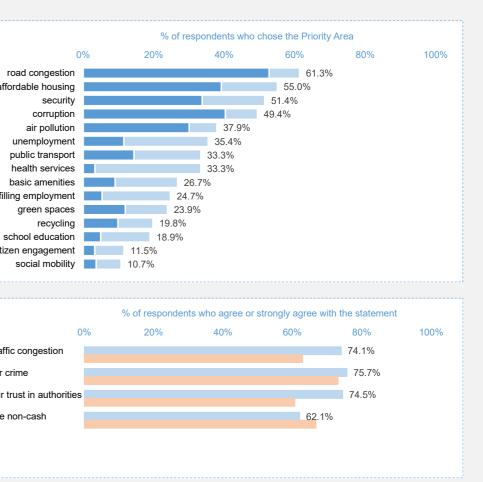
Map tiles by Stamen Design CC BY 3.0 Map Data © Op

27,227

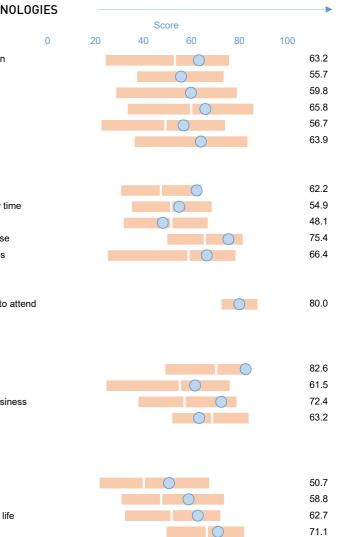
+672.0

0%

0%







Lagos



BACKGROUND INFORMATION



13,123,000

(UN World Cities Report)



102 in 2019

SMART CITY RATING D

D in 2019

FACTOR RATINGS

D STRUCTURES

D

TECHNOLOGIES

GROUP

All ratings range from AAA to D

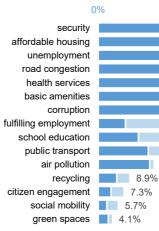


Country HDI	2015 0.527	2016 0.528	2017 0.533	2018 0.534	1 yr change +0.001
Life expectancy at Birth	53.1	53.5	54.0	54.3	+0.3
Expected years of schooling	9.7	9.5	9.7	9.7	+0.0
Mean years of schooling	6.2	6.3	6.5	6.5	+0.0
GNI per capita (PPP \$)	5,540	5,336	5,203	5,086	-117.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

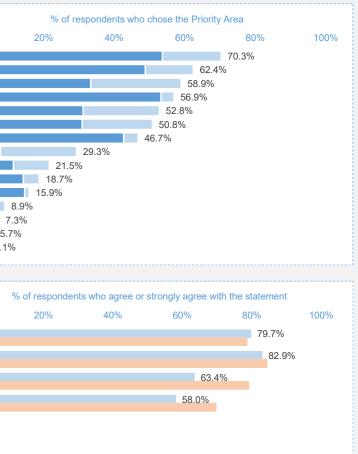


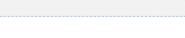
0%

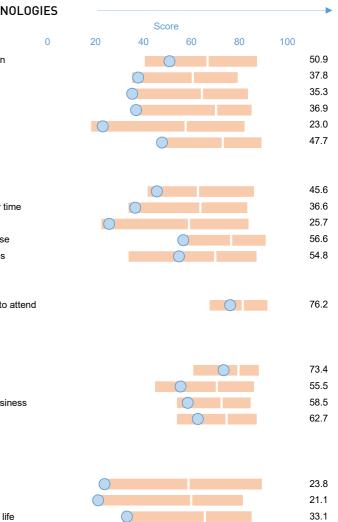
ATTITUDES

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

			LE	GEND:	MIN	CITY	MEAN GROUP MAX]
STRUCTURES							•	TECHNOLO
		Score						
Health & Safety 0	20	40	60 80		100		Health & Safety	
Basic sanitation meets the needs of the poorest areas		\bigcirc			46.3		Online reporting of city	maintenance problems provides a speedy solution
Recycling services are satisfactory		\bigcirc			44.7		A website or App allow	vs residents to easily give away unwanted items
Public safety is not a problem	(\bigcirc			32.2		Free public wifi has im	proved access to city services
Air pollution is not a problem	\bigcirc				19.0		CCTV cameras has m	ade residents feel safer
Medical services provision is satisfactory		\bigcirc			44.4		A website or App allow	vs residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc				25.9		Arranging medical app	pointments online has improved access
Mobility							Mobility	
Traffic congestion is not a problem	\bigcirc				10.6		Car-sharing Apps have	e reduced congestion
Public transport is satisfactory		\bigcirc			40.7		Apps that direct you to	an available parking space have reduced journey time
							Bicycle hiring has redu	uced congestion
							Online scheduling and	ticket sales has made public transport easier to use
							The city provides infor	mation on traffic congestion through mobile phones
Activities							Activities	
Green spaces are satisfactory					48.1		Online purchasing of t	ickets to shows and museums has made it easier to atten
Cultural activities (shows, bars, and museums) are satisfactory			\bigcirc		79.3			
Opportunities (Work & School)							Opportunities (W	ork & School)
Employment finding services are readily available		\bigcirc			46.5		Online access to job li	stings has made it easier to find work
Most children have access to a good school					47.0		IT skills are taught we	ll in schools
Lifelong learning opportunities are provided by local institutions		\bigcirc			41.9		Online services provid	led by the city has made it easier to start a new business
Businesses are creating new jobs			\bigcirc		66.4		The current internet sp	peed and reliability meet connectivity needs
Minorities feel welcome)		55.4			
Governance							Governance	
Information on local government decisions are easily accessible		\bigcirc			40.6		Online public access to	o city finances has reduced corruption
Corruption of city officials is not an issue of concern	\bigcirc				13.1		Online voting has incre	eased participation
Residents contribute to decision making of local government					24.1		•	ere residents can propose ideas has improved city life
Residents provide feedback on local government projects				-	38.1		•	on Documents online has reduced waiting times







 \bigcirc

Lisbon



BACKGROUND INFORMATION

City Population 2,884,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.843	0.846	0.848	0.850	+0.002
Life expectancy at Birth	81.2	81.4	81.7	81.9	+0.2
Expected years of schooling	16.4	16.3	16.3	16.3	+0.0
Mean years of schooling	9.1	9.2	9.2	9.2	+0.0
GNI per capita (PPP \$)	25,860	26,559	27,404	27,935	+531.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion corruption public transport air pollution unemployment health services fulfilling employment security social mobility citizen engagement recycling school education 14.8% basic amenities 8.0%

0%

0%

ATTITUDES

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

STRUCTURES			>	TECH
SIRUCTURES	Score			TECH
Health & Safety 0	20 40 60 8	0 100		Health & Safety
Basic sanitation meets the needs of the poorest areas			64.8	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			63.1	A website or App allows residents to easily give away unwanted items
Public safety is not a problem			56.7	Free public wifi has improved access to city services
Air pollution is not a problem			36.7	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			56.9	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			18.6	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			20.5	Car-sharing Apps have reduced congestion
Public transport is satisfactory			42.3	Apps that direct you to an available parking space have reduced journey
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to u
				The city provides information on traffic congestion through mobile phone
Activities				Activities
Green spaces are satisfactory			66.9	Online purchasing of tickets to shows and museums has made it easier
Cultural activities (shows, bars, and museums) are satisfactory			81.0	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			46.6	Online access to job listings has made it easier to find work
Most children have access to a good school			62.3	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			56.5	Online services provided by the city has made it easier to start a new but
Businesses are creating new jobs			50.2	The current internet speed and reliability meet connectivity needs
Minorities feel welcome	\bigcirc		59.5	
Governance				Governance
Information on local government decisions are easily accessible			51.5	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			26.9	Online voting has increased participation
Residents contribute to decision making of local government	\bigcirc		39.4	An online platform where residents can propose ideas has improved city
Residents provide feedback on local government projects			42.9	Processing Identification Documents online has reduced waiting times

SMART CITY RATING CCC CCC in 2019

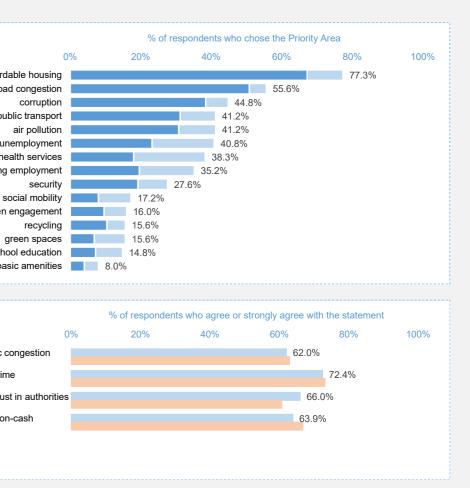
FACTOR RATINGS CCC STRUCTURES

CCC **TECHNOLOGIES**

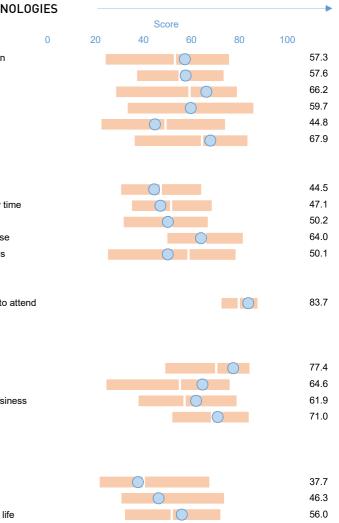
GROUP

3

All ratings range from AAA to D







London



BACKGROUND INFORMATION



(UN World Cities Report)

SMART CITY RATING

Δ

BBB in 2019

FACTOR RATINGS **BBB** STRUCTURES

Д TECHNOLOGIES

GROUP

All ratings rang

from AAA to D



Country HDI	2015 0.916	2016 0.918	2017 0.919	2018 0.920	1 yr change +0.001
Life expectancy at Birth	81.1	81.1	81.2	81.2	+0.001
Expected years of schooling	17.4	17.4	17.4	17.4	+0.0
Mean years of schooling	12.8	12.9	12.9	13.0	+0.1
GNI per capita (PPP \$)	38,116	38,421	39,216	39,507	+291.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

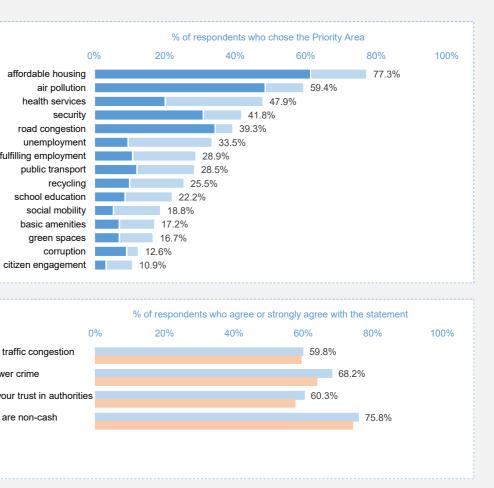
affordable housing air pollution health services security road congestion unemployment fulfilling employment public transport recycling school education social mobility basic amenities

0%

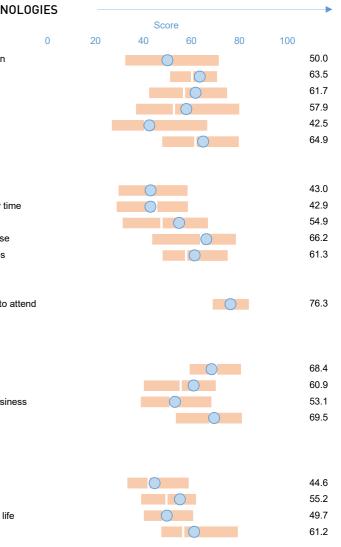
0%

ATTITUDES

				CITY MEAN GROUP MAX	
•	STRUCTURES	Score		• •	TECHNOLO
Health & Safety	0		80 100	Health & Safety	
Basic sanitation meets the needs of the	e poorest areas		64.9	Online reporting of city	y maintenance problems provides a speedy solution
Recycling services are satisfactory			67.9	A website or App allow	ws residents to easily give away unwanted items
Public safety is not a problem			38.8	Free public wifi has im	nproved access to city services
Air pollution is not a problem			28.2	CCTV cameras has m	nade residents feel safer
Medical services provision is satisfacto	ſſY		61.1	A website or App allow	ws residents to effectively monitor air pollution
Finding housing with rent equal to 30%	or less of a monthly salary is not a problem		24.6	Arranging medical app	pointments online has improved access
Mobility				Mobility	
Traffic congestion is not a problem			25.9	· · · · · · · · · · · · · · · · · · ·	re reduced congestion
Public transport is satisfactory			65.4	• • • •	o an available parking space have reduced journey time
				Bicycle hiring has redu	
				, ,	I ticket sales has made public transport easier to use
					rmation on traffic congestion through mobile phones
Activities				Activities	
Green spaces are satisfactory			71.6		tickets to shows and museums has made it easier to atten
	(seums) are satisfactory			······ · ·····························	
Cultural activities (shows, bars, and mu	accurred are callorated by		80.4		
• • •	, <u>,</u>		80.4		(ork & School)
Opportunities (Work & School)			Opportunities (W	
Opportunities (Work & School Employment finding services are readil	.) y available	0	67.6	Opportunities (W Online access to job li	istings has made it easier to find work
Opportunities (Work & School Employment finding services are readil Most children have access to a good s	.) y available chool		67.6 64.5	Opportunities (W Online access to job li IT skills are taught we	istings has made it easier to find work Il in schools
Opportunities (Work & School Employment finding services are readil Most children have access to a good s Lifelong learning opportunities are prov	.) y available chool		67.6 64.5 63.9	Opportunities (W Online access to job li IT skills are taught we Online services provid	istings has made it easier to find work Il in schools Jed by the city has made it easier to start a new business
Opportunities (Work & School Employment finding services are readil Most children have access to a good s	.) y available chool		67.6 64.5	Opportunities (W Online access to job li IT skills are taught we Online services provid The current internet sp	istings has made it easier to find work Il in schools
Opportunities (Work & School Employment finding services are readil Most children have access to a good s Lifelong learning opportunities are prov Businesses are creating new jobs Minorities feel welcome	.) y available chool		67.6 64.5 63.9 60.6	Opportunities (W Online access to job li IT skills are taught we Online services provid The current internet sp	istings has made it easier to find work Il in schools Jed by the city has made it easier to start a new business
Opportunities (Work & School Employment finding services are readil Most children have access to a good s Lifelong learning opportunities are prov Businesses are creating new jobs Minorities feel welcome Governance) y available chool rided by local institutions		67.6 64.5 63.9 60.6 63.3	Opportunities (W Online access to job li IT skills are taught we Online services provid The current internet sp Governance	istings has made it easier to find work Il in schools ded by the city has made it easier to start a new business peed and reliability meet connectivity needs
Opportunities (Work & School Employment finding services are readil Most children have access to a good s Lifelong learning opportunities are prov Businesses are creating new jobs Minorities feel welcome Governance Information on local government decisi) y available chool rided by local institutions ons are easily accessible		67.6 64.5 63.9 60.6 63.3 62.6	Opportunities (W Online access to job li IT skills are taught we Online services provid The current internet sp Governance Online public access t	istings has made it easier to find work Il in schools ded by the city has made it easier to start a new business peed and reliability meet connectivity needs to city finances has reduced corruption
Opportunities (Work & School Employment finding services are readil Most children have access to a good s Lifelong learning opportunities are prov Businesses are creating new jobs Minorities feel welcome Governance) y available chool rided by local institutions ons are easily accessible ue of concern		67.6 64.5 63.9 60.6 63.3	Opportunities (W Online access to job li IT skills are taught we Online services provid The current internet sp Governance Online public access t Online voting has incre	istings has made it easier to find work Il in schools ded by the city has made it easier to start a new business peed and reliability meet connectivity needs to city finances has reduced corruption







Los Angeles



BACKGROUND INFORMATION

City Population

12,310,000

(UN World Cities Report)



35 in 2019

SMART CITY RATING BBB BBB in 2019

FACTOR RATINGS BBB STRUCTURES

Δ

TECHNOLOGIES

GROUP

All ratings range from AAA to D



Country HDI	2015 0.917	2016 0.919	2017 0.919	2018 0.920	1 yr change +0.001
Life expectancy at Birth	78.9	78.9	78.9	78.9	+0.0
Expected years of schooling	16.2	16.3	16.3	16.3	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	54,039	54,443	55,351	56,140	+789.0

PRIORITY AR	EAS
-------------	-----

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

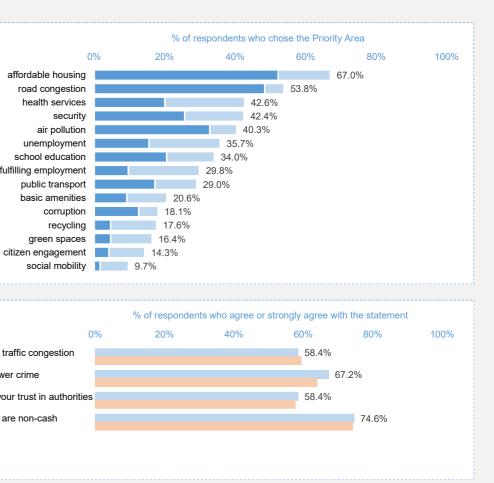
affordable housing road congestion health services security air pollution unemployment school education fulfilling employment public transport basic amenities corruption recycling

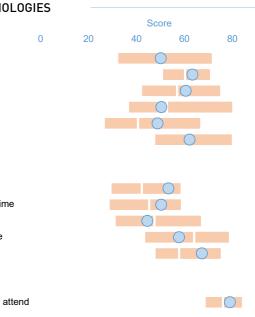
0%

0%

ATTITUDES

		GEND: MIN	CITY MEAN GROUP MAX		
STRUCTURES		•	TECHNOLOGIES		
	Score	100		Score	100
Theatth & Safety	0 20 40 60 80	100	Health & Safety 0	20 40 60 80	100
Basic sanitation meets the needs of the poorest areas		53.9	Online reporting of city maintenance problems provides a speedy solution		
Recycling services are satisfactory		66.7	A website or App allows residents to easily give away unwanted items		
Public safety is not a problem		36.8	Free public wifi has improved access to city services		
Air pollution is not a problem		28.8	CCTV cameras has made residents feel safer	\bigcirc	
Medical services provision is satisfactory		60.9	A website or App allows residents to effectively monitor air pollution		
Finding housing with rent equal to 30% or less of a monthly salary is not a problem		31.2	Arranging medical appointments online has improved access		
Mobility			Mobility		
Traffic congestion is not a problem		21.1	Car-sharing Apps have reduced congestion		
Public transport is satisfactory		49.0	Apps that direct you to an available parking space have reduced journey time		
			Bicycle hiring has reduced congestion		
			Online scheduling and ticket sales has made public transport easier to use		
			The city provides information on traffic congestion through mobile phones		
Activities			Activities		
Green spaces are satisfactory		58.2	Online purchasing of tickets to shows and museums has made it easier to attend		
Cultural activities (shows, bars, and museums) are satisfactory	0	76.8			
Opportunities (Work & School)			Opportunities (Work & School)		
Employment finding services are readily available		63.5	Online access to job listings has made it easier to find work		
Most children have access to a good school		53.6	IT skills are taught well in schools		
Lifelong learning opportunities are provided by local institutions		59.7	Online services provided by the city has made it easier to start a new business		
Businesses are creating new jobs		66.1	The current internet speed and reliability meet connectivity needs		
Minorities feel welcome	0	63.4			
Governance			Governance		
Information on local government decisions are easily accessible		63.8	Online public access to city finances has reduced corruption		
Corruption of city officials is not an issue of concern		40.0	Online voting has increased participation		
Residents contribute to decision making of local government		53.2	An online platform where residents can propose ideas has improved city life		
Residents provide feedback on local government projects		59.4	Processing Identification Documents online has reduced waiting times		





Lyon



SMART

CITY

RATING

BB

BACKGROUND INFORMATION



(UN World Cities Report)



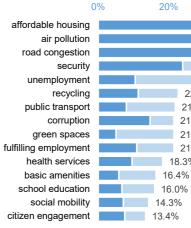
(ap	tiles	by	Stamen	Design	CC	BY	3.0	Мар	Data	C	OpenStreetMap

Country	2015	2016	2017	2018	1 yr change
HDI	0.888	0.887	0.890	0.891	+0.001
Life expectancy at Birth	82.2	82.3	82.4	82.5	+0.1
Expected years of schooling	15.4	15.5	15.5	15.5	+0.0
Mean years of schooling	11.5	11.4	11.4	11.4	+0.0
GNI per capita (PPP \$)	38,668	38,926	39,935	40,511	+576.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

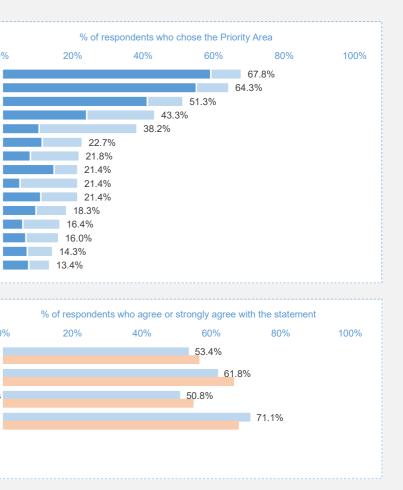


ATTITUDES

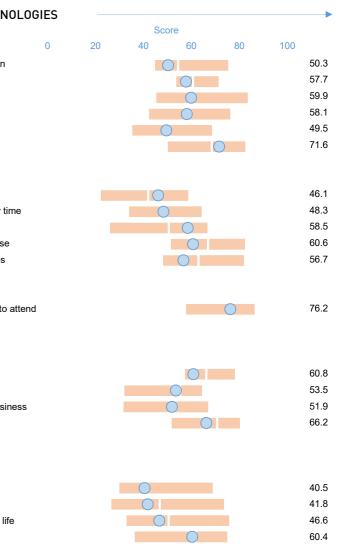
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

DD		LEC		Y MEAN GROUP MAX
BBB in 2019	STRUCTURES			TECHNOLOG
		Score		
	Health & Safety 0 20	40 60 80	100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		60.4	Online reporting of city maintenance problems provides a speedy solution
FACTOR	Recycling services are satisfactory	\bigcirc	65.8	A website or App allows residents to easily give away unwanted items
	Public safety is not a problem		48.6	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		21.7	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		63.2	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		21.3	Arranging medical appointments online has improved access
BB	A			N. 4 1 11 (a
	Mobility Traffic congestion is not a problem		25.6	Mobility
STRUCTURES	Traffic congestion is not a problem Public transport is satisfactory		69.5	Car-sharing Apps have reduced congestion
SIRUCIURES	Public transport is satisfactory		09.5	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
BB				The dry provides information on traine congestion through mobile provides
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		80.3	Online purchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		84.1	
	Opportunities (Work & School)			Opportunities (Work & School)
GROUP	Employment finding services are readily available		66.4	Online access to job listings has made it easier to find work
encer	Most children have access to a good school	\bigcirc	65.9	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		59.5	Online services provided by the city has made it easier to start a new business
2	Businesses are creating new jobs		54.6	The current internet speed and reliability meet connectivity needs
_	Minorities feel welcome		50.3	
	Governance			Governance
	Information on local government decisions are easily accessible		60.1	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		48.3	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		40.5	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects	\bigcirc	49.2	Processing Identification Documents online has reduced waiting times

0%







67

Madrid



RATING

BACKGROUND INFORMATION

City Population

6,199,000

(UN World Cities Report)

2015	2016	2017	2018	1 yr change
0.885	0.888	0.891	0.893	+0.002
83.0	83.1	83.3	83.4	+0.1
17.8	17.8	17.9	17.9	+0.0
9.7	9.8	9.8	9.8	+0.0
32,265	33,379	34,226	35,041	+815.0
	0.885 83.0 17.8 9.7	0.885 0.888 83.0 83.1 17.8 17.8 9.7 9.8	0.885 0.888 0.891 83.0 83.1 83.3 17.8 17.8 17.9 9.7 9.8 9.8	0.885 0.888 0.891 0.893 83.0 83.1 83.3 83.4 17.8 17.8 17.9 17.9 9.7 9.8 9.8 9.8

PRIORITY AREAS

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

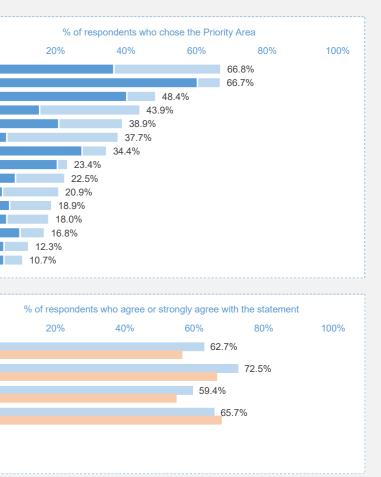
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% fulfilling employment affordable housing air pollution health services security unemployment corruption road congestion recycling basic amenities school education green spaces public transport 16.8% citizen engagement 12.3% social mobility 10.7%

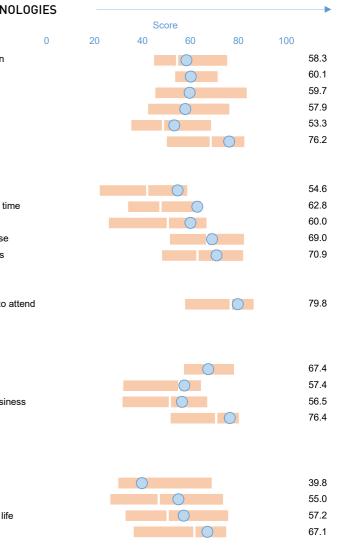
0%

ATTITUDES

BB					
			LEGEND: MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES	Score	,	•	TECHNOL
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		69.9	Online reporting of city n	naintenance problems provides a speedy solution
	Recycling services are satisfactory		62.8	A website or App allows	residents to easily give away unwanted items
FACTOR	Public safety is not a problem		59.2	2 Free public wifi has impr	oved access to city services
RATINGS	Air pollution is not a problem		26.2	2 CCTV cameras has made	le residents feel safer
IATINO 5	Medical services provision is satisfactory		63.5	A website or App allows	residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		19.2	Arranging medical appoi	ntments online has improved access
BB	Mobility			Mobility	
	Traffic congestion is not a problem		23.2	· · · · · · · · · · · · · · · · · · ·	reduced congestion
STRUCTURES	Public transport is satisfactory		60.6	0 11	n available parking space have reduced journey time
				Bicycle hiring has reduce	
					cket sales has made public transport easier to use
BBB				Ŭ	ation on traffic congestion through mobile phones
DDD				A Lat. Sat	
	Activities		70.6	Activities	
TECHNOLOGIES	Green spaces are satisfactory		70.6		xets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory		81.0	1	
	Opportunities (Work & School)			Opportunities (Wo	rk & School)
GROUP	Employment finding services are readily available		74.7	Online access to job listi	ngs has made it easier to find work
01001	Most children have access to a good school		64.8	B IT skills are taught well i	n schools
	Lifelong learning opportunities are provided by local institutions		68.1	Online services provided	by the city has made it easier to start a new business
9	Businesses are creating new jobs		48.5	5 The current internet spe	ed and reliability meet connectivity needs
4	Minorities feel welcome		50.8	3	
	Governance			Governance	
	Information on local government decisions are easily accessible		60.4	Online public access to	city finances has reduced corruption
	Corruption of city officials is not an issue of concern		28.6	Online voting has increa	sed participation
All ratings range	Residents contribute to decision making of local government		40.2	2 An online platform where	e residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		48.6	Processing Identification	Documents online has reduced waiting times
Accessed					







Makassar



BACKGROUND INFORMATION

City Population

1,489,000

(UN World Cities Report)

80 in 2019

SMART CITY RATING

CC in 2019

FACTOR RATINGS

STRUCTURES

TECHNOLOGIES

GROUP

All ratings range from AAA to D

Country HDI	2015 0.696	2016 0.700	2017 0.704	2018 0.707	1 yr change +0.003
Life expectancy at Birth	70.8	71.0	71.3	71.5	+0.2
Expected years of schooling	12.8	12.9	12.9	12.9	+0.0
Mean years of schooling	7.9	8.0	8.0	8.0	+0.0
GNI per capita (PPP \$)	10,029	10,419	10,811	11,256	+445.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

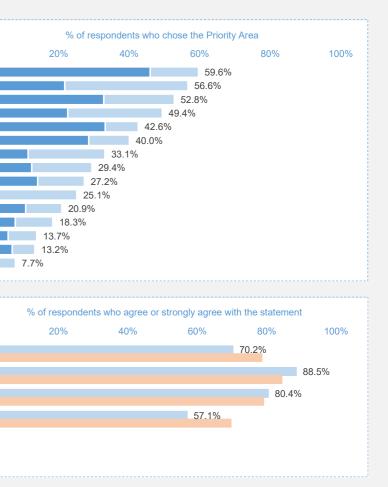
road congestion unemployment security basic amenities corruption air pollution health services green spaces public transport fulfilling employment recycling school education affordable housing 13.7% citizen engagement 13.2% social mobility 7.7%

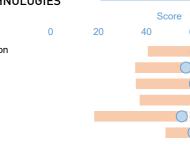
0%

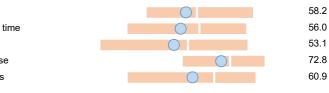
0%

ATTITUDES

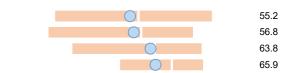
STRUCTUR	ES		TECHNOLOGIES	
	Score			Score
Health & Safety	0 20 40 60	80 100	Health & Safety 0	20 40 60 80
Basic sanitation meets the needs of the poorest areas		58.7	Online reporting of city maintenance problems provides a speedy solution	
Recycling services are satisfactory		55.7	A website or App allows residents to easily give away unwanted items	
Public safety is not a problem		45.4	Free public wifi has improved access to city services	
Air pollution is not a problem	\bigcirc	34.0	CCTV cameras has made residents feel safer	
Medical services provision is satisfactory	\bigcirc	69.4	A website or App allows residents to effectively monitor air pollution	\bigcirc
Finding housing with rent equal to 30% or less of a monthly salary is not a proble	m	57.5	Arranging medical appointments online has improved access	
Mobility			Mobility	
Traffic congestion is not a problem	\bigcirc	30.3	Car-sharing Apps have reduced congestion	
Public transport is satisfactory		61.4	Apps that direct you to an available parking space have reduced journey time	
			Bicycle hiring has reduced congestion	\bigcirc
			Online scheduling and ticket sales has made public transport easier to use	
			The city provides information on traffic congestion through mobile phones	\bigcirc
Activities			Activities	
Green spaces are satisfactory	\bigcirc	66.2	Online purchasing of tickets to shows and museums has made it easier to attend	
Cultural activities (shows, bars, and museums) are satisfactory	\bigcirc	65.9		
Opportunities (Work & School)			Opportunities (Work & School)	
Employment finding services are readily available		63.0	Online access to job listings has made it easier to find work	
Most children have access to a good school	\bigcirc	66.0	IT skills are taught well in schools	
Lifelong learning opportunities are provided by local institutions	\bigcirc	62.4	Online services provided by the city has made it easier to start a new business	
Businesses are creating new jobs		82.3	The current internet speed and reliability meet connectivity needs	
Minorities feel welcome		75.7		
Governance			Governance	
Information on local government decisions are easily accessible		66.5	Online public access to city finances has reduced corruption	\bigcirc
Corruption of city officials is not an issue of concern	\bigcirc	29.0	Online voting has increased participation	\bigcirc
Residents contribute to decision making of local government		62.6	An online platform where residents can propose ideas has improved city life	











Manchester

SMART CITY RANKING 17 Out of 109 N/A not in 2019

SMART

CITY

RATING

Д

BACKGROUND INFORMATION

City Population

2,646,000 (UN World Cities Report)



Country	2015	2016	2017	2018	1 vr change
HDI	0.916	0.918	0.919	0.920	+0.001
Life expectancy at Birth	81.1	81.1	81.2	81.2	+0.0
Expected years of schooling	17.4	17.4	17.4	17.4	+0.0
Mean years of schooling	12.8	12.9	12.9	13.0	+0.1
GNI per capita (PPP \$)	38,116	38,421	39,216	39,507	+291.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

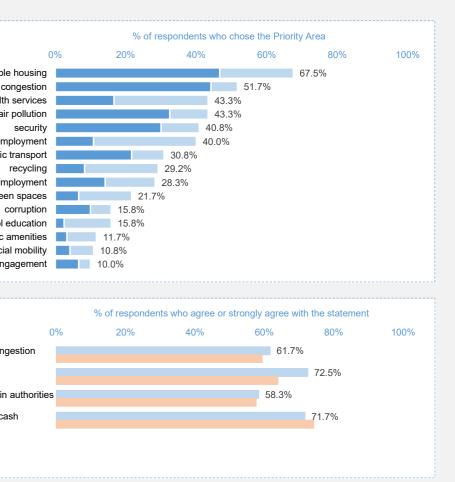
0% affordable housing road congestion health services air pollution security unemployment public transport recycling fulfilling employment green spaces school education basic amenities 11.7% social mobility 10.8% citizen engagement 10.0%

0%

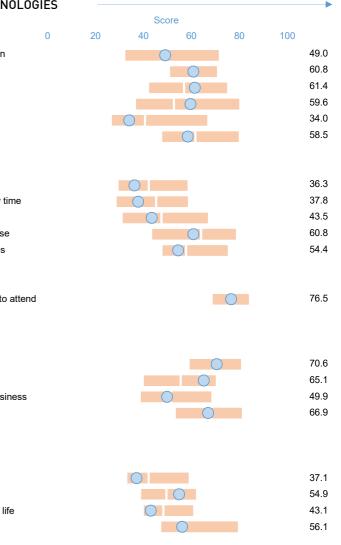
ATTITUDES

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

A		LEC	GEND: MIN	CITY MEAN GROUP MAX
not in 2019	STRUCTURES			TECHNOLO
		Score		
	Health & Safety 0	20 40 60 80	100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		68.8	Online reporting of city maintenance problems provides a speedy solution
FACTOR	Recycling services are satisfactory		73.8	A website or App allows residents to easily give away unwanted items
	Public safety is not a problem		45.7	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		36.4	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory	\bigcirc	66.8	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		38.5	Arranging medical appointments online has improved access
Λ				
A	Mobility			Mobility
	Traffic congestion is not a problem		23.1	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		52.9	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
BBB				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		66.9	Online purchasing of tickets to shows and museums has made it easier to atten
TECHNOLOOILS	Cultural activities (shows, bars, and museums) are satisfactory		82.6	
			02.0	
	Opportunities (Work & School)			Opportunities (Work & School)
CDOUD	Employment finding services are readily available		72.1	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		73.8	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		66.4	Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs		57.1	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		66.3	
	Governance			Governance
	Information on local government decisions are easily accessible		64.2	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		60.4	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		55.0	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		59.2	Processing Identification Documents online has reduced waiting times



LOGIES



Manila



SMART

CITY

RATING

BACKGROUND INFORMATION

Residents provide feedback on local government projects



12,946,000

(UN World Cities Report)

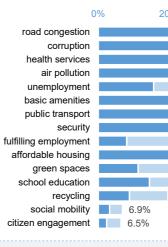


Country	2015	2016	2017	2018	1 yr change
HDI	0.702	0.704	0.709	0.712	+0.003
Life expectancy at Birth	70.6	70.8	71.0	71.1	+0.1
Expected years of schooling	12.8	12.7	12.7	12.7	+0.0
Mean years of schooling	9.3	9.3	9.4	9.4	+0.0
GNI per capita (PPP \$)	8,290	8,701	9,133	9,540	+407.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.



0%

ATTITUDES

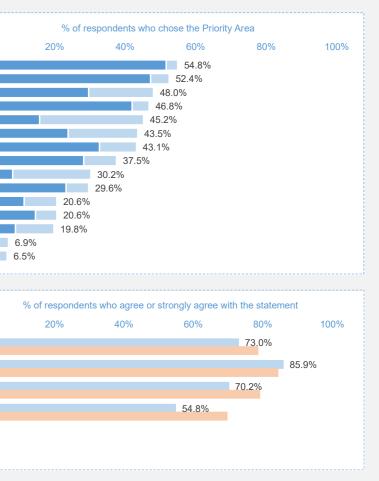
61.2

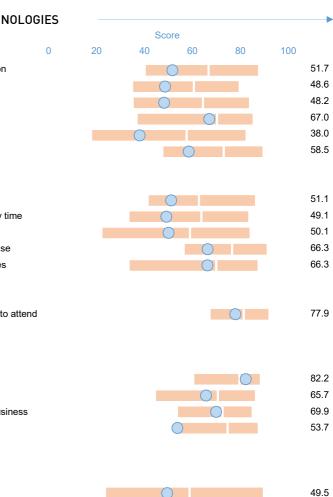
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

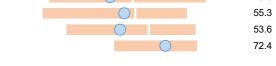
Processing Identification Documents online has reduced waiting times

D									
				LE	EGEND:	MIN	CITY	MEAN GROUP MAX	
C in 2019	STRUCTURES	5						•	TECHNOLO
			Score						
	Treatting Safety) 20	0 40 6	080)	100		Health & Safety	
	Basic sanitation meets the needs of the poorest areas					49.2		Online reporting of city maintenance	problems provides a speedy solution
FACTOR	Recycling services are satisfactory					50.5		A website or App allows residents to	easily give away unwanted items
FACTOR	Public safety is not a problem					33.0		Free public wifi has improved access	to city services
RATINGS	Air pollution is not a problem	\bigcirc				15.0		CCTV cameras has made residents	feel safer
	Medical services provision is satisfactory		\bigcirc			44.7		A website or App allows residents to	effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		\bigcirc			39.7		Arranging medical appointments onli	ne has improved access
	Mobility							Mobility	
	Traffic congestion is not a problem	\bigcirc				10.6		Car-sharing Apps have reduced cong	gestion
STRUCTURES	Public transport is satisfactory					30.6		Apps that direct you to an available p	parking space have reduced journey time
								Bicycle hiring has reduced congestion	n
								Online scheduling and ticket sales ha	as made public transport easier to use
C								The city provides information on traff	ic congestion through mobile phones
	Activities							Activities	
TECHNOLOGIES	Green spaces are satisfactory					48.2		Online purchasing of tickets to shows	s and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory			\bigcirc		63.0			
	Opportunities (Work & School)							Opportunities (Work & Scho	ol)
	Employment finding services are readily available		(61.3		Online access to job listings has made	le it easier to find work
GROUP	Most children have access to a good school		\bigcirc			48.5		IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions					49.9		Online services provided by the city I	nas made it easier to start a new business
	Businesses are creating new jobs			\bigcirc		72.0		The current internet speed and reliab	ility meet connectivity needs
4	Minorities feel welcome		\bigcirc			53.2			
	Governance							Governance	
	Information on local government decisions are easily accessible					55.8		Online public access to city finances	has reduced corruption
	Corruption of city officials is not an issue of concern					20.4		Online voting has increased participa	
All ratings range	Residents contribute to decision making of local government					45.2		• • •	an propose ideas has improved city life
, acruanys runge						=			

All ratings range from AAA to D







Marseille

SMART CITY RANKING 78 Out of 109 N/A not in 2019

SMART

CITY

RATING

BACKGROUND INFORMATION



(UN World Cities Report)



0045	001/	0048	0010	4
2015	2016	2017	2018	1 yr change
0.888	0.887	0.890	0.891	+0.001
82.2	82.3	82.4	82.5	+0.1
15.4	15.5	15.5	15.5	+0.0
11.5	11.4	11.4	11.4	+0.0
38,668	38,926	39,935	40,511	+576.0
	0.888 82.2 15.4 11.5	0.888 0.887 82.2 82.3 15.4 15.5 11.5 11.4	0.8880.8870.89082.282.382.415.415.515.511.511.411.4	0.8880.8870.8900.89182.282.382.482.515.415.515.515.511.511.411.411.4

	PRI	ORIT	Y AI	REAS
--	-----	------	------	------

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing security air pollution road congestion unemployment recycling corruption public transport green spaces basic amenities fulfilling employment health services citizen engagement 13.6%

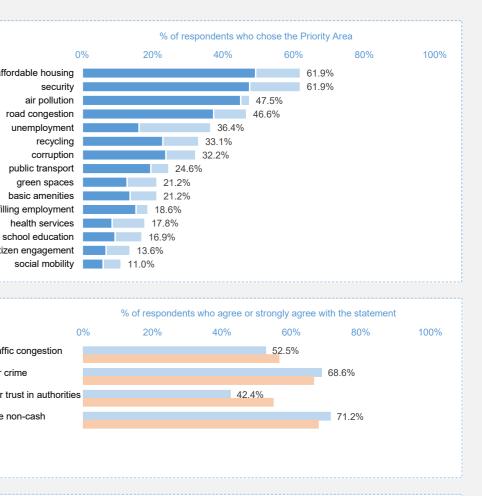
ATTITUDES

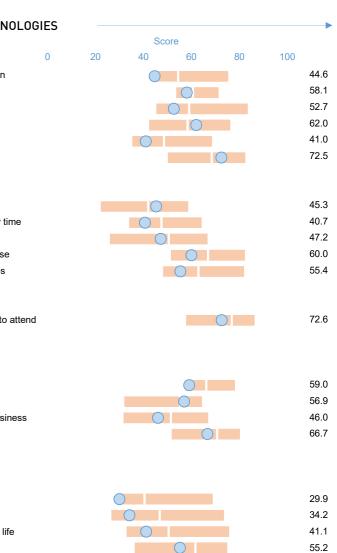
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

CCC					
			LEGEND: MIN	CITY MEAN GROUP MAX	
not in 2019	STRUCTURES	Score		•	TECHNOLO
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		43.4	Online reporting of city maintenance problems provid	les a speedy solution
	Recycling services are satisfactory		38.0	A website or App allows residents to easily give away	y unwanted items
FACTOR	Public safety is not a problem		35.7	Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem		21.5	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory		66.4	A website or App allows residents to effectively moni	tor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	34.0	Arranging medical appointments online has improved	d access
CCC					
	Mobility			Mobility	
	Traffic congestion is not a problem		22.6	······································	
STRUCTURES	Public transport is satisfactory		55.1	Apps that direct you to an available parking space ha	ave reduced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has made public to	-
B				The city provides information on traffic congestion the	rough mobile phones
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		59.5		has made it easier to attend
TECHNOLOOIES	Cultural activities (shows, bars, and museums) are satisfactory			Online purchasing of lickets to shows and museums	
	Outural activities (shows, bars, and museums) are satisfactory		00.0		
	Opportunities (Work & School)			Opportunities (Work & School)	
	Employment finding services are readily available		54.9	Online access to job listings has made it easier to fin	d work
GROUP	Most children have access to a good school		51.4	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		49.9	Online services provided by the city has made it easi	er to start a new business
9	Businesses are creating new jobs		44.1	The current internet speed and reliability meet conne	ctivity needs
∠	Minorities feel welcome	\bigcirc	46.8		
	Governance			Governance	
	Information on local government decisions are easily accessible	\bigcirc	47.0	Online public access to city finances has reduced con	rruption
	Corruption of city officials is not an issue of concern		37.3	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government		32.3	An online platform where residents can propose idea	s has improved city life
from AAA to D	Residents provide feedback on local government projects		38.8	Processing Identification Documents online has redu	ced waiting times

0%

0%





Medan



BACKGROUND INFORMATION



(UN World Cities Report)

SMART CITY RATING

CC in 2019

FACTOR RATINGS

STRUCTURES

TECHNOLOGIES

GROUP

All ratings range from AAA to D



Country HDI	2015 0.696	2016 0.700	2017 0.704	2018 0.707	1 yr change +0.003
Life expectancy at Birth	70.8	71.0	71.3	71.5	+0.2
Expected years of schooling	12.8	12.9	12.9	12.9	+0.0
Mean years of schooling	7.9	8.0	8.0	8.0	+0.0
GNI per capita (PPP \$)	10,029	10,419	10,811	11,256	+445.0

PRIORITY AREAS

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

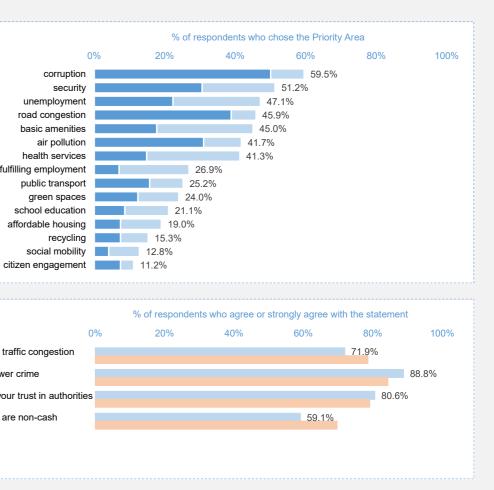
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% corruption security unemployment road congestion basic amenities air pollution health services fulfilling employment public transport green spaces school education affordable housing

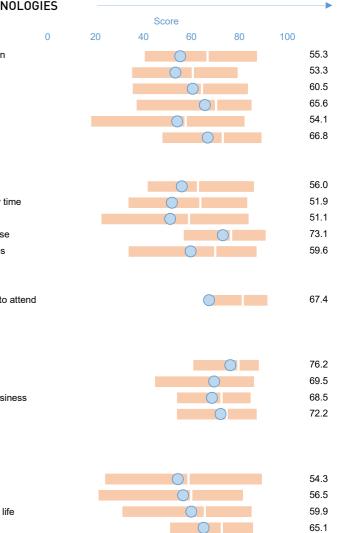
0%

ATTITUDES

STRUCTURES				TECHNOLO
STRUCTURES	Score			TECHNOLO
Health & Safety 0	20 40 60	80 100	Health & Safety	
Basic sanitation meets the needs of the poorest areas		57.2		nce problems provides a speedy solution
Recycling services are satisfactory		51.7	A website or App allows residents	s to easily give away unwanted items
Public safety is not a problem		50.6	Free public wifi has improved acc	ess to city services
Air pollution is not a problem		34.4	CCTV cameras has made residen	its feel safer
Medical services provision is satisfactory		61.3	A website or App allows residents	s to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem		61.2	Arranging medical appointments of	online has improved access
Mobility			Mobility	
Traffic congestion is not a problem		29.6	Car-sharing Apps have reduced c	ongestion
Public transport is satisfactory		54.1	Apps that direct you to an availab	le parking space have reduced journey time
			Bicycle hiring has reduced conges	stion
			Online scheduling and ticket sales	s has made public transport easier to use
			The city provides information on the	raffic congestion through mobile phones
Activities			Activities	
Green spaces are satisfactory		57.7	Online purchasing of tickets to she	ows and museums has made it easier to atten
Cultural activities (shows, bars, and museums) are satisfactory	\bigcirc	62.1		
Opportunities (Work & School)			Opportunities (Work & Scl	hool)
Employment finding services are readily available		55.8	Online access to job listings has n	
Most children have access to a good school		62.2		
Lifelong learning opportunities are provided by local institutions		54.0	Online services provided by the ci	ity has made it easier to start a new business
Businesses are creating new jobs		76.6	The current internet speed and re	liability meet connectivity needs
Minorities feel welcome	C	69.3		
Governance			Governance	
Information on local government decisions are easily accessible		59.9	Online public access to city finance	es has reduced corruption
Corruption of city officials is not an issue of concern		25.3	Online voting has increased partic	cipation
Residents contribute to decision making of local government		56.1	An online platform where resident	ts can propose ideas has improved city life
Residents provide feedback on local government projects		57.9	Processing Identification Docume	nts online has reduced waiting times



LOGIES



Medellin



SMART

BACKGROUND INFORMATION

City Population 3,911,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.753	0.759	0.760	0.761	+0.001
Life expectancy at Birth	76.5	76.7	76.9	77.1	+0.2
Expected years of schooling	14.4	14.6	14.6	14.6	+0.0
Mean years of schooling	8.1	8.3	8.3	8.3	+0.0
GNI per capita (PPP \$)	12,951	13,087	12,963	12,896	-67.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

air pollution security health services affordable housing corruption fulfilling employment unemployment road congestion basic amenities social mobility public transport school education 14.4%

0%

0%

ATTITUDES

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

-					
•		Γ	LEGEND: MIN	CITY MEAN GROUP MAX	
	STRUCTURES		•	•	TECHNOLO
		Score			120111020
_	Health & Safety 0	20 40 60 8	30 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		54.2	Online reporting of city maintenance	e problems provides a speedy solution
	Recycling services are satisfactory		67.0	A website or App allows residents t	o easily give away unwanted items
र	Public safety is not a problem		34.6	Free public wifi has improved acces	ss to city services
S	Air pollution is not a problem		24.5	CCTV cameras has made residents	s feel safer
5	Medical services provision is satisfactory		51.3	A website or App allows residents t	o effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		32.2	Arranging medical appointments on	line has improved access
	Mobility			Mobility	
	Traffic congestion is not a problem		26.2	Car-sharing Apps have reduced co	ngestion
ES	Public transport is satisfactory		67.3	Apps that direct you to an available	parking space have reduced journey time
				Bicycle hiring has reduced congesti	ion
				Online scheduling and ticket sales I	has made public transport easier to use
				The city provides information on tra	ffic congestion through mobile phones
	Activities			Activities	
IES	Green spaces are satisfactory		75.1	Online purchasing of tickets to show	ws and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		82.6		
-					0
	Opportunities (Work & School)		65.0	Opportunities (Work & Sch	
)	Employment finding services are readily available		60.0	Online access to job listings has ma	ade it easier to find work
	Most children have access to a good school		66.6	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		50.5		/ has made it easier to start a new business
	Businesses are creating new jobs Minorities feel welcome		45.2	The current internet speed and relia	ability meet connectivity needs
	Minonues leel welcome		45.2		
	Governance			Governance	
-	Information on local government decisions are easily accessible	\bigcirc	57.5	Online public access to city finance	•
	Corruption of city officials is not an issue of concern		28.1	Online voting has increased particip	
nge	Residents contribute to decision making of local government	\bigcirc	37.5	•	can propose ideas has improved city life
D	Residents provide feedback on local government projects	\bigcirc	48.9	Processing Identification Document	ts online has reduced waiting times

SMART CITY RATING CCC C in 2019

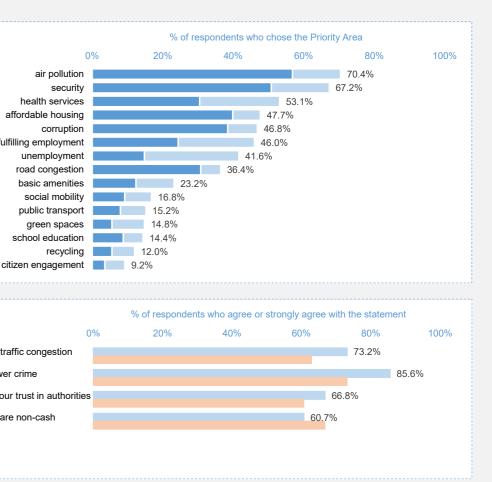
FACTOR RATINGS CCC STRUCTURES

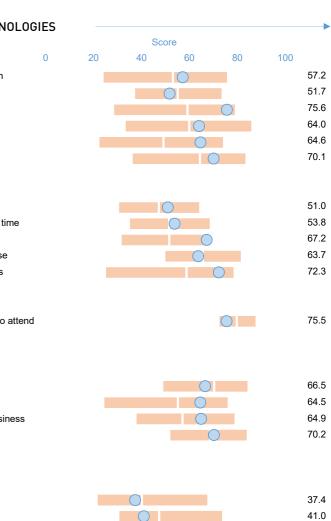
B TECHNOLOGIES

GROUP

3

All ratings range from AAA to D





50.3

Melbourne



SMART

CITY

RATING

BACKGROUND INFORMATION

City Population

4,203,000 (UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.933	0.935	0.937	0.938	+0.001
Life expectancy at Birth	82.8	83.0	83.1	83.3	+0.2
Expected years of schooling	23.3	22.9	22.1	22.1	+0.0
Mean years of schooling	12.5	12.6	12.7	12.7	+0.0
GNI per capita (PPP \$)	43,246	43,653	43,756	44,097	+341.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion security health services unemployment public transport fulfilling employment school education recycling air pollution corruption basic amenities 14.0%

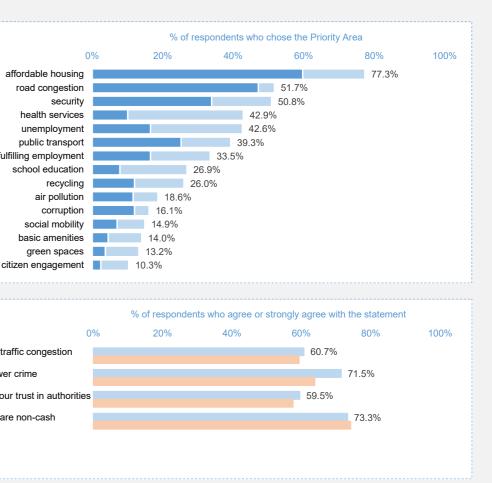
ATTITUDES

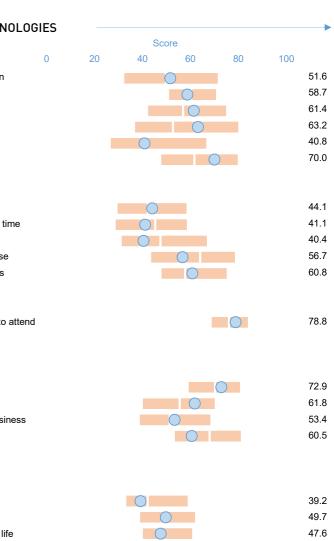
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

Δ					
			LEGEND: MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES			•	TECHNOLOG
		Score			
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		70.7	Online reporting of city maintenance p	roblems provides a speedy solution
	Recycling services are satisfactory		60.3	A website or App allows residents to e	asily give away unwanted items
FACTOR	Public safety is not a problem		41.5	Free public wifi has improved access t	o city services
RATINGS	Air pollution is not a problem		51.3	CCTV cameras has made residents fe	el safer
	Medical services provision is satisfactory		70.1	A website or App allows residents to e	ffectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		33.2	Arranging medical appointments online	e has improved access
Λ					
A	Mobility			Mobility	
	Traffic congestion is not a problem		23.8	Car-sharing Apps have reduced conge	estion
STRUCTURES	Public transport is satisfactory		47.3	Apps that direct you to an available pa	arking space have reduced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has	made public transport easier to use
BBB				The city provides information on traffic	congestion through mobile phones
DDD					
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		73.3	Online purchasing of tickets to shows	and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		78.7		
	Opportunities (Work & School)			Opportunities (Work & School	
GROUP	Employment finding services are readily available		64.7	Online access to job listings has made	it easier to find work
oncon	Most children have access to a good school		75.1	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		68.0		as made it easier to start a new business
1	Businesses are creating new jobs		57.6	The current internet speed and reliabili	ity meet connectivity needs
	Minorities feel welcome		58.5		
	Governance			Governance	
	Information on local government decisions are easily accessible		58.9	Online public access to city finances h	as reduced corruption
	Corruption of city officials is not an issue of concern		44.1	Online voting has increased participati	•
All ratings range	Residents contribute to decision making of local government		49.7	An online platform where residents car	
from AAA to D	Residents provide feedback on local government projects		59.9	Processing Identification Documents o	
	. testerite provide recebuck on recut government projecte		00.0	r recouring isonanioation bootherits o	

0%

0%





75

Mexico City



SMART

CITY

RATING

CC

CC in 2019

FACTOR

RATINGS

CC

STRUCTURES

CC

TECHNOLOGIES

GROUP

3

All ratings range from AAA to D

BACKGROUND INFORMATION





Population 20,999,000

(UN World Cities Report)



2015	2016	2017	2018	1 yr change
0.759	0.764	0.765	0.767	+0.002
74.9	74.9	74.9	75.0	+0.1
13.7	14.1	14.1	14.3	+0.2
8.6	8.6	8.6	8.6	+0.0
17,074	17,344	17,533	17,628	+95.0
	74.9 13.7 8.6	0.7590.76474.974.913.714.18.68.6	0.7590.7640.76574.974.974.913.714.114.18.68.68.6	0.7590.7640.7650.76774.974.974.975.013.714.114.114.38.68.68.68.6

PRIORITY ARE

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

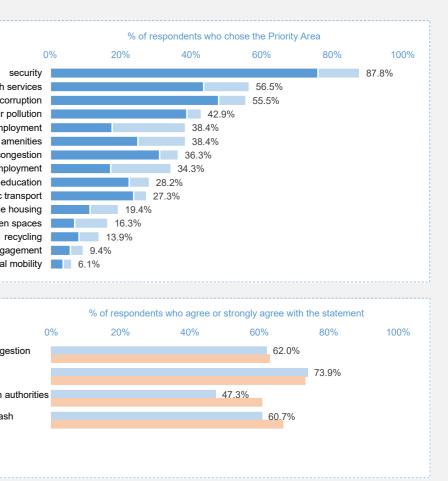
0% security health services corruption air pollution unemployment basic amenities road congestion fulfilling employment school education public transport affordable housing green spaces citizen engagement 9.4% social mobility 6.1%

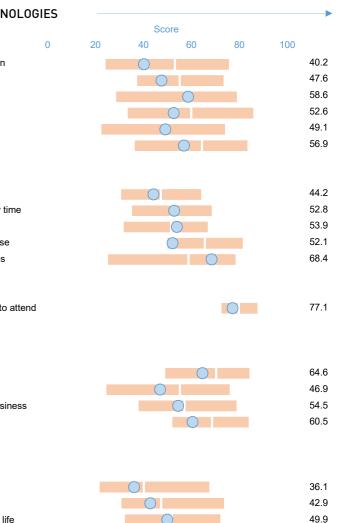
0%

ATTITUDES

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

STRUCTURES		•	
	Score		
Health & Safety 0	20 40 60 8	30 100	Health & Safety
Basic sanitation meets the needs of the poorest areas	\bigcirc	35.7	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory		38.9	A website or App allows residents to easily give away unwanted items
Public safety is not a problem	0	19.1	Free public wifi has improved access to city services
Air pollution is not a problem	\bigcirc	20.3	CCTV cameras has made residents feel safer
Medical services provision is satisfactory	\bigcirc	38.3	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	0	34.5	Arranging medical appointments online has improved access
Mobility			Mobility
Traffic congestion is not a problem	\bigcirc	18.9	Car-sharing Apps have reduced congestion
Public transport is satisfactory		27.9	Apps that direct you to an available parking space have reduced journey time
			Bicycle hiring has reduced congestion
			Online scheduling and ticket sales has made public transport easier to use
			The city provides information on traffic congestion through mobile phones
Activities			Activities
Green spaces are satisfactory		56.9	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory		69.6	
Opportunities (Work & School)			Opportunities (Work & School)
Employment finding services are readily available	\bigcirc	58.9	Online access to job listings has made it easier to find work
Most children have access to a good school		32.9	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions		44.0	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs		48.7	The current internet speed and reliability meet connectivity needs
Minorities feel welcome		36.4	
Governance			Governance
Information on local government decisions are easily accessible	\bigcirc	49.0	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern		19.0	Online voting has increased participation
Residents contribute to decision making of local government		32.9	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects		39.7	Processing Identification Documents online has reduced waiting times





Milan



SMART

CITY

RATING

CCC

BBB in 2019

FACTOR

RATINGS

CCC

STRUCTURES

CCC

TECHNOLOGIES

GROUP

3

BACKGROUND INFORMATION



Residents provide feedback on local government projects

Population 3,099,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.875	0.878	0.881	0.883	+0.002
Life expectancy at Birth	82.8	83.0	83.2	83.4	+0.2
Expected years of schooling	16.3	16.2	16.2	16.2	+0.0
Mean years of schooling	10.1	10.2	10.2	10.2	+0.0
GNI per capita (PPP \$)	34,105	34,818	35,573	36,141	+568.0

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention. air pollution unemployment security road congestion affordable housing fulfilling employment corruption public transport green spaces social mobility recycling basic amenities citizen engagement school education health services 11.8%

0%

0%

ATTITUDES

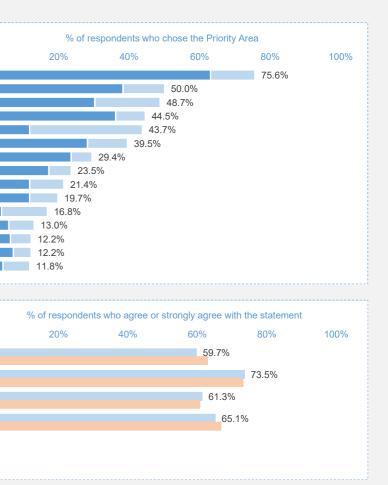
46.2

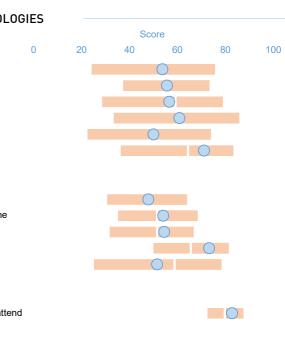
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

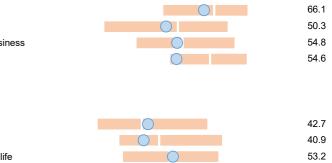
Processing Identification Documents online has reduced waiting times

				TECHNOLOGI
STRUCTURES	Score			
Health & Safety 0	20 40 60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas			62.5	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			81.2	A website or App allows residents to easily give away unwanted items
Public safety is not a problem	\bigcirc		47.8	Free public wifi has improved access to city services
Air pollution is not a problem			24.9	CCTV cameras has made residents feel safer
Medical services provision is satisfactory		-	64.6	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	Ŏ		63.7	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			23.8	Car-sharing Apps have reduced congestion
Public transport is satisfactory			59.0	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory	\bigcirc		59.7	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory		\bigcirc	81.0	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			37.6	Online access to job listings has made it easier to find work
Most children have access to a good school			65.3	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			59.2	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs			42.7	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			45.5	
Governance				Governance
Information on local government decisions are easily accessible			57.4	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			38.3	Online voting has increased participation
Residents contribute to decision making of local government			35.4	An online platform where residents can propose ideas has improved city life

All ratings range from AAA to D







53.7 55.7

56.6 60.8

50.0 71.1

47.8

54.1

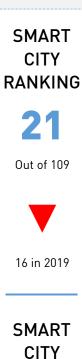
54.5

73.2

51.5

82.8

Montreal



RATING

BACKGROUND INFORMATION



3,981,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.920	0.921	0.922	+0.001
Life expectancy at Birth	82.0	82.1	82.2	82.3	+0.1
Expected years of schooling	16.0	16.1	16.1	16.1	+0.0
Mean years of schooling	13.2	13.3	13.3	13.3	+0.0
GNI per capita (PPP \$)	42,567	42,691	43,496	43,602	+106.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion health services public transport air pollution corruption school education unemployment green spaces security recycling basic amenities

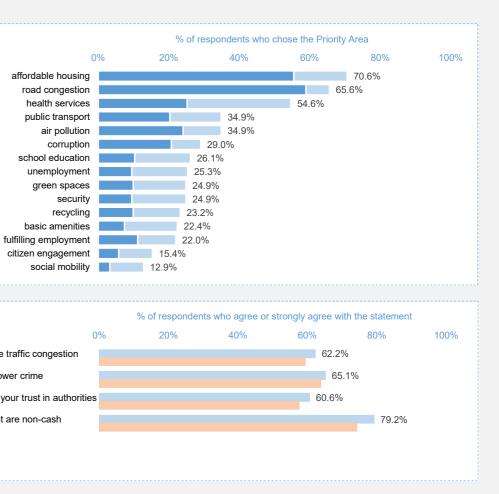
ATTITUDES

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

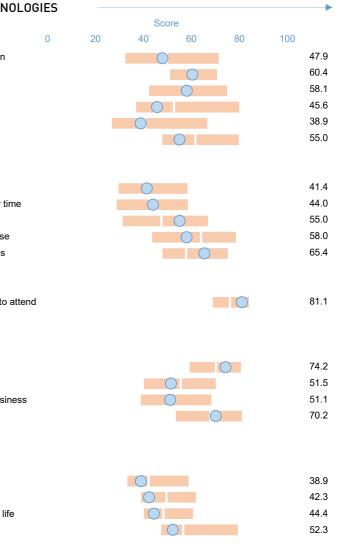
A			LEGEND: MIN	CITY MEAN GROUP MAX	
A in 2019	STRUCTURES				TECHNOLO
		Score			
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		66.9	Online reporting of city	maintenance problems provides a speedy solution
FAOTOD	Recycling services are satisfactory		70.6	A website or App allows	residents to easily give away unwanted items
FACTOR	Public safety is not a problem		64.6	Free public wifi has imp	roved access to city services
RATINGS	Air pollution is not a problem	\bigcirc	47.5	CCTV cameras has ma	de residents feel safer
	Medical services provision is satisfactory		55.6	A website or App allows	residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	32.1	Arranging medical appo	intments online has improved access
A	Mobility			Mobility	
	Traffic congestion is not a problem		18.9	Car-sharing Apps have	C C
STRUCTURES	Public transport is satisfactory		56.1		an available parking space have reduced journey time
				Bicycle hiring has reduc	
				•	icket sales has made public transport easier to use
BBB				I ne city provides inform	nation on traffic congestion through mobile phones
	A satisfation				
TECHNOLOGIES	Activities Green spaces are satisfactory		71.3	Activities	kets to shows and museums has made it easier to atter
TECHNOLOGIES	Cultural activities (shows, bars, and museums) are satisfactory		83.5	Online purchasing of tic	kets to shows and museums has made it easier to alter
	Cultural activities (shows, bars, and museums) are satisfactory		05.5		
	Opportunities (Work & School)			Opportunities (Wo	rk & School)
	Employment finding services are readily available		69.9		ings has made it easier to find work
GROUP	Most children have access to a good school		71.6	IT skills are taught well	•
	Lifelong learning opportunities are provided by local institutions		68.8	•	d by the city has made it easier to start a new business
	Businesses are creating new jobs		65.6		eed and reliability meet connectivity needs
	Minorities feel welcome		65.4	-	
-					
	Governance			Governance	
	Information on local government decisions are easily accessible		64.8	Online public access to	city finances has reduced corruption
	Corruption of city officials is not an issue of concern		39.2	Online voting has increa	ased participation
All ratings range	Residents contribute to decision making of local government		47.4	An online platform when	e residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		59.2	Processing Identification	n Documents online has reduced waiting times

0%

0%







Moscow



SMART

CITY

RATING

B

BACKGROUND INFORMATION





(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change	
HDI	0.813	0.817	0.822	0.824	+0.002	
Life expectancy at Birth	71.5	71.8	72.1	72.4	+0.3	
Expected years of schooling	15.4	15.5	15.5	15.5	+0.0	
Mean years of schooling	11.8	11.8	12.0	12.0	+0.0	
GNI per capita (PPP \$)	24,032	24,096	24,472	25,036	+564.0	
Life expectancy at Birth Expected years of schooling Mean years of schooling	71.5 15.4 11.8	71.8 15.5 11.8	72.1 15.5 12.0	72.4 15.5 12.0	+0.3 +0.0 +0.0	

PRIORITY AREAS	
----------------	--

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

road congestion affordable housing corruption air pollution security fulfilling employment recycling health services unemployment basic amenities school education 14.6% green spaces 12.9% social mobility 12.9% public transport 11.7% citizen engagement 11.3%

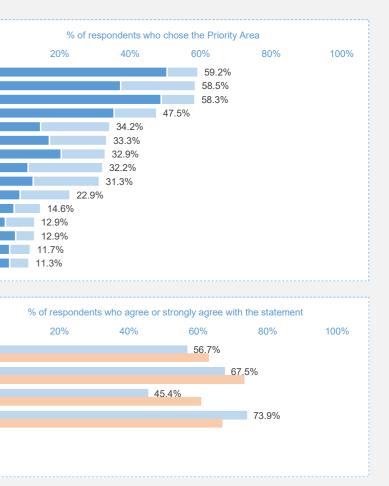
ATTITUDES

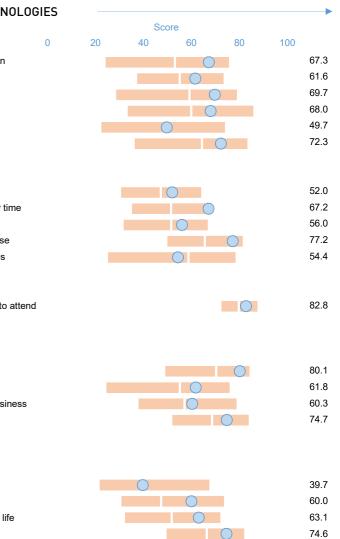
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

D			LEGEND: MIN	CITY MEAN	GROUP MAX
CCC in 2019	STRUCTURES			→	TECHNOLOG
		Score			
	Health & Safety 0	20 40 60 8	80 100		& Safety
	Basic sanitation meets the needs of the poorest areas				porting of city maintenance problems provides a speedy solution
FACTOR	Recycling services are satisfactory				or App allows residents to easily give away unwanted items
	Public safety is not a problem				ic wifi has improved access to city services
RATINGS	Air pollution is not a problem				neras has made residents feel safer
	Medical services provision is satisfactory				or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			39.8 Arranging	medical appointments online has improved access
CCC					
	Mobility			Mobility	
	Traffic congestion is not a problem	\bigcirc			ng Apps have reduced congestion
STRUCTURES	Public transport is satisfactory				direct you to an available parking space have reduced journey time
					ring has reduced congestion
					heduling and ticket sales has made public transport easier to use
B				The city p	rovides information on traffic congestion through mobile phones
	Activities			Activitie	
TECHNOLOGIES	Green spaces are satisfactory				rchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		_	81.0	
	Opportunities (Work & School)			Opport	unities (Work & School)
GROUP	Employment finding services are readily available			68.3 Online ac	cess to job listings has made it easier to find work
GROUP	Most children have access to a good school			61.8 IT skills a	re taught well in schools
	Lifelong learning opportunities are provided by local institutions			65.9 Online se	rvices provided by the city has made it easier to start a new business
2	Businesses are creating new jobs			54.1 The curre	nt internet speed and reliability meet connectivity needs
3	Minorities feel welcome			50.1	
	Governance			Govern	ance
	Information on local government decisions are easily accessible				blic access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern				ting has increased participation
All ratings range	Residents contribute to decision making of local government				platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects				g Identification Documents online has reduced waiting times
	· ····· ······························				J

0%

0%





Mumbai



BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.627	0.637	0.643	0.647	+0.004
Life expectancy at Birth	68.6	68.9	69.2	69.4	+0.2
Expected years of schooling	12.0	12.3	12.3	12.3	+0.0
Mean years of schooling	6.2	6.4	6.5	6.5	+0.0
GNI per capita (PPP \$)	5,674	6,075	6,446	6,829	+383.0

PRIORITY AREAS	
----------------	--

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

air pollution road congestion affordable housing corruption basic amenities green spaces health services unemployment fulfilling employment security public transport school education citizen engagement 10.8% social mobility 9.5%

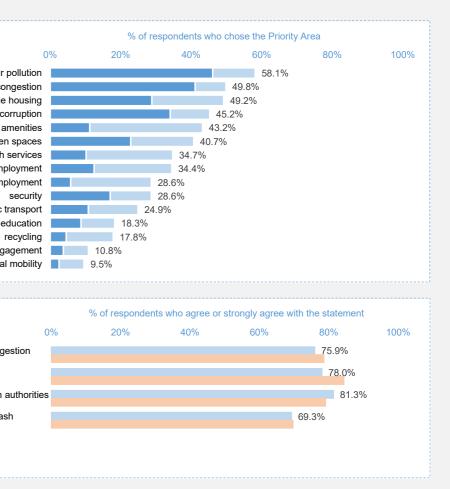
ATTITUDES

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

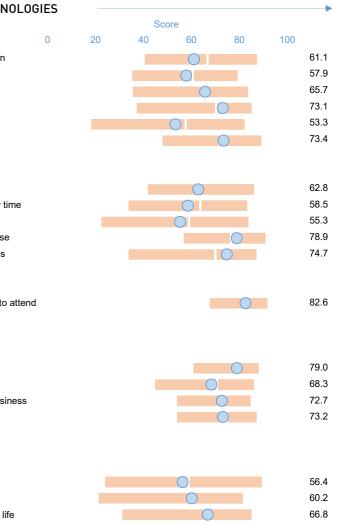
L L			LEGEND: MIN	
CC in 2019	STRUCTURES		LEGEND: MIN	CITY MEAN GROUP MAX
		Score		
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		65.2	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		65.4	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		46.3	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		28.2	CCTV cameras has made residents feel safer
10.11100	Medical services provision is satisfactory		69.2	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		44.6	Arranging medical appointments online has improved access
	Mobility			Mobility
	Traffic congestion is not a problem		25.0	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		64.5	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory	\bigcirc	53.3	Online purchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		72.7	
	Opportunities (Work & School)			Opportunities (Work & School)
	Employment finding services are readily available		67.7	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		65.8	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		63.1	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		72.6	The current internet speed and reliability meet connectivity needs
4	Minorities feel welcome		67.9	
	Governance			Governance
	Information on local government decisions are easily accessible		67.6	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		35.0	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		57.3	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		60.3	Processing Identification Documents online has reduced waiting times

0%

0%







Munich



SMART

CITY

RATING

Д

BACKGROUND INFORMATION





(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.933	0.936	0.938	0.939	+0.001
Life expectancy at Birth	80.8	80.9	81.0	81.2	+0.2
Expected years of schooling	17.0	17.1	17.1	17.1	+0.0
Mean years of schooling	14.1	14.1	14.1	14.1	+0.0
GNI per capita (PPP \$)	45,012	45,577	46,438	46,946	+508.0

PRIORITY	AREAS
----------	-------

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

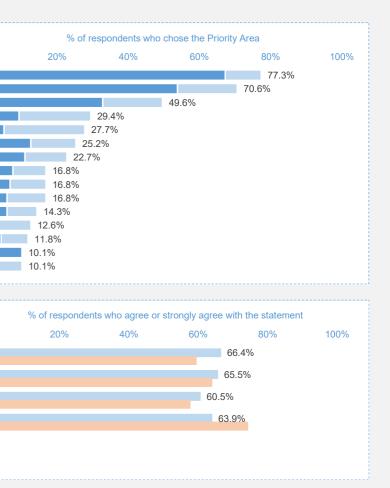
-20% 0% affordable housing road congestion air pollution public transport recycling security unemployment green spaces 16.8% social mobility 16.8% fulfilling employment 16.8% citizen engagement 14.3% basic amenities 12.6% school education 11.8% corruption 10.1% health services 10.1%

0%

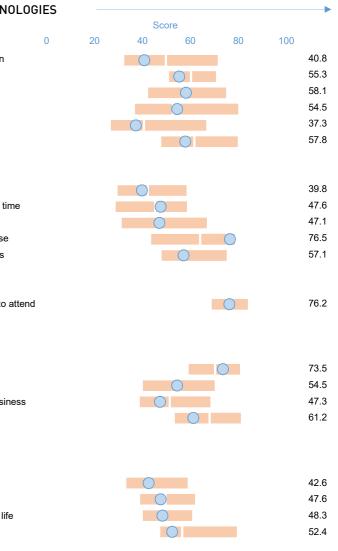
ATTITUDES

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

A			LEGEND: MIN	CITY MEAN GROUP MAX
not in 2019	STRUCTURES			TECHNOLO
		Score		
	Health & Safety ⁰	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		73.1	Online reporting of city maintenance problems provides a speedy solution
FLOTOD	Recycling services are satisfactory		76.8	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		68.5	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		47.5	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		81.8	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		21.6	Arranging medical appointments online has improved access
ΔΔ	Mobility			Mobility
	Traffic congestion is not a problem		30.1	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		66.4	Apps that direct you to an available parking space have reduced journey time
Unicoroneo				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
DDD				The city provides information on traffic congestion through mobile phones
BBB				
	Activities		_	Activities
TECHNOLOGIES	Green spaces are satisfactory		78.2	Online purchasing of tickets to shows and museums has made it easier to atter
	Cultural activities (shows, bars, and museums) are satisfactory		81.9	
	Opportunities (Work & School)			Opportunities (Work & School)
CDOUD	Employment finding services are readily available		63.4	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		73.0	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		67.1	Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs		69.7	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		61.1	
	Governance			Governance
	Information on local government decisions are easily accessible		62.7	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		64.8	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		54.6	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects	Ō	57.8	Processing Identification Documents online has reduced waiting times







81

Nairobi



D

BACKGROUND INFORMATION



Residents contribute to decision making of local government

Residents provide feedback on local government projects

3,915,000

(UN World Cities Report)

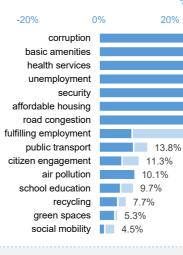


Country	2015	2016	2017	2018	1 yr change
HDI	0.562	0.568	0.574	0.579	+0.005
Life expectancy at Birth	64.8	65.4	65.9	66.3	+0.4
Expected years of schooling	10.9	11.0	11.1	11.1	+0.0
Mean years of schooling	6.3	6.4	6.5	6.6	+0.1
GNI per capita (PPP \$)	2,768	2,875	2,936	3,052	+116.0



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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.



0%

ATTITUDES

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

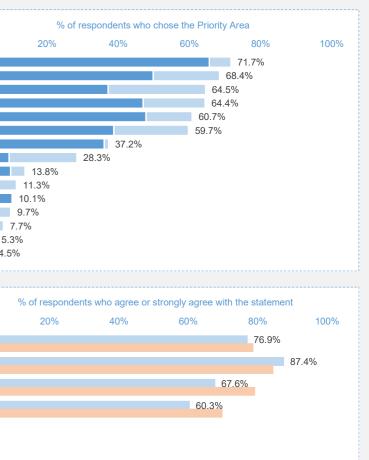
D						
			LEGEND: MIN C	TY MEAN GROUP MAX		
D in 2019	 STRUCTURES 	Score		TECHNOLOGIES	Score	
	Health & Safety 0	20 40 60	80 100	Health & Safety 0	20 40 60 80	100
	Basic sanitation meets the needs of the poorest areas		31.9	Online reporting of city maintenance problems provides a speedy solution		40.4
	Recycling services are satisfactory		34.3	A website or App allows residents to easily give away unwanted items		40.1
FACTOR	Public safety is not a problem		28.3	Free public wifi has improved access to city services		46.8
RATINGS	Air pollution is not a problem		20.6	CCTV cameras has made residents feel safer		59.9
NATINOS	Medical services provision is satisfactory		41.8	A website or App allows residents to effectively monitor air pollution		18.0
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		37.1	Arranging medical appointments online has improved access		51.9
U	Mobility			Mobility		
	Traffic congestion is not a problem	\bigcirc	11.1	Car-sharing Apps have reduced congestion		47.6
STRUCTURES	Public transport is satisfactory		38.9	Apps that direct you to an available parking space have reduced journey time		38.4
				Bicycle hiring has reduced congestion		22.3
				Online scheduling and ticket sales has made public transport easier to use		58.5
				The city provides information on traffic congestion through mobile phones		40.6
U						
	Activities			Activities		
TECHNOLOGIES	Green spaces are satisfactory		46.6	Online purchasing of tickets to shows and museums has made it easier to attend		77.4
	Cultural activities (shows, bars, and museums) are satisfactory		74.7			
	Opportunities (Work & School)			Opportunities (Work & School)		
	Employment finding services are readily available		32.8	Online access to job listings has made it easier to find work		68.6
GROUP	Most children have access to a good school		39.4	IT skills are taught well in schools		58.2
	Lifelong learning opportunities are provided by local institutions		48.9	Online services provided by the city has made it easier to start a new business		61.0
	Businesses are creating new jobs		63.3	The current internet speed and reliability meet connectivity needs		66.5
4	Minorities feel welcome	\bigcirc	47.6			
	Governance			Governance		
	Information on local government decisions are easily accessible		49.7	Online public access to city finances has reduced corruption	\bigcirc	27.3
	Corruption of city officials is not an issue of concern		10.2	Online voting has increased participation		27.3

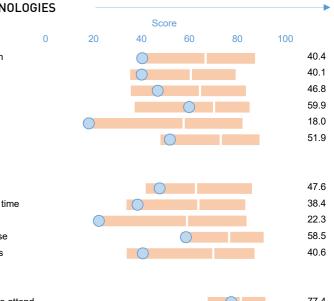
23.9

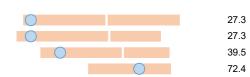
40.1

 \bigcirc

All ratings range from AAA to D







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

Processing Identification Documents online has reduced waiting times

Nanjing



BACKGROUND INFORMATION

City Population

7,369,000

(UN World Cities Report)

SMART CITY RATING CCC B in 2019

FACTOR RATINGS CCC STRUCTURES

CCC **TECHNOLOGIES**

GROUP

All ratings range from AAA to D



2015	2016	2017	2018	1 yr change
0.742	0.749	0.753	0.758	+0.005
75.9	76.2	76.5	76.7	+0.2
13.8	13.9	13.9	13.9	+0.0
7.7	7.8	7.8	7.9	+0.1
13,485	14,311	15,212	16,127	+915.0
	0.742 75.9 13.8 7.7	0.7420.74975.976.213.813.97.77.8	0.7420.7490.75375.976.276.513.813.913.97.77.87.8	0.7420.7490.7530.75875.976.276.576.713.813.913.913.97.77.87.87.9

PRIORITY AREAS

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

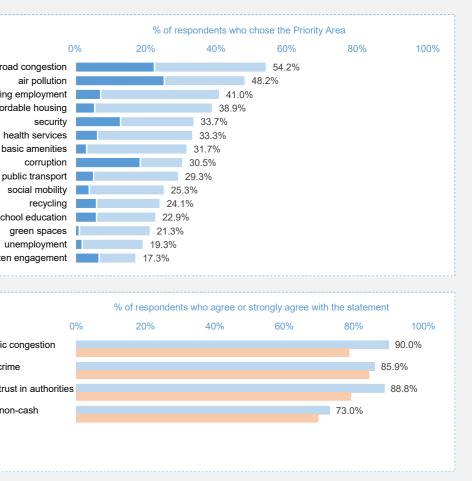
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% road congestion air pollution fulfilling employment affordable housing security health services basic amenities corruption public transport social mobility recycling school education green spaces citizen engagement 17.3%

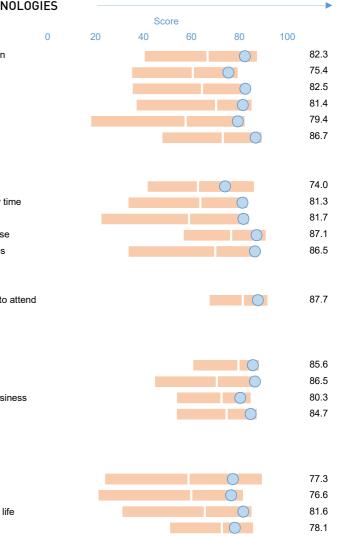
0%

ATTITUDES

STRUCTURES						TECHNOL	LOGI
		Sco	ore				
Health & Safety 0	20	40	60	80	100	Health & Safety	(
Basic sanitation meets the needs of the poorest areas				\bigcirc	84.7	Online reporting of city maintenance problems provides a speedy solution	
Recycling services are satisfactory					73.2	A website or App allows residents to easily give away unwanted items	
Public safety is not a problem					70.5	Free public wifi has improved access to city services	
Air pollution is not a problem			\bigcirc		55.8	CCTV cameras has made residents feel safer	
Medical services provision is satisfactory				\bigcirc	78.0	A website or App allows residents to effectively monitor air pollution	
Finding housing with rent equal to 30% or less of a monthly salary is not a problem				\bigcirc	74.5	Arranging medical appointments online has improved access	
Mobility						Mobility	
Traffic congestion is not a problem			\bigcirc		61.8	Car-sharing Apps have reduced congestion	
Public transport is satisfactory				\bigcirc	77.1	Apps that direct you to an available parking space have reduced journey time	е
						Bicycle hiring has reduced congestion	
						Online scheduling and ticket sales has made public transport easier to use	
						The city provides information on traffic congestion through mobile phones	
Activities						Activities	
Green spaces are satisfactory				\bigcirc	82.6	Online purchasing of tickets to shows and museums has made it easier to att	tend
Cultural activities (shows, bars, and museums) are satisfactory				\bigcirc	80.7		
Opportunities (Work & School)						Opportunities (Work & School)	
Employment finding services are readily available				\bigcirc	81.8	Online access to job listings has made it easier to find work	
Most children have access to a good school				\bigcirc	76.1	IT skills are taught well in schools	
Lifelong learning opportunities are provided by local institutions				\bigcirc	74.7	Online services provided by the city has made it easier to start a new busines	SS
Businesses are creating new jobs				\bigcirc	76.4	The current internet speed and reliability meet connectivity needs	
Minorities feel welcome				\bigcirc	78.4		
Governance						Governance	
Information on local government decisions are easily accessible				\bigcirc	79.1	Online public access to city finances has reduced corruption	
Corruption of city officials is not an issue of concern			\bigcirc		61.8	Online voting has increased participation	
Residents contribute to decision making of local government			\bigcirc		67.1	An online platform where residents can propose ideas has improved city life	
Residents provide feedback on local government projects					73.1	Processing Identification Documents online has reduced waiting times	







New Delhi



SMART

CITY

RATING

BACKGROUND INFORMATION





25,703,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.627	0.637	0.643	0.647	+0.004
Life expectancy at Birth	68.6	68.9	69.2	69.4	+0.2
Expected years of schooling	12.0	12.3	12.3	12.3	+0.0
Mean years of schooling	6.2	6.4	6.5	6.5	+0.0
GNI per capita (PPP \$)	5,674	6,075	6,446	6,829	+383.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

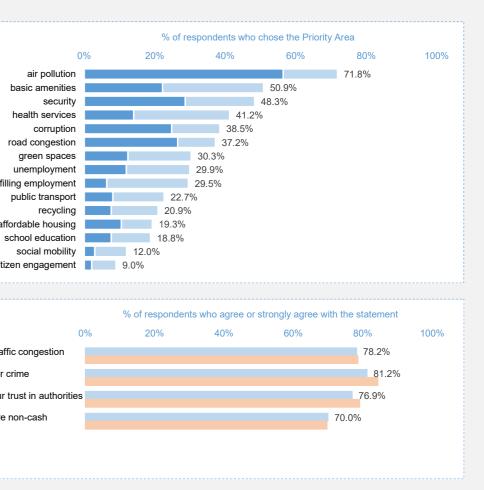
0% air pollution basic amenities security health services corruption road congestion green spaces unemployment fulfilling employment public transport recycling affordable housing social mobility 12.0% citizen engagement 9.0%

0%

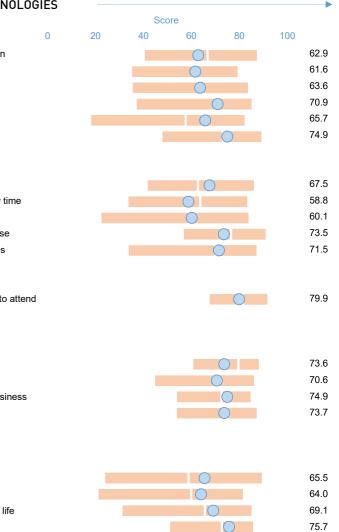
ATTITUDES

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

00								
				LEG	GEND: N	IIN	CITY MEAN GROUP MAX	
CCC in 2019	STRUCTURES		Score				TECH	INOLO
	Health & Safety 0	20	40 60	80	100		Health & Safety	
	Basic sanitation meets the needs of the poorest areas	1	\bigcirc			59.3	Online reporting of city maintenance problems provides a speedy solution	n
FLOTOR	Recycling services are satisfactory					58.5	A website or App allows residents to easily give away unwanted items	
FACTOR	Public safety is not a problem					46.4	Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem					27.4	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory			\bigcirc		67.5	A website or App allows residents to effectively monitor air pollution	
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		\bigcirc			55.0	Arranging medical appointments online has improved access	
^								
	Mobility						Mobility	
	Traffic congestion is not a problem		\bigcirc			34.6	Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory					64.0	Apps that direct you to an available parking space have reduced journey	y time
							Bicycle hiring has reduced congestion	
							Online scheduling and ticket sales has made public transport easier to u	ise
CC							The city provides information on traffic congestion through mobile phone	es
	Activities						Activities	
TECHNOLOGIES	Green spaces are satisfactory					65.4	Online purchasing of tickets to shows and museums has made it easier	to attend
	Cultural activities (shows, bars, and museums) are satisfactory					69.9		
	Opportunities (Work & School)						Opportunities (Work & School)	
GROUP	Employment finding services are readily available		(\bigcirc		66.8	Online access to job listings has made it easier to find work	
GROUP	Most children have access to a good school					64.0	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions					64.6	Online services provided by the city has made it easier to start a new bu	isiness
	Businesses are creating new jobs			\bigcirc		70.9	The current internet speed and reliability meet connectivity needs	
4	Minorities feel welcome			\bigcirc		67.4		
	Governance						Governance	
	Information on local government decisions are easily accessible			\bigcirc		71.7	Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern		\bigcirc			49.6		
All ratings range	Residents contribute to decision making of local government					64.7	An online platform where residents can propose ideas has improved city	/ life
from AAA to D	Residents provide feedback on local government projects)		63.5	Processing Identification Documents online has reduced waiting times	



OGIES



New York



SMART

CITY

RATING

BACKGROUND INFORMATION





18,593,000

(UN World Cities Report)



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

Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.919	0.919	0.920	+0.001
Life expectancy at Birth	78.9	78.9	78.9	78.9	+0.0
Expected years of schooling	16.2	16.3	16.3	16.3	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	54,039	54,443	55,351	56,140	+789.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing security health services air pollution public transport road congestion unemployment fulfilling employment school education corruption green spaces basic amenities citizen engagement 12.2%

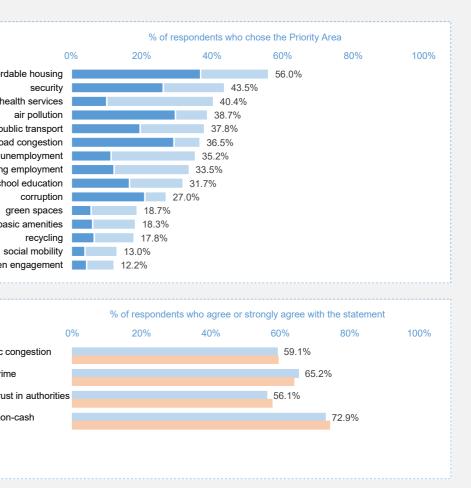
ATTITUDES

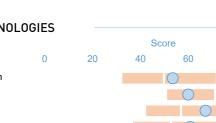
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

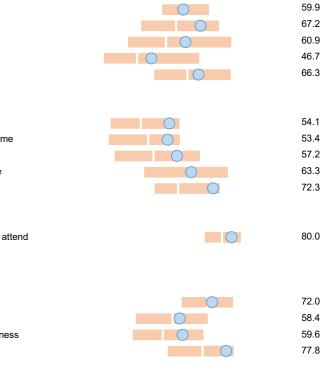
A					
			LEGEND: M		MEAN GROUP MAX
BBB in 2019	STRUCTURES				TECHNOL
	Health & Safety 0	Score 20 40 60	80 100		Health & Cofety
	Health & Safety 0 Basic sanitation meets the needs of the poorest areas	20 40 00	00 100	60.8	Health & Safety
	Recycling services are satisfactory			66.5	Online reporting of city maintenance problems provides a speedy solution
FACTOR	Public safety is not a problem			42.4	A website or App allows residents to easily give away unwanted items Free public wifi has improved access to city services
				32.5	CCTV cameras has made residents feel safer
RATINGS	Air pollution is not a problem Medical services provision is satisfactory			66.5	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			46.2	A website of App allows residents to enectively monitor all politition Arranging medical appointments online has improved access
	Finding housing with tent equal to 30% of less of a monthly salary is not a problem			40.2	Analiging medical appointments online has improved access
Δ	Mobility				Mobility
	Traffic congestion is not a problem			29.7	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		_	53.0	Apps that direct you to an available parking space have reduced journey time
STRUCTURES	Public transport is satisfactory			55.0	Bicycle hiring has reduced congestion
					Online scheduling and ticket sales has made public transport easier to use
					The city provides information on traffic congestion through mobile phones
ΔΔ					
	Activities				Activities
TECHNOLOGIES	Green spaces are satisfactory			65.4	Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory			78.6	
	Opportunities (Work & School)				Opportunities (Work & School)
000110	Employment finding services are readily available			68.5	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school			62.2	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions			64.3	Online services provided by the city has made it easier to start a new busines
	Businesses are creating new jobs			67.7	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome			62.4	
	Governance		_	<u></u>	Governance
	Information on local government decisions are easily accessible			69.2	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern			34.8	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government			55.8	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects			57.7	Processing Identification Documents online has reduced waiting times

0%

0%

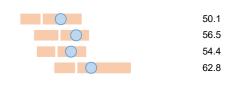






60

80



100

85

Newcastle

SMART CITY RANKING 23 Out of 109 N/A not in 2019

SMART

CITY

RATING

Д

BACKGROUND INFORMATION

City

Population 791,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.916	0.918	0.919	0.920	+0.001
Life expectancy at Birth	81.1	81.1	81.2	81.2	+0.0
Expected years of schooling	17.4	17.4	17.4	17.4	+0.0
Mean years of schooling	12.8	12.9	12.9	13.0	+0.1
GNI per capita (PPP \$)	38,116	38,421	39,216	39,507	+291.0

PRIORITY AREAS

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

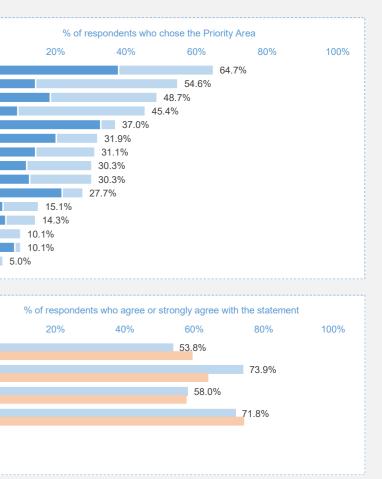
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

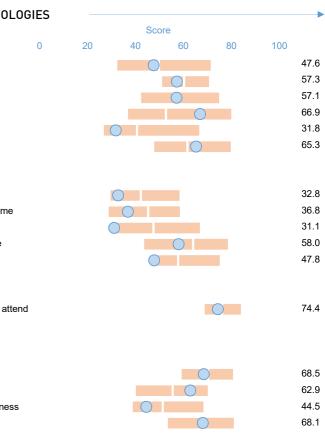
0% affordable housing unemployment fulfilling employment health services road congestion security public transport recycling school education air pollution social mobility 15.1% green spaces 14.3% citizen engagement 10.1% corruption 10.1% basic amenities 5.0%

0%

ATTITUDES

A			LEGEND: MI	N OCITY	MEAN GROUP MAX
not in 2019	STRUCTURES				TECHNOLO
		Score			
	Health & Safety 0	20 40 60	80 100		Health & Safety
	Basic sanitation meets the needs of the poorest areas			68.8	Online reporting of city maintenance problems provides a speedy solution
FAOTOD	Recycling services are satisfactory		\bigcirc	75.5	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem			56.3	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem			42.3	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		\bigcirc	78.4	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			45.5	Arranging medical appointments online has improved access
Δ	Marketta				Machilles.
	Mobility Traffic congestion is not a problem			32.9	Mobility Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		-	65.3	
SIRUCIURES	Public transport is satisfactory			05.5	Apps that direct you to an available parking space have reduced journey time
					Bicycle hiring has reduced congestion Online scheduling and ticket sales has made public transport easier to use
BBB					The city provides information on traffic congestion through mobile phones
	Activities				Activities
TECHNOLOGIES	Green spaces are satisfactory			66.2	Online purchasing of tickets to shows and museums has made it easier to atter
	Cultural activities (shows, bars, and museums) are satisfactory		\bigcirc	81.8	
	Opportunities (Work & School)				Opportunities (Work & School)
	Employment finding services are readily available			66.7	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school			70.6	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions			66.7	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs			57.6	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome			66.0	The current internet speed and reliability meet connectivity needs
•	Minorities reel welcome			00.0	
	Governance				Governance
	Information on local government decisions are easily accessible			63.6	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern			53.5	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government			46.1	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects			51.5	Processing Identification Documents online has reduced waiting times







Osaka



SMART

CITY

RATING

BACKGROUND INFORMATION

City Population

20,238,000

(UN World Cities Report)

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

Country	2015	2016	2017	2018	1 yr change	
HDI	0.906	0.910	0.913	0.915	+0.002	
Life expectancy at Birth	83.9	84.1	84.3	84.5	+0.2	
Expected years of schooling	15.2	15.2	15.2	15.2	+0.0	
Mean years of schooling	12.5	12.7	12.8	12.8	+0.0	
GNI per capita (PPP \$)	39,297	39,407	40,343	40,799	+456.0	

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

health services basic amenities security school education road congestion public transport affordable housing fulfilling employment green spaces citizen engagement unemployment corruption air pollution social mobility

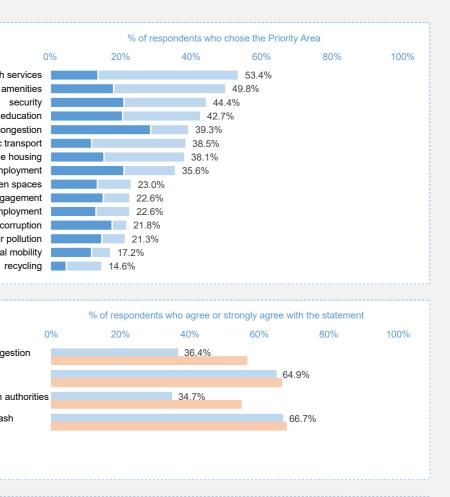
ATTITUDES

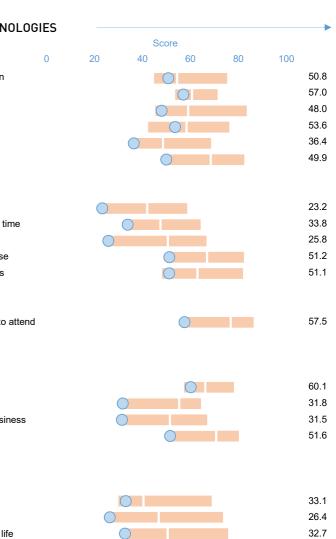
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

CCC	······································				
			LEGEND: MIN	CITY MEAN GROUP MAX	
B in 2019	STRUCTURES	Score		•	TECHNOLO
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		66.1	Online reporting of city maintenance p	problems provides a speedy solution
	Recycling services are satisfactory		60.7	A website or App allows residents to e	easily give away unwanted items
FACTOR	Public safety is not a problem		57.0	Free public wifi has improved access	to city services
RATINGS	Air pollution is not a problem		51.1	CCTV cameras has made residents for	eel safer
	Medical services provision is satisfactory		69.2	A website or App allows residents to e	effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		57.1	Arranging medical appointments onlin	e has improved access
B					
D	Mobility			Mobility	
	Traffic congestion is not a problem		36.1	Car-sharing Apps have reduced cong	estion
STRUCTURES	Public transport is satisfactory		68.8	Apps that direct you to an available pa	arking space have reduced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales ha	s made public transport easier to use
CCC				The city provides information on traffic	congestion through mobile phones
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		41.4	Online purchasing of tickets to shows	and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		55.2		
	Opportunities (Work & School)			Opportunities (Work & Schoo	50
	Employment finding services are readily available		52.1	Online access to job listings has made	
GROUP	Most children have access to a good school		50.8	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		54.6	Online services provided by the city h	as made it easier to start a new business
9	Businesses are creating new jobs		44.1	The current internet speed and reliabi	lity meet connectivity needs
Ζ	Minorities feel welcome		32.7		
	Governance			Governance	
	Information on local government decisions are easily accessible		51.0	Online public access to city finances h	nas reduced corruption
	Corruption of city officials is not an issue of concern		34.1	Online voting has increased participat	ion
All ratings range	Residents contribute to decision making of local government		45.8	An online platform where residents ca	an propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		41.6	Processing Identification Documents	online has reduced waiting times

0%

0%





 \bigcirc

Oslo



BACKGROUND INFORMATION



Population 986,000

(UN World Cities Report)



Country HDI	2015 0.948	2016 0.951	2017 0.953	2018 0.954	1 yr change +0.001
Life expectancy at Birth	81.9	82.0	82.1	82.3	+0.2
Expected years of schooling	17.8	18.0	18.1	18.1	+0.0
Mean years of schooling	12.5	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	66,584	66,746	67,529	68,059	+530.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

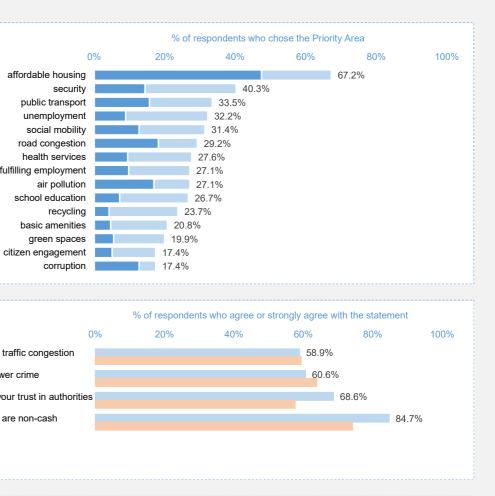
affordable housing security public transport unemployment social mobility road congestion health services fulfilling employment air pollution school education recycling basic amenities

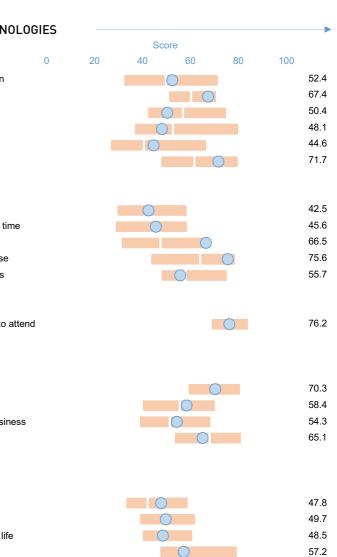
ATTITUDES

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

AA		L.		TY MEAN GROUP MAX
AA in 2019	STRUCTURES		•	TECHNOL
		Score		
	Health & Safety 0 20	40 60 80	100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		72.0	Online reporting of city maintenance problems provides a speedy solution
FAOTOD	Recycling services are satisfactory		79.7	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		72.1	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		60.7	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		76.2	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		35.5	Arranging medical appointments online has improved access
ΔΔΔ				
	Mobility			Mobility
	Traffic congestion is not a problem		49.6	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		67.4	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
Δ				The city provides information on traffic congestion through mobile phones
~	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		77.1	Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory		77.0	
	Opportunities (Work & School)			Opportunities (Work & School)
GROUP	Employment finding services are readily available		73.2	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		80.6	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		73.4	Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs		67.9	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		62.4	
	Governance			Governance
	Information on local government decisions are easily accessible		64.7	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		60.2	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		67.2	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		66.3	Processing Identification Documents online has reduced waiting times

0%





Paris



B

BACKGROUND INFORMATION



10,843,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.888	0.887	0.890	0.891	+0.001
Life expectancy at Birth	82.2	82.3	82.4	82.5	+0.1
Expected years of schooling	15.4	15.5	15.5	15.5	+0.0
Mean years of schooling	11.5	11.4	11.4	11.4	+0.0
GNI per capita (PPP \$)	38,668	38,926	39,935	40,511	+576.0

PRIORITY AREAS

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

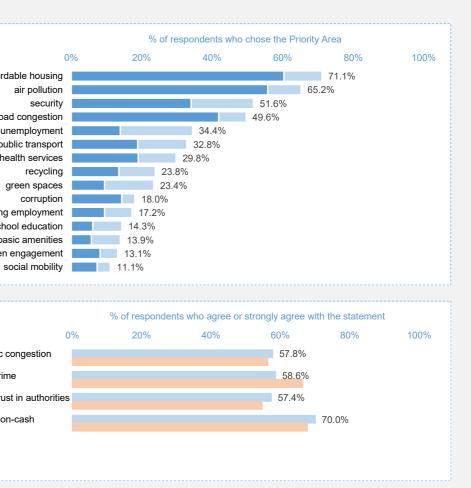
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% affordable housing air pollution security road congestion unemployment public transport health services recycling green spaces corruption fulfilling employment school education 14.3% basic amenities 13.9% citizen engagement 13.1%

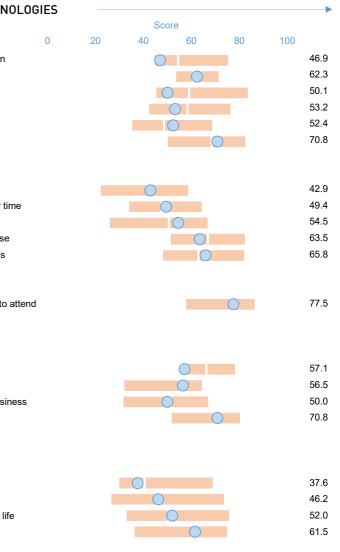
0%

ATTITUDES

D		LEGEND: MIN CITY MEAN GROUP MAX
BB in 2019	STRUCTURES	TECHNOLOG
	Score	
	Health & Safety 0 20 40 60	80 100 Health & Safety
	Basic sanitation meets the needs of the poorest areas	49.9 Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory	55.9 A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem	41.8 Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem	23.5 CCTV cameras has made residents feel safer
	Medical services provision is satisfactory	59.6 A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	26.0 Arranging medical appointments online has improved access
B		
D	Mobility	Mobility
	Traffic congestion is not a problem	26.0 Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory	55.5 Apps that direct you to an available parking space have reduced journey time
		Bicycle hiring has reduced congestion
		Online scheduling and ticket sales has made public transport easier to use
BB		The city provides information on traffic congestion through mobile phones
TECHNOLOGIES	Activities	Activities
TECHNOLOGIES	Green spaces are satisfactory	67.2 Online purchasing of tickets to shows and museums has made it easier to attend 77.3
	Cultural activities (shows, bars, and museums) are satisfactory	77.3
	Opportunities (Work & School)	Opportunities (Work & School)
	Employment finding services are readily available	59.8 Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school	59.4 IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions	60.2 Online services provided by the city has made it easier to start a new business
9	Businesses are creating new jobs	47.1 The current internet speed and reliability meet connectivity needs
_	Minorities feel welcome	38.1
	Governance	Governance
	Information on local government decisions are easily accessible	56.8 Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern	40.6 Online voting has increased participation
All ratings range	Residents contribute to decision making of local government	41.7 An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects	43.8 Processing Identification Documents online has reduced waiting times







Philadelphia



54 in 2019

SMART

CITY

RATING

BB

BACKGROUND INFORMATION

City Population

5,585,000 (UN World Cities Report)



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

ange
0.001
+0.0
+0.0
+0.0
789.0
+

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing security school education unemployment health services road congestion corruption fulfilling employment air pollution public transport recycling basic amenities citizen engagement 8.3%

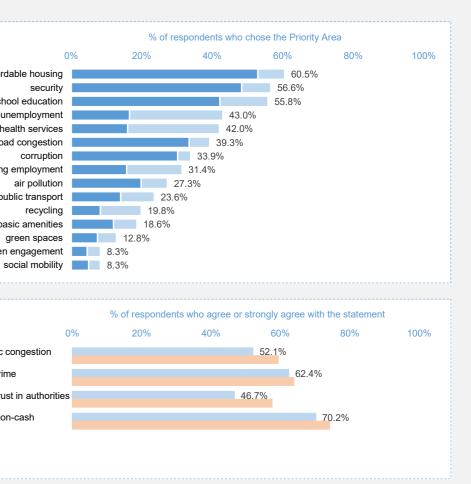
ATTITUDES

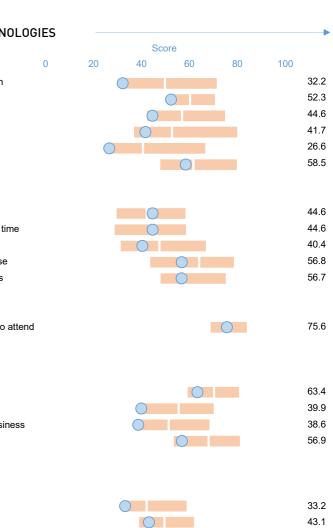
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

BB			LEGEND: MIN	CITY MEAN GROUP MAX	
BB in 2019	STRUCTURES		→	•	TECHNOLO
		Score			
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		42.1	Online reporting of city maintenance pro	oblems provides a speedy solution
FLOTOR	Recycling services are satisfactory		52.6	A website or App allows residents to ea	sily give away unwanted items
FACTOR	Public safety is not a problem		24.4	Free public wifi has improved access to	city services
RATINGS	Air pollution is not a problem		31.1	CCTV cameras has made residents fee	l safer
	Medical services provision is satisfactory		59.4	A website or App allows residents to eff	ectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		27.5	Arranging medical appointments online	has improved access
BB	Mobility			Mobility	
	Traffic congestion is not a problem		20.4	Car-sharing Apps have reduced conges	stion
STRUCTURES	Public transport is satisfactory		49.2	Apps that direct you to an available par	king space have reduced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has	made public transport easier to use
BB				The city provides information on traffic	congestion through mobile phones
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		54.4	Online purchasing of tickets to shows a	nd museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		77.8		
	Opportunities (Work & School)			Opportunities (Work & School)	
	Employment finding services are readily available		59.1	Online access to job listings has made	
GROUP	Most children have access to a good school		36.6	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		50.0	Online services provided by the city has	s made it easier to start a new business
	Businesses are creating new jobs		55.0	The current internet speed and reliabilit	
	Minorities feel welcome		52.3		
	Governance			Governance	
	Information on local government decisions are easily accessible		56.3	Online public access to city finances ha	s reduced corruption
	Corruption of city officials is not an issue of concern		32.6	Online voting has increased participatio	'n
All ratings range	Residents contribute to decision making of local government		43.1	An online platform where residents can	propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		53.2	Processing Identification Documents or	line has reduced waiting times

0%

0%





 \bigcirc

40.0

Phoenix



SMART

CITY

RATING

BACKGROUND INFORMATION



4,063,000

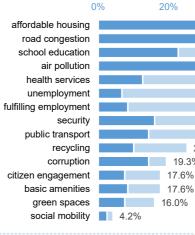
(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.919	0.919	0.920	+0.001
Life expectancy at Birth	78.9	78.9	78.9	78.9	+0.0
Expected years of schooling	16.2	16.3	16.3	16.3	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	54,039	54,443	55,351	56,140	+789.0

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

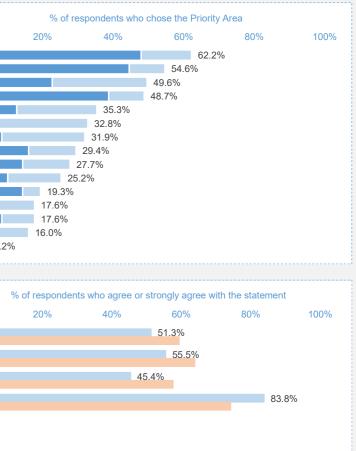
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.



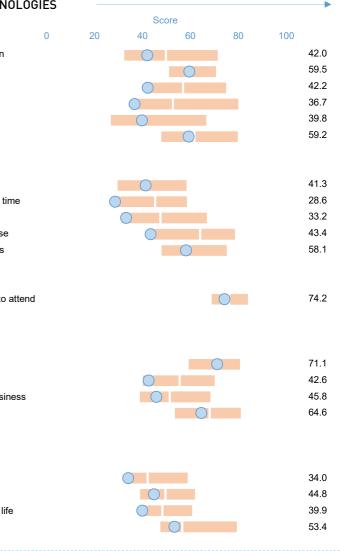
0%

ATTITUDES

BBB						
			LEGEND:	MIN	CITY	MEAN GROUP MAX
not in 2019	STRUCTURES	Score				TECHNOL
	Health & Safety 0	20 40 60	80	100		Health & Safety
	Basic sanitation meets the needs of the poorest areas			61.1		Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory			68.5		A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem			46.8		Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem	\bigcirc		32.1		CCTV cameras has made residents feel safer
	Medical services provision is satisfactory			69.6		A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			38.1		Arranging medical appointments online has improved access
Α	Mobility					Mobility
	Traffic congestion is not a problem			26.1		Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory			51.0		Apps that direct you to an available parking space have reduced journey time
						Bicycle hiring has reduced congestion
						Online scheduling and ticket sales has made public transport easier to use
RR						The city provides information on traffic congestion through mobile phones
	Activities					Activities
TECHNOLOGIES	Green spaces are satisfactory			58.1		Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory			75.2		
	Opportunities (Work & School)					Opportunities (Work & School)
	Employment finding services are readily available			75.6		Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school			60.1		IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions			69.6		Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs			69.5		The current internet speed and reliability meet connectivity needs
	Minorities feel welcome	\bigcirc		63.0		
	Governance					Governance
	Information on local government decisions are easily accessible			67.8		Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern			45.9		Online voting has increased participation
All ratings range	Residents contribute to decision making of local government			50.3		An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects	\bigcirc		61.3		Processing Identification Documents online has reduced waiting times



OLOGIES



Prague



19 in 2019

SMART

CITY

RATING

BB

BACKGROUND INFORMATION



1,314,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.882	0.885	0.888	0.891	+0.003
Life expectancy at Birth	78.7	78.9	79.1	79.2	+0.1
Expected years of schooling	16.9	16.8	16.8	16.8	+0.0
Mean years of schooling	12.7	12.7	12.7	12.7	+0.0
GNI per capita (PPP \$)	28,498	29,211	30,530	31,597	+1,067.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

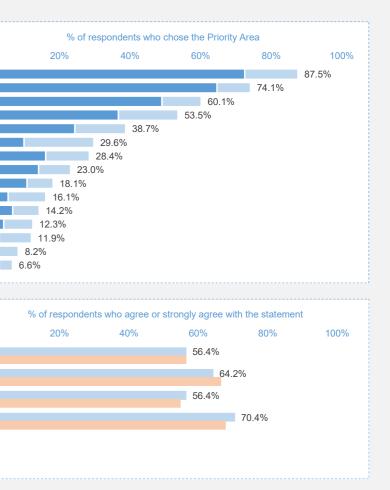
affordable housing road congestion corruption air pollution green spaces citizen engagement security social mobility public transport recycling health services 14.2% unemployment 12.3% fulfilling employment 11.9% basic amenities 8.2% school education 6.6%

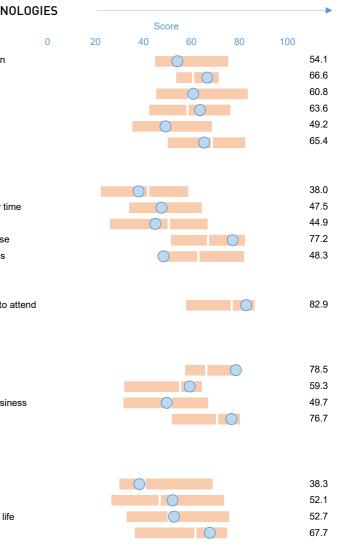
0%

0%

ATTITUDES

DD		LEGEND: MIN	N CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES		→	TECHNOLOG
	Health & Safety 0 20 40	e 60 80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		68.4 Online reporting of city maintenance	problems provides a speedy solution
	Recycling services are satisfactory		68.8 A website or App allows residents to	
FACTOR	Public safety is not a problem		64.8 Free public wifi has improved access	
RATINGS	Air pollution is not a problem		42.0 CCTV cameras has made residents f	eel safer
NATINOS	Medical services provision is satisfactory		72.4 A website or App allows residents to	effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		24.7 Arranging medical appointments onlin	e has improved access
BBB	Mobility		Mobility	
	Traffic congestion is not a problem		21.6 Car-sharing Apps have reduced cong	gestion
STRUCTURES	Public transport is satisfactory			arking space have reduced journey time
			Bicycle hiring has reduced congestion	יב. ז
			Online scheduling and ticket sales ha	as made public transport easier to use
BB			The city provides information on traffi	c congestion through mobile phones
	Activities		Activities	
TECHNOLOGIES	Green spaces are satisfactory			and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		82.7	
	Opportunities (Work & School)		Opportunities (Work & Schoo	1
	Employment finding services are readily available		78.5 Online access to job listings has mad	
GROUP	Most children have access to a good school		75.8 IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions	O	74.1 Online services provided by the city h	nas made it easier to start a new business
9	Businesses are creating new jobs	Ŏ	73.7 The current internet speed and reliab	ility meet connectivity needs
_	Minorities feel welcome		50.3	
	Governance		Governance	
	Information on local government decisions are easily accessible		66.5 Online public access to city finances	has reduced corruption
	Corruption of city officials is not an issue of concern		33.1 Online voting has increased participa	
All ratings range	Residents contribute to decision making of local government		46.4 An online platform where residents ca	an propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects	0	59.9 Processing Identification Documents	online has reduced waiting times





Rabat



CITY

RATING

Π

D in 2019

FACTOR

RATINGS

D

STRUCTURES

D

TECHNOLOGIES

GROUP

BACKGROUND INFORMATION

Residents contribute to decision making of local government

Residents provide feedback on local government projects



1,967,000

(UN World Cities Report)

Design CC BY 3.0 Map Data © Map tiles by Stamen

2015	2016	2017	2018	1 yr change
0.660	0.669	0.675	0.676	+0.001
75.7	76.0	76.2	76.5	+0.3
12.6	12.9	13.1	13.1	+0.0
5.0	5.4	5.5	5.5	+0.0
7,183	7,169	7,342	7,480	+138.0
	0.660 75.7 12.6 5.0	0.660 0.669 75.7 76.0 12.6 12.9 5.0 5.4	0.6600.6690.67575.776.076.212.612.913.15.05.45.5	0.6600.6690.6750.67675.776.076.276.512.612.913.113.15.05.45.55.5

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

unemployment affordable housing health services school education securitv corruption fulfilling employment public transport road congestion air pollution green spaces basic amenities citizen engagement

0%

0%

ATTITUDES

37.6

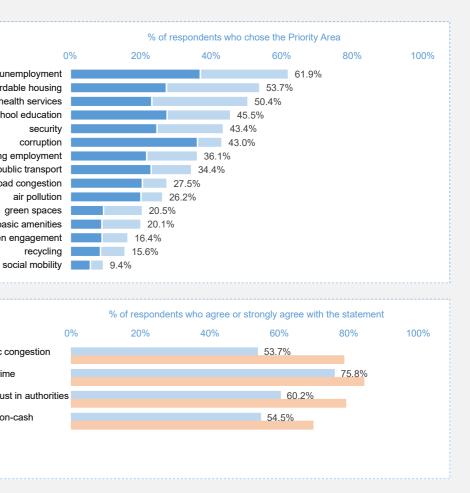
45.4

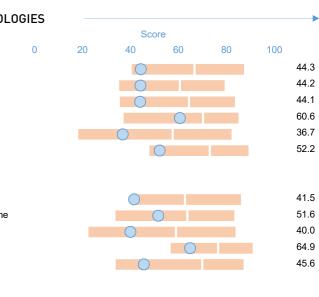
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

Processing Identification Documents online has reduced waiting times

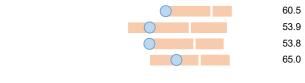
		LEGEND:	MIN	CITY MEAN GROUP MAX
STRUCTURES				TECHNOLOG
	Score			
Health & Safety 0	20 40 6	0 80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas			51.2	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			46.1	A website or App allows residents to easily give away unwanted items
Public safety is not a problem			46.6	Free public wifi has improved access to city services
Air pollution is not a problem			33.9	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			47.9	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			47.7	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem	\bigcirc		35.9	Car-sharing Apps have reduced congestion
Public transport is satisfactory			46.4	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory		\bigcirc	64.4	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory			69.7	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			43.3	Online access to job listings has made it easier to find work
Most children have access to a good school			46.7	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			51.6	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs	\bigcirc		45.6	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			53.3	
Governance				Governance
Information on local government decisions are easily accessible			51.7	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			31.4	Online voting has increased participation

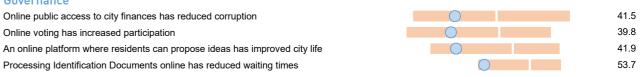
All ratings range from AAA to D











44.3

44.2

44.1 60.6

36.7 52.2

51.6 40.0 64.9

Rio de Janeiro



CITY

RATING

BACKGROUND INFORMATION



12,902,000

(UN World Cities Report)



2017	0010	1. un als annes

Country	2015	2016	2017	2018	1 yr change	
HDI	0.755	0.757	0.760	0.761	+0.001	
Life expectancy at Birth	75.0	75.2	75.5	75.7	+0.2	
Expected years of schooling	15.3	15.4	15.4	15.4	+0.0	
Mean years of schooling	7.6	7.7	7.8	7.8	+0.0	1
GNI per capita (PPP \$)	14,490	13,907	13,975	14,068	+93.0	

0047

0045

PRIORITY AREAS	
----------------	--

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

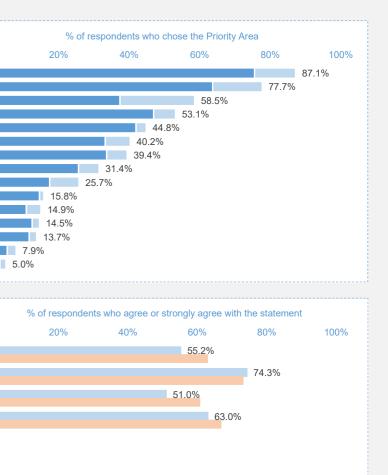
0% security health services unemployment school education corruption basic amenities public transport affordable housing fulfilling employment road congestion recycling air pollution social mobility green spaces 7.9% citizen engagement 5.0%

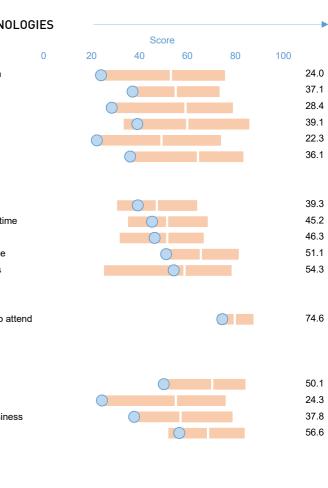
0%

ATTITUDES

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

•			LEGEND: MIN	CITY MEAN GROUP MAX	
C in 2019	STRUCTURES			< T	ECHNOLO
		Score			
	Health & Safety ⁰	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas	\bigcirc	22.6	Online reporting of city maintenance problems provides a speedy s	solution
FLOTOD	Recycling services are satisfactory		34.5	A website or App allows residents to easily give away unwanted ite	ems
FACTOR	Public safety is not a problem	\bigcirc	16.3	Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem	\bigcirc	28.2	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory		20.7	A website or App allows residents to effectively monitor air pollution	n
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		24.2	Arranging medical appointments online has improved access	
	Mobility			Mobility	
	Traffic congestion is not a problem		16.8	Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory		19.4	Apps that direct you to an available parking space have reduced jo	ourney time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has made public transport easier	er to use
C				The city provides information on traffic congestion through mobile	phones
U	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		48.7		aniar ta attan
TECHNOLOGIES			59.7	Online purchasing of tickets to shows and museums has made it e	
	Cultural activities (shows, bars, and museums) are satisfactory		59.7		
	Opportunities (Work & School)			Opportunities (Work & School)	
GROUP	Employment finding services are readily available	\bigcirc	38.5	Online access to job listings has made it easier to find work	
	Most children have access to a good school		20.9	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions	\bigcirc	32.1	Online services provided by the city has made it easier to start a new	ew business
2	Businesses are creating new jobs		30.6	The current internet speed and reliability meet connectivity needs	
3	Minorities feel welcome		19.9		
	Governance			Governance	
	Information on local government decisions are easily accessible		29.5	Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern		12.2	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government		19.7	An online platform where residents can propose ideas has improve	ed city life
from AAA to D	Residents provide feedback on local government projects		23.2	Processing Identification Documents online has reduced waiting tir	mes
		-			





 \bigcirc

 \bigcirc

 \bigcirc

21.5

36.9 32.9

Riyadh



B

BACKGROUND INFORMATION



(UN World Cities Report)

Afgha . Esfaha Eritr Design CC BY 3.0 Map Data © Open

Country	2015	2016	2017	2018	1 yr change
HDI	0.857	0.857	0.856	0.857	+0.001
Life expectancy at Birth	74.7	74.8	74.9	75.0	+0.1
Expected years of schooling	17.1	17.0	17.0	17.0	+0.0
Mean years of schooling	9.6	9.7	9.7	9.7	+0.0
GNI per capita (PPP \$)	51,509	51,099	49,371	49,338	-33.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

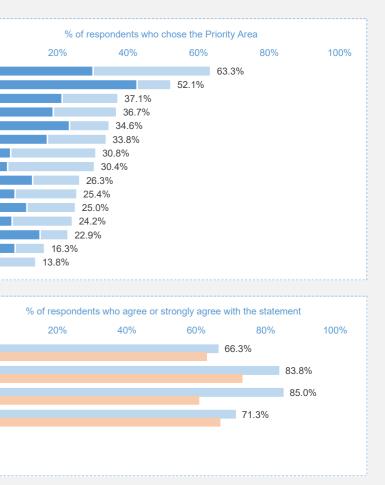
0% affordable housing road congestion public transport unemployment air pollution green spaces health services basic amenities fulfilling employment recycling security school education corruption citizen engagement 16.3% social mobility 13.8%

0%

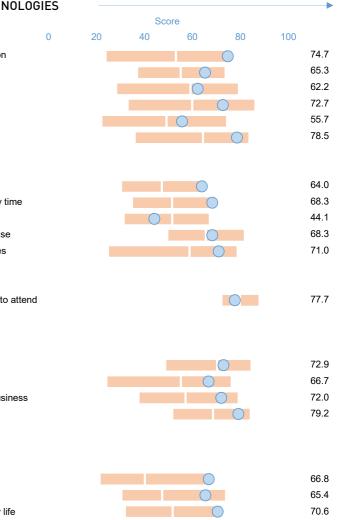
ATTITUDES

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

B					
		[LEGEND: MIN	CITY MEAN GROUP MAX	
CCC in 2019	STRUCTURES			•	TECHNOLO
		Score			
	Health & Safety 0	20 40 60 8	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		83.2	Online reporting of city maintenance pro	blems provides a speedy solution
FLOTOD	Recycling services are satisfactory		72.9	A website or App allows residents to eas	sily give away unwanted items
FACTOR	Public safety is not a problem		52.5	Free public wifi has improved access to	city services
RATINGS	Air pollution is not a problem		40.2	CCTV cameras has made residents feel	safer
	Medical services provision is satisfactory		80.7	A website or App allows residents to effe	ectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	61.4	Arranging medical appointments online h	nas improved access
B					
D	Mobility			Mobility	
	Traffic congestion is not a problem		32.1	Car-sharing Apps have reduced congest	tion
STRUCTURES	Public transport is satisfactory		54.4	Apps that direct you to an available park	ing space have reduced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has n	nade public transport easier to use
BB				The city provides information on traffic c	ongestion through mobile phones
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		62.3	Online purchasing of tickets to shows ar	ad museume has made it assist to attand
TECHNOLOGIES	Cultural activities (shows, bars, and museums) are satisfactory		66.7	Offine purchasing of tickets to shows an	
	Cultural activities (Shows, Dars, and Huseums) are satisfactory		00.7		
	Opportunities (Work & School)			Opportunities (Work & School)	
	Employment finding services are readily available	\bigcirc	58.1	Online access to job listings has made it	easier to find work
GROUP	Most children have access to a good school		76.1	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		66.7	Online services provided by the city has	made it easier to start a new business
_	Businesses are creating new jobs		65.0	The current internet speed and reliability	meet connectivity needs
3	Minorities feel welcome		62.8		
	Commence			Commence	
	Governance		76.5	Governance Online public access to city finances has	a raduad corruption
	Information on local government decisions are easily accessible Corruption of city officials is not an issue of concern		47.1	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government		58.7	An online platform where residents can	
All ratings range from AAA to D			62.1		
ITUITI AAA LU D	Residents provide feedback on local government projects		02.1	Processing Identification Documents on	ine has reduced waiting times



OGIES



Rome

SMART CITY RANKING 101Out of 109 77 in 2019

SMART

CITY

RATING

BACKGROUND INFORMATION

City Population 3,718,000

(UN World Cities Report)

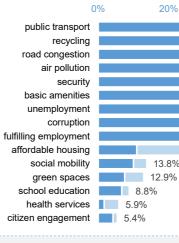


2015	2016	2017	2018	1 yr change
0.875	0.878	0.881	0.883	+0.002
82.8	83.0	83.2	83.4	+0.2
16.3	16.2	16.2	16.2	+0.0
10.1	10.2	10.2	10.2	+0.0
34,105	34,818	35,573	36,141	+568.0
	0.875 82.8 16.3 10.1	0.875 0.878 82.8 83.0 16.3 16.2 10.1 10.2	0.875 0.878 0.881 82.8 83.0 83.2 16.3 16.2 16.2 10.1 10.2 10.2	0.875 0.878 0.881 0.883 82.8 83.0 83.2 83.4 16.3 16.2 16.2 16.2 10.1 10.2 10.2 10.2

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

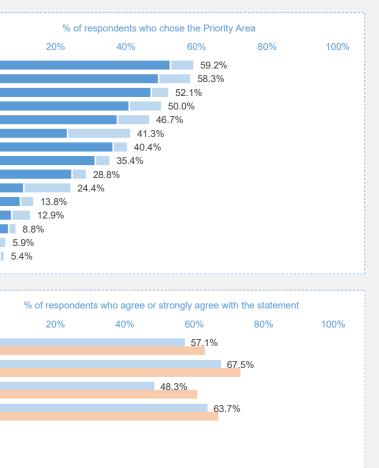


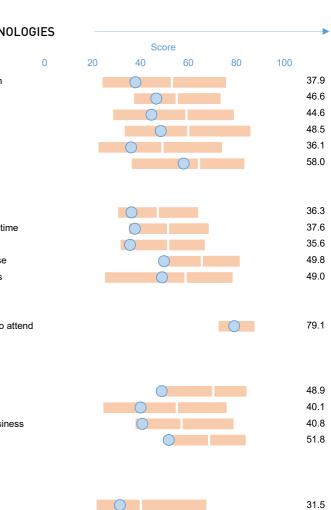
0%

ATTITUDES

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

U				
CCC in 2019	STRUCTURES		LEGEND: MIN	CITY MEAN GROUP MAX
		Score		
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		42.8	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		28.1	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		34.6	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		21.7	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		45.6	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		49.7	Arranging medical appointments online has improved access
	Mobility			Mobility
	Traffic congestion is not a problem		15.7	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		20.1	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		54.9	Online purchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		67.8	
	Opportunities (Work & School)			Opportunities (Work & School)
	Employment finding services are readily available		20.8	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school	\bigcirc	45.1	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		40.2	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		25.9	The current internet speed and reliability meet connectivity needs
3	Minorities feel welcome		28.9	
	Governance			Governance
	Information on local government decisions are easily accessible		41.5	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		21.6	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		23.5	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		32.7	Processing Identification Documents online has reduced waiting times





34.4 36.7 54.2

Rotterdam



SMART

CITY

RATING

BACKGROUND INFORMATION

City Population

993,000

(UN World Cities Report)

. Praque

Country	2015	2016	2017	2018	1 yr change
HDI	0.927	0.929	0.932	0.934	+0.002
Life expectancy at Birth	81.7	81.9	82.0	82.1	+0.1
Expected years of schooling	18.1	18.0	18.0	18.0	+0.0
Mean years of schooling	12.1	12.2	12.2	12.2	+0.0
GNI per capita (PPP \$)	46,976	47,008	48,994	50,013	+1,019.0

PRIORITY A	AREAS
------------	-------

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

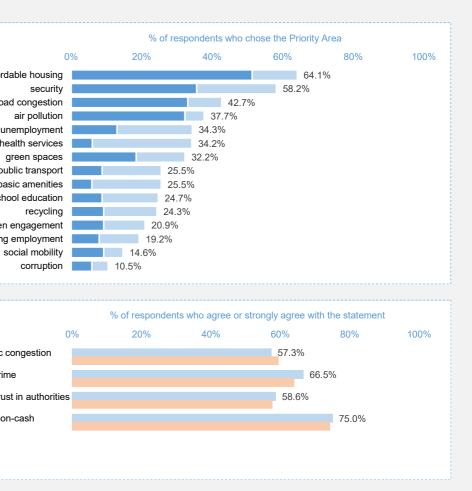
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

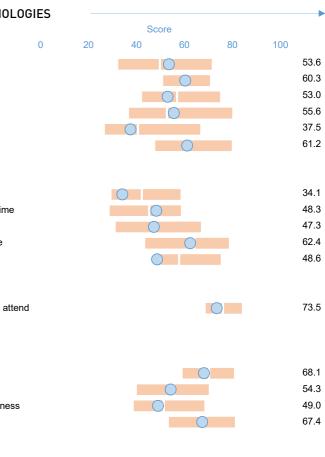
0% affordable housing security road congestion air pollution unemployment health services green spaces public transport basic amenities school education recycling citizen engagement fulfilling employment

0%

ATTITUDES

BBB					
			LEGEND: MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES	Score		•	TECHNOLO
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		63.2	Online reporting of city maintenance	e problems provides a speedy solution
FLATAR	Recycling services are satisfactory		64.6	A website or App allows residents	to easily give away unwanted items
FACTOR	Public safety is not a problem	\bigcirc	50.8	Free public wifi has improved acce	ss to city services
RATINGS	Air pollution is not a problem		36.0	CCTV cameras has made resident	s feel safer
	Medical services provision is satisfactory		73.2	A website or App allows residents	to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	31.9	Arranging medical appointments or	nline has improved access
Δ	Mobility			Mobility	
	Traffic congestion is not a problem		29.1	Car-sharing Apps have reduced co	naestion
STRUCTURES	Public transport is satisfactory		71.3		parking space have reduced journey time
	. ,	<u> </u>		Bicycle hiring has reduced congest	
				, , ,	has made public transport easier to use
BBB					affic congestion through mobile phones
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		56.1		ws and museums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory		75.2		
	Operative (Werk & Color)			One entry it is a full only 0. Cal	0
	Opportunities (Work & School)		64.6	Opportunities (Work & Sch	
GROUP	Employment finding services are readily available		70.9	Online access to job listings has m	ade it easier to find work
	Most children have access to a good school		61.2	IT skills are taught well in schools	u haa mada it aaniar ta atart a naw husinaaa
	Lifelong learning opportunities are provided by local institutions Businesses are creating new jobs		61.0	The current internet speed and reli	y has made it easier to start a new business
1	Minorities feel welcome		57.1	The current internet speed and ren	ability meet connectivity needs
•			57.1		
	Governance			Governance	
	Information on local government decisions are easily accessible		59.8	Online public access to city finance	
	Corruption of city officials is not an issue of concern		54.5	Online voting has increased partici	
All ratings range	Residents contribute to decision making of local government		52.5		can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		56.3	Processing Identification Documen	ts online has reduced waiting times
·	· · · · · · · · · · · · · · · · · · ·				





\bigcirc	42.3
	42.2
	51.7
	55.3

San Francisco



SMART

CITY

RATING

BACKGROUND INFORMATION

City Population

(UN World Cities Report)

3,300,000

OF ID S. Sat NV UT co CA AZ . Abuquerg Los Angeles NM . Phoen San Diego . Tijua Map tiles by Stamen Design CC BY 3.0 Map Data © Op

Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.919	0.919	0.920	+0.001
Life expectancy at Birth	78.9	78.9	78.9	78.9	+0.0
Expected years of schooling	16.2	16.3	16.3	16.3	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	54,039	54,443	55,351	56,140	+789.0

PRIORITY A	REAS
------------	------

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

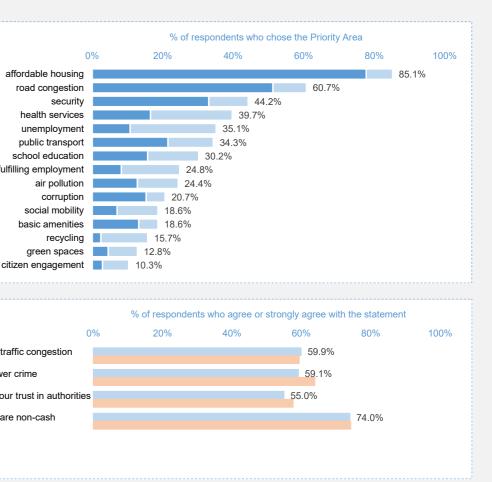
0% affordable housing road congestion security health services unemployment public transport school education fulfilling employment air pollution corruption basic amenities green spaces 12.8%

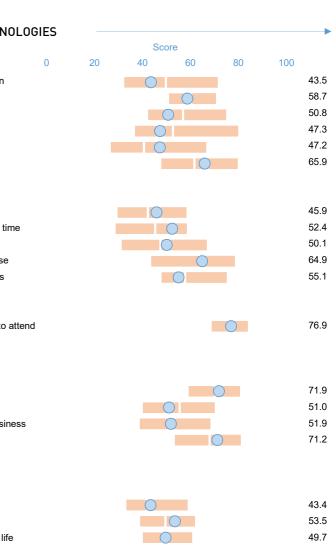
0%

ATTITUDES

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

BBB						
			LEGEND:	MIN	CITY	MEAN GROUP MAX
A in 2019	STRUCTURES	Score		•		TECHNOL
	Health & Safety 0	20 40 60	80	100		Health & Safety
	Basic sanitation meets the needs of the poorest areas			41.0		Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory			67.8		A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem			35.5		Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem			45.5		CCTV cameras has made residents feel safer
NATINO 5	Medical services provision is satisfactory			59.2		A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem			18.2		Arranging medical appointments online has improved access
BBB	Mobility					Mobility
	Traffic congestion is not a problem			25.0		Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory			51.8		Apps that direct you to an available parking space have reduced journey time
SINCOTONES				01.0		Bicycle hiring has reduced congestion
						Online scheduling and ticket sales has made public transport easier to use
DDD						The city provides information on traffic congestion through mobile phones
BBB						
	Activities					Activities
TECHNOLOGIES	Green spaces are satisfactory			68.7		Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory		\bigcirc	82.8		
	Opportunities (Work & School)					Opportunities (Work & School)
000110	Employment finding services are readily available			65.6		Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school			56.8		IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions			65.2		Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs			69.8		The current internet speed and reliability meet connectivity needs
	Minorities feel welcome			66.7		
	Governance					Governance
	Information on local government decisions are easily accessible			65.4		Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern			47.2		Online voting has increased participation
All ratings range	Residents contribute to decision making of local government			56.6		An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects			69.1		Processing Identification Documents online has reduced waiting times





98

Santiago



BACKGROUND INFORMATION

City

Population 6,507,000

(UN World Cities Report)



SMART CITY RATING CC CC in 2019

FACTOR RATINGS CC STRUCTURES

CC

TECHNOLOGIES

GROUP

3 All

All ratings range	
from AAA to D	



Country HDI	2015 0.839	2016 0.843	2017 0.845	2018 0.847	1 yr change +0.002
Life expectancy at Birth	79.6	79.8	79.9	80.0	+0.1
Expected years of schooling	16.3	16.4	16.5	16.5	+0.0
Mean years of schooling	10.2	10.3	10.4	10.4	+0.0
GNI per capita (PPP \$)	21,653	21,776	21,415	21,972	+557.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

health services security affordable housing air pollution corruption unemployment fulfilling employment road congestion public transport school education recycling basic amenities social mobility

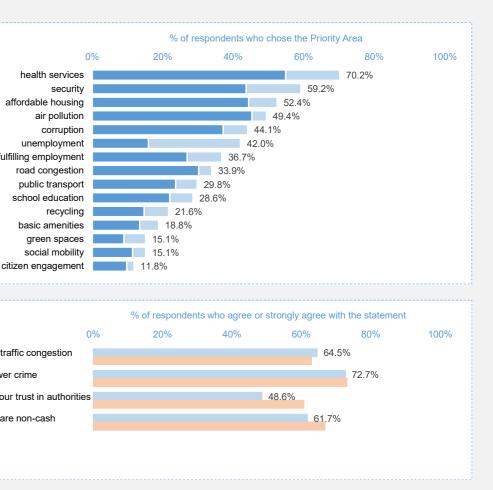
ATTITUDES

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

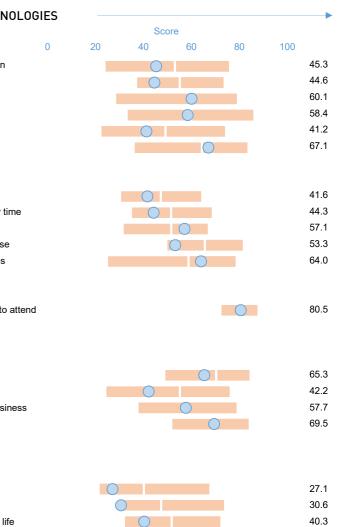
		LEGEND: MIN	CITY	MEAN GROUP MAX
STRUCTURES				TECHNOLOGIES
	Score			
Health & Safety 0	20 40 60	80 100		Health & Safety 0
Basic sanitation meets the needs of the poorest areas			41.4	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			47.1	A website or App allows residents to easily give away unwanted items
Public safety is not a problem			29.4	Free public wifi has improved access to city services
Air pollution is not a problem	\bigcirc		11.8	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			35.3	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			17.5	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			18.2	Car-sharing Apps have reduced congestion
Public transport is satisfactory			34.6	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory			59.7	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory	(71.2	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			60.9	Online access to job listings has made it easier to find work
Most children have access to a good school			34.0	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			44.6	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs			40.1	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			35.6	
Governance				Governance
Information on local government decisions are easily accessible			45.8	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			20.8	Online voting has increased participation
Residents contribute to decision making of local government			24.2	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects			36.1	Processing Identification Documents online has reduced waiting times

0%

0%







 \bigcirc

Sao Paulo



SMART

CITY

RATING

BACKGROUND INFORMATION



21,066,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.755	0.757	0.760	0.761	+0.001
Life expectancy at Birth	75.0	75.2	75.5	75.7	+0.2
Expected years of schooling	15.3	15.4	15.4	15.4	+0.0
Mean years of schooling	7.6	7.7	7.8	7.8	+0.0
GNI per capita (PPP \$)	14,490	13,907	13,975	14,068	+93.0
GNI per capita (PPP \$)	14,490	13,907	13,975	14,068	

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

security health services unemployment school education public transport corruption air pollution basic amenities affordable housing fulfilling employment road congestion recycling social mobility citizen engagement 7.6%

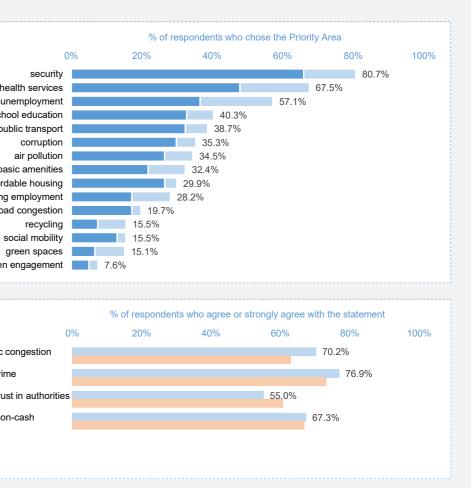
0%

0%

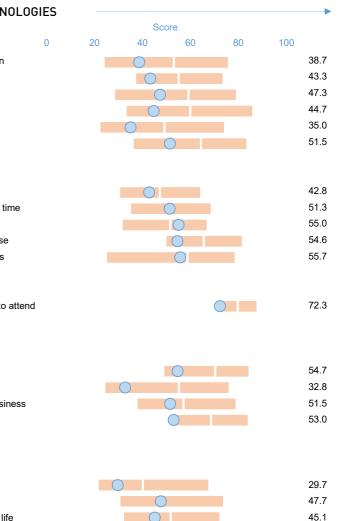
ATTITUDES

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

			LEGEND: MIN	CITY MEAN GROUP MAX
CC in 2019	STRUCTURES			TECHNOLOG
		Score		
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		42.0	Online reporting of city maintenance problems provides a speedy solution
FACTOR	Recycling services are satisfactory	\bigcirc	46.6	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		22.2	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem	\bigcirc	20.9	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory	\bigcirc	34.8	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		21.5	Arranging medical appointments online has improved access
	Mobility			Mobility
	Traffic congestion is not a problem	\bigcirc	18.4	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		25.7	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		48.1	Online purchasing of tickets to shows and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		64.5	
	Opportunities (Work & School)			Opportunities (Work & School)
	Employment finding services are readily available	\bigcirc	42.5	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		28.6	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		38.2	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		41.9	The current internet speed and reliability meet connectivity needs
- 3	Minorities feel welcome		26.6	
	Governance			Governance
	Information on local government decisions are easily accessible		41.4	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		20.7	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		28.6	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		32.6	Processing Identification Documents online has reduced waiting times







Seattle



RATING

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.919	0.919	0.920	+0.001
Life expectancy at Birth	78.9	78.9	78.9	78.9	+0.0
Expected years of schooling	16.2	16.3	16.3	16.3	+0.0
Mean years of schooling	13.3	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	54,039	54,443	55,351	56,140	+789.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion health services security unemployment public transport school education air pollution fulfilling employment corruption basic amenities citizen engagement

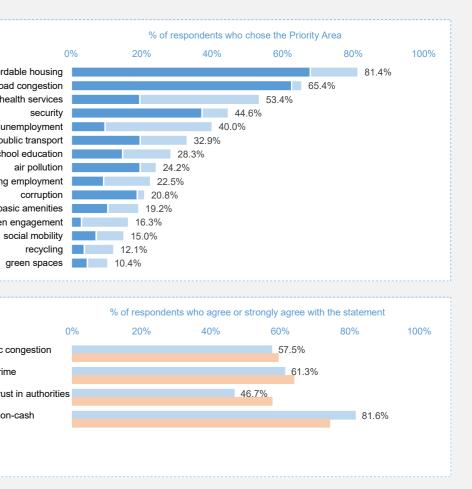
ATTITUDES

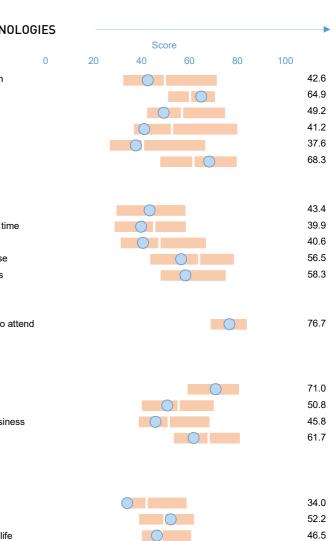
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

BBB					
			LEGEND: MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES	Score	•	•	TECHNOLO
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		46.8	Online reporting of city maintenance	problems provides a speedy solution
	Recycling services are satisfactory		74.7	A website or App allows residents to	easily give away unwanted items
FACTOR	Public safety is not a problem		31.4	Free public wifi has improved access	to city services
RATINGS	Air pollution is not a problem		40.0	CCTV cameras has made residents	eel safer
INATITO S	Medical services provision is satisfactory		65.3	A website or App allows residents to	effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		25.3	Arranging medical appointments onli	ne has improved access
BBB	Mobility			Mobility	
	Traffic congestion is not a problem		15.6	Car-sharing Apps have reduced cong	gestion
STRUCTURES	Public transport is satisfactory		53.8	Apps that direct you to an available p	arking space have reduced journey time
			_	Bicycle hiring has reduced congestio	n
				Online scheduling and ticket sales ha	as made public transport easier to use
BBB				The city provides information on traff	c congestion through mobile phones
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		69.2		and museums has made it easier to atter
TECHNOLOOIES	Cultural activities (shows, bars, and museums) are satisfactory		82.0	Online purchasing of tickets to show.	
			02.0		
	Opportunities (Work & School)			Opportunities (Work & Scho	ol)
GROUP	Employment finding services are readily available		72.2	Online access to job listings has made	le it easier to find work
UNUUF	Most children have access to a good school		64.4	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		68.8	Online services provided by the city I	has made it easier to start a new business
1	Businesses are creating new jobs		66.0	The current internet speed and reliab	ility meet connectivity needs
	Minorities feel welcome	\bigcirc	62.6		
	Governance			Governance	
	Information on local government decisions are easily accessible		62.6	Online public access to city finances	has reduced corruption
	Corruption of city officials is not an issue of concern		41.8	Online voting has increased participa	tion
All ratings range	Residents contribute to decision making of local government	\bigcirc	53.0	An online platform where residents c	an propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		69.0	Processing Identification Documents	online has reduced waiting times

0%

0%





101

Seoul



SMART

CITY

RATING

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.899	0.901	0.904	0.906	+0.002
Life expectancy at Birth	82.1	82.4	82.6	82.8	+0.2
Expected years of schooling	16.5	16.4	16.4	16.4	+0.0
Mean years of schooling	12.1	12.2	12.2	12.2	+0.0
GNI per capita (PPP \$)	34,276	35,122	35,945	36,757	+812.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

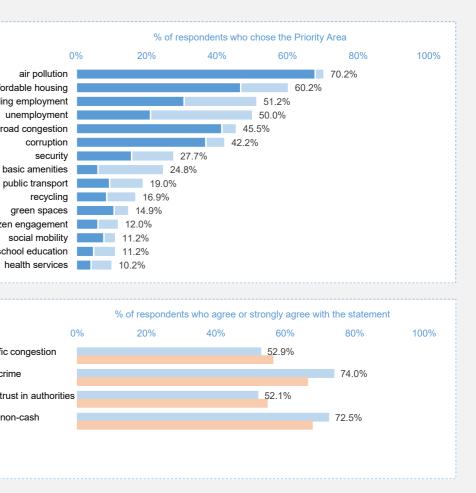
air pollution affordable housing fulfilling employment unemployment road congestion corruption security basic amenities public transport green spaces citizen engagement 12.0% social mobility 11.2% school education 11.2%

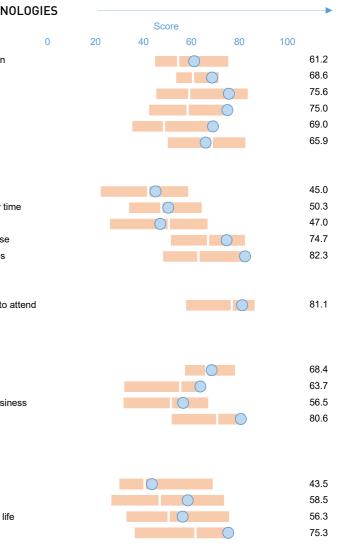
0%

0%

ATTITUDES

BB			i	
		LEGEND	: MIN CI	TY MEAN GROUP MAX
BB in 2019	STRUCTURES	Score	•	TECHNOLO
	Health & Safety 0 20	40 60 80	100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		72.2	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		68.3	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem	0	58.5	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		10.0	CCTV cameras has made residents feel safer
NATINO 5	Medical services provision is satisfactory		73.5	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		32.6	Arranging medical appointments online has improved access
B	Mobility			Mobility
_	Traffic congestion is not a problem		22.4	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		71.1	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
BBB				The city provides information on traffic congestion through mobile phones
DDD				
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		50.6	Online purchasing of tickets to shows and museums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory		70.7	
	Opportunities (Work & School)			Opportunities (Work & School)
GROUP	Employment finding services are readily available	\bigcirc	54.7	Online access to job listings has made it easier to find work
01001	Most children have access to a good school		57.0	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		60.9	Online services provided by the city has made it easier to start a new business
2	Businesses are creating new jobs		42.3	The current internet speed and reliability meet connectivity needs
4	Minorities feel welcome		27.4	
	Governance			Governance
	Information on local government decisions are easily accessible		57.8	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		24.7	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		46.3	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects	0	48.3	Processing Identification Documents online has reduced waiting times





Shanghai



BACKGROUND INFORMATION

City Population 23,741,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.742	0.749	0.753	0.758	+0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0
,					

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% road congestion air pollution affordable housing social mobility corruption basic amenities public transport health services fulfilling employment school education unemployment

0%

ATTITUDES

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

			LEGEN	ID: MIN	CITY MEAN GROUP MAX	
STRUCTURES		Score		•	TECHNO	JLOG
Health & Safety 0	20	40 60	80	100	Health & Safety	
Basic sanitation meets the needs of the poorest areas				82.7	Online reporting of city maintenance problems provides a speedy solution	
Recycling services are satisfactory				77.8	A website or App allows residents to easily give away unwanted items	
Public safety is not a problem			0	67.9	Free public wifi has improved access to city services	
Air pollution is not a problem			- The second sec	46.0	CCTV cameras has made residents feel safer	
Medical services provision is satisfactory				77.5	A website or App allows residents to effectively monitor air pollution	
Finding housing with rent equal to 30% or less of a monthly salary is not a problem	1	\bigcirc		50.7	Arranging medical appointments online has improved access	
Mobility					Mobility	
Traffic congestion is not a problem				31.6	Car-sharing Apps have reduced congestion	
Public transport is satisfactory				62.5	Apps that direct you to an available parking space have reduced journey tir	ne
					Bicycle hiring has reduced congestion	
					Online scheduling and ticket sales has made public transport easier to use	
					The city provides information on traffic congestion through mobile phones	
Activities					Activities	
Green spaces are satisfactory			\bigcirc	75.3	Online purchasing of tickets to shows and museums has made it easier to a	attend
Cultural activities (shows, bars, and museums) are satisfactory			\bigcirc	85.0		
Opportunities (Work & School)					Opportunities (Work & School)	
Employment finding services are readily available				79.0	Online access to job listings has made it easier to find work	
Most children have access to a good school				75.3	IT skills are taught well in schools	
Lifelong learning opportunities are provided by local institutions			\bigcirc	68.9	Online services provided by the city has made it easier to start a new busin	iess
Businesses are creating new jobs				79.1	The current internet speed and reliability meet connectivity needs	
Minorities feel welcome			\bigcirc	70.9		
Governance					Governance	
Information on local government decisions are easily accessible				76.7	Online public access to city finances has reduced corruption	
Corruption of city officials is not an issue of concern		\bigcirc		48.7	Online voting has increased participation	
Residents contribute to decision making of local government	1	\bigcirc		59.6	An online platform where residents can propose ideas has improved city life	э
Residents provide feedback on local government projects			\bigcirc	65.8	Processing Identification Documents online has reduced waiting times	

CITY RATING CC B in 2019

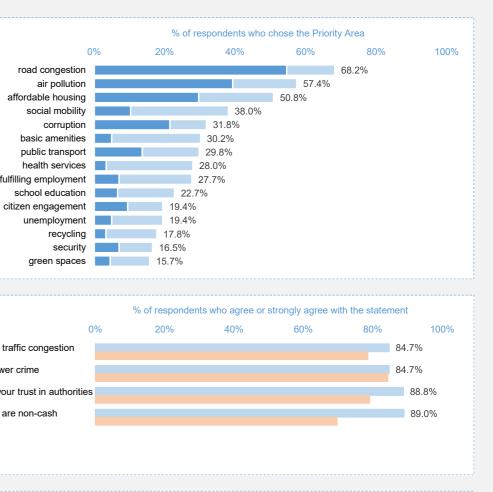
FACTOR RATINGS CC

STRUCTURES

CCC **TECHNOLOGIES**

GROUP

All ratings range from AAA to D



OGIES Score 100 0 20 60 80 40 \bigcirc 82.9 73.5 80.4 80.1 \bigcirc 78.2 \bigcirc 86.8 64.0 79.1 72.9 88.9 87.6 91.3 nd 86.4 85.5 \bigcirc 82.8 86.4 73.0 72.2

80.4

Shenzhen



BACKGROUND INFORMATION

City Population

10,749,000 (UN World Cities Report)

SMART CITY RATING CCC BB in 2019

FACTOR RATINGS CC STRUCTURES

CCC **TECHNOLOGIES**

GROUP

All ratings range from AAA to D

.Wuha Chongging Nanchand

esign CC BY 3.0 Map Data © Oj

Country HDI	2015 0.742	2016 0.749	2017 0.753	2018 0.758	1 yr change +0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0

PRIORITY AREAS

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

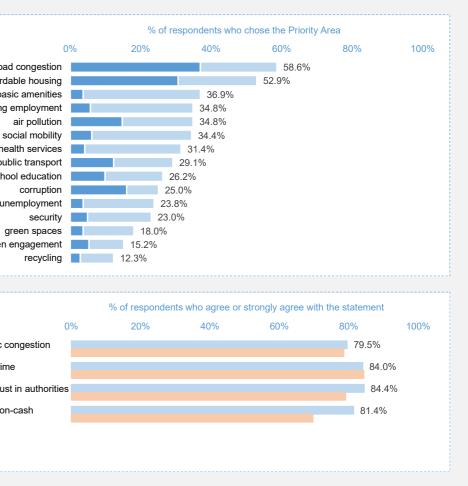
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

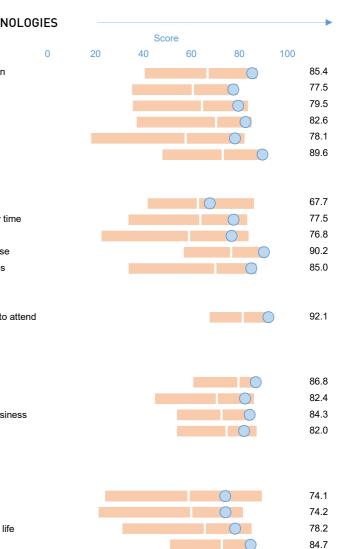
0% road congestion affordable housing basic amenities fulfilling employment air pollution social mobility health services public transport school education corruption unemployment security citizen engagement 15.2%

0%

ATTITUDES

STRUCTURES						TECHNOLO
		Sco	ore			
Health & Safety 0	20	40	60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas				\bigcirc	81.6	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory				\bigcirc	76.2	A website or App allows residents to easily give away unwanted items
Public safety is not a problem)	67.7	Free public wifi has improved access to city services
Air pollution is not a problem			\bigcirc		61.1	CCTV cameras has made residents feel safer
Medical services provision is satisfactory				\bigcirc	78.5	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			\bigcirc		54.0	Arranging medical appointments online has improved access
Mobility						Mobility
Traffic congestion is not a problem					47.8	Car-sharing Apps have reduced congestion
Public transport is satisfactory)	68.3	Apps that direct you to an available parking space have reduced journey time
						Bicycle hiring has reduced congestion
						Online scheduling and ticket sales has made public transport easier to use
						The city provides information on traffic congestion through mobile phones
Activities						Activities
Green spaces are satisfactory				\bigcirc	79.6	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory				\bigcirc	82.7	
Opportunities (Work & School)						Opportunities (Work & School)
Employment finding services are readily available				\bigcirc	82.9	Online access to job listings has made it easier to find work
Most children have access to a good school				\bigcirc	72.2	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			\bigcirc		63.3	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs					79.8	The current internet speed and reliability meet connectivity needs
Minorities feel welcome				\bigcirc	73.5	
Governance						Governance
Information on local government decisions are easily accessible				\bigcirc	74.9	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			\bigcirc		55.7	Online voting has increased participation
Residents contribute to decision making of local government			\bigcirc		62.8	An online platform where residents can propose ideas has improved city life





Singapore



BACKGROUND INFORMATION

City Population

5,619,000

(UN World Cities Report)

CITY

RATING

AAA in 2019

FACTOR RATINGS

ΑΑΔ STRUCTURE

TECHNOLOGI

GROUP

All ratings ran from AAA to

to Chi Minh City • Derpasar. Map tiles by Stamen Design CC BY 3.0 Map Data © Op

Country	2015	2016	2017	2018	1 yr change
HDI	0.929	0.933	0.934	0.935	+0.001
Life expectancy at Birth	82.9	83.1	83.3	83.5	+0.2
Expected years of schooling	16.1	16.3	16.3	16.3	+0.0
Mean years of schooling	11.4	11.5	11.5	11.5	+0.0
GNI per capita (PPP \$)	77,686	78,759	81,500	83,793	+2,293.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

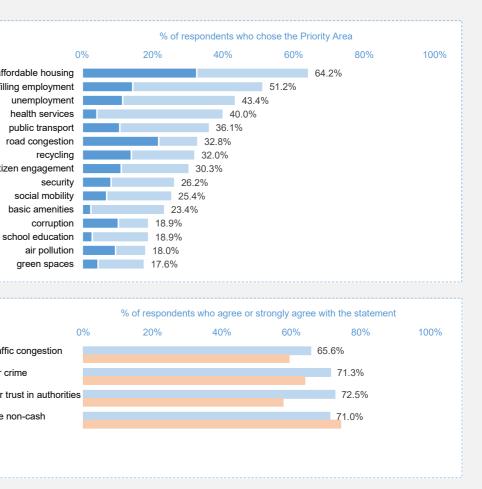
affordable housing fulfilling employment unemployment health services public transport road congestion recycling citizen engagement security social mobility basic amenities corruption

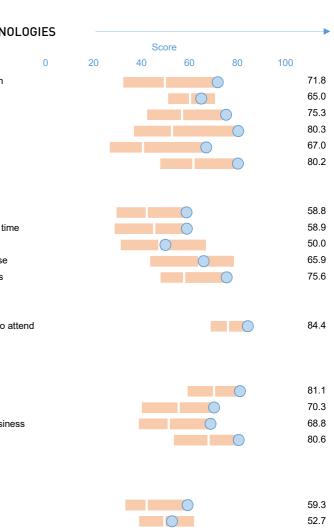
ATTITUDES

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

STRUCTURES		LEGEND: MIN	CITY MEAN GROUP MAX	TECHNOLO
SINCCIONES	Score			TECHNOLO
Health & Safety 0	20 40 60	80 100	Health & Safety	
Basic sanitation meets the needs of the poorest areas		85.2	Online reporting of city maintenance problems prov	ides a speedy solution
Recycling services are satisfactory	\bigcirc	63.9	A website or App allows residents to easily give aw	ay unwanted items
Public safety is not a problem		76.0	Free public wifi has improved access to city service	s
Air pollution is not a problem		62.4	CCTV cameras has made residents feel safer	
Medical services provision is satisfactory		82.3	A website or App allows residents to effectively mo	nitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem		53.2	Arranging medical appointments online has improve	ed access
Mobility			Mobility	
Traffic congestion is not a problem		47.2	Car-sharing Apps have reduced congestion	
Public transport is satisfactory		73.5	Apps that direct you to an available parking space I	ave reduced journey time
Fubic transport is satisfactory		10.0	Bicycle hiring has reduced congestion	lave reduced journey time
			Online scheduling and ticket sales has made public	transport easier to use
			The city provides information on traffic congestion t	•
Activities			Activities	
Green spaces are satisfactory		78.8	Online purchasing of tickets to shows and museum	s has made it easier to atter
Cultural activities (shows, bars, and museums) are satisfactory		78.2		
Opportunities (Mark & Cohool)				
Opportunities (Work & School)		75.2	Opportunities (Work & School)	in dama da
Employment finding services are readily available			Online access to job listings has made it easier to f	na work
Most children have access to a good school		79.6	IT skills are taught well in schools	
Lifelong learning opportunities are provided by local institutions		80.9	Online services provided by the city has made it ea	
Businesses are creating new jobs		65.9	The current internet speed and reliability meet conr	ectivity needs
Minorities feel welcome		70.2		
Governance			Governance	
Information on local government decisions are easily accessible		77.3	Online public access to city finances has reduced o	orruption
Corruption of city officials is not an issue of concern		69.5	Online voting has increased participation	
Residents contribute to decision making of local government		58.3	An online platform where residents can propose ide	as has improved city life
Residents provide feedback on local government projects		67.3	Processing Identification Documents online has red	

0%





 \bigcirc

61.1

Sofia

SMART CITY RANKING
89 Out of 109
89 in 2019

BACKGROUND INFORMATION

City Population 1,226,000

(UN World Cities Report)

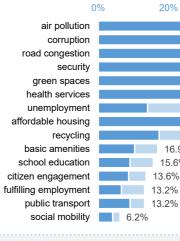


Country	2015	2016	2017	2018	1 yr change
HDI	0.807	0.812	0.813	0.816	+0.003
Life expectancy at Birth	74.6	74.7	74.8	74.9	+0.1
Expected years of schooling	15.1	15.1	14.8	14.8	+0.0
Mean years of schooling	11.8	11.8	11.8	11.8	+0.0
GNI per capita (PPP \$)	16,662	17,757	18,874	19,646	+772.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.



0%

ATTITUDES

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

		LEGEND	: MIN OC	ITY MEAN GROUP MAX
STRUCTURES				TECHNOLO
	Score			
Health & Safety 0	20 40 60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas			47.7	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			39.2	A website or App allows residents to easily give away unwanted items
Public safety is not a problem			33.0	Free public wifi has improved access to city services
Air pollution is not a problem			17.1	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			41.9	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem			29.9	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			16.0	Car-sharing Apps have reduced congestion
Public transport is satisfactory			54.4	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory			44.1	Online purchasing of tickets to shows and museums has made it easier to atter
Cultural activities (shows, bars, and museums) are satisfactory		\bigcirc	76.3	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			61.0	Online access to job listings has made it easier to find work
Most children have access to a good school			61.7	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			52.7	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs			61.1	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			41.2	
Governance				Governance
Information on local government decisions are easily accessible			39.0	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern	\bigcirc		12.3	Online voting has increased participation
• · · · · · · · · · · · · · · · · · · ·				
Residents contribute to decision making of local government			24.6	An online platform where residents can propose ideas has improved city life

SMART CITY RATING CC CC in 2019

FACTOR RATINGS CC

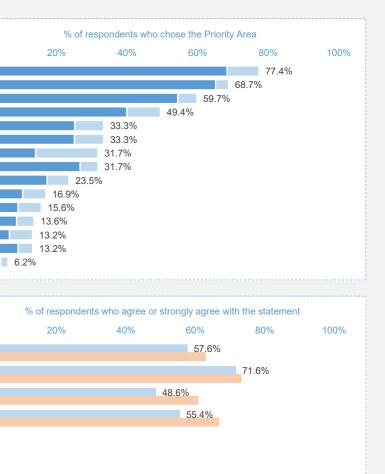
STRUCTURES

CC **TECHNOLOGIES**

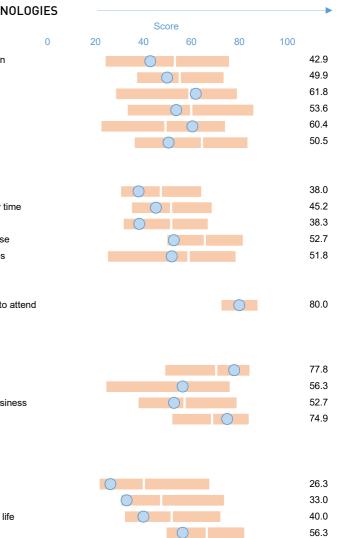
GROUP

3

All ratings range from AAA to D







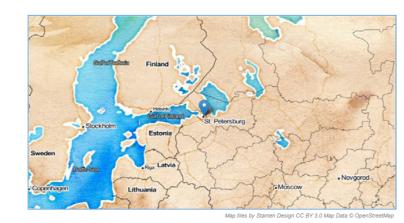
St. Petersburg



BACKGROUND INFORMATION



(UN World Cities Report)



Country HDI	2015 0.813	2016 0.817	2017 0.822	2018 0.824	1 yr change +0.002
Life expectancy at Birth	71.5	71.8	72.1	72.4	+0.3
Expected years of schooling	15.4	15.5	15.5	15.5	+0.0
Mean years of schooling	11.8	11.8	12.0	12.0	+0.0
GNI per capita (PPP \$)	24,032	24,096	24,472	25,036	+564.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

corruption road congestion affordable housing air pollution recycling health services basic amenities fulfilling employment unemployment security green spaces school education citizen engagement 14.5%

0%

0%

ATTITUDES

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

ATR/147/1570				
STRUCTURES	Score			TECHNOLOG
Health & Safety 0	20 40 60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas			60.2	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory			45.6	A website or App allows residents to easily give away unwanted items
Public safety is not a problem			57.2	Free public wifi has improved access to city services
Air pollution is not a problem			34.1	CCTV cameras has made residents feel safer
Medical services provision is satisfactory			57.3	A website or App allows residents to effectively monitor air pollution
inding housing with rent equal to 30% or less of a monthly salary is not a problem	0		37.2	Arranging medical appointments online has improved access
Mobility				Mobility
Traffic congestion is not a problem			25.5	Car-sharing Apps have reduced congestion
Public transport is satisfactory			63.9	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
Activities				Activities
Green spaces are satisfactory			67.7	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory			84.2	
Opportunities (Work & School)				Opportunities (Work & School)
Employment finding services are readily available			71.2	Online access to job listings has made it easier to find work
Most children have access to a good school			63.4	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions			70.9	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs	\bigcirc		52.5	The current internet speed and reliability meet connectivity needs
Minorities feel welcome			42.4	
Governance				Governance
Information on local government decisions are easily accessible	\bigcirc		55.6	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern			27.4	Online voting has increased participation
Residents contribute to decision making of local government			36.8	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects			60.1	Processing Identification Documents online has reduced waiting times

SMART CITY RATING CCC CCC in 2019

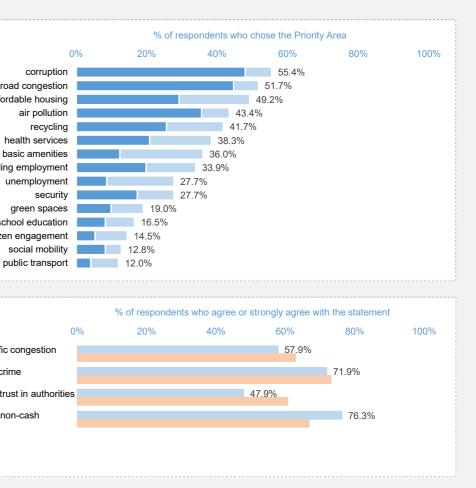
FACTOR RATINGS CCC STRUCTURES

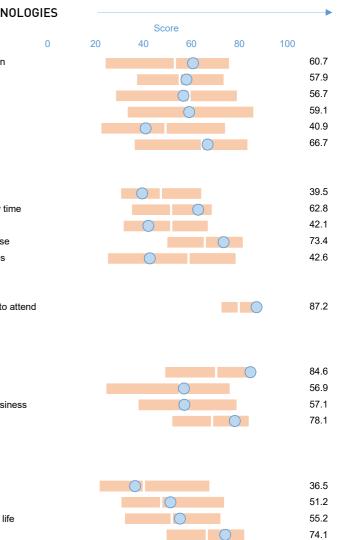
CCC **TECHNOLOGIES**

GROUP

3

All ratings range from AAA to D





Stockholm



SMART

CITY

RATING

BACKGROUND INFORMATION

City Population

1,486,000 (UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.932	0.934	0.935	0.937	+0.002
Life expectancy at Birth	82.3	82.4	82.5	82.7	+0.2
Expected years of schooling	18.6	18.8	18.8	18.8	+0.0
Mean years of schooling	12.4	12.4	12.4	12.4	+0.0
GNI per capita (PPP \$)	46,168	46,662	47,398	47,955	+557.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

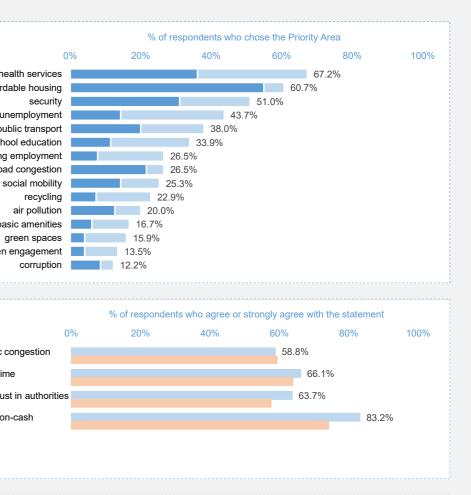
health services affordable housing security unemployment public transport school education fulfilling employment road congestion social mobility recycling air pollution basic amenities citizen engagement 13.5%

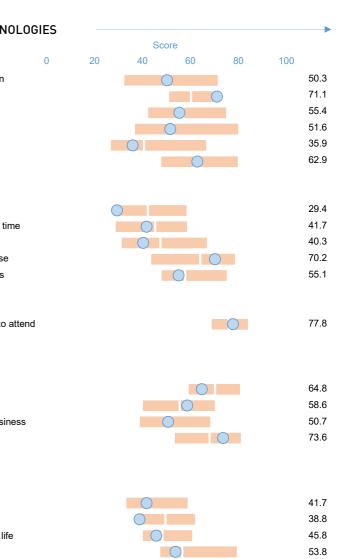
0%

0%

ATTITUDES

A			LEGEND: MIN	CITY MEAN GROUP MAX
BBB in 2019	STRUCTURES			TECHNOL
		Score		
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		66.7	Online reporting of city maintenance problems provides a speedy solution
FLOTOD	Recycling services are satisfactory		72.7	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		53.8	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		55.9	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		54.6	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		29.0	Arranging medical appointments online has improved access
•				
A	Mobility			Mobility
	Traffic congestion is not a problem	\bigcirc	33.0	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		54.6	Apps that direct you to an available parking space have reduced journey time
		_		Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
DDD				The city provides information on traffic congestion through mobile phones
BBB				
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		77.7	Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory		76.5	
			Č	
	Opportunities (Work & School)			Opportunities (Work & School)
	Employment finding services are readily available		68.4	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		72.1	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		69.2	Online services provided by the city has made it easier to start a new business
	Businesses are creating new jobs		69.1	The current internet speed and reliability meet connectivity needs
	Minorities feel welcome		57.1	
-				
	Governance			Governance
	Information on local government decisions are easily accessible		64.0	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		56.8	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		51.1	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		58.0	Processing Identification Documents online has reduced waiting times
- Landard and a second s				





Sydney



BACKGROUND INFORMATION



(UN World Cities Report)



SMART CITY RATING



A in 2019

FACTOR RATINGS

А STRUCTURES

TECHNOLOGIES

GROUP

All ratings range from AAA to D



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

Country HDI	2015 0.933	2016 0.935	2017 0.937	2018 0.938	1 yr change +0.001
Life expectancy at Birth	82.8	83.0	83.1	83.3	+0.2
Expected years of schooling	23.3	22.9	22.1	22.1	+0.0
Mean years of schooling	12.5	12.6	12.7	12.7	+0.0
GNI per capita (PPP \$)	43,246	43,653	43,756	44,097	+341.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion public transport unemployment health services security fulfilling employment recycling air pollution school education corruption green spaces basic amenities 15.9% social mobility 13.8%

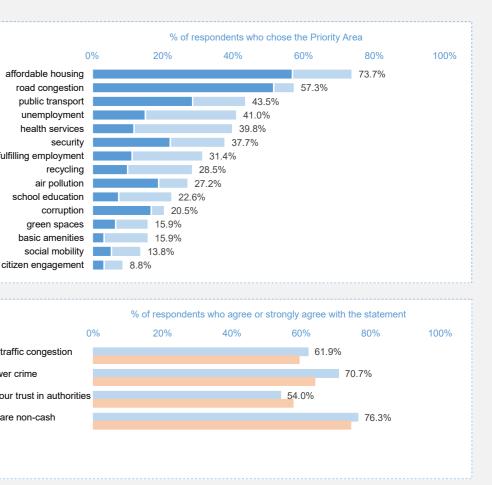
ATTITUDES

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

STRUCTURES	L		TECHNOLO
SIRUCTURES	Score		
Health & Safety 0	20 40 60 8	0 100	Health & Safety
Basic sanitation meets the needs of the poorest areas	\bigcirc	66.2	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory		66.7	A website or App allows residents to easily give away unwanted items
Public safety is not a problem		49.6	Free public wifi has improved access to city services
Air pollution is not a problem		44.1	CCTV cameras has made residents feel safer
Medical services provision is satisfactory		66.6	A website or App allows residents to effectively monitor air pollution
inding housing with rent equal to 30% or less of a monthly salary is not a problem	0	32.6	Arranging medical appointments online has improved access
Mobility			Mobility
Traffic congestion is not a problem		20.5	Car-sharing Apps have reduced congestion
Public transport is satisfactory		52.2	Apps that direct you to an available parking space have reduced journey time
			Bicycle hiring has reduced congestion
			Online scheduling and ticket sales has made public transport easier to use
			The city provides information on traffic congestion through mobile phones
Activities			Activities
Green spaces are satisfactory		65.2	Online purchasing of tickets to shows and museums has made it easier to atten
Cultural activities (shows, bars, and museums) are satisfactory	0	75.3	
Opportunities (Work & School)			Opportunities (Work & School)
Employment finding services are readily available		68.3	Online access to job listings has made it easier to find work
Most children have access to a good school		75.0	IT skills are taught well in schools
ifelong learning opportunities are provided by local institutions		68.2	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs		60.9	The current internet speed and reliability meet connectivity needs
Vinorities feel welcome	0	57.7	
Governance			Governance
nformation on local government decisions are easily accessible		60.7	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern		41.9	Online voting has increased participation
Residents contribute to decision making of local government		51.0	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects		57.9	Processing Identification Documents online has reduced waiting times

0%

0%



LOGIES Score 20 100 0 40 60 80 \bigcirc \bigcirc e ttend

> 74.4 56.8 52.7 60.7

48.9 63.8

60.2

62.3

41.2 65.6

44.8

44.5

41.4

68.2

65.8

75.9

39.6
52.7
46.4
61.4

ess

109

Taipei City



BACKGROUND INFORMATION



2,666,000

(UN World Cities Report)

SMART CITY RATING

Д

A in 2019

FACTOR RATINGS

А STRUCTURES

TECHNOLOGI

GROUP

All ratings ran from AAA to

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

Country	2015	2016	2017	2018	1 yr change
HDI	0.885	0.903	0.907	0.911	+0.004
Life expectancy at Birth	80.2	80.0	80.4	80.7	+0.3
Expected years of schooling	16.6	16.6	16.6	16.5	-0.1
Mean years of schooling	11.9	12.0	12.1	12.2	+0.1
GNI per capita (PPP \$)	45,547	46,054	47,144	49,403	+2,259.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

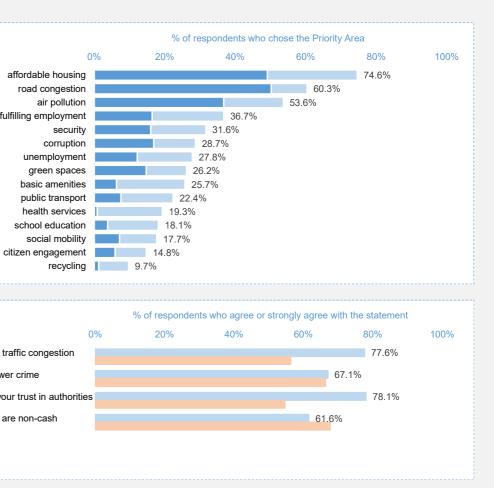
affordable housing road congestion air pollution fulfilling employment security corruption unemployment green spaces basic amenities public transport health services school education

0%

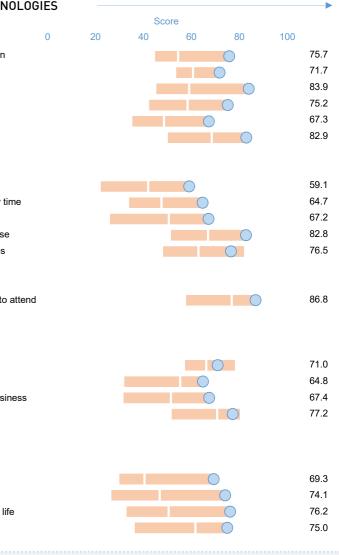
0%

ATTITUDES

4	STRUCTUR	RES					•	•	TECHNOLO
				Score					
Health & Safety		0	20 40) 60	80	100		Health & Safety	
Basic sanitation meets the r	1				\bigcirc	80.		Online reporting of city maintenance problems pr	
Recycling services are satis					\bigcirc	81.		A website or App allows residents to easily give a	
Public safety is not a proble	m			\bigcirc		66.	1	Free public wifi has improved access to city serv	ces
Air pollution is not a problem	n		\bigcirc			37.	4	CCTV cameras has made residents feel safer	
Medical services provision is	s satisfactory				\bigcirc	87.	0	A website or App allows residents to effectively r	nonitor air pollution
Finding housing with rent eq	qual to 30% or less of a monthly salary is not a proble	em)		39.	9	Arranging medical appointments online has impre	oved access
Mobility								Mobility	
Traffic congestion is not a p	roblem					26.	7	Car-sharing Apps have reduced congestion	
Public transport is satisfacto	bry			\bigcirc		66.	2	Apps that direct you to an available parking space	e have reduced journey time
								Bicycle hiring has reduced congestion	
								Online scheduling and ticket sales has made put	lic transport easier to use
								The city provides information on traffic congestio	n through mobile phones
Activities								Activities	
Green spaces are satisfacto	Dry			\bigcirc		59.	0	Online purchasing of tickets to shows and muse	ms has made it easier to attend
Cultural activities (shows, ba	ars, and museums) are satisfactory				\bigcirc	74.	7		
Opportunities (Work &	& School)							Opportunities (Work & School)	
Employment finding service						64.	6	Online access to job listings has made it easier to	o find work
Most children have access t	to a good school					63.	1	IT skills are taught well in schools	
	es are provided by local institutions)	67.	7	Online services provided by the city has made it	easier to start a new business
						60.	8	The current internet speed and reliability meet co	
• • • • •						63.		···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· , ···· ,	·····,
Businesses are creating new Minorities feel welcome	1 1000								
Businesses are creating new Minorities feel welcome								Governance	
Businesses are creating new Minorities feel welcome Governance						71	0	Governance Online public access to city finances has reduced	corruption
Businesses are creating new Minorities feel welcome Governance Information on local governm	ment decisions are easily accessible					71. 48.		Online public access to city finances has reduced	l corruption
Businesses are creating new Minorities feel welcome Governance Information on local govern Corruption of city officials is	ment decisions are easily accessible			0	0	71. 48. 62.	0		



OGIES



Tallinn

SMART CITY RANKING 59 Out of 109 N/A not in 2019

SMART

CITY

RATING

B

BACKGROUND INFORMATION

City Population 570,000

(Eurostat)

Norw:

Country	2015	2016	2017	2018	1 yr change
HDI	0.871	0.875	0.879	0.882	+0.003
Life expectancy at Birth	77.8	78.1	78.4	78.6	+0.2
Expected years of schooling	16.1	16.1	16.1	16.1	+0.0
Mean years of schooling	12.9	13.1	13.0	13.0	+0.0
GNI per capita (PPP \$)	27,001	27,915	29,320	30,379	+1,059.0

PRIORITY	AREAS
----------	-------

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing corruption health services road congestion fulfilling employment citizen engagement unemployment recycling social mobility security green spaces school education 13.1%

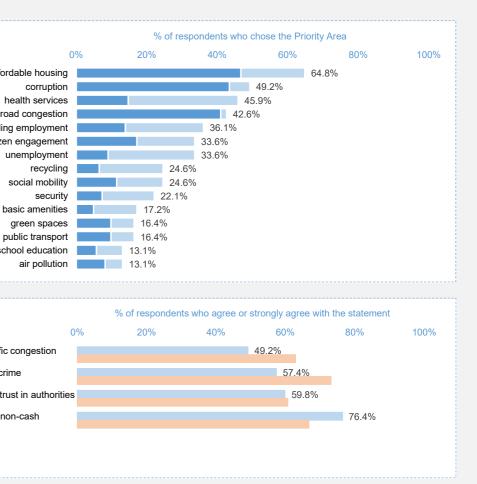
ATTITUDES

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

not in 2019	STRUCTURES	LEGEND		TY MEAN GROUP MAX
FACTOR	Health & Safety0Basic sanitation meets the needs of the poorest areasRecycling services are satisfactoryPublic safety is not a problem	Score 20 40 60 80	100 69.9 72.5 81.0	Health & Safety Online reporting of city maintenance problems provides a speedy solution A website or App allows residents to easily give away unwanted items Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem Medical services provision is satisfactory Finding housing with rent equal to 30% or less of a monthly salary is not a problem		73.0 74.6 35.5	CCTV cameras has made residents feel safer A website or App allows residents to effectively monitor air pollution Arranging medical appointments online has improved access
STRUCTURES	Mobility Traffic congestion is not a problem Public transport is satisfactory		22.7 70.6	Mobility Car-sharing Apps have reduced congestion Apps that direct you to an available parking space have reduced journey time Bicycle hiring has reduced congestion Online scheduling and ticket sales has made public transport easier to use The city provides information on traffic congestion through mobile phones
TECHNOLOGIES	Activities Green spaces are satisfactory Cultural activities (shows, bars, and museums) are satisfactory		76.9 85.5	Activities Online purchasing of tickets to shows and museums has made it easier to attend
GROUP	Opportunities (Work & School) Employment finding services are readily available Most children have access to a good school Lifelong learning opportunities are provided by local institutions Businesses are creating new jobs Minorities feel welcome		75.0 71.7 63.3 65.7 47.8	Opportunities (Work & School) Online access to job listings has made it easier to find work IT skills are taught well in schools Online services provided by the city has made it easier to start a new business The current internet speed and reliability meet connectivity needs
All ratings range from AAA to D	Governance Information on local government decisions are easily accessible Corruption of city officials is not an issue of concern Residents contribute to decision making of local government Residents provide feedback on local government projects		67.1 35.1 33.7 48.0	Governance Online public access to city finances has reduced corruption Online voting has increased participation An online platform where residents can propose ideas has improved city life Processing Identification Documents online has reduced waiting times

0%

0%



OGIES



Tel Aviv



BACKGROUND INFORMATION



(UN World Cities Report)

 Ankara Turkey . Tehran Syria Iran . Esfaha ibya Egyp

Country	2015	2016	2017	2018	1 yr change
HDI	0.901	0.902	0.904	0.906	+0.002
Life expectancy at Birth	82.3	82.5	82.7	82.8	+0.1
Expected years of schooling	16.0	15.9	16.0	16.0	+0.0
Mean years of schooling	12.9	13.0	13.0	13.0	+0.0
GNI per capita (PPP \$)	31,814	32,428	32,860	33,650	+790.0

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

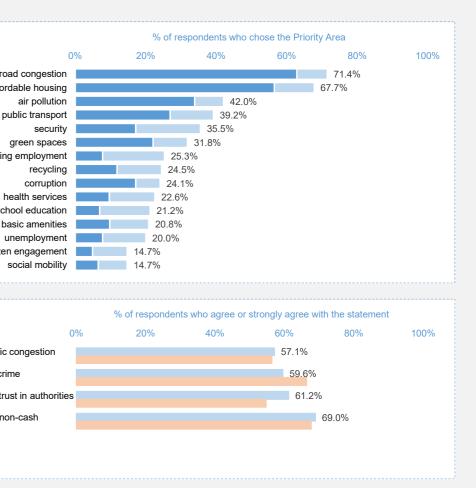
0% road congestion affordable housing air pollution public transport security green spaces fulfilling employment recycling corruption health services school education basic amenities citizen engagement 14.7%

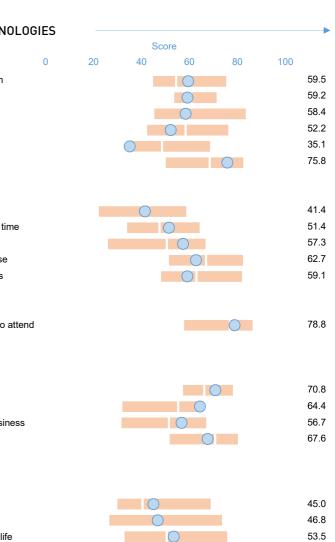
0%

ATTITUDES

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

BB	· · · · · · · · · · · · · · · · · · ·							
					LEGEN	D: MIN	CITY	MEAN GROUP MAX
BB in 2019	STRUCTURES	_		Score				TECHNOL
	Health & Safety 0	20		60	80	100		Health & Safety
	Basic sanitation meets the needs of the poorest areas					53.4		Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory					60.7		A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem					52.2		Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		\bigcirc			32.9		CCTV cameras has made residents feel safer
10111100	Medical services provision is satisfactory)	68.8		A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		\bigcirc			26.5		Arranging medical appointments online has improved access
BB	Mobility							Mobility
	Traffic congestion is not a problem	\bigcirc				19.6		Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		С			42.9		Apps that direct you to an available parking space have reduced journey time
								Bicycle hiring has reduced congestion
								Online scheduling and ticket sales has made public transport easier to use
BB								The city provides information on traffic congestion through mobile phones
	Activities							Activities
TECHNOLOGIES	Green spaces are satisfactory					54.9		Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory				\bigcirc	79.9		
	Opportunities (Work & School)							Opportunities (Work & School)
GROUP	Employment finding services are readily available					66.3		Online access to job listings has made it easier to find work
GRUUP	Most children have access to a good school			\bigcirc		67.1		IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions			\bigcirc		66.2		Online services provided by the city has made it easier to start a new business
9	Businesses are creating new jobs					70.5		The current internet speed and reliability meet connectivity needs
4	Minorities feel welcome			\bigcirc		50.7		
	Governance							Governance
	Information on local government decisions are easily accessible			\bigcirc		61.0		Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern					42.9		Online voting has increased participation
All ratings range	Residents contribute to decision making of local government)		44.0		An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects					54.8		Processing Identification Documents online has reduced waiting times





 \bigcirc

112

The Hague

SMART CITY RANKING 28 Out of 109

BACKGROUND INFORMATION

City Population 854,000

(Eurostat)

29 in 2019

SMART CITY RATING BBB

BBB in 201

FACTOR RATING

Д STRUCTURE

BB

TECHNOLOGI

GROUP

All ratings rai from AAA to



Country	2015	2016	2017	2018	1 yr change
HDI	0.927	0.929	0.932	0.934	+0.002
Life expectancy at Birth	81.7	81.9	82.0	82.1	+0.1
Expected years of schooling	18.1	18.0	18.0	18.0	+0.0
Mean years of schooling	12.1	12.2	12.2	12.2	+0.0
GNI per capita (PPP \$)	46,976	47,008	48,994	50,013	+1,019.0

PRIORITY AREAS	
----------------	--

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

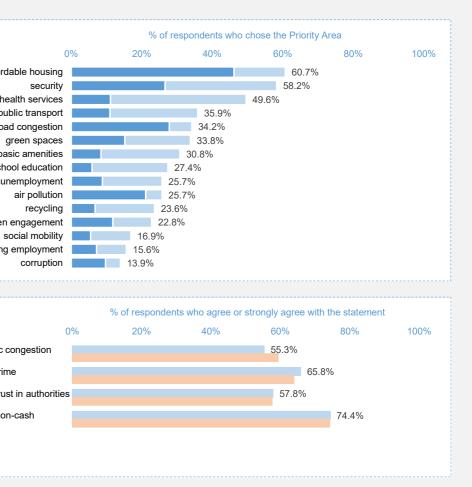
0% affordable housing security health services public transport road congestion green spaces basic amenities school education unemployment air pollution recycling citizen engagement fulfilling employment 15.6%

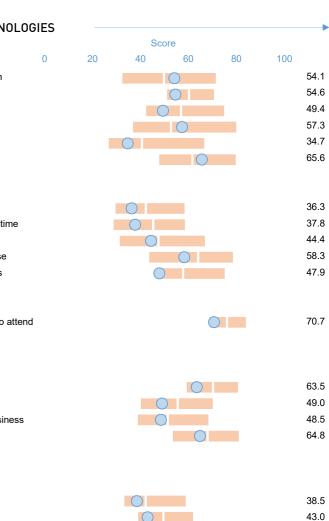
0%

ATTITUDES

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

	IFG	GEND: MIN OC	TTY MEAN GROUP MAX
STRUCTURES			TECHNOLO
	Score		
Health & Safety 0	20 40 60 80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas		68.3	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory	\bigcirc	72.2	A website or App allows residents to easily give away unwanted items
Public safety is not a problem		56.8	Free public wifi has improved access to city services
Air pollution is not a problem		43.4	CCTV cameras has made residents feel safer
Medical services provision is satisfactory		73.5	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem		34.0	Arranging medical appointments online has improved access
Mobility			Mobility
Traffic congestion is not a problem		35.6	Car-sharing Apps have reduced congestion
Public transport is satisfactory		70.1	Apps that direct you to an available parking space have reduced journey time
			Bicycle hiring has reduced congestion
			Online scheduling and ticket sales has made public transport easier to use
			The city provides information on traffic congestion through mobile phones
Activities			Activities
Green spaces are satisfactory	\bigcirc	63.8	Online purchasing of tickets to shows and museums has made it easier to atter
Cultural activities (shows, bars, and museums) are satisfactory		75.7	
Opportunities (Work & School)			Opportunities (Work & School)
Employment finding services are readily available		66.4	Online access to job listings has made it easier to find work
Most children have access to a good school		75.6	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions		59.1	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs		62.0	The current internet speed and reliability meet connectivity needs
Minorities feel welcome		59.1	
Governance			Governance
Information on local government decisions are easily accessible		59.1	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern		54.0	Online voting has increased participation
Residents contribute to decision making of local government		50.8	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects	0	60.0	Processing Identification Documents online has reduced waiting times





 \bigcirc

113

46.6

Tianjin



SMART

CITY

RATING

BACKGROUND INFORMATION





(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.742	0.749	0.753	0.758	+0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0

PRIORITY AREAS

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

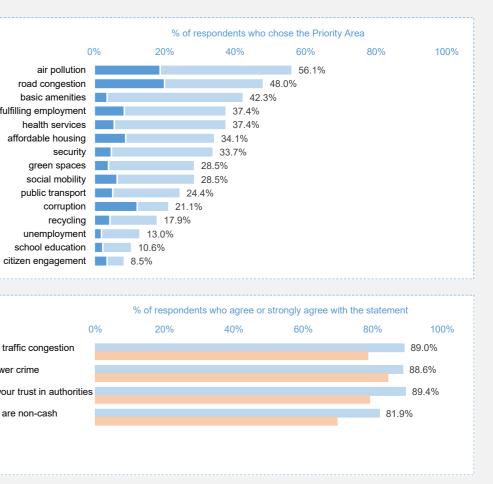
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% air pollution road congestion basic amenities fulfilling employment health services affordable housing security green spaces social mobility public transport corruption unemployment 13.0% school education 10.6%

0%

ATTITUDES

CCC	· · · · · · · · · · · · · · · · · · ·					۱		
					LEGEND:	MIN	CITY MEAN GROUP MAX	
BB in 2019	STRUCTURES		Sco	ro			TECHI	10L0
	Health & Safety 0	20	40		80	100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas				\bigcirc	80.8	Online reporting of city maintenance problems provides a speedy solution	i i
FLOTOR	Recycling services are satisfactory				\bigcirc	80.4	A website or App allows residents to easily give away unwanted items	
FACTOR	Public safety is not a problem)	75.8	Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem			\bigcirc		64.4	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory			(\bigcirc	79.5	A website or App allows residents to effectively monitor air pollution	
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem					76.2	Arranging medical appointments online has improved access	
CCC	Mobility						Mobility	
	Traffic congestion is not a problem					65.9	Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory					76.6	Apps that direct you to an available parking space have reduced journey	time
SINCOTONES						10.0	Bicycle hiring has reduced congestion	anne
							Online scheduling and ticket sales has made public transport easier to us	e
000							The city provides information on traffic congestion through mobile phones	
CCC								
	Activities						Activities	
TECHNOLOGIES	Green spaces are satisfactory					77.8	Online purchasing of tickets to shows and museums has made it easier to	o atter
	Cultural activities (shows, bars, and museums) are satisfactory					82.7		/ attoi
						02.1		
	Opportunities (Work & School)						Opportunities (Work & School)	
GROUP	Employment finding services are readily available				\bigcirc	80.0	Online access to job listings has made it easier to find work	
GRUUP	Most children have access to a good school				\bigcirc	79.8	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions			\bigcirc		75.0	Online services provided by the city has made it easier to start a new bus	iness
	Businesses are creating new jobs			\bigcirc		74.8	The current internet speed and reliability meet connectivity needs	
4	Minorities feel welcome			(\bigcirc	79.0		
	Governance						Governance	
	Information on local government decisions are easily accessible			(78.5	Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern					67.4	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government					71.1	An online platform where residents can propose ideas has improved city	life
from AAA to D	Residents provide feedback on local government projects					72.9	Processing Identification Documents online has reduced waiting times	-
							-	





Tokyo

SMART CITY RANKING 79 Out of 109

62 in 2019

SMART

CITY

RATING

CCC

B in 2019

FACTOR

RATINGS

B

STRUCTURES

CCC

TECHNOLOGIES

GROUP

9

All ratings range

from AAA to D

BACKGROUND INFORMATION



Population 38,001,000

(UN World Cities Report)



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

Country	2015	2016	2017	2018	1 yr change
HDI	0.906	0.910	0.913	0.915	+0.002
Life expectancy at Birth	83.9	84.1	84.3	84.5	+0.2
Expected years of schooling	15.2	15.2	15.2	15.2	+0.0
Mean years of schooling	12.5	12.7	12.8	12.8	+0.0
GNI per capita (PPP \$)	39,297	39,407	40,343	40,799	+456.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

health services affordable housing basic amenities road congestion security public transport school education fulfilling employment citizen engagement unemployment green spaces air pollution corruption social mobility

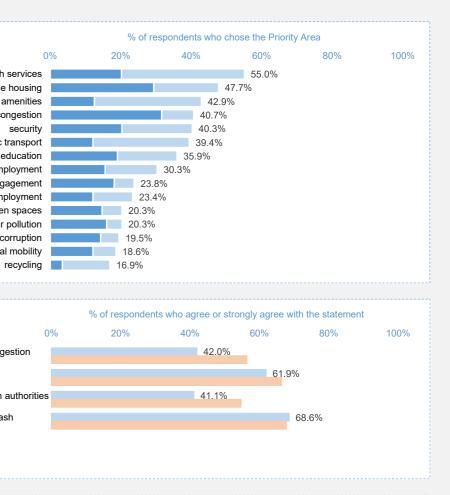
ATTITUDES

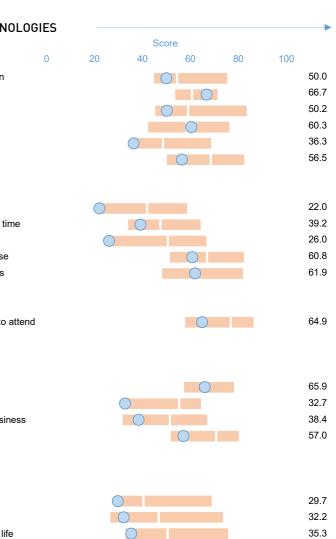
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

			LEGEN	D: MIN	CITY MEAN GROUP MAX
STRUCTURES					TECHNOLOG
		Score			
Health & Safety 0	20	40 60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas				68.6	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory		\bigcirc		65.7	A website or App allows residents to easily give away unwanted items
Public safety is not a problem		\bigcirc		57.3	Free public wifi has improved access to city services
Air pollution is not a problem		\bigcirc		46.3	CCTV cameras has made residents feel safer
Medical services provision is satisfactory				68.0	A website or App allows residents to effectively monitor air pollution
inding housing with rent equal to 30% or less of a monthly salary is not a problem		\bigcirc		44.6	Arranging medical appointments online has improved access
Mobility					Mobility
Traffic congestion is not a problem				30.4	Car-sharing Apps have reduced congestion
Public transport is satisfactory				66.3	Apps that direct you to an available parking space have reduced journey time
					Bicycle hiring has reduced congestion
					Online scheduling and ticket sales has made public transport easier to use
					The city provides information on traffic congestion through mobile phones
Activities					Activities
Green spaces are satisfactory		\bigcirc		38.7	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory				61.0	
Opportunities (Work & School)					Opportunities (Work & School)
Employment finding services are readily available				52.1	Online access to job listings has made it easier to find work
Nost children have access to a good school		\bigcirc		47.4	IT skills are taught well in schools
ifelong learning opportunities are provided by local institutions				53.5	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs				46.2	The current internet speed and reliability meet connectivity needs
/linorities feel welcome	C			33.5	
Governance					Governance
nformation on local government decisions are easily accessible				43.8	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern	\bigcirc			32.2	Online voting has increased participation
Residents contribute to decision making of local government	(36.4	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects				36.7	Processing Identification Documents online has reduced waiting times

0%

0%





Toronto



RATING

BACKGROUND INFORMATION



Population 5,993,000

(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.920	0.921	0.922	+0.001
Life expectancy at Birth	82.0	82.1	82.2	82.3	+0.1
Expected years of schooling	16.0	16.1	16.1	16.1	+0.0
Mean years of schooling	13.2	13.3	13.3	13.3	+0.0
GNI per capita (PPP \$)	42,567	42,691	43,496	43,602	+106.0
, 0					

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion health services public transport unemployment air pollution security fulfilling employment school education corruption green spaces basic amenities social mobility 11.9%

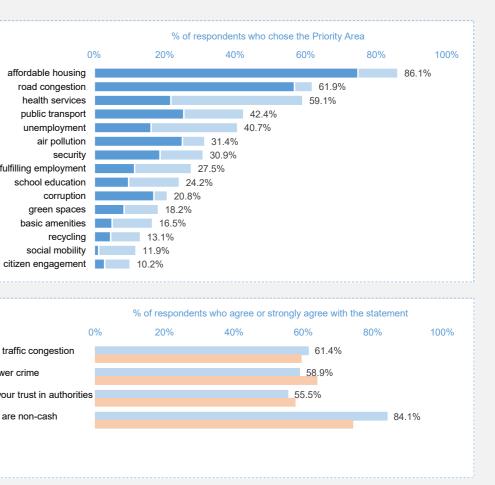
ATTITUDES

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

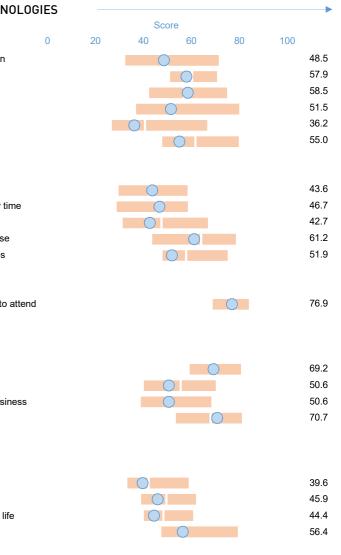
BBB			······	
			LEGEND: MIN	CITY MEAN GROUP MAX
A in 2019	STRUCTURES	Score	•	< TECHNO
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		65.5	Online reporting of city maintenance problems provides a speedy solution
	Recycling services are satisfactory		73.0	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		53.5	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		42.4	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		66.2	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		18.3	Arranging medical appointments online has improved access
Δ	Mobility			Mobility
	Traffic congestion is not a problem		18.1	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		49.4	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
BBB				The city provides information on traffic congestion through mobile phones
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory		65.5	Online purchasing of tickets to shows and museums has made it easier to at
	Cultural activities (shows, bars, and museums) are satisfactory		80.4	
	Opportunities (Work & School)			Opportunities (Work & School)
	Employment finding services are readily available		64.8	Online access to job listings has made it easier to find work
GROUP	Most children have access to a good school		67.6	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		68.1	Online services provided by the city has made it easier to start a new busine
	Businesses are creating new jobs		59.3	The current internet speed and reliability meet connectivity needs
1	Minorities feel welcome		72.0	The current memor speed and reliability meet connectivity needs
	Governance			Governance
	Information on local government decisions are easily accessible		63.4	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		46.0	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		52.2	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		59.6	Processing Identification Documents online has reduced waiting times

0%

0%







Vancouver



BACKGROUND INFORMATION

City Population 2,485,000

(UN World Cities Report)

SK AB Calgary Canada WA MT WY Map tiles by Stamen Design CC BY 3.0 Map Data © Op

Country	2015	2016	2017	2018	1 yr change
HDI	0.917	0.920	0.921	0.922	+0.001
Life expectancy at Birth	82.0	82.1	82.2	82.3	+0.1
Expected years of schooling	16.0	16.1	16.1	16.1	+0.0
Mean years of schooling	13.2	13.3	13.3	13.3	+0.0
GNI per capita (PPP \$)	42,567	42,691	43,496	43,602	+106.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion health services public transport unemployment fulfilling employment school education air pollution security corruption citizen engagement 16.7% basic amenities 10.9%

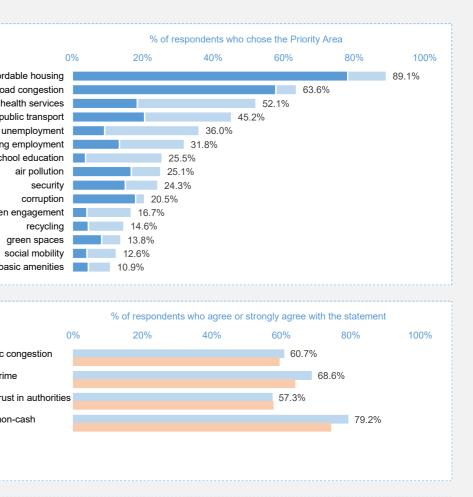
ATTITUDES

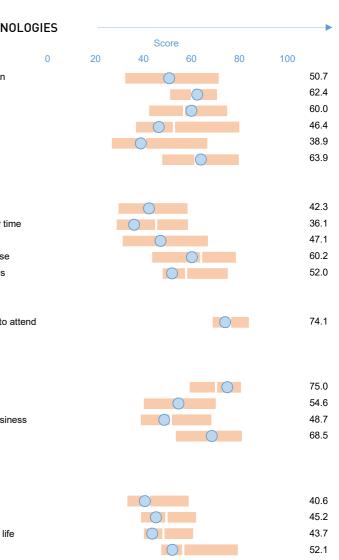
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

A					
A in 2019	STRUCTURES		LEGEND: MIN	CITY MEAN GROUP MAX	TECHNOLO
		Score			
	Health & Safety 0	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		56.5	Online reporting of city maintenance problems p	ovides a speedy solution
	Recycling services are satisfactory		76.0	A website or App allows residents to easily give	away unwanted items
FACTOR	Public safety is not a problem		57.5	Free public wifi has improved access to city serv	ices
RATINGS	Air pollution is not a problem		52.6	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory		64.3	A website or App allows residents to effectively	nonitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem	\bigcirc	16.7	Arranging medical appointments online has impr	oved access
•					
A	Mobility			Mobility	
	Traffic congestion is not a problem		20.5	Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory		55.8	Apps that direct you to an available parking space	e have reduced journey time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has made pul	olic transport easier to use
BBB				The city provides information on traffic congestic	n through mobile phones
DDD					
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		74.2	Online purchasing of tickets to shows and muse	ums has made it easier to atten
	Cultural activities (shows, bars, and museums) are satisfactory		74.4		
	Opportunities (Work & School)			Opportunities (Work & School)	.
GROUP	Employment finding services are readily available		68.9	Online access to job listings has made it easier t	o find work
	Most children have access to a good school		76.8	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		71.5	Online services provided by the city has made it	
1	Businesses are creating new jobs		61.5	The current internet speed and reliability meet co	innectivity needs
•	Minorities feel welcome		72.2		
	Governance			Governance	
	Information on local government decisions are easily accessible		65.8	Online public access to city finances has reduce	d corruption
	Corruption of city officials is not an issue of concern		49.0	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government		55.6	An online platform where residents can propose	ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		65.1	Processing Identification Documents online has	reduced waiting times

0%

0%





Vienna



SMART

CITY

RATING

BACKGROUND INFORMATION



(UN World Cities Report)



Country HDI	2015 0.906	2016 0.909	2017 0.912	2018 0.914	1 yr change +0.002
Life expectancy at Birth	81.2	81.3	81.3	81.4	+0.1
Expected years of schooling	15.9	16.1	16.3	16.3	+0.0
Mean years of schooling	12.6	12.6	12.6	12.6	+0.0
GNI per capita (PPP \$)	43,822	44,621	45,375	46,231	+856.0

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing unemployment road congestion security air pollution corruption fulfilling employment school education health services citizen engagement green spaces recycling

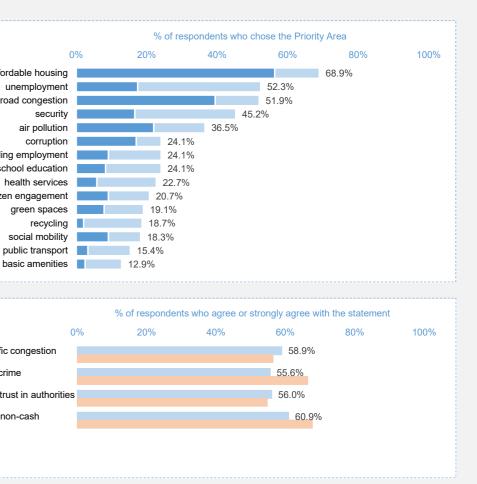
ATTITUDES

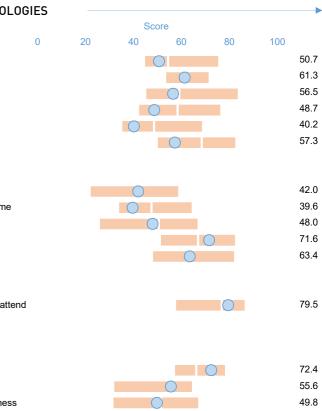
You are willing to concede personal data in order to improve traffic congestion You are comfortable with face recognition technologies to lower crime You feel the availability of online information has increased your trust in authorities The proportion of your day-to-day payment transactions that are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

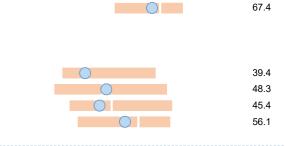
BBB									
					LEGEND	D: MIN	CITY	MEAN GROUP MAX	
BBB in 2019	STRUCTURES	_	s	core				•	TECHNOL
	Health & Safety 0	20	-	60	80	100		Health & Safety	
	Basic sanitation meets the needs of the poorest areas				\bigcirc	82.2		Online reporting of city maintenance problems provides a speed	y solution
	Recycling services are satisfactory				\bigcirc	84.2		A website or App allows residents to easily give away unwanted	items
FACTOR	Public safety is not a problem)	70.1		Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem			\bigcirc		57.6		CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory				\bigcirc	80.4		A website or App allows residents to effectively monitor air pollut	tion
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		\bigcirc			30.7		Arranging medical appointments online has improved access	
Δ	Mobility							Mobility	
	Traffic congestion is not a problem					40.2		Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory					78.3		Apps that direct you to an available parking space have reduced	l iournev time
STRUCTURES						1010		Bicycle hiring has reduced congestion	journey anto
								Online scheduling and ticket sales has made public transport ea	sier to use
BB								The city provides information on traffic congestion through mobil	
	Activities							Activities	
TECHNOLOGIES	Green spaces are satisfactory			(74.1		Online purchasing of tickets to shows and museums has made it	t easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory					85.3			
	Opportunities (Work & School)							Opportunities (Work & School)	
	Employment finding services are readily available				_	66.8		Online access to job listings has made it easier to find work	
GROUP	Most children have access to a good school					70.6		IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions					74.6		Online services provided by the city has made it easier to start a	new husiness
	Businesses are creating new jobs					67.8		The current internet speed and reliability meet connectivity need	
Z	Minorities feel welcome					59.7			
	Governance							Governance	
	Information on local government decisions are easily accessible					59.3		Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern					48.4		Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government					50.2		An online platform where residents can propose ideas has impro	oved citv life
from AAA to D	Residents provide feedback on local government projects					55.9		Processing Identification Documents online has reduced waiting	-

0%

0%







50.7

48.0

63.4

79.5

Warsaw



RATING

B

BACKGROUND INFORMATION



1,722,000

(UN World Cities Report)



2015	2016	2017	2018	1 yr change
0.858	0.864	0.868	0.872	+0.004
77.9	78.1	78.3	78.5	+0.2
16.1	16.4	16.4	16.4	+0.0
12.2	12.3	12.3	12.3	+0.0
24,369	25,042	26,182	27,626	+1,444.0
	0.858 77.9 16.1 12.2	0.8580.86477.978.116.116.412.212.3	0.8580.8640.86877.978.178.316.116.416.412.212.312.3	0.8580.8640.8680.87277.978.178.378.516.116.416.416.412.212.312.312.3



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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

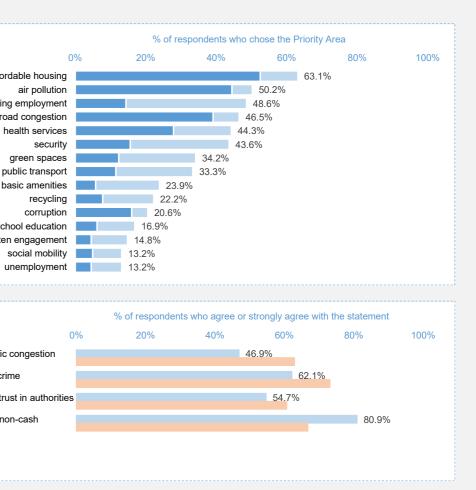
affordable housing air pollution fulfilling employment road congestion health services security green spaces public transport basic amenities recycling corruption school education citizen engagement 14.8% social mobility 13.2%

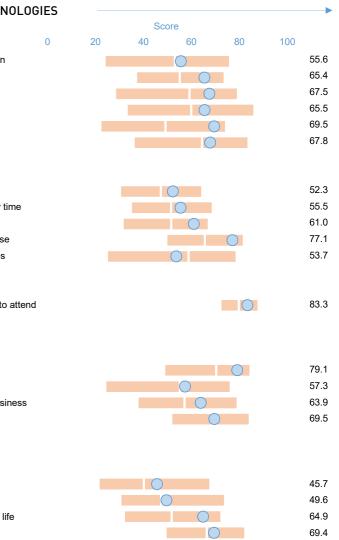
0%

0%

ATTITUDES

B			LEGEND: MIN	CITY MEAN GROUP MAX	
B in 2019	STRUCTURES				TECHNOLO
		Score			
	Health & Safety ⁰	20 40 60	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		66.5		problems provides a speedy solution
ГАСТОВ	Recycling services are satisfactory	\bigcirc	59.0	A website or App allows residents to	
FACTOR	Public safety is not a problem		65.2	Free public wifi has improved access	s to city services
RATINGS	Air pollution is not a problem		27.4	CCTV cameras has made residents	feel safer
	Medical services provision is satisfactory	\bigcirc	47.5	A website or App allows residents to	effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		26.9	Arranging medical appointments onli	ne has improved access
B					
D	Mobility			Mobility	
	Traffic congestion is not a problem		29.9	Car-sharing Apps have reduced con	gestion
STRUCTURES	Public transport is satisfactory		63.1	Apps that direct you to an available p	parking space have reduced journey time
				Bicycle hiring has reduced congestion	n
				Online scheduling and ticket sales ha	as made public transport easier to use
B				The city provides information on traff	fic congestion through mobile phones
D					
	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		68.1	Online purchasing of tickets to show	s and museums has made it easier to attend
	Cultural activities (shows, bars, and museums) are satisfactory		79.1		
	Opportunities (Work & School)			Opportunities (Work & Scho	ol)
	Employment finding services are readily available		71.7	Online access to job listings has made	de it easier to find work
GROUP	Most children have access to a good school		72.2	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		73.9	Online services provided by the city	has made it easier to start a new business
9	Businesses are creating new jobs		72.1	The current internet speed and reliab	pility meet connectivity needs
5	Minorities feel welcome		57.6		
	Governance			Governance	
	Information on local government decisions are easily accessible		67.2	Online public access to city finances	has reduced corruption
	Corruption of city officials is not an issue of concern		37.9	Online voting has increased participa	•
All ratings range	Residents contribute to decision making of local government		52.8	• • •	an propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		63.3	Processing Identification Documents	
	,				· · · · · · · · · · · · · · · · · · ·
	L				





Washington D.C.



SMART

CITY

RATING

BACKGROUND INFORMATION

City

Population 4,955,000

(UN World Cities Report)



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

2015	2016	2017	2018	1 yr change
0.917	0.919	0.919	0.920	+0.001
78.9	78.9	78.9	78.9	+0.0
16.2	16.3	16.3	16.3	+0.0
13.3	13.4	13.4	13.4	+0.0
54,039	54,443	55,351	56,140	+789.0
	0.917 78.9 16.2 13.3	0.9170.91978.978.916.216.313.313.4	0.9170.9190.91978.978.978.916.216.316.313.313.413.4	0.9170.9190.9190.92078.978.978.978.916.216.316.316.313.313.413.413.4

PRIORITY AREAS

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

affordable housing road congestion security health services school education public transport fulfilling employment unemployment air pollution corruption basic amenities recycling

0%

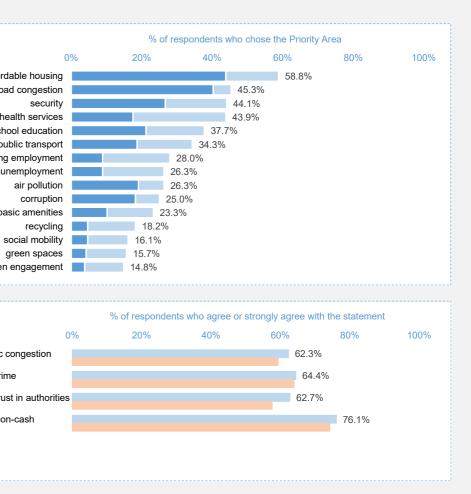
0%

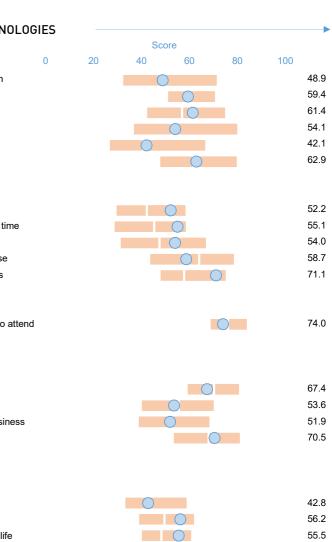
citizen engagement 14.8%

ATTITUDES

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

A			LEGEND: MIN	CITY MEAN GROUP MAX	
BBB in 2019	STRUCTURES		•	▲ T	ECHNOLO
		Score			
	Health & Safety 0	20 40 60 8	80 100	Health & Safety	
	Basic sanitation meets the needs of the poorest areas		58.2	Online reporting of city maintenance problems provides a speedy s	
FACTOR	Recycling services are satisfactory		69.2	A website or App allows residents to easily give away unwanted ite	ems
	Public safety is not a problem		40.5	Free public wifi has improved access to city services	
RATINGS	Air pollution is not a problem		42.8	CCTV cameras has made residents feel safer	
	Medical services provision is satisfactory		62.4	A website or App allows residents to effectively monitor air pollution	n
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		45.2	Arranging medical appointments online has improved access	
A	Mobility			Mobility	
	Traffic congestion is not a problem		30.1	Car-sharing Apps have reduced congestion	
STRUCTURES	Public transport is satisfactory		56.4	Apps that direct you to an available parking space have reduced jo	ourney time
				Bicycle hiring has reduced congestion	
				Online scheduling and ticket sales has made public transport easie	
Δ				The city provides information on traffic congestion through mobile	phones
~	Activities			Activities	
TECHNOLOGIES	Green spaces are satisfactory		66.2	Online purchasing of tickets to shows and museums has made it e	asier to atter
	Cultural activities (shows, bars, and museums) are satisfactory		82.1		
	Opportunities (Work & School)			Opportunities (Work & School)	
GROUP	Employment finding services are readily available		69.8	Online access to job listings has made it easier to find work	
GROUP	Most children have access to a good school		55.1	IT skills are taught well in schools	
	Lifelong learning opportunities are provided by local institutions		65.4	Online services provided by the city has made it easier to start a new	ew business
1	Businesses are creating new jobs		69.4	The current internet speed and reliability meet connectivity needs	
	Minorities feel welcome		63.6		
	Governance			Governance	
	Information on local government decisions are easily accessible		71.9	Online public access to city finances has reduced corruption	
	Corruption of city officials is not an issue of concern		42.0	Online voting has increased participation	
All ratings range	Residents contribute to decision making of local government		58.3	An online platform where residents can propose ideas has improve	ed city life
from AAA to D	Residents provide feedback on local government projects		65.9	Processing Identification Documents online has reduced waiting tir	nes





Zaragoza



SMART

BACKGROUND INFORMATION

City Population

667,000

(Eurostat)



49 in 2019

SMART CITY RATING BB

BB in 201

FACTO RATING BB STRUCTUR

B TECHNOLOG

GROUP

All ratings ra from AAA to

Esp de

Country	2015	2016	2017	2018	1 yr change
HDI	0.885	0.888	0.891	0.893	+0.002
Life expectancy at Birth	83.0	83.1	83.3	83.4	+0.1
Expected years of schooling	17.8	17.8	17.9	17.9	+0.0
Mean years of schooling	9.7	9.8	9.8	9.8	+0.0
GNI per capita (PPP \$)	32,265	33,379	34,226	35,041	+815.0

PRIORITY AREAS

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

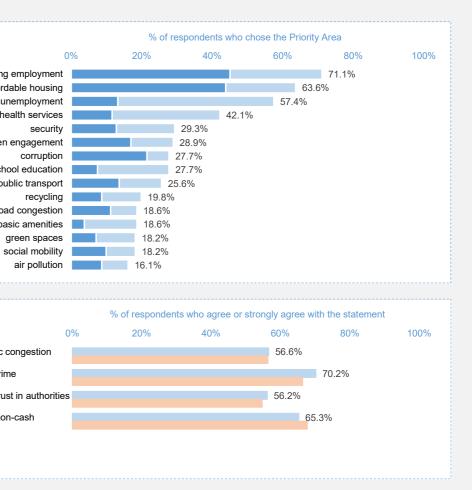
The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

0% fulfilling employment affordable housing unemployment health services securitv citizen engagement corruption school education public transport recycling road congestion basic amenities

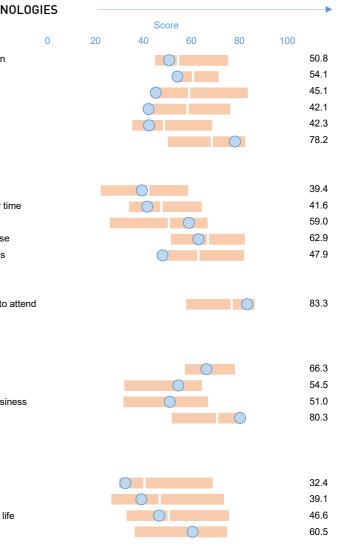
0%

ATTITUDES

				LEGEND:	MIN	CITY MEAN GROUP MAX
•	STRUCTURES					TECHNOLC
Health & S	oafety 0	20	Score 40 60	80	100	Health & Safety
	on meets the needs of the poorest areas				70.5	Online reporting of city maintenance problems provides a speedy solution
Recycling ser	vices are satisfactory				67.9	A website or App allows residents to easily give away unwanted items
, ,	is not a problem				68.5	Free public wifi has improved access to city services
-	s not a problem				57.0	CCTV cameras has made residents feel safer
	ces provision is satisfactory				65.7	A website or App allows residents to effectively monitor air pollution
1	ng with rent equal to 30% or less of a monthly salary is not a problem				37.1	Arranging medical appointments online has improved access
Mobility						Mobility
Ū.	stion is not a problem				53.4	Car-sharing Apps have reduced congestion
Public transpo	ort is satisfactory				69.2	Apps that direct you to an available parking space have reduced journey time
						Bicycle hiring has reduced congestion
						Online scheduling and ticket sales has made public transport easier to use
						The city provides information on traffic congestion through mobile phones
Activities						Activities
Green spaces	are satisfactory				75.5	Online purchasing of tickets to shows and museums has made it easier to atten
Cultural activi	ties (shows, bars, and museums) are satisfactory		Õ		73.7	
Opportuni	ties (Work & School)					Opportunities (Work & School)
	inding services are readily available				71.7	Online access to job listings has made it easier to find work
	have access to a good school				72.2	IT skills are taught well in schools
	ing opportunities are provided by local institutions				71.8	Online services provided by the city has made it easier to start a new business
ů.	re creating new jobs				43.6	The current internet speed and reliability meet connectivity needs
Minorities fee					60.3	
Comment						C
Governand					54.4	Governance
	n local government decisions are easily accessible				54.4 43.3	Online public access to city finances has reduced corruption
	city officials is not an issue of concern					Online voting has increased participation
1	ntribute to decision making of local government				39.3	An online platform where residents can propose ideas has improved city life
Residents pro	vide feedback on local government projects				43.7	Processing Identification Documents online has reduced waiting times







Zhuhai



BACKGROUND INFORMATION

City Population

1,542,000

(UN World Cities Report)

SMART CITY RATING CCC BB in 2019

FACTOR RATINGS CCC STRUCTURES

CCC **TECHNOLOGIES**

GROUP

All ratings range from AAA to D

.Wuhar Chenodu esign CC BY 3.0 Map Data @

Country	2015	2016	2017	2018	1 yr change
HDI	0.742	0.749	0.753	0.758	+0.005
Life expectancy at Birth	75.9	76.2	76.5	76.7	+0.2
Expected years of schooling	13.8	13.9	13.9	13.9	+0.0
Mean years of schooling	7.7	7.8	7.8	7.9	+0.1
GNI per capita (PPP \$)	13,485	14,311	15,212	16,127	+915.0

PRIORITY AREAS

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

the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

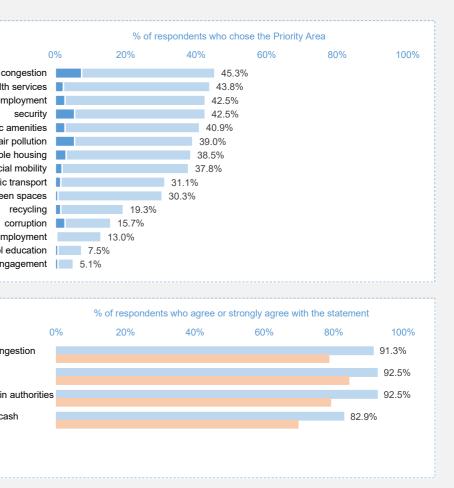
0% road congestion health services fulfilling employment security basic amenities air pollution affordable housing social mobility public transport green spaces unemployment 13.0% school education 7.5% citizen engagement 5.1%

0%

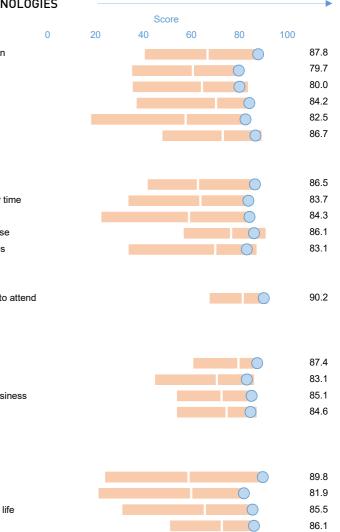
ATTITUDES

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

STRUCTURES					•	TECHNOLOGI
		So				
Health & Safety 0	20	40	60	80	100	Health & Safety
Basic sanitation meets the needs of the poorest areas				\bigcirc	84.8	Online reporting of city maintenance problems provides a speedy solution
Recycling services are satisfactory				\bigcirc	87.0	A website or App allows residents to easily give away unwanted items
Public safety is not a problem				\bigcirc	81.4	Free public wifi has improved access to city services
Air pollution is not a problem				\bigcirc	81.2	CCTV cameras has made residents feel safer
Medical services provision is satisfactory				\bigcirc	87.3	A website or App allows residents to effectively monitor air pollution
Finding housing with rent equal to 30% or less of a monthly salary is not a problem				\bigcirc	83.5	Arranging medical appointments online has improved access
Mobility						Mobility
Traffic congestion is not a problem				\bigcirc	81.2	Car-sharing Apps have reduced congestion
Public transport is satisfactory				\bigcirc	86.2	Apps that direct you to an available parking space have reduced journey time
						Bicycle hiring has reduced congestion
						Online scheduling and ticket sales has made public transport easier to use
						The city provides information on traffic congestion through mobile phones
Activities						Activities
Green spaces are satisfactory				\bigcirc	88.6	Online purchasing of tickets to shows and museums has made it easier to attend
Cultural activities (shows, bars, and museums) are satisfactory					85.2	
Opportunities (Work & School)						Opportunities (Work & School)
Employment finding services are readily available				\bigcirc	86.6	Online access to job listings has made it easier to find work
Most children have access to a good school				\bigcirc	87.3	IT skills are taught well in schools
Lifelong learning opportunities are provided by local institutions				\bigcirc	82.3	Online services provided by the city has made it easier to start a new business
Businesses are creating new jobs					84.8	The current internet speed and reliability meet connectivity needs
Minorities feel welcome				\bigcirc	86.2	
Governance						Governance
Information on local government decisions are easily accessible				\bigcirc	84.3	Online public access to city finances has reduced corruption
Corruption of city officials is not an issue of concern				\bigcirc	83.1	Online voting has increased participation
Residents contribute to decision making of local government				\bigcirc	83.4	An online platform where residents can propose ideas has improved city life
Residents provide feedback on local government projects					86.2	Processing Identification Documents online has reduced waiting times



IES



Zurich



SMART

CITY

RATING

Δ

BACKGROUND INFORMATION



(UN World Cities Report)



Country	2015	2016	2017	2018	1 yr change
HDI	0.943	0.943	0.943	0.946	+0.003
Life expectancy at Birth	83.1	83.3	83.5	83.6	+0.1
Expected years of schooling	16.2	16.2	16.2	16.2	+0.0
Mean years of schooling	13.4	13.4	13.4	13.4	+0.0
GNI per capita (PPP \$)	58,723	58,138	57,301	59,375	+2,074.0

PRIORITY AR	EAS
-------------	-----

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

The left hand section of each bar shows the Alignment - the proportion of those respondents who also answered the corresponding survey questions low. A strong Alignment implies that these areas also demand priority attention.

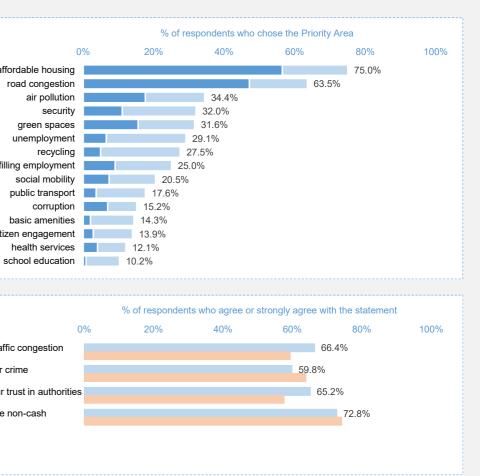
0% affordable housing road congestion air pollution security green spaces unemployment recycling fulfilling employment social mobility public transport 17.6% basic amenities 14.3% citizen engagement 13.9% health services 12.1%

0%

ATTITUDES

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

			LEGEND: MIN	CITY MEAN GROUP MAX
AAA in 2019	STRUCTURES			TECHNOL
		Score		
	Health & Safety 0	20 40 60	80 100	Health & Safety
	Basic sanitation meets the needs of the poorest areas		84.6	Online reporting of city maintenance problems provides a speedy solution
FLOTOD	Recycling services are satisfactory		84.4	A website or App allows residents to easily give away unwanted items
FACTOR	Public safety is not a problem		77.1	Free public wifi has improved access to city services
RATINGS	Air pollution is not a problem		61.0	CCTV cameras has made residents feel safer
	Medical services provision is satisfactory		82.7	A website or App allows residents to effectively monitor air pollution
	Finding housing with rent equal to 30% or less of a monthly salary is not a problem		34.7	Arranging medical appointments online has improved access
AAA	Mobility			Mobility
	Traffic congestion is not a problem		41.4	Car-sharing Apps have reduced congestion
STRUCTURES	Public transport is satisfactory		77.3	Apps that direct you to an available parking space have reduced journey time
				Bicycle hiring has reduced congestion
				Online scheduling and ticket sales has made public transport easier to use
				The city provides information on traffic congestion through mobile phones
A				
	Activities			Activities
TECHNOLOGIES	Green spaces are satisfactory			Online purchasing of tickets to shows and museums has made it easier to atte
	Cultural activities (shows, bars, and museums) are satisfactory		80.5	
	Opportunities (Work & School)			Opportunities (Work & School)
GROUP	Employment finding services are readily available	(74.7	Online access to job listings has made it easier to find work
	Most children have access to a good school		82.9	IT skills are taught well in schools
	Lifelong learning opportunities are provided by local institutions		75.7	Online services provided by the city has made it easier to start a new business
1	Businesses are creating new jobs		70.0	The current internet speed and reliability meet connectivity needs
•	Minorities feel welcome		65.4	
	Governance			Governance
	Information on local government decisions are easily accessible		70.2	Online public access to city finances has reduced corruption
	Corruption of city officials is not an issue of concern		69.7	Online voting has increased participation
All ratings range	Residents contribute to decision making of local government		74.2	An online platform where residents can propose ideas has improved city life
from AAA to D	Residents provide feedback on local government projects		73.7	Processing Identification Documents online has reduced waiting times
	······································		-	



DLOGIES Score 20 80 100 0 40 60 60.8 57.6 54.7 51.2 42.7 50.8 \bigcirc 42.6 44.4 ne 53.6 78.8 58.9 78.9 attend \bigcirc 73.8 56.8 53.8 ess 77.2 48.4 50.3

123

48.6

A collaboration between:



